Product Description

nbn™ Sky Muster™ Plus Product Module

nbn™ Sky Muster™ Plus Interim Agreement

This document forms part of the nbn™ Sky Muster™ Plus Interim Agreement, which is a Standard Form of Access Agreement for the purposes of Part XIC of the Competition and Consumer Act 2010.

Product Description

nbn™ Sky Muster™ Plus Product Module

nbn™ Sky Muster™ Plus Interim Agreement

Version	Description	Effective Date
1.0	First issued version of **nbn**™ Sky Muster™ Plus Interim Agreement	Execution Date
1.1	Amendments to introduce 25GB+ Plan, unmetered inclusions changes, Data Block and Top-Up	Unmetered inclusions changes: 1 April 2020 All other changes: 15 May 2020
1.2	Amendments in respect of eligibility restriction notified on 1 February 2021	1 March 2021
1.3	Amendments in respect of IPv4 Dynamic Network Address Translation overload IP Address Scheme implementation	1 April 2021

Introduction

This **nbn**™ Sky Muster Plus Product Description describes the **nbn**™ Sky Muster™ Plus Product. It forms part of the **nbn**™ Sky Muster™ Plus Interim Agreement.

Roadmap

A roadmap describing the structure of this document follows for the assistance of Customer.

Part A: The **nbn**™ Sky Muster™ Plus Product

Part A describes what the **nbn**™ Sky Muster™ Plus Product is.

Part B: Required Product Components

Part B describes the core Product Components of **nbn**™ Sky Muster™ Plus which Customer must order.

Part C:Plan Sub-features

Part C describes the Plan Sub-features which form part of the Plans. Plan Sub-features are not independently orderable by Customer.

Part D: Optional Product Features

Part D describes the optional Product Features of **nbn**™ Sky Muster™ Plus which Customer may elect to order.

Part E: General conditions of supply

Part E sets out general conditions which apply to the supply of **nbn**™ Sky Muster™ Plus to Customer.

Part A: The **nbn**™ Sky Muster™ Plus Product

nbn™ Sky Muster™ Plus:

- is a Layer 3 and above service that carries traffic between a UNI used to serve a Premises and the **nbn**™ Upstream Network Boundary;
- is supplied by means of the SMP Network;
- enables Customer or its Downstream Service Providers to supply a Carriage Service or Content Service to a Premises; and
- comprises required Product Components, which Customer must acquire as part of **nbn**™ Sky Muster™ Plus, and optional Product Features, which Customer may elect to acquire.

Type	Product Component / Product Feature
Product Components (required)	Plan; UNI
Product Feature (optional)	Plan Test Feature, Data Block, Top-Up

***Note: nbn** supplies the Plan to Customer on the condition that Customer also acquires a UNI in conjunction with that Plan.*

Part B: Required Product Components

*Section 1 describes the Plans that Customer must order for each Premises where **nbn** supplies **nbn**™ Sky Muster™ Plus to Customer.*

1. Plans

1.1 General Plan description

(a) A **Plan** is an Ethernet-based Layer 3 and above virtual connection on the SMP Network, that carries End User traffic to and from a UNI used to serve a Premises.

(b) Customer must order a Plan for each eligible Premises to which **nbn**™ Sky Muster™ Plus will be supplied.

(c) The available Plans are described in section 1.2.

(d) **nbn** will map one Plan to any UNI used to serve the relevant Premises and will not map more than one Plan to the same UNI.

1.2 Plans

The Plans are described by reference to the Plan Sub-features described in Part C: Plan Sub-features. Customer may select one of the Plans below in respect of each eligible Premises to which **nbn**™ Sky Muster™ Plus will be supplied:

(a) **25GB+ Plan**, which comprises the following Plan Sub-features:

Plan Sub-feature	Configuration	
Access Rate	Downstream Mbps (PIR)	Upstream Mbps (PIR)
	25 (with Supplementary Burst)	5 (with Supplementary Burst)
Peak Period Metered Data Allowance	25 GB[1]	
Off-peak Period Metered Data Allowance	25 GB[1]	
Peak Period Shaping Rate	Downstream Kbps (PIR)	Upstream Kbps (PIR)
	512	256
Off-peak Period Shaping Rate	Downstream Kbps (PIR)	Upstream Kbps (PIR)
	2,048	512
IP Address Scheme	As set out in section 5	
nbn™ Upstream Network Boundary	Internet Point of Presence	
Metered Data	Traffic Profile 1	

