



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

**in support of the  
Application for Revocation and Substitution of  
Authorisation for arrangements between NBN Co  
Limited and SingTel Optus Pty Ltd  
and other Optus entities**

**12 February 2015**

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## 1. Introduction

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1.1 This submission is made by SingTel Optus Pty Ltd, Optus Networks Pty Ltd, Optus Internet Pty Ltd, Optus Vision Pty Ltd, Optus Vision Media Pty Ltd and Optus Systems Pty Ltd (together, **Optus**) in support of the application dated 12 February 2015 for revocation of the authorisation dated 19 July 2012 and lodged by NBN Co Limited (**NBN Co**) and substitution with a new authorisation relating to the Amended and Restated Optus HFC Subscriber Agreement between NBN Co and Optus dated 14 December 2014 (**Revised HFC Agreement**) and associated agreements listed in the application (together **Transaction Documents**).

### Executive Summary

1.2 The ACCC should authorise the relevant provisions of the Revised HFC Agreement because the public benefits that will arise from the Revised HFC Agreement are substantially greater than those which the ACCC determined in 2012 would arise from the current HFC Agreement and there are no material changes to the public detriments identified by the ACCC in 2012. Accordingly, the public benefits will clearly outweigh any public detriment.

1.3 For the current HFC Agreement in 2012, the ACCC found that there were public benefits resulting from:

- (a) avoiding the ongoing cost of supplying services over the Optus HFC network which the NBN is able to provide at a lower incremental cost;
- (b) a less costly migration of Optus customers to the NBN; and
- (c) minor environmental benefits.

1.4 The Revised HFC Agreement largely preserves those benefits and will produce substantial additional public benefits. The principal public benefit is enhanced because there is a significant cost saving arising from use and absorption of an upgraded Optus HFC network into the NBN as proposed. Optus estimates that these cost savings will likely run to at least hundreds of millions of dollars. That magnified cost saving means there will be a materially greater difference between, on one hand, the total cost to society of all services being provided over the NBN and, on the other hand, the total cost of the same services being provided over two networks.

1.5 Optus believes it is that magnified cost efficiency which has driven the Government's multi-technology mix (**MTM**) policy for the NBN and it is the motivation for the Revised HFC Agreement. It is this cost efficiency which is the principal reason that revocation and substitution of authorisation for the Revised HFC Agreement should be granted.

1.6 Optus notes also that this position is supported generally by the Vertigan Panel's *Independent cost-benefit analysis of broadband and Review of Regulation* in August 2014. That study compared various scenarios and concluded resoundingly that the net benefits of an optimised MTM rollout (as facilitated under the proposed Revised HFC

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Agreement) exceeded the net benefits of a pure FTTP network: "*the MTM scenario has both **lower costs** and **higher benefits** than the FTTP scenario*"<sup>1</sup>.

- 1.7 As compared to the HFC Agreement, the Revised HFC Agreement will also:
- (a) allow an easier migration process for HFC customers who's premises will not need to be physically disconnected and reconnected; and
  - (b) minimise the impact on customers and the community in constructing the NBN.
- 1.8 Optus also notes that the Revised HFC Agreement is consistent with the Government's policy objectives for NBN. In particular, the Government's Statement of Expectations for NBN Co dated 2 April 2014 directs that "*[a]s proposed by the Strategic Review, NBN Co will integrate existing HFC networks into the rollout where this is feasible and economically beneficial, and provide for wholesale-only, open access operation of these*".
- 1.9 The Revised HFC Agreement will comply with that direction facilitating faster roll out of the NBN. In addition to bringing forward the economies of scale for the NBN and improving the economic viability and reducing the risk profile of the NBN rollout, the expedited roll-out will increase consumer benefit by enabling earlier access to high-speed broadband services.
- 1.10 Optus submits that there is no detriment arising from loss of potential competition from the Optus HFC Network when comparing the factual (of the proposed Revised HFC Agreement) to the counterfactual (of the existing authorised HFC Agreement continuing). In the factual scenario the potential competitive constraint offered by the Optus HFC Network will be limited by the proposed arrangement that Optus customers will progressively migrate to the NBN and the HFC Network will either be upgraded by NBN Co and integrated into the NBN or decommissioned. In the counterfactual scenario the potential competitive constraint offered by the Optus HFC Network will be limited by the current authorised HFC Agreement which provides that Optus customers will progressively migrate to the NBN and the HFC Network will be decommissioned.
- 1.11 Even if the counterfactual were otherwise, so that in the absence of the Revised HFC Agreement the existing HFC Agreement also did not apply, all of the key facts identified by the ACCC in 2012 as lessening the likely impact of the HFC Agreement are still in place and do not materially change in respect of the Revised HFC Agreement. In particular:
- (a) the HFC network has a limited footprint and Optus has no plans to expand it. **[RESTRICTION OF PUBLICATION OF PART CLAIMED]**;
  - (b) Optus is unlikely to undertake significant upgrades or investment in the HFC network;

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<sup>1</sup> Page 59, *Independent cost-benefit analysis of broadband and review of regulation*, Volume 2 (August 2014)

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- (c) competition between the HFC network and the NBN would be unlikely to endure in the long term due to the NBN's economies of scale; and
  - (d) access to the NBN will be regulated.
- 1.12 None of these factors change in relation to the Revised HFC Agreement. While the NBN will now to be a MTM rather than pure FTTP network, it will continue to exhibit the natural monopoly characteristics identified by the ACCC, while the Optus HFC network will still be subject to the same limitations.
- 1.13 Accordingly, even if the Optus HFC network were to remain intact (notwithstanding the existing authorised HFC Agreement) and in Optus' ownership, it would offer only a limited constraint on the NBN, because NBN Co will continue to invest to upgrade the service quality of its ubiquitous NBN network services in ways that would not be contemplated by Optus in respect of the HFC Network.

### **Optus and the HFC network**

- 1.14 Optus is a leading Australian integrated telecommunications company, delivering communications, information technology and entertainment services.
- 1.15 The history and status of the Optus HFC Network is well known to the ACCC from a variety of regulatory processes, including the authorisation of the current HFC Agreement in 2012.
- 1.16 By way of recap and update, in summary:
- (a) Optus owns and operates one of the two 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.
  - (b) The Optus parties to the Revised 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 have previously been provided and have not changed. 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.
  - (c) Optus continues, as was the case in 2012, to use the HFC Network to supply fixed line telephony, broadband and pay TV to consumers within the HFC Network coverage area. Since the HFC Agreement in mid-2011 the number of active customers connected to the HFC has declined by around 7.5% from 504,000 to 466,000.
  - (d) Outside the HFC Network coverage area, Optus supplies fixed line telephony and broadband services using Telstra's copper network.

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- (e) 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.
- (f) 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 around 2.3 million homes, only around 1.4 million of these premises are deemed to be serviceable. The remaining 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 (MDUs).
- (g) Optus continues to have 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. [RESTRICTION OF PUBLICATION OF PART CLAIMED]

1.17 In accordance with the authorised HFC Agreement, as at the end of October 2014 Optus had migrated [RESTRICTION OF PUBLICATION OF PART CLAIMED] customers to the NBN from its HFC Network and received migration payments from NBN Co of around \$[RESTRICTION OF PUBLICATION OF PART CLAIMED]. The customer migration has occurred in suburbs in Sydney, Melbourne and Brisbane.

