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March 16, 2001

Mr. Reece McAlister
Executive Secretary
Georgia Public Service Commission
244 Washington Street
Atlanta, GA 30334

RE: Investigation into Development of Electronic Interfaces for BellSouth's Operational Support Systems; Docket No. 8354-U

Enclosed please find an original and twenty (20) copies, as well as an electronic copy, of the revised sections of KPMG Consulting, Inc.'s document *BellSouth – Georgia OSS Evaluation Master Test Plan, Version 4.2*, and the document *BellSouth Telecommunications, Inc. OSS Evaluation – Georgia Supplemental Test Plan, Version 2.1*. The revisions to the sections of the Master Test Plan and the Supplemental Test Plan represent KPMG Consulting's changes in scope from the most recently published versions. The revised sections of the *Master Test Plan* consist of the following: Test Plan Cover Page; Section I—Document Control; Section IV—Pre-Ordering; Section V—Ordering and Provisioning; and Appendix D1—Evaluation Criteria. For the *Supplemental Test Plan*, the entire document has been revised.

We request that these documents be filed in the above referenced matter.

I would appreciate your filing same and returning a copy stamped "filed" in the enclosed stamped, self-addressed envelope.

Thank you for your assistance in this regard.

Very truly yours,

David Frey
Managing Director

Enclosures

cc: Parties of Record

CERTIFICATE OF SERVICE
Docket No. 8354-U

This is to certify that I have this day served a copy of the within and foregoing, upon known parties of record, by depositing same in the United States Mail with adequate postage affixed thereto, properly addressed as follows:

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BellSouth - Georgia
OSS Evaluation
Master Test Plan

Version 4.~~1~~2

March ~~28~~16, ~~2000~~2001

BellSouth Georgia OSS Evaluation
Master Test Plan
Document Organization Summary

Section	Section Title	Description
I	Document Control	Defines document version control, distribution, and approval requirements.
II	Introduction	Documents the project background, scope and objectives, assumptions, and limitations.
III	Test Plan Framework	Describes the methodologies for testing BellSouth's OSS systems, interfaces, and processes, including how testing is segmented and organized.
IV	Pre-Ordering Test Section	Describes the tests and methodologies to be applied to the Pre-Ordering process domain.
V	Ordering & Provisioning Test Section	Describes the tests and methodologies to be applied to the Ordering and Provisioning process domains.
VI	Billing Test Section	Describes the tests and methodologies to be applied to the Billing process domain.
VII	Maintenance & Repair Test Section	Describes the tests and methodologies to be applied to the Maintenance & Repair process domain.
VIII	Change Management Test Section	Describes the tests and methodologies to be applied to the Change Management business processes.
Appendix A	Product Selection	Describes the selection process for resale services and UNEs to be addressed in the Test.
Appendix B-1	Pre-Ordering Scenarios	Defines the Pre-Ordering test scenarios for use in functional and volume testing.
Appendix B-2	Resale Ordering Scenarios	Defines the resale services test scenarios for use in resale scenarios used in volume testing.
Appendix B-3	UNE Ordering Scenarios	Defines the UNE test scenarios for use in functional and volume testing.
Appendix B-4	Billing Scenarios	Defines the billing test scenarios for use in functional testing.
Appendix B-5	M&R Scenarios	Defines the maintenance and repair test scenarios for use in functional and volume testing.
Appendix C	Volume Analysis	Describes the volume forecasting methodology and the transaction volumes by product type and activity type to be applied in volume testing.
Appendix D-1	Evaluation Criteria	Lists the process evaluation cirteria that will be collected as part of the Test.
Appendix D-2	Service Quality Measurements Regional Performance Reports	BellSouth Service Quality Measurements Regional Performance Report dated 8/10/1999.
Appendix E	Test Cycles	Describes the test cycles that will be executed as part of the Test.
Appendix F	References	Lists the references used in developing this document.
Appendix G	Glossary	Lists the terms and definitions used throughout this document.

I. Document Control

A. Distribution

Copy No.	Person	Department	Date Sent
	Georgia Public Service Commission		
	David Burgess	Georgia Public Service Commissioner	~~3/31/2000~~03/16/2001
	Leon Bowles	Georgia Public Service Commission Staff	03/16/2001~~3/31/2000~~
	KPMG Consulting, Inc. ~~LLC~~		
	Michael Weeks	Engagement Partner	03/16/2001~~3/31/2000~~
	Ray Sears	Partner	03/16/2001~~3/31/2000~~
	David Frey	Engagement Manager	03/16/2001~~3/31/2000~~
	BellSouth		
	William Stacy	ICS Access Certification Program Sponsor	03/16/2001~~3/31/2000~~
	Bennett Ross	BellSouth Legal	03/16/2001~~3/31/2000~~

Figure I - I: Distribution List for Document

B. Approved By

Person	Department	Date
David Burgess	Georgia Public Service Commissioner	
Leon Bowles	Georgia Public Service Commission Staff	

Figure I - II: Approval List for Document

C. Version Control

Version	Date	Reason
Draft 1.0	March 19, 1999	Draft version for project review.
Draft 2.0	May 21, 1999	Working draft for internal review.
Draft 2.1	May 25, 1999	Working draft for KPMG/BellSouth review.
Draft 2.2	May 27, ~~1999~~	Working draft for final review.
Final 1.0	May ~~29~~, ~~1999~~	Final copy for Georgia PSC review.
Version 2.0	Auguest ~~16~~, ~~1999~~	Revisions for corrections and clarifications.
Version 3.0	October 15, 1999	Revisions for corrections and clarifications.
Version 4.0	December 15, 1999	Revisions for corrections and clarifications.
Version 4.0	January 27, 2000	Revisions for corrections and clarifications
Version 4.1	March 28, 2000	Revisions for corrections and clarifications.
Version 4.2	March 16, 2001	Revisions for corrections and clarifications.

Figure I - III: Version Control

D. Revision Notes

Version 4.~~1~~2 ~~3/28/2000~~03/16/2001		
Global Changes		
	None.	
Test Plan Cover Page		
Entire Section	Date has been changed to ~~3/28/2000~~03/16/2001; Version has been changed to 4.~~1~~2	
II. Introduction		
	None.	
III. Test Plan Framework		
	None.	

	~~Version 4.1~~2 **~~3/28/2000~~03/16/2001**
IV. Pre-Order	
Entire Section	Date has been changed ~~to 3/28/2000~~03/16/2001; Version has been changed to 4.~~1~~2
~~Page IV-1~~	~~Figure IV-I: Pre-Ordering Test Cycles – Test cycle name change~~
~~Page IV-2~~	~~1.1 Description – Text and editorial changes~~
Pages IV-4 ~~– IV-7~~	Figure IV-II: TAG Pre-Ordering Functional Test Scope – Function changes
~~Page IV-8~~	~~1.6 Exit Criteria – Text and editorial changes~~
~~Page IV-9~~	~~2.0 Pre-Ordering Performance Measures Evaluation – Test cycle name change~~
~~Page IV-9~~	~~2.1 Description – Text and editorial changes~~
~~Page IV-9~~	~~2.2 Objective – Text and editorial changes~~
~~Pages IV-10 – IV-11~~	~~Figure IV-III: Pre-Ordering Performance Measures Evaluation Test Scope – Test cycle name, sub-process and function changes~~
~~Pages IV-13 – IV-14~~	~~Figure IV-IV: TAG Pre-Ordering Document Review Test Scope – Sub-process and documentation changes~~
~~Page IV-14~~	~~3.4.1 Documents in Test Scope – Section added~~
V. Order	
Entire Section	Date has been changed to ~~3/28/2000~~03/16/2001; Version has been changed to 4.~~1~~2
~~Pages V-1 – V-2~~	~~Figure V-I: Ordering and Provisioning Test Cycles – Test cycle name change~~
~~Page V-2~~	~~Figure V-I: Ordering and Provisioning Test Cycles – Product category changes~~
~~Page V-3~~	~~1.1 Description – Text and editorial changes~~
~~Pages V-4 – V-5~~	~~Figure V-II: EDI Functional Test Scope – Function changes~~
Page V-6	Figure V-II: EDI Functional Test Scope Function changes, formatting
~~Pages V-7 – V-8~~	~~2.1 Description – Text and editorial changes~~
~~Pages V-9 – V-11~~	~~Figure V-III: TAG Functional Test Scope – Function changes~~
Page V-10	Figure V-III: TAG Functional Test Scope Function changes, formatting
~~Page V-12~~	~~3.1 Description – Text and editorial changes~~
~~Page V-15~~	~~4.1 Description – Text and editorial changes~~
~~Page V-18~~	~~5.1 Description – Text and editorial changes~~
~~Pages V-19 – V-20~~	~~Figure V-VI: Provisioning Verification Test Scope – Sub-process and function changes~~
~~Page V-23~~	~~7.0 O&P-7: O&P Performance Measures Evaluation – Test cycle name change~~
~~Page V-23~~	~~7.1 Description – Text and editorial changes~~
~~Page V-23~~	~~7.2 Objective – Text and editorial changes~~
~~Pages V-24 – V28~~	~~Figure V-IX: O&P Performance Measures Evaluation Test Scope – Test cycle name, sub-process and function changes~~
~~Page V-29~~	~~8.0 O&P-8: EDI Documentation Evaluation – Layout change~~
~~Pages V-30 – V-31~~	~~Figure V-X: EDI Documentation Evaluation Test Scope – Sub-process and function changes~~
~~Pages V-31 – V-32~~	~~8.4.1 Documents in Test Scope – Section added~~
~~Page V-32~~	~~8.5 Test Activities – Text and editorial changes~~

	~~Version 4.12~~ **~~3/28/200003~~/16/2001**
~~Pages V-33 – V-35~~	~~Figure V-XI: TAG Documentation Evaluation Test Scope – Sub-process and function changes~~
~~Page V-35~~	~~9.4.1 Documents in Test Scope – Section added~~
~~Page V-36~~	~~10.1 Description – Text and editorial changes~~
~~**VI. Billing**~~	
~~Entire Section~~	~~Date has been changed to 3/28/2000; Version has been changed to 4.1~~
~~Page VI-1~~	~~Figure VI-I: Billing Test Cycles – Test cycle name change~~
~~Page VI-9~~	~~Figure IX-VI: Billing Systems Capacity Management Evaluation Test Scope – Text and editorial changes~~
~~Page VI-10~~	~~4.0 BLG-4: Billing Performance Measures Evaluation – Test cycle name change~~
~~Page VI-10~~	~~4.1 Description – Text and editorial changes~~
~~Page VI-10~~	~~4.2 Objective – Text and editorial changes~~
~~Pages VI-11 – VI-12~~	~~Figure VI-VIII: Billing Performance Measures Evaluation – Test cycle name, sub-process and function changes~~
~~Pages VI-13 – VI – 14~~	~~Figure VI-IX: CRIS/CABS Invoicing Document Review Test Scope – Sub-process and function changes~~
~~Page VI-16~~	~~Figure VI-X: ODUF/ADUF Usage Document Evaluation – Function changes~~
~~**VII. Maintenance and Repair**~~	
~~Entire Section~~	~~Date has been changed to 3/28/2000; Version has been changed to 4.1~~
~~Page VII-1~~	~~Figure VII-I: Maintenance & Repair Test Cycles – Test cycle name change~~
~~Pages VII-4 – VII-5~~	~~Figure VII-II: TAFI Functional Test Scope – Sub-process and function changes~~
~~Page VII-10~~	~~Figure VII-IV: ECTA Normal Volume Performance Test Scope – Function deletion~~
~~Page VII-12~~	~~Figure VII-V: ECTA Peak Volume Performance Test Scope – Function deletion~~
~~Page VII-16~~	~~7.0 M&R-7: M&R Performance Measures Evaluation – Test cycle name change~~
~~Page VII-16~~	~~7.1 Description – Text and editorial changes~~
~~Page VII-16~~	~~7.2 Objective – Text and editorial changes~~
~~Pages VII-17 – VII-19~~	~~Figure VII-VIII: M&R Performance Measures Evaluation Test Scope – Test cycle name, sub-process and function changes~~
~~Page VII-20~~	~~8.0 M&R-8: TAFI Documentation Evaluation – Layout changes~~
~~Page VII-21~~	~~Figure VII-IX: TAFI Documentation Evaluation Test Scope – Function changes~~
~~Page VII-22~~	~~8.4.1 Documents in Test Scope – Section added~~
~~Page VII-24~~	~~Figure VII-X: ECTA Documentation Evaluation Test Scope – Layout change~~
VIII. Change Management	
	None.

	~~Version 4.12~~ ~~3/28/200003~~/16/2001
Appendix A: Product Selection & Description	
	None.
Appendix B1: Pre-Ordering Scenarios	
	None.
Appendix B2: Resale Ordering Scenarios	
	None.
Appendix B3: UNE Ordering Scenarios	
Entire Appendix	None.~~Date has been changed to 3/28/2000; Version has been changed to 4.1~~
Page 7	~~600 – Scenario added~~
Page B3-317	~~Scenario #600: A CLEC migrates 2 SL2 unbundled analog loops from BST – Scenario added~~
Appendix B4: Billing Scenarios	
	None.
Appendix B5: Maintenance & Repair Scenarios	
Entire Appendix	~~Date has been changed to 3/28/2000; Version has been changed to 4.1~~None.
Page 11	~~666 – Scenario deleted~~
Page B5-43	~~Scenario #666: CLEC reports trouble on resold Synchronet line to BST – Scenario deleted~~
Appendix C: Volume Analysis Methodology	
	None.
Appendix D1: Evaluation Criteria	
Entire Appendix	Date has been changed to ~~3/28/2000~~03/16/2001; Version has been changed to 4.~~1~~2
~~Entire Appendix~~	~~Test Cross Reference column has been deleted~~
~~Page D1-6~~	~~Evaluation Measures – Measure and description changes~~
~~Pages D1-7 – D1-11~~	~~1.0 PRE-1: TAG Pre-Ordering Functional Test – Function and evaluation criteria changes~~
~~Pages D1-12 – D1-13~~Page D1-11	2.0 PRE-2: Pre-Ordering Performance Measures Evaluation ~~– Test cycle name, sub-process, function and e~~Evaluation criteria changes
~~Pages D1-14 – D1-16~~	~~3.0 PRE-3: TAG Pre-Ordering Documentation Evaluation – Sub-process, function and evaluation criteria changes~~
~~Page D1 – 17~~	~~4.0 PRE-4: TAG Normal Volume Performance – Layout changes~~
Pages D1-~~22~~20 – ~~D1-23~~	1.0 O&P-1: EDI Functional Test – Sub-process, ~~F~~function and evaluation criteria changes

~~Version 4.1~~2 ~~3/28/2000~~03/16/2001	
Pages D1-~~24 – D1-25~~22	2.0 O&P-2: TAG Functional Test – Sub-process, ~~F~~function and evaluation criteria
~~Pages D1-28 – D1-29~~	~~5.0 O&P-5: Provisioning Verification Test – Sub-process, function and evaluation criteria changes~~
Pages D1-~~31~~27– D1-~~36~~31	7.0 O&P-7: O&P Performance Measures Evaluation ~~– Test cycle name, sub-process, function and e~~Evaluation criteria changes
Pages D1-~~37~~32 ~~– D1-39~~	8.0 O&P-8: EDI Documentation Evaluation – ~~Sub-process, function and evaluation criteria changes~~Formatting change
~~Pages D1-40 – D1-42~~	~~9.0 O&P-9: TAG Documentation Evaluation – Sub-process, function and evaluation criteria changes~~
~~Pages D1-44 – D1-45~~	~~1.0 BLG-1: CRIS/CABS Invoicing Functional Test – Evaluation criteria changes~~
~~Page D1-46~~	~~2.0 BLG-2: ODUF/ADUF Usage Functional Test – Evaluation criteria changes~~
Pages D1-~~48~~41 – D1-~~50~~42	4.0 BLG-4: Billing Performance Measures Evaluation ~~– Test cycle name, sub-process, function and e~~Evaluation criteria changes
~~Page D1-51~~	~~5.0 BLG-5: CRIS/CABS Invoicing Documentation Evaluation – Function and evaluation criteria changes~~
~~Page D1-52~~	~~6.0 BLG-6: ODUF/ADUF Documentation Evaluation – Function and evaluation criteria changes~~
~~Pages D1-53 – D1-55~~	~~1.0 M&R-1: TAFI Functional Test: Sub-process, function and evaluation criteria changes~~
~~Page D1-57~~	~~3.0 M&R-3: ECTA Normal Volume Performance Test – Function and evaluation criteria changes~~
~~Page D1-58~~	~~4.0 M&R-4: ECTA Peak Volume Performance Test – Function and evaluation criteria changes~~
Pages D1-~~61~~52 – D1-~~63~~54	7.0 M&R-7: M&R Performance Measures Evaluation ~~– Test cycle name, sub-process, function and e~~Evaluation criteria changes
~~Pages D1-64 – D1-65~~	~~8.0 M&R-8: TAFI Documentation Evaluation – Sub-process, function and evaluation criteria changes~~
~~Page D1-67~~	~~10.0 M&R-10: M&R Process Evaluation – Evaluation criteria changes~~
Appendix D2: SQMs GA Performance Reports	
	None.
Appendix E: Test Cycles	
	None.
Appendix F: Reference Documents	
	None.
Appendix G: Glossary	
	None.
Flow-Through Evaluation	
	The scope of this work is under separate review.

IV. Pre-Ordering Test Section

A. Overview

The purpose of this section is to define the specific pre-order tests to be undertaken in evaluating the systems and related operational elements associated with BellSouth's establishment and maintenance of business with CLECs.

