



## **Submission**

**in response to the ACCC's Draft Determination on  
the Application for Authorisation of  
the HFC Subscriber Agreement between  
NBN Co Limited and SingTel Optus Pty Ltd  
and other Optus entities**

**13 June 2012**

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## 1. Introduction

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- 1.1 This submission is made by Optus in response to the ACCC's draft determination to approve the application for authorisation of the Optus HFC Subscriber Agreement between NBN Co and Optus dated 23 June 2011 ("transaction").

### Executive Summary

- 1.2 Optus supports the ACCC's draft decision to authorise the HFC transaction on the basis that the net public benefits arising from the transaction are identifiable and significant and clearly outweigh any potential anti-competitive detriments. After taking into account the migration payments, Optus considers that the benefits of this transaction could be as high as \$1 Billion as valued on an NPV basis.
- 1.3 Consistent with the ACCC's views, Optus considers that the greater proportion of these benefits will arise from the avoidance of future expenditures on duplicate fixed line infrastructure. Such expenditure would be wasteful and is unlikely to lead to any significant advance in public welfare. It is wasteful because, for the reasons set out in this and earlier submissions, Optus does not believe that the continued operation of the legacy HFC network is likely to advance the cause of fixed line competition or provide an effective constraint on the NBN. For this reason, Optus considers that any detriment that might be alleged to arise from this transaction would be immaterial.
- 1.4 In contrast by enabling Optus to decommission the network through the approval of this transaction Optus considers that competition and consumer welfare is likely to be enhanced. It will do so by ensuring that Optus can operate on an equal footing with other market players, enabling it to offer fixed line services off a single fixed line platform.
- 1.5 This means Optus will gain the capacity to become an even stronger retail competitor because it will be free to reallocate capital that would otherwise be required to maintain the competitiveness of a subscale HFC network against the full-scale NBN. The capital and savings derived from operating off one platform, rather than two, can be redirected to things customers want – product and service innovation rather than pits, pipes and cables.
- 1.6 In this respect Optus also notes that the transaction is consistent with Government policy objectives to change the nature of competition in the fixed line sector. Following a period of lengthy consultation with the industry, the Government introduced significant policy changes in 2010 and 2011.
- 1.7 These changes explicitly recognise that past competition policy settings that have sought to encourage inter-modal competition have failed. The new policies, therefore, seek to eliminate the competitive advantage arising from infrastructure ownership, which should enable more intense retail competition at the service and application level.
- 1.8 This will be achieved by the roll-out of the NBN as a nationwide national wholesale-only, open access network that will provide the access platform for the vast majority of future fixed voice and broadband services for Australian consumers and businesses.

- 1.9 The NBN should provide a level playing field for the provision of fixed line voice and broadband, thereby enabling service providers to compete on their merits. In this way it has the prospect to deliver more vibrant competition, increased levels of innovation and enhanced consumer welfare compared to an approach which seeks to encourage multiple competing networks which are unlikely to have insufficient scale to deliver an effectively competitive fixed line sector.
- 1.10 For the reasons outlined in this submission and the previous submissions presented to the ACCC Optus considers that authorisation of the transaction should be granted.

## 2. Policy Context

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- 2.1 Before examining the specific competition implications of this transaction it is important to consider the broader policy context surrounding it. This should have regard to the state of competition in the fixed line telecommunications sector and the significant telecommunications policy reforms the Government has introduced to deliver major structural to that sector.
- 2.2 The telecommunications market was fully liberalised and opened up to competition in 1997. Policy-based amendments to the Trade Practices Act in 1997, established a telecommunications specific access regime, which sought to foster competition by a combination of encouraging efficient investment in alternate competing infrastructure backed up by regulated access to essential facilities.
- 2.3 However, some fifteen years after the telecommunications market was liberalised Telstra continues to dominate the fixed line market. In 2010 Telstra accounted for 70% of fixed line voice revenues and 41% of broadband revenue at the retail level<sup>1</sup>. Notwithstanding a strong policy focus aimed at encouraging infrastructure based competition, the Telstra network accounts for some 95% of all fixed line connections, when both retail and wholesale services are taken into account.
- 2.4 With the exception of some small local fibre and corporate networks the main competitive local infrastructure to the Telstra copper network is the Optus HFC network. Whilst this network was rolled out in the early 1990's it still only accounts for some 496,000<sup>2</sup> or 5% of fixed line connections.
- 2.5 The decision by Optus to undertake the significant investment required to roll-out an alternate network to the Telstra copper loop should have been a stand-out example of a successful telecommunications competition policy. In reality the reverse has proved to be the case.
- 2.6 This partly results from a historic policy failure. Against international precedents, Telstra was permitted to overbuild its existing copper network and the Optus HFC network with its own HFC network. As noted by Professor Martin Cave, the rationale for Telstra undertaking such an investment was unambiguously to undermine a significant competitive threat to Telstra's existing fixed line dominance:

*"The well-known precedent in Australia of Telstra's Foxtel network is an illustration of a predatory access investment. As the chairman of Telstra then acknowledged, the investment was expected (or intended) to lose money in the supply of broadcasting services, but to be profitable overall by virtue of defending the company's telephone revenues from a competitor which sought to provide both telephone and broadcasting services on a single network".*<sup>3</sup>

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<sup>1</sup> ACCC report Telecommunications competitive safeguards for 2009–10

<sup>2</sup> Refer Singtel Management Discussion and Analysis for the fourth quarter and year ended 31 March 2012

<sup>3</sup> "Separation and investment in telecommunications networks: A review of recent practice", Martin Cave, page 22

- 2.7 This strategy essentially eliminated the prospect for the HFC to emerge as viable alternative competitive infrastructure to the Telstra copper local loop. The result has been that infrastructure based competition has failed to take-off in Australia in the way it has in other jurisdictions, where alternate cable networks compete with the incumbent copper network. The market reality is that competition today is largely driven by services that are supplied over the Telstra local copper loop, utilising regulated wholesale access services. As at 31 December 2011, some 1.2 million services are supplied through wholesale arrangements that are supported over the Telstra local copper network<sup>4</sup>.
- 2.8 In commenting on the development of competition in the fixed line telecommunications sector the ACCC has relevantly noted that;
- “Some infrastructure based competition (in the form of Optus’s HFC network, several wireless networks, and optical fibre transmission links) and quasi-infrastructure based competition (in the form of access seekers installing their own DSLAMs in Telstra exchanges) has developed in limited geographic areas. However, widespread end-to-end competing infrastructure, able to provide services of comparable price and quality to the incumbent’s network, has not emerged to the extent originally envisaged. In other words, the CAN has proven to be an enduring bottleneck, because these networks have not proven to be strong substitutes for fixed-line services provided via the CAN”.*<sup>5</sup>
- 2.9 In recognition of the failings of past competition and regulatory policy settings the Government has implemented significant telecommunications policy reforms that aim to open up the fixed line sector to increased competition. These reforms follow detailed and widespread consultation with the industry on the nature of competition and the desired policy measures to achieve effective change.
- 2.10 Central to these policy reforms is the Government’s plan to roll-out the NBN. The NBN has the dual aim of both delivering highspeed broadband services at affordable prices to all Australians and enhancing competition in the fixed line market. It will achieve the latter by delivering 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.
- 2.11 The National Broadband Network Companies Act 2011 was enacted in March 2011 to give effect to this policy objective. 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.
- 2.12 The Government’s policy reforms directly recognise that existing policy settings, focused on infrastructure based competition have failed to deliver an effectively competitive fixed line sector. Those policy settings have been re-set. In effect with the establishment

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<sup>4</sup> Telstra Corporation Limited Financial Results for the Half Year ended 31 December 2011.

<sup>5</sup> Submission to the Department of Broadband, Communications and the Digital Economy - “National Broadband Network: Regulatory Reform for 21st Century Broadband” June 2009, page 53

of the NBN the focus of competition will move from passive infrastructure (pits, pipes and cables) to the services and applications that can be delivered over the NBN.

- 2.13 In a submission to the DBCDE on the proposed policy reforms, the ACCC has recognised that in circumstances where a network has the characteristics of a bottleneck infrastructure competition might be better served off a single platform rather than multi-providers duplicating that infrastructure;

*“Some telecommunications infrastructure displays the characteristics of an enduring bottleneck — infrastructure where, for a number of reasons, it is more efficient to have all consumers served by a single provider than to have multiple competing providers. In particular, the high, specialised and largely ‘sunk’ costs of investment in the most fundamental elements of telecommunications networks (e.g. the ducts, pits, poles, copper, cable and fibre), and low ongoing marginal costs, economies of scale, scope and density, impose high barriers to entry for competitors”.*<sup>6</sup>

- 2.14 More recently the rationale for a single platform was articulated in a policy paper from the DBCDE which concluded that it would be appropriate for the NBN to be rolled-out to overbuild existing fibre networks within CBD locations, since it would be more efficient to service customers from the NBN;

*“Because existing CBD fibre networks were built to support the corporate market and cannot be readily leveraged to support a fibre-access network, industry indicated it could not identify a business case to take on such a role. Finally, industry broadly supported the view that a single wholesale-only platform (the NBN), was seen as more efficient and effective for access seekers as it prefers to deal with one wholesale player to deliver products to consumers and business and it would need to invest in new systems and processes to access non-NBN networks with limited coverage footprints”*<sup>7</sup>.

