

Broadbanding
Australia

Product Description

Beta NBN Co Fibre Access Service for New Developments



NBN Co Limited

Beta NBN Co Fibre Access Service for New Developments Product Description

27/09/2011

Version: 2.0 - This contains changes to section 8 of Version 1.0 plus the addition of Annexure 1

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Environment

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1 Acknowledgements regarding Beta NFAS for ND

- (a) The Customer may order, and NBN Co will supply the Beta NBN Co Fibre Access Service for New Developments (the **Beta NFAS for ND**) at a Premises within a New Development under and in accordance with the terms of the First Release Sites (Trial) Agreement.
- (b) The Beta NFAS for ND is a Beta Product under the First Release Sites (Trial) Agreement.
- (c) The New Developments are First Release Sites for the purposes of the First Release Sites (Trial) Agreement and form part of the NBN Co Network at First Release Sites.
- (d) By ordering the Beta NFAS for ND under the First Release Sites (Trial) Agreement, that Beta NFAS for ND will become an Ordered Beta Product for the purposes of the First Release Sites (Trial) Agreement.

2 Beta NBN Co Fibre Access Service for New Developments

2.1 What is the Beta NBN Co Fibre Access Service for New Developments?

- (a) The Beta NFAS for ND is an Ethernet-based, Layer 2 virtual connection on the NBN Co Network at First Release Sites that carries traffic between:
 - (i) a User Network Interface (**UNI**) on the Network Termination Device (**NTD**) located at or near a Premises within a New Development; and
 - (ii) the Network-Network Interface (**NNI**) at the Point of Interconnection (**POI**) associated with the Connectivity Serving Area (**CSA**) in which that Premises within a New Development is located,for the purposes of enabling Customer to supply a Carriage Service or Content Service.
- (b) The Beta NFAS for ND comprises the following four Product Components:
 - (i) a **UNI**, being a physical port on the NTD at a Premises within a New Development;
 - (ii) an **Access Virtual Circuit** or **AVC**, being Ethernet-based, Layer 2 virtual capacity on the NBN Co Network at First Release Sites that carries Customer traffic to a UNI on the NTD at a Premises within a New Development;
 - (iii) a **Connectivity Virtual Circuit** or **CVC**, being Ethernet-based, Layer 2 virtual capacity on the NBN Co Network at First Release Sites for the transport of Customer traffic from multiple access virtual circuits

within a CSA on an aggregated basis and presented at the NNI at the POI associated with that CSA; and

- (iv) a **NNI**, being the physical interface (and associated ports) between the NBN Co Network at First Release Sites and the Customer Network at the POI,

each with the Product Features made available by NBN Co, and selected by Customer, in respect of that Product Component.

- (c) NBN Co supplies the Beta NFAS for ND in respect of a Premises through the Product Components of the Beta NFAS for ND. Accordingly, for Customer to acquire the Beta NFAS for ND in respect of a Premises, Customer must acquire each of the Product Components of the Beta NFAS for ND in respect of that Premises.
- (d) The Product Components of the Beta NFAS for ND are more particularly described in the Beta Product Technical Specification.
- (a) The Product Features of each Product Component of the Beta NFAS for ND are described in section 3 and are more particularly described in the Beta Product Technical Specification.
- (e) The Beta NFAS for ND product construct is depicted in the diagram set out below:

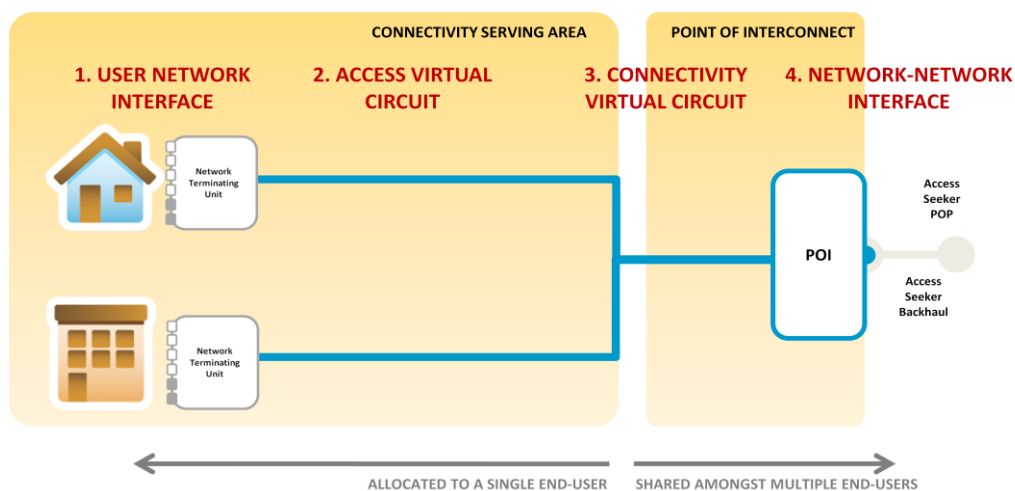


Figure 1: Beta NFAS for ND product construct.

- (f) The boundaries of the Beta NFAS for ND are:
 - (i) the End User-side of the UNI on the NTD located at or near the Premises to which the Beta NFAS for ND is supplied; and
 - (ii) the Customer-side of the NNI at the POI that serves the relevant Premises.

- (g) The NNI at the POI that serves the relevant Premises is the point at which Customer may connect its backhaul to interconnect the Customer Network with the NBN Co Network at First Release Sites. Customer is required to connect to the NNI at NBN Co's appearance on the NBN optical distribution frame associated with that NNI.

2.2 Connectivity Serving Areas and Points of Interconnection

- (a) The parties agree:
 - (i) every Premises in respect of which NBN Co may supply the Beta NFAS for ND is located within a CSA;
 - (ii) every CSA is associated with one POI;
 - (iii) every POI is associated with one or more CSAs; and
 - (iv) NBN Co will determine:
 - (A) the CSA that is associated with each Premises to which NBN Co is to supply the Beta NFAS for ND;
 - (B) the POI that is associated with that CSA; and
 - (C) the location of each POI.
- (b) NBN Co will make the information referred to in section 2.2(a)(iv) available to Customer as soon as reasonably practicable after Customer requests this information from the relevant NBN Co account manager.

2.3 Battery back-up

- (a) The NTD will include functionality that supports the operation of a battery back-up unit in respect of the UNI-V on that NTD in the event of a mains power failure in respect of that NTD. This functionality does not support the operation of a battery back-up unit in respect of any UNI-D.
- (b) NBN Co will supply, install and maintain the First Battery that will support the operation of battery back-up functionality in respect of the UNI-V on the NTD at NBN Co's cost and expense.
- (c) NBN Co is not responsible for:
 - (i) maintaining the First Battery; or
 - (ii) supplying, installing or maintaining any replacement batteries, after the expiry of the First Battery Warranty Period.
- (d) Customer is responsible for:

- (i) maintaining the First Battery; and
 - (ii) supplying, installing and maintaining all replacement batteries, after the expiry of the First Battery Warranty Period at Customer’s own cost and expense.
- (e) Customer must comply with NBN Co’s directions in relation to the supply, installation and maintenance of all replacement batteries, including
 - (i) the technical specifications of the replacement batteries; and
 - (ii) the processes in accordance with which supply, installation and maintenance of replacement batteries is to be performed.
- (f) NBN Co will not initially levy charges on Customer for the supply, installation, activation and maintenance of a battery back-up unit and the First Battery for the delivery of backup power to the UNI-V on the NTD in the event of a mains power failure in respect of that NTD, but may do so in circumstances where NBN Co is permitted to charge, or is not restricted from charging, such a levy under any law, policy, regulation or government direction.
- (g) Section 7.4 sets out Customer’s obligations in regards to NBN Pass-Through Information, which may include information that relates to the battery back-up power supply, the requirements in respect of the supply of mains power to an NTD, and the meaning of, and responses required to, any alarms that might be generated by the NTD and/or the battery backup power supply.

2.4 Exclusions

- (a) Customer agrees that the Beta NFAS for ND is one element of the overall network supply chain that is required by Customer to provide an end-to-end Carriage Service or Content Service to End Users.
- (b) Customer is responsible for providing to itself or acquiring from third parties other elements of the overall network supply chain to provide an end-to-end Carriage Service or Content Service to End Users.
- (c) The diagram set out below depicts the Beta NFAS for ND as part of the overall network supply chain that is required by Customer to provide an end-to-end Carriage Service or Content Service to End Users:

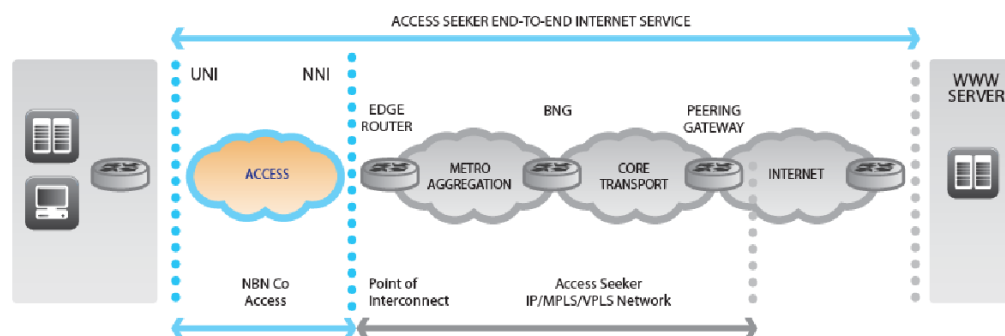


Figure 2: Beta NFAS for ND in the context of a typical end-to-end Internet service that may be offered by Customer to its End Users.

