

Supporting Submission to the ACCC – Variation to the NBN Co Special Access Undertaking

27 May 2016





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Contents

1. Introduction and Overview	1
2. Context of variation to the SAU	5
2.1 Additional context	7
2.2 Outline of the variation and the provisions of the SAU which remain unchanged	8
2.3 Statutory and analytical framework	10
2.4 ACCC approach to assessing the SAU in the Final SAU Decision	12
3. Outline of variation to the SAU	14
3.1 Changes reflect transition to MTM model without changing underlying regulatory principles, structure or incentives embedded in SAU	14
3.2 nbn has applied principles of minimal change in developing the variation	15
3.3 Changes to accommodate MTM model are limited and necessary	17
3.4 Changes to incorporate products and services for FTTB, FTTN and HFC	18
3.5 Changes to incorporate prices for FTTB, FTTN and HFC	23
3.6 Other changes	25
4. Statutory requirements	29
4.1 Reasonableness including the LTIE	29
4.2 LTIE	30
4.3 Legitimate business interests of nbn	34
4.4 Interests of persons who have rights to use the declared services	35
4.5 Direct costs of providing access to the declared service	35
4.6 Safety and reliability	35
4.7 Economically efficient operation of a carriage service, a telecommunications network or a facility	36
4.8 Reasonableness - other matters	36
5. Assessment of variation as a whole	39
5.1 Variation makes only limited changes to the SAU and ACCC's conclusions in the Final SAU Decision are not affected	39
5.2 Term	40
5.3 Regulatory certainty	41
5.4 Expert reports	42
6. Assessment of categories of changes in the variation	45
6.1 Categories of changes in the variation	45
6.2 Consistency with Category B SAOs	46
6.3 Assessment of changes to services and products provisions to incorporate FTTB, FTTN and HFC	48
6.4 Assessment of changes to price-related terms and conditions to incorporate FTTB, FTTN and HFC	53
6.5 Assessment of conduct-related changes	60



Appendix A	Categorisation of changes in the SAU variation	63
Appendix B	List of changes included in the SAU variation	73



1. Introduction and Overview

1. **nbn's** Special Access Undertaking (**SAU**), as accepted by the ACCC on 13 December 2013, is a key part of the regulatory framework that governs the terms on which **nbn** supplies services to access seekers over the period to 30 June 2040.
2. In accordance with the Government's April 2014 Statement of Expectations (**SOE**), **nbn** has been transitioning to an optimised multi-technology mix (**MTM**) model. Now is an appropriate time to update the SAU by way of a variation to incorporate the additional MTM technologies – i.e. Fibre-to-the-Building (**FTTB**), Fibre-to-the-Node (**FTTN**) and Hybrid Fibre Coaxial (**HFC**).
3. This submission is organised to:
 - (a) provide an introduction and overview – section 1;
 - (b) explain the context of the variation to the SAU – section 2;
 - (c) provide an outline of the changes that comprise the variation – section 3, Appendix A and Appendix B;
 - (d) explain the relevant statutory requirements – section 4;
 - (e) set out an assessment (against the relevant legislative criteria) of:
 - (i) the variation as a whole – section 5; and
 - (ii) the categories¹ of changes in the variation – section 6.
4. In preparing this submission, **nbn** has sought to address all issues that are relevant for the ACCC's assessment of the variation. While noting that the ACCC may request further information from **nbn** at any time throughout its assessment process, **nbn** may also lodge further submissions, expert reports and other information if it considers this may be useful.

Approach to varying the SAU

5. Consistent with what was anticipated when the SAU was accepted, **nbn's** approach to varying the SAU (under s. 152CBG of the *Competition and Consumer Act 2010* (**CCA**)) is to:
 - (a) expand the service description in Attachment A to include FTTB, FTTN and HFC (and including an approach to facilitate incorporation of future variants such as Fibre-to-the Distribution Point (**FTTdp**));

¹ These categories are based on the categories used by the ACCC in its assessment of the SAU in 2013.



- (b) make changes to some other parts of the SAU to incorporate the initial products and prices for FTTB, FTTN and HFC;
 - (c) make some minor changes to other parts of the SAU, where a need has been demonstrated through experience to date (e.g. Dispute Management, Rollout Information); and
 - (d) otherwise leave all other parts of the SAU unchanged, including the term and modular structure.
6. **nbn** notes that the Long Term Revenue Constraint Methodology (**LTRCM**) is not subject to variation by reason of the MTM model. The LTRCM is broadly defined and already covers revenue and expenditure in respect of FTTB, FTTN and HFC.
7. **nbn's** variation to the SAU reflects the outcomes of the extensive consultation **nbn** has undertaken with industry in respect of the development of the FTTB, FTTN and HFC product constructs and supply terms.
8. Overall, the variation is a largely mechanical exercise aimed at updating the SAU so that it is aligned with the MTM model; it represents an incremental change to reflect current policy settings.

Analytical framework for assessment of the variation by the ACCC

9. **nbn's** SAU and any variations made to that SAU are governed by Part XIC of the CCA.
10. The variation is lodged with the ACCC in accordance with s. 152CBG(2) of the CCA. The variation is denoted by the following changes:
- (a) underlined words are additions to the original wording in the SAU; and
 - (b) words that are struck-out are deletions from the original wording in the SAU.
11. It is these mark-ups that constitute the variation. The remainder of the SAU is left unchanged and is not subject to the variation.
12. **nbn** understands (including from a statement in the ACCC's 2013 Final SAU Decision²), that the ACCC will be assessing the variation rather than the existing provisions of the SAU, and that this will include an assessment of the interaction of the subject matter of the variation (i.e. incremental changes to incorporate the new MTM technologies) with the existing SAU provisions.

² ACCC Final SAU Decision, December 2013, p. 109.



Statutory requirements for acceptance of the variation

13. The ACCC must apply s. 152CBD to the variation *"in a corresponding way to the way in which it applies to an undertaking"*.³
14. The ACCC must not accept a variation unless the ACCC is satisfied that:
 - (a) the terms and conditions in the variation on which **nbn** complies with the obligations referred to in s. 152AXB (as if the relevant service is a declared service) are consistent with the Category B standard access obligations;
 - (b) the terms and conditions specified in the variation in relation to the Category B standard access obligations are reasonable (s. 152CBD(2)(b));
 - (c) in the event that the variation states that **nbn** will engage in specified conduct in relation to access to the service (s. 152CBA(3B)):
 - (i) the conduct referred to in s. 152CBA(3B)(a) will promote the LTIE of carriage services or of services supplied by means of carriage services (s. 152CBD(2)(ca)(i)); and
 - (ii) the terms and conditions referred to in s. 152CBA(3B)(b) are reasonable (s. 152CBD(2)(ca)(ii)); and
 - (d) the conduct of **nbn** as specified in the variation in accordance with s. 152CBA(3C) will promote the LTIE of carriage services or of services supplied by means of carriage services (s. 152CBD(2)(cb)).

Assessment of the variation

15. **nbn** submits that the ACCC should be satisfied that the variation meets the relevant criteria as set out in the CCA. In particular, **nbn** submits that the terms and conditions of the variation are reasonable. This includes that the variation promotes the LTIE by promoting competition, facilitating the achievement of any-to-any connectivity and encouraging the economically efficient use of and economically efficient investment in infrastructure as compared to the counterfactual in which the current scope of the SAU is maintained without any variation. **nbn** submits that the more definitive regulatory certainty provided by the variation strikes an appropriate balance between the interests of **nbn** and access seekers.

³ **nbn** is not aware of any Procedural Rules which are in force which would apply to the SAU.



16. The variation does not involve any change to the fixed principles (and the associated notional fixed period and qualifying circumstances), which relate to the operation of certain aspects of the LTRCM in Module 2.
17. In support of this submission, **nbn** has lodged a number of reports by independent experts from the United States, the United Kingdom and Australia.

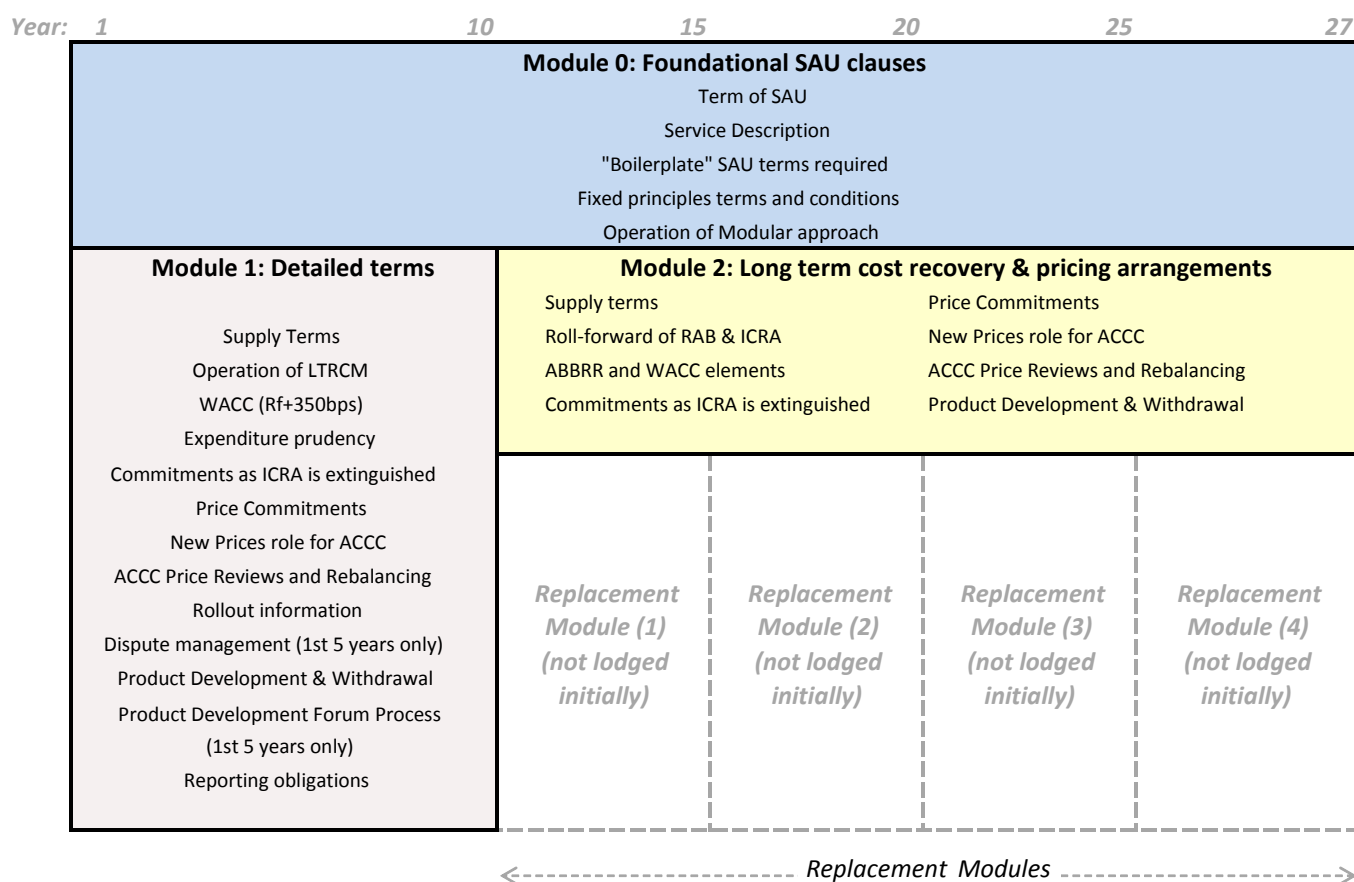
Expert report	Summary of conclusions
Professor Janusz Ordovery and Dr Allan Shampine (Ordovery and Shampine)	The economic properties and underlying characteristics of the SAU are applicable to the additional MTM technologies.
Analysys Mason	The methodology and processes used by nbn for determining which type of MTM network it will deploy are prudent and efficient, as is nbn 's initial design of its FTTB, FTTN and HFC networks.
Dr Steven Bishop and Professor Bob Officer (Bishop and Officer)	The rate of return approach in Module 1 (risk free rate plus 350bps) and the rate of return principles in Module 2 are reasonable when applied to the additional MTM technologies.



2. Context of variation to the SAU

18. **nbn's** SAU was accepted by the ACCC on 13 December 2013. It operates via a modular structure and is a key part of the regulatory framework that governs the price and other terms on which **nbn** supplies services to access seekers who are supplying services in downstream retail and wholesale markets.
19. The SAU sets in place the regulatory principles, structure and incentives governing access to the **nbn**TM network. Key features of the SAU include:
 - (a) A modular structure which provides for different arrangements in different periods, that are designed by reference to the incentives that **nbn** is expected to have over those periods, allowing certainty about the long-term cost recovery methodology and flexibility to respond to changing circumstances;
 - (b) Long-term binding price caps to ensure that end-users are not subject to unreasonable price rises;
 - (c) The ability for the ACCC to reset the price cap for a new NBN Offer or Other Charge (where the price cap on introduction is not specified in the SAU) up to two years after the NBN Offer or Other Charge is introduced;
 - (d) An overall revenue cap and prudence measures, to provide **nbn** with the opportunity (but not the guarantee) of recovering its prudent and efficient costs over the term of the SAU (including an appropriate return on capital);
 - (e) The ability for the ACCC to initiate price reviews to rebalance prices (subject to revenue neutrality) at certain times, as required;
 - (f) Product development and withdrawal provisions to ensure access seekers and consumer advocacy groups can participate in product development and to provide ACCC oversight of product withdrawal; and
 - (g) Non-price terms and conditions in relation to points of interconnect (**POIs**) and rollout information and to allow for independent dispute resolution.
20. Effective commercial engagement between **nbn** and access seekers is also facilitated by the broad regulatory framework that includes the SAU.
21. The modular structure of the SAU is depicted in Figure 1 below.

Figure 1: Modular structure of SAU



22. The SAU was accepted soon after the change of Government in September 2013 and the publication, on 12 December 2013, of the Strategic Review of the **nbn** which resulted in the Government giving **nbn** a new SOE on 8 April 2014. That SOE requires that **nbn** transition from a primarily FTTP model to an optimised MTM model.⁴
23. At the time the ACCC accepted the SAU, the ACCC recognised that the SAU was sufficiently flexible to work under a range of policy settings but that certain aspects might need to be revisited in the future to accommodate the inclusion of additional network types within the **nbn**TM network rollout. In its press release when accepting the SAU, the ACCC specifically recognised this:

"The ACCC recognises that there is some uncertainty around the NBN, especially in light of the upcoming review of the NBN. While this may have implications for the SAU, most of the commitments in the SAU are technology neutral and will apply even with a significant change in network design."

⁴ Statement of Expectations, April 2014.



If however, NBN Co wishes to vary the undertaking in the future in light of any new directions from the government, this can be accommodated”, Mr Sims [ACCC Chairman] said.⁵

24. **nbn's** variation to the SAU gives effect to the Government's policy direction for the **nbn** as outlined in the SOE. The specific changes which **nbn** has made have been carefully and deliberately drafted to address the change in network design contemplated by the MTM model in the SOE. None of the changes which **nbn** proposes alter the underlying regulatory principles, structure and incentives embedded in the SAU which the ACCC has previously accepted as being reasonable, including being in the long-term interests of end-users (**LTIE**). **nbn's** changes are limited in scope and mechanical in nature; they represent an incremental change to reflect current policy settings.
25. Overall, acceptance by the ACCC of the variation would represent a positive development for **nbn**, access seekers and ultimately end-users. It would contribute to providing long-term regulatory certainty in regard to a number of key aspects of **nbn's** services, which in turn would encourage investment and innovation in downstream markets. It would also complete an important step in the transition to the MTM model.

2.1 Additional context

26. Consistent with the SOE, **nbn** has revised its existing commercial arrangements with Telstra and Optus to facilitate the transition to the MTM model. The revised Telstra Arrangements became unconditional on 26 June 2015, following the ACCC's approval of the revised Telstra Migration Plan on the same day. Following this, on 28 August 2015, the ACCC issued its final determination to grant authorisation of the revised agreements between **nbn** and Optus and completed its informal review of **nbn's** acquisition of certain HFC assets from Optus.
27. **nbn** has also made significant investments to transition to an MTM model. **nbn** has engaged extensively with access seekers, including via **nbn's** Product Development Forum (**PDF**), on the product constructs and supply terms for FTTB, FTTN and HFC. **nbn** commercially launched FTTB services in April 2015 and FTTN services in September 2015. HFC services are scheduled to be commercially launched in June 2016 and the development of the associated supply terms in consultation with access seekers is now complete (the HFC Final Offer was sent to customers on 13 May 2016).
28. In parallel, **nbn** has had the benefit of over two years' experience operating under the SAU. During this time, **nbn** has completed its first full cycle of reporting on price and expenditure compliance, with the ACCC issuing its first annual LTRCM Determination on 11 June 2015. On 30 June 2015, **nbn** updated the Network Design Rules to include FTTB and FTTN, and an indicative overview of HFC. **nbn** has also established Dispute Resolution arrangements consistent with the commitments in the

⁵ ACCC Media Release 13 December 2013 upon acceptance of the SAU.



SAU and has successfully introduced a range of new products and changes to existing products via the PDF.

2.2 Outline of the variation and the provisions of the SAU which remain unchanged

29. The variation is denoted by the following changes:

- (a) underlined words are additions to the original wording in the SAU; and
- (b) words that are struck out are deletions from the original wording in the SAU.

30. It is these mark-ups that constitute the variation. The remainder of the SAU is not subject to the variation and the majority of the SAU remains unchanged.

31. Broadly, **nbn** has approached the variation to the SAU as follows:

- (a) expanded the service description in Attachment A to include FTTB, FTTN and HFC (and including an approach to facilitate incorporation of future variants such as FTTdp);
- (b) made changes to other parts of the SAU to incorporate the initial products and prices for FTTB, FTTN and HFC;
- (c) made some minor changes to other parts of the SAU, where a need has been demonstrated through experience to date (e.g. Dispute Management, Rollout Information); and
- (d) otherwise left all other parts of the SAU unchanged, including the term and modular structure.

32. The necessary changes which **nbn** proposes to make to the SAU are as follows:

Main Body

- (a) Background to the SAU⁶;
- (b) Process provisions concerning the date the variation is accepted⁷;
- (c) Changes to the description of the NBN Access Service to accommodate the MTM model⁸;
- (d) Inclusion of (and amendments to) defined terms necessary to accommodate the MTM model⁹;

⁶ Background section SAU (Main Body)

⁷ clause 7 SAU (Main Body)

⁸ Attachment A SAU (Main Body)



- (e) Inclusion of additional Initial Products to accommodate the MTM model¹⁰;

Module 1 (applies to 30 June 2023)

- (a) Certain changes to the Implementation of NBN Access Service, Ancillary Services and Facilities Access Service provisions to accommodate the MTM model, including clauses on User Network Interface, Co-Existence Period, Remediation and Sandpit¹¹;
- (b) Certain changes to the NBN Offers provisions to include new Products to accommodate the MTM model¹²;
- (c) Certain changes to reflect when the (newly defined) Maximum Regulated Prices will apply after a variation to the SAU¹³;
- (d) Certain changes to the Other Charges provisions so that those provisions apply to available Products under an MTM model¹⁴;
- (e) Inclusion of provisions to address when an installation at a Premises will be a Standard NBN Co FTTB Access Service Installation, Standard NBN Co FTTN Access Service Installation and Standard NBN Co HFC Access Service Installation¹⁵;
- (f) Correction to one of the CIF formulae in the LTRCM and a consequential change to address how this should be addressed in the subsequent LTRCM Determination¹⁶;
- (g) Certain changes to rollout progress information to be made available to access seekers to accommodate the MTM model¹⁷;
- (h) Certain changes to the Dispute Resolution provisions to clarify and improve current processes and procedures under the SAU, based on experience operating under the SAU to date¹⁸.

Module 2 (applies from 1 July 2023 to 30 June 2040)

- (a) Corresponding changes to those made to the clauses on Co-existence Period and Remediation¹⁹ in Module 1 addressing the terms and conditions of the supply of Product Components²⁰;

⁹ Attachment C SAU (Main Body)

¹⁰ Attachment D SAU (Main Body)

¹¹ clauses 1A.3, 1A.4 and 1A.6 (Module 1)

¹² clauses 1C.1 and 1C.2 (Module 1)

¹³ clause 1C.3 (Module 1)

¹⁴ clause 1C.4 (Module 1)

¹⁵ Annexure 3, 4 and 5 to Schedule 1C (Module 1)

¹⁶ clause 1E.1.2 and 1E.9.4 (Module 1)

¹⁷ clauses 1H.2 and 1H.3 (Module 1)

¹⁸ Annexure 1 to Schedule 1H (Module 1)



- (b) Corresponding changes to the Pricing Commitments provisions to accommodate the changes described in (a) under the Module 1 heading above (i.e. the inclusion of the clauses on Co-existence Period and Remediation)²¹;
 - (c) Corresponding changes to one of the CIF formulae in the LTRCM to reflect the changes described in (f) above²².
33. Importantly, the underlying regulatory principles, structure and incentives embedded in the SAU apply to the MTM in the same way as they do to the existing services and products within the current scope of the SAU.
34. **nbn** also notes for completeness that it is intended that the changes outlined above will align to the Wholesale Broadband Agreement (**WBA**).

2.3 Statutory and analytical framework

Provisions permitting variation to the SAU

35. **nbn** is giving the ACCC the variation to the SAU in accordance with section 152CBG of the CCA. Section 152CBG governs variations to special access undertakings. It applies if a special access undertaking is "*in operation*" (s. 152CBG(1)) and provides that the person that gave that undertaking may give the ACCC a variation of the undertaking (s. 152CBG(2)). If this occurs, then the ACCC must decide to accept or reject the variation to the undertaking within 6 months of receipt.²³
36. Before deciding whether to accept or rejection the variation to the undertaking, the ACCC must apply s. 152CBG(4) and (4A).

Matters on which the ACCC must be satisfied in order to accept the variation

37. Section 152CBG(4) relevantly provides that "*section 152CBD applies to the variation in a corresponding way to the way in which it applies to an undertaking*".²⁴
38. Section 152CBD(2)(b) relevantly provides that the ACCC must not accept a special access undertaking given by **nbn** unless it is satisfied that the undertaking meets each of the following requirements:

¹⁹ clause 2A.4 and 2A.5 (Module 2)

²⁰ clauses 1A.4.4 and 1A.4.5

²¹ clause 2B.1 (Module 2)

²² clause 2C.1.4 (Module 2)

²³ Sections 152CBG(2A), (2), (3) and (7). Note that the six month period may be extended.

²⁴ **nbn** is not aware of any Procedural Rules which are in force which would apply to the SAU.



- (a) the person providing the undertaking agrees to be bound by the obligations referred to in s. 152AXB as if the relevant service is a declared service (i.e. the Category B standard access obligations), and the terms and conditions specified in the undertaking in relation to the Category B standard access obligations are reasonable (s. 152CBD(2)(b));
- (b) in the event that the SAU states that **nbn** will engage in specified conduct in relation to access to the service (s. 152CBA(3B)):
 - (i) the conduct referred to in s. 152CBA(3B)(a) will promote the LTIE of carriage services or of services supplied by means of carriage services (s. 152CBD(2)(ca)(i)); and
 - (ii) the terms and conditions referred to in s. 152CBA(3B)(b) are reasonable (s. 152CBD(2)(ca)(ii)); and
- (c) the conduct of **nbn** as specified in the SAU in accordance with s. 152CBA(3C) will promote the LTIE of carriage services or of services supplied by means of carriage services (s. 152CBD(2)(cb)).

39. The ACCC must also not accept the undertaking unless the ACCC has consulted publicly in relation to it (s. 152CBD(2)(d)).²⁵

40. **nbn** submits that the ACCC is required to consider whether the provisions of the undertaking which are varied satisfy the requirements of s. 152CBD. 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.²⁶

Fixed principles

41. Section 152CBG(4A) provides that s. 152CBG(4) is also subject to section 152CBAA(6), which applies when a special access undertaking containing fixed principles terms and conditions is subsequently varied.

42. Relevantly, s. 152CBAA(6) provides that:

- (a) If the ACCC has accepted an SAU containing a fixed principles term or condition; and

²⁵ **nbn** notes for completeness that s. 152CBD(2)(c) applies if a Ministerial pricing determination has been issued. As no such determination has been issued, this provision does not apply and is not considered further in this submission.

²⁶ **nbn** understands that the ACCC will be assessing the variation not the existing provisions of the SAU and that this will include an assessment of the interaction of the subject matter of the variation (i.e. the incremental changes to accommodate the MTM model) with the existing SAU provisions: Final SAU Decision, p. 109.



- (b) **nbn** subsequently lodges an SAU variation (within the notional fixed period); and
- (c) the varied undertaking:
 - (i) contains a fixed principles term or condition that is identical to the original fixed principles term or condition;
 - (ii) contains a notional fixed period for the corresponding fixed principles term or condition that is identical to the notional fixed period for the original fixed principles term or condition; and
 - (iii) contains qualifying circumstances (if applicable) for the corresponding fixed principles term or condition that are identical to the qualifying circumstances in relation to the original fixed principles term or condition,

the ACCC must not reject the variation for a reason that concerns:

- (d) the corresponding fixed principles term or condition;
- (e) the notional fixed period for the corresponding fixed principles term or condition; or
- (f) if there are qualifying circumstances in relation to the corresponding fixed principles term or condition, the specification of those circumstances.

- 43. The fixed principles in the varied undertaking are identical to those already contained in the SAU (i.e. there is no change to any fixed principles terms and conditions in the SAU).
- 44. In these circumstances, the effect of s. 152CBAA(6) means that the ACCC must not reject the variation for a reason that concerns the fixed principles terms or conditions retained in the undertaking (and not changed by the variation).
- 45. Accordingly, this submission does not further consider s. 152CBAA(6).

2.4 ACCC approach to assessing the SAU in the Final SAU Decision

- 46. In the Final SAU Decision, the ACCC grouped the provisions of the SAU into the following categories for the purposes of its assessment:
 - (a) terms and conditions relating to compliance by **nbn** with the Category B SAOs;
 - (b) provisions specifying conduct in relation to access referred to in s. 152CBA(3B);
 - (c) conduct in relation to additional activities referred to in s. 152CBA(3C); and



- (d) provisions conferring functions and powers on the ACCC.²⁷
47. These categorisations were then used by the ACCC to identify the specific statutory tests that it was required to apply to the different categories of provisions of the SAU under s. 152CBD. These statutory tests are:
- (a) whether particular terms and conditions are reasonable according to the test of reasonableness in s. 152AH; and
 - (b) whether proposed conduct promotes the LTIE of carriage services or services supplied by means of carriage services in accordance with s. 152AB.
48. In the Final SAU Decision the ACCC then considered the application of the statutory tests (to the SAU structure and term, Replacement modules, Services and products, Prices, Revenue, Non-price terms and conditions, and Fixed principles) and concluded that the SAU satisfied the relevant statutory criteria of reasonableness (including the LTIE) or LTIE. **nbn** presumes that in the context of the variation the ACCC will take the same approach as in the Final SAU Decision given that the ACCC is required to apply s. 152CBD to the variation in a "*corresponding way*" to the way in which it applies (and the ACCC applied it) to the SAU.
49. Accordingly, this submission categorises the clauses that have changed using the same classification as used by the ACCC in the Final SAU Decision and assesses whether the changes satisfy the relevant statutory requirements by reference to the same categories.

