ADSL Layer 2 Service Qualification

The Structural Separation Undertaking (SSU) is a set of commitments Telstra has made to the ACCC that requires Telstra to provide transparency and equivalence in relation to the supply by Telstra of wholesale and retail services on Telstra's Copper Network. The Network Services Business Unit (NSBU) has principal control over and responsibility for:

- service activation and provisioning; and
- fault detection, handling and rectification,

for regulated services provided to wholesale customers and equivalent services provided to retail customers. NSBU staff and contractors must therefore understand and comply with the commitments made in the SSU.

The NSBU utilises equivalent systems, processes and procedures for the Service Qualification (SQ) of ADSL Layer 2 for both Retail and Wholesale customers. This ensures that the SQ of an ADSL Layer 2 service can occur in an equivalent manner regardless of whether a request for SQ was received from a retail business unit or from a wholesale customer.

Service Qualification (SQ) – Wholesale Asymmetric Digital Subscriber Line (ADSL) Layer 2

This document sets out the processes and systems for SQ of the Wholesale ADSL Layer 2 service. SQ transactions require the wholesale customer to submit a Telstra Full National Number (FNN) or an address of the location to request qualification.

SQ Request Received

A request for SQ (from the wholesale business unit system) is received by the NSBU in the Service/Resource Qualification and Inventory Management Systems (ESQ-SE), the Network Plant Assignment and Management System (NPAMS) and Managed Service Qualification system (MSQ).

SQ Request Assessment

There are three separate elements which are assessed, and which will determine an SQ result for the Wholesale ADSL Layer 2 service. They are:

1. Limited transmission loss at a specific frequency for primary and secondary technologies.
2. Availability of free infrastructure to provide the required technologies; and
3. Presence of any existing incompatible products on the selected transmission path.

For example, an ADSL service requires: (1) less than 60 dB of transmission loss @ 300 kHz for the primary technology (ADSL Data) and less than 6.5 dB of transmission loss @ 820 Hz for the

Secondary technology (PSTN Voice); (2) an available ADSL port and cross-connection to the copper transmission path; and (3) that there are no existing incompatible products on the path, such as ISDN.

This SQ is performed within NPAMS. The business logic engineered within NPAMS focuses on the technologies being qualified, not the product. Any gaps between the required technology and available capabilities of a transmission path are expressed as Limiting Factors within the SQ response. For ADSL technology, there are a total of 81 possible Limiting Factor permutations. Where the SQ is requested based on the address of the location, NPAMS will include a search for possible alternate paths. Where the SQ is requested based on the FNN of the location, NPAMS will search the current existing path for the FNN and may identify where a transposition to an alternate path would resolve an inhibitor such as an incompatible pair-gain device.

A SQ request is processed by ESQ-SE, NPAMS and the Managed Service Qualification (MSQ) interface, and the information is then returned to the wholesale business unit system in the form of a SQ response.

Where a customer has reason to question the SQ response, a request can be raised to have a manual SQ performed. The request will then be received by the Data Qualification & Activation (DQ&A) team who will then action the task and perform a manual SQ.

The DQ&A consultant will manually interrogate NPAMS and Net Maps to determine path and cable details. The consultant will then populate the Cable Length Tool and Ready Reckoner to obtain the SQ result. All manual SQs, regardless of whether they are requested using the address or the FNN of the location will include a search for possible alternate paths.

It is the responsibility of ESQ-SE to consistently translate the Technology Capabilities processed by NPAMS to Product Availabilities. The NPAMS ESQ response, with any associated Limiting Factors, is converted to a Product Result Code by ESQ-SE. Each Technology Capability scenario is mapped to a predetermined Product Result Code in an equivalent manner for Retail and Wholesale requests.

SQ Result

For automated SQ requests the ESQ-SE will respond with the Product Result Codes to MSQ and MSQ responds to the wholesale business unit system. Translation of the Product Result Code to a simple user-friendly message is performed within the wholesale business unit system that identifies whether ADSL is available on the FNN selected or at the address selected.

Where a manual SQ has been requested, the result will be conveyed to the requester via e-mail.