- (d) Customer agrees that the Beta NFAS for ND does not include:
- (i) facilities access at which the relevant POI is located;
 - (ii) any backhaul transmission, cross connects or cabling from the Customer-side of NBN Co’s appearance on the NBN Co optical distribution frame at which Customer connects the Customer Network to the NNI at the relevant POI (as described in section 2.1(g));
 - (iii) any cabling that may be installed between a UNI on an outdoor NTD at or near a Premises and any internal wall plate within that Premises;
 - (iv) any content or applications, including IP transit, Internet gateway connection, customer premise equipment (other than the NTD), BGP routing, soft switching infrastructure and all international connectivity associated with the supply of the Beta NFAS for ND; or
 - (v) any other end user equipment such as personal computers and network attached storage solutions.

3 Product Features

3.1 UNI

- (a) NBN Co will make available four UNI-D on each NTD in connection with the supply of the Beta NFAS for ND.
- (b) Where Customer is acquiring access to and use of a UNI-D and an associated AVC in respect of an NTD, Customer may also acquire access to and use of one port on that NTD that incorporates an analogue telephone adaptor (a **User Network Interface – Voice** or **UNI-V**) in respect of the supply of telephony services to that Premises.

- (c) NBN Co will only make available one UNI-V on each NTD in connection with the supply of the Beta NFAS for ND.
- (d) When ordering the UNI-D and associated AVC in respect of an NTD at a Premises, Customer must specify whether Customer wishes to also acquire access to, and use of, the UNI-V in respect of that NTD at that Premises, subject to availability of that UNI-V.
- (e) If Customer does not specify that it wishes to acquire access to and use of the UNI-V when ordering the UNI-D and associated AVC, Customer may subsequently specify that Customer wishes to acquire access to and use of the UNI-V subject to availability of that UNI-V and subject to and in accordance with the Operations Manual.
- (f) NBN Co will supply access to and use of the UNI-D and/or UNI-V to Customer, except where:
 - i that supply will prevent a Customer that already has access to the Beta NFAS for ND at that Premises from obtaining a sufficient amount of the service to be able to meet the Customer's reasonably anticipated requirements, measured at the time when the request was made;
 - ii that supply will prevent NBN Co from obtaining a sufficient amount of the Beta NFAS for ND to be able to meet NBN Co's reasonably anticipated requirements, measured at the time when the request was made;
 - iii that supply will prevent a person from obtaining, by the exercise of a pre-request right (as defined in Part XIC of the Competition and Consumer Act), a sufficient level of access to the Beta NFAS for ND to be able to meet the person's actual requirements; or
 - iv a UNI-D or UNI-V is not available, as determined in accordance with the availability rules set out in the Operations Manual.
- (g) NBN Co may, but reserves the right not to, install multiple NTDs in respect of the same Premises.
- (h) NBN Co will ensure that the UNI-D and UNI-V that are made accessible as part of the Beta NFAS for ND will have electrical interfaces. NBN Co will not make available optical UNI as part of the Beta NFAS for PD.
- (i) The Beta Product Technical Specification provides further information regarding UNI-D and UNI-V.

3.2 AVC

- (a) NBN Co will make the AVC available in the traffic class 4 downstream and upstream bandwidth combinations set out in each of the rows of Table 1 (each bandwidth combination in a row in Table 1 is an **AVC TC-4 Bandwidth Profile**) in accordance with the provisions relating to AVC TC-4 Bandwidth Profiles contained in the Beta Product Technical Specification:

AVC TC-4 Bandwidth Profile number	AVC TC- 4 (downstream) Mbps (PIR)*	AVC TC- 4 (upstream) Mbps (PIR)*
1	12	1
2	25	5
3	25	10
4	50	20
5	100	40

Table 1: Supported AVC TC-4 Bandwidth Profiles for Beta NFAS for ND. Note that traffic class 4 bandwidths are quoted on the basis of peak information rate (PIR), being the maximum data throughput that may be delivered by the service. * To be read subject to section 11(d).

- (b) In respect of AVC Bandwidth Profiles set out in Table 1, NBN Co will map the AVC to one UNI-D on the NTD at the relevant Premises.
- (c) NBN Co will not support the mapping of more than one AVC to one UNI-D.
- (d) In addition to the AVC TC-4 Bandwidth Profiles, NBN Co will make the AVC available in the traffic class 1 downstream and upstream bandwidth combinations set out in each row of Table 2, in addition to the traffic class 4 bandwidths set out in Table 1 (each bandwidth combination in a row in Table 2 is an **AVC TC-1 Bandwidth Profile**) in accordance with the provisions relating to AVC TC-1 Bandwidth Profiles contained in the Beta Product Technical Specification:

AVC TC-1 Bandwidth Profile number	AVC TC- 1 (downstream) Kbps (CIR)*	AVC TC- 1 (upstream) Kbps (CIR)*
1	0	0
2	150	150

Table 2: Supported AVC TC-1 Bandwidth Profiles for Beta NFAS for ND. Note that traffic class 1 bandwidths are quoted on the basis of committed information rate (CIR), being (for the purposes of table 2) a level of data throughput for which service frames are delivered according to the performance objectives of the respective traffic class. *To be read subject to section 11(d).

- (e) Customer may optionally select to acquire the AVC in any of the AVC TC-1 Bandwidth Profiles in respect of an NTD at a Premises if Customer acquires a AVC TC-4 Bandwidth Profile in respect of that NTD at that Premises.
- (f) In respect of the AVC TC-1 Bandwidth Profiles that Customer can optionally acquire set out in Table 2:

- (i) where Customer does not acquire the optional UNI-V, NBN Co will ensure that:
 - A the TC- 1 (CIR) Data Transfer Rate will be provided through the same AVC as the corresponding TC-4 Data Transfer Rate is provided;
 - B the TC-1 (CIR) Data Transfer Rate will be included within the overall corresponding TC-4 Data Transfer Rate; and
 - C the AVC will be mapped to the UNI-D on the NTD at the relevant Premises; but
- (ii) where Customer acquires the optional UNI-V, NBN Co will ensure that:
 - D the 150Kbps TC-1 (CIR) Data Transfer Rate will be provided through an additional AVC that is separate to the AVC through which the corresponding TC-4 Data Transfer Rate is provided;
 - E the 150Kbps TC-1 (CIR) Data Transfer Rate will be additional to the corresponding TC-4 Data Transfer Rate;
 - F the AVC through which the TC-4 Data Transfer Rate is provided will be mapped to the UNI-D on the NTD at the relevant Premises; and
 - G the additional AVC through which the TC-1 Data Transfer Rate is provided will be mapped to the UNI-V on the NTD at the relevant Premises.
- (g) NBN Co will not supply the AVC in traffic class 2 or traffic class 3.
- (h) The Beta Product Technical Specification provides further information regarding AVC TC-1 Bandwidth Profiles or AVC TC-4 Bandwidth Profiles.

3.3 CVC

- (a) NBN Co will make the CVC available in:
 - (i) the traffic class 1 bandwidths set out in Table 3;
 - (ii) the traffic class 4 bandwidths set out in Table 4; and
 - (iii) any combination of traffic class 1 and 4 bandwidths set out in Tables 3 and 4,

(each, a **CVC Bandwidth Profile**) in accordance with the provisions relating to CVC Bandwidth Profiles contained in the Beta Product Technical Specification:

CVC TC-1 symmetrical Mbps (CIR)*
0
5

Table 3: CVC Bandwidth Profiles for Beta NFAS for ND in traffic class 1. Note that bandwidths in table 3 are quoted on the basis of Committed Information Rate (CIR), being (for the purposes of table 3) the information transfer rate which the NBN Co Network at First Release Sites is committed to transfer for a particular link under normal conditions. *To be read subject to section 11(d).

CVC TC- 4 (downstream / upstream) Mbps (CIR)*
0
100
150
200
250
300

Table 4: CVC Bandwidth Profiles for Beta NFAS for ND in traffic class 4. Note that bandwidths in table 4 are quoted on the basis of Committed Information Rate (CIR), being (for the purposes of table 4) the information transfer rate which the NBN Co Network at First Release Sites is committed to transfer for a particular link under normal conditions. *To be read subject to section 11(d).