²⁷ Final SAU Decision, section 4.4.



3. Outline of variation to the SAU

3.1 Changes reflect transition to MTM model without changing underlying regulatory principles, structure or incentives embedded in SAU

50. **nbn's** approach to the variation has been to make only those changes which are necessary to reflect the change to the MTM model in the SAU. **nbn** has been deliberate and careful to leave wholly intact the regulatory principles, structure and incentives embedded in the SAU which the ACCC accepted in the Final SAU Decision. These matters are unchanged under the MTM model and, therefore, not the subject of any changes in the variation to the SAU.
51. The LTRCM is not subject to variation by reason of the transition to the MTM model. This is because the LTRCM is already broadly described in Module 1 and Module 2 of the SAU, such that revenue and expenditure in respect of the FTTB, FTTN and HFC networks is already covered by the LTRCM. The ACCC considered the implications of the transition to the MTM model (in particular for the application of the prudence provisions that form part of the LTRCM) in its 2013-14 LTRCM Determination.²⁸
52. Fundamentally, the change to the MTM model does not change the underlying regulatory principles, structure or incentives embedded in the SAU and they apply equally to the MTM as they do currently to the services and products under the SAU. As Ordovery and Shampine concluded in respect of the SAU and the change to the MTM model:²⁹

*In our initial report, we noted there is rarely a single "best" approach to attaining various regulatory objectives, such as ensuring short-term and long-term economic efficiency, while satisfying a potentially wide range of other public policy constraints that may be relevant. We concluded that the measures in the SAU were reasonable and appropriate to the concerns identified. The new structure with the MTM - where some parts of the legacy networks are transferred to **nbn** rather than retired, and **nbn** is directed to utilise existing infrastructure to achieve the specified expectations in a cost efficient manner - does not alter our conclusions. The SAU can and does adequately deal with the relevant concerns.*

*Importantly, because **nbn** is a wholesale-only entity prohibited from offering retail services, many of the most vexing concerns that often arise in designing and policing a regulatory scheme for a vertically integrated access provider do not apply. A vertically integrated access provider which also provides retail services may have an incentive and ability to discriminate in favour of its own retail services. However, structural separation of the sort implemented in Australia which led to the creation of **nbn** should ensure that all customers have equal access to the network, and **nbn** has no incentive to favour one*

²⁸ ACCC, Long Term Revenue Constraint Methodology 2013-14: Final Determination and Price Compliance Reporting 2013-14, June 2015, p. 12.

²⁹ Ordovery and Shampine (2016), pp. 10-11.



over the other. This was true with the original SAU and is also true with the MTM...nbn has appropriate incentives to ensure that its customers are successful and that will increase demand for nbn's own services and the concomitant revenue flow.

53. The Australian Competition Tribunal (**Tribunal**) and the ACCC have both recognised that the statutory reasonableness test requires it to determine whether terms and conditions are reasonable, not whether they are the best possible terms and conditions or whether they could be improved.³⁰
54. As was the case for an **nbn**TM network comprising FTTN, wireless and satellite networks, the same mechanisms to ensure efficient incentives for investment in the **nbn**TM network will equally apply to the MTM model (albeit that the cost may be lower and there are now more construction options).³¹
55. In summary, the variation should be viewed by the ACCC as a largely mechanical exercise which is aimed at updating the SAU so that it is aligned with the MTM model.

3.2 **nbn** has applied principles of minimal change in developing the variation

56. **nbn's** approach to varying the SAU is consistent with its approach to date of operating under an SAU, in combination with SFAAs, as permitted by the access regime.
57. **nbn** has applied the following principles to the variation:
 - (a) **Minimal change:** **nbn** has made changes only to the extent necessary to incorporate the MTM model and has otherwise only made minor changes where a need has been demonstrated through experience to date (e.g. Dispute Management, Rollout Information).
 - (b) **Alignment with the WBA:** the variation is aligned with the supply terms and conditions that were agreed (or are in the process of being agreed) with **nbn's** customers in the WBA context. The variation is aligned with the current published version of the WBA (including the supply terms for FTTN and FTTB) and the HFC Final Offer (sent to customers on 13 May 2016 following an extensive process of consultation).³²
 - (c) **Limited amendments to translate certain provisions from WBA to SAU context:** the variation to the SAU necessarily includes some deviation from the supply terms and conditions in the WBA because the SAU performs a different function to the WBA. For example, certain WBA content apply at a level of detail that is too granular for the SAU or

³⁰ *Telstra Corporation Limited* [2006] ACompT 4 at [150]; *Seven Networks Limited (No 4)*(2005) ATPR ¶42-056 at [119]; cf. Final SAU Decision, p. 50; FANOC Draft Decision, pp. 30-31.

³¹ Ordovery and Shampine (2016), pp. 11-12; pp. 15-16.

³² Appendix B lists all of the changes in the variation and identifies, where relevant, the corresponding WBA source for the drafting of each change and how that content has been translated to the SAU.



were negotiated in a specific context that is not appropriate for the longer timeframes of the SAU (e.g. the WBA service classes are not used in the SAU).

(d) **Inclusion of supply qualifications:** in identifying the key supply terms and conditions to be incorporated in the variation, **nbn** has focussed on those supply terms that are:

- (i) key to how the NBN Access Service, Ancillary Services and types of Facilities Access Services will be supplied over time; and
- (ii) expected to be stable over the term of the SAU (or some identified sub-period), but for a specified period during which the Product Features specified in the SAU (and the WBA) will not be achieved.

This principle is consistent with the approach that was previously accepted by the ACCC in respect of the SAU.

In line with this approach, the variation includes 'Co-existence Period' and 'Remediation' as key supply terms and conditions in both Module 1 and Module 2. Otherwise, the more detailed supply terms and conditions are left to **nbn**'s access agreements with customers (e.g. the WBA).

(e) **References to external documents in the SAU:** **nbn** has sought to limit references to external documents in the variation as much as possible. Consistent with the approach in the SAU as accepted by the ACCC, the variation only refers to external documents in certain limited cases (e.g. references to the contractual arrangements with Telstra and Optus, defining an 'Outage' by reference to the WBA Operations Manual, reliance on the SOE in regard to updating the Network Design Rules, etc.). **nbn** has also maintained the practice of including point in time references (e.g. the date of execution of a contract) in the variation to ensure certainty about the identity of the document being referred to (although the SAU retains interpretation provisions that ensure that changes to external documents which are made over time are also captured by the relevant definitions (refer to clause 3(e)(iv) in Attachment C)).

(f) **Consistent approach across technologies:** **nbn** has taken a consistent approach to defining products and pricing across the range of technologies comprising the MTM model. Relevantly, FTTB, FTTN and HFC products and pricing are based on FTTP with changes limited to only those required by the relevant technology. This approach has been welcomed by access seekers for a number of reasons, including because:

- (i) many services are already offered over legacy networks on a largely technology neutral basis; and
- (ii) it makes the task of marketing **nbn**-based wholesale and retail offers as simple as possible.



The variation reflects the outcomes of the extensive consultation that **nbn** has undertaken with industry in respect of the development of the FTTB, FTTN and HFC product constructs and supply terms.

58. The variation is consistent with the existing framework and approach of the SAU. It applies the service description focussed on Layer 2 bitstream services, the extensive set of price-related terms and conditions and the relatively limited set of non-price terms and conditions to the MTM.
59. As is currently the case under the SAU, the variation does not seek to include in the service description all eligible services provided by **nbn**. For example, the continuity licences³³ are not included because doing so would achieve no useful purpose but add significant complexity. Similarly, the variation does not seek to include a full set of terms and conditions of supply. For example, terms and conditions relating to service levels are not included because there is a need to maintain flexibility for the relevant commercial arrangements to evolve over time and this is better left to the relevant SFAAs.³⁴

3.3 Changes to accommodate MTM model are limited and necessary

60. The following sections of this submission provide an overview of the changes which **nbn** has made in the following categories:
 - (a) changes to incorporate services and products for FTTB, FTTN and HFC;
 - (b) changes to incorporate prices for FTTB, FTTN and HFC; and
 - (c) changes to non-price terms and conditions, including as to POI and rollout information commitments, Dispute Resolution, and other minor changes and corrections.³⁵
61. To assist the ACCC's review of the variation, Appendix A identifies how the ACCC categorised and assessed the provisions which constitute the variation in the Final SAU Decision.
62. Appendix B lists all of the changes in the variation and identifies, where relevant, the corresponding WBA source for the drafting of each change and how that content has been translated to the SAU.

³³ The continuity licences set out the terms on which licences may be granted to support continuity of existing services during the transition to the **nbn**TM network. The Interim Continuity Agreement, Pre-Transfer Agreement and Continuity Agreement (as published on **nbn**'s website) constitute standard forms of access agreement for the purposes of Part XIC of the CCA. The Interim Continuity Agreement sets out the terms applicable to the Voiceband Pass-through Licences to provide continuity of supply of voiceband services in respect of premises in an Interim FTTB Multi-Dwelling Unit and premises in Interim FTTN Locations during the migration to the **nbn**TM network. The Pre-Transfer Agreement sets out the terms on which a Pre-Transfer Installed Assets Licence may be granted in the period prior to network assets being transferred to **nbn**. The Continuity Agreement sets out the terms applicable to the Copper Continuity Licences to provide continuity of supply of existing fixed line services, including voiceband services, during the migration to the **nbn**TM network. The Continuity Agreement also includes arrangements in respect of the HFC network, to enable the continuity of broadband and Pay TV services during the migration to the **nbn**TM network.

³⁴ Draft SAU Decision, pp. 11 and 20.

³⁵ Capitalised terms in this section 3.4 are to those terms as defined in the variation to the SAU.



3.4 Changes to incorporate products and services for FTTB, FTTN and HFC³⁶

Expansion of service description

63. In the SAU, the description of the NBN Access Service (clause 2 of Attachment A), when read together with the definition of NBN Co Network (Attachment C, Dictionary), is currently limited to situations where the NBN Access Service is supplied on the NBN Co Fibre Network, the NBN Co Wireless Network and the NBN Co Satellite Network. As a consequence, most aspects of the SAU (e.g. the price controls and product development and withdrawal provisions) do not apply to the otherwise similar services supplied (or to be supplied in future) over the additional MTM technologies.
64. To update the service description for the transition to the MTM model (and thereby broaden the application of most aspects of the SAU), the variation includes the following changes:
- (a) a wider definition of NBN Co Network to incorporate the NBN Co FTTB Network, NBN Co FTTN Network, NBN Co HFC Network and an approach to facilitate incorporation of future variants such as FTTdp;
 - (b) consequential changes to the description of the NBN Access Service to account for the fact that the UNI will not be located on an NTD in all cases;
 - (c) an expanded definition of Premises to facilitate incorporation of a greater range of locations within the scope of the NBN Access Service; and
 - (d) removal of the provision relating to the network boundary points, which will have only limited utility given the change in relation to the location of the UNI. The operational details associated with the network boundary points are addressed in **nbn's** SFAAs.
65. The description of the Ancillary Services (clause 3 of Attachment A) and the Facilities Access Service (clause 2 of Attachment B) remain unchanged. Both of these descriptions cross refer to the description of the NBN Access Service, so the widening of the scope of the NBN Access Service flows through automatically to a widened scope of application for the Ancillary Services and the Facilities Access Service.

Wider definition of NBN Co Network

66. The expanded definition of NBN Co Network is set out in Attachment C (Dictionary). This involves incorporating specific references to the NBN Co FTTB Network, the NBN Co FTTN Network and the NBN Co HFC Network, each of which is also defined in Attachment C (and consistent with the relevant WBA2 definitions, subject to minor changes in the SAU context).

³⁶ Capitalised terms in this section 3.4 are to those terms as defined in the variation to the SAU.



67. The variation also includes an approach to facilitate incorporation of future network variants. For example, should **nbn** decide in future that it is in a position to develop and supply services over an FTTdp network, then it could bring such services within the scope of the NBN Co Network by introducing new Products and/or varying existing Products in accordance with the product development provisions of Schedule 1I (in respect of the Initial Regulatory Period) or Schedule 2D (in respect of the Subsequent Regulatory Period). At this stage, however, it would be premature to specifically include FTTdp-based Products (or Products based on any other potential technology variants) into the SAU.
68. The approach in the variation provides an appropriate balance of certainty and flexibility, and is expected to limit, and in many cases obviate, the need for future variations of the SAU to incorporate new technology variants.

Consequential changes to description of NBN Access Service

69. The variation includes an amended description of the NBN Access Service (clause 2(a) of Attachment A), to account for the fact that the UNI will not be located on an NTD in all cases. The definition of NTD has been updated in the variation to refer to active or powered devices only. This is because **nbn** does not supply an NTD as part of services supplied over the NBN Co FTTB Network or the NBN Co FTTN Network. For clarity, **nbn** has also included a note on the description of the NBN Access Service to highlight that an active or powered network termination device will need to be connected where such a device is not supplied by **nbn** as part of the NBN Access Service (as is the case with services supplied over the NBN Co FTTB Network and the NBN Co FTTN Network).
70. These changes make the NBN Access Service more technology neutral, and are complemented by the changes to the implementation provisions in Schedule 1A that set out the location of the UNI for each currently defined network type.

Expanded definition of Premises

71. The variation also includes amendments to the 'Premises' definition in Attachment C (Dictionary) to facilitate incorporation of MDU common areas and potentially a range of other locations within the scope of the NBN Access Service (noting that the variation makes Premises part of the description of the NBN Access Service). At this stage, **nbn** considers that it would be premature to specifically describe these other locations, but should **nbn** decide in future that it is in a position to develop and supply a Product to a broader range of locations then it could bring such locations within the scope of Premises by introducing the relevant Product in accordance with the product development provisions of Schedule 1I (in respect of the Initial Regulatory Period) or Schedule 2D (in respect of the Subsequent Regulatory Period).

Removal of network boundary point definition

72. Given the necessary change to the description of the NBN Access Service as discussed above, the network boundary point provision in clause 2(c) of Attachment A essentially duplicates the matters addressed in the amended description of the NBN Access Service in clause 2(a), which is sufficiently



certain without the network boundary point provision. **nbn** has therefore deleted the network boundary provision in clause 2(c). This does not mean the concept of a network boundary point is irrelevant to the NBN Access Service, but rather that the specification of that point in respect of each MTM technology will be left to the relevant SFAA. For example, in the WBA the “NEBS boundaries” are currently defined in section 12.2 of the NBN Co Ethernet Bitstream Product Description (as published on 7 April 2016).

Implementation of the NBN Access Service

73. The way in which **nbn** will implement the services already covered by the SAU in respect of the FTTP, Wireless and Satellite networks, including the NBN Access Service, the Ancillary Services and the Facilities Access Service is set out in Schedules 1A and 2A of the SAU. Schedule 1A applies during the Initial Regulatory Period and Schedule 2A mirrors some of the provisions in Schedule 1A and applies during the Subsequent Regulatory Period.
74. The variation includes changes to Schedules 1A and 2A to update them for the transition to the MTM model as follows:
 - (a) changes to:
 - (i) the UNI and AVC provisions (clauses 1A.3.1 and 1A.3.2 respectively, and also the definition of ‘NTD’);
 - (ii) the Maximum Data Transfer Rate provision (clause 1A.4.3);
 - (iii) the UNI availability provision (clause 1A.4.6 in the variation);
 - (b) inclusion of new provisions (relevant to the NBN Co FTTB Network and the NBN Co FTTN Network) in regard to:
 - (i) the Co-existence Period (new clauses 1A.4.4 and 2A.4);
 - (ii) Remediation (new clauses 1A.4.5 and 2A.5); and
 - (c) changes to the Sandpit provision (clause 1A.6.2).

Co-existence Period

75. **nbn** has included a new clause 1A.4.4 (and a corresponding new clause 2A.4 in Module 2) setting out a Co-existence Period provision, consistent with the relevant supply terms agreed with access seekers under the WBA, that is relevant to the NBN Co FTTB Network and the NBN Co FTTN Network. The Co-existence Period will typically last for a period of 18 months after the Ready for Service date for each FTTB and FTTN area, but will be extended in some cases until all special services are migrated to the **nbn**TM network.



76. **nbn** considers it is necessary to include the Co-existence Period provision (and Remediation provision discussed below) because it is:
- (a) key to how the NBN Access Service, Ancillary Services and types of Facilities Access Services will be supplied over time; and
 - (b) expected to be stable over the term of the SAU (or some identified sub-period), but for a specified period during which the Product Features specified in the SAU (and the WBA) will not be achieved.
77. During the Co-existence Period for a given area, there will be simultaneous supply of the NBN Access Service by means of the NBN Co FTTB Network or NBN Co FTTN Network and exchange-fed services, special services or other services to Premises using the public switched telecommunications network. To accommodate this, **nbn** will be required to adjust the operation of its networks by way of a downstream power back-off, which is a technique used to reduce signal strength from the **nbn** VDSL2 node to the UNI. This means that VDSL2 line speeds cannot be optimised during the Co-existence Period and the new clause 1A.4.4 reflects the effect of this on AVC TC-4 bandwidth profiles in respect of the NBN Co FTTB Network and the NBN Co FTTN Network.

Remediation

78. Consistent with the relevant supply terms agreed with access seekers in WBA2, **nbn** has included a new clause 1A.4.5 (and a corresponding new clause 2A.5 in Module 2) setting out a Remediation provision that is relevant to the NBN Co FTTB Network and the NBN Co FTTN Network. There may be some situations in which **nbn** is providing a service to an access seeker in respect of a particular Premises, but the line over which the service is supplied is not capable of meeting the PIR Objective.³⁷ In many cases, the underlying cause will be addressed via the usual service assurance processes, but in some cases **nbn** may need to conduct Remediation. This may involve more extensive activities, which by their nature occur over a more extended time period. In such cases, the purpose of the Remediation provision is to acknowledge that there may be an ongoing and significant effect in terms of the downlink Line rate and uplink Line rate until Remediation is completed. The potential need for Remediation is not limited to the initial deployment of the NBN Co FTTB Network and the NBN Co FTTN Network, which is why the same Remediation provision has been included in Module 2 as in Module 1.
79. The Remediation provision is expressed at a relatively high level and does not seek to match the level of detail set out in the current Operations Manual for the WBA. This approach appropriately leaves more detailed terms to be specified in relevant SFAAs and to be agreed with access seekers over time.

³⁷ A definition for 'PIR Objective' is included in the variation (as part of the changes to Attachment C (Dictionary)).



80. In this context, **nbn** notes that it has aligned interests with access seekers in minimising the number of Premises subject to Remediation and the amount of time taken to complete the necessary actions.

Sandpit

81. Under the SAU, the Sandpit provision in clause 1A.6.2 currently only applies in relation to the NBN Co Fibre Network.
82. The variation amends clause 1A.6.2 to expand the Sandpit so that it also applies to the NBN Co FTTB Network, NBN Co FTTN Network and NBN Co HFC Network. The changes are aligned with drafting already agreed and/or shared with industry in respect of the WBA.

Product development – Initial Products

83. Attachment D of the SAU sets out a list of Initial Products, which identifies the Product Components and Product Features that can be introduced by **nbn** (following acceptance of the SAU by the ACCC) without needing to apply the product development provisions set out in Schedule 1I (in respect of the Initial Regulatory Period) and Schedule 2D (in respect of the Subsequent Regulatory Period). Currently, Attachment D only identifies the initial Product Components and Product Features with respect to the NBN Co Fibre Network, NBN Co Wireless Network and NBN Co Satellite Network (and **nbn** does not propose any changes to the Initial Products list in respect of these networks).³⁸
84. **nbn** has updated Attachment D to incorporate an appropriate set of Initial Products in respect of the NBN Co FTTB Network, NBN Co FTTN Network and NBN Co HFC Network. The relevant Product Components and Product Features are either already included in the WBA (in respect of the NBN Co FTTB Network and the NBN Co FTTN Network), proposed for inclusion in the HFC Final Offer as sent to customers on 13 May 2016 (in respect of the NBN Co HFC Network), or otherwise proposed for later introduction. All have previously been consulted on with access seekers as part of the development of the relevant product constructs (for example, the release of TC-2 services on the NBN Co HFC Network after the commercial launch of services on that network).
85. This is consistent with the approach used in 2013 to determine the scope of the current Initial Products list. In its Final SAU Decision, the ACCC acknowledged that given the consultations that had already occurred with respect to the Product Components and Product Features in respect of the NBN Co Fibre Network, NBN Co Wireless Network and NBN Co Satellite Network, it was appropriate to exclude these products from the Schedule 1I product development process.³⁹

³⁸ **nbn** notes that it has also developed and subsequently introduced a number of Product Features on these networks via the Schedule 1I process – these Product Features were not included in Attachment D because they were not identified and/or sufficiently developed at the time when the Initial Products list was finalised prior to the SAU being accepted by the ACCC.

³⁹ Final SAU Decision, p. 80.



3.5 Changes to incorporate prices for FTTB, FTTN and HFC

86. Most of the SAU's current price-related terms and conditions are technology neutral (from the perspective of the transition to the MTM model). Accordingly, the variation includes changes to only a limited number of price-related terms and conditions of the SAU where those changes are necessary to incorporate the additional MTM technologies or to differentiate the additional MTM technologies from the existing technologies covered by the SAU.

Inclusion of FTTB, FTTN and HFC in NBN Offers, Other Charges and initial Maximum Regulated Prices (initial MRPs)

87. The variation includes a limited number of changes to Schedule 1C to include the NBN Offers, Other Charges and initial Maximum Regulated Prices in respect of the NBN Co FTTB Network, NBN Co FTTN Network and the NBN Co HFC Network. The initial MRPs are aligned with current and proposed WBA supply terms and relevant product construct papers and consistent with the initial MRPs already in the SAU in respect of the NBN Co Fibre Network, NBN Co Wireless Network and NBN Co Satellite Network.

Extended definition of NBN Offer

88. To minimise the extent of the required changes to Schedule 1C and in recognition of the fact that **nbn** has introduced a number of TC-1, TC-2 and TC-4 CVC tiers that are not listed in the SAU, **nbn** has amended the definition of NBN Offer in Attachment C (Dictionary) so that it includes any Initial Products (i.e. Products listed in Attachment D) that are introduced prior to the date the variation is accepted by the ACCC (the First SAU Variation Date). With the amendments to the list of Initial Products to address the NBN Co FTTB Network, NBN Co FTTN Network and the NBN Co HFC Network, the MRP for CVC tiers in respect of the NBN Co FTTB Network, NBN Co FTTN Network and the NBN Co HFC Network introduced prior to the variation will effectively be determined as if clause 1C.5.1 had always applied in respect of those networks.
89. Importantly, **nbn** has not changed Schedule 1C to reflect the changes to prices or the introduction of new NBN Offers or Other Charges that have already occurred under the SAU (e.g. the introduction of additional CVC TC-4 tiers on the NBN Co Fibre Network), given that these prices became subject to the operation of the SAU through the mechanism set out in clause 1C.5 of the SAU. In this regard, **nbn**'s SFAAs are the reference point for information setting out the current prices for NBN Offers and Other Charges, as well as newly introduced NBN Offers and Other Charges.

Incorporating relevant standard installation definitions

90. In the SAU, the Annexures to Schedule 1C currently set out definitions for standard installation in respect of the NBN Co Fibre Access Service and the NBN Co Wireless Access Service. Consistent with this, **nbn** has included additional annexures to define standard installation in respect of the NBN Co FTTB Access Service, the NBN Co FTTN Access Service and the NBN Co HFC Access Service.



91. These new definitions reflect those set out in the current Operations Manual for the WBA in respect of the NBN Co FTTB Access Service and the NBN Co FTTN Access Service, and the proposed changes to the Operations Manual (in the HFC Final Offer sent to customers on 13 May 2016) in respect of the NBN Co HFC Access Service.

Re-classification of Enhanced 12 Fault Service Level

92. For consistency with the NBN Offers for the additional MTM technologies (i.e. NBN Co FTTB Network, NBN Co FTTN Network and NBN Co HFC Network), the variation includes a change to reclassify the Enhanced 12 Fault Service Level in respect of the NBN Co Fibre Network from being listed as an Other Charge to being listed as an NBN Offer. This change resolves an inconsistency that **nbn** has identified in the SAU, whereby Enhanced 12 Fault Service Levels is classified as an Other Charge in clause 1C.4.2, even though it is identified in Attachment D as a Product Feature and is therefore more appropriately classified as an NBN Offer. The reclassification aligns with the WBA, where Enhanced Fault Service Levels are classified as a Product Feature.

Correction to formula for Cumulative Inflation Factor

93. The variation corrects an error in the formula for the Cumulative Inflation Factor (**CIF**) that applies to Financial Years prior to the First Financial Year.
94. In the course of applying the LTRCM provisions under the SAU, **nbn** identified an error in the formula used to calculate the CIF in respect of Financial Years prior to the First Financial Year (2013-14). The formula is included in both Module 1 (clause 1E.9.4(c)) and Module 2 (clause 2C.1.4(b)).
95. Essentially, the error means that the formula references CPI figures from one year earlier than it should and, because CPI varies from year to year, the LTRCM does not, in practice, achieve a zero expected net present value (**NPV**).
96. **nbn** has therefore replaced the existing formula in clause 1E.9.4(c) and clause 2C.1.4(b) with the following:

$$CIF_t = 1 / \left\{ \prod_{k=t+1}^1 (1 + CPI_k^{June}) \right\}$$

97. This replacement formula is consistent with the CIF formula that applies for the First Financial Year and subsequent Financial Years (clause 1E.9.4(b) and clause 2C.1.4(a)). This is evident because dividing CIF_t by CIF_{t-1} will now always equal $1 + CPI_t^{June}$, as it should (and whereas the same calculation using the original formula equals $1 + CPI_{t-1}^{June}$).
98. **nbn** has also included a new clause 1E.1.2(c) to clarify that in making the first LTRCM Determination immediately following the First SAU Variation Date, the (replacement) formula will be applied to determine the values of the RAB, ABBRR and ICRA as though it had applied to LTRCM Determinations issued prior to the First SAU Variation Date. In effect, this will allow these amounts to be



appropriately adjusted and will only be needed on one occasion. The financial value of the necessary adjustment is of the order of \$10 million on an NPV basis.

