Vacant Unconditioned Local Loop (VULL)

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

Provisioning - VULL

This document describes the end-to-end view of processes and systems used in the provisioning of VULL. VULL consists of the provisioning of an Unconditioned Local Loop Service (ULLS) using a vacant metallic path. An ULLS is the unconditioned communications wire between the boundary of a telecommunications network at an end-user's premises and a point on a telecommunications network that is a potential point of interconnection (POI), located at or associated with a customer access module and located on the end-user's side of the customer access module. VULL is a wholesale service available only to wholesale customers. There is no equivalent retail service.

Update Service Inventory

AXIS is the Telstra system used for the order provisioning of services over the Public Switched Telephone Network (PSTN). In order to enable the assignment of infrastructure, AXIS automatically transfers the required infrastructure details to the Network Plant Assignment and Management System (NPAMS). This includes Full National Number (FNN), service address and product codes.

Configure Service Order

When received in NPAMS the plant infrastructure that has been reserved as part of the Service Qualification process will be assigned to the service order. This is achieved via auto assignment within NPAMS or the Customer Access Assistant (CA-Assist). If auto assignment is not possible, the service order will automatically be queued in CA-Assist.

Where manual assignment is required the activation consultant will assign the reserved path in NPAMS.

On completion of infrastructure assignment in NPAMS, the service order is automatically updated in AXIS to reflect the date and time that this element was completed. Where assignment of plant is not possible, the service order will be placed into held status “Incomplete ULL”. The order will then be actioned by the Telstra Wholesale ULL (TW ULL) team.

Where a service order is placed into a held status, the service order is automatically updated in AXIS to reflect the held order reason as well as the date and time that the service order was held.

Held Order Statuses

Held Reason – Incomplete ULL:
This held order reason code is used for service orders where a VULL service order cannot be provisioned due to:

- plant or POI is not available for assignment, allocated POI is not available or allocated plant is not available and no alternate plant available (refer note 1 below)
- no lead-in (refer note 1 below)
- end customer is not in attendance (refer note 2 below)
- no access to the Main Distribution Frame (MDF) (refer note 2 below).

Note 1: in addition to Configure Service Order stage, these reasons can also occur during the exchange / field tasks described in the downstream Provisioning Support and Readiness section.
Note 2: these reasons will only occur during the exchange / field tasks described in the downstream Provisioning Support and Readiness section.

The TW ULL team manage the status “Incomplete ULL” queue and advise the wholesale customer when service orders move into this held status, which may result in the following activities:

- If there is no infrastructure the wholesale customer will be advised to withdraw service order.
- If the service order was held due to the end customer not in attendance the service order can be re-targeted.
- If the service order was held due to no access to the MDF, the service order can be re-targeted.

Where the service is to be retargeted the wholesale customer will submit a Retarget Notification. This Retarget Notification will result in the service order being released automatically (via Unconditioned Local Loop Carrier Interface System (ULLCIS)) with a new date and the service order will re-enter the process at the ‘provisioning support and readiness’ stage.

Held Reason – Customer Lead-in Delay:
The Customer Lead in Delay queue is an end user held reason code where the end user is responsible for the lead-in. Once the order is placed in the queue, the end user has to supply the

trench before the order is moved from the queue. The customer may choose to use Telstra's contractors, dig the trench themselves or choose a different contractor.

Once a ULL Customer Lead in Delay has been identified the following actions will be performed:

- The CT calls the Leadin Handover Team (LHT). The LHT confirms that the CT has logged the Reactive Webform and places the order into Held for Customer Lead in Delay
- Wholesale are advised of an order being placed into held due to an end user lead-in delay via an Axis Held User Alert. An email is generated and forwarded onto the Access Seeker informing them of the end user lead-in delay. Each order is case managed from end to end until lead-in is completed.
- The Leadin Provisioning Team (LPT) reviews the Ticket of Work (TOW) request and validates if it falls within our standard installation guidelines
- If within standard installation guidelines, a TOW job reference number is provided to Wholesale in AXIS within 3 Business Days of the order being held with an estimated completion date of the lead-in. Once the lead-in is completed the order is rescheduled for a CT to complete the connection.
- If not within standard installation guidelines, the customer is provided with options to arrange for a trench. LPT will confirm when the lead-in is completed and reschedule the order for connection.