### **Residential services on the HFC Network**

1.18 Optus currently uses the HFC Network to provide telephony, broadband and pay TV services to residential customers. Where residential customers' premises are serviceable by the HFC Network, Optus will supply telephony, broadband and pay TV services via the HFC Network.

1.19 As at 30 September 2014, Optus' HFC customer base comprised approximately:

- (a) 466,000 Local Access Telephone subscribers; and
- (b) 422,000 High Speed Broadband subscribers.

1.20 Approximately 92% of Optus HFC customers take more than one product.

### **Business and wholesale customers**

1.21 As in 2012, Optus does not supply business grade or wholesale services via the HFC Network. 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.

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- 1.22 In relation to wholesale customers, the HFC Network has never been and is not currently configured to enable wholesale access<sup>2</sup>. Optus would need to undertake a major upgrade of the HFC Network which would require significant investment in order to make it suitable for the provision of wholesale services. Optus has no plans to make such an investment in the network absent the Revised HFC Agreement.
- 1.23 Under the Revised HFC Agreement, NBN Co will undertake activities itself and also pay Optus for some of the network changes necessary to allow it to be provided services by Optus. [RESTRICTION OF PUBLICATION OF PART CLAIMED]
- 1.24 [RESTRICTION OF PUBLICATION OF PART CLAIMED]

## HFC Network and the NBN

- 1.25 As the ACCC is aware, the HFC Network is a contested network and user performance is dependent on network loading. Shared networks are designed to optimise the resources available by exploiting the characteristics of a large number of end users. In any 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.
- 1.26 HFC networks do have an upgrade path to higher speeds allowing peak speeds of over 500Mbps on the current DOCSIS 3.0 standard. The more recently released DOCSIS 3.1 standard is expected to support speeds up to 10 Gbps downstream and 1 Gbps upstream. Optus has no intention or plan to implement that type of upgrade to DOCSIS 3.1 given the currently authorised HFC Agreement requires progressive decommissioning. Even absent that, however, Optus would not be likely to make the investment required to upgrade the HFC network. Such future technology would not be deployed by Optus on the HFC Network because it requires significant re-engineering of the network through node splitting and/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. As the ACCC knows, even prior to ACCC authorisation of the current HFC Agreement, Optus had no plans for capital expenditure to upgrade the HFC network in this way.
- 1.27 The Revised HFC Agreement supports the MTM NBN consistent with the Government's Statement of Expectations dated 2 April 2014. As a shared network, as the ACCC is

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<sup>2</sup> As stated in the recent Explanatory Statement for *Carrier Licence Conditions (networks supplying Superfast Carriage Services to Residential Customers) Declaration 2014* (page 10): "It is also important to point out that HFC networks have not been used to supply wholesale services. Telstra's existing copper network has been used to supply wholesale services in areas with HFC networks. Although it is technically feasible to supply wholesale services over HFC, it appears that wholesale customers preferred to seek access to the copper network because this was more widespread. To supply services on a national basis, they only had to purchase one set of equipment and operate under one set of technical specifications; having to operate a different set (or even both) in areas with HFC networks would have added to their costs of doing business".

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aware, the HFC Network already allows theoretical maximum download speeds around 100Mbps, although upload speeds are capped at around 1Mbps. However, in view of increasing bandwidth requirements per user, capacity will need to be substantially increased over time in order to enable all users to experience consistent actual speeds above 25Mbps and to meet upload speed requirements of 25 to 40Mbps (in accordance with the Government's expectations and NBN Co's product plans).

1.28 Optus understands that NBN intends to significantly upgrade the HFC network as it is integrated into the NBN in ways not contemplated Optus, for example by:

- (a) infilling geographic gaps in the network;
- (b) splitting and duplicating nodes to significantly improve capacity and performance;
- (c) building out more fibre deeper into the network, closer to homes so that coaxial cable lengths are significantly reduced; and
- (d) upgrading upstream channels to 64QAM and downstream channels to 256AQM.

1.29 In relation to network speeds, the Government's Statement of Expectations states that *"the design of a MTM NBN will be guided by the Government's policy objectives of providing download data rates (and proportionate upload rates) 50 Mbps per second to 90 per cent of fixed line premises as soon as possible."*<sup>3</sup> At this stage Optus is not aware of exactly what services NBN Co intends to make available over NBN to RSPs under the MTM model. Optus has however participated in industry consultation processes coordinated through NBN Co's Product Development Forum and in that context it understands that the intended model is ultimately for the same services to be provided by NBN Co over the NBN regardless of the access technology used to provide them<sup>4</sup>. That is, to the extent possible the same services will be provided over HFC as are to be provided over other network platforms. In order to achieve that, as set out above, significant upgrade and reconfiguration of the HFC Network as it is absorbed into the NBN will be required.

1.30 Optus anticipates therefore that NBN Co's service offering will have a number of features distinguishing it from what Optus is able to offer on the HFC Network, including:

- (a) increased speed tiers (NBN Co is planning to operate a speed tier construct on HFC where each individual service receives its nominated speed tier, similar to its FTTP product construct, instead of the sharing of bandwidth by users within a node)

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<sup>3</sup> Statement of Expectations, 8 April 2014, at page 2

<sup>4</sup> See NBN Co, *HFC Product Consultation*, July 2014

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- (b) increased upload capacity (layer 2 line rates available on an AVC several speed tiers are envisaged going up to 100 Mbps downstream and 40 Mbps upstream)
- (c) multi-cast service potential (like FTTP, there will be a roadmap for NBN Co's HFC based service to enable multiple providers to offer separate services to a single premises by including multiple separate wall plates);
- (d) business grade services (to the extent possible NBN intends to retain commonality between the business products sets for HFC and other platforms).

1.31 In relation to business grade services, for example, where there is a concentration of business end-users, Optus understands that NBN Co will consider how to best facilitate higher speed symmetric data services typically required by business end-users.

## **2. The current authorisation**

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- 2.1 Optus and NBN Co entered into the current HFC Agreement on 23 June 2011. It was authorised by the ACCC in July 2012.
- 2.2 As the ACCC is aware, the authorised HFC Agreement as it stands provides for the migration of Optus HFC subscribers to the NBN and for the decommissioning of parts of the HFC network. Under the agreement Optus will cease to supply broadband, voice and pay TV services over its HFC network to consumers. Optus will receive a migration payment for those consumers served by the Optus HFC network that elect to migrate to the NBN, including those that elect to migrate to the NBN with another retailer.
- 2.3 When considering whether that authorisation should be granted to these current arrangements in 2012, the ACCC was satisfied that in all the circumstances the arrangements were likely to result in benefit to the public and that this benefit would outweigh the likely detriment to the public constituted by any lessening of competition.
- 2.4 The ACCC concluded at that time that the roll out of the NBN was likely to proceed in a substantially similar manner irrespective of the authorisation of the HFC Agreement. In the absence of authorisation, however, the ACCC considered that Optus was likely to continue to provide services to consumers over its HFC network for at least the short to medium term, although competition between the HFC network and the NBN was unlikely to endure in the long term due to the pervasive and enduring economies of scale associated with the NBN.
- 2.5 In terms of public benefit, the ACCC was satisfied in 2012 that the current arrangement would produce demonstrable benefits to the public. It noted the natural monopoly characteristics of fixed broadband networks, and accepted that the current HFC Agreement resulted in benefits by avoiding the ongoing cost of operating the Optus HFC network during this period to provide a service the NBN is able to provide at a lower incremental cost. Those cost savings were material.
- 2.6 The cost savings would not arise in the absence of the HFC Agreement because of a divergence between the private costs faced by Optus and the costs to society of providing services over the NBN. NBN Co is charging a uniform national access price to retail service providers (including Optus), which is set above NBN Co's marginal cost of providing those services, in part because it will include a contribution to fixed costs. By contrast, Optus faces the true marginal cost of providing services over the HFC. Without the HFC Agreement, the relative costs faced by Optus would therefore provide it with a private incentive to continue to operate and provide services using the HFC network despite the fact that the overall cost to society would be lower if those customers' services were provided using the NBN. The ACCC concluded that the current arrangement will lead to the provision of services to those customers at lower overall cost using the NBN.

