



Submission in response to
ACCC Consultation Paper

**Variation to NBN Co
Special Access
Undertaking**

Public Version

August 2016

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Section 1. EXECUTIVE SUMMARY

- 1.1 Optus welcomes the opportunity to provide comments on the proposed variations to the NBN Co Special Access Undertaking (SAU). These changes give effect to the new multi-technology mix (MTM) network design of the NBN.
- 1.2 A threshold issue for this review is whether the SAU is, as has been presented, a minor variation. NBN Co has adopted what it states to be a minimalist approach to varying the SAU to incorporate the shift to the MTM design. As such, NBN Co has proposed that the ACCC should only have regard to the varied provisions and not the broader application of the SAU. It appears from the discussion paper that the ACCC concurs with this approach.
- 1.3 This is troubling, since in many respects the move to an MTM design represents a material change in NBN circumstances – NBN products will now be delivered over several different access technologies each of which has different characteristics.
- 1.4 Any assessment of the variations cannot ignore the fact that, for the first time, they introduce price levels, structures, and regulations for NBN Ethernet services provided over the MTM technologies to 8.9M premises, or 75% of the NBN coverage, by 2020.
- 1.5 This is a major change, which merits full consideration by the ACCC.

Variations do not impact cost recovery

- 1.6 NBN Co states that there are no variations to the elements of the SAU that apply to the cost recovery mechanisms. Revenues and expenditure in respect of the new MTM technologies are already covered by the LTRCM, ICRA and RAB components of the SAU.
- 1.7 This has significant implications for the assessment of the LTIE criteria. Specifically the; efficient investment in infrastructure; legitimate business interests of NBN Co; and arguments around regulatory certainty and investment incentives.
- 1.8 Optus submits that the decision to accept or reject the proposed variations cannot be influenced by these considerations as there is no difference between the 'with' and 'without' variations scenarios.

LTIE promoted by rejecting variations

- 1.9 If the ACCC accepts the proposed variations it will have little role in the terms and conditions of NBN products supplied over the FTTx and HFC networks for the remaining life of the SAU – around 24 years. In effect, acceptance of the SAU would permit NBN Co to largely self-regulate the terms and conditions of existing, and new products yet to be developed supplied over the FTTx and HFC networks which will cover around 75% of Australian premises by 2020.
- 1.10 Optus submits that the LTIE is best promoted by the ACCC allowing itself the ability to over-see the price terms and conditions of NBN services delivered over the MTM technologies. There are clear benefits to end-users for the ACCC to have an option to set efficient and pro-competitive terms and conditions in the future. This is not to say that the ACCC would do so, or that it should do so. It is merely saying that the option should exist for the ACCC to do so if the circumstances arise.

Need to review existing price structure

- 1.11 The operation of the existing SAU, and the material change in circumstances with the move to an MTM approach, should give the ACCC both the impetus and opportunity to review the application of the SAU at least for the MTM technologies, forecasted to cover 75% of premises.
- 1.12 In addition to this broader point, Optus also believes that the ACCC should use the review to consider issues raised by the industry about CVC pricing.
- 1.13 The ACCC approved the AVC-CVC price structure in the 2013 SAU on the basis that the two-part tariff balances the need for NBN Co cost recovery and allowing network-based competition at the retail level.
- 1.14 This assessment was based on the market facts and expectations at the time. These facts have changed. The significant growth in demand for high bandwidth services undermines many of the reasons for approval.
- 1.15 It is no longer clear that the current two-part tariff structure promotes the efficient use of the NBN technology or promotes beneficial consumer outcomes. The commercial reality is that a high CVC price may limit the end-user experience. The CVC product construct serves as an unnecessary network bottleneck. NBN Co data shows that end-users are unlikely to be achieving their AVC speed at the times when they are most likely to be using the service.
- 1.16 Optus believes that the AVC-CVC pricing construct is not promoting the LTIE. The ACCC should think carefully before enabling this price structure to be locked in for a 24 year period for the MTM technologies.

Specific variations do not promote the LTIE

- 1.17 In relation to the specific 'minor and mechanical' changes which are outlined in the discussion paper, Optus finds that the LTIE is best promoted by the counterfactual of continual reliance on the WBA-SFAA combined with the option for ACCC to set efficient and pro-competitive terms and conditions in the future.
- 1.18 The variations to the service description and dictionary terms allow many of the detailed terms to be set under future operations manuals, potentially limiting oversight and end-user input; including altering network boundary points. In essence, the proposed variations are likely to increase the bargaining power of NBN Co and limit end-user and ACCC oversight. These variations are unlikely to promote the LTIE.
- 1.19 Variations relating to co-existence and remediation have the effect of altering the line speed available to end-users and add significant uncertainty as the quality of the service. Allowing these provisions within the SAU locks them in for 24 years and removes the ability of the ACCC to intervene should it be established that the provisions have detrimental impacts. It is likely to result in inefficient use of the network by end-users given the lack of information available on the scope and nature of the co-existence provisions.
- 1.20 Finally, Optus strongly disagrees with defining a standard HFC installation as a self-install option, where end-users install NBN Co's NTD and RF Splitter. This is likely to cause significant problems for some end-users. The SAU should be amended to make clear that NBN Co is responsible for the installation of the HFC NTD within a standard installation.

Section 2. ASSESSMENT FRAMEWORK

- 2.1 NBN Co has adopted what it states to be a minimalist approach to varying the SAU to incorporate the shift to MTM. In particular, NBN Co has claimed that the *“ACCC is not permitted to reconsider afresh the SAU as a whole or reconsider any provisions of the undertaking that are not affected by the variation.”*¹
- 2.2 However, while some changes may appear to be of a minor nature, it cannot be ignored that the variations, for the first time, introduce price levels, structures, and regulations for NBN Ethernet services provided over the MTM technologies to 8.9M premises, or 75% of the NBN coverage. Optus submits that this is a major change that merits full consideration by the ACCC.
- 2.3 This section examines the relevant question that is put before the ACCC and the relevant issues when assessing the proposed variations against the legislative criteria. Importantly, it shows that:
- (a) NBN Co’s claim that the proposed variations are minor is incorrect;
 - (b) The ACCC is in a position to assess whether applying the SAU construct – and thereby removing these services from effective regulation – best promotes the LTIE;
 - (c) The counterfactual is where the SAU continues and services over the MTM technologies could be regulated through access determination processes, at the expiry of the current WBA-SFAA term;
 - (d) The proposed variations have no impact on issues of cost recovery or efficient investment in infrastructure; and
 - (e) The relevant question before the ACCC is whether the proposed variations promote competition, the efficient use of NBN infrastructure, and the interests of access seekers better than the counterfactual.

Proposed variations are not minor

- 2.4 NBN Co’s approach to varying the SAU can be summarised as follows:
- (a) Expanding the NBN Access Service description to include FTTB, FTTN and HFC networks. It also includes an approach to facilitate incorporation of future variants of MTM technology;
 - (b) Making changes to parts of the SAU to incorporate the initial products and prices for FTTB, FTTN and HFC;
 - (c) Making some minor changes to other parts of the SAU, where a need has been demonstrated through experience to date; and

¹ NBN Co, 2016, Supporting Submission to the ACCC – Variation to the NBN Co Special Access Undertaking, 27 May, p.11

- (d) Otherwise all other parts of the SAU remain unchanged, including the term and modular structure.²
- 2.5 It is intended that NBN Co's variation will limit any need to scrutinise previously accepted aspects of the SAU – as such, NBN Co argues it should be largely considered a mechanical exercise aimed at updating the SAU to align it with the MTM model.
- 2.6 Optus disagrees that the assessment of this variation should disregard any review of the existing commitments. Optus considers that this variation, by all purposes and intent, is not a variation of a minor nature. The effect of changes (a) and (b) above is that the existing price levels, products, processes – and importantly restrictions on the ACCC to act – will expand from the current technology mix – FTTP, FWA, Satellite – to the new MTM technologies – FTTN, FTTB, HFC, and potentially FTTdp.
- 2.7 The impact of these changes will not be minor.
- 2.8 The latest expected technology mix at 2020 is shown below. The data clearly shows the importance of the MTM technologies to the overall NBN design. By 2020 it is forecasted that the MTM technologies will be available to between 7.6M to 9.7M premises, representing 64-81% of total NBN connections – with a base case of 8.9M or 75% of premises. Services supplied to these premises if provided using the MTM technologies are not currently covered by the SAU.³

Figure 1 Premises covered by each technology

	Corporate Plan Range 2020			Base Case 2020	
	Premises (M)	%		Premises (M)	%
FTTP	2.0 – 2.5	17 – 21		2.0	17
FTTN/B/dp	5.1 – 6.5	43 – 54		6.1	51
HFC	2.5 – 3.2	21 – 27		2.8	24
Fixed Wireless/Satellite	0.9 – 1.1	8		1.0	8
TOTAL	11.9			11.9	

Source: NBN Strategic Review 2017, Table 2

- 2.9 If the SAU variations are approved, this will result in applying the terms and conditions of the SAU – including removing ACCC oversight – to these 8.9M premises for the first time. Such an outcome is potentially significant.
- 2.10 Therefore, the ACCC must be satisfied that the inclusion of the MTM technologies into the SAU regime promotes the LTIE compared to the counterfactual without approval of the variation.

The Commission has an opportunity to consider the LTIE for MTM technologies

- 2.11 In accepting the NBN Co SAU in 2013, the ACCC conceded that “*there is a trade-off between certainty to NBN Co and access seekers by locking detailed provisions and*

² NBN Co, 2016, Supporting Submission to the ACCC – Variation to the NBN Co Special Access Undertaking, 27 May, pp.1-2

³ The accepted 2013 SAU defined the relevant NBN Co Network to only include the FTTP, Fixed Wireless and Satellite technologies.

allowing for flexibility to consider the particular circumstances at the time.”⁴ This view is unlikely to change with respect to this SAU variation. But the degree of the trade-off might have changed given recent experience with NBN Co and the operation of the SAU.

- 2.12 The ACCC should assess whether the legislative criteria continues to be satisfied in the context of the new MTM technologies. These include:
- (a) The term and modular structure of the SAU;
 - (b) Services to which the SAU applies;
 - (c) Products through which NBN Co will implement these services;
 - (d) Product development, variation and withdrawal provisions to which the SAU applies;
 - (e) Pricing provisions to which the SAU applies; and
 - (f) Non-price terms and conditions to which the SAU applies.
- 2.13 Importantly, Optus notes that the decision to accept or reject the variations will have no impact on NBN Co’s ability to recover its efficient costs of deploying and operating the MTM technologies. The existing cost recovery (LTRCM) terms of the SAU already include the costs of the MTM technologies.
- 2.14 In this regard, Optus submits that the ACCC must be clear on the relevant counterfactual absent approval of the SAU variations.

