Managed Network
Product Terms

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VERSION 2

Contents

1   Overview

The purpose of this is document is to define our Managed Network Products and our Charges for those Products. This document applies to all customers using our Managed Network Products, unless we agree otherwise in writing with them.

This document forms part of our agreement with each customer using this Product. The General Terms and other documents that also form part of the agreement, are available on the Legal and Policies section of our website.

2   Definitions

Terms defined in the General Terms have the same meaning in these Product Terms. In addition, unless the context requires otherwise:

- **CDN** means Content Delivery Network.
- **eDMR** means Ethernet over Digital Microwave.
- **Equipment** means any equipment that we install at your premises, including:
  - our Managed Router; and
  - any Raspberry Pi that provides enhanced or proactive support capability.
- **Incident** means:
  - any unplanned interruption to any of our Managed Network Products; or
  - any reduction in the quality of any of our Managed Network Products.
- **IP** means Internet Protocol.
- **LAN** means Local Area Network.
- **LFC** means Local Fibre Company.
- **MAC** means Moves, Adds and Changes.
- **Managed Network** means all ICT infrastructure used by us and our contractors to provide our Managed Network Products, up to:
  - the exit of the customer facing port on the router we provide at each:
    - customer premise (including into any School loop infrastructure); or
    - location used to aggregate access for multiple Providers; and
  - the exit of the Internet facing port on all Internet gateway firewalls/routers.
- **Managed Network Products** means the services described in these Product Terms.
- **Managed Router** is the router located on the edge of the Managed Network.
- **Mbps** means Megabits per second.
- **Metro** is any location within 30 kilometres of the centres of:
  - Whangarei
  - Auckland's commercial centres in Auckland central, Takapuna, Manukau and Waitakere
  - Hamilton
  - Rotorua
  - Tauranga
  - Gisborne
  - New Plymouth
  - Hastings
  - Whanganui
  - Palmerston North
  - Wellington
  - Nelson
  - Greymouth
  - Christchurch

- ○ Dunedin
- ○ Invercargill
- **MPLS** means Multiprotocol Label Switching.
- **Network Boundary** is the point where traffic exits our Managed Network.
- **Non-Metro** means any location that is not Metro.
- **PKI** means Public Key Infrastructure.
- **Priority Level** for any Incident means the highest priority level (from "P1" being highest to "P4" being lowest) that is applicable to the Incident, determined by reference to the following table:

Priority Level	Impact	Examples of Incidents
P1	All Users at multiple sites	Major network outage of the MPLS IP network.
		Outage of N4L WAN connectivity at multiple sites.
		Outage of customer WAN connectivity affecting all users at multiple sites.
P2	All Users at a single site	Outage of N4L WAN connectivity at a single site.
		Failure of a Managed Router at a single site.
		Failure of network access to a customer for a single site.
P3	Multiple Users at several sites	Degraded service for multiple Users at several sites. Users experiencing slow speed to customer resources.
P4	One or more Users at one site	Degraded service for one or more Users at one site. Single user experiencing slow speed to customer resources.

- **Provider** is defined in clause 4 (Providers).
- **QoS** means Quality of Service.
- **RBI** is the Government's "Rural Broadband Initiative" covering most of the 25% of New Zealanders that live outside of the UFB candidate areas.
- **RSBI** means the Remote Schools Broadband Initiative covering those remaining remote Schools for which providing an RBI solution was not economically viable.
- **SMTP** means Simple Mail Transfer Protocol.
- **SSL Inspection** means being able to look inside encrypted web traffic in order to filter appropriately.
- **UFB** is the Government's "Ultra-Fast Broadband" initiative intended to provide ultra-fast broadband to 75% of New Zealanders, concentrating in the first six years of the initiative on priority broadband users (including Schools).
- **URL** is a Uniform Resource Locator, or a web address.
- **WAN** means Wide Area Network.
- **Wholesale Access Service** means a wholesale, bit-stream telecommunications service that connects your premises to the Managed Network. Wholesale Access Services are part of the Managed Network and are provided by local fibre companies or RSBI providers.

3 School Managed Network Product

3.1 Overview

The School Managed Network Product is only available to Schools. It comprises the following components:

- **Managed Network Connection**. A single physical access to the Managed Network of a specified bandwidth.
- **Safe and Secure Internet**. Access to the internet, with web filtering and security protection.

