



Fact Sheet

Data solutions

DSL Internet Grade

Offer customers the convenience of 'always on' connectivity

Telstra Wholesale's DSL Internet Grade lets our customers tap into the rapidly growing residential and small business market by on-selling broadband DSL service provided by Telstra's ADSL network. DSL Internet Grade allows Internet Service Providers (ISPs) to offer competitive broadband solutions to their customers.

DSL Internet Grade gives customers the flexibility to package Telstra's service with their own value-added applications and services. And because it's available nationally, they can:

- save money through assured DSL product interconnectivity and compatibility;
- leverage off Telstra's extensive ADSL network and save capital investment.



Customer benefits	Product features
Convenient	DSL Internet Grade offers the convenience of 'always on' ¹ connectivity without tying up phone lines.
Greater service control.	DSL connectivity is made with static Layer 2 Tunneling Protocol (L2TP) tunnels and Aggregating Virtual Circuits (AGVCs) or DSL Virtual Local Area Networks (VLANs), giving direct access to end users' sessions.
Value-added applications.	DSL Internet Grade provides a platform for value-added applications and services.
Reliable.	Fast, reliable access at up to 8Mbps downstream and 384kbps upstream.
Faster access.	DSL Internet Grade service supports static and dynamic IP addresses and gives faster access for downloading large files and gaming.

¹ 'Always on' access is subject to the network availability of the DSL IG service.



Features

- Telstra Wholesale DSL Internet Grade has a target of 99.2 per cent monthly availability.²
- DSL Internet Grade is ideal for non-critical applications and is backed up by a Service Level Guarantee.
- The service offers a variety of ADSL line speeds and value-added features such as multiple domain names.
- DSL Internet Grade offers exclusive service provider access.

Benefits

- Greater service control and flexibility.
- Spans more than 2,600 ADSL-enabled sites across CBD, metropolitan and regional Australia and approximately 91 per cent of homes and businesses.³
- Direct access to end users' sessions.
- Enables customers to aggregate their data traffic on a state basis.
- Provides a platform to build differentiated value-added applications.

² On the DSL network (ie excludes Telstra's Switched Data Network and Customer Access Network).

³ As at 23 April 2007.+

Coverage

The DSL Internet Grade service is available in more than 2600 ADSL-enabled Telstra exchanges nationally. There is also a 'Check ADSL availability' link on our website that gives customers an indication of ADSL availability.

However, we will need to undertake a full service qualification after a customer's order is submitted, to confirm that an ADSL end-user service can be provided.

Prerequisites

The DSL Internet Grade service can be supplied to an end user whose local Telstra exchange contains the appropriate DSL equipment, or DSLAM (Digital Subscriber Line Access Multiplexer).

Provision of the DSL Internet Grade service is subject to a full service qualification process which checks:

- that the end user's local Telstra exchange has been ADSL-enabled;
- that the transmission loss (dB) of the telephone line from the end user's premises to the Telstra exchange is within permitted design limits;
- whether any incompatibilities exist on the end user's basic telephone service that prevent ADSL from being provisioned.

Customers must have an ATM (Asynchronous Transfer Mode) access or Ethernet-based ISP access for carriage and termination of their data traffic in a state.⁴

WITH TELSTRA WHOLESALE DSL INTERNET GRADE CUSTOMERS WILL GAIN GREATER SERVICE CONTROL AND FLEXIBILITY.

Configuration

The DSL Internet Grade service comprises two components:

- ADSL end-user access;
- for each state in which a customer has end-user access, either AGVCs or DSL VLANs (which are each used to aggregate the customer's data traffic for that state).⁵

For each state in which the customer uses:

- AGVCs to aggregate their end users' traffic, they must also acquire at least one ATM access, over which the AGVCs will be provisioned;
- DSL VLANs to aggregate their end users' traffic, they must acquire one or more ethernet accesses over which those DSL VLANs will be provisioned. The number of DSL VLANs and TWE Accesses required for each state (ie one or two) depends on the DSL VLAN configuration the customer selects.

⁴ A State is defined to be NSW, Qld, ACT, Vic, Tas, SA/NT and WA. SA/NT is considered a single State for the purposes of the service unless otherwise notified by Telstra.

⁵ Wholesale Customers can opt for either an ATM or Ethernet based ISP Access in a State, but not both.

End User Access:

End-user sessions are aggregated together in the Telstra network via static L2TP tunnels and delivered to either the customer's ATM Access or TWE Access, depending on which customer access type is required.