- (b) NBN Co will not supply the CVC in traffic class 2 or traffic class 3.
- (c) Customer agrees within a CVC a number of access virtual circuits that are located in the CSA for that CVC may be present.
- (d) Customer is responsible for dimensioning the CVC to meet its own capacity requirements and to support Customer’s supply of its own Customer Beta Products to its End Users.
- (e) The Beta Product Technical Specification provides further information regarding CVC Bandwidth Profiles.

3.4 NNI

- (a) NBN Co will make the NNI bearer available in the permissible combinations of interface capacity and range set out in each of the rows of Table 5 (each combination of interface capacity and range in a row of Table 5 is a **NNI Bearer Profile**) in accordance with the provisions relating to NNI Bearer Profiles contained in the Beta Product Technical Specification:

NNI Bearer Profiles	Interface capacity (Gbps)*	Range (Km)
1000BaseLX	1	10
10GBaseLR	10	10

Table 5: NNI Bearer Profiles for Beta NFAS for ND. *To be read subject to section 11(d).

- (b) NBN co will not supply NNI bearers in interface variants other than as specified in each of the rows of Table 5.
- (c) Customer agrees that a NNI serves as the point of hand over for one or more CVCs that are associated with that NNI in a given POI.
- (d) Customer is responsible for selecting the NNI Bearer Profile to meet its own capacity requirements in respect of the supply of its own Customer Beta Products to its End Users.
- (e) Customer agrees that the NNI operates as a single, unprotected interface.
- (f) NBN Co is not responsible for the impact that the operation of the NNI as a single, unprotected interface may have on the supply by Customer of Customer Beta Products to its End Users.
- (g) The Beta Product Technical Specification provides further information regarding NNI Bearer Profiles.

4 Ordering, varying and cancelling supply

Customer must comply with the terms, rules and processes that apply to the ordering, variation and cancellation of the supply of the Product Components and Product Features of the Beta NFAS for ND that are set out in:

- (a) the Modules of the First Release Sites (Trial) Agreement between NBN Co and Customer; and
- (b) the Operations Manual.

5 Introduction to the Business Rules

5.1 Application of these Business Rules

- (a) The rules set out or referred to in section 6 (the **Business Rules**) regulate the manner in which Customer may order, vary and cancel the supply of the Product Components and Product Features of the Beta NFAS for ND.
- (b) Customer has to comply with the Business Rules when ordering, varying and cancelling the supply of the Product Components and Product Features of the Beta NFAS for ND.

5.2 Modules and Operations Manual are subject to Business Rules

- (a) The terms and conditions set out in the Modules of the First Release Sites (Trial) Agreement between NBN Co and Customer and the Operations Manual that are referred to in section 4 are subject to the Business Rules.
- (b) If there is any inconsistency between these Business Rules and the terms and conditions set out in the Modules of the First Release Sites (Trial) Agreement between NBN Co and Customer or the Operations Manual that are referred to in section 4, then the Business Rules will prevail to the extent necessary to resolve that inconsistency.

6 Business Rules

6.1 Status

Before placing an order for any Product Component of the Beta NFAS for ND in respect of a Premises within a New Development, and before NBN Co is required to supply any Product Component of the Beta NFAS for ND in respect of a Premises within a New Development, Customer must be either:

- (a) a Carrier;
- (b) a Carriage Service Provider;
- (c) a Content Service Provider; or
- (d) an Exempt Body engaging in a related Exempt Activity.

6.2 New Developments

Customer agrees that NBN Co is only required to supply the Beta NFAS for ND, and Customer is only permitted to use the Beta NFAS for ND, in connection with a Premises which is fully located with a New Development.

6.3 Testing

- (a) Before placing an order for any Product Component of the Beta NFAS for ND in respect of a Premises, and before NBN Co is required to supply any Product Component of the Beta NFAS for ND in respect of a Premises, Customer must have successfully completed all of the tests comprising the Beta Product Testing Module for the Beta NFAS in accordance with Module B (**Testing**) of the First Release Sites (Trial) Agreement between NBN Co and Customer.
- (b) This Business Rule does not apply to the extent that NBN Co has waived the requirement for Customer to perform or participate in any of the tests comprising the Beta Product Testing Module for the Beta NFAS in

accordance with clause B1.3 of the First Release Sites (Trial) Agreement between NBN Co and Customer.

6.4 Consents, approvals and rights of access

- (a) When placing an order for any Product Component of the Beta NFAS for ND in respect of a Premises, Customer:
 - (i) warrants that it has given or obtained all consents, approvals and rights of access referred to in clause C6 of the First Release Sites (Trial) Agreement between NBN Co and Customer in respect of that Product Component of the Beta NFAS for ND; and
 - (ii) must, if requested by NBN Co, provide to NBN Co documentary evidence of Customer having obtained all of those consents, approvals and rights of access.
- (b) Customer agrees that those consents, approvals and rights of access to be provided or obtained may include consents, approvals and rights of access given by third parties, including:
 - (i) the End User to whom Customer will be supplying Carriage Services and/or Content Services that rely on the Beta NFAS for ND as an input; and
 - (ii) the owner of the Premises;and may also include:
 - (iii) the lessee of the Premises; and
 - (iv) the building manager of the Premises.
- (c) Customer agrees that the works to be performed by NBN Co and any Personnel of NBN Co in respect of which those consents, approvals and rights of access need to be provided or obtained may include (without limitation):
 - (i) the deployment of the drop fibre;
 - (ii) the installation and activation of the NTD (including the First Battery); and
 - (iii) the installation of associated wiring.
- (d) The parties agree that this section 6.4 does not limit clause C6 of the First Release Sites (Trial) Agreement between NBN Co and Customer or any other provision of the First Release Sites (Trial) Agreement between NBN Co and Customer.

6.5 Facilities access

- (a) Before NBN Co is required to supply any Product Component of the Beta NFAS for ND in respect of a Premises, Customer must:
 - (i) acquire facilities access to enable interconnection between the NBN Co Network at First Release Sites and the Customer Network at the relevant POI either:
 - (A) directly from NBN Co's nominated facilities access provider for that POI (as notified by NBN Co to Customer); or
 - (B) directly through NBN Co; and
 - (ii) successfully establish a physical and logical interconnection between the NBN Co Network at First Release Sites and the Customer Network at that POI.
- (b) Customer acknowledges that:
 - (i) there may be significant lead times between the ordering of facilities access from NBN Co's nominated facilities access provider or NBN Co (as the case may be) and commencement of supply of facilities access from NBN Co's nominated facilities access provider or NBN Co (as the case may be); and
 - (ii) Customer is responsible for planning the ordering of facilities access with regard to these lead times.

6.6 Availability

- (a) Customer agrees that the supply of the Beta NFAS for ND by NBN Co to Customer is subject to, among other things, the availability of the various Product Components of the Beta NFAS for ND at the time at which Customer places an order for those Product Components of the Beta NFAS for ND.
- (b) Please refer to the Operations Manual and the Beta Product Technical Specification for more information regarding availability.

6.7 UNI-V cannot be supplied on a standalone basis

- (a) Customer must not place an order for access to and use of a UNI-V on a NTD at a Premises unless Customer has ordered or is already acquiring access to and use of a UNI-D and associated AVC in respect of that NTD at that Premises.
- (b) Where Customer is optionally acquiring access to and use of a UNI-V on an NTD at a Premises, if Customer cancels (or attempts to cancel) the supply of the UNI-D or the associated AVC in respect of the NTD at the Premises, then

NBN Co may contemporaneously or at any time thereafter cancel the supply of the UNI-V in respect of that NTD at that Premises.

6.8 UNI-V must be supported with TC-1 CVC

Customer must not place an order for access to and use of a UNI-V on a NTD at a Premises unless Customer has ordered or is already acquiring access to and use of a CVC TC-1 in respect of the CSA in which that Premises is located.

6.9 Further Business Rules are set out in the Operations Manual

Customer acknowledges that further Business Rules are set out in the Operations Manual, including rules regarding (among other things):

- (a) the products or services that have to be ordered or acquired before any Product Components of the Beta NFAS for ND can be ordered;
- (b) the order in which Product Components of the Beta NFAS for ND can be ordered, varied and cancelled; and
- (c) the availability of Product Components of the Beta NFAS for ND, including UNIs.

7 Customer's rights and obligations

7.1 Usage

- (a) Customer may only use the Product Components of the Beta NFAS for ND for the purposes of providing Carriage Services or Content Services to End Users at Premises within the New Developments.
- (b) Customer must comply with NBN Co's Fair Use Policy in connection with Customer's use of the Beta NFAS for ND and each of the Product Components of the Beta NFAS for ND.

7.2 Connections to the UNI

Customer acknowledges that:

- (a) Customer is responsible for all connections made on the End User-side of any UNI on an NTD; and
- (b) NBN Co is not responsible for any physical connections on the End User-side of any UNI on an NTD or the supply, connection, operation or maintenance of any customer premises equipment to or in connection with the NTD.

