

Service Terms

SERVICE START DATE: for a GWAN Service, is defined in Section 4.3

INITIAL SERVICE TERM: for a GWAN Service, is defined in Section 4.4

1 Structure of this Service Schedule

- 1.1 This Service Schedule consists of:
- (a) each Service Attachment;
 - (b) any Service Schedule previously executed by Customer and Telstra for any of the GWAN Services referenced in Section 2.1 of this Service Schedule; and
 - (c) these Service Terms.
- 1.2 If there is any inconsistency between the parts of this Service Schedule, the document listed earlier in Section 1.1 prevails to the extent of the inconsistency.

2 GWAN Services

- 2.1 GWAN Services consist of the following Services as further described in an Attachment incorporated herein by reference, (or otherwise described in the Service Attachments published online by Telstra at www.telstrainternational.com), (**GWAN Service**):
- (a) IP Virtual Private Network (**IP VPN**);
 - (b) Ethernet Private Line (**EPL**);
 - (c) International Private Line (**IPL**),
 - (d) Asynchronous Transfer Mode (**ATM**);
 - (e) Frame Relay (**FR**);
 - (f) Virtual Private LAN Service (**VPLS**);
 - (g) Ethernet Virtual Private Line (**EVPL**);
 - (h) Wavelength Service; or
 - (i) other technology types advised by Telstra from time to time.

3 Local Circuit provisioning

- 3.1 A Local Circuit is required to provide digital transmission between Customer's Site in a country and Telstra's PoP in that country.
- 3.2 The Customer may purchase the Local Circuit from Telstra (**Local Access**), where available, upon the terms and conditions contained in this Section 3 and subject to additional charges. In addition, from time to time, Telstra may agree to order the Local Circuit from third party providers as Customer's agent, subject to receiving an appropriate letter of agency and the terms and conditions contained in the Agreement.
- 3.3 Telstra's Local Access is provided by means of third party products and services obtained by Telstra on behalf of the Customer, through local in-country service providers and vendors. Such third party products may include telecommunication circuits, and telecommunication hardware and equipment such as PADs, routers, switches, DSUs/CSUs and modems. The Customer acknowledges that title to any of such third party products or to any products owned by Telstra remains with the relevant owner and will not transfer to the Customer pursuant to this

Agreement.

- 3.4 Availability of Telstra's Local Access varies according to the location and local in-country regulations.
- 3.5 Where Telstra supplies the Local Access in Australia or any Australian Domestic Private Line Service to connect a Site to a GWAN Service, the relevant sections of Our Customer Terms for that Australian Local Access or Australian Domestic Private Line will apply to the supply of such Services to the extent they are not inconsistent with any other part of the Agreement. Early termination fees and service levels in Our Customer Terms do not apply.
- 3.6 If the Customer elects to arrange Local Circuit provisioning itself through a provider other than Telstra:
- (a) the Service Start Date for the GWAN Service will not be subject to the Local Circuit being available for use by the Customer; and
 - (b) the Customer shall use reasonable efforts to ensure that:
 - (i) the Local Circuit is installed, tested and made available in good time to enable the GWAN Service to be provided on or before the Service Start Date;
 - (ii) the interfaces between the Local Circuit and the Telstra PoP conform to Telstra's technical standards and specifications;
 - (iii) the third party telecommunications provider which provides the Local Circuit deals directly with, and provides reasonable assistance to, Telstra, in relation to the connection and inter-working of the GWAN Service and the Local Circuit and the Customer provides the necessary information to enable the connection of the Local Circuit to the GWAN Service; and
 - (iv) there is continued operation of the Local Circuits during the Service Term, which efforts shall include promptly settling all invoices for the Local Circuits.
- 3.7 If the supply of a Local Circuit arranged by the Customer expires or is suspended, withdrawn or terminated for any reason before the expiration of the Service Term, then the Customer continues to be liable for all charges payable for the GWAN Service.
- 3.8 Notwithstanding anything contained in the Agreement Terms to the contrary, when the Customer arranges its own Local Circuit from its Site to the Telstra PoP with a third party telecommunications provider,
- (a) Telstra will connect the Local Circuit to its PoP, but it is **not** responsible for providing any telecommunications service, cabling, hardware or software to bring the Local Circuit, or to enable Telstra to connect the Local Circuit, to the Telstra PoP; and
 - (b) Telstra is **not** responsible for the Local Circuit, connections or cabling beyond its PoP.

4 Service Term

- 4.1 Telstra will provide Customer with a test period of two Business Days commencing on the date Telstra notifies Customer that the GWAN Service is ready for testing, whether or not any associated Customer or third-party equipment, software or services (including, without limitation, any Customer-supplied Local Circuits) are installed or ready-for-use (**Test Period**). If, prior to the conclusion of the Test Period:
- (a) Customer notifies Telstra of a suspected Provisioning Fault, Telstra will investigate and, if Telstra discovers any Provisioning Fault, Telstra will endeavour to rectify any Provisioning Fault before re-delivering the GWAN Service to Customer, and a new Test Period will begin on the date of re-delivery; or
 - (b) Customer does not notify Telstra of a suspected Provisioning Fault, Customer will be deemed to accept the GWAN Service on completion of the Test Period.
- 4.2 If Customer reports a Provisioning Fault within the Test Period and Telstra is able to certify through tests that

there is no Provisioning Fault, Customer will be deemed to accept the GWAN Service on completion of the Test Period.

- 4.3 Telstra will commence billing Customer on the earlier of the date Customer accepts the GWAN Service or is deemed to have accepted the GWAN Service under Sections 4.1(b) or 4.2 (**Service Start Date**).
- 4.4 The Initial Service Term for a GWAN Service is specified in the Order for that GWAN Service or if no period is specified then the Initial Service Term is 12 months (**Initial Service Term**).