B. Scope

The pre-ordering test scope is defined across the following test dimensions: interface, test objective, product category, and test technique. The table identifies the test target, the interface under test, the primary test objective(s), the BST product offering, and the test technique(s) to be employed.

Test Cycle	***Test Dimensions***			
	Interface	***Primary Test Objective***	***Product Category***	***Test Technique***
PRE-1: TAG Pre-Ordering Functional Test	TAG	Functionality	Product Independent	Transaction Processing
PRE-2: Pre-Ordering Performance Measures Evaluation	TAG	Performance	Product Independent	Performance Comparison
PRE-3: TAG Pre-Ordering Documentation Evaluation	TAG	Documentation	Product Independent	Document Review/ Observation
PRE-4: TAG Pre-Ordering Normal Volume Test	TAG	Volume & Performance	Resale, UNE	Volume Transaction Processing
PRE-5: TAG Pre-Ordering Peak Volume Test	TAG	Volume	Resale, UNE	Volume Transaction Processing
PRE-6: Pre-Order Processing Systems Capacity Management Evaluation	TAG, Other Shared Systems	Processing Capacity	Resale, UNE	Inspection Interview

Figure IV-1: Pre-Ordering Test Cycles

Pre-order volume testing is addressed within the O&P normal and peak volume performance tests.

C. Test Cycles

1.0 PRE-1: TAG Pre-Ordering Functional Test

1.1 Description

The TAG Pre-Ordering Functional Test will evaluate the functional elements of the pre-ordering process for UNEs as delivered to CLECs by the TAG interface. This test cycle will be executed by submitting pre-order transactions against BellSouth test-bed accounts. Pre-Orders will be submitted as both stand-alone transactions and as integrated pre-order/order transactions. For a defined set of integrated transactions, information returned on the pre-order response will be used to populate fields on subsequent orders. This activity is undertaken to simulate the system-related activities of a CLEC wishing to integrate the pre-order and order functions.

TAG pre-ordering functionality and the documentation addressing its use will be tested in a cycle that will target customer service records, feature/service availability, telephone number assignment and cancellation, address validation, appointment availability and due date calculation. Transactions will be submitted using multiple "entry points" (e.g., circuit identifier and telephone number for CSRs, or telephone number and partial address for address validations), request types, customer types (where applicable), and central office switch locations.

This test will require BellSouth to establish a test bed of customer accounts against which the requisite pre-order service inquiries may be placed. The test scenarios to be used in the TAG Pre-Ordering Functional Test are described in **Appendix B-1: Pre-Ordering Scenarios**.

The Test Manager will coordinate efforts with BellSouth to ensure that, where appropriate and prior to beginning the test, BellSouth's and KPMG's performance measurement systems are prepared to track test transaction performance. Test cycle performance data will be collected and delivered to the Pre-Ordering Performance Measures Evaluation (PRE-2).

1.2 Objective

The objective of the TAG Functional Pre-Ordering Test is to evaluate the existence of TAG functionality for electronically ordered UNEs in accordance with the TAG documentation.

1.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- TAG documentation and training obtained.
- Test transaction tracking strategy identified.
- Target evaluation metrics identified.
- BellSouth and KPMG performance measurement tracking systems prepared to track test transactions.
- All appropriate SRT activities completed.
- Transaction submission tools installed and configured.
- BellSouth test-bed customer account data loaded and verified by the Test Manager.
- Expected results files completed.
- Integrated test management tools installed and configured.
- Test cases and test instances developed and loaded.
- Test case execution scheduled.
- Test cycle execution checklist created.
- Test logs created and results reporting template completed.
- Test execution team staffed, scheduled, and trained.
- Test Plan and evaluation criteria defined and approved.

1.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate TAG functionality.

Test Objectives: Functionality, Performance, Documentation, and Interface *Test Technique: Transaction Processing*	
Sub-Process	***Function***
Validate Address	Create and send address request using BTN.
	Send address validation request using WTN.
	Send address validation request using partial address.
	Receive match response.
	Receive near-match response.
	Receive no-match response.
	Receive error response.
	Correct error(s).
	Resend address inquiry.
	Receive match response.
Retrieve CSR	Create and Ssend CSR request using BTN.
	Send CSR request using WTN.
	Send CSR request using circuit identifier and state code.
	Send CSR request using miscellaneous account number.
	~~Send request for directory information only.~~
	Receive match response.
	Receive no-match response.
	Receive error response.
	Correct error(s).
	Resend CSR inquiry.
	Receive match response.
Determine Product / Service Availability	Create and send service availability (LPIC, PIC, Switch Service Availability) request transaction.

Test Objectives: Functionality, Performance, Documentation, and Interface *Test Technique: Transaction Processing*	
Sub-Process	***Function***
	Receive availability response.
	Receive error response.
	Correct error(s).
	Resend service availability inquiry.
	Receive availability response.
Request Available Telephone Number(s)	Create and send TN request for specific number(s) (Easy, Sequential, Ascending, Vanity, etc.).
	Send TN request for random number(s).
	Send TN request for a range of specific numbers.
	Send TN request for a range of random numbers.
	Receive available numbers response.
	Receive error response.
	Correct error(s).
	Resend available telephone number request.
	Receive available numbers response.
Reserve TN(s)	Create and send reservation request for a single TN.
	Send reservation request for Multi-line Hunt.
	Send reservation request for Direct-In-Dial.
	Send reservation extension request.
	Receive confirmation response.
	Receive error response.
	Correct error(s).
	Resend TN reservation request.

Test Objectives: Functionality, Performance, Documentation, and Interface Test Technique: Transaction Processing	
Sub-Process	**Function**
	Receive confirmation response.
Cancel TN Reservation	Create and send cancel reservation request for a single TN.
	Send cancel reservation request for Multi-line Hunt.
	Send cancel reservation request for Direct-In-Dial.
	Receive confirmation response.
	Receive error response.
	Correct error(s).
	Resend cancel TN reservation request.
	Receive confirmation response.
Determine Appointment Availability	Create and send request for appointment availability.
	Receive valid response.
	Receive error response.
	Correct error(s).
	Resend available due date request.
	Receive valid response.
Calculate Due Date	Create and send request for due date calculation.
	Receive valid response.
	Receive error response.
	Correct error(s).
	Resend due date calculation request.
	Receive valid response.
Pre-order / Order Integration	Submit pre-order transactions designated for integration test.

14. Calculate and report evaluation metrics.

1.6 Exit Criteria

- Global Exit Criteria satisfied.
- Disaggregated performance metrics report completed and delivered to Pre-Ordering Performance Measures Evaluation.
- Expected versus actual results report completed.
- Exceptions report completed.
- Documentation issue logs delivered to Document Review Test.
- Response information from integration pre-orders delivered to O&P-1 and O&P-2.
- Test cycle results summary report completed.
- Exit review completed.

2.0 PRE-2: Pre-Ordering Performance Measures Evaluation

2.1 Description

The Pre-Ordering Performance Measures Evaluation is a comparative analysis of performance results collected by KPMG test management tools and by BellSouth's OSS performance measurement system. The source results collected from PRE-1: TAG Functional Test, O&P-3: EDI/TAG Normal Volume Performance Test, and O&P-4: EDI/TAG Peak Volume Performance Test will be compared to BellSouth's performance results; accuracy and trends will be identified; and disparities will be analyzed for significance.

2.2 Objective

The objective of the Pre-Ordering Performance Measures Evaluation is to assess the accuracy of BellSouth's wholesale performance metrics results using test transactions.

2.3 Entrance Criteria

- Global Entrance Criteria satisfied.

- Results comparison strategy defined.
- TAG Pre-Ordering Functional Tests, including disaggregated performance metrics reports, completed.
- TAG Normal and Peak Volume Performance Tests, including disaggregated performance metrics reports, completed.
- BellSouth performance measurement system reports compiled.
- Test execution scheduled.
- Test logs created and results reporting template completed.
- Test execution team staffed, scheduled, and trained.
- Test Plan and evaluation criteria defined and approved.
- Guidelines for measuring variances defined.

2.4 Test Scope

The test scope will address the following sub-processes and functions to compare performance results.

Test Objective: Performance ***Test Techniques: Performance Comparison***	
Sub-Process	***Function***
Average OSS Response Time and Response Interval	RSAG – Address RSAG – TN ATLAS COFFI DSAP HAL P/SIMS OASIS
OSS Interface Availability	Not disaggregated.

Figure IV-III: Pre-Ordering Performance Measures Evaluation Test Scope

2.5 Test Activities

1. Acquire and format BellSouth and test performance data files.
2. Compare disaggregated BellSouth performance results with test management tools performance results.
3. Flag any unexplained variance in results comparison and determine next steps in exception and resolution process.
4. Generate comparison analysis results reports.

2.6 Exit Criteria

- Global Exit Criteria satisfied.
- Comparison analysis report completed.
- Results variance findings documented.
- Exceptions report completed.
- Test cycle results summary report completed.

3.0 PRE-3: TAG Pre-Ordering Documentation Evaluation

3.1 Description

The TAG Pre-Ordering Documentation Evaluation is an analysis of the BellSouth-provided documentation used by CLECs to interface and interact with the TAG interface for pre-ordering activities. This evaluation is intended to review the availability, accuracy and completeness of BellSouth's pre-ordering documentation using a variety of operational analysis techniques. This test will generate exception reports due to issues pertaining to documentation as input from the PRE-1: TAG Functional Test, O&P-3: EDI/TAG Normal Volume Performance Test, and O&P-4: EDI/TAG Peak Volume Performance Test. These exceptions reports will address whether system functionality matches that described in the business rules documentation.

3.2 Objective

The objective of TAG Pre-Ordering Documentation Evaluation is to assess whether the documentation provided by BellSouth adequately assists CLECs in understanding how to implement and use all of the TAG pre-ordering functions available to them.

3.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- TAG and LEO documentation obtained.
- Teams staffed, scheduled, and trained.
- Documentation evaluation checklists completed.
- Test Plan and evaluation criteria defined and approved.
- Interview guide/questionnaire(s) completed.
- Exception reports due to documentation from PRE-1: TAG Functional Test received.
- Exceptions reports due to documentation received from O&P-3: EDI/TAG Normal Volume Performance Test and O&P-4: EDI/TAG Peak Volume Performance Test.
- BellSouth and CLEC documentation order specialist and user contact information provided.
- Process for logging exceptions defined and accepted.

3.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate TAG documentation along with additional relevant information identified during the test.

Test Objective: Documentation ***Test Technique: Document Review and Observation***	
Sub-Process	***Function***
Pre-Ordering Documentation	Document structure and format.
	Document content.
	Release management.
	Document accuracy.

Test Objective: Documentation Test Technique: Document Review and Observation	
Sub-Process	**Function**
Validate Address	Create address validation request transaction.
	Correct errors.
Retrieve CSR	Determine type of inquiry to send.
	Create CSR request transaction.
	Correct errors.
Request available telephone number(s)	Create available telephone number request transaction.
	Correct errors.
Reserve TN(s)	Create telephone number reservation transaction.
	Correct errors.
Cancel TN reservation	Create telephone number cancellation or exchange transaction.
	Correct errors.
Determine product/service availability	Create service availability request transaction.
	Correct errors.
Calculate Due Date	Create due date calculation request transaction.
	Correct errors.
Determine Appointment Availability	Create appointment availability request transaction.
	Correct errors.

Figure IV-IV: TAG Pre-Ordering Document Review Test Scope

3.4.1 Documents in Test Scope

The following is a non-exclusive list of documents to be examined:

- Pre-Order Business Rules
- Pre-Order Business Rules Data Dictionary

3.5 Test Activities

1. Obtain relevant documentation needed to carry out business processes related to pre-ordering.
2. Conduct documentation evaluation using documentation evaluation checklists.
3. Conduct interviews with BellSouth documentation specialists.
4. Conduct interviews with CLEC documentation users.
5. Log incidents noted during testing.
6. Compile results.
7. Flag any exceptions or mismatched responses and determine next steps in execution resolution process.
8. Generate test results reports.

3.6 Exit Criteria

- Global Exit Criteria satisfied.
- Documentation checklists completed.
- Interview summaries completed.
- Exception report(s) completed.
- Summary evaluation report completed.
- Exit review completed.

4.0 PRE-4: TAG Normal Volume Performance Test

4.1 Description

The TAG Normal Volume Performance Test will evaluate simultaneously the behavior and performance of the TAG interfaces under "normal" YE01 projected transaction load conditions. This test cycle will be executed in a manner consistent with the forecasted daily usage patterns and transaction mix (including error conditions) for each interface by TTGs capable of submitting large volumes of flow-through pre-ordering (TAG only) and resale and UNE service request test cases. Patterns of time within the day and patterns of days within the month will be emulated. [See *Section VII O&P-3: EDI/TAG Normal Volume Performance Test* for the detailed requirements for this combined test.]

5.0 PRE-5: TAG Peak Volume Performance Test

5.1 Description

The TAG Peak Volume Performance Test will evaluate simultaneously the behavior and performance of the TAG interfaces under "peak" YE01 projected transaction load conditions. This test cycle will execute selected flow-through pre-ordering (TAG only) and resale and UNE test cases, including error conditions. The peak volume forecast will be developed using the peak hourly load identified for the TAG Normal Volume Performance Test, replicating those transaction volumes across an eight-hour period. Alternatively, if BellSouth's normal daily usage patterns are relatively flat, a multiple may be applied to the peak hourly load and the result replicated across an eight-hour day. [See *Section VII O&P-4: EDI/TAG Peak Volume Performance Test* for the detailed requirements for this combined test.]

6.0 PRE-6: Pre-Order Processing Systems Capacity Management Evaluation

6.1 Description

The Pre-Order Processing Systems Capacity Management Evaluation is a detailed review of the safeguards and procedures in place to plan for and manage projected growth in the use of the TAG interface and the other shared systems for pre-order processing.

6.2 Objective

The objective of this evaluation is to determine the extent to which procedures to accommodate increases in the pre-order TAG interface transaction volumes and users are being actively managed.

6.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- Availability of documentation identified as input.
    - Technical documentation identified and obtained for Pre-Order Processing Systems
- Interview Guide / Questionnaire developed.
- Interviewees identified and scheduled.
- Detailed evaluation checklists developed.

6.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate pre-order capacity management.

Test Objective: Capacity Management ***Test Technique: Inspection and Interview***	
Sub-Process	***Function***
Pre-orderCapacity Management	Data collection and reporting of business volumes, resource utilization, and performance monitoring
	Data verification and analysis of business volumes, resource utilization, and performance monitoring
	Systems and capacity planning.

Figure IV-VI: Pre-Order Processing Systems Capacity Management Evaluation Test Scope

6.5 Test Activities

Interviews will be conducted with system administration personnel responsible for the operation of pre-order processing. These interviews will be supplemented with an analysis of BellSouth capacity management procedures as well as evidence of related activities such as: periodic capacity management reviews; system reconfiguration/load balancing; and load increase induced upgrades.

1. Review procedural and other documentation related to pre-order capacity management.
2. Conduct interviews with key systems administration and support personnel as appropriate.
3. Document findings.
4. Resolve exceptions.

6.6 Exit Criteria

- Global Exit Criteria satisfied.
- Documentation reviews completed.
- Interviews completed.
- Summary findings and conclusions.
- Exit review completed.

V. Ordering and Provisioning Test Section

A. Overview

The purpose of this section is to define the specific order and provisioning tests to be undertaken in evaluating the systems and related operational elements associated with BellSouth's establishment and maintenance of business with CLECs.

B. Scope

The ordering and provisioning test scope is defined by the following test dimensions: interface, test objective, product category, and test technique. The table identifies the test target, the interface under test, the primary test objective(s), the BST product offering, and the test technique(s) to be employed.

Test Cycle	***Test Dimensions***			
	Interface	***Primary Test Objective***	***Product Category***	***Test Technique***
O&P-1: EDI Functional Test	EDI	Functionality	UNE	Transaction Processing
O&P-2: TAG Functional Test	TAG	Functionality	UNE	Transaction Processing
O&P-3: EDI/TAG Normal Volume Performance Test	EDI TAG	Volume & Performance	Resale UNE	Transaction Processing
O&P-4: EDI/TAG Peak Volume Performance Test	EDI TAG	Volume & Performance	Resale UNE	Transaction Processing
O&P-5: Provisioning Verification Test	TAG	Performance	UNE	Transaction Processing Inspection
O&P-6: Order Processing Systems Capacity Management Evaluation	EDI, TAG, LEO, LESOG, LNP, SOCS	Processing Capacity	Resale UNE	Inspection Interview
O&P-7: O&P Performance Measures Evaluation	EDI TAG	Performance	Resale UNE	Performance Comparison
O&P-8: EDI Documentation Evaluation	EDI	Documentation	UNE	Document Review

Evaluation				Review Interview
O&P-9: TAG Documentation Evaluation	TAG	Documentation	UNE	Document Review Observation
O&P-10: EDI/TAG Production Volume Performance Test	EDI TAG	Volume & Performance	Resale UNE	Transaction Processing

Figure V I: Ordering and Provisioning Test Cycles

C. Test Cycles

1.0 O&P-1: EDI Functional Test

1.1 Description

The EDI Functional Test will evaluate the functional elements of the ordering and provisioning process for UNEs as delivered to CLECs by the EDI interface. This test cycle will be executed by submitting local service requests (LSRs) for UNEs against BellSouth test-bed accounts and allowing the process to continue through the return of either a firm order confirmation (FOC) or reject/error notice. A number of these transactions will be permitted to proceed through the physical provisioning process and the return of an electronic completion notice (CN). This test cycle will address all electronically ordered UNE requisition type and activity type combinations for business and residence customers. Other functional elements of the UNE ordering and provisioning process to be tested include flow-through and non-flow-through orders, full and partial migrations, error conditions, order supplements, directory listings, cancels, dispatch and non-dispatch provisioning, expedites, service order status inquiries, and jeopardy notices delivered through the EDI interface.

