



Permanent Internet Connection Service Schedule

An AAPT Internet Solution



This Service Schedule forms part of the Agreement between Us and You and cannot be used as a stand-alone agreement. Any terms defined in the Service Agreement and the Service Order Form have the same meaning in this Service Schedule unless defined in this Service Schedule or the context requires otherwise.

We will be Your exclusive provider of the Service described in this Service Schedule. To place an order for this Service, please sign and return to Us the Service Order Form provided to You.

Service Agreement means Our current "Standard Service Agreement", a copy of which is available at <http://www.aapt.com.au/businesslegal>, or such other agreement as may be agreed in writing between Us and the You (in which case the latter will take precedence).

Part 1 – Service Description

1. Description

1.1 INTRODUCTION

A permanent connection is designed to provide an end-to-end broadband access solution as a delivery method for Internet access. Permanent connection provides a single machine or a whole network 24 hour, 7 day a week, connectivity (in accordance with the Service Levels in Part 3).

The Service offers a connection from Your premises into the AAPT IP Network (which is part of Our Network), allowing communication to the Internet and between Your premises in the form of Customer Premises Equipment (CPE)-based IP Virtual Private Networks (VPNs).

Permanent connections are available in a range of speeds and differing technologies to meet business requirements of small businesses sending emails or browsing the web through to large businesses interested in multimedia content or e-commerce. All AAPT business Internet products are delivered with a static IP address and unlimited users.

1.2 PERMANENT ACCESS CONNECTION TYPES

1.2.1 Public Switched Telephone Network (PSTN)

PSTN provides switching and signalling for local, long distance and international voice and low speed data calls. A modem links in to the PSTN and can be used for a permanent connection. Customers need only arrange an extra separate telephone line that the modem can remain permanently plugged into, then set it up to dial AAPT. Permanent modem connections are suitable for solutions dealing with only small amounts of data traffic (up to 56kbps) with 5-10 users.

1.2.2 Digital Subscriber Line (DSL)

DSL is a technology for bringing high bandwidth, high-speed Internet access to homes and businesses over ordinary copper telephone lines. A DSL line is capable of simultaneously transmitting data and voice signals. DSL achieves higher data transfer rates by using more of the available bandwidth spectrum, enabling continuous transmission of streaming video, audio and graphic-rich information. AAPT utilises different variations of DSL to deliver services based on customer requirements:

Asymmetric DSL (ADSL), Asymmetric DSL2+ Annex A (ADSL2+ Annex A)

ADSL and ADSL2+ Annex A are the most popular form of Broadband for home users and small to medium enterprises. ADSL and ADSL2+ Annex A is called “asymmetric” because most of its bandwidth is devoted to the downstream direction, i.e. sending data to the user. As most Internet use requires greater downstream bandwidth, only a small portion of bandwidth is available for upstream or user-interaction messages. ADSL and ADSL2+ Annex A are suitable for customers who require fast Internet access at a low cost. Asymmetric services will be delivered using ADSL2+ Annex A where possible.

Symmetric High-Speed DSL (SHDSL)

SHDSL is defined by the new ITU Global Standard G991.2. It can deliver voice and data services based on highly innovative communication technologies and will thus be able to replace older communication technologies such as T1, E1, HDSL, HDSL2, SDSL, ISDN and DDS. SHDSL is called "Symmetric High-Speed" because its bandwidth is the same in both the downstream and upstream direction. Symmetric speeds are suitable for customers who have their own web server, operate a VPN environment or are looking for WAN replacement technologies.

Asymmetric DSL2+ Annex M (ADSL2+ Annex M)

Annex M is an extension of the G.992.5 ITU-T International Telecommunications standard. It enables higher upstream speeds by increasing the available upstream frequency range. It can deliver voice and data services based on highly innovative communication technologies and will thus be able to replace older communication technologies such as T1, E1, HDSL, HDSL2, SDSL, ISDN and DDS. Annex M is configured on our Network to provide Symmetric speeds. Symmetric speeds suitable are for customers who have their own web server, operate a VPN environment or are looking for WAN replacement technologies.

1.2.3 Fibre

The platform AAPT uses to deliver access to the Customer is a technology called optical fibre. This technology uses glass (or plastic) threads (fibres) to transmit data. A fibre optic cable consists of a bundle of glass threads, each of which is capable of transmitting messages modulated onto light waves.

Fibre optic cables have a much greater bandwidth and are less susceptible to interference than metal cables. Fibre uses Synchronous Digital Hierarchy (**SDH**) to provide a "self healing" network, which means less downtime and more reliable service.

AAPT offers a range of Internet access products. These are set out in the table below. The Internet access products mentioned below are not available in all areas or in NT and TAS.

PRODUCT NAME	PRODUCT DESCRIPTION	COVERAGE	SERVICE LEVEL
Business Broadband (Asymmetric & Symmetric services)	Best Effort ADSL, ADSL2+Annex A, ADSL2+Annex M, and SHDSL	CBD, Metro and Regional (limited in Rural areas)	C*
Business ADSL2	Best Effort ADSL (ULL)	Limited CBD and Metro (some Regional areas)	C
Premium ADSL	Premium ADSL	Limited CBD and Metro (some Regional areas)	A^
Premium ADSL	Premium ADSL	Limited CBD and Metro (some Regional areas)	B
Premium ADSL 2	Premium ADSL 2	Limited CBD and Metro (some Regional areas)	A^
Premium ADSL 2	Premium ADSL 2	Limited CBD and Metro (some Regional areas)	B
Business SHDSL	Best Effort SHDSL	Limited CBD and Metro (some Regional areas)	B*
Premium SHDSL	Premium SHDSL	Limited CBD and Metro (some Regional areas)	A^
Premium SHDSL	Premium SHDSL	Limited CBD and Metro (some Regional areas)	B
Platinum Fibre	Premium Fibre	CBD areas	A
Platinum Other	x. 163 E1 (2Mb), LMDS, Metro Ethernet	Limited CBD and Metro (Some Regional areas)	A
Flexi	3 rd party access tail	Non standard access tail	N/A
AAPT Fibre	AAPT SDH Fibre, Metro Ethernet fibre	Limited CBD and Metro (some Regional areas)	Enhanced
IP Data Plan	IP traffic usage Plan	Each of the above access tails must be associated with an IP Data Plan	N/A

^Service Level A for Premium ADSL, Premium ADSL2 and Premium SHDSL is only available to customers who connected to that Service prior to 24 August 2007.