- 2.15 To help underpin the Government’s policy objective of a level playing field the *National Broadband Network Measures - Access Arrangements Act 2011 (NBN Access Act)* includes measures to extend the wholesale-only obligation that applies to the NBN to alternate highspeed broadband network infrastructure. In practical terms these provisions will act to discourage investment in existing or alternate access infrastructure to the NBN since there will be no investment case to support a second wholesale-only network in Australia. The measures reflect the strong policy desire to have a single national highspeed broadband infrastructure that operates on a wholesale-only basis.

- 2.16 In summary, it is important to consider this transaction in the context of the significant shift in competition policy settings. We have moved from a regime which placed primacy on delivering competition through investment in alternate infrastructure to one where competition is considered to be best promoted through the establishment of a single national open access wholesale network. This transaction implicitly recognises this policy shift.

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<sup>6</sup> Submission to the Department of Broadband, Communications and the Digital Economy - “National Broadband Network: Regulatory Reform for 21st Century Broadband” June 2009, page 4

<sup>7</sup> “Adequately served”: Criteria and assessment process to facilitate the rollout of the National Broadband Network (NBN) Policy paper April 2012, page 4

### 3. ACCC's framework for assessment

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- 3.1 In its draft decision the ACCC has outlined the framework it has used to evaluate potential benefits and detriments of the transaction. In particular it has noted that if the transaction does not receive authorisation (the counter factual) then it considers that the following assumptions will hold;
- (a) That the roll-out of the NBN will proceed without any material changes or delay;
  - (b) That Optus would continue to provide services over its HFC, but would not undertake the significant investments required to expand or upgrade the network; and
  - (c) That at some point Optus would likely decommission the network when the customers fall below a critical level.
- 3.2 Optus broadly supports the ACCC's characterisation of the likely counter factual. However, there are some important qualifications that need to be highlighted in respect of the latter two points, which have lead to some misunderstandings in recent commentary on the rationale for the transaction.
- 3.3 Firstly, in respect of b) above, to expand the footprint of the HFC and/or to upgrade the network to maintain some degree of technical parity with the NBN will require very significant level of capital investment. The return on such investment would be highly uncertain given that NBN Co will overbuild the HFC with a superior technology. Further, such investment is practically prohibited by the so called anti-cherry picking provisions in the NBN Access Act. As outlined in section 5 in greater detail, it is for these reasons that such a large scale investment will not be undertaken. However, this needs to be contrasted with additional operating and capital expenditure Optus will have to incur an annual basis to maintain and operate the network. If the authorisation is not granted, Optus would undertake this investment. However, as discussed in section 4, it is the avoidance of this duplicate expenditure that gives rise to a significant public benefit.
- 3.4 Secondly, whilst it is likely that at some point Optus will have lost sufficient customers to the NBN for it to independently choose to decommission the network and move its remaining customers to the NBN, this point is likely to be some time into the future. Such an inflection point is only likely to be reached when the NBN has reached scale and as customer demand for services that require more robust capability that the NBN can offer has reached critical mass. Importantly, this underpins the rationale for the transaction which will result in NBN Co accessing revenue from Optus' HFC customers considerably earlier than it otherwise would.

#### **4. Public benefit associated with the transaction**

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- 4.1 In evaluating the transaction the ACCC has indicated that it considers there are three clear public benefits arising from the transaction. This includes:
- (a) Cost savings from avoiding the duplication of future expenditure;
  - (b) Cost savings arising from the more orderly migration of HFC customers to the NBN; and
  - (c) Certain environmental benefits, such as the improved visual amenity from the removal of the overhead HFC cables.
- 4.2 Optus agrees that each of these represents a public benefit arising from the transaction.
- 4.3 By far the most material of the benefit relates to the avoidance of duplicated expenditure. If the transaction is not approved then Optus would have to undertake significant annual expenditure on the HFC network. This not only includes expenditure to maintain and operate the network, it also includes additional annual capital expenditure related to connecting customers to the network<sup>8</sup> and upgrading capacity and/or systems that are used to support the HFC and to ensure that it capable of meeting customer demands. This expenditure would directly duplicate expenditure that the NBN will incur. If the transaction is approved then this duplicate expenditure will be avoided. The avoided costs are identifiable and likely to be significant.
- 4.4 If it were assumed that the HFC network continues to be operated for a period of 15 years then Optus estimates that the avoided capital expenditure is likely to be in the order of \$646 Million on an NPV basis.
- 4.5 Optus notes that the ACCC has not accepted the arguments put forward by NBN Co and Optus in respect of the likely benefits to NBN Co's business plan and its internal rate of return. In support of its position the ACCC has indicated that;
- (a) The impact to NBN Co's business case is sensitive to a number of input assumptions so that it cannot conclude with sufficient certainty what impact the deal will have on NBN Co's internal rate of return; and
  - (b) The transfer of value from one provider to another provider does not of itself constitute a public benefit.
- 4.6 Optus does not agree with the ACCC's conclusions on each of these points. We consider that the transaction will result in a positive benefit to NBN Co's business plan which should be counted as a public benefit. This benefit arises from NBN Co being able to earn revenue from customers on the Optus HFC network considerably earlier than it otherwise would.