Orders will be submitted as both stand alone transactions and as integrated pre-order /order transactions. For a defined set of integrated transactions, information returned on the pre-order response will be used to populate fields on subsequent orders. This activity is undertaken to simulate the system-related activities of a CLEC wishing to integrate the pre-order and order functions.

Additionally in preparation for the volume test, a limited number of resale scenarios will be tested to evaluate the functional elements of the ordering and provisioning process for resale orders as delivered to CLECs by the EDI interface. This test cycle will be executed by submitting local service requests (LSRs) for resale orders against BellSouth test-bed accounts and allowing the process to continue through the return of either a firm order confirmation (FOC) or reject/error notice. A number of these transactions will be permitted to proceed through the physical provisioning process and the return of an electronic completion notice (CN).

The EDI ordering and provisioning test will require BellSouth to establish a test bed of customer accounts against which to place the requisite service requests. Customer test accounts will be distributed geographically across multiple Georgia COs and switching/transmission equipment configurations. Additionally, the downstream CRIS/CABS Invoicing Functional Test (BLG-1) requires that those transactions allowed to complete through provisioning utilize three operating company numbers (OCNs). The test scenarios to be used in the EDI Functional Test are described in **Appendix B-3: UNE Ordering Scenarios**.

Scenarios for ordering Local Number Portability (LNP) and for CLEC-to-CLEC migrations will be processed by the Test Manager using customer data and other requisite order data from CLECs currently doing business with BellSouth Georgia.

EDI ordering and provisioning functionality will be reviewed along with the documentation addressing its use. Documentation issues encountered during the creation of order transactions will be analyzed and reported in O&P-8: EDI Documentation review.

The Test Cycle Manager will coordinate efforts with BellSouth to ensure that BellSouth's and KPMG's performance measurement systems are prepared to track test transaction performance prior to beginning the test. Test cycle performance data will also be collected through test management tools and delivered to the O&P Performance Measures Evaluation (O&P-7).

1.2 Objective

The objective of the EDI Functional Test is to evaluate the existence of EDI functionality for electronically ordered UNEs in accordance with EDI documentation.

1.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- EDI documentation and training materials obtained.
- Test transaction tracking strategy identified.
- Five OCNs acquired and deployed (three for provisioning).
- Target performance metrics identified.
- BellSouth's and KPMG's performance measurement tracking systems prepared to track test transactions.
- Transaction submission tools installed and configured.

- All appropriate SRT activities completed.
- BellSouth test-bed customer account data loaded.
- CLEC data for LNP orders obtained.
- Expected results files completed.
- Integrated test management tools installed and configured.
- Test scripts (transaction content) completed and loaded.
- Test case execution scheduled.
- Test cycle execution checklist created.
- Test logs created and results reporting template completed.
- Test execution team staffed, scheduled, and trained.
- Test Plan and evaluation criteria defined and approved.

1.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate EDI functionality.

Test Objective: Functionality, Performance, Documentation, and Interface Test Technique: Transaction Processing	
Sub-Process	***Function***
Submit an Order	Create and send order in LSR format.
	Receive acknowledgment.
	Receive FOC/error/reject notification.
	Send expedited order transaction.
Submit an Error	Create and send error in LSR format.
	Receive acknowledgment.
	Receive planned error/reject notification.

Test Objective: Functionality, Performance, Documentation, and Interface *Test Technique: Transaction Processing*	
Sub-Process	***Function***
	Correct error(s).
	Resend integrated LSR.
	Receive FOC.
Supplement an Order	Create and send supplement transactions.
	Receive acknowledgment.
	Receive FOC/error/reject notification.
	Correct error(s).
	Resend supplement.
	Receive FOC.
Pre-order/Order Integration	Populate integration orders with information returned from designated pre-order response.
	Submit integration orders.
	Receive acknowledgement.
	Receive error/reject notification.
	Correct errors.
	Resend integration order.
	Receive FOC.
Receive Completion Notice (CN)	Receive CN transaction.
Receive Jeopardy Notification	Receive Jeopardy Notification transaction.
Receive Missed Appointment Notification	Receive Missed Appointment transaction.

Test Objective: Functionality, Performance, Documentation, and Interface *Test Technique: Transaction Processing*	
Sub-Process	***Function***
Check Service Order Status	Check service order status.

Figure V II: EDI Functional Test Scope

1.5 Test Activities

1. Submit EDI test case transactions according to schedule.
2. Log transaction identifier(s) and submission date/time stamp.
3. Receive transaction responses.
4. Log transaction identifier(s) and receipt date/time stamp.
5. Format transaction response for comparator evaluation.
6. Match transaction response to submitted transaction.
7. Verify that transaction response contains expected results.
8. Flag any exceptions or mismatched responses and determine next steps in exception resolution process.
9. Log documentation issues uncovered during transactions creation and submission process.
10. Resubmit transactions as necessary.
11. Review comparator results and identify pending/open transactions.
12. Generate test results reports.
13. Calculate and report performance metrics.

1.6 Exit Criteria

- Global Exit Criteria satisfied.
- Exception resolution activities and reports are complete.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.

2.0 O&P-2: TAG Functional Test

2.1 Description

The TAG Functional Test will evaluate the functional elements of the ordering and provisioning process for UNEs as delivered to CLECs via the TAG interface. This test cycle will be executed by submitting LSRs for UNEs against BellSouth test-bed accounts and allowing the process to continue through the return of either an FOC or reject/error notice. A number of these transactions will be permitted to proceed through the physical provisioning process and return an electronic CN.

This test cycle will address all electronically ordered UNE requisition type and activity type combinations for business and residence customers. Other functional elements of the UNE ordering and provisioning process to be tested include flow-through and non-flow-through orders, full and partial migrations, error conditions, order supplements, directory listings, cancels, dispatch and non-dispatch provisioning, expedites, service order status inquiries, and jeopardy notices delivered through the TAG interface.

Orders will be submitted as both stand alone transactions and as integrated pre-order /order transactions. For a defined set of integrated transactions, information returned on the pre-order response will be used to populate fields on subsequent orders. This activity is undertaken to simulate the system-related activities of a CLEC wishing to integrate the pre-order and order functions. Additionally, in preparation for the volume test, a limited number of resale scenarios will be tested to evaluate the functional elements of the ordering and provisioning process for resale orders as delivered to CLECs by the TAG interface. This test cycle will be executed by submitting LSRs for resale orders against BellSouth test-bed accounts and allowing the process to continue through the return of either a firm order confirmation (FOC) or reject/error notice. A number of these transactions will be permitted to proceed through the physical provisioning process and the return of an electronic completion notice (CN).

The TAG interface ordering and provisioning test will require BellSouth to establish a test bed of customer accounts against which to place the requisite service requests. Customer test accounts will be distributed geographically across multiple Georgia COs and switching/transmission equipment configurations. Additionally, the downstream CRIS/CABS Invoicing Functional Test (BLG-1) requires that those transactions allowed to complete through provisioning utilize two OCNs. The test scenarios to be used in the TAG Functional Test are described in **Appendix B-3: UNE Ordering Scenarios**.

Scenarios for ordering Local Number Portability (LNP) and CLEC-to-CLEC migrations will be processed by the Test Manager using customer data and other requisite order data from CLECs currently doing business with BellSouth Georgia.

TAG ordering functionality will be reviewed along with the documentation addressing its use. Documentation issues encountered during the creation of order transactions will be analyzed and report in O&P-9: TAG Documentation Review.

The Test Cycle Manager will coordinate efforts with BellSouth to ensure that BellSouth's and KPMG's performance measurement systems are prepared to track test transaction performance prior to beginning the test. Test cycle performance data will be also be collected through test management tools and delivered to the O&P Performance Measures Evaluation (O&P-7).

2.2 Objective

The objective of the TAG Functional Test is to evaluate the functionality for electronically ordered UNEs in accordance with TAG documentation.

2.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- TAG documentation and training materials obtained.
- Test transaction tracking strategy identified.
- Five OCNs acquired and deployed (three for provisioning).
- Target performance metrics identified.
- BellSouth's and KPMG's performance measurement tracking systems prepared to track test transactions.
- All appropriate SRT activities completed.
- Transaction submission tools installed and configured.
- BellSouth test-bed customer account data loaded.
- CLEC data for LNP orders obtained.
- Expected result files completed.
- Integrated test management tools installed and configured.
- Test scripts (transaction content) completed and loaded.
- Test case execution scheduled.
- Test cycle execution checklist created.
- Test logs created and results reporting templates completed.

- Test execution team staffed, scheduled, and trained.
- Test Plan and evaluation criteria defined and approved.

2.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate TAG functionality.

Test Objective: Functionality, Performance, Documentation, and Interface Test Technique: Transaction Processing	
Sub-Process	***Function***
Submit an Order	Create and send order in LSR format.
	Receive acknowledgment.
	Receive FOC/error/reject/notification.
	Send expedited order transaction.
Submit an Error	Create and send error in LSR format.
	Receive acknowledgment.
	Receive planned error/reject notification.
	Correct error(s).
	Resend integrated LSR.
	Receive FOC.
Supplement an Order	Create and send supplement transactions.
	Receive acknowledgment.
	Receive FOC/error/reject notification.
	Correct error(s).
	Resend supplement.
	Receive FOC.

Test Objective: Functionality, Performance, Documentation, and Interface Test Technique: Transaction Processing	
Sub-Process	***Function***
Pre-order/Order Integration	Populate integration orders with information returned from designated pre-order response.
	Submit integration orders.
	Receive acknowledgement.
	Receive error/reject notification.
	Correct errors.
	Resend integration order.
	Receive FOC.
Receive Completion Notice	Receive CN transaction.
Receive Jeopardy Notification	Receive Jeopardy Notification transaction.
Receive Missed Appointment Notification	Receive Missed Appointment Notification transaction.
Check Service Order Status	Create Check service order status request.
	Send transaction.
	Receive response.

Figure V III: TAG Functional Test Scope

2.5 Test Activities

1. Submit TAG test case transactions according to schedule.
2. Log transaction identifier(s) and submission date/time stamp.
3. Receive transaction responses.
4. Log transaction identifier(s) and receipt date/time stamp.
5. Format transaction response for comparator evaluation.
6. Match transaction response to submitted transaction.
7. Verify that transaction response contains expected results.

8. Flag any exceptions or mismatched responses and determine next steps in exception resolution process.
9. Review comparator results and identify pending/open transactions.
10. Generate test results reports.
11. Calculate and report performance metrics.

2.6 Exit Criteria

- Global Exit Criteria satisfied.
- Exception resolution activities and reports are complete.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.

3.0 O&P-3: EDI/TAG Normal Volume Performance Test

3.1 Description

The EDI/TAG Normal Volume Performance Test will evaluate simultaneously the behavior and performance of both the EDI and TAG interfaces under "normal" YE01 projected transaction load conditions. This test cycle will be executed by TTGs in a manner consistent with the forecasted daily usage patterns and transaction mix (including error conditions) for each interface. The TTGs are capable of submitting large volumes of flow-through pre-ordering (TAG only), and resale and UNE service request test cases. Patterns of time within the day and patterns of days within the month will be emulated.

The normal volume forecast will be developed across BellSouth's entire nine-state region as described in **Appendix C: Volume Analysis**. The test will be executed during two ten-hour periods by modeling the expected normal daily usage pattern (*e.g.*, the off-peak nighttime hour loads will be ignored for the test). The majority of the transactions submitted in support of this test cycle are expected to flow through BellSouth's OSS electronically and return an error or an FOC. However, a representative sample of transactions will be submitted to test BellSouth's processing capacity for electronically ordered service requests and errors that fall out for manual processing. LSR transaction loads will be distributed geographically across multiple Georgia COs. BellSouth will ensure that customer test accounts are established and configured accordingly.

The test scenarios to be used in the EDI/TAG Normal Volume Performance Test are described in **Appendix B-2: Resale Ordering Scenarios** and **Appendix B-3: UNE Ordering Scenarios**.

TAG and EDI volume tests will be conducted in parallel, using a forecasted order split of 60% - 40% respectively. The PRE-4: TAG Pre Ordering Normal Volume Test will also be conducted in parallel. The Test Cycle Manager will coordinate efforts with BellSouth to ensure that BellSouth's and KPMG's performance measurement systems are prepared to track test transaction performance prior to beginning the test. Test cycle performance data will also be collected through test management tools and delivered to the O&P Performance Measures Evaluation (O&P-7) and KPMG as inputs to their respective test execution functions.

3.2 Objective

The objective of the EDI/TAG Normal Volume Performance Test is to measure the performance of the EDI and TAG interface under normal projected YE01 transaction loads.

3.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- EDI and TAG documentation obtained.
- O&P-1: EDI Functional Test and O&P-2: TAG Functional Test successfully completed.
- Test transaction tracking strategy identified.
- Normal volume level defined.
- BellSouth's and KPMG's performance measurement tracking systems prepared to track transactions.
- Certification testing for TTGs completed.
- Test scenarios selected (refer to **Appendix B-2 & Appendix B-3**).
- Test cases selected.
- BellSouth test bed customer account data loaded.
- Expected result files completed.
- Integrated test management tools installed and configured.
- Test scripts (transaction content) completed and loaded.
- Test case execution scheduled.

- Test cycle execution checklist created.
- Test logs created and results reporting template completed.
- Account and security access to EDI and TAG established.
- EDI and TAG connectivity established.
- Test execution team staffed, scheduled, and trained.
- Test Plan and evaluation criteria defined and approved.

3.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate EDI and TAG performance under YE01 normal projected transaction loads.

Test Objective: Volume & Scalability, Performance, and Interface ***Test Technique: Transaction Processing***	
Sub-Process	***Function***
Submit Orders in Projected Normal Volumes	Create order transaction(s).
	Send order in LSR format.
	Receive acknowledgment.
	Receive FOC or error/reject notification.
	Send transaction response.

Figure V IV: EDI/TAG Normal Volume Performance Test Scope

3.5 Test Activities

1. Submit EDI/TAG test case transactions according to schedule.
2. Log transaction identifier(s) and submission date/time stamp.
3. Receive transaction responses.

4. Log transaction identifier(s) and receipt date/time stamp.
5. Verify that transaction response contains expected results.
6. Analyze timeliness performance
7. Flag any exceptions or mismatched responses and determine next steps in exception process
8. Generate test results reports.

3.6 Exit Criteria

- Global Exit Criteria satisfied.
- Exception resolution activities and reports are complete.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.

4.0 O&P-4: EDI/TAG Peak Volume Performance Test

4.1 Description

The EDI/TAG Peak Volume Performance Test will evaluate the behavior and performance of both the EDI and TAG interfaces under "peak" YE01 projected transaction load conditions simultaneously. This test cycle will execute selected flow-through pre-ordering (TAG only) resale and UNE service request test cases, including error conditions. The PRE-5: TAG Pre Ordering Peak Volume Test will be conducted in parallel with this test.

The peak volume forecast will be developed using the peak hourly load identified for the EDI/TAG Normal Volume Performance Test, replicating those transaction volumes across an eight-hour period. Alternatively, if BellSouth's normal daily usage patterns are relatively flat, a multiple may be applied to the peak hourly load and the result replicated across an eight-hour day. The methodology and calculations are discussed further in **Appendix C: Volume Analysis**.

The peak volume test will be executed during two eight-hour periods. LSR loads will again be distributed geographically across multiple Georgia COs to more accurately reflect a realistic peak load operating environment. BellSouth will ensure that customer test accounts are established and configured accordingly.

The test scenarios to be used in the EDI/~~TAG~~ Peak Volume Performance Test are described in **Appendix B-2: Resale Ordering Scenarios** and **Appendix B-3: UNE Ordering Scenarios**.

The Test Cycle Manager will coordinate efforts with BellSouth to ensure that BellSouth's and KPMG's performance measurement systems are prepared to track test transaction performance prior to beginning the test. Test cycle performance data will also be collected through test management tools and delivered to the O&P Performance Measures Evaluation (O&P-7) and KPMG as inputs to their respective test execution functions.

4.2 Objective

The objective of the EDI/TAG Peak Volume Performance Test is to measure the performance of the EDI and TAG interfaces under peak projected YE01 transaction loads.

4.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- EDI and TAG documentation obtained.
- O&P3 EDI/TAG Normal Volume Performance Test completed.
- Test transaction tracking strategy identified.
- Peak volume level defined.
- BellSouth's and KPMG's performance measurement tracking systems prepared to track transactions.
- Test scenarios selected (refer to **Appendix B-2 & Appendix B-3**).
- Test cases selected.
- BellSouth test bed customer account data loaded.
- Expected results files completed.
- Integrated test management tools installed and configured.
- Test scripts (transaction content) completed and loaded.
- Test case execution scheduled.
- Test cycle execution checklist created.

- Test logs created and results ~~reporting~~ template completed.
- Account and security access to EDI and TAG established.
- EDI and TAG connectivity established.
- Test execution team staffed, scheduled, and trained.
- Test Plan and evaluation criteria defined and approved.

4.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate EDI/TAG peak performance.

Test Objective: Volume & Scalability, Performance, and Interface Test Technique: Transaction Processing	
Sub-Process	***Function***
Submit Orders in Projected Peak Volumes	Create order transaction(s).
	Send order in LSR format.
	Receive acknowledgment.
	Receive FOC or error/rejection notification.
	Send transaction response.