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- 2.7 The current HFC Agreement was also found to be likely to result in lower once off costs arising from the planned migration of customers from the Optus HFC network to the NBN and also to deliver small environmental benefits.
- 2.8 In terms of detriment, the ACCC considered that Optus had a financial incentive to continue to operate its HFC network and that this provided the potential for some ongoing competition. However, there were several factors which the ACCC considered lessened the impact on competition and consumers of removing the Optus HFC network, including:
- (a) the limited footprint of the Optus HFC network which passes only 1.4 million homes serviceable by Optus in three capital cities and the absence of plans to expand the HFC network outside its current footprint;
  - (b) Optus being unlikely to undertake significant investment in its HFC network, either in terms of application and systems development and future upgrades or expansions to the network. Consequently:
    - (i) the Optus HFC network will only compete to provide NBN entry level data and voice services;
    - (ii) over time, consumers are likely to demand services that the HFC network will not be able to supply;
    - (iii) Optus will use the NBN to provide higher speed broadband services to its customers;
  - (c) that the Optus HFC network will be uneconomic to operate once a critical mass of customers has been lost;
  - (d) any detriment arising from loss of consumer choice is likely to be minimal because most consumers are unlikely to know or care what network is being used to provide their fixed line broadband service. In other words, provided services have similar characteristics in terms of capability and reliability, end-users appear largely to be indifferent as to the access network that is used to deliver them; and
  - (e) NBN Co's terms and conditions of supply will be regulated regardless of any competition from the Optus HFC Network. Optus notes that this regulation has now been put in place through the ACCC's acceptance of NBN Co's Special Access Undertaking.
- 2.9 Under the existing authorised HFC Agreement, Optus has been:
- (a) actively migrating its HFC customers onto the NBN platform as it is built out in Optus' HFC footprint;
  - (b) receiving a fee for each subscriber migrated to the NBN;

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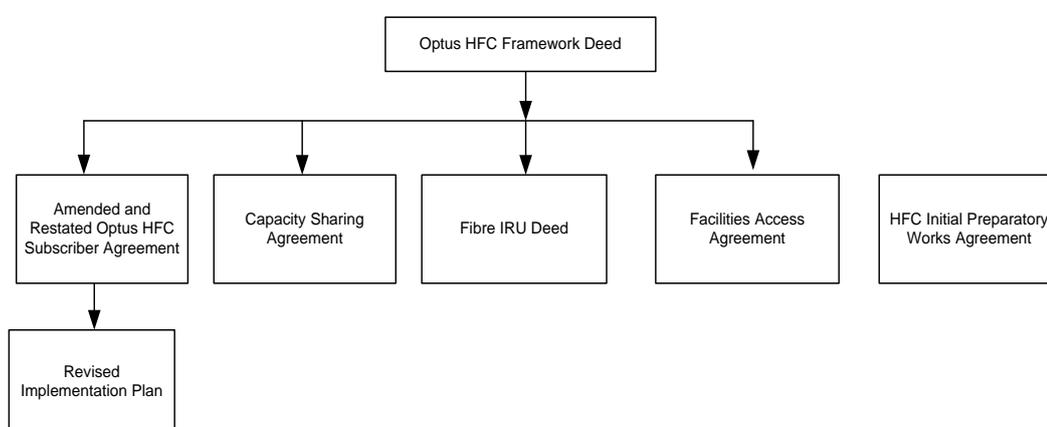
- (c) paying ongoing wholesale access fees to NBN Co for migrated customers, with a minimum commitment of 24 months;
- (d) going to progressively deactivate and decommission the HFC Network within 18 months of the NBN being completed in each HFC serving area (excluding those parts of the HFC Network that provide ongoing support for Optus' mobile infrastructure and business customers);
- (e) committed for 15 years (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) committed for 15 years 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 in contravention of sections 18 or 29 of the *Australian Consumer Law*.

2.10 In the time since the authorisation of the HFC Agreement in mid-2012 there has been migration of customers but as yet no decommissioning of any HFC network assets in accordance with the HFC Agreement. In summary, as at the end of October 2014 Optus has migrated [RESTRICTION OF PUBLICATION OF PART CLAIMED] customers to the NBN from its HFC Network. The customer migration has occurred in suburbs in Sydney, Melbourne and Brisbane.

### 3. Revised HFC Agreement

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- 3.1 NBN Co and Optus have entered into a Framework Deed which sets out the agreed terms of a variation to the HFC Agreement and associated arrangements between NBN Co and Optus to take account of NBN Co's intended changed network architecture for the NBN in HFC Serving Areas – the intended network architecture now being MTM. Schedule 1 to the Framework Deed comprises the Revised HFC Agreement.
- 3.2 The following diagram depicts the suite of Transaction Documents and the Initial Preparatory Works Agreement entered into at the date the parties agreed to the Proposed Transaction.



**Figure 1: Overview of Transaction Documents and Initial Preparatory Works Agreement**

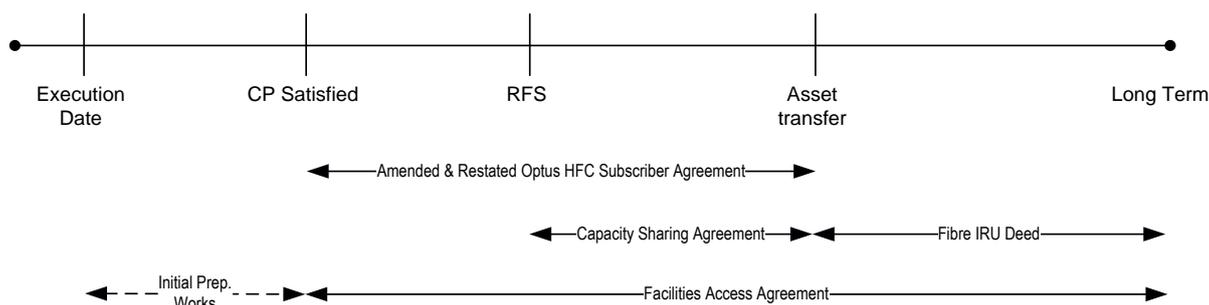
- 3.3 In summary, the principal purposes of the Transaction Documents are:
- (a) **Optus HFC Framework Deed:** outlines the Conditions Precedent to the transaction, which include any ACCC authorisation necessary for the parties to make and give effect to contracts, arrangements or understandings that may be agreed between them (clause 3, Framework Deed).
  - (b) **Revised Optus HFC Subscriber Agreement:** outlines process for agreeing the Implementation Plan, outlines the RFD Works and Migration process, timing for payment of the Migration Fee, process for transferring the Nominated HFC Assets to NBN Co, and Optus' decommissioning obligations.
  - (c) **Capacity Sharing Agreement:** sets out the terms on which Optus will supply access to the HFC Network to enable NBN Co to supply Carriage Services to a premises served by the HFC Network and, on an NBN Serving Area basis, generally precedes the Indefeasible Rights of Use Deed.
  - (d) **Indefeasible Rights of Use Deed:** sets out the terms on which Optus will provide NBN Co with access to the IRU Fibre so that it can supply Carriage Services to its customers over the NBN.

