Our Customer Terms

Ethernet MAN Section (non-current plans before 13 August 2013)

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Certain words are used with the specific meanings set out on page 26 and in the General Terms of Our Customer Terms.

1 About the Ethernet MAN section

Our Customer Terms

1.1 This is the Ethernet MAN section of Our Customer Terms.

1.2 The General Terms of Our Customer Terms apply unless you have entered into a separate agreement with us which excludes the General Terms of Our Customer Terms.

Inconsistencies

1.3 If the General Terms of Our Customer Terms are inconsistent with something in the Ethernet MAN section, then the Ethernet MAN section applies instead of the General Terms, to the extent of the inconsistency.

1.4 If a provision of the Ethernet MAN section gives us the right to suspend or terminate your service, that right is in addition to our rights to suspend or terminate your service under the General Terms of Our Customer Terms.

When this section applies

1.5 This section applies if you signed up for your IP Networking Service before 13 August 2013.

Ethernet MAN cease sale and exit notification

1.6 The following cease sale and exit notification only applies to stand-alone Ethernet MAN services and does not apply where Ethernet MAN is used as a last mile access type for other services (such as Telstra Internet Direct).

1.7 From 28 June 2018, Ethernet MAN is no longer be available for order by new customers.

1.8 From 30 June 2019, customers with existing Ethernet MAN services will no longer be allowed to add new Ethernet MAN services, make external relocations of existing Ethernet MAN services, or recontract existing Ethernet MAN services.

1.9 From 30 June 2021, we will exit Ethernet MAN service and cancel remaining Ethernet MAN services.

2 The Ethernet MAN service

What is Ethernet MAN?

2.1 Our Ethernet MAN service is a high-speed point-to-point data service. It supports Layer 2 Ethernet, Fast Ethernet and Gigabit Ethernet (rate limited) transmission of data. It is suitable for carriage of non-routable protocols.

MAN means metropolitan area network.

2.2 Ethernet MAN lets data be transmitted between our respective network boundaries at:

(a) one of your premises in an urban area; and

(b) another one of your premises in the same local call area and the same urban area.

2.3 Ethernet MAN is only available in an urban area and in the local call areas of Sydney, Melbourne, Canberra, Brisbane, Adelaide, Perth, Darwin, Hobart and the regional centres that we tell you about.

Service features

2.4 There are three types of Ethernet MAN:

(a) Ethernet MAN single uplink;

(b) Ethernet MAN dual uplink; and

(c) Ethernet MAN fully redundant connection.

2.5 Ethernet MAN single uplink is comprised of:

(a) two ports;

(b) a switch or network termination unit; and

(c) a single fibre connection that terminates at an exchange.

2.6 Ethernet MAN dual uplink, comprised of:

(a) two ports;

(b) a switch or network termination units; and

(c) two dual fibre connections that terminate at an exchange.

2.7 Ethernet MAN fully redundant connection is comprised of:

(a) three ports;

(b) two switches or network termination units; and

(c) three dual fibre connections (at least two dual fibre connections terminate at different exchanges).

2.8 An Ethernet MAN fully redundant connection provides you with a backup connection that can only be used if the primary switch or the connection between the two switches fails.

2.9 For the Ethernet MAN service we give you:

(a) two or more ports to the service as set out above;

(b) connection from our network boundary at your first specified address to the local exchange;

(c) connection from our network boundary at your second or subsequent specified address to the local exchange; and

(d) connection of the service between the two addresses where a link bandwidth is nominated to connect the two – this is referred to as the link or link service.

Availability

2.10 The availability of the service may vary depending on a number of factors including:

(a) geographic and technical capability of our network and of our delivery systems at the time at which the service is requested and delivered;

(b) availability of a suitable network infrastructure at the time at which the service is requested or delivered;

(c) provisioning time for equipment we required to provide the service; and

(d) your equipment and interfaces.

Minimum term

2.11 You have to take Ethernet MAN for at least 12 months ("**minimum term**").

Cancelling your service

2.12 If you order a new link and cancel the order within 15 working days, you must pay all costs incurred by us up to the full amount of the connection charge.

2.13 If you order a new link and cancel that order after 15 working days, you must pay us the full connection charge.

2.14 If you cancel a link service before the end of the minimum term we charge you a cancellation charge. The cancellation charge is 85% of A × B where:

A is the monthly access bandwidth charge at the 2 Mbit/s rate plus the monthly port charges; and

B is the number of months from the date of cancellation until the end of the minimum term.