3.2 Features

The standard features of the "Managed Network Connection" component are:

- **Bandwidth** as specified in clauses 3.3 (Standard Product Allocation), or 3.4 (Upgrades to Standard Products).
- **Managed Router** that does not constrain the allocated bandwidth. We will monitor your Managed Network Connection and upgrade you to a more capable Managed Router when required.
- **IP Address Management** providing a range of fixed IP addresses to the School.
- **Device and Access Management** providing proactive (threshold monitoring, troubleshooting errors) and reactive (device/interface down scenarios) management of the Managed Router to ensure continued operations and availability of services.
- **Bandwidth Management** providing differing individual types of traffic or individual weights using a traffic scheduler and policies.
- **Network Security** providing real-time protection against access to or by online security threats via the Managed Network Connection, including but not limited to malware sites and botnet command and control servers.
- **Raspberry Pi** providing enhanced support capability including proactive support.

The standard features of the "Safe and Secure Internet" component are:

- **Uncapped national and international internet** access to internet sites that are not directly connected to the Managed Network. Use of the internet is subject to N4L's Managed Network Acceptable Use Policy.
- **DNS Resolution** providing a URL to IP address resolution service.
- **Web Filtering** providing control over all internet content and incorporating dynamic internet content classification, URL filtering, file type filters, real-time scanning of search results for all http and (where you are using SSL Inspection) https traffic. This service allows Schools to alter their filtering rules to determine what categories of web sites are allowed, blocked or filtered.
- **Web Security** providing protection against malware threats and other malicious content through analysis of internet requests.
- **Firewall** providing the ability to filter IP traffic that traverses the firewall, including traffic leaving the School LAN to the internet and from the internet to the School LAN. The traffic filtering is based on source IP address, destination IP address, protocol and ports used by applications and devices.
- **Content Delivery Optimisation** using technologies such as caching and CDNs.

3.3 Standard Product Allocation

Initially we allocated bandwidth to Schools based on their roll size (using their roll return for the previous March) and which Wholesale Access Service they were connected to. We now plan to allocate a 1Gbps Standard Connection to Schools regardless of roll size, provided:

- the School is connected to a UFB or RBI Wholesale Access Service; and
- we can reasonably make the connection available (which is determined at our discretion).

If your School:

- *Is eligible* for our 1Gbps Standard Connection but currently has a lower bandwidth, we will contact you to discuss an upgrade. There are many Schools in this situation and we plan to progressively upgrade them as soon as practicable, but do not guarantee the timing of any particular upgrade.
- Is *not eligible* for our 1Gbps Standard Connection, we will allocate your bandwidth in accordance with your roll size and Wholesale Access Service in accordance with the

following table.

Roll Size	Wholesale Access Service	Product Name	Code	Bandwidth
Various	UFB or RBI	1Gbps Standard Connection (Subject to eligibility)	Edu1000	1 Gbps comprising: • 990 Mbps Internet • 10 Mbps Management
1 – 250	RBI	Rural 50Mbps Standard Connection	RBI50	50 Mbps comprising: • 40 Mbps Internet • 10 Mbps Management
251 – 750	RBI	Rural 100Mbps Standard Connection	RBI100	100 Mbps comprising: • 90 Mbps Internet • 10 Mbps Management
751 – 3200	RBI	Rural 500Mbps Standard Connection (Subject to availability)	RBI500	500 Mbps comprising: • 490 Mbps Internet • 10 Mbps Management
3200+	RBI	Rural 1000Mbps Standard Connection (Subject to availability)	RBI1000	1000 Mbps comprising: • 990 Mbps Internet • 10 Mbps Management
1 – 250	UFB	Urban 50Mbps Standard Connection	UFB50	50 Mbps comprising: • 40 Mbps Internet • 10 Mbps Management
251 – 750	UFB	Urban 100Mbps Standard Connection	UFB100	100 Mbps comprising: • 90 Mbps Internet • 10 Mbps Management
751 – 3200	UFB	Urban 500Mbps Standard Connection	UFB500	500 Mbps comprising: • 490 Mbps Internet • 10 Mbps Management
3200+	UFB	Urban 1000Mbps Standard	UFB1000	1000 Mbps comprising: • 990 Mbps Internet • 10 Mbps Management
1 – 250	eDMR[1]	eDMR 50Mbps Standard Connection	EDMR50	50 Mbps comprising: • 40 Mbps Internet • 10 Mbps Management
251+	eDMR[1]	eDMR 100Mbps Standard Connection	EDMR100	100 Mbps comprising: • 90 Mbps Internet • 10 Mbps Management
1 - 250	RSBI	RSBI 10Mbps Standard Connection	RSBI10	10 Mbps comprising; • Shared Internet • Management to a total of 10Mbps
1 - 250	RSBI[2]	RSBI 20Mbps Standard Connection	RSBI20	20 Mbps comprising; • Shared Internet • Management to a total of 20Mbps