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- (e) **Facilities Access Agreement:** sets out the terms on which (i) Optus will provide NBN Co with access to the HFC Facilities; and (ii) NBN Co will provide Optus with access to the NBN Catenary Wire.

3.4 The principal purpose of the HFC Initial Preparatory Works Agreement is to set out the terms on which the Initial Preparatory Works will be performed by Optus, including the Scope of Work and terms for payment of the Initial Preparatory Works Amount.

3.5 For illustrative purposes, the following diagram depicts the overall timeline envisaged in the Transaction Documents and the Initial Preparatory Works Agreement. Many of the events contemplated by the Transaction Documents will occur on a progressive area by area phased basis.



**Figure 2: Document structure at transaction execution**

3.6 Most of the features of the existing HFC Agreement already authorised by the ACCC will remain unchanged under the Revised HFC Agreement. However, instead of providing for Optus only to decommission its HFC network, the Proposed Transaction provides for NBN Co to use and absorb identified components of the Optus HFC network into the NBN as part of an optimised MTM roll out and otherwise for Optus to decommission it. To achieve this outcome, the Revised HFC Agreement and other Transaction Documents provide that:

- (a) Optus will continue to migrate its customers to the NBN progressively over time and receive the same total level of migration fee from NBN Co for each customer for doing so, albeit that the structure and timing of migration payments will change;
- (b) Optus will continue to be subject both to a fixed line network preference in favour of the NBN and to an obligation not to unlawfully disparage the NBN;
- (c) Optus will transfer parts of its coaxial network to NBN Co and only decommission some parts progressively over time instead of decommissioning it all;
- (d) NBN Co will upgrade and integrate assets from the HFC Network into the NBN;
- (e) between the start of customer migration and eventual transfer of ownership of the coaxial network to NBN Co or decommissioning, NBN Co will also be

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able to use the HFC network to provide its services under a capacity sharing agreement;

- (f) NBN will get long-term infeasible rights of access to a portion of Optus' retained fibre which serves the coaxial network; and
- (g) Optus will give NBN Co access to its physical HFC facilities to support these rights.

3.7 The Application and NBN Co's submission set out the specific conduct for which authorisation is being sought. NBN Co and Optus are seeking authorisation to make and give effect to the following provisions in the Revised HFC Agreement:

- (a) clause 9.1 which provides for Optus progressively to migrate HFC customers to the NBN as it is rolled out;
- (b) clause 5.2(a) to the extent that it contains an obligation on Optus to use the NBN for residential and small business customers served by the Optus HFC network (which will operate for a period of 15 years from the date the NBN is first available in an HFC serving area);
- (c) clauses 11.1(a), 11.2 and Schedule 4 which provide for NBN Co to make instalment payments to Optus based on the actual number of subscribers who are migrated to the NBN from the Optus HFC network by any retail service provider, not merely those subscribers who remain customers of Optus after they migrate to the NBN from Optus' HFC network ;
- (d) clauses 4.3(a)(ii) and 10.1 which provide for Optus to cease supplying HFC Services to new HFC Subscribers in a relevant NBN Serving Area after the Migration Start Date and cease supplying any HFC Services direct to customers in NBN Serving Areas eighteen months after the Migration Start Date for an NBN Serving Area (or as otherwise agreed in writing between Optus and NBN Co) ;
- (e) clauses 10.2(a) and 10.3 to the extent that those clauses provide for Optus to decommission or deactivate its HFC Network in NBN Serving Areas. Such decommissioning or deactivation to occur 18 months after the Migration Start Date for an NBN Serving Area but Optus may elect to Decommission Excluded HFC Assets earlier in certain circumstances;
- (f) clause 10.2(b) to the extent that it restricts or limits Optus from extending the geographic coverage of its HFC Network, unless otherwise agreed;
- (g) clauses 10.2 (c) and (d) to the extent that these clauses prohibit, restrict or limit Optus granting any right or interest or permit any person to use, operate or provide any service over or using the HFC Network in an HFC Serving Area after deactivation and Optus to ensure that no person can use the HFC Network to provide services in Australia ;

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- (h) clauses 10.4 (a) and (b) to the extent that those clause prevent, restrict or limit Optus from disposing of the HFC Assets to any third party other than NBN Co without NBN Co's prior written consent and, coinciding with the roll-out of the NBN either the progressive transfer to NBN Co or decommissioning or deactivation of the coaxial cable access network elements and associated plant of the Optus HFC Network ;
- (i) clause 4.3(a) to the extent it restricts or limits Optus in the supply of HFC Services to existing HFC Subscribers in the ordinary and usual course consistent with its usual business practices until Migration of those HFC Subscribers;
- (j) clause 5.2(c) which provides that Optus, for a period of 15 years from 23 June 2011, is not to conduct a marketing campaign in respect of wireless data services targeted at retail customers whose premises are within the HFC serving area which is expressly critical of or makes any express adverse statement about the performance or functionality of the NBN where such criticism or statement is, in all the circumstances, misleading or deceptive, or likely to mislead or deceive, in contravention of section 18 of the Australian Consumer Law or involves the making of a false or misleading representation in contravention of section 29 of the Australian Consumer Law (anti-disparagement provision);
- (k) clauses 4.3(b)(i)(C) and 7.7 to the extent that they restrict or limit Optus until the Migration Start Date from utilising certain NBN Lead-ins at Premises for the purpose of providing HFC Services to prospective HFC Subscribers. A restriction applies to Optus utilising certain NBN Lead-ins at Premises for the purpose of providing HFC Services except in response to an unsolicited request from a potential subscriber;
- (l) clauses 7.4 (a), (b) and (f) which provide that NBN Co is to provide Optus with certain forecasts being an indicative forecast and a rolling two year forecast which commences from the relevant RFD Forecast Date. The rolling two year forecast is to specify:
  - (i) the NBN Rollout Areas and RFD Areas in which RFD Works will commence during the first year in a particular area (called the First Year Forecast); and
  - (ii) a non-binding, indicative forecast of the NBN Rollout Areas in which NBN Co expects RFD Works to commence during the second year to which the forecast relates.
  - (iii) Regardless of whether the actual RFD Works specified in the First Year Forecast are performed, NBN Co will be obliged to pay Optus the First Instalment Migration Fee; and
  - (iv) clauses 7.6(b)-(c) and 7.7(a)-(d) which provide NBN Co with the ability to perform, at its cost, RFD Works in an RFD Area (including

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installing Lead-ins at the Premises) in anticipation of the transfer of the HFC Sale Assets to NBN Co, on and from the RFD Date and subject to NBN Co providing the requisite RFD Forecasts and RFD Notices to Optus. Optus is entitled to Utilise a NBN Lead-in for consideration prior to the Migration Start Date upon certain conditions.

