

Asymmetric Digital Subscriber Line (ADSL) Layer 2 Activation

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 regulated services and equivalent 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 activation of ADSL Layer 2 services for both retail and wholesale customers including the issuing, processing, management and completion of tickets of work (TOW) issued to field staff. This ensures that the service activation and provisioning of an ADSL Layer 2 service can occur in an equivalent manner regardless of whether a TOW was received from a retail or wholesale customer.

Provisioning and Activation – Wholesale ADSL Layer 2

This document describes the end-to-end view of processes and systems used in the provisioning of the Wholesale ADSL Layer 2 service. The Wholesale ADSL Layer 2 service is a broadband service which provides access to the internet and works from a fixed telephone service. ADSL Layer 2 is a wholesale service. Bigpond ADSL Layer 2 is the equivalent Retail service to ADSL Layer 2 and is described in a separate process document.

Order Received

The Wholesale Business Unit (WBU) order entry system forwards a request for a new ADSL Layer 2 service to the provisioning system AXIS. AXIS is the Telstra system for the provisioning of orders for Public Switched Telephone Network (PSTN) services and ADSL services. The NSBU receives this request in AXIS.

Update Service Inventory

AXIS automatically transfers the required infrastructure details to the Network Plant Assignment and Management System (NPAMS). This includes the Full National Number (FNN), the service address and the product codes.

Configure Service Order

The service order request is then automatically sent from AXIS to NPAMS for the plant infrastructure to be assigned.

If the plant infrastructure is available for assignment and once the assignment process is completed, the order will progress to the activation process including undertaking any field/exchange activity required.

If the plant infrastructure is not available, the order will be managed through the held order process.

Allocation of infrastructure to the order is achieved via auto assignment within NPAMS or the Customer Access Assistant (CA-Assist). If auto assignment is not possible the service order will be queued automatically in CA-Assist for manual assignment. The order will be distributed to the consultants by the Intelligent Workload Distribution system (IWD) for manual assignment

- a) and: where the existing PSTN path supports ADSL and an ADSL port is available, a port will be assigned over the existing path; or
- b) where the existing PSTN path will not support ADSL but an alternate path has been requested and is available, and an ADSL port is available, the alternate path and ADSL port will be assigned.

Held Order Statuses

Where assignment of plant infrastructure is not possible, the service order will be placed into the appropriate held order status. Each reason for an order being placed into held status, has a separate queue. The process for each of the held order queues is detailed below.

Held Reason – Dirty Ticket Of Work:

This is when an AXIS TOW has incorrect or missing details which might stop the TOW from being completed.

A TOW is created in the TOW management system, ROVE.

The Rove TOW is used to communicate back to the WBU about an error in the information supplied in the customer's order. The WBU receives the ROVE notification to action the AXIS dirty TOW. After being addressed by the WBU, the order will be either rejected, cancelled or accepted as an Order Received. Where the order has been rectified and accepted as an Order Received it will re-enter the activation process at the 'Configure Service' stage for the assignment of plant infrastructure.

Held Reason – Customer Access Network, (CAN) Solution Not Feasible:

Orders are placed into hold in these queues by the activation team when no path (including no alternate path) is available. The WBU obtains a report from the Telstra wholesale data warehouse which shows the status of the order. All orders in this queue are rejected for provisioning. The WBU withdraws the orders and manages the interactions with the wholesale customers.

Held Reasons – ADSL1 and ADSL2+ Infrastructure Not Available at an Exchange or Customer Access Network (CAN):

This is where there are no available Exchange / Sub Exchange ADSL ports or CAN ports to supply the requested ADSL service. The WBU receives notification that an order has gone into held and will then manage the interaction with the wholesale customer, while the order remains on hold pending the availability of ports.

For orders held because there are no ports available, the NSBU provides the WBU with a report on the orders that are held and the approximate timeframe when the next vacant available port will be assigned to the ADSL held order. This information is then made available to wholesale customers via the Telstra Wholesale Customer Portal.

The wholesale customer can then inform their end user of the expected delay. The end user can then make an informed decision as to whether to withdraw their order or allow the order to remain in a held status awaiting the next available port dependent on existing business rules.