[1] eDMR comprises of fibre connection to the School however portion of the connection is delivered over ethernet digital microwave
[2] Only available for Schools using Gisborne.net

3.4   Upgrades to Standard Products
At its discretion, N4L may upgrade the bandwidth of a School Managed Network Connection, as set out in the table below. Such upgrades may be implemented if considered appropriate based on the following considerations:
● a School's allocated bandwidth not being lower than any existing bandwidth to that School, where the School's current usage exceeds the standard Product allocation;

- ensuring equity of provision for Schools with similar needs;
- maintaining quality connectivity for Schools to support teaching and learning;
- student needs and the achievement of learning outcomes (and the associated needs of teachers and support staff in Schools) not being limited by the Product allocated; and
- ensuring efficient service delivery (for example by avoiding the need for a School to be revisited if a School's roll is likely to expand in the short term).

Bandwidth Upgrades:

Fibre Broadband Initiative	Product Name	Code	Bandwidth
RBI	Rural 50Mbps to 100Mbps Upgrade Connection	RBI50 -> RBI100	100 Mbps comprising: • 90 Mbps Internet • 10 Mbps Management
RBI	Rural 100Mbps to 500Mbps Upgrade Connection	RBI100 -> RBI500	500 Mbps comprising: • 490 Mbps Internet • 10 Mbps Management
RBI	Rural 500Mbps to 1000Mbps Upgrade Connection	RBI500 -> RBI1000	1000 Mbps comprising: • 990 Mbps Internet • 10 Mbps Management
UFB	Urban 50Mbps to 100Mbps Upgrade Connection	UFB50 -> UFB100	100 Mbps comprising: • 90 Mbps Internet • 10 Mbps Management
UFB	Urban 100Mbps to 500Mbps Connection Upgrade	UFB100 -> UFB500	500 Mbps comprising: • 490 Mbps Internet • 10 Mbps Management
UFB	Urban 500Mbps to 1000Mbps Connection Upgrade	UFB500 -> UFB1000	1000 Mbps comprising: • 990 Mbps Internet • 10 Mbps Management
EDMR	Rural 50Mbps to 100Mbps Upgrade Connection	eDMR50 -> eDMR100	100 Mbps comprising: • 90 Mbps Internet • 10 Mbps Management
RSBI	N/A	N/A	N/A

3.5   Product Boundary

The boundary of the School Managed Network Product ends at the Managed Router on the School's premises. That is to say, the School Managed Network Product does not extend into the School's LAN infrastructure, end user devices, or other ICT infrastructure.

3.6   Options

The optional features of this Product are:

- **Remove Web Filtering** (not recommended). By not using this service, you acknowledge that:
  - we will not be taking any action to stop or warn against access to any websites, and that you are responsible for performing any web filtering on internet requests that you deem appropriate; and
  - we will not be able to provide any assistance in analysing the websites your users visit. You will reimburse us for our reasonable costs and damages (a) incurred in responding to complaints about access your users have to inappropriate websites and (b) arising out of or in relation to any claims made against us for your users' unfiltered internet access.
- **Remove Web Filtering and Web Security** (not recommended). By not using these services, you acknowledge that:
  - we will not be taking any action to stop or warn against access to any websites, or to intercept and remove any malware content, and that you are responsible for performing

any web filtering and/or malware interception on internet requests that you deem appropriate; and

- ○ we will not be able to provide any assistance in analysing the websites your users visit. You will reimburse us for our reasonable costs and damages (a) incurred in responding to complaints about access your users have to inappropriate websites and (b) arising out of or in relation to any claims made against us for your users' unfiltered internet access.