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<sup>8</sup> Whilst the HFC passes some 1.4 million serviceable addresses, to provide connection the last drop off the network will need to be installed to activate services.

4.7 Optus accepts that, consistent with any forward looking financial analysis there is some level of uncertainty in placing a precise value on the impact of the transaction to NBN Co's business plan. Much of this uncertainty derives from the difficulty in precisely estimating the period over which the HFC would likely continue to operate in the absence of the transaction being approved by the ACCC<sup>9</sup>. Nevertheless, Optus submits that it is possible to model scenarios that are both probable and likely to occur.

4.8 When these scenarios are considered then it is reasonable to assume that the transaction will result in a positive impact to NBN Co's business plan since the revenue from accessing the Optus HFC customers will exceed the migration payments NBN Co will make to Optus to acquire those customers. In this respect, Optus notes the statement from NBN Co at the time that the transaction was announced:

*"The Definitive Agreement reached with Optus is financially beneficial to NBN Co resulting in an improvement in NBN Co's Internal Rate of Return when compared to the company's Corporate Plan of December 2010".<sup>10</sup>*

4.9 Optus considers that the net benefit to NBN Co's business plan from the transaction which could amount to \$317 Million on an NPV basis. This reflects the impact of earlier wholesale revenues for NBN Co less the migration payments it will make to Optus.

4.10 Optus does not agree with the ACCC's assertion that any benefit arising from this transaction amounts to a transfer of benefit and should not therefore be considered a public benefit.

(a) Firstly, both parties have made a decision that this deal is in their commercial interest so each party must gain some value from it. The net benefit value to NBN Co of the earlier revenue which is over and above the level of the migration payments is not something Optus would likely be able to capture in the absence of the deal; and

(b) Secondly, since NBN Co is a Government owned entity which seeks to maximise value for taxpayers (and not profit) then any benefit accruing to NBN Co should be seen as more unambiguously as a public benefit. Specifically, by gaining earlier access to the revenues from Optus' HFC customers NBN Co will be able to lower its costs to serve which is likely to assist it in keeping access prices and consequently end-user prices low. In support of this point, Optus notes the following comment by NBN Co CEO, Mr Quigley, at the most recent Senate Estimates hearing:

*"What we are trying to do is make sure that we protect our shareholders' interests on behalf of the Australian taxpayers. I repeat, our model in NBN Co is not to maximise profit. Our job is to provide the best possible broadband*

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<sup>9</sup> Assumption about the number of customers who migrate are a less significant factor since any reduction in revenue accruing to NBN Co through lower assumed customer migrations is offset by lower migration payments to Optus.

<sup>10</sup> NBN Co Media Release – "NBN Co and Optus sign binding Agreement", 23 June 2011.

*service we can across the nation at the lowest possible prices. That is what our definition of success is".*<sup>11</sup>

- 4.11 In summary Optus agrees that there is a material and quantifiable benefit arising from this transaction. We consider that this benefit could be close to \$1 Billion of NPV value after taking into account the migration payments to Optus.

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<sup>11</sup> Senate Estimates page 129, 24 May 2012, page 129