Counterfactual without authorisation of variations

- 2.15 As noted above, a clear position on the counterfactual without authorisation of the proposed variations is likely to be key when assessing the variations.
- 2.16 NBN Co submits that the relevant counterfactual without authorisation of the variations is a world where “*the current scope of the SAU is maintained without any variation.*”⁵
- 2.17 NBN Co further explain that without any variation:
- (a) MTM technologies would be declared through publications of the SFAA on NBN Co’s website; and
 - (b) The ACCC may make access determinations relating to some or all of the terms and conditions of the MTM technologies declared in the NBN Co’s SFAA.⁶
- 2.18 Optus agrees. Without approval of the variations – that is, the incorporation of NBN products supplied over the FTTx and HFC networks into the existing SAU structure – the ACCC will be able to set terms and conditions using the standard access determinations powers under Part XIC of the CCA.
- 2.19 In the short term, without approval of the variations, the supply of NBN products over the FTTx and HFC networks will be governed by the relevant WBA-SFAA agreements.

⁴ ACCC, 2013, NBN Co Special Access Undertaking, Final Decision, 13 December, p.59

⁵ NBN Co, 2016, Supporting submission to the ACCC – variation to the NBN Co SAU, 27 May, p.3

⁶ Ibid., p.33

These agreements contain several provisions which are not satisfactory to many access seekers. However, given the position of NBN Co, access seekers have little choice but to sign the WBA-SFAA in order to acquire NBN services.

- 2.20 Optus submits that the ACCC cannot take commercial agreement to the WBA-SFAA as any indication that the terms and conditions imposed on access seekers are without question or reasonable. This is discussed in more detail below.
- 2.21 The WBA will apply for two years. After this, absent approval of the SAU the ACCC will be able to set the terms and conditions. The key question before the ACCC in this inquiry is which option best promotes the LTIE:
- (a) Removing the ability to set terms and conditions of access inconsistent with the SAU without the acceptance of NBN Co. In effect, outsourcing regulatory activities to NBN Co for the remaining 24 years of the SAU; or
 - (b) Retain the ability to set terms and conditions that promote the LTIE at any time in the future.

MTM technologies already included in the cost recovery rules of the SAU

- 2.22 NBN Co states that there are no variations to the elements of the SAU that apply to the cost recovery mechanisms. NBN Co state that the “*LTRCM is not subject to variation*” because the “*revenue and expenditure in respect of the FTTB, FTTN and HFC networks is already covered by the LTRCM.*”⁷
- 2.23 Optus agrees with this position.
- 2.24 This has significant implications for the assessment of the LTIE criteria – specifically; efficient investment in infrastructure; legitimate business interests of NBN Co; and arguments around regulatory certainty and investment incentives. The proposed variations do not impact on the ability of NBN Co to recover its cost.
- 2.25 The difference between approval of the variations and the counterfactual relates only to the price structure of the services not the overall price level. That is, there is no difference in total cost recovery. NBN Co will be allowed under both future scenarios to fully recover its prudent and efficient costs.
- 2.26 Optus submits that the decision to accept or reject the proposed variations cannot be influenced by these considerations as there is no difference between the ‘with’ and ‘without’ scenarios.
- 2.27 Finally, Optus notes that the supporting expert opinions do not appear to address the central question relevant to the ACCC’s decision to accept or reject the proposed variations. The expert reviews of Shampine and Ordovery, Analysys Mason and Bishop and Officer deal with issues surrounding the efficiency of cost recovery, WACC values and the overall MTM design. For example, Shampine and Ordovery state they are making no comments or observations in relation to the detail of the actual SAU variations proposed.⁸ Optus submits that these expert reports are of little probative value to the ACCC. They provide no expert view on whether the specific variations proposed promote the LTIE.

⁷ NBN Co, 2016, op cit., p.14

⁸ NBN Co, 2016, op cit., p.42

Variations must promote competition and efficient use better than counterfactual

- 2.28 As explained above, the MTM technologies are captured in the SAU provisions relating to cost recovery and long term certainty. Consequently, the assessment of the variations are not impacted by consideration of efficient investment in infrastructure, legitimate business interests of NBN Co, and arguments around regulatory certainty and investment incentives.
- 2.29 As a result, Optus submits the focus of the assessment should be on promotion of competition, the efficient use of NBN infrastructure, and the interests of access seekers.
- 2.30 If the ACCC accepts the proposed variations then it will have little role in the terms and conditions of NBN products supplied over the MTM networks for the remaining life of the SAU – around 24 years. In effect, acceptance of the SAU would permit NBN Co to largely self-regulate the terms and conditions of existing, and new products yet to be developed supplied over the MTM networks.
- 2.31 The counterfactual absent approval allows the ACCC to set the terms and conditions of NBN products supplied over the MTM technologies using access determination processes, thereby ensuring the terms promote the LTIE. This is not to say that the ACCC would do so, or that it should do so. It is merely saying that the option will exist for the ACCC to do so if the circumstances arise.
- 2.32 There are clear benefits to end-users for the ACCC to have an option to set efficient and pro-competitive terms and conditions in the future. This is especially the case given the long time period of the SAU. Optus submits that no party can make accurate representations over what terms and conditions would likely promote the LTIE throughout a 24 year period. It may be that terms considered reasonable today, prove to be unreasonable after several years of operation and changing consumer behaviour. However, under the terms of the SAU, the ACCC have limited ability to influence the terms and conditions of products.
- 2.33 The key question, therefore, is:
- (a) Whether relying on the terms and conditions in the SAU for the provision of NBN services over the MTM technologies for a period of 24 years promotes competition, efficient use of infrastructure and the interests of access seekers better than the counterfactual of relying on the terms of the WBA-SFAA with the potential for the ACCC to make access determinations should be need arise?
- 2.34 Optus submits that it is far from clear that it would.

Note on regulatory certainty

- 2.35 A main argument offered by NBN Co in support of the proposed variations is that it would lead to an increase in regulatory certainty compared to the counterfactual of relying on the existing WBA-SFAA terms with the option for ACCC to set efficient prices through access determination processes.
- 2.36 NBN Co argue that:
- (a) The more definitive regulatory certainty provided by the variation strikes an appropriate balance between the interests of NBN Co and access seekers.⁹

⁹ NBN Co, 2016, op. cit., p.3

- (b) It would contribute to providing long-term regulatory certainty in regard to a number of key aspects of NBN Co services, which in turn would encourage investment and innovation in downstream markets.¹⁰
- (c) The variation promotes the LTIE by providing for regulatory certainty setting some of the key terms and conditions of supply for FTTB, FTTN and HFC services. Comparatively, the counterfactual scenario provides less regulatory certainty, because the nature, extent and timing of any ACCC access determination is unknown.¹¹
- (d) This is consistent with promoting competition in a range of retail and wholesale markets; the lack of certainty inherent in the counterfactual may affect access seekers' decisions to compete in relevant retail and wholesale markets.¹²
- (e) The variation also provides regulatory certainty in allowing NBN Co to develop and offer a range of specific products over FTTB, FTTN and HFC networks under the broad description of the NBN Access Service.¹³

2.37 Optus does not agree with these statements.

- (a) First, NBN Co appear to ignore its own counterfactual when assessing the difference in regulatory certainty with and without the variations. In the near term there will be no difference between SAU with and without variations. Access seekers have signed (or are about to sign) the latest WBA-SFAA, which include terms included in the SAU. The SAU will therefore have no impact during the two year term of the WBA-SFAA. Further, absent any ACCC access determination, the terms of the SFAA apply even after expiry of the WBA. The WBA and SFAA terms are the same.
- (b) Second, it may be that NBN Co is afforded more certainty with approval, but this does not necessarily lead to promotion of the LTIE. Approval would include the new MTM technologies within the SAU price framework. The SAU limits the ability of the ACCC to intervene to ensure terms promote the LTIE sometime in the future. Importantly, under the SAU, NBN Co has wide discretion to determine the terms and conditions for the 24 year SAU period. No one can be certain that NBN Co's use of such discretion will always promote the LTIE.
- (c) Third, the variations do not provide any offsetting benefit to access seekers. NBN Co confuses its own benefit with that of access seekers. Allowing a monopoly provider more power to set terms and conditions does not necessarily promote the interests of access seekers or end-users that rely upon services provided by the monopolist. Experience to date with the operation of the SAU is that it allows NBN Co to determine terms and conditions, including development and pricing of new services, with limited regard to the interests of access seekers, competition, or end-users. Certain decisions taken under the PDF process demonstrate this.

2.38 Finally, Optus also notes NBN Co's reference to the Ordovery and Shampine opinion that the SAU strikes a balance for investing through cost recovery frameworks, including use

¹⁰ NBN Co, 2016, op. cit., pp.7, 39

¹¹ NBN Co, 2016, op. cit., p.33

¹² NBN Co, 2016, op. cit., p.41

¹³ NBN Co, 2016, op. cit., p.41

of the ICRA and ABBRR. The balance is struck by limiting the nature and scope of possible future regulatory intervention.¹⁴

- 2.39 However, such claims are irrelevant to the issue at hand. The evidence put forward in these expert reports offer little, if any, assistance to the ACCC in addressing the relevant question. As explained above, there is no difference between the with and without approval worlds with regards to investment incentives or ability to recover efficient costs – all efficient MTM expenditures are included in the LTRCM-ICRA processes.
- 2.40 Ultimately, NBN Co's claims on regulatory certainty provide little assurance that the SAU promotes the LTIE. It does not alter the fundamental question relevant to the assessment of the variations – whether relying on the terms and conditions in the SAU for a period of 24 years promote competition and the LTIE better than the counterfactual of relying on the terms of the WBA-SFAA with the potential for the ACCC to make access determinations should be need arise.

¹⁴ NBN Co, 2016, op. cit., p.41

Section 3. EXTENDING PRICE TERMS TO MTM TECHNOLOGIES

- 3.1 The price terms and conditions set out in the existing NBN Co SAU do not currently apply to the MTM technologies. The specific pricing elements of Schedule 1C in the SAU apply only to the original FTTP, FWA, and Satellite technologies. An important issue in the assessment of the variation to the NBN Co SAU is the expansion of the existing price terms and conditions to the MTM technologies.¹⁵
- 3.2 Optus does not agree that the proposed variations to the NBN Co SAU should be considered to be of a minor or mechanical nature. The proposed variations opens up the question of whether applying the existing pricing structure to the new MTM technologies best promotes the LTIE.
- 3.3 This section outlines Optus' concerns with the current SAU price structure, and demonstrates that extending it to the MTM architecture may not promote the LTIE, competition, or the efficient use of the NBN.
- 3.4 Finally, it is important to remember that the discussion around optimal pricing structure has no implications for cost recovery or efficient investment signals, as the sections of the SAU¹⁶ that deal with these issues already extend to the MTM technologies.
- 3.5 The key consideration is whether the LTIE is best promoted by:
- (a) Varying the existing SAU to apply the existing price terms and conditions to MTM technologies for a 24 year period, thereby removing ACCC oversight; or
 - (b) Relying on existing WBA-SFAA terms with the option in the future for the ACCC to issue access determinations if it better promotes the LTIE.

