



PART D – SERVICE LEVELS

CONTENTS

1	ABOUT THIS PART	3
2	PROVISIONING AND CHANGES.....	3
	Terms	3
	IP MAN.....	3
	IP WAN	4
	IP Wireless	5
	Trans Tasman IP	5
3	PERFORMANCE	6
	Terms	6
	General Description	6
	Network availability	6
	Service availability.....	7
	IP MAN service availability	7
	IP WAN service availability.....	7
	IP Wireless service availability.....	8
	Trans Tasman IP service availability.....	8
4	CLASS OF SERVICE	8
	Terms	8
	Classes of service	8
	Packet loss ratio	8
	Round trip transit delay	9
	Packet delay variation	9
	IP MAN.....	10
	IP WAN and IP Wireless.....	10
	Trans Tasman IP	10
5	SERVICE ASSURANCE	11
	Scope.....	11
	Response times, restoration targets and reports	11
	What are the service assurance levels?.....	11
6	REBATES.....	12
	Rebates for all IP Services	12
7	SPECIAL MEANINGS	12

OUR CUSTOMER TERMS IP SOLUTIONS SECTION



PART D – SERVICE LEVELS

Certain words are used with the specific meanings set out under clause 7 of this Part D, Part A – General at <http://www.telstra.com.au/customer-terms/business-government/data-services/ip-solutions/> or in the General Terms of our Customer Terms at <http://www.telstra.com.au/customer-terms/business-government/>.

OUR CUSTOMER TERMS IP SOLUTIONS SECTION



PART D – SERVICE LEVELS

1 ABOUT THIS PART

1.1 This is part of the IP Solutions section of Our Customer Terms. Provisions in other parts of the IP Solutions section, as well as in the General Terms of Our Customer Terms at <http://www.telstra.com.au/customer-terms/business-government/>, may apply.

See clause 1 of the General Terms of Our Customer Terms at <http://www.telstra.com.au/customer-terms/business-government/> for more detail on how the various sections of Our Customer Terms should be read together.

See clause 1 of Part A – General of the IP Solutions section at <http://www.telstra.com.au/customer-terms/business-government/data-services/ip-solutions/> for more detail on how the various parts of the IP Solutions section should be read together.

2 PROVISIONING AND CHANGES

Terms

- 2.1 Our target provisioning and change times start on the date that we have received all the information we reasonably require from you and end on the completion of provisioning.
- 2.2 Our target provisioning and change times are indicative only. Actual provisioning and change times may be affected by a number of factors including:
 - (a) the availability of equipment and network infrastructure;
 - (b) you giving us sufficient and timely access to your premises and equipment in order to undertake the provisioning or change;
 - (c) the size, scale and location of your provisioning or change request; and
 - (d) any other factor that is beyond our reasonable control.
- 2.3 If your provisioning or change request is located in a rural area, different target provisioning and change times may apply. We will tell you these if you request this information.
- 2.4 We aim to meet our target standard provisioning and change service levels, but are not required to meet them. The only exception IP WAN. Our Provisioning Commitment applies to this service. For more information see the Service Assurance and Provisioning Commitment section of Our Customer Terms at http://www.telstra.com.au/customerterms/bus_other_services.htm.

IP MAN

2.5 The target provisioning and change service levels for IP MAN are:

Target Provisioning Time for Basic Orders 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.	9 business days from receipt of all required information and our acceptance of your order.
---	---

OUR CUSTOMER TERMS IP SOLUTIONS SECTION



PART D – SERVICE LEVELS

<p>Target Provisioning Time for Minimal Orders</p> <p>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</p>	<p>19 business days from receipt of all required information and our acceptance of your order.</p>
<p>Target Provisioning Time for Medium Orders</p> <p>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.</p>	<p>24 business days from receipt of all required information and our acceptance of your order.</p>
<p>Target Provisioning Time for Extensive orders</p> <p>Orders that need major construction activity.</p>	<p>Assessment is made by us on a case-by-case basis.</p>
<p>Target activation time</p> <p>for adds/moves/changes that you tell us using the bandwidth-on-demand dial</p>	<p>1 minute after our receipt of a valid access bandwidth change request</p>
<p>Target activation time</p> <p>for adds/moves/changes that you tell us using the time and day schedule manager</p>	<p>1 minute after the time specified in a valid access bandwidth change request</p>
<p>Target activation time</p> <p>for adds/moves/changes that you tell us by using the bandwidth-on-demand dial or the time and day schedule manager, requesting to add a port to an existing switch</p>	<p>4 business days after the time specified in a valid change request to add the port.</p>
<p>Target activation time</p> <p>for adds/moves/changes that you tell us other than by using the bandwidth-on-demand dial or the time and day schedule manager, requesting access bandwidth changes</p>	<p>1 business day after the time specified in a valid access bandwidth change request</p>