5 Ordering GWAN Services

- 5.1 If Customer submits an order to Telstra to order a new, or to vary or cancel an existing GWAN Service, Telstra reserves the right in its sole discretion to accept such Customer order, request that Customer provide Telstra with further details or reject Customer's order.

Variation to existing GWAN Services

- 5.2 If the Order is to upgrade an existing GWAN Service, a new Initial Service Term for that GWAN Service will apply from the Service Start Date for the upgraded GWAN Service.
- 5.3 If the Order is to downgrade an existing GWAN Service during the Service Term then that downgrade is an Early Termination Event and Early Termination Fees, to the extent applicable, are payable in accordance with Section 5.4 below.

Early Termination Fees

- 5.4 If an Early Termination Event occurs:
 - (a) prior to the date Telstra notifies Customer that the GWAN Service is ready for testing, the Early Termination Fee is a sum equal to:
 - (i) one month's monthly recurring charge for the GWAN Service; and
 - (ii) any out-of-pocket expenses incurred as a result of the termination of that GWAN Service prior to the end of the Initial Service Term including without limitation (A) any early termination fees charged by Service Providers; and (B) any installation charges charged by such Service Providers that Telstra had amortized over the Initial Service Term to the extent such installation charges have not yet been repaid.
 - (b) any time thereafter prior to the expiration of the then current Service Term for a GWAN Service, the Early Termination Fee is a sum equal to the percentage of the charges, as set out in the table below, that would have been payable by Customer for the GWAN Service for the remainder of the then current Service Term, if the Early Termination Event had not occurred.

Months in the then current Service Term	Percentage of the charges payable for the months or parts thereof after termination
Months 1 – 12 of the then-current Service Term	100%
Months 13 – 24 of the then-current Service Term	75%
Months 25 – end of the then-current Service Term	50%

Examples

- If an Early Termination Event for a GWAN Service with a Renewal Period of 12 months occurs at the end of month 4 of the Renewal Period, the Early Termination fee will be:
(8 months x monthly charges) x100%

- If an Early Termination Event for a GWAN Service with an Initial Service Term of 36 months occurs at the end of month 4, the Early Termination Fee will be:
 $(8 \text{ months} \times \text{monthly charges}) \times 100\% + ((12 \text{ months} \times \text{monthly charges}) \times 75\%) + ((12 \text{ months} \times \text{monthly charges}) \times 50\%)$
- If an Early Termination Event for a GWAN Service with an Initial Service Term of 36 months occurs at the end of month 30, the Early Termination Fee will be:
 $(6 \text{ months} \times \text{monthly charges}) \times 50\%$

6 Charges

- 6.1 The charges payable by Customer to Telstra for each GWAN Service are set out in the Order for that GWAN Service and include:
- (a) a fixed non-recurring charge, a fixed monthly recurring charge and/ or a variable usage charge; and
 - (b) for a variation of an existing GWAN Service, charges as advised by Telstra.
- 6.2 Fixed charges are payable in advance and variable charges based on usage are payable in arrears.

7 Service Levels

- 7.1 The “**Service Levels**” for each GWAN Service are set out in the relevant Service Attachment.
- 7.2 A Foreign Carrier’s Service does not form part of the GWAN Service. The Service Levels do not apply to a Foreign Carrier’s Service unless stated otherwise in the relevant Service Attachment.
- 7.3 The Service Levels do not apply to Australian Domestic Private Lines.
- 7.4 Network Performance Service Levels are only measured for PoPs enabled with an SAA router.
- 7.5 The targets for the Service Levels are described in the relevant Attachments for each Service (Service Level Targets). Service Level Targets are subject to change by Telstra from time to time on 30 days notice to Customer, which Telstra may give by email. If Telstra makes an adverse change to a Service Level Target Customer may, within 30 days of Telstra notifying Customer of the change, request that Telstra review the change. Telstra will advise Customer if, as a result of the review, there is any change to the Service Level Target. If Telstra determines that the original change to the Service Level Target will continue to apply, Customer may terminate each affected GWAN Service on 30 days notice without payment of any Early Termination Fee.
- 7.6 All Service Levels are, unless otherwise specified, measured on a calendar month basis, and shall only be calculated for full calendar months during the Service Term. Any Credit to which Customer is entitled in a month in respect of a GWAN Service is calculated by reference to the Relevant Credit Charges for the affected GWAN Service in that month.

Credit

- 7.7 To claim a Credit, Customer must follow the procedure set out in the Agreement Terms. If the Customer fails to make a claim in accordance with this Section, the Customer is taken to have unconditionally and irrevocably waived its right to claim the service credit and shall have no claim whatsoever against Telstra for its failure to meet such Service Level in such month. Each Service Level is also subject to the Exclusion Events set out in the Agreement Terms and, where applicable, Attachments.
- 7.8 Customer’s sole remedy for Telstra’s breach of a Service Level shall be as expressly provided for in the applicable Service Level and under no circumstances shall such breach or other failure to achieve such Service Levels be deemed a breach of this Agreement by Telstra or entitle Customer to terminate the unaffected GWAN Services or the Agreement.
- 7.9 The aggregate Credit due with respect to any month in which the Service Level was not met is subject to a cap of 100% of the Relevant Credit Charges for that GWAN Service in that month.

- 7.10 If, for a GWAN Service, in a month Customer is entitled to make a claim for a credit in respect of more than one Service Level in relation to the same event or outage Customer may only make a claim for a credit in respect of one of those Service Levels
- 7.11 Any Credits referenced hereunder shall be applied to Customer's account for the affected Services. No amounts will be refunded or paid directly to Customer.