Once an order is held in the relevant queue (i.e. depending on whether the order is awaiting an ADSL 1 or an ADSL 2+ port, either in the CAN or at the Exchange), the automated Value Added Product Report Sub-system (VAPRS) performs the following actions to meet the required customer requested outcome:

1. Orders are queued in chronological order within each exchange service area awaiting port to be assigned. Held orders are managed purely on a first in first out basis irrespective of them being a wholesale or retail held order. VAPRS receives the required information about port availability from NPAMS on a daily basis.
2. The VAPRS robot attempts to assign an available ADSL port to the order that has been held for the longest period of time in the relevant exchange service area for the held order within AXIS. This automated action is irrespective of whether the service order is Retail or Wholesale. VAPRS will attempt to assign vacant ports to existing held orders prior to assigning any new ADSL service requests that have been received, and this is again an automated function that is executed with no bearing as to whether a held order is for wholesale or retail

3. Once a port has been assigned to the held order, the VAPRS robot then adds the notation 'order now assigned' with a date and time stamp. The VAPRS robot produces a report called 'VAPRS RDAP Assigned' that indicates the port has been allocated and order is ready for release. The WBU then manages the release of the order and the interactions with wholesale customer.
4. Held ADSL orders remain queued in chronological order according to the time of receipt, within each exchange service area, until the orders are fulfilled or cancelled.

Where assignment of the port has occurred, NPAMS automatically passes that information into AXIS where the status of the service order is updated to reflect the completion of this element.

The order will re-enter the activation process at the 'Activate Service' stage described within the provisioning and activation process flow. The WBU updates the provisioning history in the wholesale automated system, which then notifies the wholesale customer.

Held Reason – ADSL Under Investigation:

Orders can also be placed into held status where the provisioning of the ADSL order has not been successfully completed in the field due to the assigned infrastructure not providing the required ADSL solution.

Where this occurs, staff will review the assigned alternate path to investigate if a solution can be found.

- Where a solution is found, the infrastructure will be assigned in NPAMS and the details will be sent to AXIS. An e-mail is sent to the WBU to manage the release of the order. Once the order has been released, the order will re-enter the activation process at the 'Activate Service' stage described within the provisioning and activation process flow.
- Where no solution is found, the order is moved to the CAN Solution Not Feasible held order queue for orders with no path available, for the WBU to manage with the wholesale customer.

Provisioning and Activating Services

The tasks to perform ADSL activation are different for orders using existing PSTN paths and orders using alternative PSTN paths.

1) Provisioning ADSL orders over existing PSTN paths

For the provisioning of ADSL over an existing PSTN path, the Service Order Manager Back End System (SOMBe) will automatically send the service order request to the Cross Domain

Manager (XDM) and the workforce management system CONNECT.

2) Provisioning of ADSL orders over an alternate PSTN paths

SOMBe will automatically identify the tasks required for the order and send each task to the relevant system as described below:

- SOMBe will automatically send the service order request to the Automatic Category Change System for exchange services (AUTOCAT);
- AUTOCAT will automatically send the task to the 'Un programmed queue' in the Activity Information Management System (AIMS). The task is automatically sorted and actioned by the Product Connect Assist Robot (PCAR) based on service order requirements, service type, and AUTOCAT remarks; and
- PCAR will send the task to an AIMS manual queue for actioning. Once the task is assigned to a manual queue in AIMS, the activation team will monitor and process the tasks. When processing the task the consultant uses the Customer Activation Menu (CAM) and/or Semi Automatic Service Activation Facility (SASAF) and/or XDM systems and tools, dependent upon the technology, to interact with the designated PSTN technology to activate the service upon cutover. The consultant will then finalise the task in AIMS and/or SOMBe on cutover.

Provisioning, Activation, Support & Readiness

For ADSL over an existing path where an exchange port is available and has been assigned, the exchange task will flow to CONNECT via the SOMBe or AIMS task.

For ADSL over an existing path where a CAN port has been assigned, the exchange and field task will flow to CONNECT via the SOMBe task.

For ADSL over an alternate PSTN path, the exchange task will flow to CONNECT via the AIMS task and the field task will flow to CONNECT via the AXIS task. Both exchange and field tasks are required to be completed.

Once these tasks are received in CONNECT, the Back Ground Optimiser (BGO) allocates the tasks to the communications technician (CT). This may need further manual refinement or rescheduling by the workforce Optimisers.

On the day the service order is due to be completed, the CT obtains the service order details needed to complete the task, and performs the required tasks. Where a change of technology has occurred due to provisioning via an alternate path the CT will contact the activation team to advise them that the cutover is complete and the PSTN is ready to be deactivated then reactivated on the assigned alternate technology and ADSL is to be activated.