*Service Level B for Business SHDSL is only available to customers who connected to that Service prior to 24 August 2007.

2. Description of Service Components

All Services are comprised of 3 main components. These are:

- (a) **Access Tail** – Your Local Area Network (LAN) is connected through an Network Terminating Unit (NTU). Depending on the service an NTU will be supplied by AAPT, for some products you have the option to use your own NTU. The Service is then connected to the AAPT IP Network via AAPT or third party access infrastructure. This provides You with access to the AAPT IP Network and AAPT's high-speed Internet connections.

- (b) **Internet Connection** – IP data plan consists of a permanent access port and Internet traffic and is sold in conjunction with access infrastructure tails.

The Internet connection service offers a full range of connection speeds and IP data plans to suit business Internet access needs.

- (c) **Network Terminating Unit (NTU)** – The LAN interface equipment installed at Your site is known as a NTU. The NTU provides the network boundary. AAPT is responsible for the Service up to and including the Ethernet port on the NTU. Everything on Your side of the Ethernet port is Your responsibility. Note, for Business Broadband services where You purchase the access tail only, no DSL NTU is provided as part of the Service, You are responsible for termination to Your network and the Service will be delivered t the wall plate forming the demarcation point at Your premises.

In all cases the access tail and the NTU differ based on the Service selected by You. The Internet connection details remain unchanged.

2.1 BUSINESS BROADBAND

2.1.1 Asymmetric Services

(i) Access tail

The access into Your site may use Your existing Telstra PSTN analogue phone line or an unbundled local loop line. If a Telstra PSTN analogue phone line is required to deliver Business Broadband it is Your responsibility to provide an appropriate phone number to be ADSL or ADSL Annex A enabled. The Business Broadband Service is delivered over the same infrastructure providing Your current phone or fax service. If no Telstra PSTN analogue phone line is available, You must provide AAPT with a phone number by installing a new phone service at Your expense.

The Service is suited to two-way asymmetrical applications where differing upstream and downstream bandwidth is required.

You have the option to purchase a line-only ADSL access. With this option, no DSL NTU is provided as part of the Service. You are responsible for termination to Your network. The Service will be delivered to the wall plate forming the demarcation point at Your premises. If you require a DSL NTU, we can provide a professionally installed standard four-port modem router.

Access speeds available at different prices to new/existing customers who connected to the service prior to 12 November 2007

SPEED RATE(S) AVAILABLE

256kbps/64kbps, 512kbps/128kbps, 1.5Mbps/256kbps, 8Mb/384kbps and 512kbpd/512kbps

Access speeds available at different prices to new/existing customers who connected to the service on or after 12 November 2007

SPEED RATE(S) AVAILABLE

256kbps/64kbps, 512kbps/128kbps, 1.5Mbps/256kbps and High Speed (8Mbps/384kbps or ADSL2+ speeds of up to 20Mbps/1Mbps* available in ADSL2+ coverage areas

*Must be connected to a High Speed plan. Based on AAPT tests of up to 20Mbps/1Mbps service. Actual speeds may be less due to a number of factors including network configuration, line quality & length, exchange type, member premises interference, traffic and hardware and software. About 56% of members on the 20Mbps/1Mbps speed can access speeds around 8Mbps/900kbps or more. Download speeds above 8Mbps require network compatible ADSL2+ modem and filters.

(ii) DSL network terminating unit

The Business Broadband service supports Routed Public IP or Routed Private IP configuration for the DSL NTU.

- With Network Address Translation (NAT) or without NAT
- NAT includes Dynamic Host Configuration Protocol (DHCP) no port forwarding

There are 3 options available for DSL NTU

Option A – Full professional install

- AAPT supplied DSL NTU configured in routed public or private IP mode will be professionally installed by AAPT
- Passive / reactive management only, no monitoring
- Allocate minimum of 1 Public IP address as standard
- AAPT will supply any filters or splitters required for service delivery if service is delivered using Your existing PSTN phone line

Option B – Bridged

Option B is no longer available to new/existing customers who connected to the service on or after 6 Nov 2007.

- DSL NTU – acts as a bridge.
- You must have a PPPoE client (i.e. firewall, router, VPN CPE). PPPoE meaning Point-to-Point Protocol over Ethernet is a network protocol for encapsulating PPP frames inside Ethernet frames.
- No NAT configuration by AAPT.
- Professional installation.
- Uses existing PSTN phone line (You must provide and pay for).
- AAPT will supply any filters or splitters required for service delivery.

Option C – Line Only

- Customer supplied NTU
- AAPT provides the Service to the wall plate at the customers premises
- Customer configured and managed
- Allocate minimum of 1 Public IP address as standard
- Customer provides ADSL2+ filter/ splitter (not required if an Unbundled Local Loop line)
- Customer provides the ADSL2+ NTU and AAPT is not responsible for any NTU

2.1.2 Symmetric Services

(i) DSL access tail

Services are delivered using ADSL, ADSL Annex A, SHDSL or ADSL2+ Annex M technology.

For services delivered using SHDSL technology, the access into Your premises includes an unbundled local loop SHDSL-enabled circuit from the DSL-enabled exchange, which is carried over twisted pair copper wire, this line is provided by AAPT to be used for this service. SHDSL, as defined in ITU Global Standard G.991.2, provides high symmetric data rates and low interference with other services by supporting equal upstream and downstream data rates.