8 Faults

- 8.1 If Telstra elects, in its sole discretion, to perform any remedial work relating to a problem that has arisen in or in connection with:
- (a) Customer equipment or other equipment or software that does not form part of a GWAN Service, with the Customer's permission; or
 - (b) a GWAN Service resulting from a breach of the Agreement by the Customer,
- then
- (c) the Customer must pay Telstra for such work at Telstra's then current time and materials rates; and
 - (d) Telstra will not be liable to the Customer in any way if Telstra is unable to correct the Customer problem.

9 Definitions

- 9.1 In this Schedule, unless otherwise indicated:

Act means the Australian Telecommunications Act 1997 (Cth)

ATM is defined in Section 2.1.

Attachment means an attachment to this Service Schedule.

Australian Domestic Private Line means a domestic connecting carriage service in a country for the purpose of connecting two or more of Customer's Sites in Australia.

CE Router means the customer edge router at Customer's Site.

Customer Premises Equipment (CPE) means equipment located at Customer's Site.

EPL is defined in Section 2.1.

EVPL is defined in Section 2.1.

Firm Delivery Date for a GWAN Service is defined in the Attachment for that Service.

FR is defined in Section 2.1.

GWAN Service is defined in Section 2.1 **Error! Reference source not found.**

Half Circuit means an IPL Half Circuit, EPL Half Circuit, ATM Half Circuit or FR Half Circuit as described in the Attachment for the relevant Service.

IP VPN is defined in Section 2.1.

IPL is defined in Section 2.1.

ITU means the International Telecommunication Union.

Initial Service Term, for a GWAN Service, is defined in Section 4.4.

International Backbone Network means a Network or group of Networks used by Telstra to carry GWAN Services between PoPs in different countries around the world.

Local Circuit means the domestic connecting carriage service providing a direct connection between a PoP in a country and Customer Site in that country.

Month or **month** means a calendar month.

Network means a system or series of systems that carries, or is capable of carrying, communications by means of guided or unguided electromagnetic or optical energy.

Network Performance Service Levels means the Service Levels identified in a Service Attachment as being a Network Performance Service Level.

Non-Tier 1 PoP means a PoP which is not designated as a Tier 1 PoP in the PoP List.

One Stop Shop Service or **OSS** means the One Stop Shop Service described in the One Stop Shop Service Attachment.

Our Customer Terms means the Standard Form of Agreement formulated by Telstra Corporation Ltd. for the purposes of Part 23 of the Act. If applicable to Services being provided hereunder, Customer acknowledges either receiving, or having had the opportunity to review, a copy of Our Customer Terms. Customer may view Our Customer Terms at <http://www.telstra.com.au/customerterms/> or obtain a copy from Telstra

PE Router means the provider edge router at a PoP.

PoP means a point of presence in a country housing an access node which connects to the International Backbone Network.

PoP List means the table of locations, available from Telstra on request, (city, state and country) where there are PoPs, subject to change by Telstra on 30 days written notice to Customer.

PoP-to-PoP means between two PoPs on the International Backbone Network.

Provisioning Fault:

- (a) for an IPL, ATM, FR or EPL, EVPL or VPLS Service, means the failure of the relevant Service to meet the relevant ITU specifications for establishing that Service; and
- (b) for an IP VPN Service means any packet drop occurred when Telstra performs a ping test for 1000 packets of 1500 bytes from a loopback IP address on one PE Router to another loopback IP address on another PE Router and then to another loopback IP address on the CE Router used by Customer to connect to, access and use the IP VPN Service

Service Level for a GWAN Service is defined in Section 7.1.

Service Level Targets is defined in Section 7.5.

Service Start Date, for a GWAN Service, is defined in Section 4.3.

Site means the location to which a GWAN Service provided to Customer is supplied or connected.

Site-to-Site means the entire Network connectivity path provided by Telstra hereunder to connect one Site to another Site, but excluding any intra-Australia Private Line.

Telstra Group means Telstra Corporation Limited and its wholly owned subsidiaries.

Tier 1 PoP means a PoP designated in the PoP List as a Tier 1 PoP.

VPLS is defined in Section 2.1.

One Stop Shop Service Attachment

1 Requirement for OSS

- 1.1 This Attachment only applies if Telstra provides our One Stop Shop Service to Customer.
- 1.2 In certain jurisdictions (including India) Telstra is unable, for legal, regulatory or Foreign Carrier policy reasons, to supply a Service to Customer (**Foreign Jurisdictions**).