AVC – CVC split is a commercial construct

- 3.6 The current AVC-CVC price construct, approved in the 2013 SAU is a commercial construct¹⁷ with a limited relationship to accepted cost-based pricing principles and cost-volume drivers. That is, changes in CVC capacity do not necessarily change the network cost incurred by NBN Co. Experience over recent years shows that the CVC pricing construct acts to limit end-user throughput and has the potential to limit the benefits of the NBN.

Background on the AVC-CVC split

- 3.7 A central pricing objective of NBN Co was to encourage take-up of services and to provide an equivalent or better business case than copper based services (at 2010

¹⁵ Amendments to Module 0 and the amendments to Module 1, Schedules 1A and 1C all have the effect of bringing the MTM technologies into the broader SAU pricing framework. The focus of the LTIE assessment in this section is on the amendments to Schedule 1C.

¹⁶ Schedules 1D, 1E and 1G.

¹⁷ Schedule 1A, with associated price levels in Schedule 1C.

terms).¹⁸ It was determined that initial NBN prices for entry-level services should reflect existing prices from legacy networks.¹⁹

3.8 A component-based product construct was introduced to give RSPs flexibility and choice in the configuration of services for their end-users.²⁰ In commercial terms, there is also a clear AVC and CVC pricing trade-off between encouraging take-up and usage.²¹ The NBN policy has a clear intent to subsidise initial take-up, while allowing ARPU growth over time as end-users started to value the speeds of fibre broadband.

3.9 The pricing of the AVC component allowed NBN Co to price consistent with the original Statement of Expectation (2010), recognising the “*importance of maintaining affordability to drive take-up rates*”.²² In other words, the connection charge (AVC) was set low enough to encourage take-up, and the usage charge (CVC) set at a level that allowed revenue growth over time. The concept is outlined in the Implementation Study: over-time end-users will attribute higher values to fibre-based products; as this happens, NBN Co will be able to increase ARPU to earn a reasonable return on its assets over its lifetime.²³ And it was used by NBN Co as the basis for setting the AVC-CVC prices:

*The balance between AVC and CVC pricing has been designed to enable NBN Co to drive – and benefit from – substantial increased usage in the future. This has been achieved by keeping the AVC as low as possible in order to encourage consumers up the speed tiers, and relying on CVC revenues to drive ARPU growth.*²⁴

3.10 Current market trends indicate that the present AVC-CVC structure may, actually, be acting as a disincentive to provisioning higher speed tiers.

3.11 The balance NBN Co refers to assumes that CVC for the base 12/1 Mbps plan would add less than \$1 per end-user based on current usage (2010). It was assumed that the CVC contribution would then grow over time, so that it would represent 30% of revenue by FY25 and AVC contributes 50% of revenue.

3.12 As highlighted by NBN Co, charging for CVC capacity is “*the principal mechanism by which NBN Co can benefit from the expected future growth in broadband data usage.*”²⁵

3.13 However, market behaviour has altered significantly since the AVC-CVC construct was designed, with much greater emphasis placed on the CVC component than envisaged. The introduction of mainstream SVOD services (such as Netflix, Stan and others) since 2015 is changing the nature of internet usage and the demand for constant bandwidth availability. Internet usage is changing from downloading webpages – requiring little concurrent usage – to use of streaming services that require constant bitstream usage. This has had impacts on CVC usage. For example, in FY2015 CVC revenue contributed over 31% of NBN Co revenue – nine years ahead of the 2025 assumption.²⁶

¹⁸ See, for example, NBN Implementation Study, Final Report, p.32, pp.109-12; Minister for Finance and Minister for Communications, 2010, Statement of Expectations, 17 December, p.10; Corporate Plan 2010

¹⁹ Implementation Study, p.33; Corporate Plan 2010,

²⁰ NBN Co, 2010, Corporate Plan 2011-2013, 15 December, p.92

²¹ NBN Co, 2010, Corporate Plan 2011-2013, 15 December, p.103

²² Minister for Finance and Minister for Communications, 2010, Statement of Expectations, 17 December, p.10

²³ Implementation Study, pp.33, 55

²⁴ NBN Co, 2010, Corporate Plan 2011-2013, 15 December, p.103

²⁵ NBN Corporate Plan 2011-2013, 17 December 2010, p.110

²⁶ NBN Co, 2016, Full Year Results 2016, p.8

- 3.14 Industry has long advocated that changes are required to the CVC pricing construct to encourage take-up and promote sustainable product economics of providing the NBN service to end users. Enabling RSPs to support and supply NBN services; and in turn encourage customers to move up the speed tiers and access bandwidth rich applications and services.²⁷

CVC construct acts as a network bottleneck

- 3.15 The CVC product component essentially operates as an upstream bottleneck with implications for all retail offers, irrespective of the RSP. It cannot be avoided nor can it be provisioned with a level of absolute certainty to meet the needs of end-users. For example, provisioning issues may arise where demand for bandwidth by an end-user (or end-users given the shared nature of CVC) exceed forecasted levels. Moreover, the current CVC price levels can make it uneconomical to supply adequate bandwidth for end-users.
- 3.16 The CVC structure remains a concern for industry as it requires RSPs to make trade-offs between quality and price, which are not required on a cost causal basis. These concerns have been previously recognised by the ACCC:

In the absence of reliable service levels for the CVC, access seekers may be unable to design a network that fulfils their contractual obligations to end-users around service quality. If this were to be the case, it may reduce the scope of competitive behaviour that is possible in downstream markets, and result in reduced complementary investment to service these markets or, alternatively, inefficient investment to bypass the NBN.²⁸

- 3.17 The latest NBN Co market indicator data demonstrates how the market is managing CVC capacity. It shows that that speed and performance is effectively treated as a scarce resource, which results in high CVC costs to meet peak demand. This approach helps to drive a misalignment between the wholesale AVC speed tier purchased and the actual performance experienced by a customer.
- 3.18 Key data from the NBN Market Indicator Reports for the quarters ending 31 March and 30 June 2016 shows that on average RSPs are acquiring AVC speeds around 30 Mbps per end-user; at the same time, however, RSPs are purchasing just over 1 Mbps of CVC per end-user.²⁹ Similarly, the latest NBN Co CVC Discount Notification calculates the non-transition CVC usage per SIO at 0.81 Mbps in the June quarter, and 0.82 Mbps in the September quarter.³⁰
- 3.19 This implies that in period of heavy demand and usage, customers are unlikely to be getting the speed expected from their AVC tier. The extent to which CVC bandwidth impacts on end-user speeds depends on the level of concurrent usage by end-users in peak periods.
- 3.20 Of course, not all subscribers are online at the same time, and not all applications use bandwidth at the same time. Traditional internet usage (i.e., downloading text-based

²⁷ See, for example: de Ridder, J., 2012, A submission to the ACCC Consultation on the NBN Co. SAU, December, p.9; Sydney Morning Herald, "Avoiding a monster: 70 is the magic number," 4 February 2011, <http://www.smh.com.au/business/avoiding-a-monster-70-is-the-magic-number-20110203-1afg6.html>; Communications Day, "Macquarie Telecom wants business users considered in CVC pricing changes," 16 February 2016, p.3

²⁸ ACCC, 2012, NBN Co Limited Special Access Undertaking, Supplementary Consultation Paper, February, p.32

²⁹ ACCC, NBN Market Indicator Reports, quarters ending 31 March and 30 June 2016.

³⁰ NBN Co, Notification of CVC Dimension Based Discount Tier for the Coming Quarter, 12 August 2016

webpages) does not require end-users to constantly use bandwidth. Network provisioning takes this into account. But as more end-users consume heavy bandwidth services (such as SVOD), it becomes more difficult for network dimensioning to overcome the costs associated with CVC capacity.

- 3.21 The current price level of the CVC encourages RSPs to minimise capacity per end-user in order to maintain competitive retail prices. This is in contrast to NBN Co's assumed impact of CVC pricing, which is to "*stimulate network usage growth while improving end-user experience and supporting RSP economics*."³¹

Counterfactual better promotes the LTIE

- 3.22 The counterfactual of relying on the existing WBA-SFAA terms for AVC and CVC price components delivered over the MTM technologies, with the potential for the ACCC to intervene in two years will better promote the LTIE than locking in the current inefficient AVC-CVC construct for 24 years. This is a significant risk, as it is becoming clearer over time that the current price structure has limitations, especially given the rapidly changing nature of end-user bandwidth usage.
- 3.23 Optus believes that relying on the existing WBA-SFAA agreement for its two year term would give NBN Co and industry sufficient time to discuss and adopt more efficient price terms. Further, it would allow the ACCC sufficient time to observe negotiations and intervene if it thought it was necessary to do so to promote efficient pricing outcomes. It would also allow sufficient lead time for NBN Co to change internal processes to evolve the AVC-CVC construct.

Assessing promotion of competition

- 3.24 NBN Co does not directly address how extending the current price terms and condition to the MTM technologies promotes competition. NBN Co's Supporting Submission states the LTRCM and the Individual Price Increase level result in promotion of competition.³² However, these reasons do not support a finding of promotion of competition:
- (a) First, Optus notes that the proposed SAU amendments do not alter the application of the LTRCM as it applied to the MTM technologies. This is recognised by NBN Co. There is no difference between the factual and counterfactual, therefore this argument does not support a finding of promoting competition.
 - (b) Second, while the amendments would have the effect of applying the Individual Price Increase Limit (clause 1C.5.2) to the MTM technologies, it is not clear that this would promote competition more than relying on the counterfactual of existing WBA-SFAA terms with the option of ACCC intervention in the future. The Individual Price Increase Limit has little practical impact on the level of CVC pricing given the current practice of price discounts. CVC TC-4 is currently priced at \$17.50 per Mbps³³; but NBN Co applies a discount as per its CVC Dimension Based Discounting Notification of \$1.75 per Mbps. This gives an effective CVC price of \$15.75 per Mbps. Under the WBA-SFAA,³⁴ NBN Co can withdraw any discount with 5 days' notice. The SAU states removal of discount does not constitute a breach of the Maximum

³¹ NBN Co, 2016, Corporate Plan 2017, Exhibit 6

³² NBN Co, Supporting Submission, [227-8]

³³ CVC price was changed from February 2015, as per Notice of Change to your Wholesale Broadband Agreement, 26 November 2014.

³⁴ Clause 8.3 in the Price List

Regulated Price.³⁵ In other words, the Individual Price Increase Limit does not apply where a discount is in place. There is no difference between the factual and counterfactual in relation to NBN Co's rights to unilaterally increase current CVC price levels.