2.15 The cancellation charges above are a genuine pre-estimate of our loss as a result of early termination.

2.16 If you cancel a link service after the end of the Minimum term, you must pay us the proportion of any monthly service charges payable for the link service up to the date of cancellation.

Ports

2.17 A port is dedicated a digital transmission interface.

2.18 Ethernet MAN supports the following physical layer standards for Ethernet (IEEE 802.3) interfaces. After considering your transmission requirements, you and we agree upon the type of ports to be used from the list below.

Physical layer standard	**Media**	**Approximate distance (metres)**	**Duplex**	**Interface**
10 Base-Tx	Category 3, 4, 5 (Copper)	100	Half	IDC, RJ-45
100Base-Tx	Category 5	100	Full/Half	IDC, RJ-45
100Base-Fx	62.5μ Multi-mode fibre (MMOF)	400	Half Duplex	SC
100Base-Fx	62.5μ Multi-mode fibre (MMOF)	2000	Full Duplex	SC
1000Base-SX	62.5μ Multi-mode fibre (MMOF)	220	Full	SC
1000 Base-LX	62.5μ Multi-mode fibre (MMOF)	550	Full	SC

Link bandwidth

2.19 You choose the link bandwidth (nominal data throughput rate limit) for your service. The options are available between 2 Mbit/s and 1000 Mbit/s. The maximum rate carried on a port is limited by the physical line rate of the interface and the subscribed access speed at which the rate will be policed. The method we use to

police the subscribed rate or specific services may vary and information on this is available from us upon request.

2.20 Actual throughput will be lower than the access bandwidth for the Ethernet MAN access connection. This is due to the transmission protocol which uses a portion of the access bandwidth of the Ethernet MAN connection to manage the transmission of data.

2.21 For the bandwidth-on-demand dial feature available for Ethernet MAN dual uplink and Ethernet MAN fully redundant connection, we currently apply VLAN-based Rate-Limiting ("**VBRL**"). Under VBRL, we apply traffic-policing (at the subscribed rate) to the sum of the ingress traffic for that service. This policy is applied at the Telstra POP switch.

2.22 For Ethernet MAN single uplink, the link bandwidth is fixed full duplex.

3 Connecting an Ethernet MAN service

Provisioning times

3.1 We aim to meet our standard provisioning times for your service. Our target standard provisioning times start on the date that we have received all the information we need from you and end on the completion of provisioning. The times are expressed in working days (ie Monday – Friday, excluding public holidays).

3.2 Our standard provisioning times for a link or port provided on existing Ethernet MAN infrastructure without the need for construction or fee-for-service work is 4 working days.

Construction work refers to the physical build activities that require the attendance of people at your premises, our premises or externally.

For information in relation to fee-for-service work see the Fee-for-Service (Other work we do for you) section of Our Customer Terms.

3.3 For all other cases, our provisioning times are based on four categories of orders as follows:

Category of order	**Target standard provisioning times**
1 – Basic	**9 working days**
2 – Minimal	**19 working days**
3 – Medium	**24 working days**
4 – Extensive	**A provisioning assessment is made on a case-by-case basis.**

Category 1 – basic: orders that do not need any external work before installation.

These orders may need minor internal plant work at our exchange, or minor internal plant work at your site that we can perform at the same time as the site visit.

Category 2 – minimal: orders that need external transmission plant installation work (including the installation of up to 500 metres of cable), substantial internal plant work, or substantial fee-for-service work.

Category 3 – medium: orders that need us to seek the consent of someone other than you before starting street work, depending on the location of your end or the exchange end of the service.

Category 4 – extensive: orders that need major construction activity.

Cabling and data terminal equipment

3.4 You must provide the cable to connect the service from our network boundary to your equipment.

3.5 You must use equipment which complies with all relevant Australian Communications & Media Authority technical requirements for connection to a public switched data service.

3.6 We only connect your existing cabling at your premises to the service if:

(a) it has been installed by a registered cabling service provider; and

(b) it has been installed to and continues to meet minimum technical requirements determined by the Australian Communications & Media Authority.

3.7 You can connect data terminal equipment to the service if the equipment supplier complies with the Australian Communications& Media Authority's data terminal equipment permit requirements.