3.6 Other changes

Expanding and clarifying the rollout information commitments in the SAU

99. The SAU sets out commitments for **nbn** to publish rollout progress information (in respect of the NBN Co Fibre Network and NBN Co Wireless Network) and POI rollout progress information (clauses 1H.2 and 1H.3 of Schedule 1H, respectively). **nbn** has amended these clauses, to expand their application to the NBN Co FTTB Network, NBN Co FTTN Network and NBN Co HFC Network and to clarify how these clauses operate in practice.
100. **nbn** has also amended clauses 1H.2 and 1H.3 to expand the scope of rollout information provided by **nbn**. This is consistent with **nbn**'s approach to the SAU variation generally (as an update to incorporate the additional MTM technologies) and is also responsive to the 2015 consultation process initiated by the Government regarding whether a carrier licence condition should be imposed on **nbn** to require it to disclose information about the **nbn**TM network.⁴⁰ In formulating changes to clauses 1H.2 and 1H.3, **nbn** has had regard to industry submissions and the ACCC's recommendations on the potential carrier licence condition. 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** to improve the reporting metrics used in key rollout plans.
101. Consistent with its commercial incentives, **nbn** makes extensive rollout-related information available on its public website, including:
 - (a) an online address tool where interested parties can check **nbn**TM network availability at a particular address;
 - (b) an interactive rollout map showing locations in Australia where **nbn**TM network services are available and where build has commenced;
 - (c) a list of areas where **nbn**TM network services are available and where build has commenced; and
 - (d) a list of areas where build work is scheduled/in plan (the most recent version of this list was published on 16 October 2015 and provides a three-year view).
102. In addition, as specified in the SOE, a weekly network rollout progress report showing the number of premises passed and the number of premises activated is available on **nbn**'s public website.

⁴⁰ ACCC, *Report to Department of Communications: ACCC consultation on proposed information disclosure carrier licence condition*, May 2015.



103. As part of the Government's consideration of whether a carrier licence condition should be imposed on **nbn** to require it to disclose additional information to access seekers, the Department of Communications requested that the ACCC consult with industry and provide a report. The ACCC's report was finalised in May 2015 and made a number of recommendations, many of which **nbn** was already in the process of implementing as part of the transition to the MTM model.⁴¹ **nbn** notes that since these issues were initially considered by the ACCC and Government, there has been additional understanding gained by **nbn** and RSPs about what information is needed to allow **nbn**'s customers to effectively provide **nbn** services. The amendments to the SAU reflect this improved understanding, and incorporate additional reporting approaches that **nbn** has developed in response to the needs of RSPs.
104. The variation reflects a number of the ACCC's and industry's recommendations in a set of expanded rollout information commitments by **nbn** to provide:
- (a) information regarding the technology type to be used (or being used) on a per premises basis, in the historical footprint list and proposed footprint list;
 - (b) an estimate of the number of premises in each geographic area served by each technology type, in the historical region rollout list;
 - (c) an estimate of the number of premises to be served by each technology type for geographic areas that have commenced construction, in the monthly ready for service plan;
 - (d) service class information on a per premises basis, in the historical footprint list;
 - (e) the expected date (if any) from which each premises will be required to be disconnected from an existing legacy network, in the historical footprint list; and
 - (f) the remaining rack space available at each POI, in the Points of Interconnect Plan.
105. **nbn** has also changed its commitments to provide for longer-term estimates of Ready for Service (**RFS**) dates. In particular, the monthly RFS rollout plan will list all geographic areas that are expected to be RFS in the current and subsequent financial year. For those areas that have entered the construction phase, the monthly RFS plan will list the expected RFS dates for all areas that are expected to be RFS in the next 12 months and, in addition, an expected RFS timeframe (expressed by reference to an annual quarter) for areas that are expected to be RFS in the remainder of the subsequent financial year.
106. **nbn** also notes that the rollout commitments in the SAU encompasses the core aspects of the rollout information provided to RSPs. The information that is actually provided by **nbn** to RSPs has evolved

⁴¹ *ibid.*



over time to cover a wider range of material than required by the SAU, and this will continue to be the case. The SAU has always been (and should only be) seen as a baseline set of commitments, which are then augmented by commercially rational provision of rollout information, consistent with **nbn**'s incentives to have all RSPs being able to effectively compete to offer services on the **nbn**.

Improving the clarity of rollout progress information

107. **nbn** has made a number of drafting changes to clause 1H.2 to clarify:
 - (a) that dates may be expressed by reference to a quarter or a half in a specified calendar year in the 3-year construction rollout plan (clause 1H.2.1(b)); and
 - (b) when the 3-year construction plan will be released, to ensure alignment with **nbn**'s corporate planning process and thus improve the alignment of information provided.
108. **nbn** has deleted the clause relating to the release of a 1-year construction plan. With changes to the 3-year construction plan and the monthly RFS rollout plan, the information in the 1-year construction plan has become redundant.
109. In the clause relating to the monthly RFS rollout plan, **nbn** has distinguished between areas that have entered the construction phase and those that have not. The effect of this change is to allow more granular information to be provided at a time when **nbn** is able to provide appropriately stable information.
110. The amendments also include clarifying the intended meaning of 'publish'. Information contained in **nbn**'s rollout plans is commercially sensitive to **nbn**; therefore, there must be appropriate restrictions in relation to the entities to which the information is provided, and how it is used by those entities. **nbn** has strong commercial incentives to provide information to access seekers which will allow them to effectively and efficiently migrate end-users onto the **nbn**TM network. These incentives are embedded in the SAU. **nbn** is also already subject to relevant statutory non-discrimination obligations. As the ACCC has previously noted, it is typical for some restrictions to be placed on the use and/or further disclosure of information, including restrictions to protect commercial-in-confidence material, conditions on further use or to prevent further disclosure. Accordingly, the variation includes the ability for **nbn** to impose certain conditions on access seekers obtaining rollout information, including that the information must only be used for permitted purposes.⁴² The ACCC has acknowledged the appropriateness of imposing conditions regarding access to **nbn**'s rollout information.⁴³

⁴² **nbn**, *NBN Co submission to the ACCC – Proposed NBN Co carrier licence condition about information disclosure*, 28 April 2015, p. 29.

⁴³ ACCC, *Report to Department of Communications: ACCC consultation on proposed information disclosure carrier licence condition*, May 2015, p. 20.



111. Certain information contained in the rollout plans and reports **nbn** provides to access seekers is derived from data **nbn** receives from third parties. Under the arrangements with these third parties, **nbn** is subject to restrictions as to the entities **nbn** may provide such information to and, in some cases, requirements that **nbn** pass on certain obligations to recipients of the information. As such, **nbn**'s current practice is to provide access to various rollout reports via an online portal, which is accessible to access seekers who have signed an agreement (i.e. a WBA) with **nbn**. The amendments to clarify the intended meaning of 'publish' also address this issue.
112. **nbn** also has commercial incentives to provide information about the **nbn**TM network rollout to certain parties who have not entered into a WBA, for instance, service providers who propose to request an **nbn** service and other parties where appropriate and in the commercial interests of **nbn**. As such, **nbn** is in the final stages of developing an agreement to share information with these parties. This agreement will place appropriate confidentiality and permitted-use obligations on information recipients, and will be separate from, and more streamlined than, the WBA.

Dispute management

113. The SAU includes a set of Dispute Management arrangements (clause 1H.5 and Annexure 1 of Schedule 1H) to support the timely resolution of disputes that might arise between **nbn** and customers. To date, **nbn** has not had any disputes with customers.
114. In the variation, **nbn** has made a small number of changes to clarify, enhance and refine the Dispute Management provisions of the SAU. The changes relate to the following:
- (a) the inclusion of a clause permitting **nbn** to appoint an additional Resolution Advisor or an additional Nominated Person in respect of an existing Resolution Advisor where such appointment is necessary and after notifying the ACCC;
 - (b) clarifying that a Resolution Advisor may be a body corporate;
 - (c) clarifying that **nbn** can appoint new Pool members after the establishment of the initial Pool at such times as **nbn** reasonably considers to be required;
 - (d) clarifying that the Resolution Advisor may appoint Panel Members from outside the Pool, provided such appointment is in accordance with the Dispute Resolution Rules and notified to the ACCC and **nbn**; and
 - (e) clarifying the information to be provided in a Resolution Advisor Nomination Notice.



4. Statutory requirements

4.1 Reasonableness including the LTIE

115. The CCA (by application of s. 152CBG(4) and s. 152CBD(2)) provides that the ACCC must not accept the variation to the SAU unless it is satisfied that:

- (a) the terms and conditions specified in the variation in relation to compliance with the Category B SAOs are consistent with those SAOs and are reasonable;
- (b) any conduct that is specified in the variation in relation to access referred to in s. 152CBA(3B) will promote the LTIE, and that the related terms and conditions are reasonable; and/or
- (c) any conduct that is specified in the variation in relation to certain matters referred to in s. 152CBA(3C) will promote the LTIE.

116. While there are some differences in the way in which the statutory tests that apply to variation of terms and conditions, variation to specified conduct in relation to access and variation to specified conduct in relation to **nbn** additional activities are expressed, there is considerable overlap between those tests. The common element in those tests is the promotion of the LTIE including where the reasonableness test applies (where the ACCC must have regard to the promotion of the LTIE under s. 152AH(1)(a)). The ACCC recognised this in the Final SAU Decision where it concluded:⁴⁴

Some of the matters the ACCC is required to consider in determining whether a term or condition of the SAU is reasonable overlap with those that the ACCC is required to consider in the context of the long-term interests of end-users. Also, as is the case with the matters relevant to the long-term interests of end-users, many of these matters are inter-related and may involve trade offs that need to be weighed up.

117. In determining whether the **terms and conditions** specified in the variation in relation to compliance with the Category B SAOs are reasonable and whether the terms and conditions related to **conduct** specified in the variation are reasonable, regard must be had to the matters set out in s. 152AH(1) entitled "Reasonableness - terms and conditions":

- (a) whether the terms and conditions promote the LTIE of carriage services or services provided by means of carriage services;
- (b) the legitimate business interests of **nbn** and **nbn's** investment in facilities used to supply the declared service concerned;
- (c) the interests of persons who have rights to use the declared service concerned;

⁴⁴ Final SAU Decision, p. 50; cf. the discussion pp. 50-51.



- (d) the direct costs of providing access to the declared service concerned;
- (e) the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or a facility; and
- (f) the economically efficient operation of a carriage service, a telecommunications network or a facility.

4.2 LTIE

118. In considering whether the terms and conditions specified in the variation in relation to compliance with the SAOs promote the LTIE, and in considering whether any conduct relating to access to the service that is specified in the variation will promote the LTIE (i.e. as part of the application of the reasonableness test under s. 152 CBD(2)(b) and (ca) and as a standalone test for the purposes of s. 152CBD(2)(cb)), the ACCC must have regard only (by operation of s. 152AB(3)) to the extent to which the terms and conditions achieve the objectives set out in s. 152AB(2) entitled "Object of this Part":

- (a) promoting competition in markets for listed services;
- (b) achieving any-to-any connectivity in relation to carriage services that involve communication between end-users; and
- (c) encouraging the economically efficient use of, and investment in, the infrastructure by which the listed services are supplied and any other infrastructure by which listed services are or are likely to become capable of being supplied.

Promotion of competition

119. In considering whether competition will be promoted in the relevant markets for FTTB, FTTN and HFC services (discussed below), s. 152AB(4) requires that the ACCC have regard to the extent to which the terms and conditions of the variation will remove obstacles to end-users of listed services gaining access to listed services.

120. The ACCC has also previously stated that obstacles to accessing services for the purposes of s. 152AB(4) include the price, quality and availability of the services and the ability of competing providers to provide the relevant services.⁴⁵

121. In the Final SAU Decision, the ACCC noted that it had regard to the 'vigour' of competition between firms in assessing the level of competition, regardless of their numbers. The ACCC noted that any barriers that may exist to entering retail markets can be addressed through the provision of

⁴⁵ ACCC, *Public inquiry into final access determinations for fixed line services – primary price terms*. Draft Decision, March 2015, p. 206.



aggregation (and other) services by wholesale providers, rather than through the regulation of terms and conditions of access to the **nbn**TM network.

122. A preliminary step in assessing whether the terms and conditions of the variation promote competition is to identify the relevant markets within which such competition will take place. As previously noted by the ACCC, it is sufficient to broadly identify the scope of the relevant markets likely to be affected.⁴⁶
123. In the context of the variation, **nbn** currently offers a Layer 2 wholesale bitstream service over its FTTB and FTTN networks. **nbn** intends to introduce a Layer 2 wholesale bitstream service over its HFC network – this is expected to be commercially launched in June 2016.
124. **nbn** submits that the relevant markets are likely to be downstream markets where the FTTB, FTTN and HFC services provide a key wholesale input for access seekers to supply Carriage Services or Content Services, such as voice telephony, high-speed broadband services, IPTV services and a range of other next generation services (e.g. e-health and telemedicine, high quality video conferencing, etc.) provided over the FTTB, FTTN and HFC networks. In addition, some wholesale markets are also relevant, both in regard to wholesale aggregation and backhaul. The relevant markets therefore include (but are not limited to):
 - (a) the retail markets for supply of:
 - (i) fixed voice services;
 - (ii) fixed broadband services;
 - (iii) bundled voice and broadband services;
 - (iv) content services;
 - (b) the wholesale markets for supply of:
 - (i) fixed voice services;
 - (ii) fixed broadband services;
 - (iii) bundled voice and broadband services;
 - (iv) content services; and
 - (v) backhaul services.

⁴⁶ ACCC, *Public Inquiry into the fixed line services declarations – Final Report*, April 2014, p. 10.



125. The ACCC has previously noted that in order to promote competition, an SAU (and by extension in the current context, a variation to an SAU) should provide for effective, non-discriminatory access by access seekers to particular carriage services.⁴⁷ In the context of FANOC's proposed FTTN network, the ACCC noted:⁴⁸

The ACCC is of the view that effective access to an FTTN network would require the specification of a bitstream access service over the bottleneck portion of the network, at as low layer within the network as feasible, so as to give Access Seekers as much control as possible over their own customer traffic.

126. For the reasons outlined in Chapter 6, **nbn** submits that the terms and conditions relating to the inclusion of FTTB, FTTN and HFC promote competition in a range of retail and wholesale markets (such as those for the supply of voice, broadband, bundled voice and broadband, and content services).

Any-to-any connectivity

127. The ACCC has noted that the objective of any-to-any-connectivity is particularly relevant when considering services that involve communications between end-users.
128. **nbn** notes that the ACCC did not place much weight on the objective of any-to-any connectivity in assessing the current terms and conditions of the SAU. The ACCC noted in the Final SAU Decision that this is because in the context of the services set out in the SAU (such as carriage services that are inputs to an end-to-end service), the achievement of this objective is neither promoted nor hindered.⁴⁹

Encouraging economically efficient use of, and economically efficient investment in, infrastructure

129. The ACCC has previously noted that the phrase 'economically efficient use of, and economically efficient investment in, infrastructure' requires considering three components of efficiency:⁵⁰
- (a) productive efficiency, achieved where individual firms produce the goods and services they offer at least cost;
 - (b) allocative efficiency, achieved where the prices of resources reflect their underlying costs so that resources are allocated to their highest valued uses (i.e. those that provide the greatest benefit relative to costs); and

⁴⁷ ACCC, *Assessment of Foxtel's Special Access Undertaking in relation to the Digital Set Top Unit Service - Final Decision*, p. 25.

⁴⁸ FANOC Draft Decision, December 2007, p. 137.

⁴⁹ Final SAU Decision, p. 47.

⁵⁰ Final SAU Decision, p. 49.



- (c) dynamic efficiency, which reflects the need for industries to make timely changes to technology and products in response to changes in consumer tastes and in productive opportunities.

130. In looking at the question of whether a particular measure in a variation results in economically efficient use of and investment in infrastructure, s. 152AB(6) of the CCA sets out a list of matters to which the ACCC must have regard (not repeated here). Further, s. 152AB(7A) provides that for the purposes of determining incentives for investment, regard must be had to the risks involved in making the investment. The factors in s. 152AB(6) do not limit the matters to which regard may be had in considering whether a term or condition of the variation results in encouraging the economically efficient use of, and economically efficient investment in, infrastructure.
131. In its Final SAU Decision, the ACCC noted that, in considering whether the economically efficient use of infrastructure is encouraged, it would typically consider:
- (a) whether, over the long-term, access prices allow the access provider the opportunity to recover its prudent and efficient costs, but no more; and
 - (b) whether the suppliers of services will make timely changes to technology, products, price structures and price relativities in response to changes in consumer preferences.⁵¹

Counterfactual when assessing the LTIE

132. When assessing the LTIE as discussed above and applied in Chapter 6, **nbn** submits that the regulatory counterfactual is relevant to the ACCC's assessment. The regulatory counterfactual involves a scenario in which the current scope of the SAU is maintained without any variation.
133. In this scenario:
- (a) although **nbn's** FTTB, FTTN and HFC services would not become declared via a varied SAU, declaration would occur via publication of SFAAs on **nbn's** website⁵²; and
 - (b) the ACCC may, but is not obligated, at some point to make access determinations relating to some or all of the terms and conditions of access concerning some or all of the FTTB, FTTN and HFC services as declared via **nbn's** SFAAs.
134. **nbn** submits that the variation promotes the LTIE by providing for regulatory certainty through setting upfront 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. Accordingly, if the ACCC accepts the variation this is likely to promote the LTIE to a greater extent than if the ACCC were to reject the

⁵¹ Final SAU Decision, p. 49.

⁵² Pursuant to s. 152ALA(8D) of the CCA.



variation, and the terms and conditions of access for FTTB, FTTN and HFC services were determined through a combination of SFAAs and access determinations.

4.3 Legitimate business interests of nbn

135. The second element in s. 152AH(1) which the ACCC must have regard to when determining whether the terms and conditions of a variation to the SAU are 'reasonable' is the legitimate business interests of the access provider concerned and the access provider's investment in facilities used to supply the declared services in the variation.

136. In the Final SAU Decision, the ACCC concluded that:⁵³

... a legitimate business interest for a carrier or carriage service provider that is an access provider, is the opportunity to recover the efficient cost of providing services and to earn an appropriate commercial return on its investment in the infrastructure used to supply those services.

137. Similarly, in the ACCC's recent Final Access Determination for fixed line services, the ACCC noted that:⁵⁴

... it would be in the access provider's legitimate business interests to seek to recover its costs as well as a normal commercial return on investment having regard to the relevant risk involved. However, an access price should not be inflated to recover any profits the access provider (or any other party) may lose in a dependent market as a result of the provision of access.

138. A carrier's 'legitimate business interests' are confined to what is regarded as allowable and appropriate when negotiating access to its infrastructure. In *Re Telstra Corporation Ltd*, the Tribunal stated that:⁵⁵

In the context of section 152AH (1)(b), the expression connotes something which is allowable and appropriate when negotiating access to the carrier's infrastructure. When looked at through the prism of a charge term and condition of access and its relationship to a carrier's cost structure, it is a reference to the interest of a carrier in recovering the costs of its infrastructure and its operating costs and obtaining a normal return on its capital.

139. The ACCC has also outlined that this criterion requires an assessment of the broader commercial interests of the service provider in conducting its own business affairs. An access provider should not be unduly compromised in the conduct of its own legitimate business interests simply because it

⁵³ Final SAU Decision, p. 50.

⁵⁴ ACCC, *Public inquiry into final access determinations for fixed line services – Final Decision*, October 2015, p. 235.

⁵⁵ *Re Telstra Corporation Limited* (ACN 051 775 556) [2006] ACompT 4 (2 June 2006).



has an obligation to provide access to its service. By way of example, the ACCC noted that an access provider must be able to make appropriate decisions about modifications and upgrades to its network or set appropriate requirements for billing and the payment of accounts. Generally, an access provider is entitled to have some legitimate control over its relationship with an access seeker to the extent reasonably required to protect its business concerns.⁵⁶

4.4 Interests of persons who have rights to use the declared services

140. In considering the criterion in relation to the interests of persons who have the right to use the declared services, the ACCC has stated that it is the interests of all current and potential access seekers that will be relevant.⁵⁷ The ACCC's approach involved ensuring that an access seeker is able to compete in the supply of a service in a dependent market based on the cost and quality of its service relative to its competitors, rather than ensuring that an access seeker is able to conduct a profitable business.⁵⁸
141. In its Final SAU Decision, the ACCC also noted that another relevant interest of access seekers is to ensure that they are not subjected to overly onerous commercial terms simply because of their status as access seekers.⁵⁹

4.5 Direct costs of providing access to the declared service

142. In its Final SAU Decision, the ACCC noted that the term 'direct costs of providing access to a declared service' refers to those costs necessarily incurred (or caused) by the provision of access.⁶⁰
143. Further, in making its final access determination for fixed line services, the ACCC considered that the use of the term 'direct costs' allowed for consideration to be given to a contribution to indirect costs. The ACCC noted that this view had also been confirmed by the Tribunal.⁶¹

4.6 Safety and reliability

144. The ACCC has noted that the objective of the safety and reliability criterion is to ensure that access prices do not lead to arrangements between parties that will result in or encourage the unsafe or unreliable operation of a carriage service.⁶²
145. In examining this criterion in the context of an ordinary access undertaking submitted by Telstra, the Tribunal noted that a service provider will have sufficient incentive to ensure the safe and reliable

⁵⁶ Final SAU Decision, p. 50; FANOC Draft Decision, p. 38.

⁵⁷ Final SAU Decision, p. 50.

⁵⁸ Final SAU Decision, p. 51; FANOC Draft Decision, p. 39.

⁵⁹ Final SAU Decision, p. 51.

⁶⁰ Final SAU Decision, p. 51.

⁶¹ ACCC, *Final Decision: Inquiry to make final access determinations for the declared fixed line service*, July 2011, p. 22; ACCC, *Final Decision: Public inquiry into final access determinations for fixed line services – primary price terms*, October 2015, p. 236; *Application by Optus Mobile Pty Limited and Optus Networks Pty Limited* [2006] ACompT 8 at [137].

⁶² FANOC Draft Decision, p. 40.



operation of carriage services, telecommunications networks or facilities, as long as it receives sufficient revenue to cover the costs of ensuring safe and reliable operations. The Tribunal equated 'sufficient revenue' with a price for the service that enabled recovery of efficient costs inclusive of a normal return on investment.⁶³

146. The ACCC noted that a carrier or carriage service provider will generally seek to have in place operations and procedures designed to ensure that the integrity of a network or facility is not harmed. As such the ACCC will consider whether any non-price terms and conditions, purportedly in relation to the safe operation of a network, are not used as a barrier to effective access.⁶⁴

4.7 Economically efficient operation of a carriage service, a telecommunications network or a facility

147. In its Final SAU Decision, the ACCC noted the following in the relation to the criterion on the economically efficient operation of a carriage service, a telecommunications network or a facility:⁶⁵

The economically efficient operation of a carriage service, telecommunications network or facility will not be precluded where the carrier or carriage service provider has the opportunity to recover the efficient costs of providing services (and no more).

148. The ACCC has indicated that the concept of 'economically efficient operation' does not limit the scope of the consideration to networks and facilities operated by the access provider, but would include those operated by others, including services provided by access seekers.⁶⁶

4.8 Reasonableness - other matters

149. Consideration of reasonableness is not limited to the factors outlined in s. 152AH(1) and discussed above (see s. 152AH(2)). The existing statutory and regulatory regime and the Government's policy decisions are also relevant considerations the ACCC should take into account when determining whether the terms and conditions of the variation are reasonable. This was the approach taken by the ACCC in its Final SAU Decision and **nbn** submits that the ACCC must take the same approach in its consideration of the variation. In particular, **nbn** considers that the ACCC should take into account the SOE, the Government's response to the Vertigan review of December 2014, **nbn**'s compliance with the non-discrimination obligations set out in s. 152AXC and s. 152AXD of Part XIC and the cost control and prudence measures that apply to **nbn**.
150. In the SOE, the Government provided directions to **nbn** that are particularly relevant for assessing the reasonableness of the variation. In particular, the SOE notes the following in relation to coverage, speed and technology mix:⁶⁷

⁶³ *Telstra Corporation Ltd (No 3)* [2007] ACompT 3 at 277.

⁶⁴ Final SAU Decision, p. 51; FANOC Draft Decision, p. 40.

⁶⁵ Final SAU Decision, p. 51.

⁶⁶ ACCC, *Assessment of Telstra's ULLS monthly charge undertaking – final decision*, August 2006, p. 24.



The design of a multi-technology mix NBN will be guided by the Government's policy objectives of providing download data rates (and proportionate upload rates) of at least 25 megabit per second to all premises and at least 50 megabits per second to 90 per cent of fixed line premises as soon as possible...

As proposed by the Strategic Review, NBN Co will integrate existing HFC networks into the rollout where this is feasible and economically beneficial, and provide for wholesale-only, open access operation of these.

151. The variation is also consistent with the Government's 11 December 2014 policy paper, which included the Government's response to the recommendations of the Vertigan review, and its response to the Vertigan review itself where it stated its position on wholesale price caps as follows:⁶⁸

The Government will request that NBN Co implement a wholesale price cap model. During the transition period, NBN Co will advise industry of implementation arrangements including any necessary changes to its Special Access Undertaking (SAU) approved by the ACCC in December 2013, noting that changes to the SAU require consideration by the ACCC. This change is consistent with the Government's 2013 election commitments and the Vertigan panel's recommendations, and will provide NBN Co with increased flexibility and assist it to compete under the new more competitive market arrangements. Price caps will not increase NBN wholesale prices in either urban or regional areas above the current levels approved by the ACCC in the SAU. There will be scope for reduced wholesale prices in some markets, where this is necessary for NBN Co to respond to more competitive arrangements.

152. As noted in paragraph 86 above, the variation includes only a limited number of changes to the price-related terms and conditions of the SAU. These changes are limited to incorporating initial MRPs for the additional MTM technologies and do not change the substance or operation of existing price-related terms and conditions.
153. Of note, the pricing provisions in the SAU are already consistent with the implementation of a wholesale price cap model. This is because the initial MRPs that apply under the SAU operate as a ceiling (or cap), but with flexibility for **nbn** to price below these levels.⁶⁹
154. The variation has been drafted in compliance with **nbn**'s non-discrimination obligations. As with the existing FTTN, fixed wireless and satellite technologies, access seekers can access FTTN, FTTN and HFC services on an equivalent basis. The variation is consistent with the incentives already operating in the SAU to ensure non-discriminatory access.⁷⁰
155. **nbn** is already subject to the prudency commitments and expenditure efficiency incentives under the SAU (as recognised by the ACCC in its authorisation of the initial Optus arrangement in 2012) and these also (already) apply in respect of the FTTN, FTTN and HFC networks. It is also subject to a range of existing legislative, Parliamentary and regulatory controls which apply to **nbn** (including as a Government Business Enterprise).

⁶⁷ SOE, p. 2.

⁶⁸ Australian Government, Telecommunications Regulatory and Structural Reform, pp. 5-6.

⁶⁹ See Schedule 1C (Module 1), clause 1.C.1.6; definition of Maximum Regulated Price in Attachment C (Main Body).

⁷⁰ Ordovery and Shampine (2016), p. 9 and pp. 19-20.