Time of Day Data (Unmetered Data)	Traffic Profile	Shaped Periods	Time of Day Limit Rate
	Traffic Profile 2	4 pm to 11 pm daily	256 Kbps[2]

Notes:

1. *The Peak Period Metered Data Allowance and Off-peak Period Metered Data Allowance include both upload and download usage as set out in section 4.1(a).*

2. *To be read in conjunction with section 4.1. Sections 4.1(a) and 4.1(b) describe the operation of Unmetered Data generally (which includes Time of Day Data). Section 4.1(c) further describes the operation of Time of Day Data specifically.*

(b) **50GB+ Plan**, which comprises the following Plan Sub-features:

Plan Sub-feature	Configuration		
Access Rate	Downstream Mbps (PIR)	Upstream Mbps (PIR)	
	25 (with Supplementary Burst)	5 (with Supplementary Burst)	
Peak Period Metered Data Allowance	50 GB[1]		
Off-peak Period Metered Data Allowance	50 GB[1]		
Peak Period Shaping Rate	Downstream Kbps (PIR)	Upstream Kbps (PIR)	
	512	256	
Off-peak Period Shaping Rate	Downstream Kbps (PIR)	Upstream Kbps (PIR)	
	2,048	512	
IP Address Scheme	As set out in section 5		
nbn™ Upstream Network Boundary	Internet Point of Presence		
Metered Data	Traffic Profile 1		
Time of Day Data (Unmetered Data)	Traffic Profile	Shaped Periods	Time of Day Limit Rate
	Traffic Profile 2	4 pm to 11 pm daily	256 Kbps[2]

Notes:

1. *The Peak Period Metered Data Allowance and Off-peak Period Metered Data Allowance include both upload and download usage as set out in section 4.1(a).*

2. *To be read in conjunction with section 4.1. Sections 4.1(a) and 4.1(b) describe the operation of Unmetered Data generally (which includes Time of Day Data). Section 4.1(c) further describes the operation of Time of Day Data specifically.*

(c) **100GB+ Plan**, which comprises the following Plan Sub-features:

Plan Sub-feature	Configuration		
Access Rate	Downstream Mbps (PIR)	Upstream Mbps (PIR)	
	25 (with Supplementary Burst)	5 (with Supplementary Burst)	
Peak Period Metered Data Allowance	100 GB[1]		
Off-peak Period Metered Data Allowance	100 GB[1]		
Peak Period Shaping Rate	Downstream Kbps (PIR)	Upstream Kbps (PIR)	
	512	256	
Off-peak Period Shaping Rate	Downstream Kbps (PIR)	Upstream Kbps (PIR)	
	2,048	512	
IP Address Scheme	As set out in section 5		
nbn™ Upstream Network Boundary	Internet Point of Presence		
Metered Data	Traffic Profile 1		
Time of Day Data (Unmetered Data)	Traffic Profile	Shaped Periods	Time of Day Limit Rate
	Traffic Profile 2	4 pm to 11 pm daily	256 Kbps[2]

Notes:

1. *The Peak Period Metered Data Allowance and Off-peak Period Metered Data Allowance include both upload and download usage as set out in section 4.1(a).*

2. *To be read in conjunction with section 4.1. Sections 4.1(a) and 4.1(b) describe the operation of Unmetered Data generally (which includes Time of Day Data). Section 4.1(c) further describes the operation of Time of Day Data specifically.*

(d) **150GB+ Plan**, which comprises the following Plan Sub-features:

Plan Sub-feature	Configuration	
Access Rate	Downstream Mbps (PIR)	Upstream Mbps (PIR)
	25 (with Supplementary Burst)	5 (with Supplementary Burst)
Peak Period Metered Data Allowance	150 GB[1]	
Off-peak Period Metered Data Allowance	150 GB[1]	