## 5. The likely public detriment

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- 5.1 The ACCC has indicated that the transaction is likely to result in a public detriment, which principally arises from the removal of a potential source of competitive tension that otherwise may act as an indirect constraint on NBN Co's wholesale services. This in turn, the ACCC argues, may have negative consequences for price and non-price competition at the retail level.
- 5.2 However, the ACCC has recognised that there are a number of factors that will lessen any potential detriment arising from this potential loss of competitive tension. These include;
- (a) The limited footprint of the network;
  - (b) The fact that Optus is unlikely to undertake the significant investment required to upgrade or expand the network (which in any event would likely be captured by the anti-cherry picking provisions of the Act);
  - (c) That the Optus HFC network is only likely to be able to compete to supply entry level voice and data service and not the higher speed services that customers will demand over time; and
  - (d) The fact that the NBN Co will be regulated, which will put a significant constraint on the NBN Co's pricing of services.
- 5.3 Optus has put forward extensive detailed material in respect of the likely ability of the HFC network to apply any effective competitive constraint to the NBN. This material draws heavily on Optus' actual experience of running the HFC in competition to the existing national copper network. This analysis supports a stronger conclusion than that posited by the ACCC. In particular, Optus considers that prospect of the HFC network applying any effective competitive constraint to the NBN is remote and that any detriment that might be alleged to arise from this transaction would, therefore, be immaterial.
- 5.4 In support of this position Optus refers the ACCC to its confidential submissions of 20 January 2012 and 22 February 2012 which indicate that, in addition to the points raised by the ACCC, the ability of the HFC to exercise any form of competitive constraint is limited given;
- (a) Optus' legitimate interest in earning an appropriate return on its investment in the HFC;
  - (b) The impact of Optus' national pricing policy;
  - (c) Differences in the technical capability between the HFC and NBN infrastructure; and
  - (d) The limited case for further large scale investment in the HFC.
- 5.5 We have briefly expanded on each of these points below.

- 5.6 We have also included some submissions in response to the ACCC's comments regarding the voice-only restrictions in the HFC Agreement.

*Optus' legitimate interests in earning a return on its infrastructure investments*

- 5.7 Optus has been a leading investor in competitive infrastructure in the telecommunications sector, with investments totalling some \$16 Billion since 1992. In recent years Optus has invested around \$1 Billion annually in the sector. For example, in FY2010 and FY2011 Optus made capital investments totalling \$1.05 Billion and \$1.02 Billion respectively.<sup>12</sup>
- 5.8 As a commercial enterprise Optus has a legitimate interest to make a return on any capital it invests. As has been well documented in previous material before the ACCC, the HFC network has proven to be a subscale network that has struggled to generate an acceptable level of return. As evidence for this Optus was forced to write down the carrying value of the network by \$1.404 Billion in 2002.<sup>13</sup>
- 5.9 Whilst the historic investment Optus has made in the HFC network might be considered to be "sunk", Optus still has to earn an appropriate return on this investment. Further, Optus also has to compete for capital to be allocated to it within the SingTel group. If this transaction is not approved and Optus has to continue to operate the HFC, then it would be rational for Optus to seek to maximise the profits it generates on the HFC. In this way Optus will best ensure that it can generate an acceptable return both on the additional capital it will have to invest in the network and on the previously sunk capital.
- 5.10 Importantly, such an outcome will not be facilitated by Optus initiating heavy price discounting of its services on the HFC network. In the face of a dominant competitor that can and likely will respond to any price discounting, such a strategy is unlikely to produce sufficient market share gains to offset the reduction in profit. That is, price discounting is unlikely to be a profit maximising strategy that will deliver the acceptable returns on Optus' investment.<sup>14</sup>

*The impact of Optus' national pricing policy*

- 5.11 As noted in its submission of 22 February, Optus has historically maintained a national pricing policy for voice and broadband services. That is, in setting prices Optus does not differentiate between services offered over the HFC network or services provided over the Telstra copper network.<sup>15</sup>
- 5.12 Having a single set of fixed line voice and broadband plans that are available nationally has distinct advantages in terms of Optus' ability to; attract customers; to serve

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<sup>12</sup> <sup>16</sup> Management Discussion and Analysis of Financial Condition, Results of Operations and cash flows for the Fourth Quarter and Year ended 31 March 2011, page 56 <sup>16</sup> Refer relevant Management Discussion & Analysis reports from Singtel website. <http://info.singtel.com/about-us/investor-relations/financial-results>

<sup>13</sup> Optus Submission dated 20 January 2012 in support of NBN Co's authorisation applications.

<sup>14</sup> Optus refers further to the confidential information provided to the ACCC regarding these matters.

<sup>15</sup> For customers currently serviced by the HFC network, Optus may offer those customers the ability to "bolt on" premium speed broadband for an additional cost. However, the base offering remains consistent across platforms.

customers efficiently; and to deliver a positive customer experience. By contrast, offering differential pricing for HFC-only customers is highly likely to increase Optus' costs to serve; to create brand and marketing issues; and result in adverse customer experience.

- 5.13 As an example, if Optus sought to make a price offer only to customers on the HFC network then the non-contiguous nature of the HFC network and its limited scale would preclude certain types of advertising and promotional activities. For example, Optus would be unable to effectively use traditional media channels such as TV and radio to market HFC-only offers, because of the need to explain the limited nature of such offers. Instead Optus would have to undertake more direct forms of marketing, which are relatively more expensive and less effective in attracting customers.
- 5.14 Given these issues it is highly likely that Optus would seek to maintain its national pricing approach in the future if it had to service customers off both the HFC and NBN platforms. Under such a scenario, Optus prices' would need to be set to generate a positive return off each platform. It follows that the scope and opportunity for Optus to engage in price discounting its HFC services is, therefore, limited.