2 Provision of OSS

- 2.1 In some Foreign Jurisdictions Telstra has relationships with carriers (**Foreign Carrier**) which enable traffic to be transmitted between a Service provided by Telstra and a corresponding type of service provided by the Foreign Carrier (**Foreign Carrier's Service**). The Foreign Carrier's Service may be, where the Service is:
 - (a) an IPL, EPL, ATM or Frame Relay Half Circuit, a corresponding half circuit using the same transmission technology at the Z end;
 - (b) IP VPN, EVPL or VPLS, a port and Local Circuit capable of communicating with the applicable GWAN Service provided by Telstra; or
 - (c) the Z end of any other transmission technology types advised by Telstra from time to time.
- 2.2 To assist Customer to obtain and manage a Foreign Carrier's Service Telstra can provide our One Stop Shop Service (**OSS**).
- 2.3 OSS provides single end ordering, single end billing and single end fault reporting for the Foreign Carrier's Service as set out below:
 - (a) Single end ordering: Telstra will assist Customer to obtain a Foreign Carrier's Service from a Foreign Carrier by ordering, assisting with arrangement of installation and, at the end of the relevant term, terminating the Foreign Carrier's Service on Customer's behalf;
 - (b) Single end billing: Telstra will bill Customer the charges for each Foreign Carrier's Service and pay those charges to the Foreign Carrier on Customer's behalf. The charges for each Foreign Carrier's Service are determined by the Foreign Carrier and are payable in accordance with the Foreign Carrier's terms and conditions. If the Foreign Carrier varies the charges for the Foreign Carrier's Service, Telstra will make a corresponding variation to the charges billed pursuant to this Section 2.3(b) for that Foreign Carrier's Service. If Telstra reasonably considers it necessary for regulatory reasons, Telstra may cease providing single end billing and Customer will have to pay the charges for each Foreign Carrier's Service directly to the Foreign Carrier;
 - (c) Single end fault reporting: Customer may report faults on each Foreign Carrier's Service to Telstra. Telstra has no liability to Customer, any party occupying the premises where the Foreign Carrier's Service terminates (**End User**) or any other party in respect of the Foreign Carrier's Service, its performance or the ability to claim Credits under Customer's contract with the Foreign Carrier.
- 2.4 Telstra may, in its sole discretion, offer Service Levels (including Credits) over the Foreign Carrier's Service. If Telstra does so:
 - (a) this is Telstra's commercial decision and does not make Telstra the supplier of the Foreign Carrier's Service; and
 - (b) Telstra may retain any Credits received from the Foreign Carrier.
- 2.5 Foreign Carrier's Services in respect of which Telstra provides OSS are set out in the Order and are noted as having OSS apply to them.
- 2.6 Notwithstanding anything to the contrary in this Agreement, any IPL, ATM or Frame Relay Service Half Circuit

from, IP VPN Service or any other Service in, India, Papua New Guinea or Fiji set out in the Order is a Foreign Carrier's Service to which OSS applies.

- 2.7 Where Telstra provides OSS to assist Customer to obtain and manage a Foreign Carrier's Service, OSS forms part of the GWAN Service to which the OSS relates but the Foreign Carrier's Service does not.
- 2.8 If a Foreign Carrier cancels the provision of the services it provides to Telstra to enable Telstra to provide OSS to Customer Telstra may cancel any OSS with effect from a date no later than the date such cancellation by the Foreign Carrier takes effect.

3 Foreign Carrier's Service

- 3.1 The Foreign Carrier's Service for which Telstra provides OSS is:
- (a) acquired by Customer directly from the Foreign Carrier;
 - (b) provided by the Foreign Carrier and subject to the Foreign Carrier's own terms and conditions (including any applicable service level agreement and early termination fees); and
 - (c) not part of the GWAN Service and is not provided to Customer by Telstra.

4 Appointment

- 4.1 Where Customer requests Telstra to provide OSS, Customer appoints, or if required by Telstra will have any applicable End User appoint, Telstra or another member of the Telstra Group nominated by Telstra, to act as agent (the **Agent**) to do the things contemplated by Section 2.3 of this Attachment.
- 4.2 Telstra or the Foreign Carrier may require that a warranty of agency, or similar document, be signed by Customer or the End User rather than Customer. Where Telstra advises Customer that a warranty of agency, or similar document, needs to be signed by the End-User, Customer must procure that the End User does so.
- 4.3 If another member of the Telstra Group is the Agent, or if the Agent is appointed as agent for the End User, OSS remains supplied by Telstra to Customer on the terms and conditions of this Agreement.
- 4.4 Where Telstra or another member of the Telstra Group are the Agent of the End User, Customer is solely responsible for ensuring that the End User agrees and understands that:
- (a) OSS is being provided by Telstra to Customer and by Customer to the End User;
 - (b) the End User must deal only with Customer in relation to the OSS; and
 - (c) Telstra and the other member of the Telstra Group, where applicable, have no liability whatsoever to the End User or any other party.
- 4.5 Customer agrees to indemnify Telstra, and where Telstra is not the Agent then the Agent and Telstra, against any loss, cost, damage, liability or expense incurred by, or any claim against, Telstra or the Agent in relation to the Foreign Carrier's Service, the Agent's performance of duties as agent for Customer or the End User and the supply by Telstra of OSS to Customer. If Telstra are not the Agent then the benefit of Customer's obligations under this Section 4.5 in respect of the Agent are deemed to inure to the Agent and Telstra may exercise and enforce the Agent's rights under this Section 4.5 for and on behalf of the Agent.

5 Management fee and Taxes

- 5.1 Customer acknowledges that Telstra may charge Customer a management fee for providing OSS and include this in the Single End Billing charges.
- 5.2 All Taxes on charges for a Foreign Carrier's Service are payable by Customer. Customer indemnifies Telstra against any Tax liability Telstra incurs in relation to the Foreign Carrier's Service or charges payable in respect

Global WAN Solutions Service Schedule

Confidential

of the Foreign Carrier's Service.

Global WAN Solutions Service Schedule - Attachment - VPLS Service

1 VPLS Service Description

Overview

- 1.1 The Virtual Private LAN Service (**VPLS**) is an Ethernet based Layer 2 multipoint communication service providing any-to-any connectivity via Logical Interfaces between access end points ("Ports") at PoPs on Telstra's VPLS Network.
- 1.2 For each VPLS:
- (a) there is a Port on Telstra's VPLS Network configured to support Ethernet-based data traffic;
 - (b) each Port has a Physical Bandwidth;
 - (c) each Port has one or more Logical Interfaces;
 - (d) each Logical Interface has a Logical Interface Bandwidth;
 - (e) Customer may select one of the two available Service Modes:
 - (i) Transparent Mode; and
 - (ii) VLAN Mode,
- as further described below in Section 1.