Peak Period Shaping Rate	Downstream Kbps (PIR)	Upstream Kbps (PIR)
	512	256
Off-peak Period Shaping Rate	Downstream Kbps (PIR)	Upstream Kbps (PIR)
	2,048	512
IP Address Scheme	As set out in section 5	
nbn™ Upstream Network Boundary	Internet Point of Presence	
Metered Data	Traffic Profile 1	
Time of Day Data (Unmetered Data)	Traffic Profile	Shaped Periods	Time of Day Limit Rate
	Traffic Profile 2	4 pm to 11 pm daily	256 Kbps[2]

Notes:

1. *The Peak Period Metered Data Allowance and Off-peak Period Metered Data Allowance include both upload and download usage as set out in section 4.1(a).*

2. *To be read in conjunction with section 4.1. Sections 4.1(a) and 4.1(b) describe the operation of Unmetered Data generally (which includes Time of Day Data). Section 4.1(c) further describes the operation of Time of Day Data specifically.*

*Section 2 describes the UNI that must be acquired in conjunction with the Plan for each Premises where **nbn** supplies **nbn**™ Sky Muster™ Plus to Customer.*

2. User Network Interface (UNI)

2.1 UNI description

(a) The **User Network Interface** or **UNI** is a physical port to which **nbn** supplies **nbn**™ Sky Muster™ Plus in respect of a Premises.

(b) **nbn** will make one type of UNI available in respect of a Premises, the UNI-D:

Type of UNI	Port	Location of UNI port	Number of physical ports on NTD (if any)
UNI-D	Ethernet	NTD	4

(c) An NTD supplied for **nbn**™ Sky Muster™ Plus may also be used for **nbn**™ Ethernet (Satellite).

(d) An NTD supplied for **nbn**™ Ethernet (Satellite) may also be used for **nbn**™ Sky Muster™ Plus.

(e) Access to and use of a UNI used to serve a Premises is subject to any availability rules determined by **nbn** from time to time.

(f) The number of UNI-Ds available at a Premises served by the SMP Network depends on the number of NTDs installed at that Premises.

(g) The UNI-D has an electrical interface and will not be made available with an optical interface.

(h) Customer must acquire a UNI-D in conjunction with a Plan for each Premises at which **nbn**™ Sky Muster™ Plus will be supplied.

Part C: Plan Sub-features

*Sections 3 to 5 describe the **nbn**™ Sky Muster™ Plus Plan Sub-features.*

3. Plan Sub-features generally

The Plan Sub-features are:

(a) supplied as part of Plans as set out in section 1; and

(b) not orderable by Customer independently or in configurations other than those set out in section 1.

4. Bandwidth profiles and data inclusions

4.1 Bandwidth profiles and data inclusions generally

(a) Subject to sections 4.1(b) to 4.1(f), 7(a) and 8(b), throughout each calendar month, the bandwidth profile of each Plan will change based on:

(i) the time of day;

(ii) type of data being transferred; and

(iii) the aggregate data of that type transferred (including both uploads and downloads) up to a given point in the calendar month,

as follows:

Time of day	Data type being transferred	Aggregate data transferred in calendar month	Applicable bandwidth profile
Peak Period	Metered Data	Up to Peak Period Metered Data Allowance	Access Rate
		More than Peak Period Metered Data Allowance	Peak Period Shaping Rate
	Unmetered Data	N/A	See section 4.1(b)
Off-peak Period	Metered Data	Up to Off-peak Period Metered Data Allowance	Access Rate
		More than Off-peak Period Metered Data Allowance	Off-peak Period Shaping Rate
	Unmetered Data	N/A	See section 4.1(b)

(b) Despite section 4.1(a) but subject to section 4.1(c), throughout each calendar month, the bandwidth profile of each Plan in respect of Unmetered Data, during the following times of day, will be as follows:

Data type being transferred	Time of day	Applicable bandwidth profile
Unmetered Data that is not Time of Day Data	12:00 am to 11:59 pm	Access Rate
Time of Day Data	Shaped Periods	Time of Day Limit Rate
	All times other than Shaped Periods	Access Rate

(c) Despite section 4.1(b):

(i) unless and until otherwise notified by **nbn** by giving 1 month's notice to Customer, the bandwidth profile in respect of Traffic Profile 2 will be the applicable Access Rate at all times of day, including during Shaped Periods; and

(ii) after the Time of Day Limit Rate begins applying pursuant to section 4.1(c)(i), the Information Rate applicable to Traffic Profile 2 may from time to time, at **nbn**'s discretion, exceed the Time of Day Limit Rate during Shaped Periods.

