C.   Maintenance & Repair (M&R)

This section provides a summary of the Maintenance & Repair (M&R) domain testing activities. For more information on planned testing, refer to Section VI: *Maintenance and Repair Test Section* of the *Supplemental Test Plan.* For more detailed information on the test design, analysis, and results from the execution of the tests, refer to Section VI: *Maintenance and Repair Domain Results and Analysis* in this document.

1.0   M&R 11: M&R Process Evaluation

This section provides a summary for the M&R-11: M&R Process Evaluation.

1.1   Objective

This test was composed of two sub-tests. The objective of Sub-Test 1 was to evaluate the equivalence of BellSouth's end-to-end processes for trouble reporting and repair for retail xDSL lines and wholesale xDSL over a CLEC Resale POTS line. The objective of Sub-Test 2 was to evaluate BellSouth's performance in making repairs to xDSL lines under the conditions of various wholesale maintenance scenarios.

1.2   Evaluation Methods

The evaluation was comprised of two major elements. For Sub-Test 1, process flows for wholesale xDSL over a CLEC Resale POTS line and retail trouble management were reviewed and evaluated along with technician methods and procedures (M&Ps) and job aids for wholesale trouble re pair. For Sub-Test 2, faults were inserted into a working test bed of provisioned telephone lines, and BellSouth's performance was observed and measured in relation to the isolation and repair of those faults.

1.3   Analysis Methods

The data collected from the M&R Process Evaluation were analyzed, and the results were assessed employing test-specific evaluation criteria.

1.4   Summary Results

The following tables present the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Complete or Not Satisfied) are provided in Section II.

Table III-C.1: M&R-11: M&R Process Evaluation – Summary Results

Evaluation Criteria – Satisfied	
M&R-11-1-1	BLS has documented M&R process flows for handling xDSL trouble tickets.
M&R-11-1-2	BLS M&R systems accurately capture relevant data and performance.
M&R-11-1-3	BLS provides commitment date and time when logging a trouble call.
M&R-11-1-4	Technicians close the trouble ticket using correct codes.

Evaluation Criteria – Satisfied	
M&R-11-1-5	Closed trouble tickets were called in by technicians.
M&R-11-1-6	BLS has a documented escalation process for xDSL service.
M&R-11-1-7	BLS follows documented processes for logging, tracking, and reporting of trouble tickets.

2.0   M&R-12: TAFI Functional Test of Resale Lines

This section provides a summary of the M&R-12: TAFI Functional Test of Resale Lines.

2.1   Objective

The objective of this test was to validate the existence of Trouble Administration Facilitation Interface (TAFI) trouble reporting and screening functionality for resale service customers in accordance with the Competitive Local Exchange Carrier (CLEC) TAFI End-User Training and User Guide.

2.2   Evaluation Methods

This test cycle was executed in BellSouth's production environment by exercising a defined set of TAFI functions associated with trouble management activities against test bed accounts. Scenarios testing these functions were executed both via a LAN-to-LAN connection and via dial-up access in order to evaluate differences in system response times associated with the methods of access.

2.3   Analysis Methods

The data collected from the TAFI Functional Test were analyzed, and the results were assessed employing test-specific evaluation criteria.

2.4   Summary Results

The following tables present the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Complete or Not Satisfied) are provided in Section II.

Table III-C.2: M&R-12: TAFI Functional Test of Resale Lines – Summary Results

Evaluation Criteria – Satisfied	
M&R-12-1-1	The user is able to enter a trouble report using TAFI and receive a satisfactory response.
M&R-12-1-2	The user is able to modify a trouble report using TAFI and receive a satisfactory response.
M&R-12-1-3	The user is able to create a repeat report using TAFI and receive a satisfactory response.
M&R-12-1-4	The user is able to create a subsequent report using TAFI and receive a satisfactory response.
M&R-12-1-5	The user is able to enter multiple trouble reports (MTRs) using TAFI and receive a satisfactory response.