Ports, Bandwidth and Logical Interfaces

- 1.3 Ports are available at the following speeds:
- (a) 10Mb (**Ethernet**);
 - (b) 100Mb (**Fast Ethernet**); and
 - (c) 1000Mb (**Gigabit Ethernet**).
- The relevant speed is the maximum bandwidth physically available for that Port (**Physical Bandwidth**).
- 1.4 A Logical Interface is a sub-interface of a VPLS Port. Each Logical Interface has a subscribed data speed selected by Customer, as set out in the Order (**Logical Interface Bandwidth**).
- 1.5 For VPLS with Transparent Mode, the Port has only one Logical Interface which is mapped to the Low Priority Data Class on Telstra's VPLS Network. For VPLS with Transparent Mode, the Logical Interface Bandwidth may be equal to or less than the Physical Bandwidth of the Port.
- 1.6 For VPLS with VLAN Mode, the Port may have one or more Logical Interfaces up to a maximum of 10. Each Logical Interface has one or more classes of service (**CoS**), as set out in the Order and further described in Sections 1.10-1.11 below. Each CoS for a Logical Interface may be allocated a percentage of the Logical Interface Bandwidth for that Logical Interface (**CoS Bandwidth**), as set out in the Order.
- 1.7 The total of all Logical Interface Bandwidths on a Port may not exceed the Physical Bandwidth for that Port.

Service Modes: Transparent Mode and VLAN Mode

- 1.8 Customer is able to subscribe to one of the following "**Service Modes**" for VPLS:
- (a) **Transparent Mode:** This Service Mode provides transparent transport of all VPLS traffic over Telstra's VPLS Network. CoS options are not available for VPLS with Transparent Mode. Any VLAN tags sent by Customer will be preserved but will not be acted upon by Telstra's VPLS Network.
 - (b) **VLAN Mode:** This Service Mode provides virtual local area network (**VLAN**) based transport of VPLS traffic. CoS options are available for VLAN Mode. Customer is responsible for ensuring that Customer's

Global WAN Solutions Service Schedule - Attachment - VPLS Service

VPLS traffic is sent with appropriate VLAN tags to enable Telstra's VPLS Network to carry the traffic as separate VLANs. Each Logical Interface on a Port will represent one VLAN.

- 1.9 Each of Customer's VPLS can only send and receive traffic with Customer's other VPLS with the same Service Mode.

CoS for VLAN Mode

- 1.10 For VPLS with VLAN Mode, Customer may subscribe to between 1 and 3 CoS on a Logical Interface.

- 1.11 The available CoS for VPLS with VLAN Mode are:

- (a) **Voice** – optimised Network performance suitable for real-time applications that require rigorous timing control and performance metrics such as voice over IP and circuit emulation;
- (b) **Video** – suitable for delay sensitive interactive video conferencing and streaming of audio/video applications or surveillance video;
- (c) **Critical Data** – suitable for mission critical business applications and applications with flow-control capable transport layers and signalling traffic;
- (d) **Interactive Data** – suitable for sporadic LAN-to-LAN traffic, or applications that favor throughput over delay and network management;
- (e) **Standard Data** – suitable for transactional services and database access; and
- (f) **Low Priority Data** – suitable for low-priority, sporadic applications such as email and web browsing.

Local Access

- 1.12 A Local Circuit is required to provide digital transmission between Customer's Site in a country and Telstra's PoP in that country. Where a Local Access is set out in the Order that VPLS Service includes that Local Access.

Australian and New Zealand Ports

- 1.13 The VPLS Service is not available solely for use as a service to carry data between Customer's Sites either within Australia or within New Zealand. If Customer cancels all of its Ports with the exception of its Ports in either Australia or New Zealand, such Australian or New Zealand Ports shall be deemed cancelled by the Customer and the Customer will be liable for the payment of Early Termination Fees, if applicable.

2 Charges

- 2.1 For each VPLS with VLAN Mode, non-recurring and monthly recurring charges are charged per Logical Interface.
- 2.2 For each VPLS with Transparent Mode, non-recurring and monthly recurring charges are charged per Port.

3 Service Levels Scope

- 3.1 The Service Levels that apply to each VPLS Service and the Relevant Credit Charges are set out in Table 1 below.

Table 1: Service Levels and Relevant Credit Charges for VPLS Service

Types of Service Levels	Applicable Service Levels	VPLS Service	
		VLAN Mode	Transparent Mode

Global WAN Solutions Service Schedule - Attachment - VPLS Service

		Relevant Credit Charges	Relevant Credit Charges
Service Delivery	Service Provisioning Time (SPT)	The first month's MRC for the applicable Logical Interface*	The first month's MRC for the applicable Logical Interface (Port)*
Service Reliability	Service Availability (Availability)	Logical Interface MRC*	Logical Interface (Port) MRC
	Mean Time to Restore (MTTR)	Logical Interface MRC	Logical Interface (Port) MRC
Network Performance	PoP-to-PoP Round Trip Delay (RTD)	Logical Interface MRC for the subscribed CoS which did not meet the RTD**	Logical Interface (Port) MRC
	PoP-to-PoP Throughput	Logical Interface MRC for the subscribed CoS which did not meet the Throughput**	Logical Interface (Port) MRC
	PoP-to-PoP Jitter	Logical Interface MRC for the subscribed Voice CoS ***	Not Applicable

* Logical Interface MRC means the monthly recurring charge for the applicable Logical Interface that does not meet the applicable Service Level during the applicable month (expressly excluding, among other things, any non-recurring charges or any monthly recurring charges for any associated Local Access or other service). In the case of Transparent Mode, the Port has only one Logical Interface so the Logical Interface MRC may also be referred to as the Port MRC.

**These Service Levels are measured separately for each subscribed CoS and Credits are calculated separately for each subscribed CoS on a Logical Interface for which the Service Level is not met using the following calculation:

$$a \times \left(\frac{x}{y} \right) \text{ where:}$$

- (a) "a" is the Logical Interface MRC;
- (b) "x" is CoS Bandwidth of the affected CoS on that Logical Interface; and
- (c) "y" is total Logical Interface Bandwidth for the affected Logical Interface .