3.8 You must tell us of the data terminal equipment configuration so that we can set up the service with compatible configurations throughout the network. If you do not tell us of the correct configuration, you must pay us for any expenses we incur relating the identification of the fault and reconfiguring the service. We charge these expenses at the fee-for-service charges (see the Fee-for-Service (Other work we do for you) section of Our Customer Terms).

3.9 At your cost, you must give us all reasonable assistance and take all safety precautions reasonably necessary to ensure the safe and proper performance by us of work at your premises.

Your liability to us

3.10 You must pay us any costs and expenses we incur in replacing or repairing our plant, equipment or other property that is damaged or destroyed at any time as a result of:

(a) connecting data terminal equipment to our network; or

(b) any change to the data terminal equipment or interference by it with any of our property.

Connection charges – single uplink

3.11 We charge you the following for connecting a new Ethernet MAN single uplink. This charge covers connection to our network and connection of your property (ie, installing and testing cabling from the building entry point to the network boundary).

Connection charges – Ethernet MAN single uplink	**GST excl.**
New Ethernet MAN single uplink establishment per link between your two specified addresses	
- central business district zone to central business district zone	**$20,000.00**
- central business district zone to business zone	**$24,000.00**
- business zone to business zone	**$24,000.00**
- central business district zone to metro zone	**$33,000.00**
- business zone to metro zone	**$24,000.00**
- metro zone to metro zone	**$33,000.00**

Connection charges – dual uplink and fully redundant connection

3.12 We charge you the following network link establishment charge and port connection charges for connecting a new Ethernet MAN dual uplink and Ethernet MAN fully redundant connection.

3.13 The network link establishment charge covers connection to our network and connection of your property (ie, installing and testing cabling from the building entry point to the network boundary).

Connection charges – dual uplink and fully redundant connection	**GST excl.**
New standard Ethernet MAN dual uplink or fully redundant connection establishment per link between your two specified addresses	
- central business district zone to central business district zone	**$30,000.00**
- central business district zone to business zone	**$40,000.00**
- business zone to business zone	**$40,000.00**
- central business district zone to metro zone	**$50,000.00**
- business zone to metro zone	**$50,000.00**
- metro zone to metro zone	**$50,000.00**
New standard Ethernet MAN port (each)	**$3,600.00**
New fully redundant connection establishment for each specified address	
- in a metro zone	**$50,000.00**
- in a business zone	**$40,000.00**
- in a central business district zone	**$30,000.00**

Cabling and NTU locations

3.14 The standard location for our NTU at your site is the building communications room or the Main Distribution Frame room ("**MDF Room**"), where this exists. We deliver Ethernet MAN to this location. In the case of Ethernet MAN fully redundant connections, we can provide you with a separate NTU at an alternate location or equipment room at your site.

3.15 If you signed up for Ethernet MAN fully redundant services or dual access services before 1 November 2012, where both NTUs are to be at an alternate location or equipment room at your site, we charge you the additional cost of extending cabling beyond the standard service delivery point for only one of the cable links (based on the rates set out below under "Cabling charges" on page 11). If you signed up for your Ethernet MAN fully redundant service or dual access service on and from 1 November 2012, you can ask us to provide you with a separate NTU at an alternative location at your site. If we agree to your request, we'll charge you the

additional cost of extending cabling beyond the standard service delivery point. We confirm these charges on request.

3.16 For Ethernet MAN single uplink and Ethernet MAN dual uplink, you may elect to have an NTU provisioned on your own floor (for example, in your own communications room) or a location other than the building communications room, provided that you pay us the cabling charges.

3.17 If there's a suitable NTU to provide Ethernet MAN in the communications room or MDF Room at your site but you ask us to terminate Ethernet MAN on a NTU located in another place at your site, additional charges apply, which we confirm on request. If you ask us to do this, you must do so at the time your order Ethernet MAN.

3.18 In addition to the above, we may supply and provide at your cost:

(a) diverse access links;

(b) cable upgrades from the property entry point to the building entry point via trenching supplied by you or us;

(c) alternate or diverse cable entry point to building;

(d) additional service commissioning tests; and

(e) any other work specifically requested on your property or premises.