- **Remove Firewall** (not recommended). By not using this service, you acknowledge that:
  - ○ you are taking full responsibility for all firewall features and for the external access that any parties have to your LAN, services within that LAN, and to any public facing internet services you operate;
  - ○ we will not be able to provide advice on the firewall rules that you establish, nor will we be able to assist with the implementation of those rules;
  - ○ we will not be taking any action to stop traffic flowing either to or from your Managed Router; and
  - ○ you are responsible for all the effects that traffic has on both your internal LAN, our managed network, and the networks of any other sites connected to our managed network that are impacted by any inappropriate traffic originating from your network, such as but not limited to malware, viruses, or Trojans.

  You will reimburse us for our reasonable costs and damages arising out of or in relation to any claims made against us that are the result of traffic that is not blocked from travelling between your network and our managed network.

- **Add SMTP Mail Relay** (including Email filtering, spam filtering and malware protection).
- **Add Remote Access**. This lets specific users remotely connect to your School's LAN and any services hosted by your School. Examples of users who may benefit from remote access include teachers, administration staff, and third party support providers.
- **All SSL Inspection.** This allows real time scanning of https traffic.

3.7 Pre-Requisites

The pre-requisites for us accepting your order for this Product are:

- The availability of a Wholesale Access Service which is acceptable to us, to connect you to the Managed Network.
- A suitable location for housing our Equipment at your premises, as per the specifications in Appendix 1.

3.8 Ordering

This Product may be ordered as follows:

- New Product – via an N4L Order Form.
- Moves, Adds or Changes – via:
  - ○ manual order form (where available); or
  - ○ call or email the N4L Helpdesk.

3.9 Term

The term of each Managed Network Connection:

- commences on completion of its provisioning; and
- continues until terminated by us or the School, on at least one month's written notice to the other.

If the School terminates the Product as above, N4L may invoice the following additional Charges to the extent they are payable by N4L to its suppliers in relation to that termination:

- a $195 termination charge;

- any early termination charges from the Wholesale Access Service provider; and
- a pro-rata proportion of a $300 plus GST network connection provisioning charge that was waived by N4L's network supplier, in respect of the period following termination and calculated over the first two years of the term.

Upon termination of this Product:
- On our request, you will return our Equipment. We will provide you with a courier bag for this purpose.
- If required by either party, both parties will work together in good faith to jointly develop and agree a plan to effect your disengagement from this Product with minimum disruption to either party.
- We will give you all reasonable assistance, at reasonable rates, if you wish to transition to another service provider.

3.10 Service Level Targets

N4L will use reasonable endeavours to meet the following service level targets for the School Managed Network Product. However, we will not be considered to have failed a target, to the extent the failure is due to:
- you not notifying us of the failure;
- any maintenance on or in relation to the Managed Network carried out within a planned maintenance window;
- any Wholesale Access Service outage;
- any breach by a School of its agreement with N4L;
- any event or circumstances outside the reasonable control of N4L or its subcontractors (including a failure of or within the School's LAN infrastructure, end user devices or other ICT infrastructure); or
- an Excusable Event for the purposes of clause 11.3 (Causes beyond our control) of our General Terms.

Availability	Description
Definition	The proportion of time the Provider Managed Network Connection is: (a) functioning; and (b) available to the Provider, (c) meeting the latency service level target below.

Target	Over a rolling 12 months:
	• **UFB** and **RBI**
	  >99.863% Metro
	  >99.817% Non-Metro
	• **Others.** Best endeavours.
	• **Remote Access** >99.7%

Measurement	Manually measured by historical unplanned downtime in relation to P1 and P2 Incidents recorded in the network provider's systems. Downtime caused outside of the Network Boundary is excluded.
Calculation	Calculated by: $$\frac{\text{Uptime} \times 100}{(\text{Uptime} + \text{Downtime})}$$ Where: • **Uptime** is the total time in the period in which the service is operating as defined above. • **Downtime** is the total time in the period that is not Uptime. • The calculation is expressed as a percentage.

Data Source	Network Monitoring System

Latency	Description	
Definition	The time taken between an IP packet being transmitted and received at an N4L defined endpoint.	