When the lead-in is completed, the service order will then move back to held status "Incomplete ULL". The TW ULL team will advise the wholesale customer to submit a Retarget Notification. This Retarget Notification will result in the order automatically being released (via ULLCIS) with a new date and the service order will re-enter the process at the 'provisioning support and readiness' stage.

Where the service order is released from a held status the service order is automatically updated in AXIS to reflect the date and time of release.
The Wholesale order can remain in Held indefinitely until the lead-in is completed or advice is received from the Wholesale customer to withdraw the order.

Held Reason – Telstra Continuity Team

TCT place the New VULL/eVULL order into 10/86, at the 30 day future dated appointment and also adds notes to identify that the order is in an Asset Transfer region, waiting for the Cutover Notification to be submitted by the Customer.

By placing the order into 10/86, this enables the ULL team to identify that the order is in an Asset Transfer region when the Cutover Appointment is notified by the Customer and enables the ULL team to notify the TCT that the order has been released with the Customer Required Date so that they can organise an appointment with NBN Co for a subsequent order and also apply the Licence when completed. Any change to this appointment will be notified back to the customer.

If the order is not placed into 10/86, we will not be aware that the service is subject to Asset Transfer, an appointment will not be organised by the TCT with NBN Co and the customer will miss their appointment timeframes.

Orchestrate Service Order

The service order then moves automatically from AXIS to the Service Order Manager Back end (SOMBe). SOMBe will break down the service order, determine what requirements need to be sent to which systems, and then send each task to the relevant system. For VULL, SOMBe will automatically send the service order request to the Automatic Category Change System (AUTOCAT) and AXIS for an exchange task .

In all instances AUTOCAT will send a task to Activity Information Management System (AIMS) for the activation consultant to action as per business rules. Once the task is assigned to a manual queue in AIMS, the activation team will monitor the manual queues and process the work according to business rules.

The activation consultant will complete the task in AIMS. AIMS will then automatically send an update to AUTOCAT.

The AXIS task is automatically sent to the workforce management system (PROMISE) via SOMBe for the exchange / field work to be completed.

Provisioning Support & Readiness

On a VULL service order, there will always be a need for both exchange and field work to be completed.

Once this task is received in PROMISE, the Back Ground Optimiser (BGO) (automated system) allocates the tasks to the Communications Technician (CT). This may need further manual refinement or rescheduling by the regional 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. The CT then performs the required tasks to ensure the path is connected to the network boundary point. The CT initiates a call to the wholesale customer to enable it to complete testing of service. Where the service terminates on the MDF, the CT provides the wholesale customer with details of the relevant Vertical & Pair ID. Once the tasks have been actioned and completed, the CT will send a SMS to SMS4ULL which is received in the Queue Management System (QMS) to update ULLCIS of completion. The CT's tasks will be noted as complete.

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 service order will then be seen