For services delivered using ADSL, ADSL Annex A and ADSL Annex M technology, the access into Your site is via an existing Telstra PSTN analogue phone line. It is Your responsibility to provide an appropriate phone number to be ADSL Annex M enabled. The Business Broadband Symmetric Service is delivered over the same infrastructure providing Your current phone or fax service. If no Telstra PSTN analogue phone line is available, You must provide AAPT with a phone number by installing a new phone service at Your expense.

SHDSL access speeds available to new/existing customers at different prices who connected to the service prior to 12 November 2007. Stated speeds are best efforts only and not guaranteed.

SPEED RATE(S) AVAILABLE

512k/512, 1M/1M, 2M/2M, 3M/3M and 4M/4M

Technology used and access speeds available to new/existing customers at different prices who connected to the service on or after 12 November 2007. Stated speeds are best efforts only and not guaranteed

SERVICE SPEED	TECHNOLOGY			
	ADSL	ADSL2+Annex A	ADSL2+Annex M	SHDSL
512kbps symmetric	✓	✓	✓	✓
1Mbps symmetric	✗	✗	✓	✓
1.5Mbps symmetric (New)	✗	✗	✓	✓
2Mbps symmetric	✗	✗	✓	✓

(ii) **Network Terminating Unit options:**

The Business Broadband Symmetric service supports Routed Public IP or Routed Private IP configuration for the DSL NTU.

- With Network Address Translation (NAT) or without NAT
- NAT includes Dynamic Host Configuration Protocol (DHCP) no port forwarding

Option A – Full professional install

- AAPT supplied NTU configured in routed public or private IP mode will be professionally installed by AAPT
- Passive / reactive management only, no monitoring
- Allocate minimum of 1 Public IP address as standard
- AAPT will supply any filters or splitters required for service delivery if service is delivered using Your existing PSTN phone line

Option C - Line Only

- Service demarcation point is the wall plate at Your premises
- You provide NTU router
- You are responsible for NTU and NTU configuration
- Your NTU must support PPPoA (i.e. firewall, router, VPN CPE)
- AAPT provides the Service to the wall plate at Your premises

(iii) **Installation notes:**

For services connected to SHDSL technology, where ULL is not available or unsuitable for Your requested Service, You will be notified and Your order automatically cancelled. In cases where ULL is not available you may give up Your existing Telstra PSTN line to deliver the ULL, note if you give up Your existing PSTN line to deliver ULL, this line can only be used for the Business Broadband Symmetric service. If ULL is not available if applicable, an alternative product will be offered to You. If You wish to use an alternate AAPT access Service, a new Service Order Form will be issued by AAPT which will need to be signed by You.

2.2 BUSINESS ADSL 2 MAIN COMPONENTS OF THE SERVICE

Business ADSL 2 only available to customers who connected to the service prior to 05 Nov 2007.

The access into the premises includes an ADSL 2+ -enabled circuit from an ADSL2+ -enabled exchange, which is carried over a dedicated twisted pair copper wire Unbundled Local Loop (ULL) service, delivered to Your premises. This line can only be used for the Internet connection.

You are provided with either 8Mb downstream, 640k upstream or 12Mb downstream, 640k upstream. There are no throughput guarantees with this Service.

There are two configuration options:

Option A - Full Professional Install

An Ethernet router (in bridge mode) will be provided at Your premises for connection into the ADSL 2 Service.

The NTU is supplied and managed by AAPT as part of the Service.

- Single Public LAN IP address allocated to the DSL NTU.
- No NAT configuration by AAPT.
- Professional installation.
- You provide a Layer 3 device (Layer 3 is the Network layer that determines how data is transferred between computers).
- AAPT will supply any filters or splitters required for service delivery.

Option B - Line Only

- Service demarcation point is the wall plate at Your premises.
- You provide CPE router.
- You are responsible for CPE and router configuration.
- Your CPE must support PPPoA (i.e. firewall, router, VPN CPE).
- AAPT provides the Service to the wall plate at Your premises.

Where ULL is not available or unsuitable for the requested Service, You will be notified and Your order automatically cancelled. If applicable, an alternative product may be offered to You. If You wish to use an alternate AAPT access Service, a new Service Order Form shall be issued by AAPT which will need to be signed by You.

2.3 PREMIUM ADSL AND PREMIUM ADSL 2 MAIN COMPONENTS OF THE SERVICE

(i) DSL access tail

The access into Your premises includes an ADSL or ADSL2+ -enabled circuit from the DSL-enabled exchange, which is carried over a twisted pair copper wire. As part of the Service AAPT deliver a new PSTN line to Your premises. This Service can only be used for the DSL connection. You are not required to pay Telstra additional charges for the PSTN Service. Voice and data are not carried over the same infrastructure.

The ATM Peak Information Rate (PIR) or Frame Relay burst rate will be defined as the Access Speed. "Frame Relay" consists of an efficient data transmission technique used to send digital information quickly in a relay of frames to one or many destinations from one or many end-points. The ATM Sustained Information Rate (SIR) or Frame Relay Committed Information Rate (CIR) will define the guaranteed minimum throughput rate. Variable-Bit-Rate Non-Real Time (VBR-NRT) class of service will be used for traffic engineering.

Premium ADSL access speeds have a minimum guaranteed throughput speed outlined in the table below:

ACCESS SPEED	MINIMUM DOWNLOAD THROUGHPUT RATE	MINIMUM UPLOAD THROUGHPUT RATE
256k/64k	64kbps	64kbps
512k/128k	64kbps	64kbps
1.5M/256k	128kbps	128kbps
2M/384k	1Mbps	192kbps
4M/512k	2Mbps	256kbps
8M/640k	4Mbps	320kbps
12M/640k	6Mbps	320kbps

(ii) **DSL network terminating unit**

The NTU is supplied and managed by AAPT as part of the Service. The interface option available for this Service is Ethernet.

Ethernet Interface: ADSL Ethernet, interface 10BaseT. The Ethernet solution supports bridged encapsulation mode only for services connected off-net* using third party provider access tails and supports routed mode (Private or Public IP) for services connected on-net* using our own direct network access tails.

