Unconditioned Local Loop Service (ULLS) Assurance

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.

Fault Detection, Handling and Rectification – Unconditioned Local Loop Service (ULLS)

This document describes the end-to-end view of processes and systems used in the rectification of faults on Unconditioned Local Loop Services (ULLS). A 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, located at or associated with a customer access module and located on the end-user's side of the customer access module.

Fault management system

Service Improvement in Assurance Management (SIIAM) is a tool used for reporting customer faults and service difficulties. SIIAM manages the lifecycle of faults including incident capture, problem diagnosis, restoration activity tracking and fault restoration details. SIIAM will create cases from a number of different media such as auto-creation from external systems, manual and via the web. These cases are then either resolved by Front of House (FoH) staff at the initial point of contact (out of scope of this process document), or dispatched to various queues within SIIAM to be resolved by the appropriate remediation group.

Linx Online Service (LOLS) is a web-extension of the SIIAM assurance Management System and is Telstra's wholesale service assurance fault ticketing system. The LOLS application is integrated in the background with the SIIAM application.

LOLS allows, in a secure online browser environment, the Access Seeker (AS) to:

- lodge a fault report for its end user
- view relevant real time notes and test results entered by Telstra operational workgroups, technical engineers and field staff;
- view reschedule notification emails sent by Telstra in LOLS notes;
- interact with Telstra technical staff with additional notes and updating information within
- LOLS;

- view up to date information on major network outages;
- view Incorrect Callout Charge information; and
- close a fault report.

Fault allocation

Business rules that are configured in LOLS will determine the appropriate course of action for fault resolution. Initial SIIAM testing and diagnosis will determine whether the case is assigned to testers or specialist groups for further testing and investigation or whether a sub-case is created and dispatched to the field workforce for rectification. Details from the preliminary testing that occurs during order entry will be provided on the ticket of work to assist in the restoration process.

Where a field sub-case is created on an order, SIIAM interfaces with the field workforce management system CONNECT to book an assurance appointment (where testing has indicated that access to the end user premises may be required) or to make a commitment timeframe in which to restore the service (where access to the end user premises is unlikely to be required) which is sent through to the field workforce for resolution.

Once this task is received in CONNECT, 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 workforce optimisers.

Fault Detection and Handling

The CT will view the fault details in TOOLKIT via their Toughbook including test results provided by the reporting AS. TOOLKIT is a software application through which the CT gets visibility of task details. The CT will contact the AS to advise that they will be working on the fault, to confirm site contact details, and also to check for symptoms. The AS can also confirm that the fault is still current and can also assist in conducting further remote testing if required. The CT will then isolate the location of the problem and perform repair.

Where the service is testing within specification and the AS is satisfied that the service is working without fault symptoms, then no further fault location/repair action is required and the fault ticket of work can be closed as completed.

Fault Rectification

Where the service is not testing within specifications the CT will select the ticket of work and fully investigate the fault identified by the AS, conducting further testing with appropriate fault locating equipment to identify the fault location and confirm that results captured match the results provided by the AS.

The CT will then identify the location and cause of the fault and restore the service to Telstra's technical specifications. The NSBU is responsible for detecting and clearing faults up to the Network Boundary Point (NBP) which is usually the main distribution frame or the first socket within the

premises. No action will be taken on faults past the NBP as this is the responsibility of the AS/end user.

Upon repair of the service the CT will notify the AS that fault rectification has been completed and provide them with the relevant clearance details (cause and physical details and any applicable charges). The CT will upload test results and comments into TOOLKIT (which is auto-populated into SIIAM) that the AS can then see in LOLS. The AS will perform a test on the service to confirm restoration. If the final test confirms the fault has been rectified then the TOW can be completed.

When completing the TOW in TOOLKIT, the CT will populate the clearance code details needed to complete the task and add any relevant completion comments. The restoration time used is the actual time the service was restored and not the time when all activities associated with the ticket of work were completed.

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 ticket of work will then be seen in a review queue in CONNECT. From that point, the ticket of work will be manually managed by the customer service consultants for that region, who will liaise with the AS to reschedule the appointment/commitment for a later date or seek after hour's attention. The fault will then be restored following the standard process.

Notification of Fault Restoration

SIIAM/LOLS will automatically receive a transaction update from CONNECT, whereby cases are auto-closed upon completion of the field ticket of work, indicating that the service has been restored. The CT will have entered the appropriate clearance code in TOOLKIT, which will be auto-populated in SIIAM. The response and restore times are also translated into the relevant fields in SIIAM.
When the service is restored and the case closed, the AS will automatically receive an SMS or e-mail (generated by SIIAM), according to the preferred contact method selected by the AS, to advise the service has been restored.