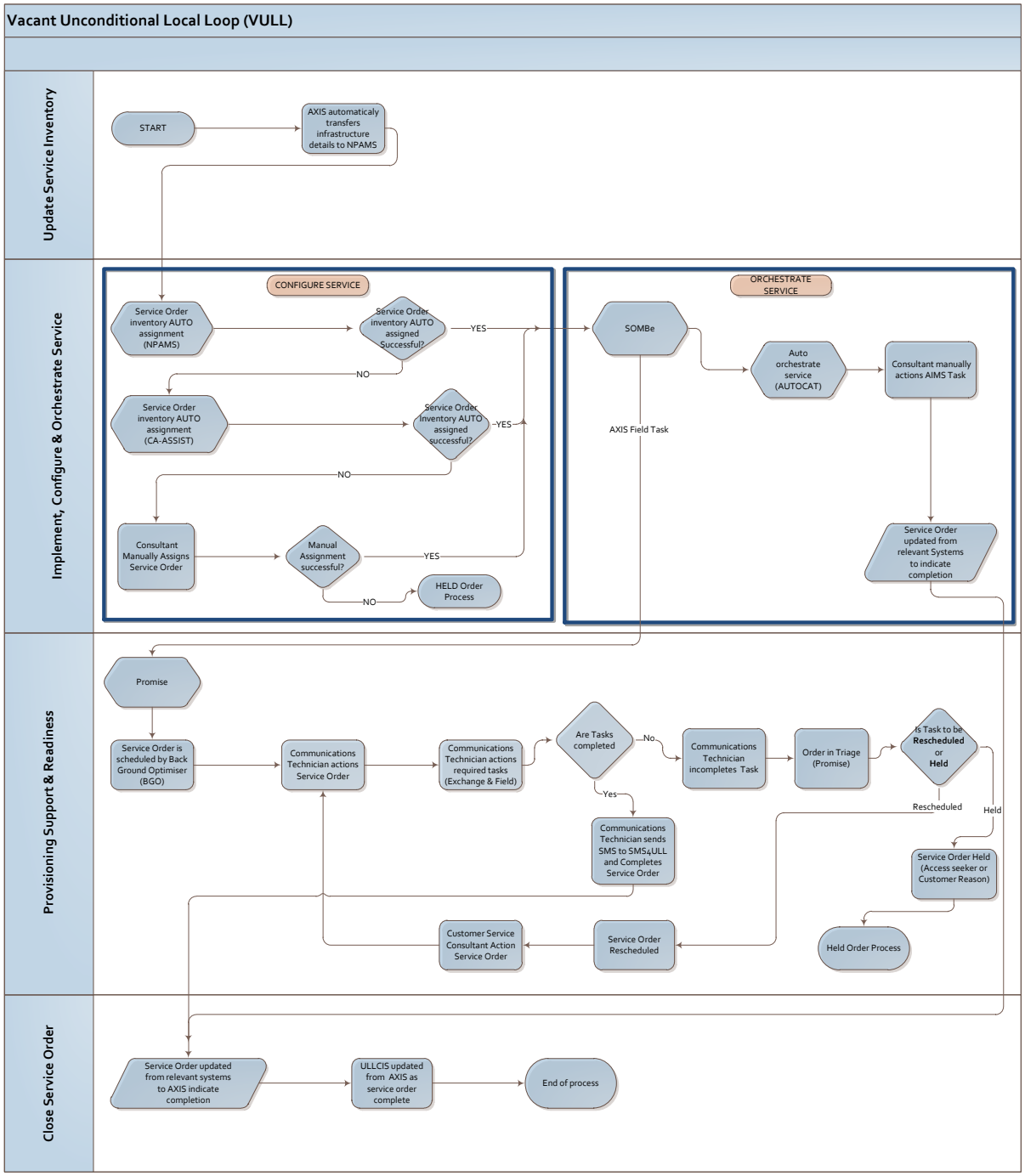
in a review queue in PROMISE. From that point, the service order will be manually managed by the customer service consultants for that region. The service order will then be rescheduled for a later date or be placed into held status ”Incomplete ULL” to be actioned by the TW ULL team.

Where a service order is placed into a held status, the service order is automatically updated in AXIS to reflect the held order reason code as well as the date and time that the service order was held.