IP WAN

2.6 The target provisioning and change service levels for IP WAN are:

<p>Target Provisioning Time</p> <p>for orders that include fewer than 100 sites</p>	<p>20 business days from receipt of all required information and our acceptance of your order</p>
<p>Target Provisioning Time</p> <p>for orders that include 100 or more sites</p>	<p>Advised on request</p>
<p>Target activation Time</p> <p>for adds/moves/changes</p>	<p>1 to 15 business days from receipt of all required information and our acceptance of your order</p>

OUR CUSTOMER TERMS IP SOLUTIONS SECTION



PART D – SERVICE LEVELS

IP Wireless

2.7 The target provisioning and change service levels for IP Wireless are:

Target Provisioning Time	20 business days from receipt of all required information and our acceptance of your order
Target Activation Time for adds/moves/changes	1 to 15 business days from receipt of all required information and our acceptance of your order

Trans Tasman IP

2.8 The target provisioning and change service levels for a New Zealand IP Network with New Zealand Ethernet access services are:

Target Provisioning Time where there is existing fibre/transmission capacity available	20 business days from receipt of all required information and our acceptance of your order.
Target Provisioning Time where there is no (or not enough) existing fibre/transmission capacity available	Advised on request
Target Activation Time for adds/moves/changes, requesting to add a port to existing switches	1 to 10 business days from receipt of all required information and our acceptance of your order
Target Activation Time for adds/moves/changes, requesting access bandwidth changes, where there is existing fibre/transmission capacity available	1 to 10 business days from receipt of all required information and our acceptance of your order
Target Activation time for adds/moves/changes, requesting access bandwidth changes, where there is no (or not enough) fibre/transmission capacity available	Advised on request

2.9 The target provisioning and change service levels for New Zealand IP Network with New Zealand Frame Relay access services or New Zealand ATM access services are:

Target Provisioning Time where there is existing fibre/transmission capacity available (subject to technical feasibility study)	20 business days from receipt of all required information and our acceptance of your order
Target Provisioning time	Advised on request



PART D – SERVICE LEVELS

where there is no (or not enough) existing fibre/transmission capacity available	
Target Activation Time for adds/moves/changes, requesting to add a port to existing switches (subject to technical feasibility study)	1 to 15 business days from receipt of all required information and our acceptance of your order
Target Activation Time for adds/moves/changes, requesting bandwidth changes, where there is existing fibre/transmission capacity available (subject to technical feasibility study)	1 to 15 business days from receipt of all required information and our acceptance of your order
Target Activation Time for adds/moves/changes, requesting bandwidth changes, where there is no (or not enough) existing fibre/transmission capacity available	Advised on request

3 PERFORMANCE

Terms

3.1 The performance service levels are indicative of our targets for the performance of the relevant service. We aim to meet performance service levels, but are not required to meet them.

General Description

3.2 The target performance service levels are:

- (a) network availability of the IP Solutions core network and the IP Solutions edge network; and
- (b) service availability of the IP Service.

Network availability

3.3 Network availability is calculated using the following formula:

$$\text{Network availability} = \{[(\text{HPM} - \text{POM}) - \text{OT}] / (\text{HPM} - \text{POM})\} \times 100\}$$

where:

HPM = the number of hours in the relevant month.

OT = (for the IP Solutions core network) the number of outage hours for that network in the relevant month.

POM = the number of hours in the planned outage period in the relevant month.

OUR CUSTOMER TERMS IP SOLUTIONS SECTION



PART D – SERVICE LEVELS

3.4 The network availability performance service levels are:

NETWORK	NETWORK AVAILABILITY
IP Solutions core network	99.9995%
IP Solutions edge network	99.995%

Service availability

3.5 Service availability is calculated using the following formula:

$$\text{Service availability} = \{[(\text{HPY} - \text{POY}) - \text{OT}] / (\text{HPY} - \text{POY})\} \times 100\}$$

where:

HPY = the number of hours in the relevant year.