A Private LAN IP address is an IP address assigned to the LAN portion of a network, not visible on the Internet while a Public LAN IP address is an Internet visible IP address assigned to the LAN portion of a network.

* Off-Net means services connected using a third party provider's ADSL Network, on-net means the service is connected using the AAPT ADSL Network.

It is assumed that You have a Layer 3 device behind the DSL NTU i.e. a router or firewall.

(iii) **Installation notes:**

This option is offered as part of a bundled Service. There is no option to purchase a non CPE option.

Where ULL is not available or unsuitable for Your requested Service, You will be notified and Your order automatically cancelled. If applicable, an alternative product will be offered to You. If You wish to use an alternate AAPT access Service, a new Service Order Form shall be issued by AAPT which will need to be signed by You.

Firewall functionality is not provided with the NTU delivered.

2.4 PREMIUM SHDSL MAIN COMPONENTS OF THE SERVICE

(i) **DSL access tail**

The access into Your premises includes an SHDSL-enabled circuit from the DSL-enabled exchange carried over a twisted pair copper wire.

The ATM Peak Information Rate (PIR) or Frame Relay burst rate will be defined as the Access Speed. The ATM Sustained Information Rate (SIR) or Frame Relay Committed Information Rate

(CIR) will define the guaranteed minimum throughput rate. VBR-NRT class of service will be used for traffic engineering.

An appropriate standard interface will be provided at Your premises for connection into the SHDSL service, interface options and access speeds listed below.

ACCESS INTERFACE	SPEED RATE(S) AVAILABLE
Ethernet	512kbps, 1024kbps, 1536kbps, 2048kbps, 3072kbps and 4096kbps
X.21	512kbps, 1024kbps, and 1984kbps

Premium SHDSL access speeds have a minimum guaranteed throughput speed outlined in the table below:

ACCESS SPEED	MINIMUM DOWNLOAD THROUGHPUT RATE	MINIMUM UPLOAD THROUGHPUT RATE
512bps	256kbps	256kbps
1024kbps	512kbps	512kbps
1536kbps	768kbps	768kbps
2048kbps	1024kbps	1024kbps
3072kbps	1536kbps	1536kbps
4096kbps	2048kbps	2048kbps

(ii) **DSL network terminating unit**

The NTU is supplied and managed by AAPT as part of the Service. There are interface options available for this service such as Ethernet and X.21. A different NTU will be provided, based on the interface option chosen.

Ethernet Interface: SHDSL Ethernet guarantees full access speeds and provides an Ethernet 10BaseT physical interface. The Ethernet solution supports bridged encapsulation mode only for services connected off-net using third party provider access tails, and supports routed mode (Private or Public IP) for services connected on-net using our own direct network access tails.

Off-Net means services connected using a third party provider’s SHDSL Network, on-net means the service is connected using the AAPT SHDSL Network.

X.21 Interface: SHDSL Frame solution is a Frame-Relay access product carried over DSL. It is a full or fractional E1 access service, capable of delivering symmetrical services. This service uses ATM /Frame Relay inter-working standards to allow interoperability.

(iii) **Installation notes:**

This option is offered as part of a bundled Service. There is no option to purchase a no CPE option.

Where ULL is not available or unsuitable for Your requested Service, You will be notified and Your order automatically cancelled. If applicable, an alternative product will be offered to You. If

You wish to use an alternate AAPT access Service, a new Service Order Form will be issued by AAPT which will be required to be signed by You.

Firewall functionality is not provided with the NTU delivered.

2.5 PLATINUM FIBRE

(i) AAPT Fibre

For each customer connection, AAPT uses two pairs of fibre, each on a different direction on a Synchronous Digital Hierarchy (SDH) ring. In each fibre pair, one fibre is used to transmit and the other to receive. Cabling within a site may be provided by copper or co-axial cable.

The following table indicates the infrastructure AAPT runs its fibre over and the speed types this infrastructure is capable of:

INFRASTRUCTURE	PVC SPEED	INTERFACE/PROTOCOL	CONNECTOR
E1	256K-2Mbps	E1	RJ
E3	2Mbps-34Mbps	E3	BNC (Coax)
STM-1	45Mbps-155Mbps	OC-3	SC (Optical)

(ii) PowerTel Fibre

The PowerTel network is a multi-service Asynchronous Transfer Mode (ATM) network that offers Variable-Bit-Rate Non-Real Time (VBR-NRT) class of services. Frame-to-ATM Service Interworking (FRASI) allows selection of the appropriate frame or ATM technology on a site-by-site basis.

The following table indicates the infrastructure PowerTel runs its fibre over and the speed types this infrastructure is capable of for Frame Relay /ATM-based services:

INFRASTRUCTURE DESCRIPTION	PVC SPEED	INTERFACE/PROTOCOL	CONNECTOR
E1	256K-2Mb	E1/X.21	DB25
E3	4Mbps-34Mb	OC-3	SC (Optical)
STM-1	45Mbps-155Mb	OC-3	SC (Optical)

PowerTel also provide a bridged Ethernet service – Ethernet over ATM. AAPT currently uses the service from 2Mbps to 30Mbps.

The following table indicates the infrastructure PowerTel runs its fibre over and the speed types this infrastructure is capable of for the bridged Ethernet service:

INFRASTRUCTURE	SPEED	INTERFACE/PROTOCOL	CONNECTOR
Ethernet	256k to 8Mb	10BaseT	RJ-45
Ethernet	10Mb to 34Mb	100BaseT	RJ-45

(iii) **Uecomm Fibre**

Uecomm uses IEEE 802.3 Ethernet standards across a fibre-base network infrastructure, delivering point-to point-Ethernet Internet links using 802.1q VLAN switching.

The Service offers full duplex data transmission. Access is provided as a point-to-point transmission service between AAPT and Your designated location. These locations are designated as the A-end address and the B-end address respectively.