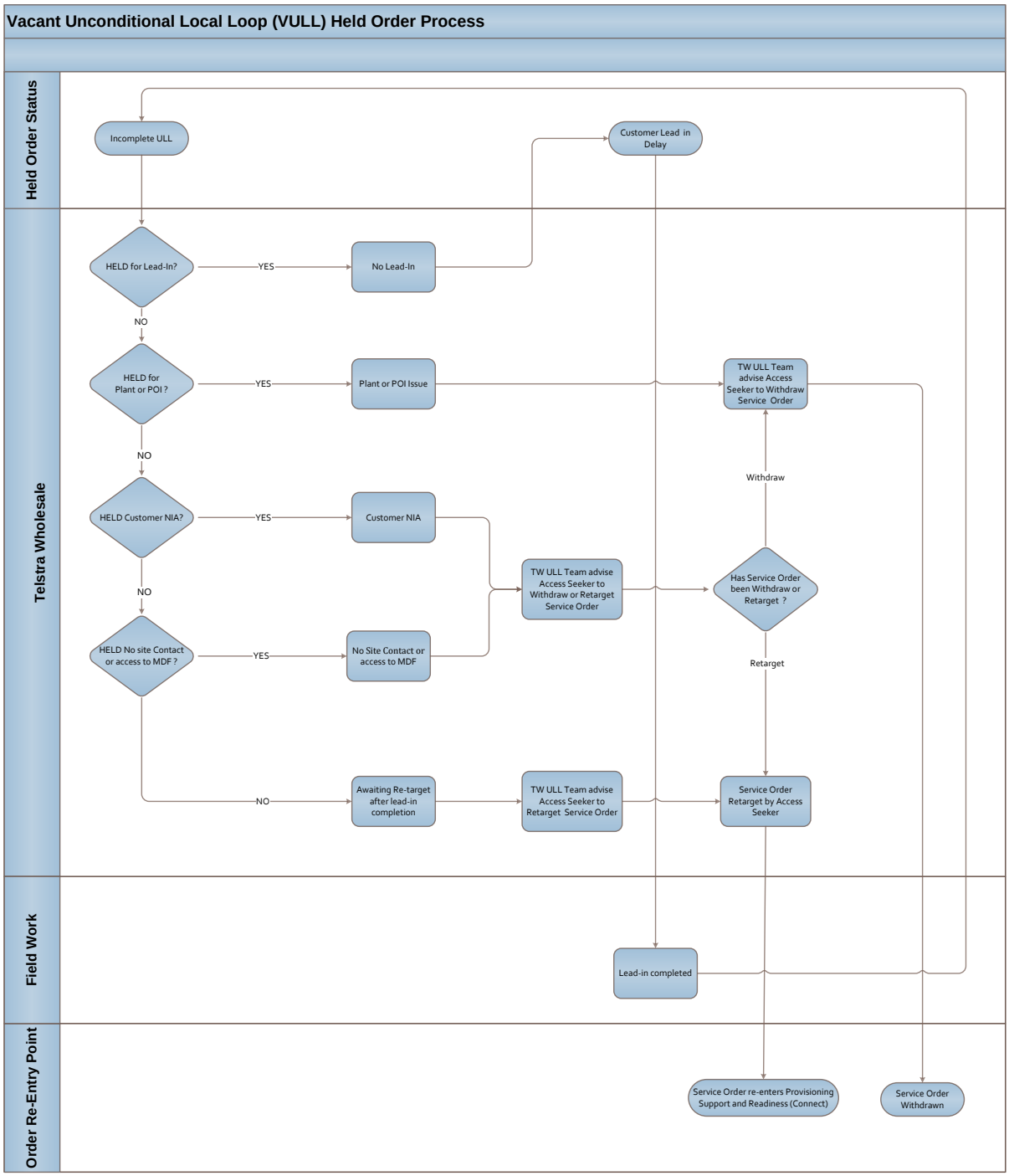
Close Service Order

As each stage of the service order is completed, AXIS will automatically receive a transaction update from the downstream systems AUTOCAT and PROMISE, ensuring that a date and time of completion are logged. The service order will then be closed and is considered to be completed. This is then automatically notified to the relevant Wholesale Business Unit system ULLCIS.

VULL Diagram



VULL Held Order Diagram



Acronym Definitions

Term	Definition
ACCC	Australian Competition and Consumer Commission
AIMS	Activity Information Management System
AUTOCAT	Automatic Category Change System
AXIS	Telstra Application that is used for the order provisioning
BGO	Back Ground Optimiser
CA-ASSIST	Customer Access Assistant
CT	Communications Technician
FNN	Full National Number
MDF	Main Distribution Frame
NSBU	Network Services Business Unit
NPAMS	Network Plant Assignment Management System
POI	Point Of Interconnect
PROMISE	PROMISE is a workforce management system
PSTN	Public Switched Telephone Network
QMS	Queue Management System
SMS	Short Message Service
SMS4ULL	SMS system used for ULL completion notification
SOMBe	Service Order Manager Back End
SQ	Service Qualification
SSU	Structural Separation Undertaking
ULLCIS	Unconditioned Local Loop Carrier Interface System
ULLS	Unconditioned Local Loop Service
VULL	Vacant Unconditioned Local Loop