Assessing efficient use of infrastructure

- 3.25 NBN Co submit that amending the price terms and conditions promotes the efficient use of infrastructure because:
- (a) **Productive efficiency:** LTRCM and RAB components would apply.³⁶
 - (b) **Allocative efficiency:** Including the minimum recurring price into the SAU promotes certainty, and balance the need to encouraging and maintaining high rates of take-up and usage.³⁷
 - (c) **Dynamic efficiency:** specific pricing commitments will provide long term certainty to access seekers.³⁸
- 3.26 Optus does not agree that the reasons put forward by NBN Co support a conclusion that the variations promote the efficient use of infrastructure because:
- (a) There is no difference between the factual and counterfactual with the applications of LTRCM or RAB components; it cannot be said that accepting the variations promotes productive efficiency.
 - (b) Optus' analysis shows that it cannot be concluded that extending the current structure to MTM technologies for a 24 years period promotes allocative efficiency better than the counterfactual of relying on the WBA-SFAA and potential for future ACCC intervention.
 - (c) With regards to dynamic efficiency, the difference between beneficial and detrimental certainty is discussed above at paragraph 2.35. The use of certainty in this context is an example of detrimental certainty. It is true that accepting the variations will lock in terms for a 24 year period, thereby resulting in certainty. But these terms are not necessarily beneficial, and will unlikely promote dynamic efficiency as access seekers design their offerings around minimising CVC expenditure; thereby minimising end-user throughput.
- 3.27 Finally, Optus notes that NBN Co's assessment of the LTIE rely heavily on the LTRCM-ICRA and other RAB-related SAU provisions (as well as non-SAU documents) to argue that accepting the variations promote the efficient investment in infrastructure.³⁹ As addressed above, there is no difference in these SAU elements or non-SAU documents between the factual and counterfactual worlds. Therefore, accepting or not accepting the variations has no impact on promoting efficient investment in infrastructure.

Counterfactual promotes competition and efficient use of infrastructure

- 3.28 While it is not necessary to provide definitive views on the appropriate efficient pricing structure, Optus believes that recalibrating the AVC-CVC balance would better reflect cost-causation principles for the NBN Co access network; and would likely result in

³⁵ NBN Co, SAU, clause 1C.5.3(a)

³⁶ NBN Co, Supporting Submission, [234]

³⁷ NBN Co, Supporting Submission, [236-8]

³⁸ NBN Co, Supporting Submission, [244-5]

³⁹ NBN Co, Supporting Submission, [229-33, 239-43, 245]

higher capacity utilisation of the NBN. Efficient use of infrastructure is promoted by prices that reflect cost-based charging principles. As noted above, the CVC structure is not reflective of cost causation.

- 3.29 For the reasons outlined above, the current AVC-CVC price construct, combined with the CVC price level does not promote competition or efficient use of NBN access lines as it:
- (a) Puts RSPs in a position of having to minimise CVC dimensioned per end-user in order to make NBN broadband offers compatible in the retail broadband market;
 - (b) Potentially misleads end-users into thinking the AVC speed tier purchased equates to throughput speed during the times when they wish to use their service; and
 - (c) Limits network competition across RSPs as few if any RSPs can afford to purchase greater CVC capacity in order to compete on the basis of higher quality of service.
- 3.30 Recalibrating charges would address many of these concerns. There would be a more direct link between the throughput of the access line purchased and that actually seen by end-users. RSPs could more directly determine dimensioning and quality of service. The price of the product components would better reflect the cost of the service. And RSPs that wished to ensure higher quality of service to end-users would not be priced out of the market.
- 3.31 Optus strongly supports the need to reform the current charging structure to rebalance charges across AVC and CVC. The problems identified above will only grow over time as NBN connections grow (thereby removing excess CVC headroom) and end-users expect faster connection speeds.
- 3.32 Optus sees no benefits in locking in the existing price structure for MTM technologies for a 24 year period given the observed current problems.

Promotion of legitimate business interests

- 3.33 NBN Co submits that the proposed variations promote cost recovery and that the regulatory certainty provided through accepting the SAU variations promotes its legitimate business interest.⁴⁰ Optus addresses claims of regulatory certainty above. It was observed that the variations do not impact on the LTRCM-ICRA and RAB components of the SAU. All efficient expenditure will be recovered over time with or without the variations.
- 3.34 Further, this discussion is primarily about price structure not total price level. It is the distribution of prices across the two product components – not the total price per end-user (ARPU) – which is the problem.
- 3.35 Optus notes the NBN Co Corporate Plan assumes growing ARPU over time. For example, the 2017 Corporate Plan assumes wholesale ARPU will grow to \$52 by 2020 and over \$100 by 2040.⁴¹ This is assumed to be on the back of growing CVC revenue. As explained above, Optus believes this will be challenging due to the economics of the retail broadband market.

⁴⁰ NBN Co, Supporting Submission, [246]

⁴¹ NBN Co, 2012 Corporate Plan

- 3.36 There is no a priori reason why AVC-CVC charges could not be rebalanced while at the same time achieving the future assumed ARPU levels. Such rebalancing would promote efficient use of NBN and competition in downstream markets, while at the same time ensuring NBN Co achieves its required returns. It is important for the ACCC to acknowledge that there may be other charging distributions which better promote the LTIE than the current AVC-CVC split. If the ACCC approves the proposed variation it is locking in the AVC-CVC distribution for the next 24 years.
- 3.37 Optus submits the LTIE is best promoted by rejection of the proposed variation, which will result in:
- (a) Price terms and conditions for products supplied over MTM technologies set by the WBA-SFAA which will expire in two years. These terms reflect the current CVC-AVC structure and levels.
 - (b) Two year period during which NBN Co, ACCC and industry can discuss the optimal pricing structure going forward.
 - (c) The ACCC being able to set terms and conditions through access determination after this initial two year period absent should agreement not be reached.

Section 4. SERVICE DESCRIPTION & DICTIONARY CHANGES

- 4.1 The above section has outlined why the variations proposed to the SAU are unlikely to promote the LTIE as it applies existing inefficient price terms and conditions to the 'new' MTM technologies – 75% of premises at 2020. Optus notes that NBN Co has provided no submissions on this issue consistent with its view that the changes are of a minor and mechanical nature.
- 4.2 The sections below discuss the minor and mechanical changes addressed in the discussion paper. This section addresses:
- (a) Proposed variations to service descriptions, including changes to the UNI and network boundary definitions; and
 - (b) Proposed introduction of co-existence and remediation provisions.
- 4.3 The assessment of the LTIE criteria below compares the:
- (a) World with variation, locking in the varied terms for 24 years and removing the option of the ACCC to intervene in the future; and
 - (b) Counterfactual without variations, where the WBA-SFAA would apply for two years and the ACCC would retain the option to intervene in the future.
- 4.4 It shows that the LTIE is best promoted by rejecting the specific changes.

Any variation to the SAU should promote access seeker certainty

- 4.5 Optus notes the references to 'regulatory certainty' throughout NBN Co's supporting submissions. In respect to the changes to the service description and dictionary terms, NBN Co submits that the provision of regulatory certainty through the variations promotes the legitimate interests of NBN Co.⁴² However, the ACCC should be cognisant that while NBN Co may see the proposed variations as increasing regulatory certainty; from the viewpoint of access seekers, the proposed changes increase the level of uncertainty. Granting the monopoly provider of services more power to unilaterally alter terms does not provide certainty to access seekers – and does not necessarily promote the LTIE.
- 4.6 Optus submits the proposed variations only result in beneficial certainty if they address access seeker concerns and do not create further uncertainty in relation to the operation and interpretation of the NBN access arrangements. For example, it has been widely acknowledged that changes to the NBN service description that facilitate the technologies as part of the shift to MTM have been required. As such, NBN Co proposes to retain the original intent of the NBN Access Service description (i.e. an end-to-end Layer 2 service between the UNI and NNI) but to amend the service description by removing direct reference to the presence of a NTD and removal of the network boundary point.

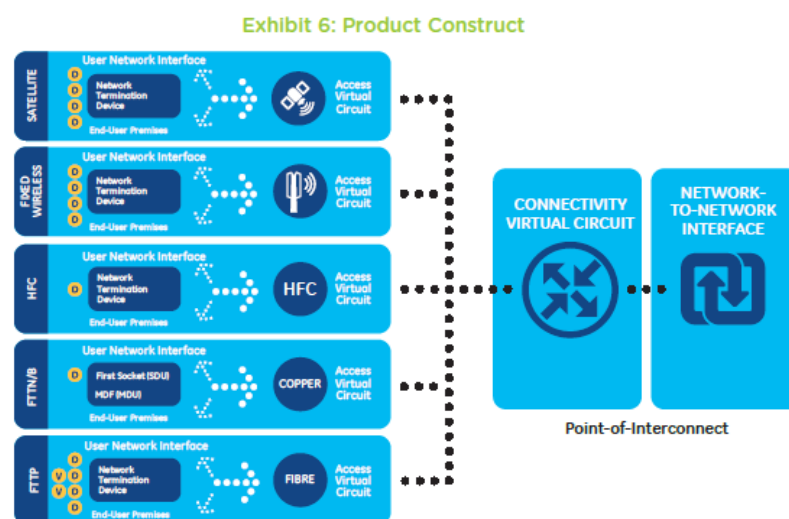
⁴² NBN Co, 2016, op. cit., p.49

- 4.7 However, the proposed change to include all future variants (i.e. FTTdp) has the potential to commit these future access technology variants to arrangements prior to any robust discussion and/or conceptualisation of the access technology into the MTM.
- 4.8 In making these amendments, NBN Co has also had to make consequential technical changes. This has the potential to result in future scope creep of the SAU provisions to both new and varied products and access technologies that may be introduced by NBN Co. Extending SAU provisions to yet unknown future technologies does not increase certainty for access seekers or end-users.
- 4.9 Further, Optus highlights the futility of many of the proposed changes in the SAU as the amended service description and changes have largely already been determined by NBN Co through the publication of its WBA-SFAA agreements and which was published prior to the release of the varied SAU. The effect of this is to further lock in NBN Co's control over the regulatory process. This reduces the weight of NBN Co's arguments around certainty.
- 4.10 This remainder of this section assesses the proposed amendments against the LTIE criteria.

Amendments to the service description

- 4.11 NBN Co proposes to amend the SAU service description and dictionary terms to incorporate services delivered across the range of the MTM technologies.
- 4.12 First and foremost, the NBN service description does not alter that the NBN Access Service is a Layer 2 service supplied on the NBN Co Network. The end-to-end product construct comprise both the access and the connectivity components, where the configuration of the access component may vary depending on the technology platform identified (see figure 2 below).⁴³

Figure 2 Updated NBN Product Construct under MTM model



Source: NBN Co Limited

- 4.13 On the face of it, there would appear to be no need to alter the fundamental Layer 2 structure of the NBN product. The proposed changes, however, remove the intermediary

⁴³ NBN Co, 2016, Corporate Plan 2017

elements between the network boundary points though still retaining the purpose of providing a Layer 2 service.