*** Only measured on the Voice subscribed CoS. Credits are calculated by reference to the charge for the Voice subscribed CoS only.

- 3.2 Any Service Level measure which is expressed to be PoP-to-PoP is a carrier network level measurement. As such, the measure does not necessarily reflect the actual VPLS performance at the individual VPLS Service level.
- 3.3 The Service Level Targets may not be measured and therefore do not apply between Ports utilising the same PoP within the same country.
- 3.4 Measurement points for carrier network performance parameters, being PE Routers enabled with a device to measure continuous VPLS traffic flow over Telstra's VPLS Network, are identified by Telstra on the PoP List. This list may be changed from time to time, as advised by Telstra.
- 3.5 Network Performance Service Levels are only measured for PoPs enabled with an SAA router.

Global WAN Solutions Service Schedule - Attachment - VPLS Service

- 3.6 All Service Levels and Credits are subject to the terms and conditions set forth in Section 7 of the GWAN Solutions Schedule.

4 Service Delivery - Service Provisioning Time (SPT)

- 4.1 Telstra will provide Customer with a service delivery date in writing for each VPLS Service purchased by Customer, after completing a feasibility assessment (**Firm Delivery Date**).
- 4.2 If the Service Start Date for such VPLS Service with a Firm Delivery Date is delayed by Telstra beyond the Firm Delivery Date (other than as a result of an Exclusion Event, including without limitation, the Customer's unavailability upon the Firm Delivery Date, Customer's providing incomplete or inaccurate information on the Order, or Customer changing information on the Order) Customer is entitled to claim a credit of 5% of the Relevant Credit Charges for the delayed VPLS Service for each Business Day (in the jurisdiction(s) where the affected VPLS Service is being installed) of delay past the Firm Delivery Date up to a maximum of 100% of the Relevant Credit Charges for the delayed VPLS Service.
- 4.3 If a VPLS Service is not delivered within 31 days of its Firm Delivery Date, other than as a result of an Exclusion Event, Customer may cancel that VPLS Service without the payment of Early Termination Fees, by providing notice to Telstra at least 10 Business Days before the earlier of the scheduled or actual delivery date; provided that Customer shall be required to reimburse Telstra for any out-of-pocket expenses associated with the termination of any associated Local Access.
- 4.4 Where the Order for a VPLS Service is changed at Customer's request, then Sections 4.2 and 4.3 will not apply unless a new feasibility assessment is conducted and Telstra advises Customer in writing of a new Firm Delivery Date.

5 Service Availability

- 5.1 From the Service Start Date for each VPLS Service, Telstra will endeavour to provide Availability for that VPLS Service:
- (a) at 99.99% for each Port; and
 - (b) at 99.90% for the associated Local Access basis (except where the Local Access is provided over DSL in which case the Local Access Availability Target does not apply),
- 5.2 for each full calendar month during the applicable Service Term (**Service Availability Service Level Target**).
- 5.3 If for any full calendar month, a VPLS Service experiences (a) Port Availability of 99.98% or less or (b) Local Access Availability of 99.89% or less, Customer is entitled to claim a Credit (not cumulative) as a percentage of the Relevant Credit Charge for each affected Logical Interface on that VPLS Service, calculated in accordance with Table 2, dependent upon the Availability experienced by such VPLS Service for the applicable calendar month.

Global WAN Solutions Service Schedule - Attachment - VPLS Service

Table 2: Service Availability Credits

Measurement	Availability calculated as a percentage	Where Unavailability is caused by the Port	Where Unavailability is caused by the Local Access
Port	99.98%-99.86	10%	NA
	99.85%-99.45%	30%	NA
	<99.45%	50%	NA
Local Access	99.89% - 99.86%	NA	10%
	99.85%-99.45%	NA	15%
	<99.45%	NA	20%

5.4 The Credit payable for a failure to meet the Service Availability Service Level Target for a Logical Interface in a month is capped at 50% of the Relevant Credit Charges for the applicable affected Logical Interface on that VPLS Service for that month.

5.5 Where a VPLS Service is Unavailable in a month due to a combination of faults on the Port and the Local Access, the Credit for a failure to meet the Service Availability Service Level Target for that VPLS Service will be the higher of:

- (a) the Credit payable where the Unavailability is caused by the Port; and
- (b) the Credit payable where the Unavailability is caused by the Local Access,

calculated in accordance with Table 2.

5.6 If a VPLS Service experiences either:

- (a) a single period of Unavailability in excess of 24 hours in any month; or
- (b) three or more distinct periods of Unavailability of eight hours or longer in any six month period,

Customer may cancel the affected VPLS Service without the payment of Early Termination Fees; provided that Customer provides at least 45 days' written notice of cancellation to Telstra, which notice must be delivered within 15 days of the event giving rise to the right to cancel under this Section; provided further that Customer shall be required to reimburse Telstra for any out-of-pocket expenses associated with the termination of any associated Local Access.

For the purpose of the Service Availability Service Levels, a period of Unavailability will not be distinct from a preceding period of Unavailability to the extent the trouble ticket for the original period of Unavailability remains open.

6 Mean Time To Restore (MTTR)

6.1 Mean Time to Restore means the sum of all minutes of Unavailability for a VPLS Service during a month divided by the total number of Global Service Interruptions on that VPLS Service in that month.

6.2 The Mean Time to Restore Service Level Target for each VPLS Service is four (4) hours for each full calendar

Global WAN Solutions Service Schedule - Attachment - VPLS Service

month during its Service Term (**MTTR Service Level Target**).