156. The ACCC recognised in its Draft 2013-14 LTRCM Determination that **nbn** is subject to a number of Government directions and parliamentary processes, particularly during the rollout period and acknowledged that this high level of external scrutiny is likely to limit the potential for **nbn** to incur inefficient expenditure. These processes apply equally to FTTB, FTTN and HFC related activities.
157. As a result of these pre-existing cost control and prudence measures, **nbn** is subject to intense scrutiny of its operating expenditure and capital expenditure decision making. This means that the prudence commitments in Module 1 of the SAU are complementary to a raft of other measures. These cost control and prudence measures are relevant considerations for assessing the reasonableness of the variation.



5. Assessment of variation as a whole

5.1 Variation makes only limited changes to the SAU and ACCC's conclusions in the Final SAU Decision are not affected

158. As discussed in section 2.3 above, **nbn**'s understanding is that the ACCC will be assessing the variation, not the current provisions of the SAU, and that this will include an assessment of the interaction of the subject matter of the variation.
159. As is evident from Chapter 3, the extent of changes included in the variation is limited. This reflects the largely mechanical exercise aimed at updating the SAU so that it is aligned with the MTM model and the minimal change approach that **nbn** has adopted in drafting the necessary changes.
160. The SAU's modular, incentive-based framework that applies over the period to 30 June 2040 applies to the MTM, including:
 - (a) the price control schedules – the variation includes the initial MRPs for FTTB, FTTN and HFC products (which are consistent with the initial MRPs in the SAU for FTTP, wireless and satellite products), with the same arrangements for determining MRPs over time and the same ACCC reserve powers in regards to new pricing, price rebalancing and pass through of tax changes⁷¹;
 - (b) the RAB, LTRCM and related reporting schedules (Module 1 only); and
 - (c) the product development and withdrawal schedules (which set out the operation of the modular framework).
161. The reason why these (and a number of other) aspects of the SAU can apply to the MTM is that they are technology neutral. The fact that initial MRPs operate as a ceiling or cap under the SAU also means that changes to those provisions were not required to implement the wholesale price cap model requested by the Government (see the discussion in paragraph 153 above).
162. Overall, the variation would, if accepted by the ACCC, be a positive development for **nbn**, access seekers and end-users, as it would contribute to ongoing long-term regulatory certainty on a number of key aspects of **nbn**'s services. Consistent with the Government's policy settings when the SAU was accepted (which continue to apply today), it would also complete an important step in the transition to the MTM model.
163. Taking into account all of the relevant considerations and in summary, **nbn** submits that the ACCC should be satisfied that the variation overall is reasonable:

⁷¹ See Final SAU Decision, pp. 85-92.



- (a) The variation promotes the LTIE by promoting competition, facilitating the achievement of any-to-any connectivity and encouraging efficient investment in and use of infrastructure as compared to the counterfactual; and
- (b) The more definitive regulatory certainty provided by the variation strikes an appropriate balance between the interests of **nbn** and access seekers.

164. Chapter 6 below sets out how the variation to incorporate FTTB, FTTN and HFC services, products and pricing (together with the limited number of other changes) satisfy the statutory criteria.
165. **nbn** therefore submits that the ACCC should accept the variation in accordance with the statutory criteria described in section 2.3 above.

5.2 Term

166. The variation includes changes to extend the service description to the additional MTM technologies, clarify and/or improve the operation of provisions relating to rollout progress information and dispute resolution which are appropriate to provide for **nbn**'s legitimate business interests while taking into account the interests of access seekers.
167. The variation does not involve any change to term of the SAU (which expires on 30 June 2040). When applied to the new MTM technologies, the term of the SAU promotes the legitimate business interests of **nbn** by providing **nbn** with a degree of commercial flexibility, within clearly defined constraints, to account for evolving technology, applications and demand and to achieve an appropriate return on its investment.
168. The ACCC, in its Final SAU decision, noted that the term of the SAU is in **nbn**'s legitimate business interests and is reasonable given:
- (a) the modular structure of the SAU;
 - (b) the scale of the rollout; and
 - (c) the likely timeframe for recovering costs associated with construction of the **nbn**TM network.
169. The ACCC appreciated that the long term of the SAU is reasonable and necessary to ensure that **nbn** has the opportunity to recover its efficient costs and that this is important to the efficient use of the **nbn**TM network and **nbn**'s legitimate business interests. These same considerations apply equally to the FTTB, FTTN and HFC services and hence the variation.



5.3 Regulatory certainty

170. The variation promotes regulatory certainty for both **nbn** and access seekers, by providing upfront and long-term certainty as to the terms and conditions on which **nbn** will supply the new FTTB, FTTN and HFC services.
171. This is consistent with promoting competition in a range of retail and wholesale markets (such as those for the supply of voice, broadband, and bundled voice and broadband services).
172. The ACCC has previously stated that regulatory certainty is likely to promote competition.
173. In the absence of the variation, access seekers would not receive the level of upfront, regulatory certainty provided by the varied SAU about how **nbn**'s pricing for FTTB, FTTN and HFC services would evolve over time (including relative to FTTP, wireless and satellite services).
174. The lack of certainty inherent in the counterfactual may affect access seekers' decisions to compete in relevant retail and wholesale markets (and if they do compete, how they compete), thereby negatively affecting competition.
175. The variation also provides regulatory certainty in allowing **nbn** to develop and offer a range of specific products over FTTB, FTTN and HFC networks under the broad description of the NBN Access Service.
176. The relevant terms and conditions of access to the FTTB, FTTN and HFC services appropriately limit the nature and scope of possible future regulatory intervention (and with it the possibility of regulatory error arising from any such intervention). This is supported by Ordovery and Shampine:⁷²

*The structure of the SAU must balance the need to provide certainty for investing significant capital in long-lived infrastructure with the fact that telecommunications is a dynamic and rapidly changing industry, making it difficult to specify contractual and other terms far in advance. The SAU provides for the former by setting in place a framework assuring that **nbn** will have the opportunity to recover its investment, along with a reasonable rate of return, over a lengthy period. It is appropriate for the SAU to specify a longer period during which explicit regulation is in place in relation to the recovery of **nbn**'s initial investment. By the same token, once the investment has been earned back, the ICRA will have served its purpose and it is appropriate to switch the regulatory regime to a "building block" approach in which the revenue cap specified by the ABBRR becomes binding.*

The same uncertainty referred to above raises concerns about specifying detailed terms far in advance. The modular structure of the SAU addresses this risk by providing significant detail for the Initial Regulatory Period and then setting out key principles to be implemented in a series of three to five year regulatory cycles for the remaining years (the "Subsequent Regulatory Period"). Together, these mechanisms are reasonable and appropriate methods for providing flexibility needed for addressing industry changes and concerns that may arise while still providing adequate assurance to investors as to their likely potential returns. They are reasonable and appropriate in respect of the proposed changes to encompass additional technologies, as part of the MTM.

⁷² Ordovery and Shampine (2016), pp. 23-24.



5.4 Expert reports

177. As discussed in Chapters 4 and 6, **nbn** considers that the variation meets the statutory criteria and that the ACCC should accept the variation. In support of **nbn**'s submission, **nbn** has sought the independent views of three experts from the United States, the United Kingdom and Australia. The views of these three experts were also previously sought as part of **nbn**'s submission in respect of the original assessment of the SAU.
178. The independent opinion of each of the experts was sought as follows:
 - (a) Professor Janusz Ordovery and Dr Allan Shampine (**Ordovery and Shampine**) were asked to address whether the variation to incorporate the additional MTM technologies (FTTB, FTTN and HFC) would impact the views expressed in their September 2012 expert report in regard to the high level design of the SAU, the nature and strength of incentives for investment expenditure, efficiency, pricing, product development and withdrawal, service quality, and engagement with access seekers on non-price terms, and the significance of **nbn**'s wholesale only status within the broader context of developing appropriate long-term regulatory arrangements;
 - (b) Analysys Mason were asked to review the prudence and efficiency of the following:
 - (i) **nbn**'s methodology and processes for determining which type of network it will deploy in particular geographical areas; and
 - (ii) **nbn**'s initial design of its FTTB, FTTN and HFC networks; and
 - (c) Dr Steven Bishop and Professor Bob Officer (**Bishop and Officer**) were asked to address whether the rate of return approach in Module 1 and the rate of return principles in Module 2 are reasonable when applied to the additional MTM technologies (FTTB, FTTN and HFC).
179. The expert reports described above are lodged together with this submission.
180. Ordovery and Shampine:
 - (a) note that there is rarely a single "best" approach to attaining various regulatory objectives, such as ensuring short-term and long-term economic efficiency, while satisfying a potentially wide range of other public policy constraints that may be relevant;
 - (b) note that their original opinions were based on the overall economics of the approaches detailed in the SAU and not on the specific details; and
 - (c) conclude that the new structure with the MTM does not alter their original conclusions and that the SAU and the variation due to MTM can and does adequately deal with the relevant economic concerns.



181. Analysys Mason conclude that:

- (a) the methodology and processes used by **nbn** for determining which type of MTM network it will deploy are prudent and efficient. This includes **nbn**'s strategic modelling process and strategic overlay process, the latter of which is based on a series of business rules that consider a range of relevant factors, including the minimisation of peak funding, the maximisation of cash flows and a long-term NPV consideration.
- (b) **nbn**'s initial design of its FTTN, FTTB and HFC networks reflects an efficient and prudent network design. This includes **nbn**'s service and technology decisions, architecture-related decisions and infrastructure-related decisions.

182. Bishop and Officer conclude that:

- (a) for Module 1:
 - (i) it is reasonable to set a WACC for the new MTM technologies and associated services based on the long-term government bond rate plus a real margin, varying annually with the long-term bond rate;
 - (ii) using a bottom-up approach (cost of debt and cost of equity), an appropriate mark-up over the risk free rate for **nbn**'s WACC would be around 400 basis points. The proposed 350 basis points would be in a reasonable confidence interval around this estimate; and
 - (iii) based on a review of other recent regulatory decisions, the proposed WACC margin of 350 basis points is within the range of a selection of regulatory determinations made between April 2015 and October 2015 by the AER and ACCC.
- (b) for Module 2, the cost of capital principles are appropriate principles for recognising a required return on investment to incorporate in a building block approach as contained in the SAU.

183. Overall, the expert reports address matters the ACCC will consider and support **nbn**'s submission that the ACCC should accept the variation, for the following reasons:

- (a) the economic properties and underlying characteristics of the SAU are applicable to the additional MTM technologies;
- (b) the methodology and processes used by **nbn** for determining which type of MTM network it will deploy are prudent and efficient, as is **nbn**'s initial design of its FTTB, FTTN and HFC networks; and



- (c) the rate of return approach in Module 1 (risk free rate plus 350 bps) and the rate of return principles in Module 2 are reasonable when applied to the additional MTM technologies.



6. Assessment of categories of changes in the variation

6.1 Categories of changes in the variation

184. In the Final SAU Decision, the ACCC categorised the operative clauses of the SAU and applied the relevant assessment criteria to each of those categories. Consistent with this approach, **nbn** has used the same categorisation for the variation.
185. Applying the categories as set out in section 4.4 of the Final SAU Decision to the variation, clauses that form part of the variation about the following matters are categorised as:

(a) ***Terms and conditions relating to compliance with the Category B SAOs:***

- (i) Terms and conditions governing supply of product components: Schedule 1A, clause 1A.4; Schedule 2A, new clauses 2A.4 and 2A.5;
- (ii) The commitment to supply NBN Offers: Schedule 1C, clauses 1C.1.2, 1C.2, Schedule 2B, clause 2B.1.2;
- (iii) Prices and charges: Schedule 1C, clauses 1C.3, 1C.4 and new Annexures 3, 4 and 5.

In accordance with the discussion in Chapter 4, **nbn** submits that the terms and conditions specified in the variation in relation to compliance with the category B SAOs are consistent with those SAOs and are reasonable. **nbn**'s detailed submissions in this regard are set out in sections 6.2 to 6.4 below.

Given the breadth of the terms and conditions relating to compliance with the Category B SAOs, **nbn** has categorised the discussion of the reasonableness of those terms and conditions in the same way as categorised in the Final SAU Decision, as follows:

- (iv) the changes to incorporate services and products for FTTB, FTTN and HFC (see section 6.3 below); and
- (v) the changes to price-related terms and conditions for FTTB, FTTN and HFC (see section 6.4 below).

(b) ***Specified conduct and terms and conditions upon which nbn will engage in specified conduct relating to access to the service under s. 152CBA(3B):***

- (i) Dispute Management: Schedule 1H, clause 1H.5 and Annexure 1 to Schedule 1H.



In accordance with the discussion in Chapter 4, **nbn** submits that the terms and conditions upon which **nbn** will engage in conduct relating to access referred to in s. 152CBA(3B) will promote the LTIE and that the related terms and conditions are reasonable. **nbn's** detailed submissions in this regard are set out in section 6.5 below.

(c) ***Specified conduct relating to nbn additional activities under s. 152CBA(3C):***

(i) The rollout provisions: Schedule 1H, clauses 1H.2 and 1H.3.

In accordance with the discussion in Chapter 4, **nbn** submits that the terms and conditions upon which **nbn** will engage in conduct that is specified in the variation in relation to certain matters referred to in s. 152CBA(3C) will promote the LTIE. **nbn's** detailed submissions in this regard are also set out in section 6.5 below.

186. None of the other clauses categorised by the ACCC in section 4.4 of the Final SAU Decision are varied or affected by the variation. Accordingly, this submission does not address those clauses, which remain unchanged.

6.2 Consistency with Category B SAOs

187. Section 152CBA(3A) (when combined with s. 152CBG(4)) requires the ACCC to assess whether the variation is consistent with **nbn's** Category B SAOs and is reasonable.
188. Clause 1.1 of the SAU, as accepted by the ACCC, meets these requirements. Clause 1.1 provides that, in the event that **nbn** supplies, or becomes capable of supplying, the NBN Access Service and Ancillary Services (whether to itself or to another person), **nbn** agrees to be bound by the Category B SAOs referred to in s. 152AXB, to the extent those obligations would apply to **nbn** in relation to the NBN Access Service and Ancillary Services if those services were treated as declared services.
189. Similarly, clause 1.2 of the SAU, as accepted by the ACCC, provides that in the event that **nbn** supplies, or becomes capable of supplying, the NBN Access Service and Ancillary Services (whether to itself or to other persons), **nbn** undertakes to comply with the terms and conditions specified in the SAU in relation to the Category B SAOs referred to in s. 152AXB.
190. The variation does not include any changes to clauses 1.1 or 1.2. However, it includes changes to the definition of the NBN Access Service and consequent definitions as outlined in detail in section 3.4 of this submission. The effect of these changes is that clauses 1.1 and 1.2 of the SAU will apply to the FTTB, FTTN and HFC networks (and, subject to the mechanism included in the variation, future variants, such as FTTdp). This means that clause 1.1 will continue to meet the requirement of s. 152CBA(3A)(a) and clause 1.2 will continue to meet the requirements of s. 152CBA(3A)(b).



191. Of the clauses specified in the Final SAU Decision that the ACCC assessed as being consistent with the category B SAOs⁷³, the variation includes changes to the following clauses only:
- (a) Non-price terms and conditions:
 - (i) Terms and conditions governing supply of product components: Schedule 1A, clause 1A.4; Schedule 2A, new clauses 2A.4 and 2A.5;
 - (ii) The commitment to supply NBN Offers: Schedule 1C, clauses 1C.1.2, 1C.2, Schedule 2B, clause 2B.1.2.
 - (b) Price terms and conditions:
 - (i) Prices and charges: Schedule 1C, clauses 1C.3, 1C.4 and new Annexures 3, 4 and 5.
192. **nbn** submits that the changes to these clauses are consistent with the Category B SAOs for the same reasons as those set out in the Final SAU Decision, that is:
- (a) those clauses continue to commit **nbn** to supply certain products and services⁷⁴; and
 - (b) nothing within these clauses would amount to a refusal to provide a service in relation to access upon request⁷⁵.
193. In particular:
- (a) the changes to these clauses conform to **nbn**'s obligations under s. 152AXB(4), by permitting the interconnection of **nbn** facilities with the facilities of access seekers to enable access seekers to be supplied with the declared services over the FTTB, FTTN and HFC networks. To this end **nbn** has maintained terms and conditions in relation to the Facilities Access Service in connection with the satisfaction of its interconnection obligations under s. 152AXB(4) in relation to the NBN Access Service and Ancillary Services over the FTTB, FTTN and HFC networks;
 - (b) the changes to Schedules 1C and 2B involve direct commitments by **nbn** to supply NBN Offers in respect of FTTB, FTTN and HFC services, consistent with the ACCC's views in the Final SAU decision that a direct commitment to supply is necessary for compliance and consistency with the Category B SAOs;

⁷³ Final SAU Decision, section 4.4.1.

⁷⁴ Final SAU Decision, p. 69.

⁷⁵ Final SAU Decision, p. 85.



- (c) there are no terms and conditions in the variation that are inconsistent with applicable Category B SAOs and as such the terms and conditions of the variation are likely to be consistent with those SAOs; and
- (d) although there may be terms and conditions in the variation that may place appropriate conditions upon the manner in which the Category B SAOs will be complied with, they do not amount to limits on the consistency with applicable SAOs.

6.3 Assessment of changes to services and products provisions to incorporate FTTB, FTTN and HFC

194. This section sets out why the changes to the services and products provisions of the SAU and specified conduct to incorporate FTTB, FTTN and HFC are reasonable, including why they promote the LTIE. In doing so, this section identifies the reasonableness criteria most relevant to assessing these changes.

Changes to services to which the SAU relates

195. The variation extends the application of the existing design and structure of the NBN Access Service, Ancillary Services and Facilities Access Service to the FTTB, FTTN and HFC networks and provides an approach to facilitate incorporation of future variants e.g. FTTdp.
196. The ACCC in its Final SAU Decision concluded that the service description for the NBN Access Service, Ancillary Services and the Facilities Access Service is reasonable.⁷⁶ Specifically, the ACCC acknowledged that the service description contains the appropriate characteristics for a bitstream service.⁷⁷ **nbn** submits that the same considerations apply to the variation in respect of the design and structure of the NBN Access Service, Ancillary Services and Facilities Access Service and that the changes similarly are reasonable including by promoting the LTIE.

Promotion of competition

197. The component based product construct in the NBN Access Service over FTTB, FTTN and HFC networks will provide access seekers with flexibility to configure capacity on these **nbn**TM networks as if it were the access seeker's own network, thereby facilitating the ability to create alternative competitive service delivery models.
198. The variation applies the existing functional (geographically neutral and technology neutral) service descriptions of the SAU to the FTTB, FTTN and HFC networks. **nbn** submits that the application of these functional service descriptions to these additional networks, including the service description relating to the Facilities Access Service, is likely to create an open and level playing field for

⁷⁶ Final SAU Decision, pp. 70-73.

⁷⁷ Final SAU Decision, p. 71.



competition at the retail level that is characterised by low barriers to entry, thus maximising the prospect of entry in all geographic areas.

199. **nbn** submits that these same factors will also promote competition at the wholesale level, which will assist with keeping the barriers to retail entry as low as possible.
200. The variation will promote competition in downstream markets by also providing non-discriminatory access to access seekers. In particular, the application of the NBN Access Service, Ancillary Services and Facilities Access Service over the FTTB, FTTN and HFC networks provides all access seekers with non-discriminatory access to a Layer 2 wholesale bitstream service with flexibility and control over configuring services for their end-users served by these networks.
201. The extension of the application of the existing design and structure of the NBN Access Service, Ancillary Services and Facilities Access Service to the FTTB, FTTN and HFC networks to accommodate the new MTM technologies will enable the smooth migration of end-users onto the FTTB, FTTN and HFC networks and hence will promote competition in downstream markets.

Any-to-any connectivity

202. The NBN Access Service and the Ancillary Services supplied over the FTTB, FTTN and HFC networks (and future variants as applicable) are carriage services that will be inputs into an end-to-end service. As such **nbn** submits that the extension of the application of the existing design and structure of the NBN Access Service, Ancillary Services and Facilities Access Service to the FTTB, FTTN and HFC networks will facilitate the objective of achieving any-to-any connectivity.

*Legitimate business interests of **nbn***

203. The variation to the NBN Access Service is in **nbn**'s legitimate business interests because it provides regulatory certainty in allowing for **nbn** to develop and offer a range of specific products over the FTTB, FTTN and HFC networks under the broad service description. It also allows **nbn** to expand the products available within that broad service description including over other networks, in accordance with the SAU's product development provisions (Schedule 1I and Schedule 2D).
204. By providing **nbn** with a degree of commercial flexibility within the constraints of existing processes (e.g. the PDF processes) to account for evolving technology, applications and demand (as well as allowing **nbn** the opportunity to achieve an appropriate return on its investment), **nbn** submits that the NBN Access Service is in **nbn**'s legitimate business interests.

Interests of persons who have the right to use the declared services

205. **nbn**'s approach to implementing the variation to the NBN Access Service (specifically by utilising Product Components and Product Features) will promote the interests of all access seekers by providing them with flexibility and control over how they configure services for their end-users of FTTB, FTTN and HFC services, thereby allowing them to compete based on their relative merits.



206. Furthermore, all access seekers will have the ability to participate through the PDF processes in a non-discriminatory manner as **nbn** considers the expansion of the NBN Access Service to other networks from time to time.

Safe and reliable operation of FTTB, FTTN and HFC networks

207. The variation as it relates to the changes to the service descriptions is consistent with the operational and technical requirements necessary for the safe and reliable operation of the FTTB, FTTN and HFC networks and does not create barriers to effective access to those networks.

Changes to products related provisions of the SAU

208. **nbn** has taken a consistent approach to defining products across the range of MTM technologies, with FTTB, FTTN and HFC products being based on FTTP with only limited changes as necessitated by the relevant technology.
209. Schedule 1I (including Annexure 1 relating to PDF processes) and Schedule 2D of the SAU specify conduct **nbn** will undertake in developing products, including conduct relating to developing new eligible services, enhancing declared services and giving information in relation to those activities over those networks. For example, Schedule 1I specifies that **nbn** will produce and publish up-to-date roadmaps of products which are under development and also consult and communicate with customers about the development of new product offerings via the PDF processes.
210. The variation applies Schedules 1I (including the PDF processes) and Schedule 2D to the FTTB, FTTN and HFC networks (in addition to their current scope). **nbn** submits that the conduct specified in Schedule 1I and Schedule 2D of the variation, when applied to the FTTB, FTTN and HFC networks, is reasonable.

Promotion of competition

211. The variation will promote competition by providing all access seekers with non-discriminatory and transparent access to products supplied over the FTTB, FTTN and HFC networks.
212. The variation will provide a degree of stability and predictability with respect to FTTB, FTTN and HFC products and pricing, and thereby facilitate access seekers making available retail and wholesale offers for longer contract terms and on a largely technology neutral basis. Such longer term offers are a key feature of how competition typically occurs in retail and wholesale telecommunications markets, with service providers offering greater value on contracts with longer terms.

Any-to-any connectivity

213. The variation will facilitate the objective of any-to-any connectivity by facilitating, to the extent that the specified conduct is relevant, the development of products that will be used as wholesale inputs for end-to-end services.



Economically efficient use of and investment in infrastructure

214. The variation will encourage efficient use of and investment in infrastructure by providing access seekers with an opportunity to participate in a structured product development process so as to obtain certainty around future investment decisions. Access to timely and sufficient information relating to product development enables access seekers to make informed decisions about their business models and products. This should lead to efficient investment by both **nbn** and access seekers in the development and application of new technologies.
215. In particular, the variation will promote dynamic efficiency. Engagement via the PDF will ensure that **nbn** is well informed about access seekers' needs and views in regard to use of the FTTB, FTTN and HFC networks, their future development and the inclusion of new networks within the scope of the NBN Access Service from time to time. This will assist **nbn** in prioritising and directing its future investments in these networks in a manner consistent with achieving dynamic efficiency. The information provided via the PDF in regard to **nbn**'s future product development will assist customers with making complementary investments and undertaking related business activities.
216. The ACCC also recognised in its Final SAU Decision that the PDF will increase the prospect that **nbn** will be in a position to supply products that end-users want and are willing to pay for and thereby encourage the economically efficient use of and investment in the **nbn**TM network.⁷⁸
217. As observed by Ordoover and Shampine, incorporating the additional MTM technologies as part of the variation is consistent with **nbn** facing incentives to introduce new products that meet access seeker needs:⁷⁹

*As a vertically separated wholesale supplier, **nbn** has no incentive to withhold desired products to advantage its own (nonexistent) retail operations. That is, **nbn** still has incentives to offer new products, while consumers are protected by the ACCC's ability to intervene on proposed withdrawal of products, and by the requirement that, once introduced, prices for the new products also decline at specified rates over time in real terms.*

*Legitimate business interests of **nbn***

218. The variation to the **nbn** product set to include products available over the FTTB, FTTN and HFC networks is in **nbn**'s legitimate business interests because **nbn** obtains certainty with respect to its product construct (and the pricing construct applied to those products, as described further below).
219. By providing certainty about the product construct, **nbn** obtains a degree of certainty over the characteristics of supply of those products and the investment made in relation to those products.

⁷⁸ Final SAU Decision, p. 76.

⁷⁹ Ordoover and Shampine (2016), p. 20.



Such certainty also provides **nbn** with a firm base from which it is able to further develop its products over time.

Interests of persons who have rights to use the declared services

- 220. The interests of persons who have rights to use the FTTB, FTTN and HFC services include access seekers being able to compete for end-users on the basis of their relative merits. Terms and conditions that favour one or more service providers over others distort the competitive process and may harm the interests of access seekers or potential access seekers.
- 221. In its Final SAU Decision, the ACCC distinguished between the interests of access seekers to effectively compete to supply a service in a dependent market from the interests of access seekers being ensured of remaining profitable. It is the former interest which the ACCC had regard to in assessing the terms and conditions of the SAU.⁸⁰
- 222. The variation promotes the interests of all persons who have rights to use the FTTB, FTTN and HFC services by enabling them to compete and have certainty with respect to the product and price characteristics of products available over the FTTB, FTTN and HFC networks.
- 223. **nbn** submits that the availability of the NBN Offers available over the FTTB, FTTN and HFC networks unless withdrawn (subject to the SAU's withdrawal provisions, with a reserve power for the ACCC to object) promotes the interests of access seekers.

Safe and reliable operation of FTTB, FTTN and HFC networks

- 224. The variation as it relates to the changes to the service descriptions and supply-related terms and conditions is consistent with the operational and technical requirements necessary for the safe and reliable operation of the FTTB, FTTN and HFC networks and does not form barriers to effective access to those networks.

Counterfactual when assessing the LTIE under reasonableness

- 225. **nbn** submits that the changes to the non-price terms and conditions relating to the declared services and the Facilities Access Service in the SAU are likely to promote the LTIE as compared to the counterfactual scenario because the terms and conditions set out in the variation will provide an upfront and definite long-term commitment about the FTTB, FTTN and HFC services provided by **nbn**. This includes certainty in relation to the evolution of these services via commitments relating to product development and withdrawal over time, which are reinforced by the inclusions of NBN Offers that are subject to price controls.