#### *Differences in the technical capability between the HFC and NBN infrastructure*

- 5.15 Optus has provided detailed information on the technical capabilities of the HFC network in comparison to those of the NBN. What this demonstrates is that the FTTP technology being deployed by the NBN has a significantly greater service capability than the HFC both in the immediate and longer-term.
- 5.16 A critical element of this difference relates to the level of contention (or load sharing) within the network, which has a direct impact the on end-user performance and the degree of practical substitutability between HFC and NBN services. Whilst the HFC Network can offer peak speeds of up to 100 Mbps, the actual average speed per user is less than this level. More importantly, however, is the capacity available to service end-user needs and the likely changes to capacity consumption over time as bandwidth hungry services become more prevalent.
- 5.17 Shared networks are designed to optimise the resources available across a number of end users by exploiting anticipated usage patterns. 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. Whilst both the HFC and NBN are subject to some level of capacity sharing, there is a significant difference in the capacity provisioned in each network. Optus has provided confidential information to the ACCC on the nature of this difference.
- 5.18 This differential is not significant today, but over time we expect it to become so as customer usage patterns change. As a result we anticipate that the HFC will become less competitive, since the level of contention within the network will become a more significant limiting factor.

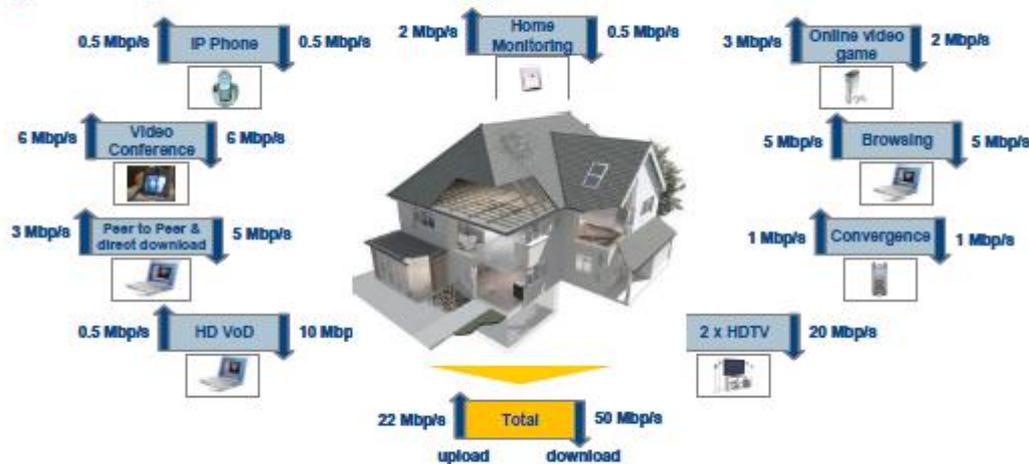
5.19 It is difficult to predict the services and applications that will emerge over the next decade, but there are two trends that appear certain to drive a significant change in usage;

- (a) The increase in video on demand services. Over the next decade the growth in demand for video and on demand TV services over broadband will increase exponentially with the prospect that these become the norm in terms of how customers consume video/TV content; and
- (b) Increased customer appetite for High Definition content (including 3D content), which will require high capacity bandwidth.

5.20 To cater for peak demand we anticipate that future networks will have to be dimensioned to support a significant lift in average throughput per customer (which is likely to be 100 times higher than today's average). This would typically be required to service an average household operating two HD TVs, with other connected devices (such as internet browsing and remote monitoring). The following extract from a report by Arthur D Little indicates this trend:

*"As illustrated in the Chart below, the presence of several TV sets, PCs phones and other devices in a home can 'easily' lead to 50Mbps<sup>16</sup>*

**Figure 18: Spread of bandwidth-hungry devices in the home**



Source: Arthur D. Little, Exane BNP Paribas estimates

5.21 The industry is already witnessing this trend with exponential growth in bandwidth requirements in recent years. The NBN has been dimensioned so that it can meet this anticipated growth in customer capacity requirements. In contrast the HFC would require a significant upgrade to meet this future capability.

<sup>16</sup> Arthur D Little report, "Superfast Broadband: catch-up if you can", March 2011.

- 5.22 Similarly, the upload speed and capacity of the HFC network, which is currently limited to 2 Mbps, is significantly below that for NBN Co's initial product set which provides upload speeds of between 1 Mbps to 40 Mbps.
- 5.23 What the above analysis demonstrates is that in practical terms the HFC network can only realistically be considered to be a substitute for NBN Co's entry level or mid-tier services and not NBN Co's higher level services. Further, over time the capability gap between the HFC and NBN will grow.