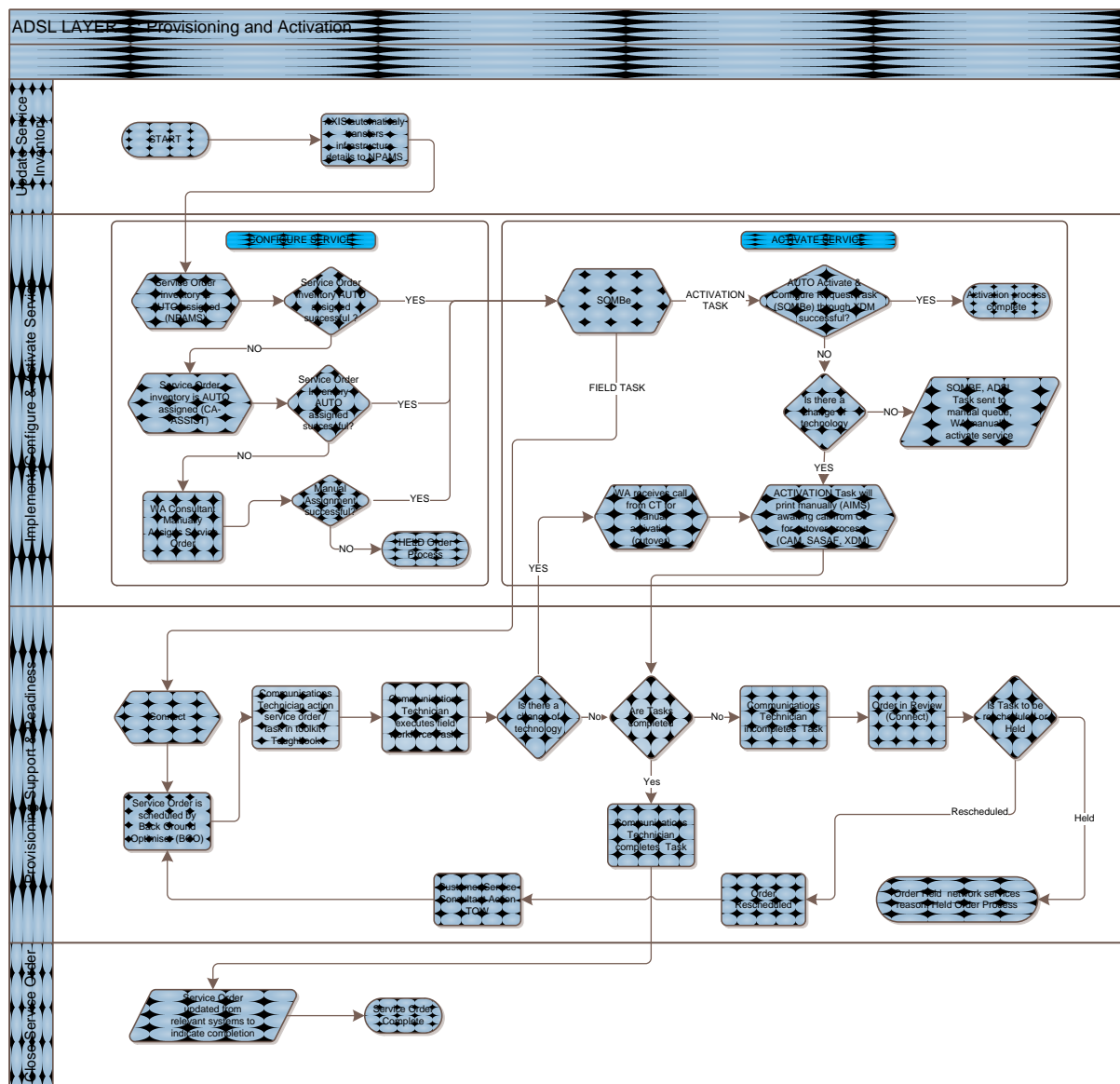
Once the tasks have been actioned and completed, they are then actioned as complete by the CT.

If the CT is unable to complete the task for any reason, they will update the task to reflect the incomplete reason, with appropriate notes and incomplete code. The order will then be seen in a review queue in CONNECT. From that point, the service order will be manually managed by the Customer Service Consultants (CSCs) for that geographic region. The order will be rescheduled for a later date or be placed into the appropriate held status as described above.