7.3 VLAN tagging

Customer must comply with the Virtual Local Area Network (**VLAN**) tagging scheme set out in the Beta Product Technical Specification.

7.4 NBN Co Pass-Through Information

- (a) From time to time, NBN Co may provide information to Customer that is relevant to an End User's access to, and use of, certain parts the NBN Co Network at First Release Sites used to supply the Beta NFAS for ND in respect of that End User, including:
- (i) the NTD;
 - (ii) the battery back-up power supply; and
 - (iii) the meaning of, and End User response required to, any alarms that may be generated by the NTD,
- (NBN Co Pass-Through Information).**
- (b) Unless agreed otherwise by NBN Co in writing, Customer has to:
- (i) provide NBN Co Pass-Through Information to each of Customer's End Users without delay after receiving NBN Co Pass-Through Information from NBN Co; and
 - (ii) use reasonable endeavours to ensure that each of Customer's End Users complies with any requirements set out in any NBN Co Pass-Through Information.
- (c) Customer may provide NBN Co Pass-Through Information to each of Customer's End Users in any manner or form that Customer thinks fit.

7.5 Failure to comply

If Customer fails to comply with any of the requirements of this section 7, then NBN Co may suspend and/or cancel the supply of the relevant Beta NFAS for ND or any of the Product Components of the relevant Beta NFAS for ND.

8 Price List

8.1 Charges

The Charges set out in this section 8 apply in respect of the supply of the Beta NFAS New Developments on and from 1 October 2011.

8.2 References to download and upload speeds

References to download and upload speeds in this section 8 are to the maximum peak speeds that the NBN Co Network is designed to make available to Customer. The speeds actually experienced by retail and wholesale downstream customers and End Users will depend upon a number of factors including the contention ratios that are determined by Customer; the equipment that is used by Customer, downstream

customers and End Users; the nature and quality of the relevant products or services acquired by wholesale and retail downstream customers and End Users; the number of simultaneous End Users using the relevant products or services acquired by wholesale and retail downstream customers and End Users; and the nature and quality of the connection at the relevant Premises.

8.3 Billing Periods

For the purposes of this section 8, **Billing Period** means each period of one calendar month starting at 00:00:00 on the 4th day of each calendar month and ending at 23:59:59pm on the 3rd calendar day of the next calendar month.

8.4 AVC TC-4 (including UNI-D) Recurring Charges

AVC TC-4 downstream Mbps (PIR)*	AVC TC-4 upstream Mbps (PIR)*	AVC TC-4 (including UNI-D) Recurring Charge	Validity Period
12	1	\$24.00	1/10/2011 to 30/6/2017
25	5	\$27.00	1/10/2011 to 31/12/2013
25	10	\$30.00	1/10/2011 to 31/12/2013
50	20	\$34.00	1/10/2011 to 31/12/2013
100	40	\$38.00	1/10/2011 to 31/12/2013

**To be read subject to section 8.2.*

- (a) The AVC TC-4 (including UNI-D) Recurring Charges are recurring charges that are incurred by Customer in respect of each Billing Period (or part thereof) in which a UNI-D and AVC TC-4 is made available by NBN Co to Customer.
- (b) The AVC TC-4 (including UNI-D) Recurring Charges are inclusive of:
 - (i) access to and use of one UNI-D for use in conjunction with the AVC;
 - (ii) optional access to and use of one UNI-V on the NTD in respect of which the AVC is made available (where available on that NTD);
 - (iii) optional acquisition of a 150kbps TC-1 (CIR) for the purposes of supplying telephony services that will be mapped to either:
 - (A) the UNI-D where Customer does not acquire the optional UNI-V, in which case:

- the 150Kbps TC- 1 (CIR) Data Transfer Rate will be provided through the same AVC as the corresponding TC-4 Data Transfer Rate is provided;
 - the 150Kbps TC-1 (CIR) Data Transfer Rate will be included within the overall corresponding TC-4 Data Transfer Rate; and
 - the AVC will be mapped to the UNI-D on the NTD at the relevant Premises; or
- (B) the UNI-V where Customer acquires the optional UNI-V, in which case:
- the 150Kbps TC-1 (CIR) Data Transfer Rate will be provided through an additional AVC that is separate to the AVC through which the corresponding TC-4 Data Transfer Rate is provided;
 - the 150Kbps TC-1 (CIR) Data Transfer Rate will be additional to the corresponding TC-4 Data Transfer Rate;
 - the AVC through which the TC-4 Data Transfer Rate is provided will be mapped to the UNI-D on the NTD at the relevant Premises; and
 - the additional AVC through which the TC-1 Data Transfer Rate is provided will be mapped to the UNI-V on the NTD at the relevant Premises.

8.5 CVC TC-1 Recurring Charges

CVC TC-1 symmetrical Mbps (CIR)*	CVC TC-1 Recurring Charge	Validity Period
5	\$100	1/10/2011 to 31/12/2013

**To be read subject to section 8.2.*

The CVC TC-1 Recurring Charges are charges that are incurred by Customer in respect of each Billing Period (or part thereof) in which a CVC TC-1 is made available by NBN Co to Customer.

8.6 CVC TC-4 Recurring Charges

CVC TC-4 symmetrical Mbps (CIR)*	CVC TC-4 Recurring Charge	Validity Period
100	\$2000	1/10/2011 to 30/7/2017

CVC TC-4 symmetrical Mbps (CIR)*	CVC TC-4 Recurring Charge	Validity Period
150	\$3000	1/10/2011 to 30/7/2017
200	\$4000	1/10/2011 to 30/7/2017
250	\$5000	1/10/2011 to 30/7/2017
300	\$6000	1/10/2011 to 30/7/2017

**To be read subject to section 8.2.*

- (a) The CVC TC-4 Recurring Charges are charges that are incurred by Customer in respect of each Billing Period (or part thereof) in which a CVC TC-4 is provided by NBN Co to Customer.
- (b) Subject to section 8.6(c), in respect of every Primary UNI-D & Associated AVC within a CSA that is provided by NBN Co to Customer as at the start of each Billing Period, NBN Co will credit to Customer an amount per Billing Period in respect of each of those Primary UNI-D & Associated AVC within that CSA (in this section 8.6, the **credit amount**). The credit amount is equal to the charge that would otherwise apply to the supply of a 50kbps CVC based on then-current CVC pricing per Mbps. (For example, if CVC pricing per Mbps at the relevant time is \$20.00, then the credit amount will be \$1.00.) In respect of every Primary UNI-D & Associated AVC within a CSA, NBN Co will ensure that the credit amount is deducted from the total amount payable by Customer to NBN Co in respect of all of the CVCs for that CSA which are provided by NBN Co to Customer as at the start of that Billing Period (and that the relevant invoice is adjusted accordingly).
- (c) In respect of the credit amount that applies to all of the CVCs for a CSA which are provided by NBN Co to Customer pursuant to section 8.6(b), the credit amount will be capped at, and will not exceed, the total recurring charges that apply in respect of all of the CVCs for that CSA which are provided by NBN Co to Customer.
- (d) For the purposes of this section 8.6, **Primary UNI-D & Associated AVC** means the primary UNI-D and associated AVC that is made available by NBN Co to Customer in respect of an NTD. In respect of each NTD, there is, and can only be, one Primary UNI-D & Associated AVC per Customer, but there can be multiple Primary UNI-D & Associated AVC in respect of an NTD where multiple customers are accessing that NTD.

8.7 NNI Bearer Recurring Charges

NNI Bearer Profiles*	Interface capacity (Gbps)*	Range (Km)	NNI Bearer Recurring Charge	Validity Period
1000BaseLX	1	10	\$200	1/10/2011 to 30/7/2017
10GBaseLR	10	10	\$400	1/10/2011 to 30/7/2017

*To be read subject to section 8.2.

- (a) The NNI Bearer Recurring Charges are charges that are incurred by Customer in respect of each Billing Period (or part thereof) in which an NNI is made available by NBN Co to Customer.
- (b) The [Beta Product Technical Specification](#) provides further information regarding NNI bearers.