The following table indicates the infrastructure Uecomm runs its fibre over and the speed types this infrastructure is capable of:

INFRASTRUCTURE	SPEED	INTERFACE/PROTOCOL	CONNECTOR
Ethernet	256k to 8Mbps	10 BaseT	RJ-45
Ethernet	10Mb to 45Mbps	100BaseT	RJ-45
GB Ethernet	100Mbps+	GB Ethernet	SX

(iv) **Amcom Fibre**

Amcom uses IEEE 802.3 Ethernet standards across a fibre base, network infrastructure, delivering point-to-point Ethernet Internet links using 802.1q Virtual Local Area Network (VLAN) switching.

The Service offers full duplex data transmission. Access is provided as a point-to-point transmission service between AAPT and Your designated location. These locations are designated as the A-end address and the B-end address respectively.

The following table indicates the infrastructure Amcom runs its fibre over and the speed types this infrastructure is capable of:

SERVICE	SPEED	INTERFACE/PROTOCOL	CONNECTOR
Ethernet	512k to 8Mbps	10BaseT	RJ-45
Ethernet	10Mbps to 100Mbps	100BaseT	RJ-45

2.6 X.163

X.163 is a Telstra wholesale access that provides a 2Mb clear channel E1 connection between a customer premises and AAPT's point of interconnect.

2.7 LOCAL MULTIPOINT DISTRIBUTION SERVICE (LMDS)

LMDS operates by way of line-of-sight radio signals carrying high-speed Internet from a small dish on the roof of a customer's building to a base station where the signal is switched to other networks.

The strength of LMDS is coverage and reach – it has significantly expanded the number of customers to which AAPT can provide Local Access Services.

LMDS can be ordered in increments of 2Mb up to a maximum of 10Mb.

This allows AAPT to offer Internet services to more customers than before – giving them all the benefits of an AAPT Direct Connection.

Note: LMDS is not available to all customers.

2.8 METRO ETHERNET

AAPT Metro Ethernet is a point to point fibre connection between customer site and AAPT Internet backbone with Ethernet IEEE 802.3 standard interface.

SERVICE	SPEED	INTERFACE/PROTOCOL	CONNECTOR
Ethernet	Up to 10Mbps	10BaseT	RJ-45
Ethernet	10Mbps to 100Mbps	100BaseT	RJ-45

2.9 DIRECT CONNECT FLEXI

Direct Connect Flexi allows customers to use a 3rd party access tail to connect to the AAPT IP network.

2.10 IP DATA PLAN

IP Data Plan consists of a permanent access port and Internet traffic and is sold in conjunction with access infrastructure tails. The Internet connection service offers a full range of connection speeds to suit business Internet access needs. With an IP Data Plan, You have access to the valuable resources available via the Internet including email, World Wide Web, Internet newsgroups and file transfer.

Features and Benefits

IP Data Plan encompasses a number of features and benefits relevant to Your Internet needs:

- AAPT offers a complete range of connection speeds.
- You have a choice of **flat-rate** or **usage-based** pricing customised to Your monthly download needs, with the added incentive of lower-price-per-megabyte rates as Your needs grow.
- AAPT does not charge for IP data uploaded

- Our customer services team offers dedicated business customer phone support
- AAPT has provisioned on-line account management tools so You can track Your usage patterns and ensure You are on the most effective plan for Your business needs
- Large connections providing sufficient headroom for bursting

IP Data Plans are either usage-based (with a Minimum Monthly Commitment) or a Flat-Rate Plan.

(i) **Usage-Based Pricing**

The Usage-Based Pricing Plan provides You with a range of data traffic allowances based on a minimum gigabyte (or traffic) allowance. This pricing is suitable to those customers who have an understanding of the data amount they intend to utilise each month. One benefit of this plan is the opportunity for You to take advantage of the lower traffic charges when upgrading to higher plans as Your data requirements change.

The Usage-Based Pricing Plan has three core pricing components and is simple and easy to understand:

Connection Set Up Charge: The setup charge includes the cost for AAPT to set up a port on Our Network. You can choose the size connection You require which is independent of the data download.

Connection Monthly Port Charge: You may be required to pay a port maintenance charge. Traffic is not included within this charge.

Monthly Traffic Charge: You are required to pay a monthly charge for the minimum traffic allowance You select. If Your actual traffic usage exceeds the allowance You have paid for, then You are also charged for the excess.

(ii) **Flat-Rate Pricing**

The Flat-Rate Plan like the Usage-Based Plan has a choice of the connection speed required. The Flat-Rate Plan has three core components for the monthly Traffic Charge:

- (a) A fixed monthly charge based on the maximum throughput of the access tail.
- (b) There are no excess usage traffic fees associated with Flat Rate.
- (c) If utilisation exceeds 40% in any one month, AAPT reserves the right to upgrade Your limit to the next access speed.

(iii) **IP Data Plan Contract Notes**

If You have an IP Data Plan You have the flexibility to increase or decrease Your minimum IP usage commitment after a 90 day period from the commencement of the Minimum Period. This flexibility is subject to the following conditions:

You provide Us with 90 days notice.

If You decrease Your minimum commitment the Minimum Period for the relevant IP Data Plan recommences from the date of the decrease.

Aggregation

AAPT offers aggregation of IP Content for customers with multiple permanent connections. This means You have the ability to aggregate Your IP Content across all links. This provides You with a number of advantages:

There is no longer the need to continuously estimate traffic download per month, per connection. An overall data commitment for all connections is likely to lessen the impact of any abnormal traffic fluctuations during the month, thereby saving You money if You have over-estimated or under-estimated Your usage for different connections.

By making one overall traffic commitment, You have the ability to receive discounted data volume pricing because the higher data commitment You make with AAPT, the better the IP Content charge We can offer.

AAPT provides contract flexibility for customers with multiple connections. We understand that circumstances change and therefore have structured our aggregation policy so that in certain circumstances and subject to certain conditions, You can reduce Your IP data volume commitment if You have over-estimated Your traffic volumes during the year, or Your circumstances have changed. The circumstances in which You can reduce Your commitment are set out in the Additional Terms and Conditions (Part 4).