- 3.8 NBN Co and Optus are also seeking authorisation of provisions in other Transaction Documents as follows:
- (a) Clauses 5.1, 5.2(a), 6.2(a) and (b) of the IRU Deed which contain provisions granting exclusive rights to NBN Co for the use of certain dark fibre cores serving the coaxial cable access network elements acquired by NBN Co.
  - (b) Clause 2(d) of the CSA which provides for the exclusive grant of access to a prescribed portion of Optus' HFC spectrum to NBN Co for the supply of HFC services to wholesale customers.
  - (c) Schedule 1, clauses 3.5, 5.3, 4.2 and 7.2 of the CSA which provide for the progressive sharing of spectrum according to capacity requirements of each party on the HFC Network through the migration period following NBN ready for service and subsequently Optus is to make available to NBN Co all the available spectrum. In addition, clause 7.2(b)(iii) of the CSA contains a restriction on NBN Co acquiring operations and maintenance services in an area where Optus has direct HFC customers from an entity which controls a hybrid fibre coaxial network that passes more than 1 million premises.
- 3.9 As outlined above, key provisions of the Transaction Documents (including those the subject of the authorisation application as outlined above) are conditional on obtaining ACCC authorisation, and the Framework Deed will terminate if authorisation is not obtained, leaving the currently authorised HFC Agreement in place.
- 3.10 Optus notes that the Revised HFC Agreement provides for NBN Co to use and have transferred to it parts of the HFC Network over time, instead of the network being decommissioned as is currently the case. Under the CCA it is not possible for the acquisition of assets by NBN Co in itself to be formally authorised and no such authorisation is sought by the parties for that aspect of the Revised HFC Agreement (including to the extent that the clauses identified above operate to effect such an acquisition). That said, the transfer of HFC Network assets to NBN Co is an integral and essential feature of the Revised HFC Agreement which cannot meaningfully be severed or otherwise isolated. In other words, it is not necessary under the CCA for the ACCC to consider whether that transfer by itself has public benefits or detriments which should be excluded from the necessary calculus of benefits for authorisation purposes. Rather, that aspect of the transaction is part and parcel of the whole Revised HFC Agreement to be considered holistically for authorisation purposes.
- 3.11 Optus anticipates that the ACCC can use the authorisation consultation process for the purposes also of informally considering whether or not it objects to the acquisition of the HFC Network for the purposes of s50 of the CCA if required.

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- 3.12 In short, no substantial lessening of competition arises under s50 of the CCA in respect of the acquisition of HFC Network assets by NBN because those assets would otherwise be decommissioned in accordance with the existing authorised HFC Agreement.

#### 4. The counterfactual

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- 4.1 This section considers the relevant counterfactual against which the public benefits of the Revised HFC Agreement should be assessed.
- 4.2 In 2012, the ACCC concluded that the roll out of the NBN was likely to proceed in a substantially similar manner irrespective of the authorisation of the HFC Agreement. In the absence of authorisation, however, the ACCC considered that Optus was at that time likely to continue to provide services to consumers over its HFC network for at least the short to medium term, although competition between the HFC network and the NBN was found to be unlikely to endure in the long term, due to the pervasive and enduring economies of scale associated with the NBN.
- 4.3 The counterfactual against which the public benefits of the relevant provisions of the Revised HFC Agreement should be considered is a future in which there is no Revised HFC Agreement. As set out above, key provisions of the Revised HFC Agreement are conditional on the ACCC revoking the authorisation of the existing HFC Agreement and substituting it with a new authorisation.
- 4.4 Accordingly, if there is no Revised HFC Agreement then the current authorised HFC Agreement will continue to operate, because its amendment is effectively conditional on the authorisation and coming into force of the Revised HFC Agreement. In that situation Optus submits that the NBN will continue to be built by NBN Co and the parties will continue to work together under the current arrangement to ensure to the extent possible that HFC customers are migrated efficiently to the NBN as it is built into HFC network areas, that the HFC network is progressively decommissioned and that Optus will continue to abide by its commitments for fixed line preference and non-disparagement.
- 4.5 Optus submits that absent revocation and substitution of the authorisation:
- (a) NBN Co is likely still to rollout the NBN within HFC network areas (in other words, Optus believes that NBN Co is likely to roll out the NBN consistent with the Government's expectations irrespective of revocation and substitution, although it may well do so using a different mix of access technology and at a different time than would be the case with authorisation<sup>5</sup>); and
  - (b) Optus will continue to service existing customers and to the extent possible migrate them as the NBN rolls out as well as progressively decommissioning the HFC network, receiving migration payments and preferring NBN Co's fixed line services.

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<sup>5</sup> Para 3.50 of the original authorisation decision described the ACCC's similar conclusion in relation to the HFC Agreement in 2012: "*The ACCC accepts that a decision not to authorise the relevant provisions of the HFC Agreement may result in some changes to the specific parameters of the NBN roll out including, for example, the timing of roll out at particular locations. However the ACCC does not consider that a decision not to grant authorisation would materially alter the intended roll out of the NBN*".

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- 4.6 Optus notes the legal requirement<sup>6</sup> that the ACCC must be satisfied that it would not be prevented from granting a substituted authorisation under the relevant provisions if it were a new authorisation. That legal requirement does not require the ACCC to consider this application for revocation and substitution as if it were somehow a wholly new application in the sense that the existing authorised arrangement is not in place. In other words, the legal requirement does not (indeed, cannot) affect the counterfactual.
- 4.7 Even if the situation were otherwise such that, absent the revocation and substitution of the authorisation now sought, Optus and NBN would effectively "rip-up" the existing authorised agreement or it would otherwise not apply, then Optus' likely conduct going forward would be no different to that which the ACCC determined in 2012, because:
- (a) the HFC network has the same limited footprint as it did in 2012 and Optus has no plans or intention to expand it;
  - (b) Optus is no more likely now than it was in 2012 to undertake significant upgrade or investment in the HFC network as is contemplated to be undertaken by NBN as part of integrating the HFC network into the NBN; and
  - (c) competition between the HFC network and the NBN is no more likely to endure in the long term than was assessed in 2012 because Optus would decommission its HFC network when the number of customers falls below a critical level where it will be cheaper for Optus to service remaining HFC customers on the NBN than on the HFC network.
- 4.8 These points are elaborated in section 6 below.

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<sup>6</sup> CCA, section 91C(7).

## 5. Public benefits of the Revised HFC Agreement

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5.1 Optus submits that there are significant public benefits arising from the Revised HFC Agreement. There are a range of general public benefits which arise from maximising the efficiency and effectiveness of an MTM NBN by including the Optus HFC Network in accordance with arrangements in the Transaction Documents<sup>7</sup>. Optus proposes in this submission, however, to focus on elaborating three quite specific public benefits which are best seen as major enhancements to the categories of public benefit which the ACCC accepted after the lengthy and detailed authorisation process in 2012:

- (a) additional efficiency gains to be derived from the operation of one network rather than two;
- (b) allowing an easier migration process for HFC customers whose premises will not need to be physically disconnected and reconnected; and
- (c) facilitating environmental benefits and improved amenity by minimising the impact on customers and the community in constructing the NBN.

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

### Additional efficiency gains

5.3 In 2012 the ACCC recognised that duplication of infrastructure is inefficient where the same service(s) can be provided at a significantly lower average cost by a single network. The ACCC considered that to the extent the HFC Agreement is expected to reduce or avoid inefficient duplication of infrastructure, public benefits will arise and avoiding inefficient duplication of infrastructure results in lower average costs for servicing network customers therefore promoting improvements in allocative and productive efficiency.