⁸⁰ Final SAU Decision, p. 51.



6.4 Assessment of changes to price-related terms and conditions to incorporate FTTB, FTTN and HFC

226. This section sets out why the changes to price-related terms and conditions of the SAU and specified conduct to incorporate FTTB, FTTN and HFC are reasonable including why they promote the LTIE. In doing so, this section identifies the reasonableness criteria most relevant to assessing the changes to price-related terms and conditions to incorporate FTTB, FTTN and HFC.

Promotion of competition

227. The LTRCM which incorporates the ICRA mechanism will ensure that **nbn's** prices for FTTB, FTTN and HFC can, over time, recover no more than its prudently incurred costs (including an appropriate return on capital). This is consistent with the promotion of competition because **nbn's** prices for FTTB, FTTN and HFC will ultimately be set to recover its efficient costs of supply.
228. The added certainty of the CPI-1.5% Individual Price Increase limit will facilitate access seekers making investments in product and application development for the new MTM technologies that will, in turn, promote competition in the markets they serve by expanding the range of consumer choice and scope of competitive activity.

Economically efficient use of and investment in infrastructure

229. The SOE ensures that **nbn's** network design and network technology choices will establish economically efficient investment from the primary perspective of productive efficiency, although allocative and dynamic efficiency will also be relevant. As Ordovery and Shampine conclude:⁸¹

*The MTM and SAU can be expected to meet the policy goal of achieving the product speed and offering expectations in a cost-efficient manner. That is, **nbn's** incentives will be to minimize costs and transition time while investing in a prudent and efficient manner and meeting the service expectation imposed upon it.*

230. As noted in the Vertigan report⁸², progressive investments are often efficient because the costs of upgrade are not that great in comparison with the ongoing cost of a larger initial investment.
231. **nbn** is guided by the SOE in its decision making. As set out above key considerations in the SOE are minimising peak funding and achieving rapid rollout of a minimum level of service (at least 25Mbps to all premises and at least 50Mbps to 90% of fixed line premises as soon as possible). The factors identified in the SOE mean that **nbn** is keen to achieve a quick rollout, minimise peak funding, minimise risk in the overall rollout and avoid asset stranding.
232. **nbn** has given effect to that approach by using a two-step approach for the selection of the network type, which comprises the strategic modelling process and the strategic overlay process, as further described below:

⁸¹ Ordovery and Shampine (2016), pp. 12-13.

⁸² See recommendation 1(c), pp. 10, 50 and 58.



- (a) a strategic modelling process: the optimal network type for each geographic area is determined based on a linear programme model (**the MTM Optimiser**), which is based on a series of parameters that have been developed in line with SOE principles; and
- (b) a strategic overlay process: once the optimal network type has been determined by the MTM Optimiser, **nbn** then applies a strategic overlay process to review the outcome of the MTM Optimiser to address practical issues. **nbn's** methodology is based on a series of business rules that consider a range of relevant factors, including (amongst others) the minimisation of peak funding, the maximisation of cash flows and a long-term NPV consideration.

233. **nbn** submits that the variation to the price-related terms and conditions to incorporate FTTB, FTTN and HFC pricing will encourage the economically efficient use of and investment in infrastructure in a number of ways, which can be expressed in terms of the three standard components of efficiency (productive, allocative and dynamic).

Productive efficiency

234. First, the prudence commitments operating as part of the LTRCM in Module 1 and the incentive arrangements operating in Module 2 when applied to FTTB, FTTN and HFC will reinforce **nbn's** incentives to incur opex and capex in a manner that is consistent with achieving productive efficiency. This minimises costs associated with delivering the NBN Access Service, the Ancillary Services and the Facilities Access Services over the FTTB, FTTN and HFC networks.

235. This is supported by Ordovery and Shampine:⁸³

The SAU thus provides an appropriate mix of incentives to achieve an efficient level of costs associated with the construction and operation of the network and common and reasonable safeguards against overinvestment.

Allocative efficiency

236. Secondly, the changes to the price-related terms and conditions to incorporate initial MRPs for FTTB, FTTN and HFC services balance the competing needs of encouraging and maintaining high rates of take-up of the FTTB, FTTN and HFC services (through affordable AVC prices for entry and higher speed/functionality services) with high rates of usage of the FTTB, FTTN and HFC networks (through affordable CVC prices).

237. The variation to the price related terms and conditions of the SAU provides certainty as to the price terms and conditions on which FTTB, FTTN and HFC services will be offered, and this should encourage the growth of downstream services, as argued by Ordovery and Shampine:⁸⁴

⁸³ Ordovery and Shampine (2016), p. 18.

⁸⁴ Ordovery and Shampine (2016), pp. 19-20.



...nbn has incentives under the SAU – incentives that do not change with the MTM – to price in such a way as to ensure the growth of downstream services.

...This certainty stimulates downstream incentives for investment and take-up of nbn's services.

238. Encouraging high rates of take-up and usage, while recognising the need for long-term cost recovery is particularly important from an allocative efficiency perspective because **nbn** is subject to significant economies of scale and scope, willingness to pay for higher speed and functionality services is expected to grow over time and **nbn** will continue to face potential competition from some services delivered on other networks (such as 3G and 4G mobile and their successors) in respect of providing both voice and broadband services.
239. Thirdly, the ACCC in its Final SAU Decision recognised that prices that reflect prudently and efficiently incurred costs over the long-term are efficient from an allocative efficiency perspective and that such prices will encourage the efficient supply of FTTB, FTTN and HFC services by **nbn** and consumption by end-users.⁸⁵
240. The LTRCM which remains unchanged in the variation will ensure that in the long term **nbn's** prices for FTTB, FTTN and HFC services will be consistent with recovering the efficient cost of supply (including an appropriate return on capital). This will promote, consistent with achieving allocative efficiency, the efficient use of the FTTB, FTTN and HFC networks and complementary infrastructure (such as backhaul).
241. In this regard, Bishop and Officer have also confirmed that the rate of return approach in Module 1 and the cost of capital principles for determining a rate of return in Module 2 are reasonable when applied to the additional MTM technologies (FTTB, FTTN and HFC).

Dynamic efficiency

242. Fourthly, the LTRCM will encourage efficient ongoing investment in the FTTB, FTTN and HFC networks by **nbn** in order to maintain and extend those networks because **nbn** will be provided with an appropriate opportunity to recover its costs of supply over time (inclusive of an appropriate return on capital).
243. The ACCC also agreed in its Final SAU Decision that allowing **nbn** to earn an appropriate commercial return on its investment would encourage dynamic efficiency, as **nbn** would not be precluded from making timely investments to respond, on an ongoing basis, to changes in consumers' preferences.⁸⁶
244. Fifthly, the specific pricing commitments (the NBN Offers, Other Charges, Individual Price Increase Limit and related commitments) in the variation, together with the existing LTRCM when applied to the FTTB, FTTN and HFC services and networks, will provide certainty to access seekers. This should

⁸⁵ Final SAU Decision, p. 95.

⁸⁶ Final SAU Decision, p. 95.



enable them to develop and implement medium to long-term business models that are predicated on **nbn** based supply of these services over these networks. Such business models should provide an appropriate rationale, consistent with achieving dynamic efficiency, for a range of infrastructure investment:

- (a) by the access seeker in order to provide an end-to-end service based on the access service provided by **nbn** over the FTTB, FTTN and HFC networks;
- (b) by **nbn** in undertaking additional future investment in these networks to support the new applications that access seekers may have factored into their business models; and
- (c) by investors in complementary infrastructure (such as backhaul).

Ordovery and Shampine also consider that the varied SAU will encourage complementary downstream investment.⁸⁷

245. In relation to the specific matters that the ACCC must have regard to under s. 152AB(6) in determining the extent to which the terms and conditions of the variation are likely to result in the achievement of the objective of encouraging the economically efficient use of, and economically efficient investment in, infrastructure:

- (a) *whether it is, or likely to become, technically feasible for the services to be supplied and charged for:* **nbn** is already supplying and billing for FTTB and FTTN products. HFC services are expected to be made available in June 2016. Furthermore, service providers are already providing end-users with **nbn**-based FTTB and FTTN services. The ACCC noted in its Final SAU Decision that the SAU neither promotes nor detracts from the technical feasibility for the services to be supplied and charged for⁸⁸;
- (b) *the legitimate commercial interests of the supplier or suppliers of the services, including the ability of the supplier or suppliers to exploit economies of scale and scope:* the LTRCM will provide **nbn** with an opportunity to recover its prudently incurred costs in connection with the FTTB, FTTN and HFC networks (inclusive of an appropriate return on capital), and the overarching pricing strategy reflected in the price-related terms and conditions accounts for the economies of scale and scope associated with the new MTM services. This is discussed above in relation to both allocative and dynamic efficiency; and
- (c) *the incentives for investment in the infrastructure by which the FTTB, FTTN and HFC services are supplied and any other infrastructure by which these services are, or are likely to become, capable of being supplied:* as discussed above in relation to dynamic

⁸⁷ Ordovery and Shampine (2016), p. 20.

⁸⁸ Final SAU Decision, p. 48.



efficiency, the SAU will encourage efficient ongoing investment by **nbn** in order to maintain and extend the FTTB, FTTN and HFC networks.

Legitimate business interests of nbn

246. The variation includes changes to the price-related terms and conditions that apply to the FTTB, FTTN and HFC services. These are designed to be consistent with **nbn**'s legitimate business interests in that they provide:
- (a) the opportunity for **nbn** to recover its prudently incurred costs over the long term in respect of the FTTB, FTTN and HFC services (inclusive of an appropriate return on capital) – this is a result of the LTRCM, which incorporates the ICRA mechanism for carrying forward initially unrecovered costs for recovery in later years, inclusive of a rate of return (determined via the WACC approaches as specified in Modules 1 and 2); and
 - (b) the limited pricing flexibility that **nbn** needs in order to have the opportunity to recover its costs having regard to the need to account for evolving technology, applications and demand over the term of the SAU – this is a result of the NBN Offers and Other Charges applicable to the FTTB, FTTN and HFC services (including the CPI-1.5% Individual Price Increase Limit);
 - (c) for a correction to the CIF formula as described in section 3.5 above. The revised CIF formula corrects a prior error in the calculation and, with the correction, the CIF formula now works to correctly calculate the CIF in the LTRCM.

Interests of persons who have the rights to use the declared services

247. The variation promotes the interests of access seekers on a non-discriminatory basis by providing certainty as to:
- (a) the starting prices for a broad range of FTTB, FTTN and HFC services (NBN Offers and Other Charges);
 - (b) the maximum increases in **nbn**'s prices for these services over time (the CPI-1.5% Individual Price Increase Limit);
 - (c) the ACCC's reserve powers in regard to pricing for new NBN Offers and Other Charges and price rebalancing; and
 - (d) the long-term revenue cap that will constrain, in any event, **nbn** prices for these services to recover no more (on an expected NPV basis) than **nbn**'s prudently incurred costs, including an appropriate return on capital (the LTRCM).



Direct costs of providing the service

248. As a wholesale-only provider specifically established by the Government and required to provide access at the lowest practical levels in the network stack, **nbn** submits that its direct costs of providing access to the NBN Access Service and the Ancillary Services over the FTTB, FTTN and HFC networks, together with supplying the Facilities Access Service in connection with the satisfaction of **nbn**'s interconnection obligations, comprise all of the costs captured by the LTRCM over the course of the SAU (rather than just those in any one year).
249. Relevantly to the variation and the FTTB, FTTN and HFC networks, the LTRCM:
- (a) includes the operating and capital costs incurred in connection with the FTTB, FTTN and HFC networks on an actual basis during the Initial Regulatory Period (subject to meeting certain prudency requirements) and on a forecast basis during the Subsequent Regulatory Period;
 - (b) incorporates network costs relating to the construction, operation and maintenance of the FTTB, FTTN and HFC networks as well as non-network costs, relating to activities such as product development and sales, information technology, finance and administration; and
 - (c) provides a mechanism (the ICRA) for carrying forward initially unrecovered costs at an appropriate rate of return for recovery in later years.
250. Bishop and Officer have also confirmed, in respect of the rate of return in Module 1:⁸⁹

It is reasonable to set a WACC for the new MTM technologies and associated services based on the long-term government bond rate plus a real margin, varying annually with the long-term bond rate...

...using a bottom-up approach (cost of debt and cost of equity), an appropriate mark-up over the risk free rate for NBN's WACC would be around 400 basis points...the proposed 350 basis points would be in a reasonable confidence interval around this estimate...

...Based on a review of other recent regulatory decisions...the proposed WACC margin of 350 basis points is within the range of a selection of regulatory determinations made between April 2015 and October 2015 by the AER and ACCC. The range of 17 (12) recent decisions is 288bp to 420bp (290bp to 420bp) with a simple average of 347bp (333bp). A wider set of 29 (24) determinations incorporating decisions by other regulators over a longer period from June 2014 to October 2015 has a range of 288bp to 420bp (290bp to 420bp) with the simple average of 350bp (343bp).⁹⁰

And in respect of Module 2:⁹¹

...the cost of capital principles for the Subsequent Regulatory Period of the SAU are appropriate principles for recognising a required return on investment to incorporate in a building block approach as contained in the SAU. These principles are quite general and

⁸⁹ Officer and Bishop, p. 5.

⁹⁰ The figures in parentheses exclude 5 decisions that the Tribunal has referred back to the AER for review. See the full expert report for further explanation.

⁹¹ Officer and Bishop, p. 6.



are unaffected by the variations to capture the new technologies, associated new products and the Amended Agreements.

251. The ACCC noted in its Final SAU Decision that direct costs are those necessarily incurred by the provision of access, not profits that may be lost in a dependent market as a result of the provision of access.⁹² The ACCC therefore concluded that this consideration is not relevant to wholesale-only access providers such as **nbn** who do not sell services in dependent markets.

Safety and reliability of the operation of the FTTB, FTTN and HFC networks

252. The variation as it relates to changes to the price-related terms and conditions is designed to ensure that **nbn** has the opportunity to recover its prudently incurred costs (inclusive of an appropriate return on capital), enabling **nbn** to maintain the safety and reliability of the operation of the FTTB, FTTN and HFC networks.
253. The ACCC, in its Final SAU Decision, noted that an access provider will have a sufficient incentive to ensure the safe and reliable operation of carriage services, telecommunications networks or facilities where it receives sufficient revenue to cover the costs of the operational and technical requirements necessary for ensuring the safe and reliable operation of carriage services.⁹³ **nbn's** incentives apply equally to its investment in the FTTB, FTTN and HFC networks.

Economically efficient operation

254. The ACCC, in its Final SAU Decision, noted that the economically efficient operation of a carriage service, telecommunications network or facility will not be precluded where the carrier or carriage service provider has the opportunity to recover the efficient costs of providing services (and no more).⁹⁴
255. **nbn** submits that the terms and conditions set out in the variation will lead to the economically efficient operation of the FTTB, FTTN and HFC networks and also of networks operated by other infrastructure owners (such as backhaul providers). The reasons for this are the same as those discussed earlier with regards to encouraging economically efficient investment in and use of network infrastructure.

Counterfactual when assessing the LTIE under reasonableness

256. In terms of whether the price terms and conditions in the variation will promote the LTIE, in the counterfactual in which the current scope of the SAU is maintained without any variation:
- (a) the economically efficient use of and investment in relevant infrastructure is likely to be encouraged to a lesser extent because both access seekers and investors in infrastructure that supports the FTTB, FTTN and HFC networks (such as competitive backhaul) would not

⁹² Final SAU decision, p. 51.

⁹³ Final SAU Decision, p. 51.

⁹⁴ Final SAU Decision, p. 51.



receive as much certainty upfront, nor in so definite a manner, as is afforded under the variation, about how **nbn**'s pricing of FTTB, FTTN and HFC services would evolve over time.

- (b) **nbn** will have less long-term regulatory certainty as to how the new MTM technologies will be regulated by the ACCC and this may adversely impact on efficient investment levels (for both **nbn** and access seekers). For **nbn** to invest efficiently, it needs to know that it will be provided an opportunity to recover its efficient costs (including a return on investment).

6.5 Assessment of conduct-related changes

257. Section 6.1 identified two categories of conduct for the ACCC to assess under s. 152CBD(2)(ca) (which relates to conduct under s. 152CBA(3B)) and (cb) (which relates to conduct under s. 152CBA(3C)) respectively.⁹⁵
258. This section sets out why the changes to the rollout provisions promote the LTIE, and why the changes to the dispute resolution provisions are reasonable including why they promote the LTIE.
- Expanding and clarifying the rollout information provisions***
259. The change to expand and clarify the rollout information commitments in the SAU will promote the LTIE.
260. The change to the rollout information commitments to widen their scope to include FTTN, FTTB and HFC networks reduces information asymmetry and ensures access seekers are kept informed about the rollout of the **nbn**TM network in a transparent and non-discriminatory manner, thereby enabling access seekers to develop product and marketing plans and strategies, and by doing so promoting competition and innovation.

Amending and clarifying dispute resolution provisions

261. The dispute resolution provisions of the SAU enable the resolution of disputes that may arise between **nbn** and customers. The changes to the dispute resolution provisions are reasonable, including in the LTIE, because they facilitate a more speedy and efficient resolution of disputes and operate in a transparent and non-discriminatory manner.
262. The Dispute Management arrangements currently enable **nbn** to appoint a new Resolution Advisor under specified circumstances, as noted in clause 5.3 of Annexure 1 to Schedule 1H. **nbn** has amended this clause to enable **nbn** to appoint an *additional* Resolution Advisor during the term of the existing Resolution Advisor if it appears that additional support is required. This may also provide for appropriate transition arrangements if the term of one Resolution Advisor is coming to an end and may not be renewed.

⁹⁵ See paragraphs 161(b) and (c) of section 6.1 above.



263. **nbn** notes that the approved Resolution Advisor terms of appointment establish the role of the additional Resolution Advisor, and the SAU already contemplates multiple Resolution Advisors (see clause 6(a)(iii) of Annexure 1 to Schedule 1H).
264. **nbn** may wish to cater for the appointment of an additional Resolution Advisor during the term of the primary Resolution Advisor, rather than require all Resolution Advisors to be appointed at the same time.
265. **nbn** has inserted a new clause 1.1(f) in Annexure 1 to Schedule 1H and an associated new definition in clause 9.1, to clarify that the Resolution Advisor may be a body corporate and may delegate its functions to its officers or employees provided that it nominates at least one 'Nominated Person' that remains responsible for overall compliance. This reflects the existing Resolution Advisor arrangements with Endispute.
266. **nbn** considers that this clarifies the drafting to reflect the existing Resolution Advisor arrangements. It retains the requirement that a nominated person has overall responsibility for the compliance and decision-making functions of the Resolution Advisor, but permits administrative functions of the Resolution Advisor to be undertaken by staff.
267. It is intended that an additional Resolution Advisor could be a second nominated person within the same corporate entity, or an individual or corporate entity unrelated to the other Resolution Advisor.
268. **nbn** has also included a new definition for 'Nominated Person' in clause 9.1 of Annexure 1 to Schedule 1H.
269. The SAU sets out a process for the selection and approval of Pool Members (clause 2.1(b) of Annexure 1 to Schedule 1H). On 8 May 2014, the ACCC approved the persons nominated by **nbn** for appointment as Pool Members. However, currently under the SAU once the initial Pool has been established, there is no process for adding new Pool Members.
270. **nbn** has amended this clause to enable the appointment of new Pool Members over time (i.e. after the establishment of the initial Pool). This change will ensure that the Pool can be maintained over time to achieve a beneficial balance of skills, experience and expertise, particularly in light of any resignations from the Pool during the term of appointment.
271. On 3 April 2014, the ACCC approved the Resolution Advisor terms of appointment. In accordance with clause 3.1(c) of the approved Resolution Advisor terms of appointment, the Resolution Advisor may, in accordance with the Dispute Management Rules in the SAU, select for appointment to the Panel a person that they consider to be eligible and sufficiently skilled and experienced, but who is not a member of the Pool and notify the ACCC and **nbn** of such selection.
272. **nbn** has inserted a new clause 3.2 into the Dispute Management Rules, to reflect what is currently provided for under clause 3.1(c) of the approved Resolution Advisor terms of appointment. This



enables the efficient appointment of a suitably qualified Panel Member for a particular dispute where that person is not already a Pool Member.

273. If the person has skills and experience that are appropriate for the Pool, the appointment of new Pool Members from time to time may be initiated, but will not delay the arbitrator's empanelment for the particular dispute.



Appendix A Categorisation of changes in the SAU variation

Table A.1: Changes – Module 0 (Main body and Attachments)

SAU part	Change	Nature of changes	Provisions changed	ACCC categorisation and assessment in Final SAU Decision
Main body	Y	Minor updates	Background	<ul style="list-style-type: none"> N/A – not specifically categorised and no statutory test specifically referenced in Final SAU Decision
		Minor updates	Variation, withdrawal and extension of Special Access Undertaking (clause 7.1(b) added)	<ul style="list-style-type: none"> Categorisation of clause - section 4.4.5, p.56, fn 180 (Other provisions in the SAU) Assessment <ul style="list-style-type: none"> N/A – no statutory test specifically referenced in Final SAU Decision
Attachment A – Service Descriptions	Y	Update for MTM – e.g. clarification of UNI locations	NBN Access Service (clause 2(a) changed; clause 2(c) deleted)	<ul style="list-style-type: none"> Categorisation of clause – section 4.4.5, p.56, fn. 184 (Other provisions in the SAU) Assessment <ul style="list-style-type: none"> section 6.1, section 6.1.1 (pp.69-72 - Reasonableness including the LTIE) section 6.1, pp.69-70 (Terms and conditions of supply - Consistent with category B SAOs, and Reasonableness)



SAU part	Change	Nature of changes	Provisions changed	ACCC categorisation and assessment in Final SAU Decision
Attachment B – Facilities Access Service	-	No changes	No changes	No changes
Attachment C – Dictionary	Y	Consequential changes – e.g. include new definitions / amend existing definitions based on WBA2 (final version for FTTB and FTTN and draft version for HFC)	Defined terms added, amended, deleted as necessary to update for MTM	<ul style="list-style-type: none"> • Categorisation of clause - section 4.4.5, p.56, fn 183 (Other provisions in SAU) • Assessment <ul style="list-style-type: none"> ◦ N/A – no statutory test specifically referenced in Final SAU Decision
Attachment D – Initial Products	Y	Include initial products for MTM – same as existing approach in the SAU	Provisions added for initial products for NBN Co FTTB Network, NBN Co FTTN Network; NBN Co HFC Network	<ul style="list-style-type: none"> • Categorisation of clause - N/A in Final SAU Decision as the changes to Attachment D are in relation to the new MTM technologies, however note section 4.4.5, p.56, fn 184 (Other provisions in the SAU) • Assessment <ul style="list-style-type: none"> ◦ N/A – no statutory test specifically referenced in Final SAU Decision

**Table A.2: Changes – Module 1 Initial Regulatory Period (applies to 30 June 2023)**

Schedule	Change	Nature of changes	Provisions changed	ACCC categorisation and assessment in Final SAU Decision
Schedule 1A – Implementation	Y	Update for MTM – e.g. clarify the UNI locations for each network type	Product Components of NBN Access Service (clause 1A.3)	<ul style="list-style-type: none"> • Categorisation of clause - section 4.4.5, p.56, fn 184 (Other provisions in SAU) • Assessment <ul style="list-style-type: none"> ◦ section 6.1.1, pp.70-72 (Reasonableness including the LTIE) ◦ section 6.1.1, pp.71-72 (Terms and conditions of supply - Consistent with Category B SAOs and Reasonableness)
			Terms and conditions relating to supply of Product Components (clause 1A.4)	<ul style="list-style-type: none"> • Categorisation of clause – section 4.4.1, p.52, fn 134 (Terms and conditions relating to compliance with Category B SAOs and Reasonableness) • Assessment <ul style="list-style-type: none"> ◦ section 6.1.1, p.71 (Reasonableness including the LTIE) ◦ section 6.1.1, pp.71-72 (Terms and conditions of supply - Consistent with category B SAOs and Reasonableness)
			Types of Ancillary Services (clause 1A.6)	<ul style="list-style-type: none"> • Categorisation of clause - section 4.4.5, p.56, fn 184 (Other provisions in SAU) • Assessment <ul style="list-style-type: none"> ◦ service description – section 6.1.2, p.72 (Reasonableness including the LTIE)



Schedule	Change	Nature of changes	Provisions changed	ACCC categorisation and assessment in Final SAU Decision
Schedule 1B – Term of any SFAA and consultation on changes to any SFAA	-	No changes	No changes	No changes
Schedule 1C – NBN Offers and Other Charges	Y	Include NBN Offers and Other Charges in respect of the FTTB, FTTN and HFC networks	Status of NBN Offers (clause 1C.1.2)	<ul style="list-style-type: none"> • Categorisation of clause – section 4.4.1, p.52, fn 135 (Terms and conditions relating to compliance with Category B SAOs and Reasonableness) • Assessment <ul style="list-style-type: none"> ◦ section 7 intro, section 7.1, p.85 (Reasonableness including the LTIE) ◦ section 7 intro, section 7.1 to 7.2, pp. 85 to 88 (Terms and conditions of supply - Consistent with Category B SAOs and Reasonableness)
			NBN Offers (clause 1C.2)	<ul style="list-style-type: none"> • Categorisation of clause – section 4.4.1, p.52, fn 135 (Terms and conditions relating to compliance with Category B SAOs and Reasonableness) • Assessment <ul style="list-style-type: none"> ◦ section 7 intro, section 7.1, p.85 (Reasonableness including the LTIE) ◦ section 7 intro, section 7.1 to 7.2, pp. 85 to 88 (Terms and conditions of supply - Consistent with Category B SAO and Reasonableness)



Schedule	Change	Nature of changes	Provisions changed	ACCC categorisation and assessment in Final SAU Decision
			Maximum Regulated Price for certain NBN Offers (clause 1C.3)	<ul style="list-style-type: none"> • Categorisation of clause – section 4.4.1, p.52, fn 136 (Terms and conditions relating to compliance with Category B SAOs and Reasonableness) • Assessment <ul style="list-style-type: none"> ◦ section 7 intro, section 7.1, p.85 (Reasonableness including the LTIE) ◦ section 7 intro, section 7.1 to 7.2, pp.85 to 88 (Terms and conditions of supply - Consistent with Category B SAOs and Reasonableness)
			Maximum Regulated Prices on introduction (clause 1C.4)	<ul style="list-style-type: none"> • Categorisation of clause – section 4.4.1, p.52, fn 136 (Terms and conditions relating to compliance with Category B SAOs and Reasonableness) • Assessment <ul style="list-style-type: none"> ◦ section 7 intro, section 7.1, p.85 (Reasonableness including the LTIE) ◦ section 7 intro, section 7.1 to 7.2, pp. 85 to 88 (Terms and conditions of supply - Consistent with Category B SAOs and Reasonableness)
			Standard NBN Co FTTB Access Service Installation (new Annexure 3 to Schedule 1C)	<ul style="list-style-type: none"> • Categorisation of clause – N/A in Final SAU Decision as this is a new annexure for the technology, however note section 4.4.1, p.52, fn 136 (Terms and conditions relating to compliance with Category B SAOs and Reasonableness)