Target	Best Effort	Average over a month:
		• **UFB** and **RBI**
		  200 byte packets: <215ms
		  1472 byte packets: <215ms
		• **Others**: Best endeavours

Measurement	Samples from a loopback address from the Managed Router at one site to the loopback address from the Managed Router, at another site nominated by N4L	
Calculation	Measured as an average on a monthly basis	
Data Source	Network Monitoring System	

Note these service level targets are measured on a global basis across all Schools receiving the School Managed Network Product.

4 Provider Managed Network Connection Product

This Product is only available to organisations that are not Schools and that we accept as being eligible to use this Product (**Providers**). It provides a direct path from the Provider to Schools that are connected to our Managed Network. This provides School based users with an experience which is predictable and managed.

Our Provider Managed Network Connection provides the following:

4.1 Features
The standard features of the Provider Managed Network Connection are:
- **Bandwidth** as specified in clause 4.2 (Product Options).
- **Managed Router** that terminates the connection and provides the demarcation between our Managed Network and the Provider's network.
- **IP Address Management** providing IP addresses to each Provider to establish connectivity.
- **Device and Access Management** providing proactive (threshold monitoring, troubleshooting errors) and reactive (device and/or interface down scenarios) management of the Managed Router to ensure continuous operation and availability of services.
- **Bandwidth Management** providing differing, individual, types of traffic or individual weights using a traffic scheduler and policies for any traffic that requires special treatment.
- **Firewall** providing the ability to filter IP traffic that traverses the firewall, including traffic leaving the Provider LAN to the internet and from the internet to the Provider LAN. The traffic filtering is based on source IP address, destination IP address, protocol and ports.

4.2 Product Options
The Provider Managed Network Connection comes in the bandwidth agreed with the Provider (e.g. in its Order Form).

4.3 Product Boundary
The Provider Managed Network Connection ends at the Managed Router on the Provider's premises. The Provider Managed Network Connection does not extend into the Provider's LAN infrastructure, end user devices or other ICT infrastructure.

4.4   Prerequisites

The Provider must ensure that the following prerequisites for a Provider Managed Network Connection are met at all times (unless otherwise agreed in writing by us):

- A fibre connection, or other connection method acceptable to us, available in the Provider's server room.
- A suitable location to house our Equipment at the Provider's premises, as per the specifications in Appendix 1.
- Any internal cabling that may be required at the Provider's premises to deliver the circuit to the location where the Managed Router is housed.

4.5   Ordering

The Provider Managed Network Connection must be ordered as follows:

- New Product:
  - Detailed Design Order Form - To order a new Provider Managed Network Connection, the Provider must first sign an Order Form with us for the preparation of a Detailed Design. The Detailed Design will confirm the implementation and configuration. Charges for the Product will be confirmed at this time.
  - Provider Managed Network Connection Order Form - Once Charges have been confirmed, the Provider then signs an Order Form with us for the provisioning of a Provider Managed Network Connection. The Detailed Design will be completed, and signed off by both parties, prior to the Provider Managed Network Connection being implemented.
- Moves, Adds or Changes - MACs can be requested via:
  - a manual order form (where available); or
  - a request logged with our Helpdesk.

4.6   Product Term

The term of each Provider Managed Network Connection:

- commences on completion of its provisioning; and
- continues until terminated by us or the Provider, on at least one month's written notice to the other.

Except as set out otherwise in an Order Form, if the Provider terminates any Provider Managed Network Connection as above, N4L may invoice the following additional Charges to the extent they are payable by N4L to its suppliers in relation to that termination:

- A $195 termination charge.
- Any early termination charges from the Wholesale Access Service provider.
- A pro-rata proportion of the $300 plus GST network connection provisioning charge that was waived by N4L's network supplier, in respect of the period following termination and calculated over the first two years of the term.

Upon termination of this Product:

- On our request, you will return our Equipment. We will provide you with a courier bag for this purpose.
- If required by either party, both parties will work together in good faith to jointly develop and agree a plan to effect your disengagement from this Product with minimum disruption to either party.
- We will give you all reasonable assistance, at reasonable rates, if you wish to transition to another service provider.

4.7 Service Level Targets

We will endeavour to meet the following service level targets for each Provider Managed Network Connection. However, we will not be considered to have failed a target, to the extent the failure is due to:

- you not notifying us of the failure;
- any maintenance on or in relation to our Managed Network carried out within a planned maintenance window;
- any Excusable Event as defined in the General Terms (including a failure of or within a Provider's LAN infrastructure, end user devices or other ICT infrastructure);
- any breach by the Provider of its agreement with us;
- any event or circumstances outside the reasonable control of us or our subcontractors; or
- an Excusable Event for the purposes of clause 11.3 (Causes beyond our control) of our General Terms.