5.4 The basic proposition accepted for the current HFC Agreement is that it will deliver cost savings to society by providing an incentive for Optus to migrate its customers to the NBN, thereby avoiding the costs associated with inefficient network duplication. Specifically, in 2012 the ACCC accepted that in the absence of the HFC Agreement, Optus would have a private incentive to continue to operate and provide services using the HFC network, whereas from the point of view of overall social welfare and efficiency, it would be less costly to provide the same services using the NBN. This private incentive arises because NBN Co's access pricing is above its marginal or incremental costs of serving Optus HFC customers. Despite these costs being lower than equivalent costs of service provision using the HFC network, Optus will not face a private incentive to migrate customers to the NBN in these circumstances. The HFC Agreement was therefore found to facilitate a closer alignment of Optus' private interests with the overall interests of society.

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<sup>7</sup> Optus supports the broader range of public benefits which are elaborated in NBN Co's submission accompanying the current application.

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- 5.5 Optus submits that the Revised HFC Agreement will permit substantial additional cost savings as compared to those anticipated under the existing authorised HFC Agreement, thereby improving the calculus of public benefit. These additional cost savings arise from integration of a significantly upgraded HFC network into the NBN, instead of NBN Co building a wholly new network and the HFC network being decommissioned as is already authorised.
- 5.6 Cost savings from the Revised HFC Agreement will arise in different ways, both for NBN Co (in terms of significantly reducing cost to build the NBN which is elaborated in NBN Co's submission), but also for Optus, particularly in terms of reducing the cost of HFC network decommissioning as compared to what is currently envisaged under the existing authorised HFC Agreement.
- 5.7 That enhanced level of cost saving means there will be an even greater difference between, on one hand, the total cost to society of all broadband access services being provided over the NBN using MTM network design and, on the other hand, the total cost of the same services being provided over two networks (ie, the NBN without the HFC Network and separately the HFC Network).
- 5.8 The fact that NBN Co will now utilise key parts of the HFC network to provide highspeed broadband services rather than overbuild the HFC and in turn require Optus to decommission elements of the HFC will result in very substantial additional benefits. Optus does not have access to the detailed internal analysis undertaken by NBN Co as part of its Strategic Review. There is, however, sufficient publicly available information to be able to conclude confidently that these potential cost savings are very significant. A conservative assessment of the cost savings NBN Co will generate by upgrading and using the Optus HFC Network must take into account in particular the use of existing coaxial premises lead-ins (instead of their duplication), as well as Optus fibre for distribution. Optus believes that cost savings would be in the order of at least hundreds of millions of dollars. This is based on the assumption that the Optus HFC will enable NBN Co to access between 0.9 to 1.2 million premises<sup>8</sup>.
- 5.9 In addition to the above, Optus had estimated that it would incur costs of approximately \$[RESTRICTION OF PUBLICATION OF PART CLAIMED] over a 4-5 year period to decommission the relevant components of the HFC Network under the existing HFC Agreement. These costs will no longer be incurred as the elements of the HFC Network that will be decommissioned under existing arrangements will be absorbed into the NBN under the proposed arrangements. This is another significant cost saving.
- 5.10 Even if the existing authorised HFC Agreement did not exist (so that the counterfactual is as the ACCC found in 2012) largely the same reasoning would apply as applied in 2012, albeit with the enhanced cost savings for the reasons set out above. Optus provided the ACCC in 2012 complete details of continuing expenditure requirements for its HFC network on a confidential basis, including actual and forecast expenditure data

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<sup>8</sup> Refer Exhibit 3.2 of NBN Co *Strategic Review* 12 December 2013 (page 89) for assumptions on HFC premises. Absent the Transaction Documents, NBN Co would have to incur significant additional costs to connect these premises through alternate technologies, such as FTTP, FTTN or augmentation of the Telstra HFC.

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by category. Optus has had no cause within its normal business activities to update that information but has for present purposes 'desktop' reviewed that 2012 cost analysis. In short, there is no material change since 2012 to the likely cost profile of maintaining and operating the HFC Network going forward absent any agreement with NBN Co.

- 5.11 If the Revised HFC Agreement proceeds, Optus will progressively sell to NBN or decommission its HFC network. Customers, who in the absence of any arrangements (ie either the proposed new arrangements or the existing authorised HFC Agreement) would have been provided services using the HFC network, would be provided with services using the NBN. The economic cost saving to society from operating one network instead of two networks is the difference between the resource costs of providing services to customers using the HFC network and the NBN network separately and the resource costs of providing the same services to these customers using the NBN (which under the Revised HFC Agreement will incorporate parts of the HFC network).
- 5.12 The reduction of expenditure is, as before, likely to occur progressively as the NBN is rolled out and the HFC network is either integrated into it or decommissioned. Optus submits that the benefit from avoiding inefficient duplicated expenditure will occur in each year that the Optus HFC network would otherwise have been separately operational.
- 5.13 This ongoing operations and maintenance expenditure is what the ACCC previously accepted would be avoided by serving all customers on the NBN instead of duplicating the network. Under the Revised HFC Agreement costs to maintain and operate the HFC Network will continue to be incurred, but will be borne by NBN Co (together with costs of upgrading etc), but these are massively outweighed by the costs avoided by NBN Co not having to roll out an entirely separate NBN where the HFC Network is upgraded and integrated. That efficiency dividend will be even greater than that which exists under the current arrangements, as is elaborated by NBN Co's submission.
- 5.14 In short, on this scenario, public benefits will arise from the cessation of continuing additional expenditure requirements associated with the Optus HFC network operating separately to the NBN and these benefits are likely to be material.
- 5.15 Optus submits that it is these improved cost efficiencies which both underlie the Government's direction to NBN to employ a MTM and which are also the principal reason that authorisation should now be granted for it.

### **Easier migration of Optus customers to the NBN**

- 5.16 The existing HFC Agreement includes a 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 efficient and fairly seamless such that Optus' HFC customers are likely to gain access to the NBN through a process that will minimise any disruption to the customer. That has been the experience to date<sup>9</sup>.

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<sup>9</sup> Optus notes that no issues of 'contestability' of retail customers have arisen as a result of Optus' approach to migration under the existing authorised HFC Agreement (ie no customers have been 'locked in' to contracts

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- 5.17 In 2012, the ACCC accepted that there were likely to be some cost savings to the parties through that orderly migration of Optus HFC customers as a result of the HFC Agreement. Moreover the ACCC noted that the value of the cost savings is likely to be greater where co-ordination avoids prolonged consumer driven migration from the Optus HFC to the NBN. The types of efficiency saving generated by co-ordination of migration included reduced travel time for a technician to complete each installation for a mass migration program as opposed to multiple individual installations.
- 5.18 Optus (and NBN Co) provided a confidential estimate of likely savings to arise from the orderly migration of Optus HFC customers to the NBN in 2012. The ACCC considered<sup>10</sup> that those estimates may have overstated the likely benefit that can only be derived if the HFC Agreement proceeds. This was primarily because the comparison had been made between an orderly migration enabled by the Optus HFC Agreement and migration on an ad hoc basis and the ACCC considered it likely that there would be a degree of coordination even in the absence of the HFC Agreement to ensure that the connection of customers to the NBN (when that occurs) is as efficient as possible. Optus submits that at the very least the same cost savings as were previously accepted will arise under the Revised HFC Agreement.
- 5.19 Optus notes and supports the additional cost benefits identified in NBN Co's submission in terms of improved customer migration from its perspective as the gaining network. In particular, the different process for migration in the Transaction Documents arising because no physical service connection and disconnection is necessary for existing end-users is expected to generate a significant incremental cost saving for NBN, relative to the site visit costs which are otherwise expected to arise under the existing authorised HFC Agreement.