Cabling charges

3.19 If you signed up for your service before 1 November 2012, we charge you for providing and installing cabling to your site beyond the standard service delivery point on the following basis:

Cabling charges	**GST excl.**
Riser-Category 5 or 6 cable up to 4 floors	**$720.00**
Riser-Category 5 or 6 cable up to 10 floors	**$1,065.00**
Riser-MMOF/SMOF cable up to 4 floors	**$1,450.00**
Riser-MMOF/SMOF cable up to 10 floors	**$1,750.00**
Riser-MMOF/SMOF cable per additional 5 floors	**$454.00**
25m lateral Category 5e or 6 cable	**$255.00**
50m lateral Category 5e or 6 cable	**$510.00**

Cabling charges	GST excl.
25m lateral MMOF/SMOF cable	**$360.00**
50m lateral MMOF/SMOF cable	**$715.00**

3.20 If you signed up for your service on and from 1 November 2012, our charges for providing and installing cabling to your site beyond the standard service delivery point will be confirmed on request.

Network extension charges

3.21 Where your new service will be supplied by cable and your property entry point is more than 500 metres from the nearest part of our existing network to be used to connect your service, we can charge you our fee-for-service charges to lay cable from our existing network to your property entry point. We charge you beyond the first 500 metres. We will tell you this cost and get your consent before we start work.

For fee-for-service charges see the Fee-for-Service (Other work we do for you) section of Our Customer Terms.

Service extension charges

3.22 We can charge you our fee-for-service charges for installing alternative cabling where you occupy premises for which our network boundary is a main distribution frame (or MDF) and:

(a) there is no suitable spare capacity in the cabling system at the premises to extend cabling from the MDF to the location you request; or

(b) you do not want your service to be connected through the MDF.

For fee-for-service charges see the Fee-for-Service (Other work we do for you) section of Our Customer Terms.

4 Charges – single uplink

Monthly link bandwidth charges – to CBD and business zones

4.1 We charge you the following monthly charge for using a link to either a Central Business district zone or a Business zone for Ethernet MAN single uplink:

Monthly link bandwidth charges – Ethernet MAN single uplink			
Link bandwidth	**Central business district zone to central business district zone**	**Central business district zone to business zone**	**Business zone to business zone**
	(GST excl.)	(GST excl.)	(GST excl.)
2 Mbit/s	**$1,898.75**	**$2,190.75**	**$2,464.33**
10 Mbit/s	**$2,596.67**	**$2,991.50**	**$3,361.50**
20 Mbit/s	**$4,474.50**	**$5,203.17**	**$5,886.00**
50 Mbit/s	**$6,080.00**	**$7,141.00**	**$8,136.00**
100 Mbit/s	**$7,666.50**	**$9,074.25**	**$10,395.00**
500 Mbit/s	**$13,129.00**	**$15,831.42**	**$18,369.00**
1000 Mbit/s	**$16,549.00**	**$20,118.75**	**$23,472.00**

Monthly link bandwidth charges – to metropolitan zones

4.2 We charge you the following monthly charge for using a link to a Metropolitan zone for Ethernet MAN single uplink:

Monthly link bandwidth charges – Ethernet MAN single uplink			
Link Bandwidth	**Central business district zone to metro zone**	**Business zone to metro zone**	**Metro zone to metro zone**
	(GST excl.)	(GST excl.)	(GST excl.)
2 Mbit/s	**$3,306.75**	**$3,584.75**	**$4,154.33**
10 Mbit/s	**$4,507.67**	**$4,921.92**	**$5,464.92**
20 Mbit/s	**$5,811.75**	**$6,370.92**	**$7,128.75**

Monthly link bandwidth charges – Ethernet MAN single uplink			
Link Bandwidth	**Central business district zone to metro zone**	**Business zone to metro zone**	**Metro zone to metro zone**
	(GST excl.)	(GST excl.)	(GST excl.)
50 Mbit/s	**$8,132.42**	**$8,946.00**	**$10,116.33**
100 Mbit/s	**$10,722.58**	**$11,568.42**	**$13,033.75**
500 Mbit/s	**$19,387.58**	**$21,034.17**	**$24,130.33**
1000 Mbit/s	**$25,026.33**	**$27,212.08**	**$31,454.92**

5 Charges – dual uplink and fully redundant connection

Link bandwidth charges – to CBD and business zones

5.1 We charge you the following link bandwidth for using a link to either a central business district zone or a business zone for Ethernet MAN dual uplink or Ethernet MAN fully redundant connection. With the bandwidth-on-demand option our charge is based on the number of seconds the link bandwidth was provided at the relevant access speed.