Availability	Description
Definition	The proportion of time the Provider Managed Network Connection is: (a) functioning; and (b) available to the Provider, (c) meeting all of the following service level targets.
Target	Over a rolling 12 months: • >99.863% Metro • >99.817% Non-Metro
Measurement	Manually measured by historical unplanned downtime in relation to P1 and P2 Incidents recorded in the network provider's systems. Downtime caused outside of the Network Boundary is excluded.
Calculation	Calculated by: Uptime x 100 (Uptime + Downtime) Where: • **Uptime** is the total time in the period in which the service is operating as defined above. • **Downtime** is the total time in the period that is not Uptime. • The calculation is expressed as a percentage.
Data Source	Network Monitoring System

Latency		
Definition	The time taken between an IP packet being transmitted and received at an N4L defined endpoint.	
Target	Real-time	200 byte packets: <35ms 1472 byte packets: <35ms
	Interactive	200 byte packets: <40ms 1472 byte packets: <40ms
	Business Data	200 byte packets: <117.5ms 1472 byte packets: <117.5ms
	Best Effort	200 byte packets: <117.5ms 1472 byte packets: <117.5ms

Measurement	Samples from a loopback address from the Managed Router at one site to the loopback address from the Managed Router at another site nominated by N4L
Calculation	Measured as an average on a monthly basis
Data Source	Network Monitoring System

Packet Loss		
Definition	The number of packets lost on a one-way transmission between end points defined by N4L.	
Target	Measured at 5-minute intervals and reported on a monthly basis	
	Real-time	<0.1%
	Interactive	<0.1%
	Business Data	<1%
	Best Effort	<3%
Measurement	Samples from a loopback address from the Managed Router at one site to the loopback address from the Managed Router at another site nominated by N4L	
Calculation	The total number of test packets lost in the period / total number of test packets transmitted in the period	
Data Source	Network Monitoring System	

4.8   Quality of Service

We can provide differing levels of QoS, depending on the type of traffic traversing the Provider Managed Network Connection. The QoS provided to each Provider will be investigated and specified in the Detailed Design.

QoS levels available as standard are:
- Business Data
- Best Effort

Higher QoS Levels, available only by agreement with us, are:
- Realtime
- Interactive

5   Support

We will provide these Products using reasonable care and skill and use reasonable endeavours to:
- meet any service level targets expressly identified in these Product Terms;
- ensure that, within the service level targets, these Products are secure, accessible, available and fully functioning; and
- keep these Products free of:
  - errors and defects;
  - harmful or inappropriate content; and
  - malware and other harmful things.

While we will use reasonable endeavours to keep these Products free of harmful or inappropriate content, this cannot be guaranteed due to the nature of these services. These Products should always be used in conjunction with your own digital citizenship and acceptable

use policies and procedures.

If any of our Products are not performing as expected, support is available 8:00am – 5:00pm on Business Days by emailing our helpdesk (see our website for details). We will take action as reasonably required to fix and prevent the recurrence of any reported fault or disruption which occurs in these Products.

6   Moves, Adds and Changes (MACs)

N4L will perform, or will enable you to perform, the following MACs:

6.1   Managed Network Connection

MAC Transaction	MAC Type	Description
Managed Router upgrade / downgrade	Onsite MAC	Upgrade or downgrade of a Managed Router
Access speed upgrade / downgrade	Complex Remote MAC	Change to the access speed within profiles and within the capability of the Managed Router
IP Address add / remove / change	Complex Remote MAC	Changes to IP Addressing
IPsec VPN add / remove / change	Complex Remote MAC	Change to a VPN defined within the network
VLAN add / remove / change	Complex Remote MAC	Change to a VLAN defined within the network
Security zone add / remove / change	Complex Remote MAC	Change to a security zone defined within the network
QoS traffic add / remove / change	Simple MAC	Change to the QoS traffic classification
Pre-approved Firewall rule add / remove / change	Simple MAC	Change to a pre-approved firewall rule on the Managed Router
Customised Firewall rule add / remove / change	Complex Remote MAC	Change to any other firewall rule on the Manager Router
DHCP add / remove / change	Complex Remote MAC	Change to the DHCP settings on the Managed Router
Relinquish Product	Onsite MAC	Relinquishment of a Managed Network Product
Site to site VPN add / remove / change	Complex remote MAC	Change to site to site VPN routing for a customer