Figure V V: EDI/TAG Peak Volume Performance Test Scope

4.5 Test Activities

1. Submit EDI/TAG test case transactions according to schedule.
2. Log transaction identifier(s) and submission date/time stamp.
3. Receive transaction responses.
4. Log transaction identifier(s) and receipt date/time stamp.
5. Analyze timeliness performance.

6. Flag any exceptions or mismatched responses and determine next steps in exception process.
7. Generate test results reports.

4.6 Exit Criteria

- Global Exit Criteria satisfied.
- Exception resolution activities and reports are complete.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.

5.0 O&P-5: Provisioning Verification Test

5.1 Description

The Provisioning Verification Test will evaluate BellSouth's ability to accurately and expeditiously complete the provisioning of service requests placed in both the O&P-1: EDI Functional Test and O&P-2: TAG Functional Test. This analysis will focus on electronically ordered UNEs and involves the physical inspection of BellSouth's provisioning process. Real CLEC provisioning activities will be observed to test end-to-end provisioning process on UNE – Loop orders. In addition, to test the full functionality of BellSouth's provisioning process, orders will be supplemented and canceled, require outside dispatch, and address customer coordination.

The test scenarios to be used in the Provisioning Verification Test are described in **Appendix B-3: UNE Ordering Scenarios**.

Test cycle performance data will be collected by an on-site observer and those results will be delivered to the O&P Performance Measures Evaluation (O&P-7) as inputs to test execution functions.

5.2 Objective

The objective of the Provisioning Evaluation Test is to evaluate BellSouth's performance in the provisioning of UNEs as described in the Georgia Order.

5.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- O&P-1, EDI Functional Test and O&P-2, TAG Functional Test successfully executed.
- LEO Implementation Guides (Volumes 1-4), Local Number Portability Ordering Guide, TAG API Programmers Guide, and Georgia SGAT obtained.
- Test transaction tracking strategy identified.
- BellSouth performance measurement tracking system prepared to track transactions.
- Three carrier OCNs obtained for provisioning.
- Test scenarios selected. (Refer to **Appendix B-3**).
- Test transaction tracking data elements identified.
- Expected result files completed.
- BellSouth test bed prepared and customer account data loaded.
- BellSouth test facilities available.
- Test management tools installed and fully configured.
- Test scripts (transaction content) completed and loaded.
- Test case execution scheduled.
- Detailed test cycle execution checklist created.
- Test logs created and results reporting templates completed.
- Test execution team identified, trained, and scheduled.
- Test Plan and evaluation criteria defined and approved.

5.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate UNE provisioning.

Test Objective: Functionality and Performance *Test Technique: Transaction Processing, Inspection*	
Sub-Process	***Function***
Receive completion notification	Receive completion notification transaction.
	Match response to order transcation and confirmation.
	Verify timeliness of completion.
Support provisioning process	Perform provisioning activity accurately.
	Confirm provisioning on orders requiring coordination.
	Manage provisioning process.
BellSouth provisioned service	BellSouth provisioning methods and procedures.

Figure V VI: Provisioning Verification Test Scope

5.5 Test Activities

1. Analyze FOC for provisioning information.
2. Log all provisioning notifications.
3. Verify provisioning appointment date/time.
4. Meet BellSouth provisioners for appointment.
5. Log interactions in provisioning checklist.
6. Perform testing on provisioned services.
7. Log activity completion date/time for provisioning event.
8. Record results in appropriate provisioning log.
9. Flag any exceptions or mismatched responses and determine next steps in exception process.
10. Generate test results reports.

5.6 Exit Criteria

- Global Exit Criteria satisfied.

- Exception resolution activities and reports are complete.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.

6.0 O&P-6: Order Processing Systems Capacity Management Evaluation

6.1 Description

The Order Processing Systems Capacity Management Evaluation is a detailed review of the safeguards and procedures in place to plan for and manage projected growth in the use of EDI, TAG, LEO, LESOG, LNP and SOCS [Order Processing Systems].

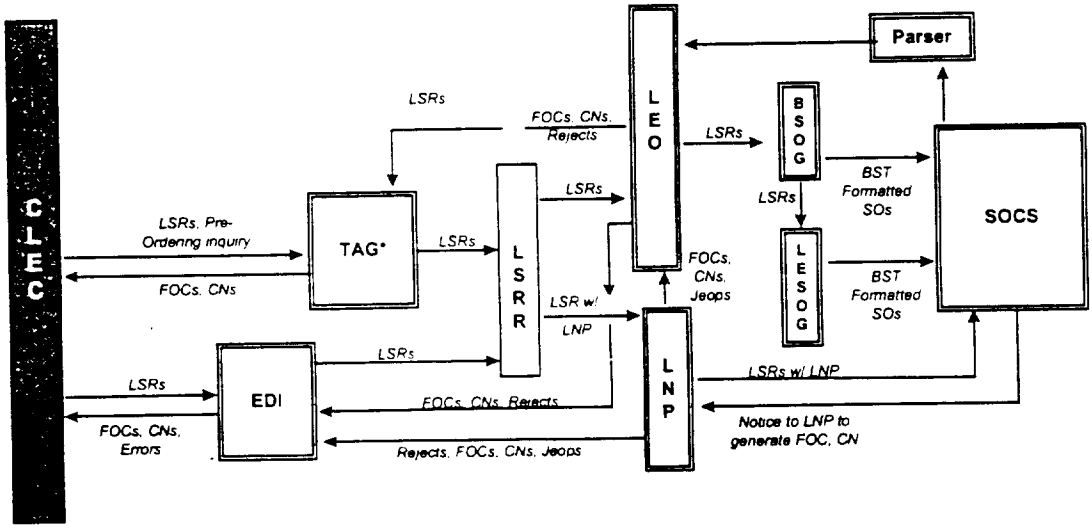

Figure VI VII: BellSouth's Ordering Network Elements

6.2 Objective

The objective of this evaluation is to analyze the capabilities of BST capacity management functions in relation to the order processing applications and determine whether the procedures are adequate to identify and implement capacity increments to satisfy projected customer business volumes on a timely basis.

6.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- Availability of documentation identified as input.
- Interview guide / questionnaire developed.
- Interviewees identified and scheduled.
- Detailed evaluation checklists developed.
- Technical documentation identified and obtained for Order Processing Systems.
- Test Plan and evaluation criteria defined and approved.

6.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate wholesale order processing capacity management.

Test Objective: Capacity Management ***Test Technique: Inspection and Interview***	
Sub-Process	***Function***
Order Processing SystemsCapacity Management	Data collection and reporting of business volumes, resource utilization, and performance monitoring
	Data verification and analysis of business volumes, resource utilization, and performance monitoring
	Systems and capacity planning

Figure V VIII: Order Processing Systems Capacity Management Evaluation Test Scope

6.5 Test Activities

Interviews will be conducted with system administration personnel responsible for the operation of the Order Processing Systems. These interviews will be supplemented with an analysis of BellSouth capacity management procedures as well as evidence of related

activities such as: periodic capacity management reviews; system reconfiguration/load balancing; and load increase induced upgrades.

1. Review procedural and other documentation related to order processing systems capacity management.
2. Conduct interviews with the key systems administration and support personnel as appropriate.
3. Document findings.
4. Resolve exceptions.

6.6 Exit Criteria

- Global Exit Criteria satisfied.
- Documentation reviews complete.
- Interviews completed.
- Capacity management review report completed.
- Exit review completed.

7.0 O&P-7: O&P Performance Measures Evaluation

7.1 Description

The O&P Performance Measures Evaluation is a comparative analysis of O&P performance results collected by the KPMG test management tools and by BellSouth's OSS performance measurement system. The source results collected from O&P-1: EDI Functional Test, O&P-2: TAG Functional Test, O&P-3: EDI/TAG Normal Volume Performance Test, and O&P-4: EDI/TAG Peak Volume Performance Test will be compared to BellSouth's performance results; accuracy and trends will be identified; and disparities will be analyzed for significance.

7.2 Objective

The objective of the O&P Performance is to assess the accuracy of BellSouth's wholesale performance metrics results using test transactions.

7.3 Entrance Criteria

- Global Entrance Criteria satisfied.

- Results comparison strategy defined.
- EDI/TAG Functional Tests completed with disaggregated performance metrics reports (including raw data in electronic form).
- EDI/TAG Normal and Peak Volume Performance Tests completed with disaggregated performance metrics reports (including raw data in electronic form)
- BellSouth performance measurement system reports compiled.
- Test execution scheduled.
- Test logs created and results reporting template completed.
- Test execution team staffed, scheduled, and trained.
- Test Plan and evaluation criteria defined and approved.
- Guidelines for measuring variances defined.

7.4 Test Scope

The test scope will address the following sub-processes and functions to compare performance results.

Test Objective: Performance ***Test Technique: Performance Comparison***	
Sub-Process	***Function***
Percent Rejected Service Requests	Resale Residence Resale Business Resale Specials UNE UNE Loop with NP Other

Test Objective: Performance Test Technique: Performance Comparison	
Sub-Process	**Function**
Reject Interval	Resale – Residence Resale – Business Resale – Design UNE Design UNE Non-Design UNE Loop with and w/o NP Mechanized (0-4 min., 4-8 min., 8-12 min., 12-60 min., 0-1 hr.,1-8 hrs., 8-24 hrs., >24 hrs.) Non-Mechanized (0-1 hr., 1-4 hrs., 4-8 hrs., 8-12 hrs., 12-16 hrs., 16-20 hrs., 20-24 hrs., >24 hrs.) Average Interval in Days
Firm Order Confirmation Timeliness	Resale – Residence Resale – Business Resale – Design UNE Design UNE Non-Design UNE Loop with and w/o NP Mechanized (0-15 min., 15-30 min., 30-45 min., 45-60 min., 60-90 min.,90-120 min., 120-240 min., 4-8 hrs., 8-12 hrs., 12-16 hrs., 16-20 hrs., 20-24 hrs., 24-48 hrs., >48 hrs.) Non-Mechanized (0-4 hr., 4-8 hrs., 8-12 hrs., 12-16 hrs., 16-20 hrs., 20-24 hrs., 24-48 hrs., >48 hrs.) Average Interval in Days
Speed of Answer in the Ordering Center	Not disaggregated
Mean Held Order Interval & Distribution Intervals	Circuit breakout <10 >=10 POTS – Residence POTS – Business Design UNE Design UNE Non-Design
Average Jeopardy Notice Interval & Percentage of Orders Given Jeopardy Notices	POTS – Residence POTS – Business Design UNE Design UNE Non-Design

Test Objective: Performance Test Technique: Performance Comparison	
Sub-Process	**Function**
Percent Missed Installation Appointments	<10 lines/circuits >10 lines/circuits Dispatch/No Dispatch POTS – Residence POTS – Business Design UNE Design UNE Non-Design
Average Completion Interval / Order Completion Interval Distribution	Dispatch/No Dispatch Residence and Business reported in day intervals: 0,1,2,3,4,5,5+ UNE and Design reported in day intervals: 0-5, 5-10, 10-15, 15-20, 20-25, 25-30, >=30 <10 lines/circuits >=10 lines/circuits POTS – Residence POTS – Business Design UNE Design UNE Non-Design
Average Completion Notice Interval	Reporting intervals in hours: 0-1, 1-2, 2-4, 4-8, 8-12, 12-24, >24, plus overall average hour interval <10 lines/circuits >=10 lines/circuits POTS – Residence POTS – Business Design UNE Design UNE Non-Design
Coordinated Customer Conversions	Reported in intervals: <=5 min., >5 and <=15 min., >15 min., plus Overall Average Interval UNE Loops without INP UNE Loops with INP

Test Objective: Performance Test Technique: Performance Comparison	
Sub-Process	**Function**
Percent Provisioning Troubles within 30 days of Service Order Activity	<10 lines/circuits >10 lines/circuits Dispatch/No Dispatch POTS – Residence POTS – Business Design UNE Design UNE Non-Design
Total Service Order Cycle Time	Dispatch/No Dispatch POTS – Residence POTS – Business Design UNE Design UNE Non-Design
Service Order Accuracy	<10 lines/circuits >10 lines/circuits Dispatch/No Dispatch POTS – Residence POTS – Business Design UNE Design UNE Non-Design

Figure V IX: O&P Performance Measures Evaluation Test Scope

7.5 Test Activities

1. Acquire and format BellSouth and test management tools performance data files.
2. Compare disaggregated BellSouth performance results with test management tools performance results.
3. Flag any exceptions in results comparison and determine next steps in exception resolution process.
4. Generate comparative analysis results reports.

7.6 Exit Criteria

- Global Exit Criteria satisfied.
- Exception resolution activities and reports are complete.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.

8.0 O&P-8: EDI Documentation Evaluation

8.1 Description

The EDI Documentation Evaluation is an analysis of the BellSouth-provided documentation used by CLECs to interface and interact with the EDI interface for ordering and provisioning activities. This evaluation is intended to review the availability, accuracy, and completeness of BellSouth's ordering and provisioning documentation using a variety of operational analysis techniques. This test will receive as input from the O&P-1: EDI Functional Test an exceptions report based on issues pertaining to documentation which addresses whether system functionality matches that described in the business rules documentation.

8.2 Objective

The objective of the EDI Documentation Evaluation is to assess whether the documentation provided by BellSouth adequately assists CLECs in understanding how to implement and use all of the EDI ordering and provisioning functions available to them.

8.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- EDI documentation obtained.
- Teams staffed, scheduled and trained
- Documentation evaluation checklist completed.
- Test Plan and evaluation criteria defined and approved.
- Interview guide/questionnaire(s) completed.

- Incident report(s) arising from documentation issues from O&P-1:EDI Functional Test obtained.
- BST and CLEC documentation Order Specialist and User contact information provided.
- Process for logging exceptions defined and accepted.

8.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate EDI documentation along with additional relevant documentation identified for use in Ordering and Provisioning.

Test Objective: Documentation ***Test Technique: Document Review and Interview***	
Sub-Process	***Function***
O&P-8 Documentation	Document structure and format.
	Document content.
	Realease management.
	Document accuracy.
Submit an Order	Create and send order in LSR format.
	Receive FOC/error/reject notification.
Submit an Error	Create and send order in LSR format.
	Receive planned error/reject notification.
	Correct errors.
	Receive FOC.
Supplement an Order	Create and sned supplement transactions.
	Receive FOC/error/reject notification.
	Correct errors.

Test Objective: Documentation Test Technique: Document Review and Interview	
Sub-Process	**Function**
Pre-Order/Order Intergration	Populate integration orders with information returned from designated pre-order response.
	Submit integration orders.
	Receive acknowledgement.
	Receive error/reject notification.
	Correct errors.
Receive Completion Notice (CN)	Receive CN transaction.
Receive Jeopardy Notification	Receive jeopardy notification transaction.
Check Service Order Status	Check service order status.

Figure V X: EDI Documentation Evaluation Test Scope

8.4.1 Documents in Test Scope

The following is a non-exclusive list of documents to be examined:

- LEO Implementation Guide, Volumes 1-3
- Facility Based Activation Requirements
- Facility Based Advisory Guide
- Pending Service Order Job Aid
- Products and Services Interval Guide
- Carrier Notifications from the BellSouth Web site
- Local Number Portability Ordering Guide

8.5 Test Activities

1. Obtain relevant documentation needed to carry out business processes related to O&P.

2. Conduct documentation evaluation using documentation evaluation checklist.
3. Conduct interviews with BellSouth documentation specialists.
4. Conduct interviews with CLEC documentation users.
5. Log incidents noted during testing.
6. Flag any exceptions and determine next steps in execution resolution process.
7. Compile results.

8.6 Exit Criteria

- Global Exit Criteria satisfied.
- Exception resolution activities and reports are complete.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.

9.0 O&P-9: TAG Documentation Evaluation

9.1 Description

The TAG Documentation Evaluation is an analysis of the BellSouth-provided documentation used by CLECs to interface and interact with the TAG interface for ordering and provisioning activities. This evaluation is intended to review the availability, accuracy and completeness of BellSouth's ordering and provisioning documentation using a variety of operational analysis techniques. This test will receive as input from the O&P-2: TAG Functional Test an incident report due to issues pertaining to documentation which addresses whether system functionality matches that described in the business rules documentation.

9.2 Objective

The objective of TAG Documentation Evaluation is to assess whether the documentation provided by BellSouth adequately assists CLECs in understanding how to implement and use all of the TAG ordering and provisioning functions available to them.

9.3 Entrance Criteria

- Global Entrance Criteria satisfied.

- TAG documentation obtained.
- Teams staffed, scheduled, and trained.
- Documentation evaluation checklist completed.
- Test Plan and evaluation criteria defined and approved.
- Interview guide/questionnaire(s) completed for BST & CLEC.
- Exception report(s) arising from documentation issues from O&P-2 TAG Functional Test obtained.
- BST and CLEC documentation Order Specialist and User contact information provided.
- Process for logging exceptions defined and accepted.

9.4 Test Scope

The scope will address the following sub-processes and functions to evaluate TAG documentation along with additional relevant documentation identified for use in Ordering and Provisioning.

Test Objective: Documentation ***Test Technique: Document Review and Interview***	
Sub-Process	***Function***
O&P-9 Documentation	Document structure and format.
	Document content.
	Release management.
	Document accuracy.
Submit an Order	Create and send order in LSR format.
	Receive FOC/error/reject notification.
Submit an Error	Create and send order in LSR format.
	Receive planned error/reject notification.

Test Objective: Documentation Test Technique: Document Review and Interview	
Sub-Process	**Function**
	Correct errors.
	Receive FOC.
Supplement an Order	Create and sned supplement transactions.
	Receive FOC/error/reject notification.
	Correct errors.
Pre-Order/Order Intergration	Populate integration orders with information returned from designated pre-order response.
	Submit integration orders.
	Receive acknowledgement.
	Receive error/reject notification.
	Correct errors.
Receive Completion Notice (CN)	Receive CN transaction.
Receive Jeopardy Notification	Receive jeopardy notification transaction.
Check Service Order Status	Check service order status.