Schedule	Change	Nature of changes	Provisions changed	ACCC categorisation and assessment in Final SAU Decision
				<ul style="list-style-type: none"> Assessment <ul style="list-style-type: none"> section 7 intro, section 7.1, p.85 (Reasonableness including the LTIE) section 7 intro, section 7.1 to 7.2, pp. 85 to 88 (Terms and conditions of supply - Consistent with Category B SAOs and Reasonableness)
			Standard NBN Co FTTN Access Service Installation (new Annexure 4 to Schedule 1C)	<ul style="list-style-type: none"> As above
			Standard NBN Co HFC Access Service Installation (new Annexure 5 to Schedule 1C)	<ul style="list-style-type: none"> As above
Schedule 1D – Regulatory Asset Base	-	No changes	No changes	No changes
Schedule 1E – LTRCM	Y	Minor correction to one of the LTRCM formulae	LTRCM Determination (clause 1E.1.2)	<ul style="list-style-type: none"> Categorisation of clause – section 4.4.4, p.55, fn 168 (ACCC functions and powers) Assessment <ul style="list-style-type: none"> section 8, pp.93-94 (Reasonableness including LTIE) section 8, p.94 (Terms and conditions - consistent with Category B SAOs, and Reasonableness)



Schedule	Change	Nature of changes	Provisions changed	ACCC categorisation and assessment in Final SAU Decision
		Minor correction to one of the LTRCM formulae	Real Values (clause 1E.9.4)	<ul style="list-style-type: none"> Categorisation of clause – section 4.4.1, p.52, fn 139 (Terms and conditions relating to compliance with Category B SAOs and Reasonableness) Assessment <ul style="list-style-type: none"> section 8, pp.93-94 (Reasonableness including LTIE) section 8, p.94 (Terms and conditions - consistent with Category B SAOs, and Reasonableness)
Schedule 1F – Regulatory Information	-	No changes	No changes	No changes
Schedule 1G – Maximum Regulated Price Review Mechanisms	-	No changes	No changes	No changes
Schedule 1H – Non-price terms and conditions	Y	Update to scope of POI rollout progress information provisions to include information on the remaining Rack Space available at each POI	Rollout progress information (clause 1H.2)	<ul style="list-style-type: none"> Categorisation of clause – section 4.4.3, p.54, fn 157 (Conduct relating to additional activities) Assessment <ul style="list-style-type: none"> LTIE (section, 9.1.2 pp. 104-105 fn 399)
		Update to wording and scope of Rollout progress information provisions to reflect developments in nbn 's approach to providing such information	POI rollout progress (clause 1H.3)	<ul style="list-style-type: none"> Categorisation of clause – section 4.4.3, p.54, fn 157 (Conduct relating to additional activities) Assessment <ul style="list-style-type: none"> LTIE (section 9.1.2, pp. 104-105 fn 399)



Schedule	Change	Nature of changes	Provisions changed	ACCC categorisation and assessment in Final SAU Decision
		Minor updates to Dispute Management provisions based on experience establishing existing arrangements	Dispute Resolution (Annexure 1 to Schedule 1H) <ul style="list-style-type: none"> • Appointment of Resolution Advisor (clause 1 of Part A) • Pool (clause 2 of Part A) • Panel (clause 3 of Part A) • Termination of appointment of Resolution Advisor or Pool Member (clause 5 of Part B) • Definitions and Interpretations (clause 9) • Resolution Advisor Nomination Notice (Appendix 1) 	<ul style="list-style-type: none"> • Categorisation of clauses – section 4.4.2, p.53, fn 147 (Conduct relating to access). See also section 4.4.4, p.55, fn 172 to 176 (ACCC functions and powers) • Assessment <ul style="list-style-type: none"> ◦ LTIE and Reasonableness (section 9.2, p.106)
Schedule 1I – Product Development and Withdrawal	-	No changes	No changes	No changes

**Table A.3: Changes – Module 2 Subsequent Regulatory Period (applies from 1 July 2023 to 30 June 2040)**

Schedule	Change	Nature of change	Provisions changed	ACCC categorisation and assessment in Final SAU Decision
Schedule 2A - Implementation	Y	Corresponding change to be consistent with Schedule 1A	Co-existence Period (clause 2A.4) - see above re 1A.4	<ul style="list-style-type: none"> See above re 1A.4
		Corresponding change to be consistent with Schedule 1A	Remediation (clause 2A.5) - see above re 1A.4	<ul style="list-style-type: none"> See above re 1A.4
Schedule 2B – Pricing commitments	-	Minor update to wording	Supply of NBN Offers (clause 2B.1.2)	<ul style="list-style-type: none"> Categorisation of clause – section 4.4.1, p.52, fn 135 (Terms and conditions relating to compliance with Category B SAOs and Reasonableness) Assessment <ul style="list-style-type: none"> section 7 intro, p.85 (Consistency with category B SAOs and Reasonableness including the LTIE)
Schedule 2C – LTRCM and RAB	Y	Consistent with Schedule 1E - corresponding change	Calculation of Cumulative Inflation Factor (clause 2C.1.4)	<ul style="list-style-type: none"> Categorisation of clause – section 4.4.1, p.52, fn 142 (Terms and conditions relating to compliance with Category B SAOs and Reasonableness) Assessment <ul style="list-style-type: none"> section 8, pp. 93-94 (Reasonableness including the LTIE) section 8, p.94 (consistent with Category B SAOs and Reasonableness)



Schedule	Change	Nature of change	Provisions changed	ACCC categorisation and assessment in Final SAU Decision
Schedule 2D – Product Development and Withdrawal	-	No changes	No changes	No changes
Schedule 2E – Maximum Regulated Price Review Mechanisms	-	No changes	No changes	No changes



Appendix B List of changes included in the SAU variation

This Appendix lists all of the changes included in the variation to the SAU and identifies, where relevant, the corresponding Wholesale Broadband Agreement (e.g. WBA2) documents from which the relevant drafting changes have been drawn and how that content has been translated to the SAU. This Appendix is not intended to explain the existing drafting of the SAU or how that existing drafting relates to the relevant WBA documents. For example, in relation to the definition of 'NBN-Related Networks' in Attachment C of the SAU, this Appendix only identifies what has changed. That is, it sets out that the existing SAU definition has been modified to include 'Other NBN Co Networks' and to exclude any 'Central Splitter' and that the source document for this change is the WBA2 Dictionary.

In translating content from the WBA documents to the SAU, **nbn** has only adopted those changes that are strictly necessary to reflect the MTM developments. For example, in translating definitions from the WBA2 Dictionary to the Attachment C (Dictionary) of the SAU, **nbn** has only made changes to the SAU definitions where this is necessary to reflect the MTM developments – all other existing drafting in the SAU has been left unchanged.

Broadly, the drafting changes to the SAU and the translations from the relevant WBA documents can be grouped into the following categories:

- SAU drafting mirrors relevant WBA document – in some instances, the definitions in Attachment C of the SAU mirror the respective definitions in the WBA2 Dictionary.
- WBA terminology modified to reflect SAU terminology – where appropriate, the drafting language in the WBA document has been modified to reflect SAU language. For example, WBA2 makes references to the term 'NEBS' (NBN Co Ethernet Bitstream Service), which is not used in the SAU. References to the term 'NEBS' have been replaced with SAU terminology (e.g. NBN Co FTTB Access Service or NBN Co FTTN Access Service).
- WBA drafting simplified – certain WBA content applies at a level of detail that is too granular for the SAU or was negotiated in a specific context that is not appropriate for the longer timeframes of the SAU (e.g. the WBA service classes are not used in the SAU). In other cases, the SAU drafting has been simplified to reduce the scope of definitional terms translated from the WBA documents – e.g. WBA2 Dictionary definitions have been modified to replace the term 'NBN Co Network Boundary' (a defined term in the WBA) with the words 'between the UNI and NNI' in the SAU.
- New terminology introduced to facilitate the operation of relevant clauses in the SAU – for example, the term 'First SAU Variation First Financial Year' has been introduced to the SAU to facilitate the application of additional 'Other Charges' in clause 1C.4.2 of the SAU.
- Removal of references to external documents – where possible, for drafting clarity, **nbn** has sought to limit references to external documents in the variation (e.g. Telstra Migration Plan, NBN Co Operations Manual).



- Corrections/updates to some WBA2 Dictionary definitions – **nbn** notes that in some instances, the changes to the SAU reflect a correction or update to the current WBA2 Dictionary. Where this is the case, **nbn** notes that it will propose that the next version of the WBA (WBA3) be updated to align with the SAU variation and **nbn** does not anticipate this giving rise to any issues in the meantime.



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
Cover page		
Title page and page 2 of the SAU (inside cover) – title of SAU modified	N/A	Drafting change to reflect that the SAU has been varied to include changes made up to and including the 'First SAU Variation Date' (as defined in Attachment C of the SAU).
Special Access Undertaking		
Main body – clause modified	N/A	Drafting change introduced to reflect that the SAU has been varied.
Background		
Clause I – clause modified	N/A	Drafting change to reflect the Government's policy in relation to wholesale price caps. ⁹⁷
Clause J – new clause inserted	N/A	Drafting change introduced to reflect that the SAU has been varied.
Clause 7.1(b) (Variation, withdrawal and extension of this Special Access Undertaking) – new clause inserted	N/A	Drafting change to reflect when the variation will become operational.
Attachment A (Service Description)		
Clause 2(a) (NBN Access Service) – clause	WBA2 Product Description – version 7	The revised SAU drafting references the UNI or NNI used to

⁹⁶ Note – the clause references used in this Appendix refer to the new/ updated numbering in the varied SAU.

⁹⁷ Australian Government, *Telecommunications Regulatory and Structural Reform*, December 2014, pp. 5-6.



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
modified	April 2016, Introduction, Clause 12.2 (NEBS boundaries)	<p>serve the relevant premises rather than the relevant NTD, which is the approach that is now applied in the latest WBA2 NEBS Product Description.</p> <p>In addition, a note has been added to the description of the NBN Access Service as a "Layer 2 service", to clarify that, where an active or powered NTD is not supplied by nbn as part of the NBN Access Service, an nbn compliant device will need to be connected to the NBN Access Service in respect of the relevant premises.</p>
Clause 2(c) (NBN Access Service) – clause deleted	WBA2 Product Description – version 7 April 2016, Clause 12.2 (NEBS boundaries)	Clause deleted in the SAU, as it will only have limited utility given the changes in relation to the location of the UNI. The operational details associated with the network boundary points are addressed in the WBA2 Product Description.
Attachment C (Dictionary)		
Access Component Modification – definition modified	N/A	SAU definition modified to change the reference from 'Enhanced-12 Fault Service Level' to 'Enhanced Fault Service Level' in accordance with the new terminology used in the SAU.
Access Component Reactivation – definition modified	WBA2 Dictionary – version 23 May 2016	Reference to NBN Co Copper Pair added in accordance with WBA2.
Access Seeker Active Equipment – definition modified	WBA2 Dictionary – version 23 May 2016 (see 'Customer Active Equipment') and section 6.3(d) of the WBA2 Service Description for the Facilities Access Service – version December 2013	SAU definition modified to include the condition in section 6.3(d) of the Service Description for the Facilities Access Service.



SAU clauses that have changed / new provisions introduced⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
Access Seeker Equipment – new definition inserted	WBA2 Dictionary – version 23 May 2016 (see 'Customer Equipment')	WBA2 definition modified to replace some references to the term 'the Customer' (WBA terminology) with 'an Access Seeker' (SAU terminology).
Access Seeker Installed NBN Co Equipment – new definition inserted	WBA (HFC) Dictionary – Final Release May 2016 (see Customer Installed NBN Co Equipment)	WBA (HFC) Dictionary definition modified to incorporate the characteristics of clause C7.2(a) of the WBA2 Head Terms directly into the SAU definition, to replace references to NEBS (WBA terminology) with 'NBN Co HFC Access Service' and to replace references to 'Customer' (WBA terminology) with 'Access Seeker' (SAU terminology)
Central Splitter – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition modified to replace the term 'NBN Co Network Boundary' (WBA terminology) with the words 'between the UNI and NNI'. Reference to the term 'Customer' (WBA terminology) has also been replaced with 'Access Seeker' (SAU terminology).
Central Splitter Fault – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
Co-existence Period – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition modified to replace reference to the term 'NEBS' (WBA terminology) with the words 'NBN Co FTTB Access Service' and 'NBN Co FTTN Access Service' (SAU terminology).
Combiner – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition modified to replace reference to the term 'NEBS' (WBA terminology) with the words 'NBN Co FTTB Access Service' and 'NBN Co FTTN Access Service' (SAU terminology).
Common MDU Site Equipment – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition modified to replace reference to the term 'the Customer' (WBA terminology) with 'an Access Seeker' (SAU terminology).



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
Common Property – definition modified	WBA2 Dictionary– version 23 May 2016	SAU definition modified to include the word ‘, including’, to reflect the definition in the WBA2 Dictionary.
Connecting Equipment –definition modified	WBA2 Dictionary – version 23 May 2016	SAU definition modified to extend to the FTTB, FTTN and HFC networks. The WBA2 definition for Connecting Equipment (in respect of the FTTB, FTTN and HFC networks) has been reflected in Clause 4 of Annexures 3-5 of Schedule 1C of the SAU.
Copper Connecting Cable – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition modified to replace reference to the term ‘NEBS’ (WBA terminology) with the words ‘NBN Co FTTN Access Service’ (SAU terminology).
Customer Side MDF – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
Downstream Customer Equipment – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
Downstream Power Back-off – new definition inserted	WBA2 Dictionary – version 23 May 2016	Reference to the term ‘User Network Interface’ replaced with ‘UNI’ in the SAU.
Drop Fibre – definition modified	WBA2 Dictionary – version 23 May 2016	SAU definition modified to include the additional words ‘in relation to the NBN Co Fibre Network’ – to specify that the term ‘Drop Fibre’, as described in the SAU, is only in relation to the NBN Co Fibre Network.
DSLAM – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
End User Equipment – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
End User HFC-NTD Installation – new	WBA (HFC) Dictionary – Final Release	WBA (HFC) Dictionary definition modified to replace references to ‘HFC-NTD Connecting Equipment’ (WBA terminology) with



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
definition inserted	May 2016	the specific equipment within this category, to remove references to Service Classes (instead, the characteristics of Service Class 23 have been incorporated directly into the SAU definition) and to replace references to 'Customer' (WBA terminology) with 'Access Seeker' (SAU terminology).
End User Installed NBN Co Equipment - new definition inserted	WBA (HFC) Dictionary - Final Release May 2016	WBA (HFC) Dictionary definition modified to incorporate the characteristics of clause C7.2(a) of the WBA2 Head Terms directly into the SAU definition and to replace references to NEBS (WBA terminology) with 'NBN Co HFC Access Service' (SAU terminology)
Enhanced-12 Fault Service Level - definition modified	WBA2 Product Description - version 7 April 2016, Clause 6(a)	SAU definition modified to replace reference to specific network technology ('NBN Co Fibre Network') with the broader term 'NBN Co Network,' to reflect Clause 6(a) of the WBA2 Product Description.
Enhanced Fault Service Levels Offer - new definition inserted	N/A	New SAU definition introduced to refer to the 'NBN Offers', as set out in Schedule 1C of the SAU (Clause 1C.2.16).
First SAU Variation Date - new definition inserted	N/A	New SAU definition introduced to facilitate, for the purposes of the variation, the operation of nbn's supply commitments (Clause 1C.1.2 of the SAU), the operation of Maximum Regulated Prices (Clause 1C.3), and the operation of the amendment to Cumulative Inflation Factor (Clause 1E.1.2).
First SAU Variation First Financial Year - new definition inserted	N/A	New SAU definition introduced to facilitate, for the purposes of the variation, the application of Other Charges set out in Clause 1C.4.2(b) of the SAU.
FTTB/FTTN Subsequent Installation - new definition inserted	WBA2 Dictionary - version 23 May 2016	WBA2 definition modified to remove references to Service Classes.



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
Gaining Customer – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition modified to replace reference to the term 'Service Transfer Order' (WBA2 terminology) with 'Service Transfer' (SAU terminology).
HFC Connecting Cable – new definition inserted	WBA (HFC) Dictionary – Final Release May 2016	SAU definition reflects minor refinements that nbn intends to make when it publishes the HFC SFAA.
HFC Fly Lead – new definition inserted	WBA (HFC) Dictionary – Final Release May 2016	Reference to the term 'HFC-NTD' (WBA terminology) replaced with NTD (SAU terminology)
HFC Lead-In Cable – new definition inserted	WBA (HFC) Dictionary – Final Release May 2016	SAU definition mirrors WBA (HFC) Dictionary.
HFC Premises Amplifier – new definition inserted	WBA (HFC) Dictionary – Final Release May 2016	SAU definition mirrors WBA (HFC) Dictionary.
HFC Premises Amplifier Power Supply – new definition inserted	WBA (HFC) Dictionary – Final Release May 2016	SAU definition mirrors WBA (HFC) Dictionary.
HFC RF Splitter – new definition inserted	WBA (HFC) Dictionary – Final Release May 2016	Reference to the term 'Customer' (WBA terminology) replaced with 'Access Seeker' (SAU terminology).
HFC Tap – new definition inserted	WBA (HFC) Dictionary – Final Release May 2016	SAU definition mirrors WBA (HFC) Dictionary.
HFC Wall Outlet – new definition inserted	WBA (HFC) Dictionary – Final Release May 2016	SAU definition mirrors WBA (HFC) Dictionary.
Incorrect Callout – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
Initial Non Standard Installation – definition modified	WBA2 Dictionary – version 23 May 2016	SAU definition modified to exclude FTTB/N Subsequent Installation (to mirror the WBA2 Dictionary).



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
Initial Standard Installation – definition modified	WBA2 Dictionary – version 23 May 2016	SAU definition modified to include a new sub-clause (b) and to exclude any FTTB/N Subsequent Installation. In making this modification, references to Service Classes (WBA terminology) have been removed.
Internal Copper Pair – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
Jumper Cable – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
Jumpering – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition modified to replace the term 'NBN Co Network Boundaries' (WBA terminology) with the words 'UNI and the NBN Co Node'.
Lead-In cable – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition modified to replace the term 'NBN Co Network Boundaries' (WBA terminology) with the words 'PCD or building entry point (as applicable).'
Losing Customer – new definition inserted	WBA2 Dictionary – version 23 May 2016	<p>WBA2 definition modified to remove references to the terms 'Other Gaining Customer' and 'Other Wholesale Broadband Agreement', as these terms are not defined in the SAU. The term 'Agreement' (WBA terminology) has been replaced with 'Access Agreement' (SAU terminology).</p> <p>The term 'service transfer' (from the WBA2 Dictionary) has also been capitalised to 'Service Transfer' in the SAU, as this is a defined term in the SAU.</p>
M Pair Frame – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition refers specifically to the Telstra network, whereas the SAU definition refers more generally to an Other Copper Network. The definitions operate consistently in the contexts of each document.



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
Maximum Data Transfer Rate – definition modified	N/A	<p>SAU definition modified to remove references to 'NTD' to take account of the fact that an NTD will not be supplied by nbn on the FTTB and FTTN networks.</p> <p>Some minor redrafting has been performed to make cited examples relevant to the particular network types to which they are applicable.</p> <p>This definition has also been modified to reflect the operation of the co-existence period.</p>
MDF – new definition inserted	WBA2 Dictionary (see 'Main Distribution Frame') – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary definition of 'Main Distribution Frame'.
MDU Site – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
NBN Co Copper Network – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
NBN Co Copper Pair – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
NBN Co Equipment – definition modified	WBA2 Dictionary – version 23 May 2016	SAU definition modified to include Passive NTDs and exclude Central Splitters, Pre-existing Carrier Side MDF, Customer Side MDF and Common MDU Site Equipment (to reflect the WBA2 Dictionary).
NBN Co Fibre Network – definition modified	WBA2 Dictionary – version 23 May 2016	<p>SAU definition modified to clarify that the NBN Co Fibre Network (1) comprises fibre lines between the UNI and NNI and (2) excludes the NBN Co FTTN Network, NBN Co FTTB Network and NBN Co HFC Network.</p> <p>In making this modification to the SAU definition, nbn has (1) replaced the term 'Network Boundaries' (from the WBA2</p>



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
		<p>Dictionary) with the words 'the UNI and the NNI' and (2) removed the word 'solely' from the WBA2 Dictionary to align with the definition of 'NBN Co FTTN Network'.</p> <p>The definitions operate consistently in the contexts of each document.</p>
NBN Co Fixed Line Network	N/A	New SAU definition inserted to reflect amendments to rollout reporting commitments in Clause 1H.2.
NBN Co Frame – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
NBN Co FTTB Access Service – new definition inserted	N/A	This definition is modelled on the existing SAU definitions for NBN Co Fibre Access Service (NFAS) and NBN Co Wireless Access Service (NWAS).
NBN Co FTTB Network – new definition inserted	WBA2 Dictionary – version 23 May 2016	<p>WBA2 definition has been restructured:</p> <ul style="list-style-type: none"> the word 'solely' has been removed to align with the definition of 'NBN Co FTTN Network'; reference to 'Network Boundaries' has been replaced with the words 'between the NNI and an NBN Co FTTB Node'; and SAU definition includes the additional words '(excluding coaxial cable)' to make clear that the FTTB network excludes coaxial cables. <p>The definitions operate consistently in the contexts of each document.</p>
NBN Co FTTB Node – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition updated to make clear the NBN Co FTTB Node



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
		<p>relates to FTTB and excludes other potential technology variants.</p> <p>nbn proposes that WBA3 reflect the SAU definition for 'NBN Co FTTB Node'.</p>
NBN Co FTTN Access Service – new definition inserted	N/A	This definition is modelled on the existing SAU definitions for NBN Co Fibre Access Service (NFAS) and NBN Co Wireless Access Service (NWAS).
NBN Co FTTN Network – new definition inserted	WBA2 Dictionary – version 23 May 2016	<p>WBA2 definition modified to include the words '(excluding coaxial cable)', to make clear that the NBN Co FTTN Network excludes coaxial cables.</p> <p>nbn proposes that WBA3 reflect the SAU definition for 'NBN Co FTTN Network'.</p>
NBN Co FTTN Node – new definition inserted	WBA2 Dictionary – version 23 May 2016	<p>WBA2 definition updated to make clear the NBN Co FTTN Node relates to FTTN and excludes other potential technology variants.</p> <p>nbn proposes that WBA3 reflect the SAU definition for 'NBN Co FTTN Node'.</p>
NBN Co HFC Access Service – new definition inserted	N/A	This definition is modelled on the existing SAU definitions for NBN Co Fibre Access Service (NFAS) and NBN Co Wireless Access Service (NWAS).
NBN Co HFC Network – new definition inserted	WBA (HFC) Dictionary – Final Release May 2016	SAU definition mirrors the WBA (HFC) Dictionary.
NBN Co Network – definition modified	WBA (HFC) Dictionary – Final Release	SAU definition widened to (1) incorporate the NBN Co FTTB Network, NBN Co FTTN Network and NBN Co HFC Network (to



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
	May 2016	reflect the WBA2 Dictionary); and (2) widened to include an approach to facilitate the incorporation of future variants such as FTTdp.
NBN Co Node – new definition inserted	N/A	nbn proposes that WBA3 reflect the SAU definition for 'NBN Co Node'.
NBN Co Pillar – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
NBN Co Service Qualification System – definition deleted	WBA2 Dictionary – version 23 May 2016	Term deleted because it is no longer used in the SAU.
NBN Co Side MDF – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition modified to incorporate the additional 'note' under the definition of 'NBN Co Side MDF' in the WBA2 Dictionary.
NBN Offer – definition modified	N/A	SAU definition amended to facilitate the operation of Clause 1C.2 (NBN Offers) in the SAU, when any Initial Products are introduced before the acceptance of the SAU variation by the ACCC.
NBN-Related Networks – definition modified	WBA2 Dictionary – version 23 May 2016	SAU definition modified to include references to 'Other NBN Co Networks' and to exclude any 'Central Splitter', to reflect the WBA2 Dictionary.
NBN Serviceable – definition modified	WBA2 Dictionary – version 23 May 2016, WBA2 Operations Manual – version 23 May 2016 (section 4.3.1)	<p>The WBA2 Operations Manual (section 4.3.1) allows nbn to determine what is 'NBN Serviceable' irrespective of the 'Site Qualification Enquiry' – the SAU definition has been modified to reflect this.</p> <p>nbn proposes that WBA3 reflect the SAU definition for 'NBN Serviceable'.</p>



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
Network Termination Device – definition modified	WBA2 Dictionary – version 23 May 2016	SAU definition modified to clarify that the NTD can be 'active or powered' and to exclude 'Passive NTD(s)' – this modification mirrors the WBA2 Dictionary.
Non-Infrastructure Transfers (per Service Transfer) – new definition inserted	WBA2 Dictionary (see definition of 'Non-Infrastructure Type Transfer') – version 23 May 2016	WBA2 definition modified to apply as a charge in relation to an activity for the purposes of the SAU. WBA2 definition also modified to reflect SAU terminology (e.g. 'Same Port Transfer' modified to 'Service Transfer').
Non Standard Installation – definition modified	WBA2 Dictionary – version 23 May 2016, WBA2 Operations Manual – version 23 May 2016, section 4.8.4 (Non Standard Installations)	SAU definition modified to include references to Non Standard FTTB/FTTN/HFC Access Service Installation. The WBA2 Dictionary refers to the WBA2 Operations Manual to define this term; however the SAU does not do this (as the SAU limits references to external documents).
Non Standard NBN Co FTTB Access Service Installation – new definition inserted	WBA2 Operations Manual – version 23 May 2016, section 4.8.4 (Non Standard Installations)	<p>New SAU definition to translate the 'Non Standard Installation' terms for FTTB, as set out in 4.7.4 of the WBA2 Operations Manual.</p> <p>This definition is modelled on the existing SAU definitions for 'Non Standard NFAS Installation' and 'Non Standard NNAS Installation'.</p>
Non Standard NBN Co FTTN Access Service Installation – new definition inserted	WBA2 Operations Manual – version 23 May 2016, section 4.8.4 (Non Standard Installations)	<p>New SAU definition to translate the 'Non Standard Installation' terms for FTTN, as set out in 4.7.4 of the WBA2 Operations Manual.</p> <p>This definition is modelled on the existing SAU definitions for 'Non Standard NFAS Installation' and 'Non Standard NNAS Installation'.</p>
Non Standard NBN Co HFC Access Service	WBA (HFC) Operations Manual – Final Release May 2016, section 4.8.4 (Non	New SAU definition to translate the 'Non Standard Installation' terms for HFC, as set out in 4.8.4 of the WBA (HFC) Operations



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
Installation – new definition inserted	Standard Installations)	Manual. This definition is modelled on the existing SAU definitions for 'Non Standard NFAS Installation' and 'Non Standard NWAS Installation'.
Non-Voiceband Service – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition modified to remove references to the term 'ADSL Service' as this term is only used as an example and does not need to be included in the longer term SAU. The SAU uses the terms 'Other Copper Network' and 'NBN Co Copper Network', rather than 'Copper Network' - this change has been made accordingly.
O Pair Frame – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
Other Copper Network – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition modified to remove reference to 'Telstra' to allow flexibility in the operation of this definition over time.
Other NBN Co Network – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
Other NBN Co Network Works – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
Outage – definition modified	WBA2 Dictionary – version 23 May 2016	SAU definition modified to include reference to "any Other NBN Co Network Works" to reflect the WBA2 Dictionary.
Passive NTD – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
PCD – definition modified	WBA2 Dictionary – version 23 May 2016	SAU definition modified to extend to the FTTN and HFC network, to reflect the WBA2 Dictionary.