(d) For clarity, Unmetered Data (including Time of Day Data) will not count towards any Peak Period Metered Data Allowance or Off-peak Period Metered Data Allowance.

(e) Each bandwidth profile in section 4.1(a) and 4.1(b) specifies the maximum data throughput that the SMP Network is designed to make available to Customer at the UNI in respect of a Plan during the time that bandwidth profile applies, and not the minimum data throughput.

(f) If a Plan is Activated part way through a calendar month, the Peak Period Metered Data Allowance and Off-peak Period Metered Data Allowance for that Plan for the remainder of that calendar month may, at **nbn**'s discretion, be calculated on a pro-rata basis by reference to the number of days remaining in that calendar month.

4.2 Access Rates

(a) In respect of the Access Rate for a Plan, **Supplementary Burst** refers to the ability for data transfers under that bandwidth profile to exceed the specified Peak Information Rate.

(b) Data transfers subject to an Access Rate with Supplementary Burst may or may not burst above the applicable PIR in any given period.

(c) An Ordered Product may only transfer data at its PIR once during a 24 hour period, and only if the Ordered Product has not exceeded either of its Peak Period Metered Data Allowance or its Off-peak Period Metered Data Allowance in that 24 hour period.

4.3 Traffic Profiles for Metered Data and Time of Day Data

(a) The Traffic Profiles for Metered Data and Time of Day Data are:

(i) **Traffic Profile 1**, which means such traffic as determined by **nbn** from time to time, which may include some traffic related to streaming video content, and traffic accessed via a VPN; and

(ii) **Traffic Profile 2**, which means such traffic as determined by **nbn** from time to time, which may include some traffic related to peer to peer applications, operating system updates, software and application updates, gaming software updates, cloud storage platforms and any traffic related to applications which **nbn** cannot identify (but does not include traffic that forms part of Traffic Profile 1).

(b) Details of specific traffic included in each Traffic Profile from time to time are available to Customer on request in accordance with standard processes as determined by **nbn** from time to time.

5. IP Address Scheme

5.1 IP Address Scheme generally

(a) Subject to sections 5.2 to 5.4, **nbn** will support one of the two following IP Address Schemes in respect of each Plan:

(i) Public Dynamic Network Address Translation (NAT) overload in accordance with section 5.2; or

(ii) Public 1:1 NAT in accordance with section 5.3.

(b) The IP Address Scheme that **nbn** will support for a given Plan will be determined in accordance with section 5.4.

5.2 Public Dynamic NAT overload

(a) **nbn** will allocate:

(i) a private IP address to each item of Customer Equipment or End User Equipment attached to a UNI-D; and

(ii) an internet-accessible public IP address to each Plan for which the **nbn**™ Upstream Network Boundary is the Internet Point of Presence.

(b) **nbn** will link the private IP addresses allocated under section 5.2(a)(i) with the public IP address allocated under section 5.2(a)(ii) using Dynamic NAT overload.

(c) **nbn** may change the public IP address allocated under section 5.2(b) at its discretion:

(i) from time to time; and

(ii) without limiting section 5.2(c)(i), upon request by Customer.

5.3 Public 1:1 NAT

(a) **nbn** will allocate:

(i) a private IP address to each item of Customer Equipment or End User Equipment attached to a UNI-D; and

(ii) an internet-accessible public IP address to each Plan for which the **nbn**™ Upstream Network Boundary is the Internet Point of Presence.

(b) **nbn** will link the private IP addresses allocated under section 5.3(a)(i) with the public IP address allocated under section 5.3(a)(ii) using Static NAT.

(c) **nbn** may change public IP address allocated under section 5.3(b) at its discretion:

(i) from time to time; or

(ii) without limiting section 5.3(c)(i), upon request by Customer.

5.4 Allocation of IP Address Scheme

(a) Subject to section 5.4(b), Public Dynamic NAT overload will apply as the default IP Address Scheme in respect of all Ordered Products on and from 1 April 2021.