Annual link bandwidth rates – dual uplink and fully redundant connection			
Link bandwidth	**Central business district zone to central business district zone**	**Central business district zone to business zone**	**Business zone to business zone**
	(GST excl.)	(GST excl.)	(GST excl.)
2 Mbit/s	**$23,984.00**	**$28,421.00**	**$32,858.00**
3 Mbit/s	**$25,430.00**	**$30,135.00**	**$34,840.00**
4 Mbit/s	**$26,877.00**	**$31,849.00**	**$36,821.00**

Annual link bandwidth rates – dual uplink and fully redundant connection			
Link bandwidth	**Central business district zone to central business district zone**	**Central business district zone to business zone**	**Business zone to business zone**
	(GST excl.)	(GST excl.)	(GST excl.)
8 Mbit/s	**$29,770.00**	**$35,277.00**	**$40,784.00**
10 Mbit/s	**$32,800.00**	**$38,808.00**	**$44,820.00**
20 Mbit/s	**$56,520.00**	**$67,500.00**	**$78,480.00**
30 Mbit/s	**$64,800.00**	**$77,640.00**	**$90,480.00**
40 Mbit/s	**$71,280.00**	**$85,740.00**	**$100,200.00**
50 Mbit/s	**$76,800.00**	**$92,640.00**	**$108,480.00**
60 Mbit/s	**$81,600.00**	**$98,640.00**	**$115,680.00**
70 Mbit/s	**$85,920.00**	**$104,040.00**	**$122,160.00**
80 Mbit/s	**$89,880.00**	**$108,960.00**	**$128,040.00**
90 Mbit/s	**$93,480.00**	**$113,520.00**	**$133,560.00**
100 Mbit/s	**$96,840.00**	**$117,720.00**	**$138,600.00**
150 Mbit/s	**$110,880.00**	**$135,420.00**	**$159,960.00**
200 Mbit/s	**$122,040.00**	**$149,580.00**	**$177,120.00**
300 Mbit/s	**$139,800.00**	**$172,140.00**	**$204,480.00**
400 Mbit/s	**$153,840.00**	**$190,080.00**	**$226,320.00**
500 Mbit/s	**$165,840.00**	**$205,380.00**	**$244,920.00**
600 Mbit/s	**$176,280.00**	**$218,760.00**	**$261,240.00**

Annual link bandwidth rates – dual uplink and fully redundant connection			
Link bandwidth	**Central business district zone to central business district zone**	**Central business district zone to business zone**	**Business zone to business zone**
	(GST excl.)	(GST excl.)	(GST excl.)
800 Mbit/s	**$194,040.00**	**$241,620.00**	**$289,200.00**
1000 Mbit/s	**$209,040.00**	**$261,000.00**	**$312,960.00**

Link bandwidth charges – to metropolitan zones

5.2 We charge you the following link bandwidth charge for using a link to a metropolitan zone for Ethernet MAN dual uplink or Ethernet MAN fully redundant connection. With the Bandwidth on Demand option our charge is based on the number of seconds the link bandwidth was provided at the relevant access speed.

Annual link bandwidth rates – dual uplink and fully redundant connection			
Link bandwidth	**Central business district zone to metro zone**	**Business zone to metro zone**	**Metro zone to metro zone**
	(GST excl.)	(GST excl.)	(GST excl.)
2 Mbit/s	**$44,090.00**	**$49,162.00**	**$58,649.00**
3 Mbit/s	**$46,749.00**	**$52,127.00**	**$62,187.00**
4 Mbit/s	**$49,408.00**	**$55,092.00**	**$65,724.00**
8 Mbit/s	**$54,726.00**	**$61,022.00**	**$70,371.00**
10 Mbit/s	**$60,102.00**	**$67,500.00**	**$77,152.00**
20 Mbit/s	**$77,490.00**	**$87,372.00**	**$100,642.00**