- 4.14 Optus submits that this does not provide clarity on the NBN Access Services covered under the SAU for a number of reasons. As a result, it is difficult to ascertain the definitive list of services to which the SAU applies. There is also the potential to unnecessarily capture NBN services that have yet to be developed. This does not increase certainty.
- 4.15 Optus has five main concerns with the proposed variations to the service description.
- 4.16 First, as defined in NBN Co's WBA-SFAA, the NBN Access Service is referred to as the NBN Co Ethernet Bitstream Service (NEBS) which NBN Co supplies to its customers.

The NEBS:

- *is an Ethernet-based Layer 2 virtual connection that carries traffic between a UNI used to service a Premises and a POI;*
 - *is supplied by means of the NBN Co Fibre Network, the NBN Co FTTB Network, the NBN Co FTTN Network, the NBN Co Wireless Network, the NBN Co Satellite Network and the NBN Co HFC Network;*
 - *enables Customer or its Downstream Customers to supply a Carriage Service or Content Service to a Premises; and*
 - *Comprises 4 Product Components and a number of optional Product Features which customers may elect to order depending on which NBN Co Network the NEBS is supplied over.⁴⁴*
- 4.17 This description is somewhat contrary to the description set out in the SAU, which implies a much broader scope of NBN services being captured. Due to the regulatory hierarchy, the proposed variations in the SAU would not apply. Optus questions the need for the variations if NBN Co is willing to use the above commercial definition in the WBA-SFAA agreements.
- 4.18 Second, the proposed variation removes the physical references to the network boundary points (i.e. the presence of a NTD both at the premise and at the POI). This inevitably captures all NBN services which meets the definition of Premises and is NBN Serviceable at one end, and a NNI associated with the POI at the other end.
- 4.19 This has the potential to capture new access technologies and/or variants of the existing access technologies that are added to the NBN suite. For example, the revised definition for NBN Network also includes:

... any other telecommunications network or other network elements, platforms, systems and functions owned or controlled by, or operated by or on behalf of, NBN Co or any Related Body Corporate of NBN Co over which any Product introduced or varied in accordance with Schedule 1I (Product Development and Withdrawal) or Schedule 2D (Product development and Withdrawal) is supplied by NBN Co.

⁴⁴ The four required Product Components include the NNI; CVC; AVC and UNI. See: NBN Co, Wholesale Broadband Agreement – NBN Co Ethernet Bitstream Service, Product Description, version 2.8, p.4

- 4.20 This means that new or revised NBN technologies may automatically be captured and committed to existing NBN arrangements, thereby limiting the scope for future ACCC review of those commitments. This includes technologies not yet planned within the MTM design.
- 4.21 Third, the proposed variations introduce a wider definition of NBN Co Network, yet there is a lack of clarity over the existing suite of NBN services covered under the SAU. For instance:
- (a) Attachment C in Module 0 effectively describes a Product to include the products that are offered for supply by NBN Co to Access Seekers in relation to a NBN Co Network access service (i.e. Products form the components of a Service).
 - (b) Attachment D in Module 0 sets out a list of Initial Product Components and Product Features, however these only refer to the listed NBN products offered over the NBN Co Fibre, FTTN, FTTB, HFC, Wireless and Permanent Satellite Networks, and all products provided over the NBN Interim Satellite Network.
- 4.22 Outside the list of Initial Products, the SAU also captures all products introduced and varied through the PDF processes. It is this list, however, that fails to give the certainty that the SAU, WBA and other NBN documents are intended to provide. As a result, a new product or product feature may be introduced or varied through the PDF, but unless it specifies that it directly applies to a defined NBN Co Network, it remains unclear as to whether it is captured under the SAU, WBA or any other NBN agreement.
- 4.23 Fourth, the proposed variations include an expanded definition of Premises. In particular, it facilitates the inclusion of MDUs in common areas but also a potential range of other locations, as determined or introduced through the product development provisions.
- 4.24 The proposed variations also remove the provisions relating to the network boundary points. Rather, NBN Co has deferred this information to fall within the scope of other NBN documentation, e.g. *“The operation details associated with the network boundary points are addressed in nbn’s SFAAs.”*⁴⁵ This appears counter to the purpose of the SAU; namely, to provides rules and guidance on the terms that can be included in WBA-SFAA agreements. This does not increase certainty for access seekers.
- 4.25 Finally, the bulk of these *minor* amendments to the service description occur in the form of the introduction or variation to terms defined within Attachment C of Module 0, which specifically deals with relevant NBN terminology. This is further discussed below.
- 4.26 The proposed changes do not increase the level of certainty for access seekers. It may, however, increase certainty for NBN Co as the variations grant increased discretion for NBN Co to include future services in the SAU without intervention from the ACCC.
- 4.27 Optus submits that such arrangements run counter to the reasons for the SAU – to provide specific rules and procedures that balance the interests of NBN Co and access seekers that limit actions that can be taken (by ACCC or NBN Co) for future WBA-SFAAs. The proposed amendments permit almost unrestricted powers to NBN Co to insert provisions in future agreements.

⁴⁵ NBN Co, 2016, Supporting Submission to the ACCC – Variation to the NBN Co Special Access Undertaking, 27 May, p.18

Changes to the UNI definition

- 4.28 NBN Co's proposed changes to the UNI definition give effect to the fact that the UNI will not be located on an NTD in all cases. Schedule 1A.3.1 describes the UNI to be a physical interface, while the complementing UNI description in the WBA refers to the UNI more succinctly as *"a physical port to which NBN Co supplies the NEBS in respect of a Premises. The type of UNI depends on the type of Premises and the NBN Co Network used to serve the relevant Premises."*⁴⁶
- 4.29 A key change to the UNI definition relates to that of the NTD. The SAU variation specifies that the NTD only refers to an "active or powered" network termination device "but does not include a Passive NTD". The WBA accordingly defines Passive NTD to mean *"a passive or non-powered device: (a) provided by a Carrier to establish a demarcation point between the Carrier's network and customer cabling/ equipment; and (b) permanently marked at manufacture with the words 'Network Termination Device' or the letters 'NTD'."*⁴⁷
- 4.30 This variation is therefore required to facilitate the inclusion of FTTB and FTTN technologies where there is no NTD provided. However, this lack of provision of NTD by NBN Co should not automatically apply to any future (or variant of any existing) NBN access technologies absent of any robust discussion on the product specification through forums such as the PDF.
- 4.31 Optus does not see any justification for placing this rule within the SAU for a period of 24 years when it is already in the WBA-SFAA agreements.

Removal of the network boundary point

- 4.32 The definition of the NBN Co Network Boundary has important implications particularly with respect to service activation, fault rectification, and installations. It is oft quoted in the WBA that NBN Co's responsibility ends at the NBN Co Network Boundary, beyond which it is no longer responsible for any issues. For example, the WBA Head Terms specify that:
- Without limiting NBN Co's obligations under this Agreement, Customer is responsible for (and assumes all liabilities and obligations in respect of) all activities required for: (a) the supply of Customer Products and Downstream Products **beyond the NBN Co Network Boundaries** including all services, systems, equipment or facilities associated with the supply of Customer Products and Downstream Products...*⁴⁸ [emphasis added]
- 4.33 The WBA Operations Manual similarly refers to the NBN Co Network Boundary in the context of service activations. Namely, that NBN Co will supply the NEBS to the NEBS boundary specified in section 12.2 of the NEBS Product Description (i.e. a NBN service between the UNI and the NNI). The same description for NEBS boundaries applies across all existing NBN Co networks.⁴⁹
- 4.34 Put simply, the concept of a UNI and network boundary point are important because they enable all parties to understand where a service is being delivered to, and

⁴⁶ NBN Co, SFAA – Wholesale Broadband Agreement Product Catalogue, Product Description, NBN Co Ethernet Bitstream Service, version 2.8, p.17

⁴⁷ NBN Co, SFAA – Wholesale Broadband Agreement, Dictionary, version 2.19, p.68

⁴⁸ See, for example clause E4.1. NBN Co, SFAA – Wholesale Broadband Agreement, Head Terms, version 2.4, p.45

⁴⁹ See, clause 12.2. NBN Co, SFAA – Wholesale Broadband Agreement, Product Description, NBN Co Ethernet Bitstream Service, version 2.8, p.29

importantly who is responsible for maintaining and assuring the various elements that go together to deliver a complete, end-to-end broadband service. Optus has experienced issues with regard to the responsibilities for installation, supply and maintenance of NBN equipment like splitters onto the end-user.

4.35 As such, it is general industry understanding that:

- (a) The UNI is the point to which NBN Co delivers a service, and
- (b) The network boundary point is the point to which NBN Co assures a service.

4.36 Optus therefore agrees that removal of the network boundary point is not necessary, as inclusion of the new UNI definitions for FTTN, FTTB and HFC could be included without removing the existing network boundary point clauses. Maintaining the definition of network boundary point and ensuring NBN Co has responsibility up to that point will assist industry clarity.

Assessing service description changes against LTIE criteria

4.37 The proposed variations introduces a wide-ranging service definition, which is inconsistent with the definitions in the current WBA-SFAA. The variations add significant uncertainty as the network boundaries of the NBN services. This section assesses the proposed variations against the counterfactual of the WBA-SFAA operating for at least two years, with the option of the ACCC to intervene in the future.

4.38 Promote competition and efficient use:

- (a) The variations are unlikely to promote competition and efficient use better than the counterfactual as the wide service definition permits NBN Co to limit regulatory oversight for any new service developed. The variations allow many of the detailed terms to be set under future operations manuals, again limiting oversight and end-user input; including altering network boundary points to suit NBN Co's position. In essence, the proposed variations are likely to increase the bargaining power of NBN Co and limit RSP input and ACCC oversight.

4.39 Legitimate business interests and efficient investment:

- (a) The variations are unlikely to have any impact on the legitimate business interests of NBN Co, or efficient investment incentives. As noted earlier, these changes have no impact on the LTRCM-ICRA components of the SAU, therefore do not impact on cost recovery.

4.40 Regulatory certainty:

- (a) The proposed variations increase uncertainty for RSPs and end-users compared to the counterfactual, as the variations result in less clarity over the services covered now and over the remaining 24 years of the SAU. Optus notes that the WBA-SFAA documents have more specific definitions.

4.41 Interest of access seekers:

- (a) The proposed variations do not promote the interests of access seekers better than the counterfactual. The proposed variations increases the level of discretion afforded to NBN Co during the 24 year term of the SAU. NBN Co will be free to alter service descriptions and network boundary points as it sees fit. The effect of the SAU variations is to remove ACCC oversight for MTM products for the next 24 years, while at the same time granting more discretion to NBN Co. Given NBN Co's market power, this does not promote interests of access seekers.