Part 2 - Charges

See Service Order Form for the Charges applicable to the Service.

Additional Terms and Conditions of Charges for Premium ADSL, Business SHSDL and Premium SHDSL

- (a) Setup fee includes: ULL, DSL NTU leases for the Minimum Period for the Service and DSL and NTU maintenance.
- (b) AAPT will organise the installation of a ULL for the Broadband Service at the same location. The installation fee includes cabling up to 20 metres from the Main Distribution Frame (MDF0 to the Intermediate Distribution Frame (IDF). Should the cabling be further than 20 metres, or in the event of the Customer specifying an alternative location for the CPE equipment outside the standard wiring cabinet (IDF), additional cabling charges will apply for which the Customer is liable. If the cabling charge is in excess of \$300, AAPT will obtain the Customer's authorisation to proceed via a signed change request order form.
- (c) A standard 2 meter RJ45 cable is provided with all AAPT supplied routers. Additional cabling requirements will carry an extra charge.
- (d) Standard Installation: AAPT defines an end user installation as standard if:
 - (i) there is standard 240v AC General Purpose Outlet (GPO) available at the Network Terminating Unit (NTU) location;
 - (ii) the installation is possible via normal means (i.e. no scissor lifts, cable trays or other sundry civil works are required to be undertaken); and
 - (iii) building riser cable has sufficient capacity available.

If non-standard installation is required there may be an additional Charge.

Part 3 – Service Levels

Service Functional Performance

The Service Level has two components:

1. Service Attribute related to the level of service that We provide; and
2. Service Rebates that apply when specific service attributes do not perform in accordance with the Service Attributes.

You are able to select a service level appropriate to Your business on a site by site basis. You acknowledge that not all Service Levels are available for all Services or at all Customer site locations and options will need to be discussed with Your account manager.

Where a Service Attribute is not differentiated by Service Level (Enhanced, A, B or C) the Service Attribute provides the same Service Level for all options.

1. Service Attributes

The Service Attributes define the level of service that We are committed to delivering to You.

SERVICE ATTRIBUTE	ATTRIBUTE DEFINITION	SERVICE LEVEL COMMITMENT
Service Reception	Answering a telephone call from a Customer and logging information relevant to a fault or other details relevant to the service required.	<p>Fault Reporting: Call Reception is available 24 hours a day, 7 days a week, 52 weeks a year.</p> <p>Daily average – 85% of calls will be answered within 20 seconds.</p> <p>Billing and Provisioning Enquiries: Call Reception is available on NSW Business Days, 0830 to 1730 EDST for provisioning and 0830 to 2000 EDST for billing.</p> <p>Daily average – 85% of calls will be answered within 20 seconds.</p>
Standard Service Hours	Those hours during which the AAPT Service Operations Centre (SOC) is staffed and infrastructure monitoring systems are operational and alarm surveillance occurs.	24 hours a day, 7 days a week, 52 weeks a year.
Fault Classification	<p>All faults are classified as follows:</p> <p>Interrupted: Service is non-operational.</p> <p>Non-Interrupted: Service is degraded but still operational.</p>	Faults are classified by the SOC and advised to the Customer on initial response.

SERVICE ATTRIBUTE	ATTRIBUTE DEFINITION	SERVICE LEVEL COMMITMENT
Response Time	<p>The elapsed time, during Standard Service Hours, between the Customer reporting a fault to AAPT or AAPT responding to an alarm, and AAPT contacting the Customer to provide the following details:</p> <ul style="list-style-type: none"> • Fault classification • Initial diagnosis • An estimated time to restore, if known 	<p>Interrupted Faults – 60 minutes Non-Interrupted Faults – 4 hours</p>
Progress Updates	<p>Updates on the status of service restoration activity</p>	<p>Hourly for Interrupted Faults On a significant event basis or as agreed for all other faults</p>
Service Restoration	<p>The elapsed time, during Standard Service Hours, between the Customer reporting a fault to AAPT or AAPT responding to an alarm, and confirmation to the Customer that the Service has been restored to the levels defined in the Service Description (Part 1).</p>	<p>Restoration time will vary by Fault Classification, by Core, Access and AAPT CPE and also by the Customer selected Service Level (Enhanced, A, B or C) as outlined in Table 1.</p>
Network Availability for: AAPT CPE Access Core	<p>Our Network is engineered to deliver the following availability:</p> <p>AAPT CPE Availability is defined as the availability of the AAPT provided and owned equipment located on the Customer's premises (CPE) connected to the access NTU, the point of demarcation being the LAN port on the CPE to which the Customer's own equipment is connected.</p> <p>Access Availability is defined as the availability of the circuit and all other network infrastructure that connects the Customer site to the relevant AAPT Edge Point of Presence (POP) and through to the AAPT Core Network. The point of demarcation is the AAPT provided Network Termination Unit (NTU) on the Customer's premises.</p> <p>Core Availability is defined as the availability of the AAPT Core Network infrastructure. The AAPT Core Network is built on high reliability, diverse and redundant network elements that interconnect at speeds of 155Mbps or greater.</p> <p>Access and AAPT CPE Availability is measured monthly on a tail-by-tail basis.</p> <p>Availability is calculated as Standard Service Hours less downtime outside the Standing Window for planned outages divided by the Standard Service Hours expressed as a percentage.</p> <p>The AAPT Core Network is the telecommunications network operated and/or controlled by the Telecom group (Us), excluding components supplied by 3rd party service providers.</p>	<p>AAPT CPE Availability = 99.95%</p> <p>Access Availability varies by Service Level (Enhanced, A, B or C) as outlined in Table 2.</p> <p>Core Availability = 99.999%</p>