End-user access speeds supported are (maximum downstream/maximum upstream)⁶:

Asymmetric Speeds

- Up to 256k/64k bps;
- Up to 512k/128k bps;
- Up to 1.5M/256k bps;
- Up to 8M/384k bps;

Symmetric Speeds

- Up to 512k/ 512k bps.⁷

Pricing

End-User Access:

An installation charge per end-user access applies, along with a monthly charge per end-user access based on the DSL Internet Grade end user access speed.

Aggregating Virtual Circuit (for ATM ISP Accesses only).

A monthly charge per AGVC applies and depends on:

- the speed of the AGVC;
- the radial distance between the Telstra Aggregation Point Charging PoP and the Telstra ATM;
- charging PoP for the associated ATM service.

DSL Virtual LANs (for Ethernet ISP Accesses only):

A monthly charge per DSL VLAN applies and depends on:

- the speed of the DSL VLAN.
- TWE Access configuration chosen (Single, Dual or Quad in a state).

Other Charges

There are other charges relating to enhanced features such as Multiple Domain Names, as well as miscellaneous charges contained in the DSL Internet Grade contract.

Ordering

The following ordering options are available:

- faxed-based ordering of end-user accesses and AGVC and DSL VLAN orders;
- spreadsheet attached to email for end-user access orders;
- LinxOnLine™ Ordering (LOLO) of end-user accesses and AGVC and DSL VLAN orders;
- business-to-business ordering of end-user accesses (LOLIG).

⁶ Speeds indicated are the maximum transmission rates possible and are not guaranteed. Actual speeds will be subject to network configuration, dimensioning, overhead, line quality, customer premises interference, distance from the exchange, exchange type, method of data transmission, hardware and software configuration and other technical parameters. Further details are set out in the Technical Specifications for the service.

⁷ Telstra is not able to guarantee simultaneous downstream and upstream speed due to the use of ADSL access technology.

Billing

DSL Internet Grade service charges are billed monthly. Customers are issued with a monthly bill itemising their ADSL end-user access, AGVC, DSL VLAN and other charges.

Telstra Wholesale offers three options for electronic billing:

- BillView – our web-based bill-delivery medium that lets customers download their Telstra invoice from a secure website.
- eBill –allows daily reception of details of service charges being added to or removed from the customer's DSL Invoice using a daily event file on a dedicated transmission link. An invoice is also generated each month and transmitted electronically in a similar process.
- eInvoice –eBill without the daily event file. ADSL end-user access and other charges appear on the ADSL bill, AGVC charges on the ATM bill, and DSL VLAN charges on the Ethernet bill.

DSL Internet Grade is a rebillable product.

Delivery

A minimum term of 12 months applies to the DSL Internet Grade service and early termination charges apply if an end-user access is disconnected within six months of being activated on the customer's DSL network. Indicative provisioning lead times are:

- connection of end user access - five business days;
- connection of AGVC (up to 32Mbps) - 10 business days;
- connection of AGVC (greater than 32Mbps) - subject to Telstra feasibility study;
- AGVC speed change (up to 32Mbps) - five business days;
- AGVC speed change (greater than 32Mbps) - subject to Telstra feasibility study;
- connection of DSL VLAN – 10 business days;
- DSL VLAN speed change – five business days.

These lead times apply when ATM Access or TWE Access of sufficient capacity exists, the order has been accepted by Telstra Wholesale and the relevant infrastructure is available.

Operations and maintenance

These are detailed in the Operations and Maintenance Manual that a Telstra Wholesale account manager will provide. DSL Internet Grade is a Telstra-managed service. Customers can facilitate changes to their service through Telstra Wholesale.

Managing faults

Faults can be reported to the Service Assurance Centre on 180 2288. More details about managing faults are available in the Operations and Maintenance Manual for this product.

The target response time is eight business hours from the receipt of a fault report. Response and restoration of faults on end-user accesses apply between 8am and 5pm, Monday to Friday (excluding public holidays).

Related products

DSL Internet Grade provides a broadband access connecting our customers with their end users. We also offer applications that can use this access, such as Telstra Wholesale Internet (TWI).

More information

We recommend that DSL Internet Grade is used for non-critical applications. Where data transmission is critical, Telstra Wholesale Business DSL or one of our other data or transmission products may be a better solution.

Telstra Wholesale account managers can provide more information on these products, which can also be obtained on our website www.telstrawholesale.com.