8.8 Ancillary charges for installations and activations

Activity	Chargeable unit	Charge	Validity Period
Initial Standard Installation	Per installation	\$0	1/10/2011 to expiry of Term
Initial Non Standard Installation	Time and materials	Hourly Labour Rate plus cost of materials (subject to section 8.8(a) below)	1/10/2011 to 31/12/2012
Subsequent Installation	Time and materials	\$270 plus Hourly Labour Rate plus cost of materials (subject to section 8.8(b) below)	1/10/2011 to 31/12/2012
Access Component Reactivation	Per reactivation	\$0	1/10/2011 to expiry of Term
CVC Setup / Activation	Per activation	\$0	1/10/2011 to expiry of Term
NNI 1000BaseLX (1Gbps/10Km) Setup	Per activation	\$1,000	1/10/2011 to 31/12/2012
NNI 10GBaseLR (10Gbps/10Km) Setup	Per activation	\$5,000	1/10/2011 to 31/12/2012
Service Qualification Enquiry	Per enquiry	\$0	1/10/2011 to expiry of Term

- (a) For the purposes of the Charges for Initial Non Standard Installations:

- (i) the Charges will only be incurred if Customer has consented to the details of a quote provided by NBN Co in respect of that Initial Non Standard Installation;
 - (ii) the Charges will only be incurred by Customer in respect of the labour and materials that NBN Co considers is additional to the labour and materials that would have been required if the installation were considered to be an Standard Initial Installation; and
 - (iii) the Charge incurred by Customer will be rounded up to the nearest full hour of labour required to perform the installation.
- (b) For the purposes of the Charges for Subsequent Installations:
- (i) the Charges will only be incurred if Customer has consented to the details of a quote provided by NBN Co in respect of that Subsequent Installation;
 - (ii) the Charges will only be incurred by Customer in respect of the labour and materials that NBN Co considers is additional to the labour and materials that would have been required if the installation were considered to be an Standard Initial Installation;
 - (iii) the Charge incurred by Customer will be rounded up to the nearest full hour of labour required to perform the installation; and
 - (iv) the minimum amount of the Charge incurred by Customer is \$270.
- (c) For the purposes of the table set out above:

Access Component means, in respect of the Beta NFAS New Developments, the UNI and the AVC.

Access Component Reactivation means the activation of the Access Components of the Beta NFAS New Developments to be made available by NBN Co to Customer in respect of a NTD at a Premises where:

- (i) NBN Co has previously made available Access Components in respect of that NTD at that Premises; and
- (ii) NBN Co (or an Installer) is not required to attend that Premises to activate those Access Components.

Connecting Equipment has the meaning given to that term in Annexure 1 to this Product Description.

CVC Setup / Activation means the setup and activation of a CVC to be made available by NBN Co to Customer.

Hourly Labour Rate means \$75 per hour.

Initial Non Standard Installation means a Non Standard Installation that is the first Installation performed by NBN Co (or an Installer) in respect of a Premises.

Initial Standard Installation means a Standard Installation that is the first Installation performed by NBN Co (or an Installer) in respect of a Premises.

Installation means:

- (i) the installation and make ready for service of Connecting Equipment by NBN Co (or an Installer) at a Premises; or
- (iii) the installation, make ready for service and activation of the Connecting Equipment by NBN Co (or an Installer) at a Premises.

Installer has the meaning given to that term in Annexure 1 to this Product Description.

NNI 10GBaseLR (10Gbps/10Km) Setup means the setup and activation of a NNI 10GBaseLR (10Gbps/10Km) to be made available by NBN Co to Customer.

NNI 1000BaseLX (1Gbps/10Km) Setup means the setup and activation of a NNI 1000BaseLX (1Gbps/10Km) to be made available by NBN Co to Customer.

Non Standard Installation means an Installation where:

- (i) the conditions set out in section 1 of Annexure 1 to this Product Description are not satisfied; or
- (iv) the installation is otherwise considered to be a “non standard installation” in accordance with section 2 of Annexure 1 to this Product Description.

Service Qualification Enquiry has the meaning given to that term in the Dictionary to the Wholesale Broadband Agreement.

Standard Installation means an Installation where:

- (i) the conditions set out in section 1 of Annexure 1 to this Product Description are satisfied; and
- (v) the installation is not otherwise considered to be a “non standard installation” in accordance with section 2 of Annexure 1 to this Product Description.

Subsequent Installation means any:

- (i) Standard Installation performed by NBN Co (or an Installer) in respect of a Premise that is not an Initial Standard Installation; or
- (ii) Non Standard Installation performed by NBN Co (or an Installer) in respect of a Premise that is not an Initial Non Standard Installation.

8.9 Ancillary charges for service modifications

Activity	Chargeable unit	Charge	Validity Period
AVC Modification	Per modification	\$0	1/10/2011 to expiry of Term
CVC Modification	Per event	\$0	1/10/2011 to expiry of Term
NNI Modification	Per event	\$0	1/10/2011 to expiry of Term
Rearrangement / Modification	Time and materials	Hourly Labour Rate plus cost of materials	1/10/2011 to 31/12/2012
Equipment Removal	Time and materials	Hourly Labour Rate plus cost of materials	1/10/2011 to 31/12/2012
Equipment Repair	Time and materials	Hourly Labour Rate plus cost of materials	1/10/2011 to 31/12/2012

- (a) For the purposes of the table set out above:

AVC Modification means the modification of the bandwidth or traffic class of an AVC made available by NBN Co to Customer in respect of a Premise where Customer has validly requested that modification be performed in accordance with the [Operations Manual](#).

CVC Modification means the modification of the bandwidth or traffic class of a CVC made available by NBN Co to Customer in respect of a CSA where Customer has validly requested that modification be performed in accordance with the [Operations Manual](#).

Hourly Labour Rate means \$75 per hour.

NNI Modification means the modification of the configuration of an NNI which NBN Co supplies an NNI to Customer in respect of a POI where Customer has validly requested that modification be performed in accordance with the [Operations Manual](#).

Rearrangement / Modification means the rearrangement or modification of any NBN Co Equipment that is installed or located at a Premises where Customer has validly requested that NBN Co rearrange or modify that NBN Co Equipment in accordance with the [Operations Manual](#).

Equipment Removal means the removal of any NBN Co Equipment that is installed or located at a Premises where Customer has validly requested that NBN Co remove that NBN Co Equipment in accordance with the [Operations Manual](#).

Equipment Repair means the repair of any NBN Co Equipment that is installed or located at a Premises where Customer has validly requested that NBN Co repair that NBN Co Equipment, except for repairs of any NBN Co Equipment where NBN Co reasonably considers that an act or omission of Customer (or any downstream customer or End User) has caused the loss, theft or damage to that NBN Co Equipment which has given rise for the need to perform those repairs.

- (b) For the purposes of the Charges for:
- (i) Rearrangement / Modification;
 - (ii) Equipment Removal; and
 - (iii) Equipment Repair,

the Charges incurred by Customer will be rounded up to the nearest full hour of labour required to perform the Rearrangement / Modification, Equipment Removal or Equipment Repair (as the case may be).

8.10 Ancillary charges for service management

Activity	Chargeable unit	Charge	Validity Period
On Site Maintenance Call Out	Per event	\$0	1/10/2011 to expiry of Term
No Fault Found (No Truck Roll Required)	Per event	\$50	1/10/2011 to 31/12/2012
No Fault Found (Truck Roll Required)	Per event	\$150 for the first two hours plus the Hourly Labour Rate for each hour thereafter (subject to section 8.10(a) below)	1/10/2011 to 31/12/2012
Late Cancellation (Site Visit Required)	Per event	\$0	1/10/2011 to expiry of Term
Missed Appointment	Per event	\$0	1/10/2011 to expiry of Term

- (a) For the purposes of the Charges for No Fault Found (Truck Roll Required):

- (i) the Charges incurred by Customer will be rounded up to the nearest full hour of labour required to investigate a fault that is reported by Customer to NBN Co which NBN Co determines, acting reasonably, is not an NBN Fault (as that term is defined in the [Operations Manual](#)); and
 - (ii) the minimum amount of the Charge incurred by Customer is \$150.
- (b) For the purposes of the table set out above:

Hourly Labour Rate means \$75 per hour.

On Site Maintenance Call Out means the performance of works by NBN Co Personnel to rectify a Reported NBN Fault that requires NBN Co Personnel to attend the location of the cause of that Reported NBN Fault for the purposes of rectifying that Reported NBN Fault.

No Fault Found (No Truck Roll Required) means the investigation of a fault that is reported by Customer to NBN Co which NBN Co determines, acting reasonably, is not an NBN Fault where NBN Co Personnel have not attended the suspected location of the suspected cause of that alleged NBN Fault for the purposes of investigating and/or rectifying that alleged NBN Fault.

No Fault Found (Truck Roll Required) means the investigation of a fault that is reported by Customer to NBN Co which NBN Co determines, acting reasonably, is not an NBN Fault where NBN Co Personnel have attended the suspected location of the suspected cause of that alleged NBN Fault for the purposes of investigating and/or rectifying that alleged NBN Fault.

Late Cancellation (Site Visit Required) means the cancellation of a request by Customer for the performance of an activity that requires NBN Co to attend the Premises where that cancellation occurs after NBN Co has dispatched NBN Co Personnel for the purposes of fulfilling that request.

Missed Appointment means that when a technician has visited a premises and the end user was not present for the work to occur such as installation, on site survey or maintenance call out.