Annual link bandwidth rates – dual uplink and fully redundant connection			
Link bandwidth	**Central business district zone to metro zone**	**Business zone to metro zone**	**Metro zone to metro zone**
	(GST excl.)	(GST excl.)	(GST excl.)
30 Mbit/s	**$89,910.00**	**$101,466.00**	**$117,450.00**
40 Mbit/s	**$99,900.00**	**$112,914.00**	**$131,126.00**
50 Mbit/s	**$108,432.00**	**$122,688.00**	**$142,819.00**
60 Mbit/s	**$115,938.00**	**$131,274.00**	**$153,155.00**
70 Mbit/s	**$122,688.00**	**$138,996.00**	**$162,446.00**
80 Mbit/s	**$128,898.00**	**$146,070.00**	**$171,007.00**
90 Mbit/s	**$134,568.00**	**$152,604.00**	**$178,837.00**
100 Mbit/s	**$142,968.00**	**$158,652.00**	**$184,006.00**
150 Mbit/s	**$165,986.00**	**$184,464.00**	**$214,966.00**
200 Mbit/s	**$184,478.00**	**$205,254.00**	**$239,940.00**
300 Mbit/s	**$214,176.00**	**$238,626.00**	**$280,188.00**
400 Mbit/s	**$238,078.00**	**$265,518.00**	**$312,799.00**
500 Mbit/s	**$258,502.00**	**$288,468.00**	**$340,663.00**
600 Mbit/s	**$276,442.00**	**$308,664.00**	**$365,225.00**
700 Mbit/s	**$292,560.00**	**$326,862.00**	**$387,413.00**
800 Mbit/s	**$307,354.00**	**$343,494.00**	**$407,743.00**
900 Mbit/s	**$320,988.00**	**$358,884.00**	**$426,526.00**

Annual link bandwidth rates – dual uplink and fully redundant connection			
Link bandwidth	**Central business district zone to metro zone**	**Business zone to metro zone**	**Metro zone to metro zone**
	(GST excl.)	(GST excl.)	(GST excl.)
1000 Mbit/s	**$333,684.00**	**$373,194.00**	**$444,070.00**

Link bandwidth charges – per second charging

5.3 With the Bandwidth on Demand option, we calculate the link bandwidth charges for Ethernet MAN dual uplink and Ethernet MAN fully redundant connection by determining the number of seconds we actually provide the bandwidth to you (to the nearest second) and multiplying it by the annual link bandwidth charge (calculated as a per-second rate). Charges are calculated to the nearest cent and billed monthly. The minimum charge is the applicable 2 Mbit/s rate.

Example: For a link from a central business district zone to a business zone at 10 Mbit/s, with the link bandwidth provided to you for 9000 seconds in a particular month – the link bandwidth charge is $11.07 GST excl. (ie $38,808 ÷ (365 x 24 x 60 x 60) x 9000).

5.4 We will not take into account any ineffective change requests when calculating the charges payable.

Monthly port charges

5.5 We charge you the following monthly charge for each port using an Ethernet MAN dual uplink or an Ethernet MAN fully redundant connection:

Monthly port charges – dual uplink and fully redundant connection	**GST excl.**
For each port – central business district, business or metro zone	**$300.00**

Fully redundant connection – additional annual charge

5.6 We charge you the following annual charge for an Ethernet MAN fully redundant connection:

Ethernet MAN fully redundant connection additional annual charges			
GST excl.	**Central business district zone**	**Business zone**	**Metro zone**
For each of your specified addresses	**$28,200.00**	**$38,400.00**	**$57,00.00**

6 Changing your service

Provisioning times

6.1 The standard target provisioning times for network alterations made by us (not on-line by you) to the service is one working day.

Changing your link bandwidth

6.2 For Ethernet MAN dual uplink and Ethernet MAN fully redundant connection, you can submit link bandwidth change requests online using the bandwidth-on-demand dial feature or the time and day schedule manager. You must submit bandwidth change requests for Ethernet MAN single uplink to us directly.

6.3 We give you two secure ID devices that must be used to access bandwidth-on-demand or the time and day schedule manager.

6.4 The target activation time for link bandwidth changes that you tell us about:

(a) using the bandwidth-on-demand dial feature is 1 minute after we receive a valid link bandwidth change request from you; and

(b) using the time and day schedule manager is 1 minute after the time specified in a valid link bandwidth change request.

6.5 We do not promise the availability, effectiveness or performance of the bandwidth-on-demand dial or time and day schedule manager. You must ensure that you tell us about the link bandwidth change requests and verify that they are effective.

6.6 We use the following bands to determine link bandwidth change charges:

Band	**Link Bandwidth (Mbit/s)**
1	2 3 4 8 10

Band	Link Bandwidth (Mbit/s)					
2	10	20				
3	20	30	40			
4	30	40	50	60	70	80
5	60	70	80	90	100	150
6	100	150	200	300		
7	200	300	400	500		
8	500	600	800	1000		

6.7 We charge you the following for movements between adjacent bands. We charge you multiple change charges for movements between non-adjacent bands. Changes within a band do not incur a change charge; only a change in the monthly charges set out above.