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
Personnel – definition modified	WBA2 Dictionary – version 23 May 2016, WBA2 Operations Manual – version 23 May 2016 (section 4.5.2)	<p>SAU definition modified to reflect the carve-out to this term, as reflected in the WBA2 Dictionary. In making this modification, nbn has limited references to external documents (WBA2 Operations Manual) and replaced references to 'Customer' and 'Agreement' (WBA terminology) with 'Access Seeker' and 'Special Access Undertaking' (SAU terminology).</p> <p>To ensure that the SAU definition does not apply a broader carve-out for 'Personnel' than applies under the WBA, the SAU definition for this term includes the additional words 'in connection with the supply of a Product', to ensure that nbn contractors that are building the nbnTM network on behalf of nbn are not inadvertently excluded (as per the WBA2 Operations Manual).</p>
Pillar Jumper Cable – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
PIR Objective – new definition inserted	WBA2 Dictionary – version 23 May 2016	<p>WBA2 definition modified to limit references to external documents (WBA2 Product Description) and replace reference to 'PIR' with 'Line rate'.</p> <p>nbn proposes that WBA3 reflect the SAU definition for 'PIR Objective'.</p>
Planned RFS Area – new definition inserted	N/A	New SAU definition inserted to reflect amendments to rollout reporting commitments in clause 1H.2.2 of the SAU.
Pre-existing Carrier Side MDF – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition modified to include the 'Note' under the definition of 'Pre-existing Carrier Side MDF' in the WBA2 Dictionary.
Premises – definition modified	WBA2 Dictionary – version 23 May 2016	SAU definition expanded to (1) include references to 'MDU common area' (note – SAU definition does not reference the



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
		'Telstra Migration Plan', to limit references to external documents); and (2) expand the definition of 'Premises'. The reference to "other location" aligns with the revised definition of NBN Co Network and ensures that these other locations fall within the scope of Premises for the purposes of the NBN Access Service.
Product – definition modified	WBA2 Dictionary – version 23 May 2016, WBA2 Product Description – version 7 April 2016	SAU definition modified to include references to the NBN Co FTTB/FTTN/HFC Access Service to reflect the WBA2 Dictionary.
Professional HFC-NTD Installation – new definition inserted	WBA (HFC) Dictionary– Final Release May 2016	New SAU definition to describe the nature of this charge, as set out in Clause 1C.4.2(c) of the SAU. WBA2 definition modified to remove references to Service Classes (instead, the characteristics of Service Class 23 have been incorporated directly into the SAU definition).
Professional Splitter Installation – new definition inserted	WBA2 Dictionary– version 23 May 2016, WBA2 Operations Manual – version 23 May 2016 (section 4.5.2.5)	WBA2 definition modified to limit references to external documents (WBA2 Operations Manual).
Remediation – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition updated to replace reference to 'PIR' with 'Line rate' (for technical accuracy) and to remove reference to 'NEBS' (WBA terminology). nbn proposes that WBA3 reflect the SAU definition for 'Remediation'.
Resetting Regulatory Determination	N/A	Correction for minor typographical error.
Service Fault – current definition modified	WBA2 Dictionary – version 23 May 2016, WBA (HFC) Dictionary – Final Release	SAU definition modified to include new subclauses (a)(iii) and (a)(iv) and to include new subclauses (b) and (c).



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
	May 2016	In translating the relevant content from the WBA2 Dictionary, nbn has removed details that are not necessary for the SAU.
Service in Operation – definition modified	N/A	SAU definition modified to extend its application to the MTM networks.
Service Transfer – new definition inserted	WBA2 Dictionary – version 23 May 2016, WBA2 Operations Manual – version 23 May 2016 (section 4.5.2.6)	WBA2 definition modified to limit references to external documents (NBN Co Operations Manual). The SAU definition has been derived from section 4.5.2.6 of the WBA2 Operations Manual.
Special Service – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
Standard Installation – definition modified	WBA2 Dictionary – version 23 May 2016, WBA2 Operations Manual – version 23 May 2016 (section 4.8.3)	SAU definition modified to include references to the Standard NBN Co FTTB/FTTN/HFC Access Service Installation (to reflect the WBA2 Dictionary).
Standard NBN Co FTTB Access Service Installation – new definition inserted	WBA2 Operations Manual – version 23 May 2016 (section 4.8.3)	SAU definition derived from section 4.7.3 of the WBA2 Operations Manual (Standard Installations). See explanation below for 'Annexure 3 to Schedule 1C (Standard NBN Co FTTB Access Service Installation)'
Standard NBN Co FTTN Access Service Installation – new definition inserted	WBA2 Operations Manual – version 23 May 2016 (section 4.8.3)	SAU definition derived from section 4.7.3 of the WBA2 Operations Manual (Standard Installations). See explanation below for 'Annexure 4 to Schedule 1C (Standard NBN Co FTTN Access Service Installation)'
Standard NBN Co HFC Access Service Installation – new definition inserted	WBA (HFC) Operations Manual – Final Release May 2016 (section 4.8.3)	SAU definition derived from section 4.8.3 of the WBA (HFC) Operations Manual (Standard Installations). See explanation below for 'Annexure 5 to Schedule 1C (Standard NBN Co HFC Access Service Installation)'



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
Subsequent Installation – definition modified	WBA2 Dictionary – version 23 May 2016	SAU definition modified to mirror the WBA2 Dictionary.
Symmetric Access Capacity (TC-1) – definition deleted	N/A	SAU definition removed because it is no longer used in the SAU.
Telecommunications Outlet – new definition inserted	WBA2 Dictionary – version 23 May 2016	<p>WBA2 definition updated to remove the word 'accessible' and to replace reference to the term 'Customer' (WBA terminology) with 'Access Seeker' (SAU terminology).</p> <p>nbn proposes that the word 'accessible' be removed from this definition in WBA3.</p>
Telstra Migration Plan – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition modified to replace reference to 'Agreement' (WBA terminology) with 'Special Access Undertaking' (SAU terminology) and replace reference to 'Telstra' with 'Telstra Corporation Limited'.
Transfer Reversal – new definition inserted	WBA2 Dictionary – version 23 May 2016, WBA2 Operations Manual – version 23 May 2016 (section 4.5.2.6)	WBA2 definition modified to limit references to external documents (NBN Co Operations Manual). The SAU definition has been derived from section 4.5.2.6 of the WBA2 Operations Manual.
Transition Order – new definition inserted	WBA2 Dictionary – version 23 May 2016	<p>WBA2 definition has been (1) corrected for a minor typographical error; (2) modified to replace reference to the term 'NEBS' (WBA terminology) with the words 'NBN Co FTTB Access Service' and 'NBN Co FTTN Access Service' (SAU terminology); (3) modified to lower case 'connect order' as this is not a defined term in the SAU; and (4) modified to remove the words "as part of that connect order", which are redundant.</p> <p>nbn proposes that WBA3 reflect the SAU definition for</p>



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
		'Transition Order' in respect of (1) and (4).
Transition Reversal – new definition inserted	WBA2 Dictionary– version 23 May 2016	WBA2 definition modified to remove operational details (Service Requests) that are not necessary for the SAU and to remove reference to 'NEBS' (WBA terminology).
User Network Interface-DSL or UNI-DSL – new definition inserted	WBA2 Dictionary – version 23 May 2016 (see User Network Interface – DSL), WBA2 Product Description – version 7 April 2016, Clause 4.1(a) (UNI description)	WBA2 definition modified to limit references to external documents (WBA2 Product Description). The SAU definition has been derived from section 4.1(a) of the WBA2 NEBS Product Description.
Voiceband Continuity – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
Voiceband Continuity Cable – new definition inserted	WBA2 Dictionary – version 23 May 2016	SAU definition mirrors the WBA2 Dictionary.
Voiceband Reinstatement – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition modified to limit references to external documents (WBA2 Operations Manual).
Voiceband Service – new definition inserted	WBA2 Dictionary – version 23 May 2016	WBA2 definition modified to remove the reference to 'Copper Network', as there is no such defined term in the SAU – the references to 'NBN Co Copper Network' and 'Other Copper Network' have been maintained. The new SAU definition of 'Other Copper Network' captures the definition of 'Copper Network' in the WBA2 Dictionary. The term 'PSTN' (from the WBA2 Dictionary) has been replaced with 'public switched telecommunications network' in the SAU.
Glossary	N/A	New acronyms used in the amended SAU drafting have been added to the Glossary ('MDF', 'MDU', 'UNI-DSL'). A typographic



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
		error relating to 'PPPoE' has also been corrected.
Attachment D (Initial Products List)		
Clause 1(b) – clause modified	N/A	Modification to SAU Clause to extend the Initial Products List to the FTTB, FTTN and HFC networks.
<p>Product Component: Network-Network Interface</p> <p>Product features: 1000BaseLX, 10GBaseLR, 1000BaseEX, 10GBaseER, Multi-bearer Link Aggregation Groups for load sharing, Chassis diversity</p> <p>Rows in Attachment D modified</p>	<p>WBA2 Product Description – version 7 April 2016, section 1.2</p> <p>nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014)</p> <p>nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)</p>	<p>The rows in Attachment D for the 'NNI' product component and respective product features have been modified to extend to the FTTB, FTTN and HFC networks, as nbn has consulted on the NNI and associated product features for FTTB, FTTN and HFC:</p> <ul style="list-style-type: none"> Section 2.1 of the 'FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) notes that FTTN/B will be made up of the four product components (including NNI) used to deliver the existing FTTP, wireless and satellite services. Section 2.1 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that HFC will be made up of the four product components (including NNI) used to deliver the existing FTTP, FTTN/B, wireless and satellite services. <p>Further, nbn notes that the NNI and associated product features are already available on FTTB and FTTN under the published WBA2.</p>
Product Component: Connectivity Virtual Circuit	WBA2 Product Description – version 7 April 2016, section 2.2	Row modified to reflect that nbn has consulted on the listed product features for FTTB, FTTN and HFC:
Product Feature: TC-4: 100, 150, 200, 250,	WBA (HFC) Product Description – Final	<ul style="list-style-type: none"> Section 2.1 of the 'FTTN/B Consultation Outcomes & Final



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
<p>300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600, 1,700, 1,800, 1,900, 2,000 Mbps</p> <p>Row in Attachment D modified</p>	<p>Release May 2016, section 2.2</p> <p>nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014)</p> <p>nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)</p>	<p>Product Construct' (August 2014) notes that nbn will utilise the same traffic class model for FTTB/N that is used for FTTP and wireless for traffic classes 1-4.</p> <ul style="list-style-type: none"> Section 2.1 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that nbn will utilise the same traffic class model for HFC that is used for FTTP, FTTB/N and wireless for traffic classes 1-4. <p>Further, nbn notes that the listed CVC TC-4 speed tiers are already available on FTTB and FTTN under the published WBA2 and are reflected in the WBA (HFC) Product Description.</p>
<p>Product Component: Connectivity Virtual Circuit</p> <p>Product Feature: TC-4: 2,100, 2,200, 2,300, 2,400, 2,500, 2,600, 2,700, 2,800, 2,900, 3,000, 3,100, 3,200, 3,300, 3,400, 3,500, 3,600, 3,700, 3,800, 3,900, 4,000, 4,100, 4,200, 4,300, 4,400, 4,500, 4,600, 4,700, 4,800, 4,900, 5,000, 5,100, 5,200, 5,300, 5,400, 5,500, 5,600, 5,700, 5,800, 5,900, 6,000, 6,100, 6,200, 6,300, 6,400, 6,500, 6,600, 6,700, 6,800, 6,900, 7,000, 7,100, 7,200, 7,300, 7,400, 7,500, 7,600, 7,700, 7,800, 7,900, 8,000, 8,100, 8,200, 8,300, 8,400, 8,500, 8,600, 8,700, 8,800, 8,900, 9,000, 9,100, 9,200, 9,300, 9,400, 9,500, 9,600, 9,700, 9,800, 9,900, 10,000 Mbps</p> <p>New row inserted to Attachment D</p>	<p>WBA2 Product Description – version 7 April 2016, section 2.2</p> <p>WBA (HFC) Product Description – Final Release May 2016, section 2.2</p> <p>nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014)</p> <p>nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)</p>	<p>New row inserted to reflect that nbn has consulted on the listed product features for FTTB, FTTN and HFC:</p> <ul style="list-style-type: none"> Appendix 1 of the 'FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) notes that the traffic classes for FTTB/N will be based on the existing nbn product construct. Section 2.1 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that nbn will utilise the same traffic class model for HFC that is used for FTTP, FTTB/N and wireless for traffic classes 1-4. <p>Further, nbn notes that the listed CVC TC-4 speed tiers are already available on FTTB and FTTN under the published WBA2 and are reflected in the WBA (HFC) Product Description.</p>



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
<p>Product Component: Connectivity Virtual Circuit</p> <p>Product Feature: TC-1: 5, 10, 20, 50, 100, 150, 200, 250, 300, 400, 500 Mbps</p> <p>Row in Attachment D modified</p>	<p>WBA2 Product Description – version 7 April 2016, section 2.3</p> <p>WBA (HFC) Product Description – Final Release May 2016, section 2.3</p> <p>nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014)</p> <p>nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)</p>	<p>Row modified to reflect that nbn has consulted on the listed product features for FTTB, FTTN and HFC:</p> <ul style="list-style-type: none"> Section 2.2 of the 'FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) notes that the FTTB/N offering will launch with TC-1 profiles of 150kbps and 300kbps and that nbn intends to expand its TC-1 offering with subsequent product releases. Section 2.5 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that HFC will launch with TC-1 profiles of 150kbps and 300kbps and that nbn intends to expand its TC-1 offering with subsequent product releases. <p>Further, nbn notes that the listed CVC TC-1 speed tiers are already available on FTTB and FTTN under the published WBA2 and are reflected in the WBA (HFC) Product Description.</p>
<p>Product Component: Connectivity Virtual Circuit</p> <p>Product Feature: TC-1: 25, 30, 40, 60, 80, 120 Mbps</p> <p>New row inserted to Attachment D</p>	<p>WBA2 Product Description – version 7 April 2016, section 2.3</p> <p>WBA (HFC) Product Description – Final Release May 2016, section 2.3</p> <p>nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014)</p> <p>nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)</p>	<p>New row inserted to reflect that nbn has consulted on the listed product features for FTTB, FTTN and HFC:</p> <ul style="list-style-type: none"> Section 2.2 of the 'FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) notes that the FTTB/N offering will launch with TC-1 profiles of 150kbps and 300kbps and that nbn intends to expand its TC-1 offering with subsequent product releases. Section 2.5 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that HFC will launch with TC-1 profiles of 150kbps and 300kbps and that nbn intends to expand its TC-1 offering with subsequent



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
		<p>product releases.</p> <p>Further, nbn notes that the listed CVC TC-1 speed tiers are already available on FTTB and FTTN under the published WBA2 and are reflected in the WBA (HFC) Product Description.</p>
<p>Product Component: Connectivity Virtual Circuit</p> <p>Product Feature: TC-2: 5, 10, 20, 25, 30, 40, 60, 80, 120 Mbps</p> <p>New row inserted to Attachment D</p>	<p>WBA2 Product Description – version 7 April 2016, section 2.4</p> <p>nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014)</p> <p>nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)</p>	<p>New row inserted to reflect that nbn has consulted on the listed product features for FTTB, FTTN and HFC:</p> <ul style="list-style-type: none"> Section 2.10 of the FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) notes that FTTB will launch with TC-2 5Mbps, with the subsequent FTTN offering including additional TC-2 increments. Section 2.6 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that TC-2 speed tiers of 5Mbps and 10Mbps will be made available on HFC, followed by higher TC-2 speed tiers in the medium term. <p>Further, nbn notes that the listed CVC TC-2 speed tiers are already available on FTTB and FTTN under the published WBA2.</p>
<p>Product Component: Connectivity Virtual Circuit</p> <p>Product Feature: TC-2: 50, 100, 150, 200, 250, 300, 400, 500, 600, 700, 800, 900, 1,000 Mbps</p> <p>Row in Attachment D modified</p>	<p>WBA2 Product Description – version 7 April 2016, section 2.4</p> <p>nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014)</p> <p>nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)</p>	<p>Row modified to reflect that nbn has consulted on the listed product features for FTTB, FTTN and HFC:</p> <ul style="list-style-type: none"> Section 2.10 of the 'FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) notes that FTTB will launch with TC-2 5Mbps, with the subsequent FTTN offering including additional TC-2 increments. Section 2.6 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that TC-2 speed tiers



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
	Construct' (May 2015)	<p>of 5Mbps and 10Mbps will made available on HFC, followed by higher TC-2 speed tiers in the medium term.</p> <p>Further, nbn notes that the listed CVC TC-2 speed tiers are already available on FTTB and FTTN under the published WBA2.</p>
<p>Product Component: Connectivity Virtual Circuit</p> <p>Product Feature: TC-3: 50, 100, 150, 200, 250, 300, 400, 500, 600, 700, 800, 900, 1,000 Mbps</p> <p>Row in Attachment D modified</p>	<p>nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014)</p> <p>nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)</p>	<p>Row modified to reflect that nbn has consulted on the listed product features for FTTB, FTTN and HFC:</p> <ul style="list-style-type: none"> Appendix 1 of the 'FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) notes that traffic classes for FTTB/N will be based on the existing nbn product construct (i.e. having traffic classes 1-4), although TC-3 will not be available at launch. Section 2.1 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that nbn will utilise the same traffic class model for HFC that is used for FTTP, FTTB/N and wireless for traffic classes 1-4.
<p>Product Component: Access Virtual Circuit</p> <p>Product Feature: TC-4: 12/1, 25/5 Mbps</p> <p>Row in Attachment D modified</p>	<p>WBA2 Product Description – version 7 April 2016, section 3.2</p> <p>WBA (HFC) Product Description – Final Release May 2016, section 3.2</p> <p>nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014)</p> <p>nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)</p>	<p>Row modified to reflect that nbn has consulted on the listed product features for FTTB, FTTN and HFC:</p> <ul style="list-style-type: none"> Appendix 1 of the 'FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) notes that AVC TC-4 speed profiles of 12/1, 25/5 Mbps will be offered on FTTB/N. Section 2.1 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that AVC TC-4 speed profiles of 12/1, 25/5 Mbps will be offered on HFC.



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
	Construct' (May 2015)	Further, nbn notes that the listed AVC TC-4 speed tiers are already available on FTTB and FTTN under the published WBA2 and are reflected in the WBA (HFC) Product Description.
Product Component: Access Virtual Circuit Product Feature: TC-4: 25/10, 50/20, 100/40, 250/100, 500/200, 1,000/400 Mbps Row in Attachment D modified	WBA (HFC) Product Description – Final Release May 2016, section 3.2 nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)	Row modified to reflect (1) that the AVC TC-4 speed tiers 250/100, 500/200, 1,000/400 Mbps are (currently) not available on network technologies other than FTTP, and (2) that nbn has consulted on the AVC TC-4 speed tiers 25/10, 50/20 and 100/40 Mbps with respect to HFC: <ul style="list-style-type: none">Section 2.1 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that TC-4 AVC speed profiles of 25/10, 50/20, 100/40 Mbps will be offered on HFC. Further, nbn notes that the AVC TC-4 speed tiers 25/10, 50/20 and 100/40 Mbps with respect to HFC are reflected in the WBA (HFC) Product Description.
Product Component: Access Virtual Circuit Product Feature: TC-4: 25/5-10, 25-50/5-20, 25-100/5-40 Mbps New row inserted to Attachment D	WBA2 Product Description – version 7 April 2016, section 3.2 (b) nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014)	New row inserted to reflect that nbn has consulted on the listed product features for FTTB and FTTN: <ul style="list-style-type: none">Appendix 1 of the 'FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) notes that TC-4 AVC speed profiles of 25/5-10, 25-50/5-20 and 25-100/5-40 Mbps will be offered on FTTB/N. Further, nbn notes that the listed AVC TC-4 speed tiers are already available on FTTB and FTTN under the published WBA2.
Product Component: Access Virtual Circuit	N/A	New row inserted to make clear that the AVC TC-4 speed tiers 250/100, 500/200, 1,000/400 Mbps have only been consulted



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
Product Feature: TC-4: 250/100, 500/200, 1,000/400 Mbps New row inserted to Attachment D		with customers with respect to the FTTP network. This product feature was already consulted upon, as reflected in Attachment D of the current SAU.
Product Component: Access Virtual Circuit Product Feature: TC-1: 0.15Mbps Row in Attachment D modified	WBA2 Product Description – version 7 April 2016, section 3.3(a) WBA (HFC) Product Description – Final Release May 2016, section 3.3(a) nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014) nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)	Row modified to reflect that nbn has consulted on the listed product feature for FTTB, FTTN and HFC: <ul style="list-style-type: none"> Section 2.2 of the 'FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) notes that the FTTB/N offering will launch with TC-1 profiles of 150kbps and 300kbps and that nbn intends to expand its TC-1 offering with subsequent product releases. Section 2.5 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that HFC will launch with TC-1 profiles of 150kbps and 300kbps and that nbn intends to expand its TC-1 offering with subsequent product releases. <p>Further, nbn notes that AVC TC-1 0.15Mbps is already available on FTTB and FTTN under the published WBA2 and is reflected in the WBA (HFC) Product Description.</p>
Product Component: Access Virtual Circuit Product Feature: TC-1: 0.3, 0.5, 1, 2, 5Mbps Row in Attachment D modified	WBA2 Product Description – version 7 April 2016, section 3.3(a) WBA (HFC) Product Description – Final Release May 2016, section 3.3(a) nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product	Row modified to reflect that nbn has consulted on the listed product features for FTTB, FTTN and HFC: <ul style="list-style-type: none"> Section 2.2 of the 'FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) notes that the FTTB/N offering will launch with TC-1 profiles of 150kbps and 300kbps and that nbn intends to expand its TC-1 offering with subsequent product releases.