9 Service Levels

9.1 Scope of this Section

- (a) This section 9 sets out the Service Levels that will apply in respect of NBN Co's supply of the Beta NFAS for ND to Customer.
- (b) This section 9 is divided into two parts:
 - (i) Part A which sets out the Service Levels that are intended to support Customer's compliance with certain regulatory obligations; and

- (ii) Part B which sets out the remaining Service Levels.

9.2 Priority Assistance

- (a) Customer agrees that the Service Levels that will apply in respect of NBN Co's supply of the Beta NFAS for ND to Customer may not support Customer's obligations to certain End Users in relation to Priority Assistance.
- (b) If an End User is eligible for Priority Assistance, then Customer must ascertain whether that End User has access to and agrees to use an Alternative Service. If that End User does not have access to, or has not agreed to use, an Alternative Service, then Customer must, at no cost to NBN Co, offer that End User an Interim Service until such time as NBN Co provides written notification to Customer that the Service Levels that will apply in respect of NBN Co's supply of the Beta NFAS for ND to Customer are able to support Customer's obligations to that End User in relation to Priority Assistance.

Part A Service Levels supporting Customer's compliance with certain regulatory obligations

9.3 Access Connection Performance Targets

Status of Premises Location of Premises	Available Infrastructure	No Available Infrastructure
Urban Area	5 Business Days	NBN Co will aim to successfully complete Access Connections in as timely a manner as is reasonably practicable in the circumstances (determined on a case-by-case basis)
Major Rural Area	10 Business Days	
Minor Rural Area	15 Business Days	
Remote Area	15 Business Days	

Table 7: Access Connection Performance Targets

- (a) Table 7 sets out the performance targets (the **Access Connection Performance Targets**) that apply in respect of the timeframes within which NBN Co will successfully complete the connection and activation of both of the Access Components of the Beta NFAS for ND supplied by NBN Co to Customer in respect of a Premises within a New Development (a **Access Connection**).
- (b) NBN Co will use reasonable endeavours to meet the applicable Access Connection Performance Target, but will not be liable for any Losses or be required to pay or credit any Service Level Rebates or other amounts to Customer if NBN Co fails to meet the applicable Access Connection Performance Target.

- (c) The Access Connection Performance Targets do not apply in respect of the connection and activation of the CVC or NNI Product Components of the Beta NFAS for ND.
- (d) The Access Connection Performance Targets do not apply unless NBN Co is already supplying the CVC and NNI Product Components of the Beta NFAS for ND that are associated with the supply of the Access Components of the Beta NFAS for ND in respect of the Premises.
- (e) For the purposes of determining whether NBN Co has successfully completed a Access Connection within the relevant performance target:
 - (i) the measurement of NBN Co’s performance will commence at Order Receipt using the local time at the location of the Premises in respect of which the connection and activation is being performed (not at the local time at the location at which Customer placed those orders or the local time at the location at which NBN Co received those orders);
 - (ii) if Order Receipt occurs outside of 8:00am to 5:00pm on a particular Business Day, then it is deemed that Order Receipt occurs at 8:00am on the following Business Day; and
 - (iii) the measurement of NBN Co’s performance will end at the time at which:
 - (A) NBN Co, acting reasonably, considers that NBN Co has successfully completed the connection and activation; and
 - (B) NBN Co notifies Customer (either through the NBN Co Platform, by telephone, by email or by such other means as may be notified by NBN Co to Customer from time to time) that NBN Co has successfully completed the connection and activation.
- (f) By way of example only, if:
 - (i) Customer validly places order(s) for both of the Access Components in respect of a Premises located in Sydney by 6:00pm Sydney time; and
 - (ii) NBN Co receives both of those orders in Perth by 4:00pm Perth time on the same Business Day,

then for the purposes of determining whether NBN Co has successfully completed the connection and activation within the relevant performance target, it is deemed that Customer’s validly placed the order(s) for both of the Access Components in respect of that Premises at 8:00am Sydney time on the following Business Day.

9.4 Beta NFAS for ND Fault Rectification Performance Targets

Type of Standard Beta NFAS for ND Fault	Performance target
Standard Beta NFAS for ND Fault that can be rectified without external or internal plant work or NBN Co attending the Premises or where the Standard Beta NFAS for ND Fault is caused by NBN Co disconnecting the Beta NFAS for ND as a result of an administrative error that does not involve damage to a facility	By the end of the next Business Day after the day on which the Standard Beta NFAS for ND Fault is validly reported by Customer to NBN Co in accordance with the Operations Manual
Standard Beta NFAS for ND Fault in respect of a Premises in an Urban Area (that is not a Standard Beta NFAS for ND Fault described in row 1)	By the end of the next Business Day after the day on which the Standard Beta NFAS for ND Fault is validly reported by Customer to NBN Co in accordance with the Operations Manual
Standard Beta NFAS for ND Fault in respect of a Premises in a Rural Area (that is not a Standard Beta NFAS for ND Fault described in row 1)	By the end of the second Business Day after the day on which the Standard Beta NFAS for ND Fault is validly reported by Customer to NBN Co in accordance with the Operations Manual
Standard Beta NFAS for ND Fault in respect of a Premises in a Remote Area (that is not a Standard Beta NFAS for ND Fault described in row 1)	By the end of the third Business Day after the day on which the Standard Beta NFAS for ND Fault is validly reported by Customer to NBN Co in accordance with the Operations Manual

Table 8: Standard Beta NFAS for ND Fault Rectification Performance Targets

- (a) Table 8 sets out the performance targets (the **Standard Beta NFAS for ND Fault Rectification Performance Targets**) that apply in respect of the timeframes within which NBN Co will successfully rectify reported faults that are validly reported by Customer in accordance with the Operations Manual and which adversely impact the Beta NFAS for ND (or any Product Component of the Beta NFAS for ND) supplied by NBN Co to Customer in respect of a Premises (**Standard Beta NFAS for ND Faults**).
- (b) NBN Co will use reasonable endeavours to meet the applicable Standard Beta NFAS for ND Fault Rectification Performance Target, but will not be liable for any Losses or be required to pay or credit any Service Level Rebates or other amounts to Customer if NBN Co fails to meet the applicable Standard Beta NFAS for ND Fault Rectification Performance Target.
- (c) For the purposes of determining whether NBN Co has successfully rectified a Standard Beta NFAS for ND Fault within the relevant performance target:
- (i) the measurement of NBN Co's performance will commence at the time at which Customer validly reports the Standard Beta NFAS for ND Fault to NBN Co in accordance with the Operations Manual using

the local time at the location of the Premises in respect of which that Standard Beta NFAS for ND Fault has been raised (not at the local time at the location from which Customer validly reports that Standard Beta NFAS for ND Fault to NBN Co or the local time at the location at which NBN Co received that report);

- (ii) if the time at which Customer validly reports the Standard Beta NFAS for ND Fault to NBN Co occurs outside of 8:00am to 5:00pm on a particular Business Day, then it is deemed that Customer validly reported that Standard Beta NFAS for ND Fault to NBN Co at 8:00am on the following Business Day; and
- (iii) the measurement of NBN Co's performance will end at the time at which:
 - (A) NBN Co, acting reasonably, considers that NBN Co has successfully rectified the Standard Beta NFAS for ND Fault; and
 - (B) NBN Co notifies Customer (either through the NBN Co Platform, by telephone, by email or by such other means as may be notified by NBN Co to Customer from time to time) that NBN Co has successfully rectified the Standard Beta NFAS for ND Fault.
- (d) By way of example only, if:
 - (i) Customer validly reports to NBN Co a Standard Beta NFAS for ND Fault in respect of a Premises located in Sydney by 6:00pm Sydney time; and
 - (ii) NBN Co receives that report in Perth by 4:00pm Perth time on the same Business Day,

then for the purposes of determining whether NBN Co has successfully rectified that Standard Beta NFAS for ND Fault within the relevant performance target, it is deemed that Customer validly reported that Standard Beta NFAS for ND Fault to NBN Co in respect of that Premises at 8:00am Sydney time on the following Business Day.

9.5 Kept Appointment Performance Targets

Type of appointment	Performance target
Appointment made by NBN Co to attend a Premises at a particular time for the purposes of connecting and activating Access Components of the Beta NFAS for ND or rectifying a Standard Beta NFAS for ND Fault	NBN Co Personnel is present at the Premises not later than 15 minutes after the time of the appointment
Appointment made by NBN Co to attend a Premises between two particular times of day that are not more than four hours apart for the purposes of connecting and activating Access Components of the Beta NFAS for ND or rectifying a Standard Beta NFAS for ND Fault	NBN Co Personnel is present at the Premises not later than 15 minutes after the end of the period
Appointment made by NBN Co to attend a Premises between two particular times of day that are more than four, but not more than 5, hours apart for the purposes of connecting and activating Access Components of the Beta NFAS for ND or rectifying a Standard Beta NFAS for ND Fault	NBN Co Personnel is present at the Premises within the period
Appointment made by NBN Co to attend a Premises located in a Minor Rural Area or Remote Area between two particular times of day that are more than four, but not more than 5, hours apart for the purposes of connecting and activating Access Components of the Beta NFAS for ND or rectifying a Standard Beta NFAS for ND Fault where the NBN Co Personnel must travel a long distance to keep the appointment	NBN Co Personnel is present at the Premises not later than 45 minutes after the end of the period

Table 9: Kept Appointment Performance Targets

- (a) Table 9 sets out the performance targets (the **Kept Appointment Performance Targets**) that apply in respect of the keeping of appointments made by NBN Co to attend a Premises for the purposes of:
- (i) connecting and activating the Access Components of the Beta NFAS for ND; or
 - (ii) rectifying a Standard Beta NFAS for ND Fault.
- (b) NBN Co will use reasonable endeavours to meet the applicable Kept Appointment Performance Target, but will not be liable for any Losses or be required to pay or credit any Service Level Rebates or other amounts to

Customer if NBN Co fails to meet the applicable Kept Appointment Performance Target.