Introduction of co-existence and remediation provisions

- 4.42 Schedule 1A.4 sets out additional provisions with respect to the FTTB and FTTN technologies. Similar clauses are also reflected in Schedule 2A. The additional provisions relate to co-existence period and remediation:
- (a) The **Co-Existence Period** refers to a period (currently with no defined end date) where NBN Co may be required to adjust the normal operations of the network in the supply of the NBN Access Service, for example, by way of a Downstream Power Back-off. This means that during this period, the lower end of any PIR range at the UNI for each AVC TC-4 will be a minimum of 12/1 Mbps. For FTTB, a minimum of 25/5 Mbps AVC TC-4 will also be available. In practical terms, this is important as it aligns with the price list for services delivered through the FTTB and FTTN technologies.
 - (b) The **Remediation** provision refers to a period during which NBN Co may undertake work in respect of the Premises and during which time the NBN Access Service at that Premise may be significantly less than the PIR Objective (including any applicable during the Co-Existence Period).
- 4.43 These proposed variations are intended to apply in areas where copper lines are being used simultaneously to provide FTTN/FTTB services and legacy fixed-line services. While they may be considered consistent with the relevant supply terms set out in the WBA, it facilitates a number of contradictory outcomes and creates ongoing industry uncertainty. For example, there is no defined timeframe for the cessation of the provision (as it can be extended beyond a natural end date) and lack of transparency and commitment in relation to the provision of information notifying RSPs of when this likely end date would occur.
- 4.44 NBN Co further justifies its position on the basis that RSPs had agreed to the new clauses and the relevant supply terms in the WBA during the PDF. As noted above, Optus submits no inference should be drawn from clauses agreed to in the WBA, as absent signing NBN Co refuses to supply the service. The WBA effectively represents the terms and conditions imposed on industry by NBN Co. The SAU process is designed to place limits on the terms on conditions that can be imposed by the WBA. It would appear circular if a reason for approval of SAU terms is inclusion within WBA – the very document the SAU is supposed to limit.
- 4.45 Finally, it remains unclear why NBN Co has proposed to include co-existence and remediation clauses in Module 2, particularly given that the natural end date of these periods should conclude in line with the completion of the NBN rollout.

Co-existence period

- 4.46 Optus agrees that further certainty should be provided in relation to information on affected FTTN and FTTB services during this period.
- 4.47 NBN Co notes that the co-existence period will typically last for a period of 18 months following RFS for each FTTN and FTTB area. However this period can be extended beyond the natural end date (i.e. the disconnection date for the given FTTN or FTTB rollout area), and by up to two years in some cases.⁵⁰
- 4.48 The implication of this provision is two-fold:

⁵⁰ ACCC, 2016, Variation to NBN Co Special Access Undertaking, Consultation Paper, July, p.22

- (a) First, it provides a defined PIR (at the lower end of any PIR range) at the UNI for each AVC TC-4 bandwidth profile. In extending the PIR for the AVC to comprise a range, this allows NBN Co to offer different speed tiers and price it according to the higher end of the PIR range, while only committing that in some cases it is able to only provide speeds to the lower end of the PIR range. However, this commitment is still minimal at best given the WBA acknowledges that where speeds are referenced as a range, this does not reflect the minimum data throughput. Rather, it specifies that *“the maximum data throughput at the UNI used to serve the relevant Premises may peak anywhere within that range; and may reach a PIR within that range only once during a 24 hour period.”*⁵¹
 - (b) Second, it allows NBN Co to apply a ‘power back-off’ to its downstream services to accommodate the simultaneous supply of services during the co-existence period. The downstream power back-off means a technique used to reduce power spectral density for signal transmission from the NBN Co Node to the UNI.
- 4.49 Further, the WBA acknowledges that NBN Co retains discretion to disable the Downstream Power Back-off when it is no longer required in respect of that part of the FTTN or FTTB network. Once disabled, this also means that the co-existence period has ended for Ordered Products supplied by means of that NBN Co Node.⁵²
- 4.50 Optus considers that it is too early to comment on the effectiveness of the current co-existence provisions in the WBA. The only certainty that the WBA provisions provide is that: *“During this period optimal VDSL2 line speeds will not be possible due the use of Downstream Power Back-off (DPBO) at the VDSL2 node and cross talk from the exchange based services. Customer should therefore consider these factors in the selection of AVC bandwidth profiles.”*⁵³ However, this in itself is not sufficient.
- 4.51 RSPs have had limited experience during the co-existence period for a number of reasons. First, FTTB⁵⁴ and FTTN⁵⁵ services were only introduced to the NBN Product suite in 2015, therefore the natural cessation of the co-existence period in relevant NBN rollout areas is yet to be observed. Second, the NBN SIO RKR report as at 30 June 2016 shows that approximately 11% of all TC-4 AVCs provided over FTTN and FTTB networks are currently being purchased by RSPs at one of the specified PIR range bandwidth profiles (and which may be subject to the co-existence period provisions). However, this is expected to increase as NBN rollout continues.
- 4.52 Early experiences regarding co-existence matters suggest that further improvements are required. Concerns largely relate to issues in relation to information asymmetry and timing of notifications. Further, it is not clear how co-existence interact with Australian

⁵¹ See, clause 13.1(a). NBN Co, SFAA – Wholesale Broadband Agreement, Product Description, NBN Co Ethernet Bitstream Service, version 2.8, p.30

⁵² See, clause 12.5. NBN Co, SFAA – Wholesale Broadband Agreement, Product Description, NBN Co Ethernet Bitstream Service, version 2.8, pp.29-30

⁵³ See, clause 5.3.3. NBN Co, SFAA – Wholesale Broadband Agreement, Product Technical Specification, NBN Co Ethernet Bitstream Service – FTTB/FTTN, version 1.5, p.27

⁵⁴ The FTTB product launch occurred in March 2015. NBN Co, “NBN Co launches Fibre to the Building technology,” Media Release, 31 March 2015, <http://www.nbnco.com.au/corporate-information/media-centre/media-releases/nbn-co-launches-fibre-to-the-building-technology.html>

⁵⁵ The FTTN product launch occurred in September 2015. NBN Co, “FTTN will help get Australians connected to the nbn™ network faster,” Media Release, 21 September 2015, <http://www.nbnco.com.au/corporate-information/media-centre/media-releases/nbn-launches-fibre-to-the-node-technology.html>

Consumer Law, and specifically, whether actions could be taken against RSPs as a result of NBN Co actions in relation to power back-off or other co-existence issues.

- 4.53 Optus submits it is too early to lock-down the rules in the SAU for a 24 year period. It is better to continue to rely upon the terms in the WBA-SFAA agreements.

Remediation

- 4.54 Optus agrees that further certainty should be provided in relation to information on affected FTTN and FTTB services when it is required to be placed into remediation.
- 4.55 NBN Co notes that remediation for a given FTTN or FTTB service may apply in some situations in where NBN Co is providing a service, but the line over which the service is supplied is not capable of providing the PIR Objective. However the PIR Objective appears to be very minimal, with NBN Co only committing to ensure that the line rate at the UNI is capable of providing: 12/1 Mbps for that bandwidth profile; or 25/5 Mbps for all bandwidth profiles other than 12/1 Mbps.⁵⁶ The only exception applies to FTTN services during the co-existence period where NBN Co will only commit to ensure that the line rate at the UNI is capable of providing a 12/1 Mbps bandwidth profile.⁵⁷
- 4.56 The implication of this provision is two-fold:
- (a) First, the SAU only sets out the high-level conditions relating to the supply of the Product Components in the event of Remediation. For example, the proposed variation at 1A.4.5 outlines that if a line is unable to meet the PIR Objective for that service then NBN Co *may* conduct Remediation, and until this work is completed the PIR bandwidth profile for that service may be significantly reduced. There is no commitment or transparency in relation to the required timeframe and or information to be provided in respect of affected services.
 - (b) Second, NBN Co notes that more detail on the Remediation provision be set out in the WBA Operations Manual.⁵⁸ However, this module is designed as a 'living document' so provisions and terms within it will continually evolve during the life of the WBA agreements. This means that the current level of uncertainty is further entrenched, as the current WBA provisions similarly do not provide any commitment or transparency in relation to the required timeframe and or information to be provided in respect of affected services. The WBA further sets out a complex process for raising and resolving Trouble Tickets, which may indirectly impact on the information available to RSPs and prolong the timeframes in which any remediation work may take to be completed.
- 4.57 The operation of the remediation provisions remain largely decoupled from the operation of the co-existence period. However, similar to some of the co-existence provisions, it provides NBN Co with broad discretion once Remediation has been designated in respect of a Premises. As highlighted in the discussion paper, there appears to be a lack of firm commitments made by NBN Co to inform its RSPs that a service will be placed into remediation and limited transparency in relation to the timeframes associated with the completion of the remediation work being undertaken.⁵⁹

⁵⁶ See: NBN Co, SFAA – Wholesale Broadband Agreement, Dictionary, version 2.19, p.69

⁵⁷ See: NBN Co, SFAA – Wholesale Broadband Agreement, Dictionary, version 2.19, p.77

⁵⁸ NBN Co, 2016, Supporting Submission to the ACCC – Variation to the NBN Co Special Access Undertaking, 27 May, p.21

⁵⁹ ACCC, 2016, Variation to NBN Co Special Access Undertaking, Consultation Paper, July, pp.24-25

- 4.58 Optus considers that it is too early to comment on the effectiveness of the current remediation provisions in the WBA. While the WBA Operations Manual currently deals with Remediation in clause 5.2.6, this appears incomplete in providing RSPs with the necessary transparency to keep its end-users informed on the status of their service. The WBA provisions impose a stringent process for RSPs to follow before NBN Co determines that Remediation is required.⁶⁰
- 4.59 The discussion paper notes that “*End-users may also be misinformed as there is no transparent way in which they could obtain an accurate and reliable indication of what speeds are likely to be obtained at their premises and in determining what speed tier is best suited to their needs.*”⁶¹ This information asymmetry is likely to arise because RSPs are unable to ascertain the line quality to a Premises prior to the point of sale, and therefore issues in relation to the service cannot be raised until after the service has been activated.
- 4.60 Optus submits it is too early to lock-down the rules in the SAU for a 24 year period. It is better to continue to rely upon the terms in the WBA-SFAA agreements.

Assessment against LTIE criteria

- 4.61 The proposed variations introduce co-existence and remediation provisions, which affects the line speed available to end-users. The variations add significant uncertainty as the quality of the service available to end-users. This section assesses the proposed variations against the counterfactual of the WBA-SFAA operating for at least two years, with the option of the ACCC to intervene in the future.
- 4.62 Promote competition and efficient use:
- (a) The variations are unlikely to promote competition and efficient use better than the counterfactual as the introduction of co-existence and remediation provisions introduce significant doubts over quality of service. Allowing these provisions within the SAU locks them in for 24 years and removes the ability of the ACCC to intervene should it be established the provisions have detrimental impacts. Further, these provisions limit the speed offered to end-users, even though the end-users have acquired the speed tier. It is not immediately clear how these provisions are consistent with promotion of retail network competition, Australian consumer law, or the ACCC’s broadband speed advertisement requirements. It is likely to result in inefficient use of the network by end-users given lack of information available on the scope and nature of the co-existence provisions.
- 4.63 Legitimate business interests and efficient investment:
- (a) The variations are unlikely to have any impact on the legitimate business interests of NBN Co, or efficient investment incentives. As noted earlier, these changes have no impact on the LTRCM-ICRA components of the SAU, therefore do not impact on cost recovery.
- 4.64 Regulatory certainty:
- (a) The proposed variations increase uncertainty for RSPs and end-users compared to the counterfactual, as the variations result in less clarity over performance of the AVC services for the remaining 24 years of the SAU.