6.2   Safe and Secure Internet (Schools Only)

MAC Transaction	MAC Type	Description
Web Filtering rule change	Simple MAC	Change to a filter rule within the "Web Filtering" Product

6.3 Remote Access (Schools Only)

MAC Transaction	MAC Type	Description
Remote VPN add / remove / change	Complex remote MAC	Change remote VPN access for a customer
Remote access user add / remove / change	Simple remote MAC	Change remote access for a user

7 Pricing

7.1 Fully Funded Schools

With the exceptions below, the School Managed Network Products are fully funded by the Ministry of Education for:

- State Schools
- State Integrated Schools
- Partnership Schools
- Health Schools
- the Correspondence School
- Activity Centres

Full funding includes a reasonable volume of Moves, Adds and Changes. N4L will monitor the volume of MAC requests being made by Schools and will work with Schools to ensure that the efficiency of the MAC request process is optimised.

The only exceptions to full funding for these Schools are where:

- a School continues to require an unreasonable number of MACs after being fairly advised by N4L that its use is unreasonable;
- there is a physical change at a School site that was not required by the Ministry. In that case N4L will invoice the School for N4L's time and costs resulting from the physical change.

7.2 Independent Schools

Independent Schools are not funded for School Managed Network Products by the Ministry of Education. Accordingly:

- each Independent School's Charges for Managed Network Connections are as specified in its Order Form (a document titled "Managed Network Contract for Independent Schools").
- MAC Charges are payable in accordance with clause 0 (MAC Charges).

7.3 Providers

As Managed Network Connections are customised for each Provider, the Charges for each Managed Network Connection are specified in its Order Form. In addition, MAC Charges are payable in accordance with clause 0 (MAC Charges).

7.4 MAC Charges

Where MACs are payable, they will be invoiced in arrears, at the following rates:

Charge	Amount	Charge Description
Onsite MAC	POA	Case by Case basis Complex MAC requests normally require detailed investigation or design work to implement
Simple MAC	$150	Simple change that can be completed in less than 30 minutes 8:30am - 5.00pm local business days Outside those hours incurs a charge of $380
Complex Remote MAC	$220	Simple change that can be completed in less than 60 minutes 8:30am - 5.00pm local business days Outside those hours incurs a charge of $500

8   Additional Terms

8.1   Testing

When we provide Managed Network Products to you, it is your responsibility to test the Products to ensure they interface correctly with your relevant business systems and equipment.

8.2   End User Terms

Local Fibre Company Terms

Some Managed Network Products are delivered over the Government's ultra-fast broadband (**UFB**) initiative. The UFB network is provided by Local Fibre Companies (**LFCs)**. On the website of each LFC are "End User Terms" relating to the supply, installation, ownership and use of the line (and any associated equipment and infrastructure) connecting a School's premises to the LFC's wider network (the **LFC End User Terms**). You agree to comply with the LFC End User Terms of any LFC connected to your premises. A list of LFCs may be found at http://www.crownfibre.govt.nz/crown-partners/ .

Other Local Network Company Terms

If the above paragraph (Local Fibre Company Terms) does not apply to you, then you agree to comply with the "End User Terms for Other Local Network Companies" that are available on the "Legal and Policies" section of our Website.

8.3   Safeguarding the Managed Network

So that our Products to you and other customers are not disrupted, it is important that you help safeguard the Managed Network. It is your responsibility to:

- take all reasonable security precautions to protect the Managed Network including our Equipment at your premises;
- take reasonable measures to ensure you do not introduce any faults or viruses (and the like) into the Managed Network; and
- take all reasonable steps to prevent interference with, or damage to, the Managed Network and our Equipment at your premises.