Part B Other Service Levels

9.6 CVC Activation Performance Targets

Activity	Performance target
CVC Activation	5 Business Days

Table 10: CVC Activation Performance Targets

- (a) Table 10 sets out the performance targets (the **CVC Activation Performance Targets**) that apply in respect of the timeframes within which NBN Co will successfully complete the activation of a CVC supplied by NBN Co to Customer in respect of a CSA (a **CVC Activation**).
- (b) NBN Co will use reasonable endeavours to meet the CVC Activation Performance Targets, but will not be liable for any Losses or be required to pay or credit any Service Level Rebates or other amounts to Customer if NBN Co fails to meet any CVC Activation Performance Target.
- (c) For the purposes of determining whether NBN Co has successfully completed a CVC Activation within the relevant performance target:
- (i) the measurement of NBN Co's performance will commence at the time at which NBN Co receives a valid order from Customer for the activation of the CVC in respect of the CSA in accordance with the Operations Manual (in this section 9.6, **Order Receipt**) using the local time at the location of that CSA (not at the local time at the location at which Customer placed that order or the local time at the location at which NBN Co received that order);
 - (ii) if the Order Receipt occurs outside of 8:00am to 5:00pm on a particular Business Day, then it is deemed that Order Receipt occurs at 8:00am on the following Business Day; and
 - (iii) the measurement of NBN Co's performance will end at the time at which:
 - (A) NBN Co, acting reasonably, considers that NBN Co has successfully completed the activation; and
 - (B) NBN Co notifies Customer (either through the NBN Co Platform, by telephone, by email or by such other means as may be notified by NBN Co to Customer from time to time) that NBN Co has successfully completed the activation.

- (d) By way of example only, if:
 - (i) Customer validly places an order for a CVC Activation in respect of a CSA located in Sydney by 6:00pm Sydney time; and
 - (ii) NBN Co receives that order in Perth by 4:00pm Perth time on the same Business Day,

then for the purposes of determining whether NBN Co has successfully completed the CVC activation within the relevant performance target, it is deemed that Order Receipt occurred at 8:00am Sydney time on the following Business Day.

9.7 NNI Bearer Activation Performance Targets

Activity	Timeframe
Activate new NNI bearer	15 Business Days after NBN Co receives a valid order from Customer for activation of a new NNI bearer in accordance with the Operations Manual.

Table 11: NNI Bearer Activation Performance Targets

- (a) Table 11 sets out the performance targets (the **NNI Bearer Activation Performance Targets**) that apply in respect of the timeframes within which NBN Co will successfully complete the activation of new NNI bearers supplied by NBN Co to Customer in respect of a POI (each, a **NNI Bearer Activation**).
- (b) NBN Co will use reasonable endeavours to meet the NNI Bearer Activation Performance Targets, but will not be liable for any Losses or be required to pay or credit any Service Level Rebates or other amounts to Customer if NBN Co fails to meet any NNI Bearer Activation Performance Target.
- (c) The NNI Bearer Activation Performance Targets do not apply in respect of the activation of new NNI bearers where NBN Co, acting reasonably, considers that the equipment or infrastructure necessary for NBN Co to supply the new NNI bearer is not available in respect of the POI.
- (d) For the purposes of determining whether NBN Co has successfully completed a NNI Bearer Activation within the relevant performance target:
 - (i) the measurement of NBN Co’s performance will commence at the time at which NBN Co receives a valid order from Customer for the activation of the new NNI bearer in respect of the POI in accordance with the Operations Manual (in this section 9.7, **Order Receipt**) using the local time at the location of that POI (not at the local time at the location at which Customer placed that order or the local time at the location at which NBN Co received that order);

- (ii) if Order Receipt occurs outside of 8:00am to 5:00pm on a particular Business Day, then it is deemed that Order Receipt occurs at 8:00am on the following Business Day; and
- (iii) the measurement of NBN Co's performance will end at the time at which:
 - (A) NBN Co, acting reasonably, considers that NBN Co has successfully completed the activation; and
 - (B) NBN Co notifies Customer (either through the NBN Co Platform, by telephone, by email or by such other means as may be notified by NBN Co to Customer from time to time) that NBN Co has successfully completed the activation.
- (e) By way of example only, if:
 - (i) Customer validly places an order for a NNI Bearer Activation in respect of a POI located in Sydney by 6:00pm Sydney time; and
 - (ii) NBN Co receives that order in Perth by 4:00pm Perth time on the same Business Day,

then for the purposes of determining whether NBN Co has successfully completed the NNI Bearer Activation within the relevant performance target, it is deemed that Order Receipt occurred at 8:00am Sydney time on the following Business Day.

10 Beta Product Technical Specification

10.1 Compliance

NBN Co and Customer agree to comply with the Beta Product Technical Specification, including any further terms and conditions that may be set out in the Beta Product Technical Specification.

10.2 Inconsistency

- (a) The Beta NFAS for ND, including its Product Components and Product Features, is more particularly described in the Beta Product Technical Specification.
- (b) If there is any inconsistency between this Product Description and the Beta Product Technical Specification, then the Beta Product Technical Specification will prevail to the extent necessary to resolve that inconsistency.

11 Defined terms and interpretation

- (a) A capitalised term that is used in this Product Description and is defined in:
- (i) the Dictionary for the First Release Sites (Trial) Agreement has the meaning given to that term in the Dictionary for that agreement; or
 - (ii) in this section 11, has the meaning given to that term in this section 11.

- (b) In this Product Description:

Access Component means the UNI and/or the AVC, as the context requires.

Access Connection has the meaning given to that term in section 9.3(a).

Access Connection Performance Targets has the meaning given to that term in section 9.3(a).

Access Virtual Circuit or **AVC** has the meaning given to that term in section 2.1(b)(ii).

Alternative Service has the meaning given to that term in Industry Code ACIF C609:2007 - Priority Assistance for Life Threatening Medical Conditions.

Available Infrastructure means the Access Components in respect of a Premises are available for automatic connection and activation by NBN Co at Order Receipt (i.e. remotely without the need for NBN Co Personnel to attend that Premises for the purposes of connecting and activating that Access Connection).

AVC TC-1 Bandwidth Profile has the meaning given to that term in section 3.2(d).

AVC TC-4 Bandwidth Profile has the meaning given to that term in section 3.2(a).

Beta NFAS for ND has the meaning given to that term in section 2.1(a).

Business Rules has the meaning given to that term in section 5.1(a).

Connectivity Virtual Circuit or **CVC** has the meaning given to that term in section 2.1(b)(iii).

CSA means Connectivity Serving Area, being a geographical region that is addressable using a single CVC.

CVC Activation has the meaning given to that term in section 9.6(a).

CVC Activation Performance Targets has the meaning given to that term in section 9.6(a).

CVC Bandwidth Profile has the meaning given to that term in section 3.3(a).

Data Transfer Rate means the average number of bits per second transferred from a data source to a data destination.

Fair Use Policy means the latest version of the NBN Co Fair Use Policy that applies in respect of the Beta NFAS for ND that is notified by NBN Co to Customer from time to time.

First Battery means the first battery that is or was installed by or on behalf of NBN Co in respect of the NTD at a Premises on or about the time of the installation of that NTD at that Premises.

First Battery Warranty Period means a period of 2 years starting from (and including) the date on which the First Battery is installed in respect of the NTD at a Premises.

Interim Service has the meaning given to that term in Industry Code ACIF C609:2007 - Priority Assistance for Life Threatening Medical Conditions.

Kept Appointment Performance Targets has the meaning given to that term in section 9.5(a).

Layer 2 means the 'data link' layer of the open system interconnection (OSI) model.

Major Rural Area means an urban centre or other recognised community grouping with a population greater than 2500 but less than 10000 people at Order Receipt or at the time at which NBN Co makes the relevant appointment in respect of the relevant Premises (as the context requires).

Minor Rural Area means an urban centre, locality or recognised community grouping with a population greater than 200 but not more than 2500 people at Order Receipt or at the time at which NBN Co makes the relevant appointment in respect of the relevant Premises (as the context requires).