- 6.3 If the Mean Time to Restore for a VPLS Service is more than four (4) hours for any full calendar month, Customer is entitled to a Credit (not cumulative) as a percentage of the Relevant Credit Charge for each affected Logical Interface for that VPLS Service, calculated in accordance with Table 3.

Table 3: MTTR Credits

Mean Time to Restore*	Where Unavailability is caused by the Port	Where Unavailability is caused by the Local Access
241 minutes – 480 minutes	10%	10%
481 minutes – 720 minutes	15%	13%
721 minutes – 960 minutes	20%	15%
961 minutes – 1200 minutes	25%	18%
1201 minutes – 1440 minutes	30%	20%
Each 24 hour period thereafter	35% (in addition to the 30% for MTTR of 1201 minutes – 1440 minutes)	10% (in addition to the 20% for MTTR of 1201 minutes – 1440 minutes)

*Mean Time to Restore measurements are rounded down to the nearest minute.

- 6.4 Where the Mean Time to Restore for a VPLS Service exceeds the MTTR Service Level Target for a month due to Unavailability caused by a combination of faults on the Port and the Local Access, the Credit will be the higher of:

- (a) the Credit payable where the Unavailability is caused by the Port; and
- (b) the Credit payable where the Unavailability is caused by the Local Access,

calculated in accordance with Table 3.

7 PoP-to-PoP Round Trip Delay (RTD)

- 7.1 RTD is a measure of the monthly average round trip delay performance for the PoP-to-PoP portion of each VPLS Service. RTD is measured PoP-to-PoP using sample data sent at 5 minute intervals between PE Routers enabled with a device to measure continuous traffic over Telstra's VPLS Network. If none of the sample data is received back for a measurement test, it is assumed that there is a line fault and the test is excluded.
- 7.2 RTD is measured separately for each applicable PE Router pair.
- 7.3 The current RTD Service Level Targets for Customer's VPLS Service are set forth on Exhibit A to this Service Attachment.
- 7.4 Credits for exceeding the RTD Service Level Target for a VPLS Service in a month are calculated:
- (a) separately for each affected CoS on each Logical Interface for VLAN Mode; and
 - (b) for the Logical Interface for Transparent Mode.

Global WAN Solutions Service Schedule - Attachment - VPLS Service

- 7.5 If the RTD on a VPLS Service exceeds the RTD Service Level Target by 20% in a month, Customer is entitled to claim a Credit of 10% of the Relevant Credit Charges for each affected:
- (a) CoS on each Logical Interface for VLAN Mode; and
 - (b) the Logical Interface for Transparent Mode,
- on that VPLS Service for that month.

8 PoP-to-PoP Throughput

- 8.1 Throughput means the average success rate of data transmission from origin to destination PE Routers over Telstra's VPLS Network during a month. Throughput is measured PoP-to-PoP using sample data sent at 5 minute intervals between PE Routers enabled with a device to measure continuous traffic over Telstra's VPLS Network. If none of the sample data is received back for a measurement test, it is assumed that there is a line fault and the test is excluded.
- 8.2 Throughput is measured separately for each applicable PE Router pair.
- 8.3 The Throughput Service Level Targets for VLAN Mode are set out in Table 4 below.

Table 4 – Throughput Service Level Targets – VLAN Mode

Targets (%)						
Voice CoS	Video CoS	Critical CoS	Data	Interactive Data CoS	Standard Data CoS	Low Priority Data CoS
99.995%	99.99%	99.95%		99.95%	99.95%	99.9%

- 8.4 The Throughput Service Level Target for Transparent Mode is 99.9% (**Throughput Service Level Target**).
- 8.5 If the Throughput Service Level Target is not met for a VPLS Service in a month, Customer is entitled to claim a Credit of 10% of the Relevant Credit Charges for each affected:
- (a) CoS on a Logical Interface for VLAN Mode; and
 - (b) Logical Interface for Transparent Mode,
- on that VPLS Service for that month.

9 PoP-to-PoP Jitter

- 9.1 The Jitter Service Level only applies to the Voice CoS of the VLAN Mode.
- 9.2 Jitter measures the average deviation in a month in the RTD for the Voice CoS. Jitter is measured PoP-to-PoP using sample data sent at 5 minute intervals between PE Routers enabled with a device to measure continuous traffic over Telstra's VPLS Network. If none of the sample data is received back for a measurement test, it is assumed that there is a line fault and the test is excluded.
- 9.3 The monthly average Jitter Service Level Target is ≤ 5 milliseconds (**Jitter Service Level Target**).
- 9.4 If the Jitter Service Level Target is not met for a VPLS Service, Customer is entitled to claim a Credit of 10% of the Relevant Credit Charges for the affected Voice CoS for the Logical Interface on that VPLS Service.

Exhibit A - Global WAN Solutions - RTD Service Level Target

Virtual Private LAN Service (VPLS)

Voice - Class of Service (CoS)



The table below represents an exhibit to the terms of the Telstra Global WAN (GWAN) Solutions offering and should be read in conjunction with the GWAN Solutions Service Schedule and relevant Service Attachments and any other Attachments, where applicable.