OT = the number of outage hours for the relevant IP Service in the relevant year.

POY = the number of hours in the planned outage period in the relevant year.

IP MAN service availability

3.6 The service availability performance service levels for IP MAN are:

IP MAN SERVICE	SERVICE AVAILABILITY
IP MAN single uplink	99.95%
IP MAN dual uplink connection	99.97%
IP MAN dual access connection	99.97%
IP MAN dual site diverse access connection	99.97%
IP MAN fully redundant connection	99.995%

IP WAN service availability

3.7 The service availability performance service levels for IP WAN are:

CONNECTING SERVICE	SERVICE AVAILABILITY
ADSL Hyperconnect	99.2%
Frame Relay	99.9%
ATM	99.9%
Basic Telephone Service (PSTN)	99%
ISDN	99.6%
Ethernet Lite	99.8%



PART D – SERVICE LEVELS

3.8 We determine the service availability performance service levels for IP WAN using our Iterra Digital satellite service specifically for you.

IP Wireless service availability

3.9 The service availability performance service levels for IP Wireless are:

CONNECTING SERVICE	SERVICE AVAILABILITY
GPRS	99.8%

Trans Tasman IP service availability

3.10 The service availability performance service levels for Trans Tasman IP are:

TRANS TASMAN IP	SERVICE AVAILABILITY
New Zealand IP Network (Ethernet access service)	99.95%
New Zealand IP Network (ATM or Frame Relay access service)	99.9%

4 CLASS OF SERVICE

Terms

4.1 The classes of service are indicative of our targets for packet loss ratio, round trip transit delay and packet delay variation within the IP Solutions edge network.

Classes of service

4.2 There are two types of class of service: static and dynamic.

4.3 The only static class of service that is available is data transfer.

4.4 Where available, the dynamic class of service allows you to prioritise your traffic. The priorities are multimedia class of service, interactive class of service or data transfer class of service.

Packet loss ratio

4.5 The packet loss ratio is the percentage of packets lost when traffic travels through the IP Solutions edge network.

4.6 We measure the admitted committed traffic (packets) into the IP Solutions edge network and the delivered committed traffic (packets) out of the IP Solutions edge network over a monthly period. We calculate a number of sample packet loss ratios based upon the results of each measurement using the following formula:



PART D – SERVICE LEVELS

Sample packet loss ratio (%) = $((B - A) / B) \times 100$

where:

A = the delivered committed traffic (packets) out of the IP Solutions edge network.

B = the admitted committed traffic (packets) into the IP Solutions edge network.

- 4.7 Our target is that 99% of the samples will have a packet loss ratio of less than or equal to the value set out below for the relevant service.

For example: if a packet loss ratio value of 0.01% applies, our target is that 99% of the samples with have a packet loss ratio of less than or equal to 0.01%.

Round trip transit delay

- 4.8 The round trip transit delay is a measure of the time taken for a 64 byte IP packet to traverse any two given nodes within the IP Solutions edge network.

- 4.9 We measure the time taken for a 64 byte IP packet to traverse any two given nodes within the IP Solutions edge network. We calculate a sample round trip transit delay by adding together (in milliseconds):

- (a) the total time taken for the destination node to receive an IP packet from the source node (propagation delay); and
- (b) the total time taken for the destination node to generate an acknowledgement message (new IP packet) that it has received the IP packet from the source (this delay also includes any delays for resequencing and resynchronisation required by the destination node); and
- (c) the total time taken for the destination node to send the acknowledgment back to the source node (propagation delay).

Note: Ingress/egress queuing and blocking delays are not included as the effect of these parameters varies based on the bandwidth of your ports.

- 4.10 Our target is that 99% of the samples will have a round trip transit delay of less than or equal to the value set out below for the relevant service.

For example: if a round trip transit delay value of 20ms applies, our target is that 99% of the samples will have a round trip transit delay of less than or equal to 20ms.

Packet delay variation

- 4.11 The packet delay variation (or Jitter) is the deviation or displacement in phased timing (RTTD timing) within the IP Solutions edge network.

- 4.12 A sample packet delay variation is calculated by deducting the minimum measured RTTD time over a one hour period from the maximum measured RTTD time over the same one hour period.