NBN Co Pass-Through Information has the meaning given to that term in section 7.4(a).

New Developments means broadacre developments and constructions, regardless of the number of lots, premises or units involved and regardless of whether they are residential, commercial, industrial, government or of some other type, as published and updated from time to time on NBN Co's website with the URL www.nbnco.com.au or such other URL as NBN Co may notify Customer from time to time.

NNI has the meaning given to that term in section 2.1(b)(iv).

NNI Bearer Activation has the meaning given to that term in section 9.7(a).

NNI Bearer Activation Performance Targets has the meaning given to that term in section 9.7(a).

NNI Bearer Profile has the meaning given to that term in section 3.4(a).

No Available Infrastructure means the Access Components in respect of a Premises are not available for automatic connection and activation by NBN Co as:

- (i) the NTD is not installed in respect of that Premises at Order Receipt; or
- (ii) the NTD is installed in respect of that Premises at Order Receipt, but that NTD is not operational at that time.

NTD means Network Termination Device.

Order Receipt means the time at which NBN Co receives valid order(s) from Customer for both of the Access Components in respect of a Premises within a New Development.

POI means Point of Interconnection.

Priority Assistance has the meaning given to that term in Industry Code ACIF C609:2007 - Priority Assistance for Life Threatening Medical Conditions.

Remote Area means an area in which the relevant Premises is located which:

- (i) is not an Urban Area, Major Rural Area or Minor Rural Area at Order Receipt; or
- (iii) is not an Urban Area, Major Rural Area or Minor Rural Area at the time at which NBN Co makes the relevant appointment in respect of the relevant Premises; or
- (iv) is not an Urban Area or Rural Area at the time at which Customer notifies NBN Co of the Standard Beta NFAS at ND Fault,

(as the context requires).

Rural Area means an urban centre with a population of less than 10000 people or a locality or recognised community grouping with a population greater than 200 people at the time at which Customer notifies NBN Co of the Standard Beta NFAS at ND Fault.

Service Levels means any one or more of Access Connection Performance Targets, Standard Beta NFAS for ND Fault Rectification Targets, Kept Appointment Performance Targets, CVC Activation Performance Targets and NNI Bearer Activation Performance Targets, as the context requires.

Service Level Rebate, in respect of a Service Level, means the rebate that NBN Co will credit to Customer if NBN Co fails to meet that Service Level.

Standard Beta NFAS for ND Fault Rectification Targets has the meaning given to that term in section 9.4(a).

Standard Beta NFAS for ND Faults has the meaning given to that term in section 9.4(a).

UNI has the meaning given to that term in section 2.1(b)(i).

Urban Area means an urban centre with a population equal to or greater than 10000 people at the time at Order Receipt, or at which Customer notifies NBN Co of the Standard Beta NFAS at ND Fault or at which NBN Co makes the relevant appointment in respect of the relevant Premises (as the context requires).

User Network Interface – Data or **UNI-D** means a data port on a NTD.

User Network Interface – Voice or **UNI-V** has the meaning given to that term in section 3.1(b).

- (c) The rules of interpretation set out in clause D13 of the First Release Sites (Trial) Agreement apply to this Product Description.
- (d) References to download and upload speeds in this Product Description are to the maximum peak speeds that the NBN Co Network at First Release Sites is designed to make available to Customer. The speeds actually experienced by End Users will depend upon a number of factors including the contention ratios that are determined by Customer; the equipment that is used by Customer and End Users; the number of simultaneous End Users using the relevant Customer Beta Product; and the nature and quality of the connection at the relevant Premises.

Annexure 1 – Standard Installation

1 Standard Installation

An installation will be considered to be a **Standard Installation** in respect of a Premises where each of the following conditions is satisfied:

- (a) all Connecting Equipment in respect of that Premises is able to be installed during an Appointment in Standard Hours and activated during Standard Hours;
- (b) the installation requires no more than one Drop Fibre, NTD, Connecting Fibre and PCD to be installed for the Premises;
- (c) NBN Co (or the Installer):
 - (i) has been provided with necessary rights of access to the Premises, as required under the Wholesale Broadband Agreement;
 - (ii) is given access to the Common Property, if required by NBN Co; and
 - (iii) is given access to the Premises, if required,

at the time during the Appointment to perform and complete the installation of the Connecting Equipment at that Premises (including any necessary inspection or related works);

- (d) in respect of the Connecting Equipment:
 - (i) a PCD:
 - (A) is not required;
 - (B) is already installed and able to service the Premises; or
 - (C) is able to be installed on the exterior of the Building at which the Premises is located;
 - (ii) the Drop Fibre:
 - (A) is not required;
 - (B) is already installed and able to service the Premises; or
 - (C) is:
 - (I) only required from the NAP to the PCD which serves the Premises;
 - (II) able to be installed at the Premises;

- a. through an existing lead-in conduit;
 - b. through a new lead-in conduit; or
 - c. aerially; and
- (III) no more than 60 metres in length, measured by reference to the cable run distance between:
 - a. the property boundary point that is nearest to the location of both the PCD and NAP; and
 - b. the location of that PCD,or such longer length as may be reasonably determined by NBN Co in the circumstances;
- (iii) the NTD and any associated battery backup unit are able to be attached on the interior side of a wall of the Premises, at a location agreed between the end user and NBN Co (or the Installer), and:
 - (A) that location has a 240 volt power source available for the supply of electricity to the NTD; and
 - (B) that power source is located within approximately 3 metres of the location of the NTD; and
- (iv) the Connecting Fibre is no more than 40 metres in length, measured by reference to the cable run distance between the PCD and the location of the NTD, or such longer length as may be reasonably determined by NBN Co in the circumstances.

2 Non Standard Installation

Notwithstanding anything in section 1 of this Annexure 1, an installation will be considered to be a **Non Standard Installation** in respect of a Premises if NBN Co (or the Installer) determines, acting reasonably, that the installation of Connecting Equipment at the Premises does not properly constitute a “standard installation”, having regard to the following:

- (a) generally accepted industry practices and any applicable industry guidelines, policies, laws, regulations or directions;
- (b) the level of complexity and difficulty associated with the installation;
- (c) the uniqueness of the circumstances associated with the installation; and
- (d) the presence of obstacles, dangers or other safety concerns during the time of installation.

3 Acknowledgements

3.1 Safety standards and procedures

The parties acknowledge that NBN Co will conduct all installations in accordance with safety standards or procedures that apply from time to time.

3.2 Requirement for Connecting Equipment

NBN Co will determine when a separate Drop Fibre or PCD is not required or already installed and able to service the Premises.

4 Definitions

For the purposes of this Annexure 1:

Appointment means the appointment period requested by Customer, and agreed to by NBN Co, in which NBN Co (or the Installer) will perform the installation and activation of Connecting Equipment at a Premises in connection with the supply of a NBN Co carriage product, including:

- (a) any initial appointment for the installation of the Connecting Equipment at the Premises; and
- (b) any subsequent appointment required to perform or complete the installation of the Connecting Equipment at the Premises.

Building means a permanent structure, equipment or a building in respect of which an NTD is able to be installed.

Common Property means any real property or part thereof which is owned or managed by a third party strata body, managing corporation or other similar entity, or which is otherwise common to, accessible by, or shared between, two or more separately owned or occupied Premises to which NBN Co may require access to perform an installation and/or activation of Connecting Equipment at a Premises in connection with the supply of a NBN Co Carriage Product.

Connecting Equipment means any or all (as the context requires) of:

- (a) a Drop Fibre;
- (b) a PCD;
- (c) a Connecting Fibre;
- (d) an NTD (and any installation and provision of an associated battery backup unit and first battery); and

- (e) any ancillary equipment, facilities, lines or network owned or controlled by, or operated by or on behalf of NBN Co between, and including, the NAP and the NTD.

Connecting Fibre means the fibre optic Line which connects from a PCD to an NTD.

Drop Fibre means the fibre optic Line which connects from a NAP to a PCD.

Line means:

- (a) a wire, cable, optical fibre, tube, conduit, waveguide or other physical medium used, or for use, as a continuous artificial guide for or in connection with carrying communications by means of guided electromagnetic energy;
- (b) a “line” as defined in the Telecommunications Act if that definition differs from paragraph (a); or
- (c) any other media of a similar nature to any one or more of the media under paragraphs (a) or (b).

Installer means a person authorised by, or on behalf of, NBN Co to install and make the Connecting Equipment at a Premises ready for service.

NAP, in respect of a Premises, means the network access point for the Premises for the purposes of the NBN Co Fibre Network.

PCD means the Premises connection device which is owned or controlled by, or operated by or on behalf of, NBN Co for the purposes of the NBN Co Fibre Network.

Standard Hours means a period between 9:00 am and 5:00 pm, Monday to Friday, excluding public holidays in the state or territory in which the Premises is located.