Figure V XI: TAG Documentation Evaluation Test Scope

9.4.1 Documents in Test Scope

The following is a non-exclusive list of documents to be examined:

- LEO Implementation Guide, Volumes 1-3
- Facility Based Activation Requirements
- Facility Based Advisory Guide
- Pending Service Order Job Aid

- Products and Services Interval Guide
- Carrier Notifications from the BellSouth Web site
- Local Number Portability Ordering Guide

9.5 Test Activities

1. Obtain relevant documentation needed to carry out business processes related to O&P.
2. Conduct documentation evaluation using documentation evaluation checklist
3. Conduct interviews with BellSouth documentation specialists
4. Conduct interviews with CLEC documentation users
5. Log incidents noted during testing.
6. Flag any exceptions and determine next steps in execution resolution process.
7. Compile results.

9.6 Exit Criteria

- Global Exit Criteria satisfied.
- Exception resolution activities and reports are complete.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.

10.0 O&P-10: EDI/TAG Production Volume Performance Test

10.1 Description

The EDI/TAG Production Volume Performance Test will evaluate simultaneously the behavior and performance of both the interfaces under current capacities of the production system. This test cycle will be executed by TTGs in a manner consistent with the forecasted daily usage patterns and transaction mix (excluding error conditions) for each interface. The TTGs are capable of submitting large volumes of flow through pre-orders (TAG only), and resale and UNE service request cases. The test will be executed during an eight-hour period. All the transactions submitted are expected to flow through BellSouth's OSS electronically and return an error or an FOC. LSR transaction loads will

be distributed geographically across multiple Georgia COs. BellSouth will ensure that customer test accounts are established and configured accordingly.

The test scenarios to be used in the EDI/TAG Production Volume Performance Test are described in **Appendix B-2: Resale Ordering Scenarios** and **Appendix B-3: UNE Ordering Scenarios.**

The Test Manager will coordinate efforts with BellSouth to ensure that BellSouth's and KPMG's performance measurement system are prepared to track test transaction performance prior to beginning the test. Test cycle performance data will also be collected though test management tools and delivered to the O&P Performance Measures Evaluation (O&P-7).

10.2 Objective

The objective of the EDI/TAG Production Volume Performance Test is to measure the performance of the EDI and TAG interface under current production capacity at YE01 projected mix.

10.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- EDI and TAG documentation obtained.
- O&P-1: EDI Functional Test, O&P-2: TAG Functional Test, O&P-3: EDI/TAG Normal Volume Performance Test and O&P – TAG/EDI Peak Volume Performance Test successfully completed.
- Test transaction tracking strategy identified.
- Current volume level defined.
- BellSouth's and KPMG's performance measurement tracking systems prepared to track transactions.
- Certification testing for TTGs completed.
- Test scenarios selected (refer to **Appendix B-2 &Appendix B-3**).
- Test cases selected.
- BellSouth test bed customer account data loaded.
- Expected result files completed.

- Integrated test management tools installed and configured.
- Test scripts (transaction content) completed and loaded.
- Test case execution scheduled.
- Test cycle execution checklist created.
- Test logs created and results reporting template completed.
- Account and security access to EDI and TAG established.
- EDI and TAG connectivity established.
- Test execution team staffed, scheduled, and trained.
- Test Plan and evaluation criteria defined and approved.

10.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate EDI and TAG performance under current transaction loads.

Test Objective: Volume & Scalability, Performance, and Interface Test Technique: Transaction Processing	
Sub-Process	***Function***
Submit Orders in Projected Normal Volumes	Create order transaction(s).
	Send order in LSR format.
	Receive acknowledgment.
	Receive FOC or error/reject notification.
	Send transaction response.

Figure V IV: EDI/TAG Production Volume Performance Test Scope

10.5 Test Activities

1. Submit EDI/TAG test case transactions according to schedule.
2. Log transaction identifier(s) and submission date/time stamp.
3. Receive transaction responses.
4. Log transaction identifier(s) and critical performance responsiveness date/time stamp information.
5. Verify that transaction response contains expected results.
6. Flag any exceptions or mismatched responses and determine next steps in exception resolution process.
7. Generate test results reports.

10.6 Exit Criteria

- Global Exit Criteria satisfied.
- Exception resolution activities and reports are complete.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.

Appendix D1:
Evaluation Criteria

This appendix outlines the evaluation criteria to be applied during the various test cycles.

Once the results from each test cycle have been collected, they must be assessed in order to determine performance. This activity includes comparing expected results files with actual results. In addition, this activity involves assessing the coverage and accuracy of all test conditions within a test cycle. Those failing validation must be re-tested during the next cycle. If a significant number of test conditions fail or are not covered during a specific cycle, the test cycle will be rescheduled for execution following the implementation of the appropriate corrective measures.

Both transactional testing and operational analysis require evaluation criteria to assess test results. Test evaluation criteria provides the basis for determining whether an individual test event meets stated objectives and achieves expected results. This activity serves to sharpen the test approach and scope by defining the specific criteria required to measure the success of each test event.

Evaluation criteria are defined for each test to determine whether the results deviate from expectations. In those cases where results deviate, analysis is undertaken to determine the significance of the deviation.

The following table contains metrics that will be gathered from transactional testing and operational analysis. The BellSouth Service Quality Measurements Regional Performance Reports contain BellSouth performance measurement data which will be utilized during the test. This document is available from the BellSouth Web site.

For those areas lacking an existing performance measurement approved by the Georgia PSC, KPMG has developed a set of process and function evaluation criteria that will be used to evaluate the functional and transactional elements of BellSouth's OSS interfaces and processes. During test design, KPMG will further develop the appropriate metrics and standards of performance. These evaluation criteria and may be applied to all instances of a test execution or to a sampling of instances. The volume tests are an example of where a sampling of test transactions would be appropriate to ensure the integrity and content of the transaction data while testing the capacity of BellSouth's application software and infrastructure.

Business Process	***Metric***	***Test Objective***	***Test Technique***
Pre-Ordering	OSS Response Interval	Performance	Transaction Processing Performance Comparison
	OSS Interface Availability	Interface	Transaction Processing Document Review
	OSS Functionality	Functionality	Transaction Processing

Business Process	Metric	Test Objective	Test Technique
	Capacity of Systems	Volume & Capacity Management	Transaction Processing Inspection Document Review
	Completeness of Documents	Documentation	Document Review
	Accuracy of Documents	Documentation	Document Review
Ordering	Percent Flow-through Service Requests	Performance	Transaction Processing Performance Comparison
	Percent Rejected Service Requests	Performance	Transaction Processing
	Reject Interval	Performance	Transaction Processing
	Firm Order Confirmation Timeliness	Performance	Transaction Processing
	OSS Interface Availability	Interface	Transaction Processing Observation Document Review
	OSS Functionality	Functionality	Transaction Processing
	Capacity of Systems	Volume & Capacity Management	Transaction Processing Inspection Document Review
	Completeness of Documents	Documentation	Document Review
	Accuracy of Documents	Documentation	Document Review
Provisioning	Average Completion Interval & Order Completion Interval Distribution	Performance	Transaction Processing Inspection Performance Comparison
	Held Order Interval Distribution & Mean Interval	Performance	Transaction Processing Performance Comparison
	Average Jeopardy Notice Interval	Performance	Transaction Processing Performance Comparison
	Percentage of Orders Given Jeopardy Notices	Performance	Transaction Processing Performance Comparison
	Percent Missed Installation Appointments	Performance	Transaction Processing Performance Comparison
	Percent Provisioning Troubles within 30 Days	Performance	Transaction Processing Performance Comparison
	Coordinated Customer Conversions	Performance	Transaction Processing Inspection
	Average Completion Notice Interval	Performance	Transaction Processing Performance Comparison
	Completed Service Order Accuracy	Performance	Transaction Processing Performance Comparison

Business Process	Metric	Test Objective	Test Technique
	OSS Functionality	Functionality	Transaction Processing
	Completeness of Documents	Documentation	Document Review
	Accuracy of Documents	Documentation	Document Review
Maintenance & Repair	OSS Interface Availability	Interface	Transaction Processing Document Review Observation
	Average OSS Response Interval	Performance	Transaction Processing Performance Comparison
	Missed Repair Appointments	Performance	Transaction Processing Performance Comparison Inspection
	Customer Trouble Report Rate	Performance	Performance Comparison Inspection Interviews
	Maintenance Average Duration	Performance	Transaction Processing Performance Comparison Inspection
	Percent Repeat Troubles within 30 Days	Performance	Transaction Processing Performance Comparison Inspection
	Out of Service > 24 Hours	Performance	Transaction Processing Performance Comparison Inspection
	OSS Functionality	Functionality	Transaction Processing
	Capacity of Systems	Volume & Capacity Management	Transaction Processing Inspection Document Review
	Completeness of Documents	Documentation	Document Review
	Accuracy of Documents	Documentation	Document Review
Billing	Invoice Accuracy & Timeliness	Performance	Transaction Processing
	Usage Data Delivery Accuracy	Performance	Transaction Processing
	Usage Data Delivery Timeliness and Completeness	Performance	Transaction Processing
	Completeness of Documents	Documentation	Document Review
	Accuracy of Documents	Documentation	Document Review
Change Management	Change Development Process	Documentation	Document Review Inspection
	Change Evaluation Process	Documentation	Document Review Inspection

Business Process	Metric	Test Objective	Test Technique
	Change Implementation Process	Documentation	Document Review Inspection
	Change Interval	Documentation	Document Review Inspection
	Documentation Update Timeliness	Documentation	Document Review Inspection
	Adequacy and Completeness of Change Management Tracking Process	Documentation	Document Review Inspection

The following table contains the specific criteria that will be used for each test.

EVALUATION MEASURES		
Category	**Measure**	**Description**
	Availability of Interface	The interface is accessible during specified hours of availability as described in BellSouth CLEC documentation including CLEC notification letters. System outages or downtimes are within service quality measurements.
	Presence of Functionality	The functionality exists in the application or OSS and transactions can be executed through the interface as described in BellSouth CLEC documentation and training.
	Accuracy of Response	The data contained in the response (valid response or error response) is accurate and complete in relationship to the event or test case and as described in BellSouth CLEC documentation.
	Timeliness of Response	The response is generated and delivered within objective intervals.
	Clarity of Information	The data contained in the response provides a clear understanding of the requested data, error or status of a transaction.
	Availability of Document(s)	The BellSouth CLEC documentation and training is readily available. Documents are available in electronic or hard copy format.
	Accuracy of Document(s)	The BellSouth CLEC documentation accurately describes the process, application, interface, business rules, technical requirements, etc. that are relevant to a CLEC entering the local service market. Documentation is accurate and consistent within the document as well as across BellSouth CLEC documents.
	Structure of Document(s)	The BellSouth CLEC documentation clearly states the scope and intended audience for the document. The document contains change management markings for version/release control and associated dates. The document contains contact information for reporting errors, obtaining additional information or related resources.
	Distribution of Document(s)	The BellSouth CLEC documentation is readily available via various distribution paths (BST web site, training classes, restricted web sites, on request, via functional SMEs, industry groups, etc.).

	Change Management Notification Process	Changes to the BellSouth CLEC documentation are communicated to the CLEC community in a timely and non-discriminatory manner via various distribution paths.
	Adequacy and Completeness of Planning and Forecasting	There are clearly defined and documented processes for reviewing and projecting growth in facilities requirements.
	Adequacy and Completeness of Usage Monitoring	There are clearly defined and documented processes for recording and analyzing system usage.
	Adequacy and Completeness of Capacity Management	There are clearly defined and documented processes for developing and implementing capacity management plans.
	Provisioning Validation	The circuits are provisioned correctly at CLEC co-location facilities. Dial tone is available.
	Process Validation	The steps or processes required for reviewing, balancing or evaluating follow standard business practices and/or documented procedures. The work flow steps required to complete the process (i.e., invoice balancing) are defined. The intervals or time lines defined in the process are reasonable.
	Provisioning Coordination	Provisioning and maintenance activities for Unbundled Network Elements (UNEs) are coordinated between BellSouth, CLECs and end-user customers.
	Provisioning Timeliness of Response/Completion	Provisioning completion/activity notification is required. Confirmation of activity is processed back to BellSouth and CLEC points of contact within objective intervals.
	Provisioning Systems Integrity	Systems utilized in provisioning and coordination of CLEC activities are consistent and comparable with BST retail systems.
	Procedural Adherence	Clearly defined BellSouth methods and procedures are being followed.
	Provisioning Accuracy	Provisioning activity is completed correctly within all BellSouth systems and Central Offices.
	OS/DA Accuracy	Operator Services/Directory Assistance orders are completed correctly.
Result Types	Satisfied	The evaluation criterion was satisfied.
	Not Satisfied	The evaluation criterion was not satisfied. Some issues were identified that would have a business impact to CLECs – in some cases an exception was raised.

IV. Pre-Ordering Test Section

1.0 PRE-1: TAG Pre-Ordering Functional Test

The TAG Pre-Ordering Functional Test will evaluate the functional elements of the pre-ordering process for UNEs as delivered to CLECs by the TAG interface. The TAG interface will be used to execute the following pre-order transaction types:

Pre-Order Transaction Type	***TAG Functional Evaluation***	***Product Category***
Validate Address	X	Product Independent
Retrieve CSR	X	Product Independent
Determine Product/Service Availability	X	Product Independent
Request Available Telephone Number(s)	X	Product Independent
Reserve Telephone Number(s)	X	Product Independent
Cancel Telephone Number(s) Reservation	X	Product Independent
Determine Appointment Availability	X	Product Independent
Calculate Due Date	X	Product Independent

The following evaluation criteria () will be used to address the sub-processes and functions evaluated in test PRE-1.

Sub Process	***Function***	***Evaluation Criteria***
Validate Address	Create and send address request using BTN	Presence of Functionality
	Send address validation request using WTN	Presence of Functionality
	Send address validation request using partial address	Presence of Functionality
	Receive match response	Accuracy of Response Clarity of Information Timeliness of Response
	Receive near match response	Accuracy of Response Clarity of Information Timeliness of Response
	Receive no match response	Accuracy of Response Clarity of Information Timeliness of Response
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response
	Correct errors	Clarity of Information
	Re-send address inquiry	Presence of Functionality
	Receive match response	Accuracy of Response Clarity of Information Timeliness of Response
Retrieve CSR	Create and send CSR request using BTN	Presence of Functionality
	Send CSR request using WTN	Presence of Functionality
	Send CSR request using circuit identifier and state code	Presence of Functionality

Sub Process	Function	Evaluation Criteria
	Send CSR request using miscellaneous account number	Presence of Functionality
	Send request for directory information only	Presence of Functionality
	Receive match response	Accuracy of Response Clarity of Information Timeliness of Response
	Receive no match response	Accuracy of Response Clarity of Information Timeliness of Response
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response
	Correct errors	Clarity of Information
	Re-send CSR inquiry	Presence of Functionality
	Receive match response	Accuracy of Response Clarity of Information Timeliness of Response
Determine Product / Service Availability	Create and send service availability (LPIC, PIC, Switch Service Availability) request transaction	Presence of Functionality
	Receive availability response	Accuracy of Response Clarity of Information Timeliness of Response
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response
	Correct errors	Clarity of Information
	Re-send service availability inquiry	Presence of Functionality
	Receive availability response	Accuracy of Response Clarity of Information Timeliness of Response
Request Available Telephone Number(s)	Create and send TN request for specific number(s) (Easy, Sequential, Ascending, Vanity, etc)	Presence of Functionality
	Send TN request for random number(s)	Presence of Functionality
	Send TN request for a range of specific numbers	Presence of Functionality
	Send TN request for a range of random numbers	Presence of Functionality
	Receive available numbers response	Accuracy of Response Clarity of Information Timeliness of Response
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response
	Correct errors	Clarity of Information
	Re-send available telephone number request	Presence of Functionality
	Receive available numbers response	Accuracy of Response Clarity of Information Timeliness of Response

Sub Process	Function	Evaluation Criteria
Reserve TN(s)	Create and send reservation request for a single TN	Presence of Functionality
	Send reservation request for Multi-line Hunt	Presence of Functionality
	Send reservation request for Direct-In-Dial	Presence of Functionality
	Send reservation extension request	Presence of Functionality
	Receive confirmation response	Accuracy of Response Clarity of Information Timeliness of Response
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response
	Correct errors	Clarity of Information
	Re-send TN reservation request	Presence of Functionality
	Receive confirmation response	Accuracy of Response Clarity of Information Timeliness of Response
Cancel TN Reservation	Create and send cancel reservation request for a single TN	Presence of Functionality
	Send cancel reservation request for Multi-line Hunt	Presence of Functionality
	Send cancel reservation request for Direct-In-Dial	Presence of Functionality
	Receive confirmation response	Accuracy of Response Clarity of Information Timeliness of Response
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response
	Correct errors	Clarity of Information
	Re-send cancel TN reservation request	Presence of Functionality
	Receive confirmation response	Accuracy of Response Clarity of Information Timeliness of Response
Determine Appointment Availability	Create and send request for appointment availability	Presence of Functionality
	Receive valid response	Accuracy of Response Clarity of Information Timeliness of Response
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response
	Correct errors	Presence of Functionality Clarity of Information
	Re-send available due date request	Presence of Functionality
	Receive valid response	Accuracy of Response Clarity of Information Timeliness of Response

Sub Process	Function	Evaluation Criteria
Calculate Due Date	Create and send request for due date calculation	Presence of Functionality
	Receive valid response	Accuracy of Response Clarity of Information Timeliness of Response
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response
	Correct errors	Clarity of Information
	Re-send due date calculation request	Presence of Functionality
	Receive valid response	Accuracy of Response Clarity of Information Timeliness of Response
Pre-order/Order Integration	Submit pre-order transactions designated for integration test	Presence of Functionality
	Receive valid response	Accuracy of Response Clarity of Information Timeliness of Response
	Receive error response	Accuracy of Response Clarity of Information Timeliness of Response
	Correct errors	Clarity of Information
	Re-send transaction	Presence of Functionality
	Receive valid response	Accuracy of Response Clarity of Information Timeliness of Response

2.0 PRE-2: Pre-Ordering Performance Measures Evaluation

The Pre-Ordering Performance Measures Evaluation is a comparative analysis of performance results collected by KPMG test management tools and those collected by BellSouth's OSS performance measurement system. The source results collected from PRE-1: TAG Functional Test, PRE-4: TAG Normal Volume Performance Test, and PRE-5: TAG Peak Volume Performance Test will be compared to BellSouth's performance measurements, accuracy and trends will be identified, and disparities will be analyzed for significance. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test PRE-2.