SERVICE ATTRIBUTE	ATTRIBUTE DEFINITION	SERVICE LEVEL COMMITMENT
Network Quality	<p>Maximum transit delay</p> <p>Packet Loss</p>	<p>AAPT Backbone – The average round-trip transmission time for packets will be less than 200 milliseconds, within the AAPT Core Network, to another point in the AAPT Core Network, and return.</p> <p>The average packet loss will be less than 2%.</p>
Planned Outage Notification	<p>Notice of any planned maintenance that could cause a service outage.</p>	<p>Notification at least five Business Days in advance either by letter, telephone, fax or e-mail.</p> <p>In the case where emergency maintenance needs to be conducted, AAPT will endeavour to provide at least 24-hour notice.</p>
Service Provisioning	<p>The elapsed time between confirmed acceptance of the Order by AAPT and the implementation of that request, unless the Customer specifies a longer time.</p>	<p>Provisioning time varies by geographic location and access technology used. Refer to Table 3.</p>
Service Level Reporting	<p>A monthly report, delivered to the Customer detailing AAPT's achievement against the Service Levels outlined.</p> <p>Report to include details on Grade of Service measures across the business as well as individual fault performance for the Customer.</p>	<p>Report Availability to be advised.</p>
Moves, Adds and Changes (MACs)	<p>MACs are separated into two types:</p> <p>Physical – changes that require a site visit e.g. router upgrades, increased access bandwidth.</p> <p>Logical – changes that do not require a site visit e.g. PVC changes (with no change to access bandwidth), IP/Configuration changes to routers, new IP configurations for routers.</p>	<p>Physical:</p> <p>Change to Existing Access – as per Table 3.</p> <p>CPE Change – as quoted at time of request, dependent on equipment lead-time.</p> <p>Logical:</p> <p>PVC Changes – 10 Business Days</p> <p>IP/Configuration Changes to CPE – 2 Business Days</p> <p>New IP/Configurations for CPE – 5 Business Days</p> <p>All other MACs – as advised at time of order</p>

Table 1 – Service Restoration for Service Levels Enhanced, A, B and C

Depending on the Service Level selected by You, We provide the following restoration times:

FAULT CLASSIFICATION	CORE	ACCESS				AAPT CPE
		Enhanced	Service Level A	Service Level B	Service Level C	
Interrupted Faults	2 Hours	Metro = 4 Hours Regional = 6 Hours	Metro = 8 Hours Regional = 12 Hours	Metro = 12 Hours Regional = 12 Hours	Metro = 1 Business Day Regional = 2 Business Days Rural = 3 Business Days	Metro = 4 Hours Regional = 8 Hours Rural = 24 Hours
Non Interrupted Faults	24 Hours					

Notes:

1. A metropolitan area is defined as the local calling area of Melbourne, Sydney, Brisbane, Adelaide, Perth, Canberra, Darwin or Hobart or within 50km of the GPO of each of Melbourne, Sydney, Brisbane, Adelaide, Perth, Canberra, Darwin or Hobart, whichever is the nearer.
2. A rural area is defined as a site that is greater than 250 kms from a town with a population of 10000 or more people, as defined by the Australian Bureau of Statistics.
3. All other areas are classified as regional.
4. Some non-interrupted faults may require monitoring over a time period to effectively diagnose and resolve the problem and this will be advised to You as the fault is investigated.
5. Where ISDN is provided as a dial back up to an Individual Service then the Service Level (as set out in Table 1) will be incremented by one level.

Also refer to the Business Dial up Service Schedule (which Your account manager may provide) for ISDN Dial up service level information.

Table 2 – Access Availability for Service Levels Enhanced, A, B and C

The Access Network Availability Service Attribute is as follows:

SERVICE ATTRIBUTE	ENHANCED	SERVICE LEVEL A	SERVICE LEVEL B	SERVICE LEVEL C
Access Availability	99.97%	99.95%	99.9%	99.5%

Table 3 – Provisioning Times

	AAPT FIBRE AND XDSL	AAPT LMDS OR MICROWAVE	BUSINESS BROADBAND (ASYMMETRIC), POWERTEL FIBRE, UECOMM FIBRE AND AMCOM FIBRE	X.163, ADSL2, SHDSL, BUSINESS BROADBAND (SYMMETRIC) AND PREMIUM ADSL
Metro	12 Business Days	20 Business Days	30 Business Days	35 Business Days
Regional	20 Business Days	20 Business Days	30 Business Days	45 Business Days

Notes:

A metropolitan area is defined as the local calling area of Melbourne, Sydney, Brisbane, Adelaide, Perth, Canberra, Darwin or Hobart or within 50km of the GPO of each of Melbourne, Sydney, Brisbane, Adelaide, Perth, Canberra, Darwin or Hobart, whichever is the nearer. All other areas are classified as regional.

Provisioning time assumes that infrastructure is already established at the site and may be increased where We are required to increase capacity or build new infrastructure at the site in order to deliver the Service.

Provisioning times are exclusive of any site acquisition issues. The Customer is requested to provide assistance with site acquisition as may be necessary.

2. Service Restoration Rebate

Where We fail to meet the defined restoration time for Interrupted Faults as set out in Table 1 above, the following rebates will apply:

NUMBER OF HOURS OVER STATED RESTORATION TIME	SERVICE RESTORATION REBATE
Less than or equal to 1 hour	15% of total monthly Charges for the eligible Service at that site.
Greater than 1 hour, less than or equal to 2 hours	25% of total monthly Charges for the eligible Service at that site.
Greater than 2 hours, less than or equal to 4 hours	40% of total monthly Charges for the eligible Service at that site.
Greater than 4 hours	50% of total monthly Charges for the eligible Service at that site.

Where a service at a site experiences two or more Interrupted Faults in any calendar month (of duration longer than one hour each) a rebate of 20% of the total monthly Charges for the eligible Service at that site is available in addition to the rebates outlined above.

Example – an Interrupted Fault occurs in the Service at a Service Level A nominated metro site which results in the Service to that site being non-operational for 10 hours. Our restoration

Service Level for this site is 8 hours. Restoration takes 2 hours longer than targeted. As such a 25% rebate is payable on the monthly Charges for the Service at that site.