OUR CUSTOMER TERMS IP SOLUTIONS SECTION



PART D – SERVICE LEVELS

Note: Ingress/egress queuing and blocking delays are not included as the effect of these parameters varies based on the bandwidth of your ports.

4.13 Our target is that 99% of the samples will have a packet delay variation of less than or equal to the value set out below for the relevant service.

For example: if a packet delay variation of 2ms applies, our target is that 99% of the samples will have a packet delay variation of less than or equal to 2ms.

IP MAN

4.14 The class of service values for an IP MAN connection are:

CLASS OF SERVICE	PACKET LOSS RATIO	ROUND TRIP TRANSIT DELAY (MAXIMUM MILLISECONDS)	PACKET DELAY VARIATION (MAXIMUM MILLISECONDS)
Static – data transfer	1%	35	10
Dynamic			
- Multimedia	0.01%	20	2
- Interactive	0.1%	20	5
- Data transfer	1%	35	10

IP WAN and IP Wireless

4.15 The class of service values for IP WAN and IP Wireless are:

CLASS OF SERVICE	PACKET LOSS RATIO	ROUND TRIP TRANSIT DELAY (MAXIMUM MILLISECONDS)	PACKET DELAY VARIATION (MAXIMUM MILLISECONDS)
Static – Data transfer	1%	105	30
Dynamic			
- Multimedia	0.01%	75	10
- Interactive	0.1%	85	15
- Data Transfer	1%	105	30

Trans Tasman IP

4.16 The class of service values for New Zealand IP Networks are:

CLASS OF SERVICE	PACKET LOSS RATIO	ROUND TRIP TRANSIT DELAY (MAXIMUM MILLISECONDS)	PACKET DELAY VARIATION (MAXIMUM MILLISECONDS)
------------------	-------------------	---	---



PART D – SERVICE LEVELS

		MILLISECONDS)	MILLISECONDS)
Static – Data transfer	1%	175	70
Dynamic			
- Multimedia	0.01%	115	20
- Interactive	0.1%	135	35
- Data transfer	1%	175	70

5 SERVICE ASSURANCE

Scope

5.1 The target Service Assurance Restoration levels cover:

- (a) response times; and
- (b) restoration targets;

5.2 We use reasonable commercial efforts to meet the service assurance levels.

Response times, restoration targets and reports

5.3 Our response time is the period commencing when a valid service fault report is received by us and ending on the first to occur of:

- (a) when we tell you that the fault has been identified by remote diagnostics and that work has commenced to identify the fault;
- (b) when we tell you that a site visit is required; or
- (c) when one of our representatives attends the site.

We exclude any hours during that period that are outside the coverage period.

5.4 Our restoration time is the period commencing when a valid service fault report is received by us and ending on the first to occur of:

- (a) the service is returned to full working order; or
- (b) a temporary repair is performed which allows the service to be used.

We exclude any hours during that period, which are outside the coverage period.

What are the service assurance levels?

5.5 Each IP Service comes with a standard service assurance level at no additional cost.

You can upgrade your standard assurance by getting an SLA Premium enhanced service level at an additional charge. The terms and conditions applicable to SLA Premium are set out in



PART D – SERVICE LEVELS

the Standard Restoration and SLA Premium section of Our Customer Terms at <http://www.telstra.com.au/customer-terms/business-government/other-services/restoration-sla-premium/>

6 REBATES

- 6.1 If a restoration time exceeds a restoration target, then you are entitled to a service rebate.
- 6.2 All performance service levels other than restoration targets are indicative of our targets for response times and the provision of status reports and follow up reports.
- 6.3 Where a service rebate is paid, it applies instead of any other rebate that would otherwise apply.
- 6.4 Our liability to you for us failing to meet a restoration target is set out under the General Terms of Our Customer Terms at <http://www.telstra.com.au/customer-terms/business-government/>.
- 6.5 To claim a service rebate, you must provide the following details to a member of our fault account management team, or to one of our sales representatives, within two months of the original fault report:
 - (a) your name and address;
 - (b) the relevant Telstra account number and service number;
 - (c) the relevant fault reference number; and
 - (d) the reason for dissatisfaction.
- 6.6 If there is a dispute about whether we have failed to meet a restoration target, the parties shall negotiate in good faith to resolve the dispute. If the parties cannot resolve the dispute, we may, on reasonable grounds and in good faith, make a final and binding decision about whether the restoration target has been met.