*There is no investment case to support a HFC upgrade or expansion*

- 5.24 Whilst there are clear differences between the capability of the HFC and FFTP network, Optus acknowledges that there is an upgrade path for HFC networks that enable them to provide services with speeds in excess of 100Mbps and much greater capacity throughput.
- 5.25 However, such an upgrade would require extensive re-engineering of the network. This is likely to require node splitting to reduce the level of sharing within the network and extending fibre deeper into the network. Ultimately, such changes would bring the HFC 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.
- 5.26 Changes of this nature would inevitably be very costly – running into many hundreds of millions of dollars. Given the history of this investment and the limited scale of the network there would be little prospect of a viable business case to make such an investment in today's environment. Faced with a situation where the HFC is overbuilt by a national scale NBN that is funded by the Government, then the case for such an investment in the future would be non-existent.
- 5.27 There is also no investment case to support an HFC expansion. In particular, the anti-cherry picking provisions in the NBN Access Act which extend the wholesale-only obligation to any new alternate highspeed broadband infrastructure (including any extension to an existing network such as the HFC network) ensure that this is the case.<sup>17</sup>

*Transaction will enhance competition*

- 5.28 The evidence and analysis Optus has provided to the ACCC presents a clear case that the HFC is unlikely to act as an effective competitive constraint on the NBN. An important implication of this is that Optus is likely to be a less effective competitor if it has to maintain its HFC network. To put this in a more positive way Optus is likely to be a more effective competitor if the transaction is approved.
- 5.29 This is clearly demonstrated if the transaction is examined through a broader lens, which takes account of the nature of current and likely future competition. Rather than adversely impact competition and consumer welfare, Optus submits that approval of the transaction is more likely to advance competition and consumer welfare.

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<sup>17</sup> Optus 20 January 2012 submission, paragraphs 6.31-6.32

- 5.30 As indicated in section 2 of this submission, recent policy reforms implemented by the Government recognise that intermodal competition has failed and that competition is more likely to be advanced by multiple service providers competing over a single national wholesale platform, where differentiation occurs at the service and application layer. Importantly, this transaction is consistent with those policy reforms.
- 5.31 In many respects the market is already in transition to this environment in advance of the roll-out of the NBN. In recent years the telecommunications sector has witnessed the rapid growth in converged digital services and devices. This is shifting the focus of competitive intensity from platforms to services and applications.
- 5.32 The roll-out of the NBN will accelerate this trend. Firstly, by offering a single national open access wholesale platform it will neutralise the impact of infrastructure as a differentiator, thereby placing ever more importance on the services and applications offered over the platform. Secondly, the technical capability of the NBN will open up opportunities for new content based services to be delivered over broadband. Each of these trends will be complimented by the roll-out of high speed 4G mobile networks that in turn are likely to leverage off the NBN infrastructure.
- 5.33 Optus is well advanced in preparing for this significant shift in the focus of the market. For example, Optus has recently established Optus Digital Media (ODM) as business division dedicated to creating digital products and services through building new capabilities and technology partnerships. Optus Digital Media is part of Group Digital L!fe, a dedicated division within SingTel which in turn is aimed at becoming a lead player in the global digital ecosystem.
- 5.34 In the last 18 months, Optus has released more than 20 digital products and services. These include cloud-based services such as online storage and backup, Internet TV services plus digital content and applications that directly the needs of consumers and business users.
- 5.35 These digital services enable consumers to better communicate, find and share information and be entertained wherever they are located across multiple platforms. Specific examples include:
- (a) Optus Smart Safe™, which is a cloud service that allows customers to back up and store content from their mobile handset, PC or laptop and access it online.
  - (b) Optus-Now news service gives customers access to the latest news, weather and traffic information on their mobiles.
  - (c) Optus MeTV with Fetch TV is an internet TV service that redefines conventional TV viewing by giving customers control over what they watch and when.
  - (d) Optus OfficeApps is a suite of cloud services for SMBs providing access to a range of business applications.

5.36 In conjunction with Singtel Group Digital Life group, Optus is investing heavily in new technologies, systems and partnerships to build its digital capabilities and enable new services to be brought to the market.