8.4   Our Equipment

Your Responsibilities

We remain the owner or licensee of our Equipment. Where our Equipment is at your premises, the Equipment will be at your risk and you will:

- only use our Equipment for your own lawful business use and for the purposes for which we provide it;
- not change or interfere with our Equipment in any way, unless authorised by us and in accordance with our instructions;
- comply with our reasonable directions and restrictions regarding your use of our Equipment;
- comply with any manufacturer's terms of use for our Equipment that are enforceable against you;
- make sure nothing or no-one on property or premises under your control interferes with or damages any of our Equipment;
- if requested by us, insure our Equipment against loss or damage by fire, theft or otherwise, with a reputable insurer for its full replacement cost;
- let us know immediately if any of our Equipment is lost, stolen or damaged;
- not sell, dispose of, grant any security interest in or otherwise part with possession of, any of our Equipment; and
- pay our charges for repairing or replacing any of our Equipment which is lost or damaged (however caused) while at your premises, but there is no charge where damage occurs through normal wear and tear.

Our Responsibilities

Where we provide our Equipment (or other goods) to you, we give you these extra commitments:
- Except to the extent our Equipment is affected by any failure to meet your responsibilities above, our Equipment will:
  - be safe, durable, substantially free from defects, and in good working order;
  - be fit for the purposes which we describe in writing and for which we are providing it to you;
  - be as we describe in writing or demonstrate to you and will do everything we say in writing it will do; and
  - be approved for connection to the Managed Network at the time we provide it to you.
- If our Equipment does not comply with these requirements, we will replace or repair the Equipment (at our cost) as soon as reasonably practicable and such replacement or repair will be your sole and exclusive remedy in respect of any failure of the Equipment to comply with such requirements.
- We will also:
  - ensure that we have the right to provide our Equipment to you and it will be free from any undisclosed security; and
  - not interfere with your possession of our Equipment except where both of us agree otherwise.

8.5   Access to your premises

Where required for us to provide our Products to you, you will provide us with reasonable access to your premises. This includes access to install, test, repair and carry out maintenance on our Equipment, and to remove any of our Equipment which is no longer required to provide our Products to you.

8.6   IP Addresses

Depending on the Products you acquire from us, we will arrange for appropriate IP addresses to be allocated to you. Unless we have agreed otherwise with anybody else, all IP addresses allocated to you remain our property. You must not transfer or sell those IP addresses to anyone else. We may change any IP address that we allocated to you. We will always give you

as much notice as we reasonably can before making these changes.

8.7 Monitoring

As a managed network provider, we will monitor the performance characteristics, volume, source and peak flows of network traffic on our Managed Network. You agree that we may (but are not obliged to) monitor use of our Products by you and Your Users as:

- reasonably required to provide or improve any of our Products;
- reasonably required to check your compliance with the Agreement; and
- required by law.

8.8 Excusable Events

Each of the following is deemed to be an Excusable Event for the purposes of clause 11.3 (Causes beyond our control) of our General Terms:

- outage of the Wholesale Access Service that connects you to the Managed Network;
- power outage, theft or vandalism of any device that connects you to the Managed Network; and/or
- denial of access to your site.

8.9 Privacy Implications of our Filtering Product (Schools only)

If you are a School and use our filtering service, the web traffic (including encrypted traffic) of Your Users may be inspected by us or our filtering service provider. You are responsible for informing Your Users that filtering is in place, and that all web traffic (including encrypted traffic) may be subject to such inspection and disclosure in accordance with our Privacy Policy (details of how we protect the information are contained in that policy).

8.10 Services you can't provide over the Managed Network (Providers only)

Our agreement with the provider of our Managed Network includes a number of services that we must obtain exclusively from them and prohibits us from allowing Providers to provide equivalent services over the Managed Network. Accordingly, if you are a Provider you will not provide any third party with:

- physical access to the Managed Network;
- national and/or international internet access over the Managed Network;
- wide area network connectivity over the Managed Network;
- IP telephony services over the Managed Network; or
- remote access over the Managed Network to an in-house LAN or resources.

Additionally, you may not use the Managed Network to support your own internal infrastructure services (such as replication between multiple data centres), except where they are delivered as part of a service to Schools.

Appendix 1 - Managed Router Housing Requirements

Each customer must:

- ensure that the room housing its Managed Router has adequate air circulation;
- ensure that the room and/or rack housing its Managed Router has restricted access;
- allow clearance, around the rack housing its Managed Router, for maintenance; and
- ensure its Managed Router utilises a permanent ground connection, installed in a secure location.