The following conditions apply to eligibility for a Service Restoration Rebate:

- Rebates apply from the first full calendar month that the Service is operational.
- The rebate is payable only in relation to the site where the fault originates.
- The rebate is Your only remedy in the event of any failure to meet the service availability target.
- You must apply for the rebate in writing to Your Account Manager within 90 calendar days of the end of the month to which the rebate applies.
- The rebate is only to be applied by way of a credit, and cannot be redeemed for cash.
- The maximum rebate available for any circumstance in any month will not exceed 100% of the total monthly Charges for the eligible Service at that site.

Service Restoration Rebates are not available where:

- planned outages (including scheduled maintenance) are undertaken by AAPT.
- disruption or delay in restoring the Service is caused or contributed to by You.
- You have not paid any Charges for the Services when due and payable.
- the fault was caused by a power interruption at Your site.

Part 4 – Transfer of Services to Us

1. Transfer of Services to Us

1.1 USE OF THE SERVICES

1. We will provide You with a user identification code, unique password and other security information specific to Your Account. You must keep this information confidential and not disclose it to third parties without our permission. For clarity, You may disclose this information to Your agents and integrators who have a legitimate need to know.
2. You are responsible for and must pay the cost of all telecommunications and access charges incurred when accessing or using the Service, and any charges by any content provider.
3. You acknowledge that the Internet is not necessarily a secure or confidential means of transmitting information.
4. If You request Us to change the place at which the Services are provided, We cannot guarantee that We will be able to provide the Services at the new address. You may have to pay charges for installing the Services at the new address. We will obtain Your agreement to any such charges prior to invoicing You for them.

1.2 TRANSFER OF SERVICES TO US

1. You authorise Us to transfer applicable services received from Your current supplier to Us.
2. You authorise (and if requested by Us, agree to give written instructions to) Your current supplier of telecommunications services to transfer to Us all telecommunications services relating to the provision of the Service, and to provide Us with all information necessary for this purpose.
3. We will not accept any liability for any amounts owing by You to Your current supplier for a service that Your current supplier provided to You. You must indemnify Us against any claims made by Your current supplier to Us in relation to any such amounts.

1.3 SUPPLY OF ADSL AND SHDSL SERVICES

1. Clauses 9 – 18 (inclusive) apply to the supply of SHDSL and ADSL Services.
2. Whilst We will use our best endeavours to supply the Services to You, the availability of the Services is dependent upon a variety of matters including capacity of the telephone line linked to Your nominated premises where the Services will be supplied ('Customer Premises') and the geographic location and technical capability of the Customer Premises.
3. The Services will only be provided to the Customer Premises if the following apply:
 - (a) the Customer Premises must be located at such a distance from an exchange equipped to provide AAPT's digital subscriber line services to enable Us to provide the Services;
 - (b) the telephone line(s) on which the Services will be delivered must be compatible with the Services ordered by You; and
 - (c) the CPE must be authorised and certified for use with the Services and must be approved by the Australian Communications and Media Authority ('ACMA').
4. Service Installation: We will carry out the work necessary to enable the provision of the Services (the 'Service Installation Work') as set out in the Service Order Form. If You require the CPE to be installed at a site outside a standard wiring cabinet, additional cabling charges may apply for which You will be liable. Without limiting the foregoing, if in

performing the Service Installation Work, it is necessary for Us to install cabling in excess of 20 metres, additional charges for time and materials will apply. If the cabling must pass through solid obstacles, such as concrete, the price for installation will be determined after a site inspection. Additional charges for the installation of cabling will be itemised separately. We will notify You of any such additional charges prior to installation and obtain Your consent to accept them.

5. You acknowledge that, in some circumstances, installation of the Services may temporarily disrupt standard telephone services.
6. No Reinstatement: When an existing telephone service is selected for conversion to the Service, the telephone service may be terminated and if so it cannot be reinstated as the same telephone service. We do not guarantee the restoration or reinstatement of any previous telephone number or service supplied over that telephone line.
7. You will provide Us with telephone numbers of lines that You wish to have enabled to receive the Service and We will provide You with a preliminary indication as to whether or not the lines can be enabled to receive the Service.
8. You agree to obtain, install and maintain suitable CPE as is necessary to access the Services, and not to install any CPE not authorised by Us. "CPE" means a DSL router or modem located in Your premises which complies with AAPT's DSL CPE standards and is configured to receive the Service.
9. When undertaking Service Installation Work, the CPE will be configured to AAPT's standard CPE configuration templates in order to receive the Services. If You wish to re-configure the CPE, You must apply for a username and password. If We have provided You with a username and password at Your request and You reconfigure the CPE, then We accept no responsibility for the correct operation of that CPE due to Your re-configuration, nor for any damage, loss or cost whatsoever incurred by You or any third party as a result thereof, and You acknowledge that You are solely responsible for the CPE. You will be liable for any service fees incurred to Us for restoration of the Services due to fault or failure of the CPE and for any costs incurred in AAPT reconfiguring CPE to meet AAPT's CPE configuration requirements.
10. You will incur an integration charge of \$100, excluding GST, for a qualified technician to visit Your premises to assess Your CPE configuration requirements, if You ask Us to at any time to configure the CPE to an AAPT-defined configuration option other than AAPT's standard CPE default configuration option.
11. You:
 - (a) acknowledge that in some instances, such as where You are acquiring a security monitoring service, additional CPE such as central splitters and network termination devices will have to be installed by You at Your own cost before We will provide an individual Service, in order to maintain continued supply of security and similar services. This will also apply where a security monitoring service is supplied subsequent to the Service being supplied; and
 - (b) warrant that where such additional CPE is required, You will install the additional CPE and notify Us once the installation has been successfully completed; and
 - (c) acknowledge that We will only provide the Service once We have received notice from You that the additional CPE has been successfully installed; and
 - (d) acknowledge that We can only supply or continue to supply a business ADSL Service to You while You are receiving and paying the cost for a standard telephone service from Telstra Corporation Limited.