⁶⁰ See, Clause 5.2.6.1. NBN Co, SFAA – Wholesale Broadband Agreement, NBN Co Operations Manual, version 2.18, p.160

⁶¹ ACCC, 2016, Variation to NBN Co Special Access Undertaking, Consultation Paper, July, p.24

Optus notes that the WBA-SFAA documents have these provisions within them, but the term of the WBA is materially different from the remaining 24 years of the SAU. The information asymmetry does not provide regulatory certainty to access seekers or end-users.

4.65 Interest of access seekers:

- (a) The proposed variations do not promote the interests of access seekers better than the counterfactual. The proposed variations increase the level of discretion afforded to NBN Co during the 24 year term of the SAU. NBN Co will be able to alter the line speed for MTM households without notification to RSPs and end-users. Access seekers and their customers may end up paying for AVC speed tiers without the minimum implied service levels. While it is too early to provide detailed views on the impact of these provisions, it is also too early to lock the terms in for a 24 year period and removing the potential for ACCC oversight.

Section 5. INFORMATION COMMITMENTS

- 5.1 Optus welcomes the proposed variations to the information commitments in the SAU as a step in the right direction. However, some of the changes continue to be incomplete, and fail to address the data integrity issues access seekers continue to face.
- 5.2 A lack of timely and relevant information is likely to hinder access seeker efforts to undertake effective business planning, sales and marketing activities. These concerns are magnified given Telstra's special position in the migration process as well as a contracted supplier to NBN Co.
- 5.3 Optus has concerns about the potential impact on competition without accurate and timely rollout-related information being made available to all NBN access seekers.
- 5.4 NBN Co currently discloses information to access seekers through a combination of SAU and voluntary rollout information commitments. The proposed variations provide a number of improved clarifications to the SAU commitments, but should be further strengthened to include information across all access technologies and include detailed monthly forecasts for expected Ready For Service (RFS) areas in the next 12 months.
- 5.5 This section sets out Optus' comments in relation to the information commitments set out under the SAU framework.

Rollout progress information

- 5.6 Schedule 1H.2 sets out the rollout progress information commitments during the Initial Regulatory Period and until the Rollout Built Date. For example, it attempts to expand and clarify that NBN rollout progress information is to be provided across the NBN fixed-line and wireless network access technologies.
- 5.7 NBN Co has proposed to vary the SAU to:
 - (a) Remove altogether the need to provide a one-year construction rollout plan.
 - (b) Clarify its commitments in relation to the provision of monthly RFS rollout information to include information on Planned RFS Areas and proposed footprint list.
 - (c) Clarify its commitments in relation to the provision of weekly Historic Footprint List (HFL) reports and the information to be included in both the historical footprint list and the historical rollout region list.
- 5.8 NBN Co has proposed to remove a number of information rollout commitments from the SAU on the basis that the ACCC has already undertaken targeted consultation on a number of these issues and that *"the changes also reflect ongoing feedback from access seekers as to what information they need to support their business planning, including via a recent consultation process conducted by NBN Co to improve the reporting metrics used in key rollout plans."*⁶²
- 5.9 It is unclear what NBN Co consultation process has been referred to in this context.

⁶² NBN Co, 2016, Supporting Submission to the ACCC – Variation to the NBN Co Special Access Undertaking, 27 May, p.25

- 5.10 Optus also notes that while NBN rollout information and the subsequent rollout information files have similarly continued to evolve over time, this has led to some supposed ‘minor’ amendments resulting in detrimental impacts on access seeker planning processes.
- 5.11 The discussion paper also acknowledges that “*NBN Co’s proposed variations to the SAU falls short of the recommendations in the advice to the Department in some areas.*”⁶³
- 5.12 Optus considers that the information commitments in the SAU are high-level, and while they represent a step in the right direction, do not necessarily provide RSPs with the level of detail required. Optus supports the SAU information commitments being consistent with the ACCC advice, with the ACCC also retaining the ability to impose reporting and information disclosure requirements on NBN Co where required.

Access to NBN rollout progress information

- 5.13 Optus is concerned that the proposed amendments remove the current commitment to “*publish*” with a commitment to “*make available to Access Seekers (subject to the agreement of the terms of access to that information between NBN Co and each Access Seeker).*” In doing so, NBN Co is seeking to force access seekers to accept certain conditions in relation to gaining access to the NBN Portal and rollout information through provisions set out in the WBA-SFAA documents.
- 5.14 This highlights a risk that NBN Co may either withhold or charge RSPs for access to certain information through contractual agreements, and in doing so, may either charge RSPs for access or force RSPs to waive liability rights for use of the information. This would not be in the LTIE.

Information required in the various NBN reports

- 5.15 The SAU framework oversees the commitment to provide long-term construction rollout forecasts, short to medium term ready for service rollout forecasts, and historical ready for service footprint information. Each report services a different purpose for business planning, marketing and sales activities. However, the overarching requirement that the information is provided on a timely and accurate manner remains the same. In particular, each of the reports will have implications on the expected RFS dates, which in turn, are important for business planning purposes.
- 5.16 Optus therefore considers that detailed information on Premises should be provided to RSPs in a timely manner, with the key trigger based on the expected RFS date and should capture all information up to 12 months prior to the expected RFS. This should be provided for all Premises in Planned RFS Areas irrespective of where in the design and construction phase it is at, insofar as RFS is forecast to occur within the next 12 months.
- 5.17 While the timing for the release of reports (i.e. annual, monthly and weekly) remain intact, there appears to be some, albeit incomplete, clarification of the information commitments these reports now require. For example, NBN Co has pared back its commitment to provide detailed Premise and boundary information for all Planned RFS Areas to only include areas which have entered the construction phase. It justified this on the basis that: “*The effect of this change is to allow more granular information to be*

⁶³ ACCC, 2016, Variation to NBN Co Special Access Undertaking, Consultation Paper, July, p.30

*provided at a time when nbn is able to provide appropriately stable information.*⁶⁴ Optus does not agree that this change promotes the LTIE.

- 5.18 Specific comments on these reports and further proposed amendments to strengthen the current information commitments are discussed below.

Clause 1H.2.1 – Construction Rollout Plan should include all access technologies

- 5.19 Optus supports the continued commitment to provide the three-year construction rollout plan on an annual basis, but considers that this commitment should be extended to include all NBN technologies, not just the NBN Co Fixed Line Network. This information is also generally made available on the NBN Co website,⁶⁵ and currently also shows Rollout Regions where Fixed Wireless is the anticipated technology.
- 5.20 In contrast, Optus considers that the removal of the one-year construction rollout plan commitment should only be accepted, where it can sufficiently be shown that RSPs are able to access the relevant information through the relevant RFS, PFL and HFL reports.

Clause 1H.2.2 – Monthly ready for service rollout plan and proposed footprint list should include information for all Premises with expected RFS within the next 12 months

- 5.21 Optus considers there is a current disconnect between the information provided in the monthly RFS plan and the PFL reports, and considers that the proposed variations be further strengthened to address the information flows and forecast information being provided to access seekers. In particular, that;
- (a) The monthly RFS report should commit to providing information at a monthly level for all Planned RFS Areas. Given this information only provides information for expected RFS areas up to 24 months, the same level of granularity and boundary information should be provided for all identified areas and there should be no carve out for areas that have not entered the construction phase; and
 - (b) The monthly PFL report should be extended to include information for all Premises with expected RFS within the next 12 months. This would address the current information gap for RFS areas between 6-12 months, and would greatly assist access seekers for business planning purposes.
- 5.22 Optus supports the clarification to the monthly RFS report to include rollout progress information for all areas with an expected RFS date within at most 24 months of the monthly RFS rollout plan being made available. However the information commitment should continue to apply to all Planned RFS Areas that have entered the design and construction phase, including but not limited to the same level of granularity and boundary information for all identified areas. There should be no carve out for the exclusion of Planned RFS Areas that have only entered the design phase.
- 5.23 It would be premature to remove the commitment to include boundary information for Planned RFS Areas that have entered design phase because it may lead to planning anomalies for rollout regions that have been subject to an expedited design and construction phase. The potential implication of this change is that it may exclude relevant information on rollout regions where RFS may occur earlier than expected.

⁶⁴ NBN Co, 2016, Supporting Submission to the ACCC – Variation to the NBN Co Special Access Undertaking, 27 May, p.27

⁶⁵ See: NBN Co, Three-year construction plan, <http://www.nbnco.com.au/learn-about-the-nbn/three-year-construction-plan.html> [accessed 17/8/16]

- 5.24 For example, there may be a scenario where a Planned RFS Area is identified in the monthly RFS plan but further detail is not provided because it has not entered the construction phase. If it is subject to an expedited design and/or construction phase (i.e. where the total period for phase is less than 6 months), this may mean that the detailed information may only first arise in the PFL with less than 6 months' notice, which is insufficient for robust business planning purposes. This would therefore lead to a detrimental change to the current monthly RFS reports that RSPs receive today.
- 5.25 Optus supports the commitment to provide the monthly PFL as a separate sub-requirement in the SAU variation. This information commitment will continue to provide a list of premises within the relevant geographic areas that will be RFS within the next six month period, and it has also been clarified to identify the relevant access technology (all Fixed Line and Fixed Wireless) that will be used to service each premise in the proposed footprint list.
- 5.26 Optus also considers that this information commitment should be extended to include all Premises with an expected RFS within 12 months. This should be provided irrespective of whether it is in the design or construction phase, insofar that the expected RFS date is within 12 months. Access to this information would greatly assist RSPs with business planning decisions, particularly given that operational planning usually occur in 12 monthly cycles and there is currently a significant gap in the information available for expected RFS Premises between 6 to 12 month timeframe.

Clause 1H.2.3 – Historical footprint list and historical rollout region list should include all relevant location information for all Premises that have reached RFS

- 5.27 Optus supports the clarification on a number of information commitments for inclusion in the weekly historical footprint and rollout region lists. In general, the historical rollout region list will include the estimated number of premises in each geographic area and the access technology used to serve those premises. The historical footprint list will, in addition, include information on the service class of each Premises and the expected DCD (if any) for each Premise must be disconnected from an existing legacy network.
- 5.28 Optus considers that the SAU variation should also commit to providing location information for Premises (e.g. LOC ID and GNAF) in the HFL within the SAU framework. These location identifiers represent baseline information that should form part of the core aspects of the rollout information provided to RSPs.