Sub Process	***Function***	***Evaluation Criteria***
Average OSS Response Time and Response Interval	RSAG – Address RSAG – TN ATLAS COFFI DSAP HAL P/SIMS OASIS	BLS reports are correctly disaggregated and complete.
		KPMG-cCalculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation purposes and are complete.~~
OSS Interface Availability	Not disaggregated	BLS reports are correctly disaggregated and complete.
		KPMG-cCalculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation purposes and are complete.~~

3.0 PRE-3: TAG Pre-Ordering Documentation Evaluation

The TAG Pre-Ordering Documentation Evaluation is an analysis of the BellSouth provided documentation used by CLECs to interface and interact with the TAG interface for pre-ordering activities. This evaluation is intended to review the availability, accuracy and completeness of BellSouth's pre-ordering documentation using a variety of operational analysis techniques. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test PRE-3.

Sub Process	***Function***	***Evaluation Criteria***
Pre-Ordering Documentation	Document Structure and Format	Existence of Structural Elements Completeness of Data
	Document Content	Clarity of Information Completeness of Data
	Release Management	Existence and Adequacy of the Update Process Availability of Documentation
	Document Accuracy	Accuracy of Documents
Validate Address	Create address validation request transaction	Content of Document(s) Accuracy of Document(s)
	Correct errors	Content of Document(s) Accuracy of Document(s)
Retrieve CSR	Determine type of inquiry to send	Content of Document(s) Accuracy of Document(s)
	Create CSR request transaction	Content of Document(s) Accuracy of Document(s)
	Correct errors	Content of Document(s) Accuracy of Document(s)
Request available telephone number(s)	Create available telephone number request transaction	Content of Document(s) Accuracy of Document(s)
	Correct errors	Content of Document(s) Accuracy of Document(s)
Reserve TN(s)	Create telephone number reservation transaction	Content of Document(s) Accuracy of Document(s)
	Correct errors	Content of Document(s) Accuracy of Document(s)
Cancel TN reservation	Create telephone number cancellation or exchange transaction	Content of Document(s) Accuracy of Document(s)
	Correct errors	Content of Document(s) Accuracy of Document(s)
Determine product/service availability	Create service availability request transaction	Content of Document(s) Accuracy of Document(s)
	Correct errors	Content of Document(s) Accuracy of Document(s)
Calculate Due Date	Create due date calculation request transaction	Content of Document(s) Accuracy of Document(s)

Sub Process	*Function*	*Evaluation Criteria*
	Correct errors	Content of Document(s) Accuracy of Document(s)
Determine Appointment Availability	Create appointment availability request transaction	Content of Document(s) Accuracy of Document(s)
	Correct errors	Content of Document(s) Accuracy of Document(s

4.0 PRE-4: TAG Normal Volume Performance

The TAG Normal Volume Performance Test will evaluate the behavior and performance of the TAG pre-order interface under "normal" YE01 projected transaction load conditions. This test cycle will be executed by submitting large volumes of flow-through pre-ordering (TAG only) resale and UNE service request test cases in a manner consistent with the forecasted daily usage patterns and transaction mix (including error conditions). Patterns of time within the day and patterns of days within the month will be emulated. The TAG interface will be used to execute the following pre-order transaction types:

Pre-Order Transaction Type	*TAG Normal Volume*	*TAG Peak Volume*	*Product Category*
Validate Address	X		UNE, Resale
Retrieve CSR	X		UNE, Resale
Determine Product/Service Availability	X		UNE, Resale
Request Available Telephone Number(s)	X		UNE, Resale
Reserve Telephone Number(s)	X		UNE, Resale
Cancel Telephone Number(s) Reservation	X		UNE, Resale
Determine Appointment Availability	X		UNE, Resale
Calculate Due Date	X		UNE, Resale

The following evaluation criteria will be used to address the sub-processes and functions evaluated in test PRE-4.

Sub Process	*Function*	*Evaluation Criteria*
Submit pre-orders in Projected Normal Volumes	Address Validation	Availability of Interface Accuracy of Response Timeliness of Response
	CSR Retrieval	Availability of Interface Accuracy of Response Timeliness of Response
	Switched Service Availability	Availability of Interface Accuracy of Response Timeliness of Response
	PIC/LPIC Availability	Availability of Interface Accuracy of Response Timeliness of Response
	Product / Service Availability	Availability of Interface Accuracy of Response Timeliness of Response
	Telephone Number(s) Availability	Availability of Interface Accuracy of Response Timeliness of Response
	Reserve TN(s)	Availability of Interface Accuracy of Response Timeliness of Response
	Cancel TN Reservation	Availability of Interface Accuracy of Response Timeliness of Response

Sub Process	Function	Evaluation Criteria
	Determine Due Date / Appointment Availability	Availability of Interface Accuracy of Response Timeliness of Response

5.0 PRE-5: TAG Peak Volume Performance

The TAG Normal Volume Performance Test will evaluate the behavior and performance of the TAG pre-order interface under "peak" YE01 projected transaction load conditions. This test cycle will be executed by submitting large volumes of flow-through pre-ordering (TAG only) resale and UNE service request test cases in a manner consistent with the forecasted daily usage patterns and transaction mix (including error conditions). Patterns of time within the day and patterns of days within the month will be emulated. The TAG interface will be used to execute the following pre-order transaction types:

Pre-Order Transaction Type	*TAG Normal Volume*	*TAG Peak Volume*	*Product Category*
Validate Address		X	UNE, Resale
Retrieve CSR		X	UNE, Resale
Determine Product/Service Availability		X	UNE, Resale
Request Available Telephone Number(s)		X	UNE, Resale
Reserve Telephone Number(s)		X	UNE, Resale
Cancel Telephone Number(s) Reservation		X	UNE, Resale
Determine Appointment Availability		X	UNE, Resale
Calculate Due Date		X	UNE, Resale

The following evaluation criteria (will be used to address the sub-processes and functions evaluated in test PRE-5.

Sub Process	*Function*	*Evaluation Criteria*
Submit pre-orders in Projected Peak Volumes	Address Validation	Availability of Interface Accuracy of Response Timeliness of Response
	CSR Retrieval	Availability of Interface Accuracy of Response Timeliness of Response
	Switched Service Availability	Availability of Interface Accuracy of Response Timeliness of Response
	PIC/LPIC Availability	Availability of Interface Accuracy of Response Timeliness of Response
	Product / Service Availability	Availability of Interface Accuracy of Response Timeliness of Response
	Telephone Number(s) Availability	Availability of Interface Accuracy of Response Timeliness of Response
	Reserve TN(s)	Availability of Interface Accuracy of Response Timeliness of Response

Sub Process	Function	Evaluation Criteria
	Cancel TN Reservation	Availability of Interface Accuracy of Response Timeliness of Response
	Determine Due Date / Appointment Availability	Availability of Interface Accuracy of Response Timeliness of Response

6.0 PRE-6: Pre-Order Processing Systems Capacity Management Evaluation

The Pre-Order Processing Systems Capacity Management Evaluation is a detailed review of the safeguards and procedures in place to plan for and manage projected growth in the use of the cluster of pre-ordering applications. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test PRE-6.

Sub Process	***Function***	***Evaluation Criteria***
Pre-Order Capacity Management	Data collection and reporting of business volumes, resource utilization, and performance monitoring	Adequacy and Completeness of data collection and reporting
	Data verification and analysis of business volumes, resource utilization, and performance monitoring	Adequacy and Completeness of data verification and analysis
	Systems and capacity planning.	Adequacy and Completeness of systems and capacity planning

V. Ordering and Provisioning Test Section

1.0 O&P-1: EDI Functional Test

The EDI Functional Test will evaluate the functional elements of the ordering and provisioning process for UNEs as delivered to CLECs by the EDI interface. This test cycle will be executed by submitting local service requests (LSRs) for UNEs against BellSouth test bed accounts and allowing the process to continue through the return of either a firm order confirmation (FOC) or reject/error notice. A number of these transactions will be permitted to proceed through the physical provisioning process and the return of an electronic completion notice (CN). The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-1.

Sub Process	***Function***	***Evaluation Criteria***
Submit an Order	Create and send order in LSR format	Presence of Functionality
	Receive acknowledgment	Timeliness of Response
	Receive FOC/error/reject notification	Accuracy of Response Clarity of Information Timeliness of Response
	Send Expedited Order Transaction	Presence of Functionality
Submit an Error	Create and send error in LSR format	Presence of Functionality
	Receive acknowledgment	Timeliness of Response
	Receive planned error/reject notification	Accuracy of Response Clarity of Information Timeliness of Response
	Correct errors	Clarity of Information
	Re-send order	Presence of Functionality
	Receive FOC	Accuracy of Response Clarity of Information Timeliness of Response
Supplement an Order	Create and send supplement transactions	Presence of Functionality
	Receive acknowledgment	Timeliness of Response
	Receive FOC/error/reject notification	Accuracy of Response Clarity of Information Timeliness of Response
	Correct errors	Clarity of Information
	Re-send supplement	Presence of Functionality
	Receive FOC	Accuracy of Response Clarity of Information Timeliness of Response
Pre-Order/Order Integration	Populate integration orders with information returned from designated pre-order response	Clarity of Information

Sub Process	*Function*	*Evaluation Criteria*
	Submit integration orders	Presence of Functionality
	Receive acknowledgement	Timeliness of Response
	Receive error/reject notification	Accuracy of Response Clarity of Information Timeliness of Response
	Correct errors	Clarity of Information
	Re-send integration order	Presence of Functionality
	Receive FOC	Accuracy of Response Clarity of Information Timeliness of Response
Receive Completion Notice (CN)	Receive CN transaction	Accuracy of Response Clarity of Information Timeliness of Response
Receive Jeopardy Notification	Receive Jeopardy Notification transaction	Accuracy of Response Clarity of Information Timeliness of Response
Receive Missed Appointment Notification	Receive Missed Appointment Notification transaction	Accuracy of Response Clarity of Information Timeliness of Response
Check Service Order Status	Check Service Order Status	Accuracy of Response Clarity of Information Timeliness of Response

2.0 O&P-2: TAG Functional Test

The TAG Functional Test will evaluate the functional elements of the ordering and provisioning process for UNEs as delivered to CLECs via the TAG interface. This test cycle will be executed by submitting LSRs for UNEs against BellSouth test bed accounts and allowing the process to continue through the return of either an FOC or reject/error notice. A number of these transactions will be permitted to proceed through the physical provisioning process and return an electronic CN. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-2.

Sub Process	***Function***	***Evaluation Criteria***
Submit an Order	Create and send order in LSR format	Presence of Functionality
	Receive acknowledgment	Timeliness of Response
	Receive FOC/error/reject notification	Accuracy of Response Clarity of Information Timeliness of Response
	Send Expedited Order Transaction	Presence of Functionality
Submit an Error	Create and send error in LSR format	Presence of Functionality
	Receive acknowledgment	Timeliness of Response
	Receive planned error/reject notification	Accuracy of Response Clarity of Information Timeliness of Response
	Correct errors	Clarity of Information
	Re-send order	Presence of Functionality
	Receive FOC	Accuracy of Response Clarity of Information Timeliness of Response
Supplement an Order	Create and send supplement transaction(s)	Presence of Functionality
	Receive acknowledgment	Timeliness of Response
	Receive FOC/error/reject notification	Accuracy of Response Clarity of Information Timeliness of Response
	Correct errors	Clarity of Information
	Re-send supplement	Presence of Functionality
	Receive FOC	Accuracy of Response Clarity of Information Timeliness of Response
Pre-Order/Order Integration	Populate integration orders with information returned from designated pre-order response	Clarity of Information
	Submit integration orders	Presence of Functionality
	Receive acknowledgement	Timeliness of Response

Sub Process	Function	Evaluation Criteria
	Receive error/reject notification	Accuracy of Response Clarity of Information Timeliness of Response
	Correct errors	Clarity of Information
	Re-send integration order	Presence of Functionality
	Receive FOC	Accuracy of Response Clarity of Information Timeliness of Response
Receive Completion Notice	Receive CN transaction	Accuracy of Response Clarity of Information Timeliness of Response
	Receive transaction response	Accuracy of Response Clarity of Information Timeliness of Response
Receive Jeopardy Notification	Receive jeopardy notification transaction	Accuracy of Response Clarity of Information Timeliness of Response
Receive Missed Appointment Notification	Receive Missed Appointment transaction	Accuracy of Response Clarity of Information Timeliness of Respo
Check Service Order Status	~~Create~~ Check Service Order Status request	Presence of Functionality
	~~Send transaction~~	~~Presence of Functionality~~
	~~Receive response~~	~~Accuracy of Response~~ ~~Clarity of Information~~ ~~Timeliness of Response~~

3.0 O&P-3: EDI/TAG Normal Volume Performance Test

The EDI/TAG Normal Volume Performance Test will evaluate the behavior and performance of both the EDI and TAG interfaces under "normal" YE01 projected transaction load conditions simultaneously. This test cycle will be executed by TTGs capable of submitting large volumes of flow-through pre-ordering (TAG only) and resale and UNE service request test cases in a manner consistent with the forecasted daily usage patterns and transaction mix (including error conditions) for each interface. Patterns of time within the day and patterns of days within the month will be emulated.

The normal volume forecast will be developed across BellSouth's entire 9-state region (not simply Georgia) as described in Appendix C: Volume Analysis. The test will be executed during two 10-hour periods by modeling the expected normal daily usage pattern (e.g., the off-peak nighttime hour loads will be ignored for the test). The majority of the transactions submitted in support of this test cycle are expected to flow through BellSouth's OSS electronically and return an error or a FOC. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-3.

Sub Process	***Function***	***Evaluation Criteria***
Submit Orders in Projected Normal Volumes	Create order transaction(s)	Availability of Interface Timeliness of Response
	Send order in LSR format	Availability of Interface
	Receive acknowledgment	Availability of Interface Accuracy of Response Timeliness of Response
	Receive FOC or error/reject notification	Availability of Interface Accuracy of Response Timeliness of Response

4.0 O&P-4: EDI/TAG Peak Volume Performance Test

The EDI/TAG Peak Volume Performance Test will evaluate the behavior and performance of both the EDI and TAG interfaces under "peak" YE01 projected transaction load conditions simultaneously. This test cycle will execute selected flow-through pre-ordering (TAG only) and resale and UNE service request test cases, including error conditions.

The peak volume forecast will be developed using the peak hourly load identified for the EDI/TAG Normal Volume Performance Test and replicating those transaction volumes across an 8-hour period. Alternatively, if BellSouth's normal daily usage patterns are relatively flat, a multiple may be applied to the peak hourly load and the result replicated across an 8-hour day. The methodology and calculations are discussed further in Appendix C: Volume Analysis. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-4.

Sub Process	***Function***	***Evaluation Criteria***
Submit Orders in Projected Peak Volumes	Create order transaction(s)	Availability of Interface Timeliness of Response
	Send order in LSR format	Availability of Interface
	Receive acknowledgment	Availability of Interface Accuracy of Response Timeliness of Response
	Receive FOC or error/rejection notification	Availability of Interface Accuracy of Response Timeliness of Response

5.0 O&P-5: Provisioning Verification Test

The Provisioning Verification Test will evaluate BellSouth's ability to accurately and expeditiously complete the provisioning of service requests placed in both the O&P-1: EDI Functional Test and O&P-2: TAG Functional Test. This analysis will focus on electronically ordered UNEs and involves the physical inspection of BellSouth's provisioning process. Real CLEC provisioning activities will be observed in order to test end-to-end provisioning process on UNE Loop orders. In addition, in order to test the full functionality of BellSouth's provisioning process, orders will be supplemented and canceled, require outside dispatch, and address customer coordination. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-5.

Sub Process	***Function***	***Evaluation Criteria***
Receive completion notification	Receive completion notification transaction (See O&P-1, O&P-2)	Timeliness of Response Completeness of Data Accuracy of Response
	Match response to order transaction and confirmation	Provisioning Validation
	Verify timeliness of completion	Provisioning Timeliness of Response/Completion
Support provisioning process	Perform Provisioning Activity Accurately	Provisioning Accuracy Procedural Adherence OS/DA Accuracy
	Confirm provisioning on orders requiring coordination	Provisioning Coordination Procedural Adherence
	Manage provisioning process	Provisioning Accuracy Procedural Adherence
BellSouth provisioned service	BellSouth Provisioning Methods and Procedures	Procedural Adherence

6.0 O&P-6: Order Processing Systems Capacity Management Evaluation

The Order Processing Systems Capacity Management Evaluation is a detailed review of the safeguards and procedures in place to plan for and manage projected growth in the use of the cluster of ordering applications. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-6.