### **Environmental and community benefits**

- 5.20 In 2012, the ACCC considered that the HFC Agreement was likely to give rise to some minor environmental benefit as compared to the counterfactual, arising principally from improvement in visual amenity and safety for the public and relevant workforce. The anticipated benefits arising from reduced power consumption (using one network rather than two) were significant but were already reflected in the reduced operating costs which formed part of the efficiency benefits discussed above and should not be 'double-counted'.
- 5.21 Under the Revised HFC Agreement the HFC network is in part to be upgraded and incorporated into the NBN, and to that extent will remain in place as partly aerial. Optus accepts that some small measure of anticipated benefit may therefore be lost from the currently authorised position, but notes that the ACCC did not see these benefits as being particularly significant. For example, the NBN is expected to be aerial in some locations in any case, albeit with potentially narrower diameter cables than the existing

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beyond the normal contract terms). Optus broadband customers can sign-up to plans either monthly or for 24 month irrespective of network type (ie, HFC, ADSL1 or NBN).

<sup>10</sup> Para 3.91 of ACCC Authorisation decision.

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HFC network<sup>11</sup>. Further, while overhead coaxial cable is to be removed as part of decommissioning under the current arrangements, the catenary wire (which is attached to the power poles to support the coaxial cable) is to remain in any case.

- 5.22 Offsetting any such small loss of benefit is the obvious and very real benefit for householders and local communities of avoiding the disruption which inevitably occurs as a result of full blown network construction. The level of disruptive construction activity required to upgrade and infill the HFC network for the purpose of incorporating it into the NBN (for example, the deployment of small street cabinets) as proposed is notably lower than the construction activity which is involved under the currently authorised arrangements, which requires both the rollout of a completely new network and the decommissioning and removal of the existing HFC network.
- 5.23 While the cost saving to NBN and Optus of reduced construction and decommissioning will, Optus acknowledges, be captured as part of efficiency benefits outlined above, there are benefits for local communities and householders from not being subject to that level of disruption. These are hard to quantify but are potentially significant<sup>12</sup>.

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<sup>11</sup> Para 3.94 of ACCC Authorisation decision.

<sup>12</sup> Refer for example 'Information Super Driveway', *Daily Telegraph* (25 November 2010) (<http://www.dailytelegraph.com.au/information-super-driveway/story-fn6bm90q-1225960465773>). The article describes the experience in Minnamurra in New South Wales of the inconvenience and 'destruction' associated with the digging of trench to lay cable for the NBN.

## 6. No public detriment

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6.1 There are no additional public detriments arising from the proposed Revised HFC Agreement, as compared to those which the ACCC considered in 2012.

6.2 In respect of the existing authorised HFC Agreement, the ACCC concluded in 2012 that some public detriment was likely to result from the restriction upon Optus' future use of its HFC network, reducing a potential source of competitive tension and consumer choice. The ACCC accepted, however, that some key factors significantly lessened the potential impact of the HFC Agreement on competition. These were set out as part of its analysis balancing public benefit and public detriment, as follows<sup>13</sup>:

*3.232 The ACCC considers however that there are several factors which are likely to lessen the impact on competition and consumers of removing the Optus HFC Network, including:*

- *the limited footprint of the Optus HFC Network – the network only passes 1.4 million serviceable homes in three capital cities, with a customer base of around 400,000 broadband subscribers. Optus has stated that it has no plans to expand the HFC network outside its current footprint;*
- *Optus is unlikely to undertake significant investment in its HFC network, either in terms of application and systems development and future upgrades or expansions to the network. Consequently:*
  - *the Optus HFC network will only compete to provide NBN entry level data and voice services;*
  - *over time, consumers are likely to demand services that the HFC network will not be able to supply;*
  - *Optus will use the NBN to provide higher speed broadband services to its customers;*
- *the ACCC accepts that the Optus HFC network will be uneconomic to operate once a critical mass of customers has been lost. If Optus were to decommission the HFC network in the short term then the likely detriments arising from the HFC Agreement would be diminished, especially those resulting from a loss of dynamic efficiency. The ACCC has not formed a view on when this is likely to occur;*
- *any detriment arising from loss of consumer choice is likely to be minimal; most consumers are unlikely to know or care what network is being used to provide their fixed line broadband service. That is, they choose Optus to be their RSP, not the underlying network technology used to provide the broadband service. In other words, provided services have similar characteristics in terms of capability and reliability, end-users appear largely to be indifferent as to the access network*

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<sup>13</sup> ACCC Authorisation Decision, para 3.232.

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*that is used to deliver them. Further, the entry level broadband services Optus will offer on the NBN and the HFC network are likely to be very similar (in terms of offerings and price). Since Optus will likely offer its higher speed services over the NBN and is unlikely to market its HFC products separately, the choice for Optus customers will concern the speed of the broadband product rather than the network over which it is provided.*

*In the circumstances the ACCC considers that the potential detriments to the public from the loss of competition are likely to be less significant than may otherwise be expected. The ACCC also considers that these detriments, to the extent that they arise, will become less significant over time.*

- 6.3 Optus' principal submission is that there is no detriment at all arising from loss of potential competition from the HFC Network when comparing the factual (of the proposed Revised HFC Agreement) to the counterfactual (of the existing authorised HFC Agreement continuing). In the factual scenario the potential competitive constraint offered by the Optus HFC Network will be limited by the arrangement that Optus customers will progressively migrate to the NBN and the HFC Network will either be upgraded by NBN Co and integrated into the NBN or decommissioned. In the counterfactual scenario the potential competitive constraint offered by the Optus HFC Network will be limited by the arrangement that Optus customers will progressively migrate to the NBN and the HFC Network will be decommissioned. The same per customer migration payments will apply in both scenarios. The same preference obligations exist and the same anti-disparagement arrangement will apply in each scenario. Accordingly, there is no public detriment at all arising from the move from the HFC Agreement to the Revised HFC Agreement.
- 6.4 Optus further submits that even were the counterfactual otherwise, so that in the absence of the Revised HFC Agreement the HFC Agreement was terminated or did not apply, all of the key facts identified by the ACCC in 2012 as lessening the likely impact of the HFC Agreement are still in place and do not materially change in respect of the Revised HFC Agreement. The same "*institutional and legislative factors*"<sup>14</sup> which restricted the scope of competitive rivalry then persist now<sup>15</sup>. In particular:
- (a) the Optus HFC network has a limited footprint and Optus has no plans to expand its HFC network which means that any hypothetical competitive constraint imposed on NBN would be geographically limited;
  - (b) Optus is unlikely to undertake significant investment in its HFC network, both in terms of application and systems development and future upgrades or expansions to the network; and

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<sup>14</sup> Sims, Understanding the ACCC's NBN Co / Optus authorisation decision and its implications (2012) 20 AJCL 177 at 177.

<sup>15</sup> Possible changes to legislation are discussed at paragraph 6.20 and 6.21 of this submission.

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- (c) Optus notes that even the initial improvements and upgrades NBN Co has identified for the services it will offer under MTM, as described in section 1.25 to 1.31, would involve significant investment for Optus to replicate. This would require a major upgrade to the Optus HFC network, involving new Cable Modem Termination systems, node splits, product developments and a significant upgrade to capacity to meet the upstream speeds which NBN Co proposes to offer. Such upgrades are likely to run to hundreds of millions of dollars.