Rebates for all IP Services

- 6.7 The service rebates for IP MAN (single uplink, dual uplink and fully redundant connection+), IP WAN (standard connection and redundant connection) and IP Wireless are:

SERVICE ASSURANCE LEVEL	SERVICE REBATE
For standard	A rebate to the value of one month access rental fee, paid at 20% per complete hour beyond the target restoration time and capped at 100% per month per service. Some exclusions apply.

7 SPECIAL MEANINGS

The following words have the following special meanings in this Part:



PART D – SERVICE LEVELS

a **business day** means 8am to 5pm, Monday to Friday, excluding public holidays.

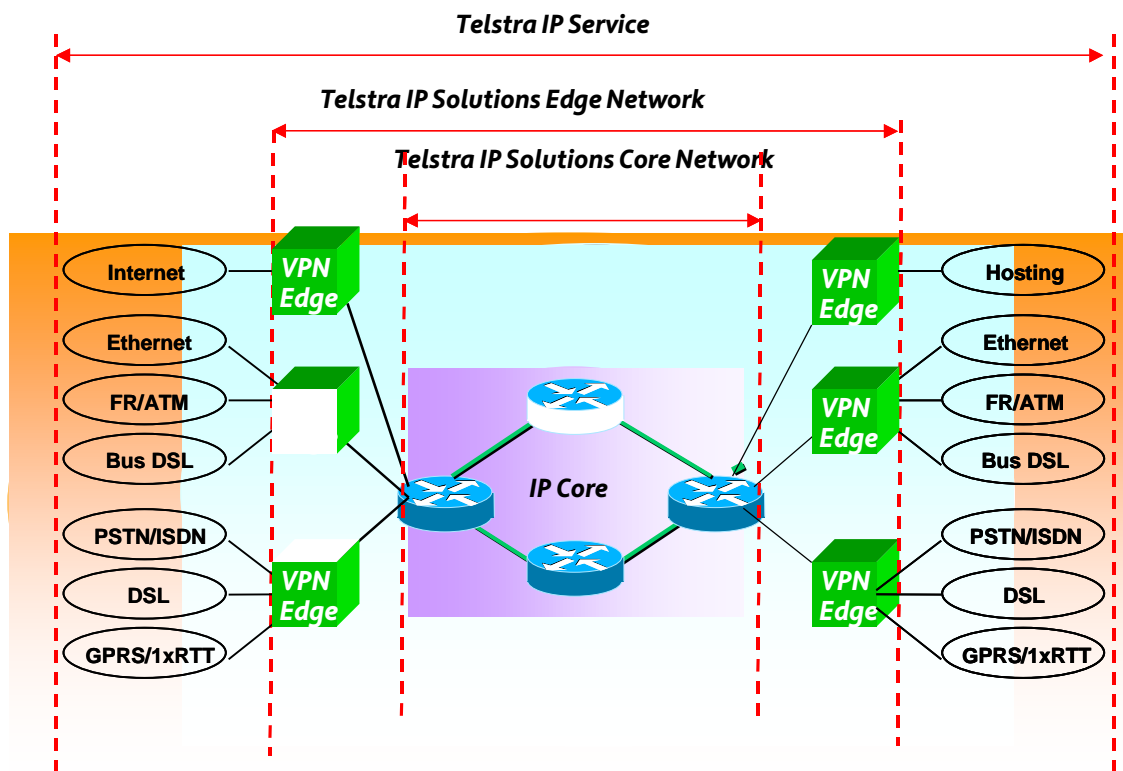
coverage period means the coverage period for the service. The coverage period depends upon the service assurance level that applies to that service.

an **IP Service** is the IP Solutions core and edge networks and:

- (a) in the case of an IP MAN: your fibre connections;
- (b) in the case of an IP WAN: your ADSL Hyperconnect, Frame Relay, ATM, Basic Telephone Service (PSTN), ISDN, Ethernet Lite or our Iterra Digital satellite service; and
- (c) in the case of IP Wireless: your GPRS service.

IP Solutions core network is our core transmission links and backbone routers.

IP Solutions edge network is our IP Solutions core network and our VPN edge devices.



an **urban area** is an area with a population of at least 10,000.

a **rural area** is an area with a population of less than 10,000 people.