Other issues

- 5.29 There are clear omissions in the information commitments provided in the SAU variation that have previously been identified by NBN Co (and in some cases provided to RSPs) and recommended in the ACCC's advice to the Department on NBN information disclosure. Optus is concerned that these omissions will have the practical outcome of favouring Telstra through its role in the migration process and network design and roll-out contracts.
- 5.30 These issues are:
- (a) Information disclosure should be consistent with previous commitments;
 - (b) Greater disclosure post RFS date; and
 - (c) Disclosure of HFC implementation data.

Consistency with previous commitments

- 5.31 In 2015 NBN Co submitted it was considering providing RSPs nine-quarterly forecast information (updated on a quarterly basis) and an additional set of information that RSPs may require on the mix of technologies that NBN Co expects to deploy.⁶⁶ Neither proposed information flow has been addressed in the SAU variation.
- 5.32 As highlighted in the discussion paper, it is also important to revisit the submissions made during the course of the ACCC's 2015 inquiry on inputs into a proposed NBN Co CLC about information disclosure. The ACCC's final report and advice to the Department provided in May 2015, highlighted the following guiding principles should underpin the proposed CLC:
- (a) NBN Co disclose certain information via management reports, and make other information available on request;
 - (b) NBN Co must regularly consult with stakeholders to ensure that information disclosed remains relevant to their needs, and to achieving the objective of the proposed licence condition; and
 - (c) NBN Co must implement compliance systems and processes to monitor and report on compliance with the proposed licence condition, again to ensure that the proposed licence condition is effective in achieving its objectives.⁶⁷

Details on plans post-RFS

- 5.33 NBN Co can declare RFS when 80% of premises within an area have been passed. Much of the information disclosure relates to the timeframes around the declaration of RFS. Less information is available on timeframes and plans for the remaining 20% of premises that were not passed when RFS was declared.
- 5.34 The lack of timely and relevant information has the potential to hinder access seeker efforts to undertake effective business planning, sales and marketing activities for the remaining 20% of premises.
- 5.35 Optus also has concerns over the potential impact on competition without accurate and timely rollout-related information being made available to all NBN access seekers. These concerns are magnified given Telstra's special position in the migration process as well as a contracted supplier to NBN Co.

Activation data on HFC networks

- 5.36 Optus further requests that NBN Co provide ongoing information comparing key metrics for Telstra NBN HFC services compared to a HFC service for other RSPs.
- 5.37 Telstra has a material advantage in the provision of NBN HFC services through its contract to manage the design and construction of the NBN HFC network. There is a significant risk that the arrangements could result in Telstra obtaining confidential NBN Co information in advance of other RSPs. There is a material risk that Telstra would prioritise its own end-users when managing faults or other issues going forward on the NBN HFC. It may be that there are procedures in place to minimise this risk.

⁶⁶ NBN Co, 2015, NBN Co submission to the ACCC – Proposed NBN Co carrier licence condition about information disclosure, 28 April, pp.5-7

⁶⁷ ACCC, 2015, Report to Department of Communications: ACCC consultation on proposed information disclosure carrier licence condition, May, p.9

- 5.38 However, Optus sees benefits in having a reporting process that enables RSPs and the ACCC to see whether Telstra is receiving a material benefit through its arrangements with Telstra. This may indicate if there is any systemic advantage to Telstra through its role as HFC delivery partner).
- 5.39 To that end, Optus sees benefit in an obligation for NBN Co to disclose:
- (a) Time to provision/activate a Telstra NBN HFC service compared to a HFC service for other RSPs; and
 - (b) Fault repair data for a Telstra NBN HFC service compared to a HFC service for other RSPs.

POI rollout progress

- 5.40 Schedule 1H.3 sets out the POI rollout progress information commitments NBN Co is required to provide to RSPs during the Initial Regulatory Period and until the Rollout Built Date. The proposed amendment adds the commitment that the report will contain information on the remaining Rack Space available at the POI.
- 5.41 This change is in line with the ACCC's advice which recommended that:
- In relation to service information, additional information could be provided in connection with the points of interconnect report. Specifically, NBN Co should disclose details of rack space available at POIs, including whether there are any impediments to service providers making use of a POI (for instance because of capacity constraints) and if so the works underway to address those constraints.*⁶⁸
- 5.42 It should also be noted that the SAU commitments in this clause only apply to information in relation to Established POIs. This report is provided on a quarterly basis and outlines the status of all NBN POIs, the SAU then commits to pare back this requirement to an annual basis following the completion of the Established POIs.
- 5.43 With regards to POI rollout information, Optus supports the commitment to provide information about remediation work to address capacity constraints at the POI.

⁶⁸ ACCC, 2015, Report to Department of Communications: ACCC consultation on proposed information disclosure carrier licence condition, May, p.15

Section 6. HFC STANDARD INSTALLATIONS

- 6.1 The discussion paper identifies NBN Co's proposal to introduce additional annexures to define standard installations for the new MTM technologies. NBN Co indicates that these provisions reflect the clauses set out in the WBA-SFAA agreement.
- 6.2 Optus does not object to the concept that a standard installation is defined within the SAU to provide certainty to industry and to ensure NBN Co does not inefficiently cost shift to RSPs. However, this is not the outcome of the proposed HFC definition in Annexure 5.
- 6.3 First, Optus notes NBN Co has provided little supporting evidence that its proposal to include the standard installation definitions within the SAU promotes the LTIE. The supporting submission makes reference to the additional annexures in paragraph 90, but there is no specific mention of this issue in its assessment of the LTIE. Importantly, there is no discussion on the details of the annexure.
- 6.4 The fact a clause is contained within NBN Co's WBA-SFAA agreements does not provide uncontested grounds that the clause is reasonable for inclusion within the SAU. One fundamental role of the SAU is to limit the ability of NBN Co to exercise unilateral rights within subsequent WBA-SFAA agreements. Any term included in the SAU should be justified on its merits.
- 6.5 Optus disagrees with two aspects of the proposed HFC standard installation annexure:⁶⁹
- (a) Clause 1(d)(vii)(D)(III) defines that a standard installation is where an NTD is not already installed and the NTD is installed by means of an End User HFC-NTD Installation; and
 - (b) The definition of the End User HFC-NTD Installation is:
 - (i) An installation method for an HFC Fly Lead, HFC RF Splitter (as required) and NTD that involves NBN Co sending the HFC Fly Lead, HFC RF Splitter (as required) and NTD directly to the Designated End User for installation at no charge to the Access Seeker.⁷⁰
- 6.6 In other words, where an existing wall plate is in place, a standard HFC installation only occurs if NBN Co mails the HFC Fly Lead, RF Splitter and NTD to the end-user and the end-user self-installs these elements. If an end-user requires assistance, NBN Co will charge additional fees. This is counter to current industry practice.
- 6.7 This definition was developed by NBN Co and does not take proper account of issues raised by RSPs. The SAU should not adopt definitions developed by NBN Co which may be detrimental to RSPs and end-users.
- 6.8 In May 2016, Optus provided feedback to NBN Co in the PDF forum in relation to its approach to HFC installation options. Optus had, and still has, serious concerns over the self-install aspects of the proposal. NBN Co did not adequately respond to Optus' concerns; nor did NBN Co address any of the issues during the PDF process. Optus is

⁶⁹ Annexure 5, Schedule 1C

⁷⁰ Attachment C Dictionary

concerned that the same provisions are proposed to be included in the SAU – meaning it cannot be altered for 24 years without NBN Co approval.

- 6.9 NBN Co proposed in the Near to Final Draft of the WBA for HFC that for a Service Class 23 Premises (SC23: where the HFC wall plate is already in place), the installation of the HFC Network Termination Device (NTD) will not be included a Standard HFC Installation. This would apply from April 2017 or the date that NBN Co releases a Self-Installation Process for the NTD.
- 6.10 From that time onwards, where NBN Co does send a technician to install the HFC NTD at a SC23 premises, end-users would be charged a Professional HCF NTD Installation, which under the WBA Price list, is a minimum charge of \$225 ex GST.
- 6.11 NBN Co has indicated that RSPs could avoid the Professional HCF NTD Installation Charge at an SC23 premises by selecting a self-installation option for the HFC NTD where either NBN Co or the RSP could ship the NTD to the end user to allow them to install it themselves. Alternatively, an RSP could avoid the Professional HCF NTD Installation Charge by sending its own technician out to install NBN Co's NTD at an SC23 premises. This proposal is reflected in the drafting of the relevant clause in the HFC Standard Installation Annexure.
- 6.12 Optus understands that in certain circumstances, NBN Co may want to avoid a truck-roll to complete the HFC installation (e.g. migration of a relevant legacy HFC service to an NBN HFC service) to realise cost efficiencies. Whilst Optus supports NBN Co's objective of reducing costs, the installation of a NTD must remain the responsibility of NBN Co as it is integral to the end-to-end wholesale service. Optus position was, and remains, that the installation should, therefore, be undertaken by NBN Co or alternatively by an RSP under a commercial agreement that compensates the RSP for undertaking this activity.
- 6.13 In this latter case, NBN Co could seek specific commercial arrangements with some RSPs for the installation of the HFC NTDs on its behalf. Such a commercial arrangement can then appropriately deal with issues such as supply, warehousing, installation, maintenance and replacement of the NTD through its lifespan. However, RSPs should still have the option of NBN Co installing an NTD as a Standard Installation at no cost at all HFC premises including SC23.
- 6.14 Optus does not support varying the SAU to include a standard installation requiring end-users to self-install the HFC NTD on behalf of NBN Co. Installation of the NTD is likely to be complex due to the existence of parallel legacy HFC services, multiple devices, RF Splitters, different in-house cabling arrangements and different legacy wall plate configurations. Given these complexities, it is likely that a proportion of customer self-installation processes will fail. This could result in end-users being charged a professional installation fee. This may result in a negative and frustrating customer experience.
- 6.15 It is not clear to Optus that a self-installation process is currently viable. It is far from clear that it should be locked-in for a 24 year period. As an existing HFC operator Optus has considered implementing a self-installation model over several years but we have been unable to resolve a number of the practical difficulties noted above. These practical difficulties will be greater in a wholesale supply model, where legacy HFC services may have to operate in parallel with new services for an interim period.
- 6.16 If NBN Co wishes to retain the option of a self-installation model then it should only proceed to implement that solution after it has been successfully trailed and accepted by RSPs. Discussions around a self-install model should continue on a commercial basis and should not be determined by unilateral variations to the SAU.

- 6.17 For these reasons, Optus has serious doubts over the benefits of including a self-install model within the SAU. Optus would prefer that NBN Co enter into commercial negotiations with RSPs on how best to address the concerns. But the approach NBN Co has taken to the development of the standard installation definition is an example of unilateral decision-making with little regard to the interests of access seekers and end-users.
- 6.18 Optus submits that rather than amending the SAU to define standard installation as a self-install process, the SAU should be amended to make clear that NBN Co is responsible for the installation of the HFC Fly Lead, HFC RF Splitter (as required) and NTD within the standard installation.