For example, for a change from band 5 to band 7, we charge you two link bandwidth change charges (band 5 to band 6, plus band 6 to band 7).

Link bandwidth change charges	**GST excl.**
For one or more link bandwidth change requests we receive directly at the same time (not requested using bandwidth-on-demand dial)	
- for Ethernet MAN single uplink	**$1000.00**
- for Ethernet MAN dual uplink or Ethernet MAN fully redundant connection	**$100.00**
Ethernet MAN dual uplink or Ethernet MAN fully redundant connection – for each individual link bandwidth change request that you make using bandwidth-on-demand dial (or change that we make in addition to the link bandwidth charge above):	
• Changes between adjacent bands in bands 1 to 5:	**nil**
• Changes between adjacent bands in bands 5 to 6:	**$50.00**

Link bandwidth change charges	GST excl.
• Changes between adjacent bands 6 to 8:	**$500.00**

Minor network changes

6.8 We charge you the following for any minor network changes:

Minor network change charge	GST excl.
For one or more minor network changes requested at the same time	**$100.00**

New and replacement secure ID devices

6.9 We charge you the following for each new or replacement secure ID device you ask us to provide:

Secure ID device charge	GST excl.
For each new or replacement secure ID device	**$100.00**

Changing the physical port type

6.10 We charge you the following for changing the physical port type from a UTP to a MMOF, or from a MMOF to a UTP:

Changing the physical port type charges	GST excl.
For each change	**$3,600.00**

Converting your service

6.11 You can ask us to convert:

(a) one Ethernet MAN single uplink to one Ethernet MAN dual uplink;

(b) two IP MAN dual uplinks to one Ethernet MAN service;

(c) two IP MAN fully redundant connections to one Ethernet MAN service;

(d) an Ethernet MAN service to two IP MAN dual fibre connections; and

(e) an Ethernet MAN service to two IP MAN fully redundant connections.

6.12 We charge you the following for the conversion:

Service conversion charges	GST excl.
For each conversion from Ethernet MAN single uplink to Ethernet MAN dual uplink	**$5,000.00**
For each conversion from Ethernet MAN service to two IP MAN fully redundant connections	**$1,000.00**
For each other conversion	**$1,000.00**

Indoor removal and miscellaneous works

6.13 We charge you our fee-for-service charges for any indoor removal of your service. The fee-for-service charges are set out in the Fee-for-Service (Other work we do for you) section of Our Customer Terms.

7 Performance specifications

7.1 The engineering design rules for Ethernet MAN are listed below. Target availability of the service is measured over a 12 month period.

Ethernet MAN single uplink	Ethernet MAN dual uplink	Ethernet MAN fully redundant connection
99.9%	99.98%	99.998%

8 Service Assurance

Fault reporting and repair

8.1 As part of the Ethernet MAN service, we also provide:

(a) a 24-hour fault reporting service for telling us about service faults; and

(b) a 24-hour maintenance and repair service for service faults, including public holidays.

8.2 The monthly service charge covers maintenance up to our network boundary and, where applicable, of the network termination unit only. Maintenance of any telecommunications cabling on your premises (ie cabling beyond the network boundary point) or any telecommunications equipment owned or used by you is not included.

Target response and repair times

8.3 Our target response and repair times only apply to service faults within our maintenance responsibilities.

8.4 If there is a fault in your service we aim to respond to you within one hour of you telling us about the fault. You receive a response from us when we tell you that we have started action to identify the fault.

8.5 If there is a fault in your service, we aim to repair your service to full working order within 12 hours of you telling us about the fault.

Temporary repairs

8.6 In some cases, we may perform a temporary repair, so that you can use the service before we finish a full repair. A temporary repair that lets you use the service counts as a repair for the purposes of working out our service repair obligations to you.

Emergency repairs

8.7 We give priority to rectifying major fault outages affecting a number of customers. If such cases arise, we may not meet our targets for repairing your service.

Faults caused by interference or you

8.8 We can charge you to repair the following faults:

(a) faults caused by interference;

(b) faults caused by your negligence; and

(c) faults caused due to wilful damage by you to your Ethernet MAN service.