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
	<p>Construct' (August 2014)</p> <p>nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)</p>	<ul style="list-style-type: none"> Section 2.5 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that HFC will launch with TC-1 profiles of 150kbps and 300kbps and that nbn intends to expand its TC-1 offering with subsequent product releases. <p>Further, nbn notes that the listed AVC TC-1 speed tiers are already available on FTTB and FTTN under the published WBA2. The AVC TC-1 speed tier for 0.3Mbps is also reflected in the WBA (HFC) Product Description.</p>
<p>Product Component: Access Virtual Circuit</p> <p>Product Feature: TC-2: 2Mbps</p> <p>New row inserted to Attachment D</p>	N/A	<p>The SAU already includes a row for AVC TC-2 with respect to the FTTP technology for the following speed tiers: TC-2: 2, 5, 10, 20, 30, 40 Mbps.</p> <p>This amendment separates out the 'AVC TC-2 2Mbps' for the FTTP technology – to make clear that this product feature has not been consulted on for the other technologies.</p>
<p>Product Component: Access Virtual Circuit</p> <p>Product Feature: TC-2: 5 Mbps</p> <p>Row in Attachment D modified</p>	<p>WBA2 Product Description – version 7 April 2016, section 3.4(a)</p> <p>nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014)</p> <p>nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)</p>	<p>Row modified to reflect that (1) nbn has previously consulted on the AVC TC-2 5Mbps with respect to the FTTP network (as reflected in Attachment D of the SAU) and (2) nbn has consulted on this product feature for FTTB, FTTN and HFC:</p> <ul style="list-style-type: none"> Section 2.10 of the 'FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) notes that FTTB will launch with TC-2 5Mbps, with the subsequent FTTN offering including additional TC-2 increments. Section 2.6 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that TC-2 speed tiers of 5Mbps and 10Mbps will be made available on HFC, followed



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
		<p>by higher TC-2 speed tiers in the medium term.</p> <p>Further, nbn notes that AVC TC-2 5 Mbps is already available on FTTB and FTTN under the published WBA2.</p>
<p>Product Component: Access Virtual Circuit</p> <p>Product Feature: TC-2: 2, 5, 10, 20, 30, 40 Mbps</p> <p>Row in Attachment D modified</p>	<p>WBA2 Product Description – version 7 April 2016, section 3.4(a)</p> <p>nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014)</p> <p>nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)</p>	<p>Row modified to (1) remove reference to the AVC TC-2 2Mbps and AVC TC-2 5Mbps as these product features are now reflected in separate rows to Attachment D and (2) reflect that nbn has consulted on the AVC TC-2 10, 20, 30 and 40 Mbps with respect to FTTB, FTTN and HFC:</p> <ul style="list-style-type: none"> • Section 2.10 of the 'FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) notes that FTTB will launch with TC-2 5Mbps, with the subsequent FTTN offering including additional TC-2 increments. • Section 2.6 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that TC-2 speed tiers of 5Mbps and 10Mbps will be made available on HFC, followed by higher TC-2 speed tiers in the medium term. <p>Further, nbn notes that AVC TC-2 10Mbps and 20Mbps are already available on FTTB and FTTN under the published WBA2.</p>
<p>Product Component: Access Virtual Circuit</p> <p>Product Feature: Enhanced Service Level guarantee: Business 7am-9pm; 7 days a week, 1 hour responses, 12 hour restoration (+geographic factor)</p>	<p>WBA2 Product Description - version 7 April 2016, section 6(a)</p> <p>nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014)</p> <p>nbn Consultation Paper: 'HFC:</p>	<p>Row modified to reflect that nbn has consulted on the listed product feature for FTTB, FTTN and HFC:</p> <ul style="list-style-type: none"> • Section 2.10 of the 'FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) notes that at the time of the FTTN launch, 'Enhanced 12' will be made available. • Section 2.7 of the 'HFC: Consultation Outcome and Final



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Row in Attachment D modified	Consultation Outcome and Final Product Construct' (May 2015)	<p>Product Construct' (May 2015) notes that at the time of the HFC launch, nbn intends to make available the 'Enhanced 12' offering.</p> <p>Further, nbn notes that 'Enhanced 12' is already available on FTTB and FTTN under the published WBA2.</p>
<p>Product Component: Access Virtual Circuit</p> <p>Product Feature: Enhanced Service Level guarantee: Business 7am-9pm; 7 days a week, 1 hour responses, 8, 6 and 4 hour restoration (+geographic factor)</p> <p>New row inserted to Attachment D</p>	<p>WBA2 Product Description – version 7 April 2016, section 6(a)</p> <p>nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014)</p> <p>nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)</p> <p>nbn Consultation Paper: 'FTTN/B Product Consultation Paper' (April 2014)</p> <p>nbn Consultation Paper: 'HFC Product Consultation Paper' (July 2014)</p>	<p>Row modified to reflect that nbn has consulted on the listed product features for FTTB, FTTN and HFC:</p> <ul style="list-style-type: none"> Section 2.10 of the 'FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) notes that Enhanced-8 (and Enhanced-12) will be made available at the FTTN launch. Section 2.7 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that 'Enhanced-8' will be made available after the HFC launch. Section 2.8.1.2 of the 'FTTN/B Product Consultation Paper' (April 2014) notes that all FTTP Enhanced Service Levels (e.g. including Enhanced-8, Enhanced-6 and Enhanced-4) will be considered for offer on FTTB/N. Section 2.7.1.2 of the 'HFC Product Consultation Paper' (July 2014) notes that nbn is proposing to offer all FTTP Enhanced Service Levels for assurance on HFC (including Enhanced-8, Enhanced-6 and Enhanced-4). <p>Further, nbn notes that 'Enhanced-8' is already available on FTTB and FTTN under the published WBA2.</p>



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
<p>Product Component: Access Virtual Circuit</p> <p>Product Feature: Additional Enhanced Service Levels: 24/7 fault rectification with 12, 8, 6 and 4 hour restoration</p> <p>Row in Attachment D modified</p>	<p>WBA2 Product Description – version 7 April 2016, section 6(a)</p> <p>nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014)</p> <p>nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)</p> <p>nbn Consultation Paper: 'FTTN/B Product Consultation Paper' (April 2014)</p> <p>nbn Consultation Paper: 'HFC Product Consultation Paper' (July 2014)</p>	<p>Row modified to reflect that nbn has consulted on the listed product features for FTTB, FTTN and HFC:</p> <ul style="list-style-type: none"> Section 2.10 of the 'FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) notes that Enhanced-8 and Enhanced-12 restoration service levels offered on FTTN will be made available on FTTN. Section 2.7 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that Enhanced-12 24/7 and Enhanced-8 24/7 is intended to be made available on HFC. Section 2.8.1.2 of the 'FTTN/B Product Consultation Paper' (April 2014) notes that all FTTP Enhanced Service Levels will be considered for offer on FTTB/N (including 24/7 fault rectification for Enhanced-12, Enhanced-8, Enhanced-6 and Enhanced-4). Section 2.7.1.2 of the 'HFC Product Consultation Paper' (July 2014) notes that nbn is proposing to offer all FTTP Enhanced Service Levels for assurance on HFC (including 24/7 fault rectification for Enhanced-12, Enhanced-8, Enhanced-6 and Enhanced-4). <p>Further, nbn notes that 'Enhanced-12', 'Enhanced-12 24/7', 'Enhanced-8' and 'Enhanced-8 24/7' are already available on FTTB and FTTN under the published WBA2.</p>
<p>Product Component: Access Virtual Circuit</p> <p>Product Feature: Tagged and Priority Tagged</p>	<p>WBA2 Product Technical Specification – FTTB/FTTN – version 22 February 2016, section 5.3.2.1</p>	<p>Row modified to reflect that nbn has consulted on the listed products feature for FTTB, FTTN and HFC:</p> <ul style="list-style-type: none"> Section 2.11 of the 'FTTN/B Consultation Outcomes & Final



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
Framing Row in Attachment D modified	nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014) nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)	Product Construct' (August 2014) notes that Tagged and Priority-tagged features will be made available on FTTB/N. <ul style="list-style-type: none"> Section 2.3 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that Tagged and Priority-tagged features will be made available on HFC. <p>Further, nbn notes that 'Tagged' and 'Priority-tagged' framing is already available for the AVC product component on FTTB and FTTN, as set out in section 5.3.2.1 of the published WBA2 Product Technical Specification – FTTB/FTTN.</p>
Product Component: Access Virtual Circuit Product Feature: Drop priority based on Class of Service markings Row in Attachment D deleted	N/A	Row for this entry deleted because 'Drop priority based on Class of Service markings' is innate in all of nbn 's product offerings and is not a selectable product feature.
Product Component: User Network Interface Product Feature: Data (1 port) New row inserted to Attachment D	nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015) WBA (HFC) Product Description – Final Release May 2016, section 4.1	New row inserted to make clear that the 'Data (1 port)' feature has only been consulted on with customers with respect to HFC: <ul style="list-style-type: none"> Section 2.5 of the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) notes that UNI-V will not be provided on HFC. Section 4.1(a) of the WBA (HFC) Product Description – Final Release May 2016 notes that the UNI for HFC will be a UNI-D (with 1 port).
Product Component: User Network Interface	nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product	New row inserted to make clear that the 'DSL' feature has only been consulted on with customers with respect to FTTB and



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
Product Feature: DSL New row inserted to Attachment D	Construct' (August 2014) WBA2 Product Description – 7 April 2016, section 4.1(a)	FTTN: <ul style="list-style-type: none"> Appendix 2 of the 'FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) <p>Further, nbn notes that this product feature is already available on FTTB and FTTN under the published WBA2.</p>
Product Component: User Network Interface Product Feature: IPv6 for DHCP on UNI-D Row in Attachment D modified	WBA (HFC) Product Technical Specification – Final Release May 2016, section 7.6.2	Row modified to make clear that this product feature has been consulted with customers with respect to HFC: <ul style="list-style-type: none"> Section 7.6.2 of the WBA (HFC) Product Technical Specification (Final Release May 2016), notes that IPv6 DHCP is supported on UNI-D.
Product Component: User Network Interface Product Feature: IPv6 for DHCP on UNI-DSL New row inserted to Attachment D	nbn Consultation Paper: 'FTTN/B: Consultation Outcomes & Final Product Construct' (August 2014) WBA2 Product Technical Specification – FTTB/FTTN – version 22 February 2016, section 6.6.2	Row modified to make clear that this product feature has only been consulted on with customers with respect to FTTB and FTTN: <ul style="list-style-type: none"> Section 2.1 of the 'FTTN/B Consultation Outcomes & Final Product Construct' (August 2014) notes that FTTN/B will be made up of the four product components (including UNI) used to deliver the existing FTTP, wireless and satellite services. <p>Further, nbn notes that this product feature is already available on FTTB and FTTN under the published WBA2 (see WBA2 Product Technical Specification for FTTB/N).</p>
Schedule 1A (Implementation of NBN Access Service, Ancillary Services and the Facilities Access Service)		
Clause 1A.3.1 (User Network Interface) –	WBA2 Product Description – version 7	The UNI will no longer be associated with an NTD in all cases as there is no NTD for FTTB and FTTN. Accordingly, this clause



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
clause modified	April 2016, Clause 4.1(a)	<p>has been updated to:</p> <ol style="list-style-type: none"> 1. remove reference to the NTD and replace it with the concept of the UNI applying “in respect of a Premises” because the FTTB and FTTN networks will not have an NTD; and 2. include a new clause 1A.3.1(b) to also define the specific location of the UNI in respect of each access technology, including FTTB, FTTN and HFC, as set out in Clause 4.1(a) of the WBA2 Product Description.
Clause 1A.3.2 (Access Virtual Circuit) – clause modified	WBA2 Product Description – version 7 April 2015, Clause 3.1(a)	The UNI will no longer be associated with an NTD in all cases as there is no NTD for FTTB and FTTN. Accordingly, this clause has been updated to remove reference to the NTD.
Clause 1A.3.5 (Composition of AVC and CVC) – clause modified	N/A	Update to correct for minor typographical error. Reference is to PPPoE, not PPOE.
Clause 1A.4.3 (Maximum Data Transfer Rate) – clause modified	WBA2 Product Description – version 7 April 2016, Clause 4.1(a)	SAU clause modified to remove references to ‘NTD’ to take account of the fact that an NTD will not be supplied by nbn on the FTTB and FTTN networks.
Clause 1A.4.4 (Co-existence Period) – new clause inserted	WBA2 Product Description – version 7 April 2016, section 3.2(c)	<p>Clause 1A.4.4 of the SAU mirrors the AVC TC-4 bandwidth profiles for FTTB/N set out in section 3.2(c) of the published WBA2 Product Description.</p> <p>This supply qualification is (1) key to how the NBN Access Service, Ancillary Services and types of Facilities Access Services will be supplied over time; and (2) expected to be stable over the term of the SAU (or some identified sub-period), but for a specified period during which the Product Features specified in the SAU (and the WBA) will not be</p>



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
		achieved.
Clause 1A.4.5 (Remediation) – new clause inserted	WBA2 Product Description – 7 April 2016, section 3.2(d)	SAU clause 1A.4.5 of the SAU reflects section 3.2(d) of the published WBA2 Product Description. Where appropriate, the SAU has corrected references to 'PIR' with 'Line rate'. nbn proposes that the WBA3 Product Description reflect the SAU in this respect of this change.
Clause 1A.4.6 (UNI availability) – clause modified	WBA2 Product Description – 7 April 2016, Clause 4.1(a)	SAU clause modified to remove references to 'NTD' to take account of the fact that an NTD will not be supplied by nbn on the FTTB and FTTN networks.
Clause 1A.6.2 (Sandpit) – clause modified	WBA2 Sandpit Service Description – version 4 September 2015, Clause 1.2(a) WBA (HFC) Sandpit Service Description – Final Offer May 2016, Clause 1.2(a)	SAU clause modified to include references to the MTM networks (FTTB, FTTN and HFC).
Schedule 1C (NBN Offers and Other Charges)		
Clause 1C.1.2(a)(ii), Clause 1C.1.2(a)(iii) and Clause 1C.1.2(a)(iv) (Status of NBN Offers) – new clauses inserted	N/A	New clauses to clarify from when nbn will supply each of the NBN Offers specified in Clause 1.2 in respect of the FTTB, FTTN and HFC networks.
Clause 1C.1.2(b)(v) – new clause inserted	N/A	New clause inserted to clarify that where an NBN Offer has been introduced as at the First Variation Date, it will be supplied from the First Variation Date.
Clause 1C.2.1 (Overview of NBN Offers) – clause modified	WBA2 Product Description – version 7 April 2016, Clause 6(a)	'Enhanced Fault Service Levels Offers' included as an NBN Offer. This is consistent with the classification of Enhanced Fault Service Levels as a Product Feature in Clause 6(a) of the WBA2 Product Description.



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
		The reference to 'as at the SAU Commencement Date' has also been deleted, to reflect the fact that additional NBN Offers have been added after the SAU Commencement Date (i.e. as part of this variation).
Clause 1C.2.2(a) (Asymmetric AVC Offers) – clause modified	WBA2 Product Description – version 7 April 2016, Clause 3.2 WBA (HFC) Product Description – Final Release May 2016, Clause 3.2	Data Transfer Rates in respect of FTTN, FTTB and HFC are consistent with WBA2. Schedule 1C has not been updated to reflect the introduction of new NBN Offers or Other Charges that have <i>already occurred under the SAU</i> .
Clause 1C.2.2(b) (Asymmetric AVC Offers) – clause modified	WBA (HFC) Product Description – Final Release May 2016, Clause 4	Expansion of existing clause to apply to the NBN Co HFC Network, which is consistent with WBA2.
Clause 1C.2.2(c) (Asymmetric AVC Offers) – new clause inserted	WBA2 Product Description – version 7 April 2016, Clause 4	New clause to account for UNI descriptions in respect of FTTB and FTTN.
Clause 1C.2.2(e) (Asymmetric AVC Offers) – clause modified	WBA2 Product Description – version 7 April 2016, Clause 4 WBA2 Price List – version 23 May 2016, Clause 1.1(b) WBA (HFC) Product Description – Final Release May 2016, Clauses 3.3(a) and 4 WBA (HFC) Price List – Final Release May 2016, Clause 1.1(b)	Drafting changes to: - expand clause 1C.2.2(e)(ii) to apply to the NBN Co HFC Network, which is consistent with clauses 3.3(a) and 4 of the WBA2 (HFC) Product Description; and - include new clause 1C.2.2(e)(iii) to describe provision of telephony services in respect of FTTB and FTTN (consistent with WBA2)
Clause 1C.2.4 (Symmetric Access Capacity Offers) – clause modified	WBA2 Product Description – version 7 April 2016, Clauses 3.3 and 3.4	New wording inserted to account for Symmetric Access Capacity Offers provided over the FTTB, FTTN and HFC



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
	WBA (HFC) Product Description – Final Release May 2016, Clauses 3.3 and 3.4	networks.
Clause 1C.2.4(a) (Symmetric Access Capacity Offers – TC-1) – clause modified	WBA2 Product Description – version 7 April 2016, Clause 3.3(a) WBA (HFC) Product Description – Final Release May 2016, Clause 3.3(a) nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)	Inclusion of 'NBN Co Network' column to identify the networks for which each data transfer rate is applicable. Data transfer rates applicable to each network are consistent with WBA2 or with the 'HFC: Consultation Outcome and Final Product Construct' Paper (May 2015), which notes that HFC will launch with TC-1 profiles of 150kbps and 300kbps and that nbn intends to expand its TC-1 offering with subsequent product releases. nbn has not changed Schedule 1C to reflect the introduction of new NBN Offers or Other Charges that have <i>already occurred under the SAU</i> .
Clause 1C.2.4(b) (Symmetric Access Capacity Offers – TC-2) – clause modified	WBA2 Product Description – version 7 April 2016, Clause 3.4(a) nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)	Inclusion of 'NBN Co Network' column to identify the networks for which each data transfer rate is applicable. Data transfer rates applicable to each network are consistent with WBA2 or with the 'HFC: Consultation Outcome and Final Product Construct' Paper (May 2015), which notes that TC-2 speed tiers of 5Mbps and 10Mbps will be made available on HFC, followed by higher TC-2 speed tiers in the medium term.
Clause 1C.2.4(c) (Symmetric Access Capacity Offers – TC-3) – clause modified	N/A	Inclusion of 'NBN Co Network' column to identify the networks for which each data transfer rate is applicable.
Clause 1C.2.15 (Standard Business Offer) – clause modified	N/A	Reference to NBN Co Fibre Network inserted to clarify that the Standard Business Offer is applicable in respect of the NBN Co Fibre Network only. This clarification is not currently necessary in the SAU because the Data Transfer Rates specified in Clause 1C.2.15(a) are not available on the NBN Co Wireless Network



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
		or NBN Co Satellite Network.
<p>Clause 1C.2.16 (Enhanced Fault Service Levels Offers) – new clause inserted</p> <p>[Also relevant to deletion of previous clause 1C.4.2(e) – initial MRP for Enhanced-12 Fault Service Levels]</p>	<p>WBA2 Product Description - version 7 April 2016 Clause 6</p> <p>nbn Consultation Paper: 'HFC: Consultation Outcome and Final Product Construct' (May 2015)</p>	<p>Enhanced Fault Service Levels applicable to each network are consistent with WBA2.</p> <p>Enhanced 12 Fault Service Levels in respect of the FTTP network has been re-classified from an Other Charge to an NBN Offer. This resolves an inconsistency in the SAU, whereby Enhanced 12 Fault Service Levels is classified as an Other Charge in Clause 1C.4.2, even though it is identified in Attachment D as a Product Feature and is therefore more appropriately classified as an 'NBN Offer'. This reclassification is also consistent with WBA2, where Enhanced Fault Service Levels are classified as a Product Feature.</p> <p>Schedule 1C has not been updated to reflect the introduction of new NBN Offers or Other Charges that have <i>already occurred under the SAU</i>.</p> <p>Clause 1C.2.16 has been drafted to include the NBN Co HFC Network. Although the WBA (HFC) Product Description does not provide that Enhanced Fault Service Levels are applicable to the NBN Co HFC Network, the 'HFC: Consultation Outcome and Final Product Construct' (May 2015) Paper notes that nbn intends to make available Enhanced Fault Service Level Offers in respect of the NBN Co HFC Network.</p>
Clause 1C.3(a) – clause modified	N/A	New wording inserted to account for NBN Offers described in clause 1C.3 that have already been incorporated in the SAU.
Clause 1C.4.1(c) (MRPs on introduction – NBN Offers – Asymmetric AVC Offers) –	WBA2 Price List – version 23 May 2016, Clause 1.1(a)	Additional rows inserted for FTTB and FTTN-specific data transfer rates. The initial MRPs for the additional data transfer



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
clause modified		rates are consistent with WBA2.
Clause 1C.4.1(I) (MRPs on introduction – NBN Offers – Enhanced Fault Service Levels Offer) – new clause inserted	WBA2 Price List – version 23 May 2016, Clause 2.2	The initial MRPs are consistent with WBA2.
Clause 1C.4.2(a-b) (Other Charges) – new clauses inserted	N/A	New clauses to clarify that “First Financial Year” is not relevant to the MRPs of the Other Charges for FTTB, FTTN and HFC Networks. As these Other Charges were introduced in this variation to the SAU, the relevant time reference should be to the “First SAU Variation First Financial Year” (which is a newly defined term).
Clause 1C.4.2(c) (installations and activations) – clause modified	WBA2 Price List – version 23 May 2016, Clause 3.1 WBA (HFC) Price List (Final Release, May 2016), Clause 3.1	The initial MRPs for these Other Charges are consistent with WBA2 and the WBA (HFC) Price List. Some of the charges are expressed in the SAU slightly differently to WBA2; this is to maintain consistency with the way existing Other Charges are expressed in the SAU.
Clause 1C.4.2(d) (Service transfer-related charges) – new clause inserted	WBA2 Price List – version 23 May 2016, Clause 3.1 WBA (HFC) Price List – Final Release May 2016, Clause 3.1	The initial MRPs for these Other Charges are consistent with WBA2. Schedule 1C has not been updated to reflect the introduction of new NBN Offers or Other Charges that have <i>already occurred under the SAU</i> .
Clause 1C.4.2(e) (service modifications) – clause modified	WBA2 Price List – version 23 May 2016, Clause 3.2 WBA (HFC) Price List – Final Release May 2016, Clause 3.2	The initial MRPs for these Other Charges are consistent with WBA2. Some of the charges are expressed in the SAU slightly differently to WBA2; this is to maintain consistency with the way existing Other Charges are expressed in the SAU.



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
Clause 1C.4.2(e) (Enhanced-12 Fault Service Levels charge) – clause deleted	N/A	Clause 1C.4.2(e) of the SAU has been deleted, as the content of this clause has now been moved to the new Clause 1C.4.1(l) (MRPs on introduction – NBN Offers – Enhanced Fault Service Levels Offer). See above.
Clause 1C.4.2(f) (service management) – clause modified	<p>WBA2 Price List – version 23 May 2016, Clause 3.3</p> <p>WBA (HFC) Price List – Final Release May 2016, Clause 3.3</p>	<p>The initial MRPs for these Other Charges are consistent with WBA2. Some of the charges are expressed in the SAU slightly differently to WBA2; this is to maintain consistency with the way existing Other Charges are expressed in the SAU.</p> <p>The words 'plus each hour thereafter' have been deleted for the activity 'No Fault Found (Truck Roll Required)' for Fibre/Wireless/Satellite for (1) consistency with the rest of the drafting in Clause 1C.4.2; and (2) drafting simplicity – these words are redundant given that this charge is already explained as 'Hourly Labour Rate charged for a minimum of 2 hours'.</p>
Annexure 3 to Schedule 1C (Standard NBN Co FTTB Access Service Installation) – new annexure inserted	WBA2 Operations Manual – version 23 May 2016, Clause 4.8.3 (Standard Installation)	New Annexure 3 reflects the standard installation activities for FTTB, as set out in the table in section 4.7.3 of the WBA2 Operations Manual.
Annexure 4 to Schedule 1C (Standard NBN Co FTTN Access Service Installation) – new annexure inserted	WBA2 Operations Manual – version 23 May 2016, Clause 4.8.3 (Standard Installation)	New Annexure 4 reflects the standard installation activities for FTTN, as set out in the table in section 4.7.3 of the WBA2 Operations Manual.
Annexure 5 to Schedule 1C (Standard NBN Co HFC Access Service Installation) – new annexure inserted	WBA (HFC) Operations Manual – Final Release May 2016, Clause 4.8.3 (Standard Installation)	<p>New Annexure 5 reflects the standard installation activities for HFC, as set out in the table in section 4.8.3 of the WBA (HFC) Operations Manual.</p> <p>References to Service Classes have been replaced by direct incorporation of the characteristics of relevant Service Classes.</p>



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
Schedule 1E (Long Term Revenue Constraint Methodology)		
Clause 1E.1.2(c) (LTRCM Determination) – new clause inserted	N/A	<p>[To be read in conjunction with explanation for changes to clause 1E.9.4(c)]</p> <p>New clause to clarify that in making the first LTRCM Determination immediately following the First SAU Variation Date, the (replacement) formula in Clause 1E.9.4(c) will be applied to determine the values of the RAB, ABBRR and ICRA as though it had applied to LTRCM Determinations issued prior to the First SAU Variation Date. In effect, this will allow these amounts to be appropriately adjusted and will only be needed on one occasion.</p>
Clause 1E.9.4(c) (Real Values)	N/A	<p>Formula amended to address an error that nbn identified in the existing formula used to calculate the Cumulative Inflation Factor (CIF) in respect of Financial Years prior to the First Financial Year (2013-14).</p> <p>The replacement formula is consistent with the CIF formula that applies for the First Financial Year and subsequent Financial Years (clause 1E.9.4(b) and clause 2C.1.4(a)) – the replacement formula means that the LTRCM achieves a zero expected net present value (which is not true of the existing formula).</p>
Schedule 1H (Non-price terms and conditions)		
Clause 1H.2 (Rollout progress information) – clause modified	WBA2 Head Terms – version 7 April 2016, Clause C16.1 (Monthly Ready for Service Rollout Plan)	Update to wording and scope of rollout progress information provisions to reflect developments in nbn 's approach to providing such information, including current customer preferences.



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
Clause 1H.3 (POI rollout progress) – clause modified	N/A	Update to wording and scope of POI rollout progress information provisions to reflect developments in nbn 's approach to providing such information.
Annexure 1 to Schedule 1H (Dispute Resolution)		
Part A, Clause 1.1 (d) – clause modified	WBA2 Head Terms – version 7 April 2016, Clause G10.4 (Delegation of functions) Dispute Management – Approved Dispute Guidelines (approved by the ACCC on 10 October 2014), Clause 7.1 (More than one Resolution Advisor appointed)	This drafting change clarifies the existing Resolution Advisor arrangements set out in (1) the ACCC's approved Dispute Guidelines (approved by the ACCC on 10 October 2014); and (2) the published WBA2 Head Terms.
Part A, Clause 1.1(f) – new clause inserted	WBA2 Head Terms – version 7 April 2016, Clause G10.4 (Delegation of functions) Dispute Management – Approved Dispute Guidelines (approved by the ACCC on 10 October 2014), Clause 7.1 (More than one Resolution Advisor appointed)	This drafting change clarifies the existing Resolution Advisor arrangements set out in (1) the ACCC's approved Dispute Guidelines (approved by the ACCC on 10 October 2014); and (2) the published WBA2 Head Terms.
Part A, Clause 2.1(b) – clause modified	N/A	This change will help to ensure that the Pool can be maintained over time to achieve a beneficial balance of skills, experience and expertise, particularly in light of any resignations from the Pool during the term of appointment.
Part A, Clause 3.2 (Appointment of Panel Members from outside Pool) – new clause inserted	Dispute Management Agreement – Approved Resolution Advisor Terms of Appointment (approved by the ACCC on 3 April 2014), Clause 3.1(c)	New SAU clause inserted to reflect arrangements already set out in Clause 3.1(c) of the Approved Resolution Advisor Terms of Appointment (approved by the ACCC on 3 April 2014).
Part B, Clause 5.3 (Replacement of a	Dispute Management Agreement –	This drafting change clarifies the existing arrangements set out



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
Resolution Advisor and appointment of an additional Resolution Advisor) – clause modified	Approved Resolution Advisor Terms of Appointment (approved by the ACCC on 3 April 2014), Clause 2.1(b) SAU, Annexure 1 to Schedule 1H, Clause 5.3	in the Approved Resolution Advisor Terms of Appointment, which establishes the role of the Alternate Advisor (see clause 2.1(b)). The SAU currently contemplates multiple Resolution Advisors (see clause 6(a)(iii) of Annexure 1 Schedule 1H).
Clause 9, Definitions and Interpretation – new definition introduced for 'Nominated Person'	N/A	New definition introduced to facilitate the operation of the new Clause 1.1(f) to Annexure 1 of Schedule 1H (see above).
Appendix 1, Resolution Advisor Nomination Notice – clause modified	N/A	Appendix 1 has been modified to reflect the drafting changes made to Clause 1.1(d) and 1.1(f) of Annexure 1 of Schedule 1H.
Schedule 2A (Implementation)		
Clause 2A.4 (Co-existence Period) – new clause inserted	WBA2 Product Description – version 7 April 2016, section 3.2(c)	Clause 2A.4 of the SAU mirrors the AVC TC-4 bandwidth profiles for FTTB/N set out in section 3.2(c) of the published WBA2 Product Description. This supply qualification is (1) key to how the NBN Access Service, Ancillary Services and types of Facilities Access Services will be supplied over time; and (2) expected to be stable over the term of the SAU (or some identified sub-period), but for a specified period during which the Product Features specified in the SAU (and the WBA) will not be achieved.
Clause 2A.5 (Remediation) – new clause inserted	WBA2 Product Description – 7 April 2016, section 3.2(d)	Clause 2A.5 of the SAU reflects section 3.2(c) of the published WBA2 Product Description. Where appropriate, the SAU has replaced references to 'PIR' with 'Line rate'. nbn proposes that the WBA3 Product Description reflect the SAU in respect of this



SAU clauses that have changed / new provisions introduced ⁹⁶	WBA reference (if applicable) or relevant reference	Translation from the WBA to the SAU/ rationale for change and drafting approach
		change.
Schedule 2B (Pricing Commitments)		
2B.1.2 (Supply of NBN Offers) – clause modified	N/A	SAU clause modified to ensure that the Co-existence Period and Remediation are captured by the SAU, in the event that the Co-existence Period and Remediation continue during the Subsequent Regulatory Period.
Schedule 2C (Long Term Revenue Constraint Methodology and Regulatory Asset Base)		
2C.1.4 (Calculation of Cumulative Inflation Factor) – clause modified	N/A	See explanation for clause 1E.9.4(c), above.