RTD POP-to-POP

	Auckland, New Zealand	Hong Kong	Jakarta, Indonesia	Kuala Lumpur, Malaysia	London, UK	Los Angeles, CA, USA	Manila, Philippines	New York, NY, USA	Perth, WA, Australia	San Jose, CA, USA	Seoul, Korea	Singapore	Sydney, NSW, Australia	Taipei, Taiwan	Tokyo, Japan
Auckland, New Zealand		162	142	154	274	138	179	205	82	143	178	129	34	176	145
Hong Kong	162		53	54	224	152	25	219	88	158	46	40	138	30	57
Jakarta, Indonesia	142	53		33	214	197	69	264	68	202	90	19	118	74	101
Kuala Lumpur, Malaysia	154	54	33		215	198	71	265	70	205	92	21	130	76	108
London, UK	274	224	214	215		151	241	218	249	151	262	201	293	246	248
Los Angeles, CA, USA	138	152	197	198	151		169	77	208	24	146	184	160	144	113
Manila, Philippines	180	25	70	71	241	169		237	105	170	63	57	155	47	69
New York, NY, USA	205	219	264	265	218	77	236		276	91	213	251	227	212	181
Perth, WA, Australia	83	88	68	69	249	208	105	276		203	126	55	58	110	137
San Jose, CA, USA	143	158	202	205	151	24	170	91	203		140	190	155	139	108
Seoul, Korea	178	46	90	92	262	146	63	213	126	140		77	153	67	39
Singapore	129	40	19	21	201	184	57	251	55	190	77		105	61	89
Sydney, NSW, Australia	34	138	118	130	293	160	155	227	58	155	153	105		152	121
Taipei, Taiwan	176	30	74	76	246	144	47	212	110	139	67	61	152		38
Tokyo, Japan	145	57	101	108	248	113	69	181	137	108	39	89	121	38	

Exhibit A - Global WAN Solutions - RTD Service Level Target
Virtual Private LAN Service (IPVPN)
Video , Critical Data, Interactive Data & Standard Data - Class of Service (CoS)



The table below represents an exhibit to the terms of the Telstra Global WAN (GWAN) Solutions offering and should be read in conjunction with the GWAN Solutions Service Schedule and relevant Service Attachments and any other Attachments, where applicable.

RTD POP-to-POP

	Auckland, New Zealand	Hong Kong	Jakarta, Indonesia	Kuala Lumpur, Malaysia	London, UK	Los Angeles, CA, USA	Manila, Philippines	New York, NY, USA	Perth, WA, Australia	San Jose, CA, USA	Seoul, Korea	Singapore	Sydney, NSW, Australia	Taipei, Taiwan	Tokyo, Japan
Auckland, New Zealand		165	145	157	277	141	182	208	85	146	181	132	37	179	148
Hong Kong	165		56	57	227	155	28	222	91	161	49	43	141	33	60
Jakarta, Indonesia	145	56		36	217	200	72	267	71	205	93	22	121	77	104
Kuala Lumpur, Malaysia	157	57	36		218	201	74	268	73	208	95	24	133	79	111
London, UK	277	227	217	218		154	244	221	252	154	265	204	296	249	251
Los Angeles, CA, USA	141	155	200	201	154		172	80	211	27	149	187	163	147	116
Manila, Philippines	183	28	73	74	244	172		240	108	173	66	60	158	50	72
New York, NY, USA	208	222	267	268	221	80	239		279	94	216	254	230	215	184
Perth, WA, Australia	86	91	71	72	252	211	108	279		206	129	58	61	113	140
San Jose, CA, USA	146	161	205	208	154	27	173	94	206		143	193	158	142	111
Seoul, Korea	181	49	93	95	265	149	66	216	129	143		80	156	70	42
Singapore	132	43	22	24	204	187	60	254	58	193	80		108	64	92
Sydney, NSW, Australia	37	141	121	133	296	163	158	230	61	158	156	108		155	124
Taipei, Taiwan	179	33	77	79	249	147	50	215	113	142	70	64	155		41
Tokyo, Japan	148	60	104	111	251	116	72	184	140	111	42	92	124	41	

Exhibit A - Global WAN Solutions - RTD Service Level Target
Virtual Private LAN Service (VPLS)
Low Priority - Class of Service (CoS)



The table below represents an exhibit to the the terms of the Telstra Global WAN (GWAN) Solutions offering and should be read in conjunction with the GWAN Solutions Service Schedule and relevant Service Attachments and any other Attachments, where applicable.

RTD POP-to-POP

	Auckland, New Zealand	Hong Kong	Jakarta, Indonesia	Kuala Lumpur, Malaysia	London, UK	Los Angeles, CA, USA	Manila, Philippines	New York, NY, USA	Perth, WA, Australia	San Jose, CA, USA	Seoul, Korea	Singapore	Sydney, NSW, Australia	Taipei, Taiwan	Tokyo, Japan
Auckland, New Zealand		167	147	159	279	143	184	210	87	148	183	134	39	181	150
Hong Kong	167		58	59	229	157	30	224	93	163	51	45	143	35	62
Jakarta, Indonesia	147	58		38	219	202	74	269	73	207	95	24	123	79	106
Kuala Lumpur, Malaysia	159	59	38		220	203	76	270	75	210	97	26	135	81	113
London, UK	279	229	219	220		156	246	223	254	156	267	206	298	251	253
Los Angeles, CA, USA	143	157	202	203	156		174	82	213	29	151	189	165	149	118
Manila, Philippines	185	30	75	76	246	174		242	110	175	68	62	160	52	74
New York, NY, USA	210	224	269	270	223	82	241		281	96	218	256	232	217	186
Perth, WA, Australia	88	93	73	74	254	213	110	281		208	131	60	63	115	142
San Jose, CA, USA	148	163	207	210	156	29	175	96	208		145	195	160	144	113
Seoul, Korea	183	51	95	97	267	151	68	218	131	145		82	158	72	44
Singapore	134	45	24	26	206	189	62	256	60	195	82		110	66	94
Sydney, NSW, Australia	39	143	123	135	298	165	160	232	63	160	158	110		157	126
Taipei, Taiwan	181	35	79	81	251	149	52	217	115	144	72	66	157		43
Tokyo, Japan	150	62	106	113	253	118	74	186	142	113	44	94	126	43	