Sub Process	***Function***	***Evaluation Criteria***
Order Processing Systems Capacity Management	Data collection and reporting of business volumes, resource utilization, and performance monitoring	Adequacy and Completeness of data collection and reporting
	Data verification and analysis of business volumes, resource utilization, and performance monitoring	Adequacy and Completeness of data verification and analysis
	Systems and capacity planning.	Adequacy and Completeness of systems and capacity planning

7.0 O&P-7: O&P Performance Measures Evaluation

The O&P Performance Measures Evaluation is a comparative analysis of O&P performance results collected by the test through test management tools and those collected by BellSouth's performance measurements system. The source results collected from O&P-1: EDI Functional Test, O&P-2: TAG Functional Test, O&P-3: EDI/TAG Normal Volume Performance Test, and O&P-4: EDI/TAG Peak Volume Performance Test will be compared to BellSouth's performance measurement systems, variances and trends will be identified, and disparities will be analyzed for significance. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-7.

Sub Process	***Function***	***Evaluation Criteria***
Percent Rejected Service Requests	Resale Residence Resale Business Resale Specials UNE UNE Loop with NP Other	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation and comparison purposes and are complete.~~
		Test data collected by KPMG agrees with BLS raw data.
Reject Interval	Resale - Residence Resale - Business Resale - Design UNE Design UNE Non-Design UNE Loop with and w/o NP Mechanized (0-4 min., 4-8 min., 8-12 min., 12-60 min., 0-1 hr., 1-8 hrs., 8-24 hrs., >24 hrs.) Non-Mechanized (0-1 hr., 1-4 hrs., 4-8 hrs., 8-12 hrs., 12-16 hrs., 16-20 hrs., 20-24 hrs., >24 hrs.)Average Interval in Days	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation and comparison purposes and are complete.~~
		Test data collected by KPMG agrees with BLS raw data.

Sub Process	Function	Evaluation Criteria
Firm Order Confirmation Timeliness	Resale - Residence Resale - Business Resale - Design UNE Design UNE Non-Design UNE Loop with and w/o NP Mechanized (0-15 min., 15-30 min., 30-45 min., 45-60 min., 60-90 min., 90-120 min., 120-240 min., 4-8 hrs., 8-12 hrs., 12-16 hrs., 16-20 hrs., 20-24 hrs., 24-48 hrs., >48 hrs.) Non-Mechanized (0-4 hr., 4-8 hrs., 8-12 hrs., 12-16 hrs., 16-20 hrs., 20-24 hrs., 24-48 hrs., >48 hrs.)	BLS reports are correctly disaggregated and complete.
	Average Interval in Days	KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation and comparison purposes and are complete.~~
		Test data collected by KPMG agrees with BLS raw data.
Speed of Answer in the Ordering Center	Not disaggregated	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation and comparison purposes and are complete.~~
Mean Held Order Interval & Distribution Intervals	Circuit breakout <10 >=10 POTS – Residence POTS – Business Design UNE Design UNE Non-Design	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation and comparison purposes and are complete.~~

Sub Process	Function	Evaluation Criteria
		Test data collected by KPMG agrees with BLS raw data.
Average Jeopardy Notice Intervals & Percentage of Orders Given Jeopardy Notices	POTS – Residence POTS – Business Design UNE Design UNE Non-Design	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation and comparison purposes and are complete.~~
		Test data collected by KPMG agrees with BLS raw data.
Percent Missed Installation Appointments	<10 lines/circuits >10 lines/circuits Dispatch/ No Dispatch POTS – Residence POTS – Business Design UNE Design UNE Non-Design	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation and comparison purposes and are complete.~~
		Test data collected by KPMG agrees with BLS raw data.
Average Completion Interval/Order Completion Interval Distribution	Dispatch/ No Dispatch Residence and Business reported in day intervals: 0,1,2,3,4,5,5+ UNE and Design reported in day intervals: 0-5, 5-10, 10-15, 15-20, 20-25, 25-30, >=30 <10 lines/circuits >=10 lines/circuits POTS – Residence POTS – Business Design UNE Design UNE Non-Design	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation and comparison purposes and are complete.~~
		Test data collected by KPMG agrees with BLS raw data.

Sub Process	Function	Evaluation Criteria
Average Completion Notice Interval	Reporting interval in hours: 0-1, 1-2, 2-4, 4-8, 8-12, 12-24, >24, plus overall average hour interval <10 lines/circuits >=10 lines/circuits POTS – Residence POTS – Business Design UNE Design UNE Non-Design UNE Non-Design	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation and comparison purposes and are complete.~~
		Test data collected by KPMG agrees with BLS raw data.
Coordinated Customer Conversion	Reported in intervals: <=5 min., >5 and <=15 min., >15 min., plus Overall Average Interval UNE Loops without INP UNE Loops with INP	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation and comparison purposes and are complete.~~
		~~Test data collected by KPMG agrees with BLS raw data.~~
Percent Provisioning Troubles within 30 days of Service Order Activity	<10 lines/circuits >10 lines/circuits Dispatch/ No Dispatch POTS – Residence POTS – Business Design UNE Design UNE Non-Design	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation and comparison purposes and are complete.~~

Sub Process	*Function*	*Evaluation Criteria*
Total Service Order Cycle Time	Dispatch/ No Dispatch POTS – Residence POTS – Business Design UNE Design UNE Non-Design	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation and comparison purposes and are complete.~~
		Test data collected by KPMG agrees with BLS raw data.
Service Order Accuracy	<10 lines/circuits >10 lines/circuits Dispatch/ No Dispatch POTS – Residence POTS – Business Design UNE Design UNE Non-Design	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation and comparison purposes and are complete.~~

8.0 O&P-8: EDI Documentation Evaluation

The EDI Documentation Evaluation is an analysis of the BellSouth provided documentation used by CLECs to interface and interact with the EDI interface for ordering and provisioning

activities. This evaluation is intended to review the availability, accuracy and completeness of BellSouth's ordering and provisioning documentation using a variety of operational analysis techniques. This test will receive as input from the O&P-1: EDI Functional Test an exceptions report due to documentation which addresses whether system functionality matches that described in the business rules documentation.

The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-8.

Sub Process	***Function***	***Evaluation Criteria***
O&P-8 Documentation	Document Structure and Format	Existence of Structural Elements Completeness of Data Document Content
	Document Content	Clarity of Information Completeness of Data
	Release Management	Existence and Adequacy of Update Process Availability of Documentation
	Document Accuracy	Accuracy of Documents
Submit an Order	Create and send order in LSR format	Accuracy of Document(s) Content of Document(s)
	Receive FOC/error/reject notification	Accuracy of Document(s) Content of Document(s)
Submit and Error	Create and send order in LSR format	Accuracy of Document(s) Content of Document(s)
	Receive planned error/reject notification	Accuracy of Document(s) Content of Document(s)
	Correct errors	Accuracy of Document(s) Content of Document(s)
	Receive FOC	Accuracy of Document(s) Content of Document(s)
Supplement an Order	Create and send supplement transactions	Accuracy of Document(s) Content of Document(s)
	Receive FOC/error/reject notification	Accuracy of Document(s) Content of Document(s)
	Correct errors	Accuracy of Document(s) Content of Document(s)
Pre-Order/Order Integration	Populate integration orders with information returned from designated pre-order response	Accuracy of Document(s) Content of Document(s)
	Submit integration orders	Accuracy of Document(s) Content of Document(s)
	Receive acknowledgement	Accuracy of Document(s) Content of Document(s)
	Receive error/reject notification	Accuracy of Document(s) Content of Document(s)

Sub Process	*Function*	*Evaluation Criteria*
	Correct errors	Accuracy of Document(s) Content of Document(s)
Receive Completion Notice (CN)	Receive CN transaction	Accuracy of Document(s) Content of Document(s)
Receive Jeopardy Notification	Receive jeopardy notification transaction	Accuracy of Document(s) Content of Document(s)
Check Service Order Status	Check service order status	Accuracy of Document(s) Content of Document(s)

9.0 O&P-9: TAG Documentation Evaluation

The TAG Documentation Evaluation is an analysis of the BellSouth provided documentation used by CLECs to interface and interact with the TAG interface for ordering and provisioning activities. This evaluation is intended to review the availability, accuracy and completeness of BellSouth's ordering and provisioning documentation using a variety of operational analysis techniques. This test will receive as input from the O&P-2: TAG Functional Test an exceptions report due to documentation which addresses whether system functionality matches that described in the business rules documentation. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-9.

Sub Process	***Function***	***Evaluation Criteria***
O&P-9 Documentation	Document Structure and Format	Existence of Structural Elements Completeness of Data
	Document Content	Clarity of Information Completeness of Data
	Release Management	Existence and Adequacy of Update Process Availability of Documentation
	Document Accuracy	Accuracy of Documents
Submit an Order	Create and send order in LSR format	Accuracy of Document(s) Content of Document(s)
	Receive FOC/error/reject notification	Accuracy of Document(s) Content of Document(s)
Submit and Error	Create and send order in LSR format	Accuracy of Document(s) Content of Document(s)
	Receive planned error/reject notification	Accuracy of Document(s) Content of Document(s)
	Correct errors	Accuracy of Document(s) Content of Document(s)
	Receive FOC	Accuracy of Document(s) Content of Document(s)
Supplement an Order	Create and send supplement transactions	Accuracy of Document(s) Content of Document(s)
	Receive FOC/error/reject notification	Accuracy of Document(s) Content of Document(s)
	Correct errors	Accuracy of Document(s) Content of Document(s)
Pre-Order/Order Integration)	Populate integration orders with information returned from designated pre-order response	Accuracy of Document(s) Content of Document(s)
	Submit integration orders	Accuracy of Document(s) Content of Document(s)
	Receive acknowledgement	Accuracy of Document(s) Content of Document(s)

Sub Process	*Function*	*Evaluation Criteria*
	Receive error/reject notification	Accuracy of Document(s) Content of Document(s)
	Correct errors	Accuracy of Document(s) Content of Document(s)
Receive Completion Notice (CN)	Receive CN transaction	Accuracy of Document(s) Content of Document(s)
Receive Jeopardy Notification	Receive jeopardy notification transaction	Accuracy of Document(s) Content of Document(s)
Check Service Order Status	Check service order status	Accuracy of Document(s) Content of Document(s)

10.0 O&P-10: EDI/TAG Production Volume Performance Test

The EDI/TAG Peak Volume Performance Test will evaluate the behavior and performance of both the EDI and TAG interfaces under current capacities of the production system. This test cycle will execute selected flow-through pre-ordering (TAG only) and resale and UNE service request test cases, excluding error conditions.

The test will be executed during an 8-hour period. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test O&P-10.

Sub Process	***Function***	***Evaluation Criteria***
Submit Orders in Production Volumes	Create order transaction(s)	Availability of Interface Timeliness of Response
	Send order in LSR format	Availability of Interface
	Receive acknowledgment	Availability of Interface Accuracy of Response Timeliness of Response
	Receive FOC or error/rejection notification	Availability of Interface Accuracy of Response Timeliness of Response

1.0 BLG-1: CRIS/CABS Invoicing Functional Test

The CRIS/CABS Invoicing Functional Test will evaluate the functional elements of the carrier invoicing process for UNEs as delivered to CLECs by the CRIS/CABS interface. This test cycle will be executed by placing test calls on those UNE scenarios selected for provisioning as part of the EDI/TAG functional tests (O&P-1 and O&P-2). KPMG will place calls on provisioned lines to generate usage and invoice detail. The functional elements of UNE invoicing that will be specifically targeted by this test include usage and measured rate billing, recurring and non-recurring charges, pro-ration of charges, the recording of account configuration changes, adjustments, and the accuracy of invoice line item details delivered by both the CABS/CRIS systems. KPMG will use process walk-throughs/interviews to ensure quality of internal processes. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test BLG-1.

Sub Process	***Function***	***Evaluation Criteria***
Adjustment	Enter adjustments	Presence of Functionality Accuracy of Response
	Track adjustments	Presence of Functionality Accuracy of Response
Maintain Bill Balance	Carry balance forward	Presence of Functionality Accuracy of Response
Review Bills	Verify normal recurring charges	Presence of Functionality Accuracy of Response
	Verify one-time charges	Presence of Functionality Accuracy of Response
	Verify prorated recurring charges	Presence of Functionality Accuracy of Response
	Verify usage charges	Presence of Functionality Accuracy of Response
	Verify adjustments (debits and credits)	Presence of Functionality Accuracy of Response
	Verify late charges	Presence of Functionality Accuracy of Response
Balance Cycle	Define balancing and reconciliation procedures	Process Validation Presence of Functionality
	Produce control reports	Presence of Functionality
	Release cycle	Presence of Functionality
Deliver Bill	Deliver bill media	Presence of Functionality Timeliness of Response
Maintain Bill history	Maintain billing information	Process Validation Presence of Functionality

Sub Process	*Function*	*Evaluation Criteria*
	Access billing information	Presence of Functionality
Request re-send	Deliver bill media	Process Validation Presence of Functionality Timeliness of Response

2.0 BLG-2: ODUF/ADUF Usage Functional Test

The Daily Usage File Test will evaluate the functional elements of daily message/usage processing for UNE ports as delivered to CLECs by the ADUF/ODUF interfaces. This test cycle will be executed by KPMG placing test calls on those UNE port and port loop scenarios selected for provisioning as part of the EDI/TAG functional tests (O&P-1 and O&P-2). The functional elements of daily message/usage processing for UNE ports that will be specifically targeted by this test include the completeness and accuracy of the call details across a variety of incoming and outgoing call types, changes in account disposition/configuration, and CO switch types. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test BLG-2.

Sub Process	***Function***	***Evaluation Criteria***
Receipt of usage by BellSouth	Receive switch records at data center	Process Validation Presence of Functionality
	Verify DUF data	Presence of Functionality
Daily Usage Feed	Create usage feed	Process Validation Presence of Functionality
	Define balancing and reconciliation procedures	Presence of Functionality
	Route usage	Presence of Functionality
Deliver usage to CLECs	Send Connect:Direct®	Presence of Functionality
	Acknowledge arrival	Presence of Functionality Timeliness of Response
Maintain usage history	Create usage backup	Process Validation Presence of Functionality
	Request backup data	Presence of Functionality
Status tracking and reporting	Track valid usage	Presence of Functionality Accuracy of response
	Account for no usage	Presence of Functionality Accuracy of response
	Account for missing usage (gaps)	Presence of Functionality Accuracy of response

3.0 BLG-3: Billing Systems Capacity Management Evaluation

The Billing Systems Capacity Management Evaluation is a detailed review of the safeguards and procedures in place to plan for and manage projected growth in the use of the billing applications. The following evaluation criteria (will be used to address the sub-processes and functions evaluated in test BLG-3.

Sub Process	***Function***	***Evaluation Criteria***
Billing Systems Capacity Management	Data collection and reporting of business volumes, resource utilization, and performance monitoring	Adequacy and Completeness of data collection and reporting
	Data verification and analysis of business volumes, resource utilization, and performance monitoring	Adequacy and Completeness of data verification and analysis
	Systems and capacity planning.	Adequacy and Completeness systems and capacity planning

4.0 BLG-4: Billing Performance Measures Evaluation

The Billing Performance Measures Evaluation is a comparative analysis of billing performance results collected by the test through test management tools and those collected by BellSouth's performance measurement system from BellSouth's OSS. The source results collected from BLG-1: CRIS/CABS Invoicing Functional Test and BLG-2: ODUF/ADUF Usage Functional Test will be compared to performance measures metrics, accuracy and trends will be identified, and disparities will be analyzed for significance. Overall, for consistency testing, four test results sources will be used and compared to ensure BellSouth accuracy:

- Daily usage files ODUF/ADUF
- CRIS/CABS test invoices
- BellSouth's performance measurements system data collected
- Test Call Log

The following evaluation criteria will be used to address the sub-processes and functions evaluated in test BLG-4.

Sub Process	***Function***	***Evaluation Criteria***
Invoice Accuracy	Resale UNE Interconnection	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation purposes and are complete.~~
Mean Time to Deliver Invoices	Resale UNE Interconnection	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation purposes and are complete.~~
		Test data collected by KPMG agrees with BLS raw data.
Usage Data Delivery Accuracy	Not Disaggregated	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.

Sub Process	Function	Evaluation Criteria
		~~BLS raw data are suitable for calculation purposes and are complete.~~
Usage Data Delivery Completeness	Not Disaggregated	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation purposes and are complete.~~
		Test data collected by KPMG agrees with BLS raw data.
Usage Data Delivery Timeliness	Not Disaggregated	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation purposes and are complete.~~
		Test data collected by KPMG agrees with BLS raw data.
Mean Time to Deliver Usage	Not Disaggregated	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation purposes and are complete.~~
		Test data collected by KPMG agrees with BLS raw data.

5.0 BLG-5: CRIS/CABS Invoicing Documentation Evaluation

The CRIS/CABS Invoicing Documentation Evaluation is an analysis of the documentation used by CLECs to interact with BellSouth's invoicing systems when conducting billing activities. This high level evaluation is intended to review the accuracy and completeness of BellSouth's documentation using a variety of operational analysis techniques. Since there is no direct system interaction with CRIS/CABS, this documentation evaluation will be concerned with analyzing the accuracy of documentation with respect to connectivity to gather invoices, delivery of invoices and the overall format and contents of the invoices delivered. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test BLG-5.