6.5 These key factors are outlined in more detail below at sections 6.8 to 6.13.

6.6 Further, [RESTRICTION OF PUBLICATION OF PART CLAIMED]

- (a) [RESTRICTION OF PUBLICATION OF PART CLAIMED]; and

- (b) NBN Co is subject to regulation under Part XIC of the CCA so NBN Co's terms and conditions of supply will be regulated regardless of any competition from the HFC.

6.7 These factors are outlined further in paragraphs 6.14 to 6.19 below.

### *Limited footprint of HFC Network and no plans to expand*

6.8 First, the limited footprint of the Optus HFC network has not changed since 2012 and Optus has no plan to expand its HFC network. The relevant counterfactual is that the existing authorised HFC Agreement will continue to apply and in that circumstance of course there is no chance at all of network expansion absent the revised HFC Agreement. Even if the counterfactual were otherwise, so that in the absence of the Revised HFC Agreement the HFC Agreement did not apply, Optus would in that scenario still be very unlikely to geographically expand its network for the reasons the ACCC accepted in 2012.

6.9 Optus notes that there has been no consideration of any plans to extend or infill the HFC Network since 2012 except in the context of negotiation of the currently proposed Revised HFC Agreement, where such infill activity is to be funded by NBN Co.

6.10 Further, as the ACCC is aware, Parts 7 and 8 of the *Telecommunications Act* will in any case prevent Optus from expanding the HFC 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 allowed to provide wholesale based services over the network.

### *No likelihood of Optus investing to upgrade the HFC Network*

6.11 Second, Optus will not undertake significant investment in its HFC network, either in terms of application and systems development and future upgrades to the network. This is an incontrovertible conclusion given the relevant counterfactual is that the existing authorised HFC Agreement will continue to apply and so there is no incentive whatsoever for Optus to invest any additional capital in upgrading the HFC Network pending migration of its customers and it being decommissioned. [RESTRICTION OF PUBLICATION OF PART CLAIMED].

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- 6.12 Even if the counterfactual were otherwise, so that in the absence of the Revised HFC Agreement, the HFC Agreement did not apply, Optus would still not make the significant investments required to upgrade the performance or capacity of its HFC Network. In particular, the extensive re-engineering of the HFC Network envisaged by NBN Co before it is integrated into the NBN under the Revised HFC Agreement will involve significant capital expenditure for node splitting, infill, extending fibre deeper into the network and upgrading capacity. Given the history of the HFC Network and its limited scale, as well as the fact that the existing authorised HFC Agreement has already been in place now for some time and that in any case the Optus HFC would face overbuild by the NBN in this scenario (ie, absent any arrangements between the parties the NBN will be built in some other way in areas covered by the Optus HFC Network) the case for any such investment to be made by Optus in future would be non-existent.
- 6.13 Optus notes that no further work has been undertaken since 2012 to examine options to upgrade the HFC Network as customers have been progressively migrated under the existing HFC Agreement and Optus continues to stabilise capex.

### *No likely HFC-specific price competition*

- 6.14 Third, before the HFC Network could provide any effective competitive constraint on the NBN, Optus would need to have the ability and incentive to offer lower prices for services offered on the HFC Network (or, put another way, it must be profit maximising to pass on to consumers cost savings from providing services over the HFC Network).
- 6.15 Optus does not materially differentiate between services provided over the HFC Network and services provided over Telstra's copper network or the NBN when setting its retail pricing, although Optus notes that on the HFC and NBN platforms customers can acquire an increased speed capability as a bolt-on to their basic plan. [RESTRICTION OF PUBLICATION OF PART CLAIMED]<sup>16</sup>.
- 6.16 [RESTRICTION OF PUBLICATION OF PART CLAIMED]

### *NBN regulatory price controls assume no network competition*

- 6.17 Fourth, the NBN will in any case be subject to strict regulatory controls which limit the impact of any possible competitive constraint that the HFC Network could have on the NBN without the Revised HFC Agreement. Back in 2012, the ACCC noted that<sup>17</sup>:

*While the precise regulatory arrangements applicable to NBN Co are still under consideration by the ACCC, it is intended that these arrangements will impose a significant constraint on NBN Co's pricing.*

- 6.18 Since that time the regulatory arrangements in respect of pricing have crystallised and it is clear that the level of pricing control in many respects reflects the anticipation that NBN is a natural monopoly network that is not subject to any effective competitive

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<sup>16</sup> [RESTRICTION OF PUBLICATION OF PART CLAIMED]

<sup>17</sup> Para 3.181 of ACCC Authorisation Decision

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constraint. For example, in its Final Decision on the NBN Co Special Access Undertaking in December 2013, the ACCC stated<sup>18</sup>:

*The structure and function of NBN Co is established by the National Broadband Network Companies Act 2011. NBN Co is to operate as a wholesale-only company. This will deliver a key structural reform to the telecommunications sector, responding to longstanding competition concerns that have arisen from vertical integration in Australian telecommunications markets. That said, NBN Co will still be a monopoly provider, requiring ACCC oversight to ensure the terms and conditions of access to the NBN are in the long-term interests of end-users.*

- 6.19 As NBN Co's pricing is and will be subject to strict regulatory oversight, even if Optus were able to use the HFC Network to attempt to compete on price with services provided over the NBN, this is unlikely to have any real effect on NBN Co's pricing behaviour.
- 6.20 Optus notes that the Government released a framework for regulatory reform on 11 December 2014 in response to recommendations made by the Vertigan panel's Independent Cost-Benefit Analysis and Review of Regulation. That framework may or may not ultimately be implemented by legislation – that can't be known now – but it envisages some changes to current regulatory arrangements.
- 6.21 Optus submits that none of those possible legislative changes which may occur should properly affect analysis of the Revised HFC Agreement for immediate purposes. In particular, that is because the proposed changes effectively assume that the Government directed MTM model for the NBN is rolled out, including the Revised HFC Agreement. That was the basis of the Vertigan panel's initial recommendations and is implicit also in the Government's proposed approach to those recommendations. Whilst the Government policy proposals anticipate future competition to the NBN, it will introduce measures to ensure that there is a level playing field such that any alternate infrastructure operates on a wholesale-only basis.

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<sup>18</sup> Page 9 of ACCC Final Decision on NBN Co SAU, December 2013 (emphasis added),

## 7. Conclusion

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- 7.1 In conclusion, Optus submits that the ACCC should revoke the existing authorisation of the HFC Agreement and substitute for it an authorisation of the Revised HFC Agreement because the public benefits associated with the Revised HFC Agreement clearly outweigh any public detriment.
- 7.2 Optus notes that in addition to all the information it has provided, this conclusion is also generally supported by the Vertigan Panel's *Independent cost-benefit analysis of broadband and Review of Regulation* in August 2014. That study compared various scenarios and concluded that the net benefits of an optimised MTM rollout (as will be facilitated by the proposed Revised HFC Agreement) exceeded the net benefits of a pure FTTP network. While the quantification of net benefits in that study may not be directly attributable to the Revised HFC Agreement, the Revised HFC Agreement is certainly a critical component of NBN Co's proposed optimised multi-technology mix in respect of which the study concluded<sup>19</sup>:

*The MTM scenario has net benefits relative to the FTTP scenario of \$16 billion. This is comprised of lower costs (around \$10 billion) and higher benefits (around \$6 billion). The benefits are higher because this scenario delivers higher speeds to consumers earlier.*

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<sup>19</sup> Page 84, *Independent cost-benefit analysis of broadband and review of regulation*, Volume 2 (August 2014)