(b) If any Ordered Products activated prior to 1 April 2021 experience service supply issues, as determined by **nbn** (acting reasonably), the IP Address Schemes for such Ordered Products may be changed to apply Public 1:1 NAT upon approval by **nbn.**

Part D: Optional Product Features

*Sections 6 to 8 describe the optional Product Features available for **nbn**™ Sky Muster™ Plus.*

6. Plan Test Service

(a) The Plan Test Service is an Ordered Product that allows Customers to conduct testing of Plans.

(b) **nbn**'s supply of the Plan Test Service comprises:

(i) a Plan and an associated UNI-D; and

(ii) the Installation of Connecting Equipment, if not already installed.

(c) Customers may order:

(i) up to a maximum of two Plan Test Services in total; but

(ii) in respect of any given Beam, a maximum of one Plan Test Service.

(d) **nbn** will only supply the Plan Test Service if:

(i) the Customer has successfully onboarded, or is in the process of onboarding, for **nbn**™ Sky Muster™ Plus; and

(ii) **nbn** determines, acting reasonably, that the Customer requires the Plan Test Service to successfully supply **nbn**™ Sky Muster™ Plus to its End Users.

(e) **nbn** may, at its discretion:

(i) supply a Plan Test Service to a Premises which would not otherwise be eligible for a Plan under the standard processes determined by **nbn** from time to time; and

(ii) require Customer to select an alternative location if Customer requests the supply of a Plan Test Service at a location:

(A) at which it would be difficult for **nbn** to Install the Connecting Equipment or expensive to do so;

(B) which is served by a Beam which **nbn** determines is, or is likely to become, subject to capacity constraints; or

(C) which would require **nbn** to supply more than one Plan Test Service to Customer using a given Beam.

(f) **nbn** will not conduct, or assist Customer to conduct, any testing in connection with the Plan Test Service except to the extent of supplying the Plan Test Service and Installing the Connecting Equipment for the Plan Test Service under this section 6.

7. Data Block

(a) A Data Block is an optional Product Feature that increases both the Peak Period Metered Data Allowance and the Off-peak Period Metered Data Allowance of a Plan by 5 GB each.

***Example:** If Customer acquires a 25GB+ Plan plus two Data Blocks, the Peak Period Metered Data Allowance and Off-peak Period Metered Data Allowance for that Plan will be 35 GB each.*

(b) The increase to the Peak Period Metered Data Allowance and Off-peak Period Metered Data Allowance of a Plan from a Data Block, as described in section 7(a), will apply:

(i) at the time a Plan is initially ordered, if the Data Block is ordered at the same time; and

(ii) from the start of the first calendar month which begins at least 1 Business Day after the order of the Data Block, if the Data Block is ordered after the Plan is initially ordered.

(c) Customer must not order, and **nbn** may decline to supply, a Data Block in respect of a Plan if that Data Block would have the effect that the Peak Period Metered Data Allowance or Off-peak Period Metered Data Allowance of that Plan, as adjusted by the Data Block, would exceed 150 GB.

8. Top-Up

(a) A Top-Up is an optional Product Feature that enables a Plan to transfer a specified amount of Metered Data at the applicable Access Rate for use after the relevant Plan has exceeded its Peak Period Metered Data Allowance or Off-peak Period Metered Data Allowance, as set out in this section 8.

(b) Top-Ups are available in increments that include both 1 GB of Peak Period Top-Up Allowance and 1 GB Off-peak Period Top-Up Allowance.

(c) Despite section 4.1(a), if a Top-Up is supplied in respect of a Plan:

(i) the bandwidth profile for that Plan for Metered Data usage during Peak Periods will be the Access Rate from the time the Top-Up is supplied until the Peak Period Top-Up Allowance is exhausted; and

(ii) the bandwidth profile for that Plan for Metered Data usage during Off-peak Periods will be the Access Rate from the time the Top-Up is supplied until the Off-peak Period Top-Up Allowance is exhausted.

(d) If a Top-Up is supplied in respect of a Plan during a calendar month, Metered Data usage during Peak Periods for that Plan during that calendar month will be counted towards the Peak Period Top-Up Allowance starting from the later of the following to occur (to the extent applicable):

(i) the Top-Up is supplied;

(ii) the Plan exceeds its Peak Period Metered Data Allowance; and

(iii) the Plan exhausts the Peak Period Top-Up Allowance for any Top-Up previously supplied in respect of that Plan during that calendar month.