5.37 Optus is not alone in preparing for this this market transition. Telstra has also established a Telstra Applications and Ventures Group which aims to invest in applications and ventures that will grow off next-generation communication platforms. In recent investor updates, Telstra’s CEO, David Thodey, spoke of the importance of differentiating through new applications and services and how the NBN will accelerate the pace of change within the industry;

*“The NBN rollout will accelerate trends that we have been aware of for nearly a decade. The NBN is not a fundamental change to strategic technological trends – but it does represent a significant acceleration....Perhaps the most important of these trends is the move to intelligent networks. It’s not enough to be a Network Service Provider. We need to be an Application Service Provider as well. This will allow us to differentiate; to simplify our products and systems across multiple platforms; and to bring new products to market faster. We will not be providing dumb pipes. But rather an intelligent, flexible and rich Layer 3 network”.*<sup>18</sup>

5.38 Optus considers that approval of this transaction will help to increase retail competition and choice between carriers in an NBN environment. It will do so by ensuring that Optus can operate on an equal footing with other market players, enabling it to offer fixed line services off a single fixed line platform.

5.39 This means Optus will be free to become an even stronger retail competitor because it will be free to reallocate capital that would otherwise be required to maintain the competitiveness of a subscale HFC network against the full-scale NBN. The capital and savings derived from operating off one platform, rather than two, can be redirected to things customers want – product and service innovation rather than pits, pipes and cables.

5.40 The NBN has the capacity to support a vast array of new services and applications that will be relevant to customers in the future. Examples that we can predict today will include;<sup>19</sup>

- (a) Improved teleworking to make working from home easier;
- (b) Online health services that support interactive internet consultations, telemedicine and home care assistance;
- (c) Infotainment services that will include a broad range of entertainment applications and services such as IPTV, video-on-demand services, superfast online gaming and high quality video calling; and

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<sup>18</sup> Telstra Investor Update – media release and presentations, 19 April 2012

<sup>19</sup> Refer NBN website “About the NBN”

- (d) Business Solutions that will help businesses increase productivity, save time and money and compete on a global scale.

- 5.41 Whilst it is difficult to predict with any level of certainty the services and applications that will be important to customers in the future, what we can predict with some certainty is that these will require capital investment to be developed and brought to market. This transaction will assist Optus competing on the NBN by allowing it to focus its investment capacity on such services and applications.
- 5.42 Further to the above, Optus does not agree with the view expressed in the draft determination at paragraph 3.172 that the HFC network's continued presence in the market could provide additional incentives for NBN-based service providers to improve their retail product offerings in order to better differentiate their services from Optus' HFC-based services. It is clear that there are strong incentives that currently exist and will continue to exist, regardless of the HFC Agreement, for RSPs to improve their retail products and differentiate their offerings from those of other RSPs. With the roll-out of the NBN, these incentives and competition will only increase as RSPs seek to differentiate their NBN services from those of their competitors. This will be the focus of competition, not as against Optus' HFC network.

#### *Voice-only restrictions*

- 5.43 In the draft determination the ACCC expresses the view that the 'voice-only' restriction is likely to result in some public detriment. The reason for this is that the ACCC considers that the restraint will limit the promotional activities that may otherwise have been undertaken by Optus in the ordinary course of business which may hinder Optus' ability to compete to supply fixed-line services.
- 5.44 The voice-only restriction in the HFC Agreement provides that Optus will not proactively by way of a directed marketing campaign seek to obtain subscribers who will use the HFC network for voice-only services. The rationale for this provision is essentially as set out in the draft determination.
- 5.45 This restriction is unlikely to have any impact in practice on how Optus conducts its business. Optus has a number of voice-only customers on the HFC network the majority of who are legacy customers who originally acquired voice as well as other fixed line services from Optus but have since stopped acquiring those other services from Optus. Optus also makes a voice-only offer available to potential new customers (see for example the home phone plans included on the Optus website). Under the HFC Agreement, Optus will continue to be able to offer these voice-only services and promote them to potential customers in the way it currently does.
- 5.46 Optus does not however in the ordinary course of business actively promote the HFC network for the supply of voice-only services. Optus' fixed line marketing is conducted on a national basis and, while Optus' service offering includes a voice-only option, its marketing focuses on its broadband and bundled offerings. In this regard, the active promotion of voice-only services is not consistent with maximising Optus' return on investment in the HFC network.<sup>20</sup> Accordingly, this restriction is unlikely to impact on

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<sup>20</sup> Optus refers to the financial information it has provided to the ACCC in its confidential submissions.

Optus' marketing activities by restricting the promotional activities it would have otherwise engaged in.

- 5.47 Further, contrary to the suggestion in the draft determination, the voice-only restriction is unlikely to impact on any broader marketing activities that Optus may wish to conduct as such campaigns would not constitute "proactively by way of a directed campaign" seeking to obtain subscribers who will only use the HFC network for voice services for the purpose of the voice-only restriction in the HFC Agreement.

## **6. Conclusion**

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- 6.1 In conclusion, Optus submits that the ACCC should authorise the HFC Agreement between NBN Co and Optus because the public benefits associated with the HFC Agreement clearly outweigh any public detriments.