M&R-12-1-6	The user is able to enter and retrieve trouble reports from the queue in TAFI and receive a satisfactory response.
M&R-12-1-7	The user is able to execute supervisor functions within TAFI and receive a satisfactory response.
M&R-12-1-8	The user is able to close a trouble report using TAFI and receive a satisfactory response.
M&R-12-1-9	The user is able to cancel a trouble report using TAFI and receive a satisfactory response.
M&R-12-1-10	The user is able to conduct a port and loop-port test (Mechanized Loop Tests [MLT]) using TAFI and receive a satisfactory response.
M&R-12-1-11	The user is able to view port and loop-port test (MLT) results using TAFI and receive a satisfactory response.
M&R-12-1-12	The user is able to retrieve a LMOS recent status report and receive a satisfactory response.
M&R-12-1-13	The user is able to obtain customer line record information (BOCRIS CSR) using TAFI and receive a satisfactory response.
M&R-12-1-14	The user is able to obtain Predictor results using TAFI and receive a satisfactory response.
M&R-12-1-15	The user is able to view Display Line Record (DLR) information using TAFI and receive a satisfactory response.
M&R-12-1-16	The user is able to view SOCS pending order information using TAFI and receive a satisfactory response.
M&R-12-1-17	The user is able to view and resend transactions that incurred host request errors using TAFI and receive a satisfactory response.
M&R-12-1-18	The user is able to retrieve trouble history using TAFI and receive a satisfactory response.
M&R-12-2-1	The user receives timely responses when entering and retrieving trouble reports from the queue in TAFI.
M&R-12-2-2	The user receives timely responses when executing TAFI supervisor functions.
M&R-12-2-3	The user receives timely responses from the MLT test.
M&R-12-2-4	The user receives timely responses when retrieving a LMOS recent status report using TAFI.
M&R-12-2-5	The user receives timely responses when obtaining customer line record information using TAFI.
M&R-12-2-6	The user receives timely responses when obtaining Predictor results using TAFI.
M&R-12-2-7	The user receives timely responses when retrieving DLR information using TAFI.
M&R-12-2-8	The user receives timely responses when retrieving SOCS pending order information using TAFI.
M&R-12-2-9	The user receives timely responses when retrieving trouble history using TAFI.
M&R-12-3-1	TAFI is a user-friendly system for creating trouble reports.
M&R-12-3-2	TAFI is a user-friendly system for modifying trouble reports.
M&R-12-3-3	TAFI is a user-friendly system for creating repeat reports.
M&R-12-3-4	TAFI is a user-friendly system for creating subsequent reports.

M&R-12-3-5	TAFI is a user-friendly system for entering multiple trouble reports (MTR).
M&R-12-3-6	TAFI is a user-friendly system for entering and retrieving trouble reports from the queue.
M&R-12-3-7	TAFI is a user-friendly system for executing supervisor functions.
M&R-12-3-8	TAFI is a user-friendly system for closing trouble reports.
M&R-12-3-9	TAFI is a user-friendly system for canceling trouble reports.
M&R-12-3-10	TAFI is a user-friendly system for initiating port and loop-port tests.
M&R-12-3-11	TAFI is a user-friendly system for viewing port and loop-port test results.
M&R-12-3-12	TAFI is a user-friendly system for retrieving a LMOS recent status report.
M&R-12-3-13	TAFI is a user-friendly system for obtaining customer line record information.
M&R-12-3-14	TAFI is a user-friendly system for obtaining Predictor results.
M&R-12-3-15	TAFI is a user-friendly system for viewing DLR information.
M&R-12-3-16	TAFI is a user-friendly system for viewing SOCS pending order information.
M&R-12-3-17	TAFI is a user-friendly system for viewing and resending trouble reports that incurred host request errors.
M&R-12-3-18	TAFI is a user-friendly system for retrieving trouble history.
M&R-12-3-19	TAFI is a user-friendly system for handling non-designed UNE M&R issues.

3.0   M&R-13: ECTA Functional Test of Resale Lines

This section provides a summary for the M&R-13: ECTA Functional Test of Resale Lines.

3.1   Objective

The objective of this test was to validate the existence of Electronic Communication Trouble Administration (ECTA) trouble reporting and screening functionality for resale service customers in accordance with BellSouth's published specifications.

3.2   Evaluation Methods

In order to accomplish this objective, KCI executed a test cycle by exercising a defined set of ECTA functions associated with trouble management activities against test bed accounts.   The functional elements targeted by this test included access to test capabilities, trouble report entry, query and receipt of trouble report status information, modification and addition of information to trouble reports, and cancellation/closure of trouble reports.   In addition, error conditions were included to assess the ECTA Gateway's response to incorrect information. The ECTA Functional Test was conducted against BellSouth's production environment system.

3.3   Analysis Methods

The data collected from the ECTA Functional Test were analyzed, and the results were assessed employing test-specific evaluation criteria.

3.4   Summary Results

The following tables present the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Complete or Not Satisfied) are provided in Section II.

Table III-C.3: M&R-13: ECTA Functional Test of Resale Lines – Summary Results

Evaluation Criteria – Satisfied	
M&R-13-1-1	The user is able to enter a trouble report into ECTA and receive a satisfactory response.
M&R-13-1-2	The user is able to request trouble report status from ECTA and receive an adequate response.
M&R-13-1-3	The user is able to add trouble information to an ECTA trouble report and receive an adequate response.
M&R-13-1-4	The user is able to modify trouble administration information on an ECTA trouble report and receive a satisfactory response.
M&R-13-1-5	The user is able to cancel a trouble report in ECTA and receive a satisfactory response.
M&R-13-1-6	The user is able to respond to trouble repair completion notifications and receive a satisfactory response.
M&R-13-1-7	The user is able to conduct a Mechanized Line Test and receive a satisfactory response.
M&R-13-2-1	The user receives a timely response when entering a trouble report using ECTA.
M&R-13-2-2	The user receives a timely response when requesting trouble report status using ECTA.
M&R-13-2-3	The user receives a timely response when adding trouble information using ECTA.
M&R-13-2-4	The user receives a timely response when modifying trouble report administration information using ECTA.
M&R-13-2-5	The user receives a timely response when canceling a trouble report using ECTA.
M&R-13-2-6	The user receives a timely response when responding to a verify repair completion.
M&R-13-2-7	The user receives a timely response when conducting a Mechanized Line Test using ECTA.