(e) If a Top-Up is supplied in respect of a Plan during a calendar month, Metered Data usage during Off-peak Periods for that Plan during that calendar month will be counted towards the Off-peak Period Top-Up Allowance starting from the later of the following to occur (to the extent applicable):

(i) the Top-Up is supplied;

(ii) the Plan exceeds its Off-peak Period Metered Data Allowance; and

(iii) the Plan exhausts the Off-peak Period Top-Up Allowance for any Top-Up previously supplied in respect of that Plan during that calendar month.

(f) Each Top-Up, including any unused Peak Period Top-Up Allowance and any unused Off-Peak Period Top-Up Allowance, will expire at the end of the calendar month in which it is supplied.

(g) Customer must not order, and **nbn** may decline to supply, a Top-Up in respect of a Plan if that Top-Up would have the effect that:

(i) the aggregate of the Peak Period Metered Data Allowance for that Plan plus any Peak Period Top-Up Allowance supplied in respect of that Plan in that calendar month would exceed 160 GB; or

(ii) the aggregate of the Off-peak Period Metered Data Allowance for that Plan plus any Off-peak Period Top-Up Allowance supplied in respect of that Plan in that calendar month would exceed 160 GB.

(h) Despite anything else in this section 8, the Top-Up Product Feature will not be available until **nbn** gives notice in writing to Customer of its availability.

Part E: General conditions of supply

*Section 9 sets out Customer obligations in relation to the downstream supply of services to which **nbn**™ Sky Muster™ Plus is an input.*

9. Downstream supply

9.1 Priority Assistance and CSG Services

Customer must not use **nbn**™ Sky Muster™ Plus as an input into the supply of:

(a) a Downstream Priority Assistance Service; or

(b) a Downstream CSG Service.

9.2 End User Equipment and installation activities

(a) Customer is responsible for supplying and installing all End User Equipment required for the supply of **nbn**™ Sky Muster™ Plus.

*Section 10 sets out some general obligations of **nbn** and Customer that apply in relation to the end-to-end supply of **nbn**™ Sky Muster™ Plus.*

10. **nbn**™ Sky Muster™ Plus exclusions and Customer responsibilities

(a) Customer is responsible for ordering appropriate Plans for each **nbn**™ Sky Muster™ Plus Product to meet its own requirements in respect of the supply of Customer Products to its Downstream Service Providers and Contracted End Users.

(b) **nbn**™ Sky Muster™ Plus does not include:

(i) facilities access;

(ii) any interconnection with the SMP Network at the **nbn**™ Upstream Network Boundary;

(iii) Customer Equipment or End User Equipment (including cabling from the NTD to Customer or End User Equipment);

(iv) any content or applications;

(v) any other end user equipment, such as modems, personal computers, network attached storage solutions, central splitters, in-line splitters and any equipment necessary to receive or interact with multicast data;

(vi) any network fault or performance monitoring probe or device supplied by **nbn** in relation to the SMP Network;

(vii) any equipment (including Lines) upstream of the **nbn**™ Upstream Network Boundary, excluding any **nbn™** Equipment; or

(viii) any form of internet filtering.

*Section 11 describes the structure of the SMP Network and the boundaries of **nbn**™ Sky Muster™ Plus.*

11. SMP Network architecture and **nbn**™ Sky Muster™ Plus boundaries

11.1 SMP Network architecture

In the SMP Network, each Premises at which **nbn**™ Sky Muster™ Plus is available is located within a Beam.

11.2 **nbn**™ Sky Muster™ Plus boundaries

nbn™ Sky Muster™ Plus carries traffic in respect of a Premises over the SMP Network between the following boundaries:

(a) the UNI used to serve that Premises; and

(b) the **nbn**™ Upstream Network Boundary.

11.3 Power Outages

nbn may not be able to supply **nbn**™ Sky Muster™ Plus in the event of a Power Outage affecting:

(a) an NTD or any other **nbn**™ Equipment located at a Premises served by the SMP Network; or

(b) any other active equipment that forms part of the SMP Network.