Service appointment times

8.9 We will agree service appointment times for restoring and repairing faulty services with you.

Customer Select Assurance and Maintenance Options

8.10 Enhanced service assurance options may be available at an additional cost to you. These offer faster response and repair targets for faults. For information in relation to our Customer Select Assurance and Maintenance Options, see the Service Assurance and Provisioning Commitment section of Our Customer Terms.

9 Other work we do for you

9.1 The standard network connection charge for service activation includes work performed during our standard hours of business, which are 8am to 5pm, Monday to Friday, excluding public holidays.

9.2 For charges for installation, maintenance, consultancy and after sales activities not covered by a standard charge or contract see “Our Customer Terms Fee-for-service (Other work we do for you)”.

10 Charging zones

10.1 The various zones refer to our exchange districts in a metropolitan area.

10.2 If you apply for an Ethernet MAN service before 1 June 2012, the charges you pay for your service are based on the following zones, as defined in this Ethernet MAN section:

(a) central business district (CBD) zone;

(b) business zone; and

(c) metropolitan or metro zone.

10.3 If you apply for an Ethernet MAN service on and from 1 June 2012, the charges you pay for your service are based on the zone advised to you when you apply for the service, and from time to time.

Central business district zones

10.4 The central business district zones are set out in the following table:

Central business district zone exchange districts	
Sydney:	Pitt, Haymarket, City South, Kent, Dalley, North Sydney, Balmain, City East, Redfern
Melbourne:	Batman, Exhibition, Lonsdale, Russell, North Melbourne, Windsor, South Melbourne
Brisbane:	Edison, Charlotte, Springhill, Roma, Woolloongabba, Valley, Paddington, South Brisbane, Toowong
Adelaide:	Flinders, Waymouth, North Adelaide, West Adelaide, Prospect, St Peters, Unley
Perth:	Bulwer, Pier, Wellington, Subiaco
Canberra:	Civic, Barton, Deakin, Belconnen

Business zones

10.5 The business zones are set out in the following table:

Business zone exchange districts	
Sydney:	Glebe, Mascot, East, St Leonards, Chatswood, Willoughby, Frenchs Forest, North Ryde, Burwood, Concord, Homebush, Parramatta, Castle Hill, Baulkham Hills, Liverpool, Lane Cove, Blacktown, Alexandria, Epping, Silverwater
Melbourne:	South Yarra, Tullamarine, Collingwood, Richmond, Box Hill, Clayton, Port Melbourne, Mulgrave, Oakleigh, Carlton, Moorabbin,
Brisbane:	Brisbane Airport, Lutwyche, Coorparoo, 8 Mile Plains
Adelaide:	Brooklyn Park, Hampstead, Woodville, Pt Adelaide, Salisbury, Modbury, Lonsdale, Elizabeth, Norwood, Edwardstown, St Marys, Gepps Cross, Croydon
Perth:	Tuart Hill, Ascot, Doubleview, Herdsman, Fremantle, Cannington, Midland, Maylands, Ascot, Vic Park, Mt Hawthorn, Morley, South Coogee, Kewdale, South Perth, Applecross, Nedlands, Cottesloe, Osborne Park, Balcatta, Joondalup Kingsley
Canberra:	Tuggeranong, Fyshwick, Crace, Hume, Weston Creek,

Business zone exchange districts	
	Queanbeyan

Metropolitan zones

10.6 Metro zones are of our exchange districts in:

(a) a metropolitan area that is not a central business district zone or a business zone (including Hobart and Darwin); and

(b) Geelong, Newcastle, Wollongong and Southport.

11 Special meanings

11.1 The following words and abbreviations have the following special meanings:

building entry point is the point where cable crosses or goes through the perimeter of your building.

metropolitan or **metro** refers to the following cities: Sydney, Canberra, Melbourne, Adelaide, Perth, Brisbane, Hobart and Darwin.

network boundary means the boundary as ascertained in accordance with section 22 of the Telecommunications Act 1997.

NTU is a Network Termination Unit and is a Telstra network device, which can be either a switch or an Optical Media Converter (OMC), which supports one or more of your ports, each port providing a network boundary and/or service delivery demarcation point. The ports on an NTU may support more than one Virtual Private Network (VPN).

property entry point means the point where the cable or optic fibre enters your property.

shared access switch is a switch device which can support multiple ports for more than one customer, where each port provides a network boundary demarcation point.