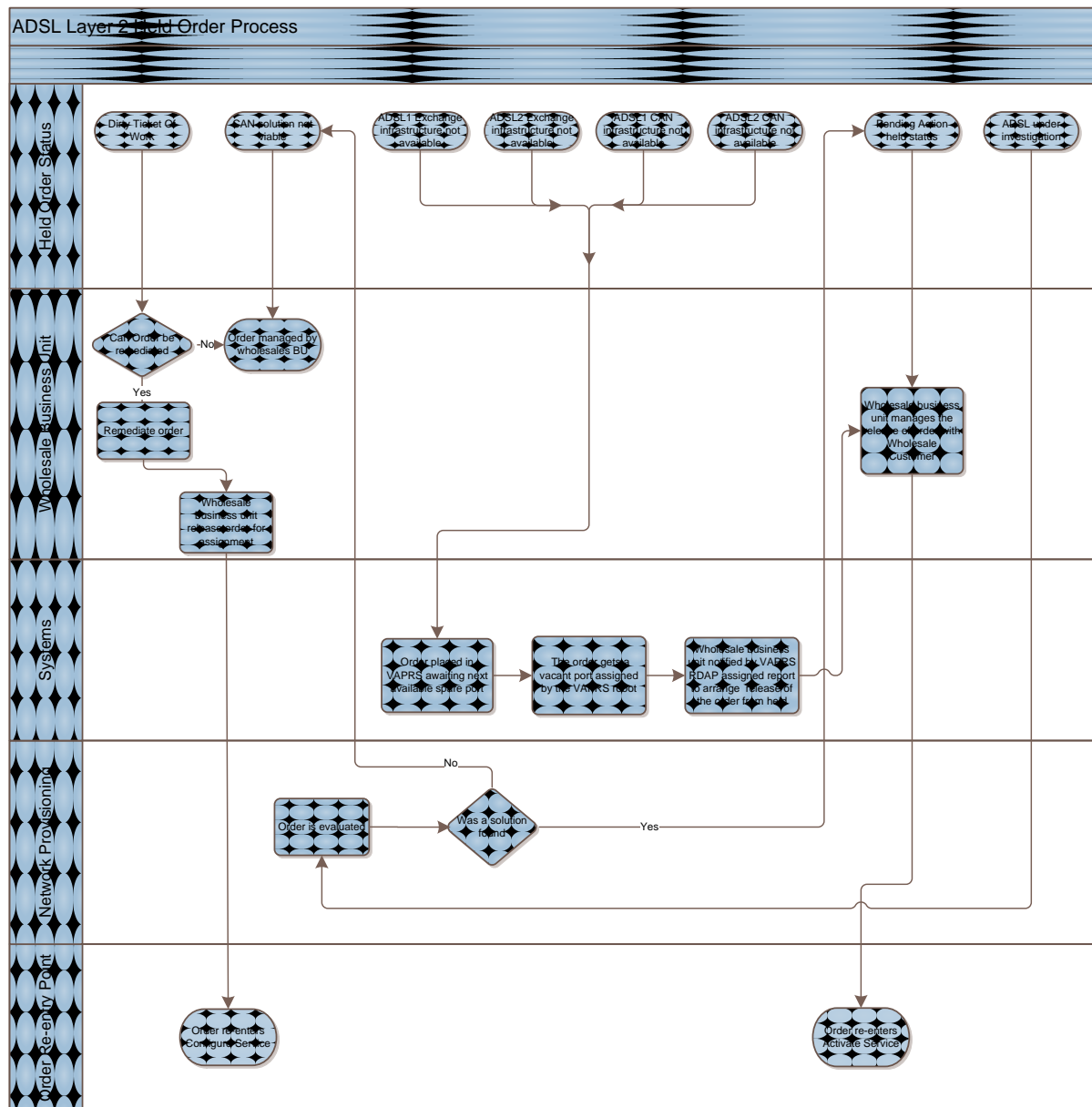
Close Service Order

Once the completion of every element of a service order has taken place, AXIS will automatically receive a transaction update from the downstream systems AUTOCAT and CONNECT, ensuring the date and time of completion are logged. The order will then be closed and it is considered to be complete. The customer record is automatically updated and the relevant information is passed to the billing systems and to the WBU order entry system to advise of request completion.

Wholesale ADSL Layer 2 Provisioning and Activation Diagram



Wholesale ADSL LAYER 2 Held Order Process Diagram



Acronym Definitions

Term	Definition
ACCC	Australian Competition and Consumer Commission
ADSL	Asymmetric Digital Subscriber Line
AIMS	Activity Information Management System
AUTOCAT	Automatic Category Change System
AXIS	Telstra Application that is used for order provisioning
BGO	Back Ground Optimiser
CA-ASSIST	Customer Access Assistant
CAM	Customer Activation Menu
CAN	Customer Access Network
CONNECT	workforce management system
CSC	Customer Service Consultant
CT	Communications Technician
FNN	Full National Number
IWD	Intelligent Workload Distribution system
NPAMS	Network Plant Assignment Management System
NPSO	National Progression of Service Orders
NSBU	Network Services Business Unit
PCAR	Product Connect Assist Robot
POI	Point Of Interconnect
PSTN	Public Switched Telephone Network
SASAF	Semi Automatic Service Activation Facility
SOMBe	Service Order Manager Back End
SSU	Structural Separation Undertaking
TOW	Ticket of Work
VAPRS	Value Added Product Report Sub-system
WBU	Wholesale Business Unit
XDM	Cross Domain Manager