*Section 12 describes factors relevant to the speeds, performance and availability of **nbn**™ Sky Muster™ Plus.*

12. Speeds, performance and availability

12.1 Speeds and performance of Ordered Products

(a) References to download and upload speeds in this **nbn**™ Sky Muster™ Plus Product Description are to Layer 3 speeds and are references to the maximum data throughput that the SMP Network is designed to make available to Customer at the UNI in respect of the relevant Premises, not the minimum data throughput.

(b) The speeds and performance (including stability) of Ordered Products actually experienced by Customer, Downstream Service Providers, Contracted End Users and other End Users will vary and depend upon a number of factors including:

(i) the equipment used by Customer, Downstream Service Providers, Contracted End Users and other End Users (which can also affect the speeds experienced at the UNIs for a relevant Premises in respect of Products supplied to End Users and end users of Other Customers);

(ii) the nature and quality of the Customer Product or Downstream Product acquired by Downstream Service Providers and Contracted End Users;

(iii) the number of simultaneous End Users being served by the **nbn**™ Network;

(iv) interference caused by the equipment or network of any third party;

(v) the nature, quality and length of the connection to, and signal reception (including any interference with in building cabling, line-of-sight interference, weather, wireless signals, Satellite Limitations or prevailing radio conditions) at or affecting, the relevant Premises.

12.2 Line Rate

Customer must consider, and acknowledges, that:

(a) if a UNI-D negotiates with any attached device downstream of the UNI-D to operate over a Line Rate that is insufficient to deliver an applicable bandwidth profile, traffic loss may occur at the UNI-D; and

(b) **nbn**'s ability to deliver bandwidth profiles included in Plans selected by Customer will be affected by actual Line Rates achieved in operation.

12.3 NTD throughput limits

(a) If the aggregate PIR bandwidth profiles of ordered products, including both **nbn**™ Ethernet (Satellite) ordered products and **nbn**™ Sky Muster™ Plus ordered products, supplied to the same NTD exceed the NTD maximum aggregate throughput set out below (in section 12.3(b)), the ordered products supplied to that NTD may not achieve maximum peak data throughput simultaneously.

(b) The maximum aggregate throughput for an NTD in respect of all UNIs on an NTD are:

Downstream (Mbps)	Upstream (Mbps)
60	20

(c) Customer must ensure that End Users are aware of the potential for the maximum aggregate throughput of NTDs to affect the ability of multiple Ordered Products supplied using the same NTD to achieve maximum peak data throughput simultaneously.

***Note**: The maximum aggregate NTD throughputs set out in this section 12.3 apply in respect of all ordered products supplied by **nbn** to Customer and all Other Customers. Limitations apply to the number of **nbn**™ Sky Muster™ Plus ordered products which **nbn** makes available in respect of a Premises as set out in sections 12.4 and 12.5.*

12.4 Availability of supply of Product

Notwithstanding anything else in this **nbn**™ Sky Muster™ Plus Product Description, the supply of **nbn**™ Sky Muster™ Plus by **nbn** to Customer is subject to the availability of each of the **nbn**™ Sky Muster™ Plus Product Components, Plan Sub-features and Product Features at the time at which Customer places an order.

12.5 SMP Network capacity management

In respect of **nbn**™ Sky Muster™ Plus:

(a) except as otherwise notified by **nbn** in accordance with standard processes determined by **nbn** from time to time, Customer must not place, and **nbn** may decline, an **nbn**™ Sky Muster™ Plus order in respect of a Premises if the supply of the ordered Plan would result in **nbn** supplying to all **nbn** customers in respect of that Premises either:

(i) more than one Plan; or

(ii) a Plan in addition to any **nbn**™ Ethernet ordered product;

(b) Customer must suspend or terminate any Customer Product that Customer becomes aware is being used by a Downstream Service Provider or End User in connection with the bonding of two or more UNIs (even if **nbn** is only supplying one of the UNIs to Customer and the other UNI(s) to an Other Customer);

(c) **nbn** may decline an order or modification (as applicable) which would require additional Beam capacity to be supplied during any period in which a Beam is at or near maximum capacity; and

(d) **nbn** may deprioritise data transfers or reduce the maximum data transfer rate of any Plan contributing disproportionately to Beam capacity utilisation.