Sub Process	***Function***	***Evaluation Criteria***
Billing Invoicing Documentation	Document Structure and Format.	Existence of Structural Elements Completeness of Data
	Document Content	Clarity of Information Completeness of Data
	Release Management	Existence and Adequacy of the Update Process Availability of Documentation Accuracy of Documentation
	Document Accuracy	Accuracy of Documents

6.0 BLG-6: ODUF/ADUF Documentation Evaluation

The ODUF/ADUF Documentation Evaluation is an analysis of the documentation used by CLECs to interact with BellSouth's usage reporting systems when conducting billing activities. This high level evaluation is intended to review the accuracy and completeness of BellSouth's documentation using a variety of operational analysis techniques. Since there is no direct system interaction with BellSouth's systems in this process, this documentation evaluation will be concerned with analyzing the accuracy of documentation with respect to connectivity to gather usage records, delivery of usage records and the overall format and contents of the daily usage files delivered. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test BLG-6.

Sub Process	***Function***	***Evaluation Criteria***
Billing Usage Reporting Documentation	Document Structure and Format	Existence of Structural Elements Completeness of Data
	Document Content	Clarity of Information Completeness of Data
	Release Management	Existence and Adequacy of the Update Process Availability of Documentation Accuracy of Documentation
	Document Accuracy	Accuracy of Documents

VII. Maintenance and Repair Test Section

1.0 M&R-1: TAFI Functional Test

The TAFI Functional Test will evaluate the functional elements of the trouble reporting and screening process for telephone number assigned UNEs as delivered to CLECs via the TAFI interface in BellSouth's production environment. This test cycle will be executed by submitting trouble reports against provisioned test bed accounts

TAFI functionality will be reviewed along with the documentation addressing its use. The functional elements trouble reporting and screening that will be specifically targeted by this test include the entry and resolution of trouble reports, query and receipt of status reports, access to test capabilities, access to trouble history, and error conditions. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test M&R-1.

Sub Process	***Function***	***Evaluation Criteria***
Trouble reports	Create trouble report	Presence of Functionality Accuracy of Response TAFI Usability
	Modify trouble report	Presence of Functionality Accuracy of Response TAFI Usability
	Create repeat report	Presence of Functionality Accuracy of Response TAFI Usability
	Create subsequent report	Presence of Functionality Accuracy of Response TAFI Usability
	Enter Multiple Trouble Reports	Presence of Functionality Accuracy of Response TAFI Usability
	Enter and Retrieve Trouble Reports from Queues	Presence of Functionality Accuracy of Response Timeliness of Response TAFI Usability
	Execute supervisor functions	Presence of Functionality Accuracy of Response Timeliness of Response TAFI Usability
	Close trouble report	Presence of Functionality Accuracy of Response TAFI Usability
	Cancel trouble report	Presence of Functionality Accuracy of Response Timeliness of Response

Sub Process	*Function*	*Evaluation Criteria*
Access to test capability	Initiate port and loop-port test	Presence of Functionality Accuracy of Response Timeliness of Response TAFI Usability
	View port and loop-port test results	Presence of Functionality Accuracy of Response Timeliness of Response TAFI Usability
Downstream System Reports	Retrieve LMOS recent status report	Presence of Functionality Accuracy of Response Timeliness of Response TAFI Usability
	Obtain customer line record (BOCRIS)	Presence of Functionality Accuracy of Response Timeliness of Response TAFI Usability
	Obtain predictor results	Presence of Functionality Accuracy of Response Timeliness of Response TAFI Usability
	View DLR (Display Line Record)	Presence of Functionality Accuracy of Response Timeliness of Response TAFI Usability
	View SOCS pending order (open issue)	Presence of Functionality Accuracy of Response Timeliness of Response TAFI Usability
Access error reports	Host request errors	Presence of Functionality Accuracy of Response TAFI Usability
Trouble history	Retrieve trouble history	Presence of Functionality Accuracy of Response Timeliness of Response TAFI Usability
General	TAFI Usability	TAFI Usability

2.0 M&R-2: ECTA Functional Test

The ECTA Functional Test will evaluate the functional elements of the trouble reporting and screening process for both telephone number assigned and circuit identified UNEs as delivered to CLECs via the ECTA interface. This test cycle will be executed by exercising a defined set of ECTA functions associated with trouble management activities against test bed accounts.

ECTA functionality will be reviewed along with the documentation addressing its use. The functional elements of trouble reporting and screening that will be specifically targeted by this test include the entry and resolution of trouble reports, the query and receipt of status reports, and error conditions. The ECTA Functional Test will be conducted against BellSouth's production environment system. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test M&R-2.

Sub Process	***Function***	***Evaluation Criteria***
Trouble reports	Create trouble report	Presence of Functionality Timeliness of Response
	Modify trouble report	Presence of Functionality Timeliness of Response
	Cancel trouble report	Presence of Functionality Timeliness of Response
	Request trouble ticket status	Presence of Functionality Timeliness of Response
	Verify repair completion	Presence of Functionality Timeliness of Response
	Add trouble information	Presence of Functionality Timeliness of Response

3.0 M&R-3: ECTA Normal Volume Performance Test

The ECTA Normal Volume Performance Test will evaluate the behavior and performance of the ECTA interface under "normal" YE01 projected transaction load conditions. This test cycle will be executed by a test transaction generator capable of submitting large volumes of resale services and UNE trouble test cases in a manner consistent with ECTA's current and forecasted daily usage patterns and transaction mix, including error conditions. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test M&R-3.

Sub Process	***Function***	***Evaluation Criteria***
Submit trouble transactions in projected normal volumes	Create trouble report	Correctness of Response Timeliness of Response
	Modify trouble report	Correctness of Response Timeliness of Response
	Cancel trouble ticket	Correctness of Response Timeliness of response
	Request trouble ticket status	Correctness of Response Timeliness of Response
	Add trouble information	Correctness of Response Timeliness of Response

4.0 M&R-4: ECTA Peak Volume Performance Test

The ECTA Peak Volume Performance Test will evaluate the behavior and performance of the ECTA interface under peak YE01 projected transaction load conditions. This test cycle will be run following the execution of the ECTA Normal Volume Performance Test (M&R-3) and will utilize a selected sample of resale services and UNE trouble test cases, including error conditions.

The peak volume forecast will be developed using the peak hourly load identified for the ECTA Normal Volume Performance Test and replicating those transaction volumes across an 8-hour period. Alternatively, if BellSouth's normal daily usage patterns are relatively flat, a multiple may be applied to the peak hourly load and the result replicated across an 8-hour day. The methodology and calculations are discussed further in Appendix C: Volume Analysis. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test M&R-4.

Sub Process	***Function***	***Evaluation Criteria***
Submit trouble transactions in projected normal volumes	Create trouble report	Correctness of response Timeliness of Response
	Modify trouble report	Correctness of Response Timeliness of Response
	Cancel trouble ticket	Correctness of Response Timeliness of Response
	Request trouble ticket status	Correctness of Response Timeliness of Response
	Add Trouble Administration Information	Correctness of Response Timeliness of Response

5.0 M&R-5: TAFI Capacity Management Evaluation

The TAFI Capacity Management Evaluation is a detailed review of the safeguards and procedures in place to plan for and manage projected growth in the use of TAFI interfaces. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test M&R-5.

Sub Process	***Function***	***Evaluation Criteria***
TAFI Capacity Management	Data collection and reporting of business volumes, resource utilization, and performance monitoring	Adequacy and Completeness of data collection and reporting
	Data verification and analysis of business volumes, resource utilization, and performance monitoring	Adequacy and Completeness of data verification and analysis
	Systems and capacity planning	Adequacy and Completeness of systems and capacity planning

6.0 M&R-6: ECTA Capacity Management Evaluation

The ECTA Capacity Management Evaluation is a detailed review of the safeguards and procedures in place to plan for and manage projected growth in the use of ECTA interfaces. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test M&R-6.

Sub Process	***Function***	***Evaluation Criteria***
ECTA Capacity Management	Data collection and reporting of business volumes, resource utilization, and performance monitoring	Adequacy and Completeness of data collection and reporting
	Data verification and analysis of business volumes, resource utilization, and performance monitoring	Adequacy and Completeness of data verification and analysis
	Systems and capacity planning	Adequacy and Completeness of systems and capacity planning

7.0 M&R-7: M&R Performance Measures Evaluation

The M&R Performance Measures Evaluation is a comparative analysis of M&R performance results collected by KPMG test management tools and BellSouth's OSS performance measurements systems. The source results collected from M&R-1: TAFI Functional Test, M&R-2: ECTA Functional Test, M&R-3: ECTA Normal Volume Performance Test, and M&R-4: ECTA Peak Volume Performance Test will be compared to BellSouth's performance measurements systems, accuracy and trends will be identified, and disparities will be analyzed for significance. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test M&R-7.

Sub Process	***Function***	***Evaluation Criteria***
Missed Repair Appointments	POTS – Residence, Business Design PBX, CENTREX, AND ISDN UNE 2 Wire Loop (Design and Non-Design) UNE Loop Other (Design and Non-Design) UNE Other (Design and Non-Design) Dispatch/No Dispatch	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation purposes and are complete.~~
		Test data collected by KPMG agrees with BLS raw data.
Customer Trouble Report Rate	POTS – Residence, Business Design PBX, CENTREX, AND ISDN UNE 2 Wire Loop (Design and Non-Design) UNE Loop Other (Design and Non-Design) UNE Other (Design and Non-Design) Dispatch/No Dispatch	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation purposes and are complete.~~
		Test data collected by KPMG agrees with BLS raw data.
Maintenance Average Duration	POTS – Residence, Business Design PBX, CENTREX, AND ISDN UNE 2 Wire Loop (Design and Non-Design) UNE Loop Other (Design and Non-Design) UNE Other (Design and Non-Design) Dispatch/No Dispatch	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation purposes and are complete.~~
		Test data collected by KPMG agrees with BLS raw data.

Sub Process	Function	Evaluation Criteria
Percent Report Troubles within 30 days	POTS – Residence, Business Design PBX, CENTREX, AND ISDN UNE 2 Wire Loop (Design and Non-Design) UNE Loop Other (Design and Non-Design) UNE Other (Design and Non-Design) Dispatch/No Dispatch	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation purposes and are complete.~~
		Test data collected by KPMG agrees with BLS raw data.
Out of Service >24 hours	POTS – Residence, Business Design PBX, CENTREX, AND ISDN UNE 2 Wire Loop (Design and Non-Design) UNE Loop Other (Design and Non-Design) UNE Other (Design and Non-Design) Dispatch/No Dispatch	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation purposes and are complete.~~
		Test data collected by KPMG agrees with BLS raw data.
OSS Interface Availability	Not Disaggregated	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation purposes and are complete.~~
OSS Response Interval and Percentages	Not Disaggregated	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation purposes and are complete.~~
Average Answer Time – Repair Centers	Not Disaggregated	BLS reports are correctly disaggregated and complete.
		KPMG-calculated SQM values agree with BLS-reported SQM values.
		~~BLS raw data are suitable for calculation purposes and are complete.~~

8.0 M&R-8: TAFI Documentation Evaluation

The TAFI Documentation Evaluation is an analysis of the BellSouth-provided documentation used by CLECs to interface and interact with the TAFI interface for maintenance and repair activities. This evaluation is intended to review the availability, accuracy and completeness of BellSouth's maintenance and repair documentation using a variety of operational analysis techniques. This test uses records of observations from the M&R-1: TAFI Functional Test and CLEC TAFI User Training Manuals to identify incidents in documentation and functionality described in the business rules. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test M&R-8.

Sub Process	***Function***	***Evaluation Criteria***
M&R Documentation	Document Structure and Format	Existence of Structural Elements Completeness of Data
	Document Content	Clarity of Information Completeness of Data
	Release Management	Existence and Adequacy of the Update Process Availability of Documentation Accuracy of Documentation
TAFI Interface	Trouble Report	Accuracy of Documentation
	Access to Test Capability	Accuracy of Documentation
	Access to Downstream System Reports	Accuracy of Documentation
	Error Reports	Accuracy of Documentation
	Trouble History	Accuracy of Documentation

9.0 M&R-9: ECTA Documentation Evaluation

The ECTA Documentation Evaluation is an analysis of the BellSouth-provided documentation used by CLECs to interface and interact with the ECTA interface for maintenance and repair activities. This evaluation is intended to review the accuracy, ease of use and conformance to ANSI standards of BellSouth's maintenance and repair documentation using a variety of operational analysis techniques. This test will use records of observations from the M&R-2: ECTA Functional Test to identify incidents in documentation and functionality. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test M&R-9.

Sub Process	***Function***	***Evaluation Criteria***
M&R Documentation	Joint Implementation Agreement for Electronic Communications Trouble Administration (ECTA) Gateway for Local Service (JIA)	Accuracy of Document Ease of Use of Document Conformance of Document toANSI Standards

10.0 M&R-10: M&R Process Evaluation

The M&R Process Evaluation Test is comprised of two major elements. The first (Sub-Test 1) evaluates the functional equivalence of BellSouth's M&R processes for wholesale and retail trouble reports. Process flows for wholesale and retail trouble management will be reviewed and evaluated along with technician methods and procedures (M&P) and job aids for wholesale trouble repair.

The second element (Sub-Test 2) involves the execution and observation of selected M&R test scenarios to evaluate BellSouth's performance in making repairs under the conditions of various wholesale maintenance scenarios.

The following evaluation criteria will be used to address the sub-processes and functions evaluated in test M&R-10.

Sub Process	***Function***	***Evaluation Criteria***
End-to-End M&R Process	Process flow documentation	Completeness Wholesale/Retail Comparison
	Process evaluation	Wholesale/Retail Comparison
End-to-End Trouble Report Processing	M&R test situations	Timeliness Wholesale/Retail Comparison

VIII. Change Management Test Section

1.0 CM-1: Change Management Practices Review

This test evaluates the overall policies and practices for managing change in the procedures and systems necessary for establishing and maintaining effective relationships between BellSouth and CLECs. The results of this test will rely upon checklists and inspections. The following evaluation criteria will be used to address the sub-processes and functions evaluated in test CM-1.

Sub Process	***Function***	***Evaluation Criteria***
Change Management	Developing Change Proposals	Completeness and consistency of change development process
	Evaluating Change Proposals	Completeness and consistency of change evaluation process
	Implementing Change	Completeness and consistency of change implementation process
	Intervals	Reasonableness of change interval
	Documentation	Timeliness of documentation updates
	Tracking Change Proposals	Adequacy and completeness of change management tracking process

Not Complete – Master Test Plan – O&P 7-1-3, 7-2-3, and 7-3-3

The Ordering and Provisioning Performance Measures Evaluation (O&P – 7) provided for "(1) Calculation and Reporting Validation, and (2) Data Comparison, for ordering and provisioning-related Service Quality Measures (SQMs) produced by BellSouth."

For O&P 7-1-3 (Percent Rejected Service Requests), O&P 7-2-3 (Reject Interval), and O&P 7-3-3 (Firm Order Confirmation Timeliness), KCI compared HP-provided data to the corresponding BellSouth raw data for the months of August 2000 – November 2000. KCI found discrepancies in time stamps for Local Service Request Sent/Received, Reject/Clarification Requested, and Firm Order Confirmation (FOC) for the TAG and EDI interfaces and issued Draft Exceptions 176 and 178 to BellSouth.

Draft Exception 176 identified six discrepancies for the EDI interface. BellSouth responded to the exception on March 12, 2001:

- Two discrepancies were due to multiple submittals of the same PON/version combinations; BellSouth accepts and processes only one instance of a PON/version combination. KCI had compared time stamps for fatal rejects to time stamps for processed LSRs.
- Four discrepancies were due to unusual delays in the processing of PONs from EDI to LEO. Information identifying the causes of the delays was no longer available, so BellSouth requested KCI to test on the most recent month's data.

Draft Exception 178 identified a total of nineteen discrepancies for the EDI and TAG interfaces. BellSouth is currently investigating the discrepancies. They appear to be similar to those investigated in Draft Exception 176, but for later months.

For each case where historical information was available for analysis, BellSouth found no discrepancies in time stamps. Therefore, no negative impact on competition has been demonstrated.

Not Complete – Master Test Plan O&P 7-6-3

For O&P 7-6-3 (Average Jeopardy Notice Interval and Percentage of Orders Given Jeopardy Notices), KCI issued Exception 128 for one PON and service order number in the month of October 2000, where the KCI-collected value for "completion date" did not match the BellSouth-reported value. BellSouth submitted a response to this exception on March 13, 2001.

BellSouth concluded that this discrepancy was due to a business rule in the "SOCS daily fixed fielded extract," a standard SOCS extract that feeds downstream systems. In certain instances, the final disposition of a service order is not updated in the extract to allow the appropriate changes in the ICAIS system.

To resolve this issue, BellSouth will build another extract from SOCS that duplicates the original one but removes all business rules and extracts every service order in SOCS each time it is run. An initial estimate for completing this work is under development; implementation is expected to take a minimum of eight weeks.

Not Complete – Supplemental Test Plan PMR 1-2-1

The objective of the Data Collection and Storage Verification and Validation Review (PMR 1) was to evaluate the key policies and procedures for collecting and storing both the raw data that BellSouth uses to create Service Quality Measure (SQM) reports and the preliminary data that BellSouth uses to produce the raw data.

KCI reported that BellSouth did not provide sufficient data for re-creating any prior month's historical SQM report. It suggested that the raw data, early-stage data, and the SQM reports be retained for a sufficient length of time to support any audits that might be required by the Georgia Public Service Commission. KCI reported its findings in Exception 79.

BellSouth provided its latest response to this exception on March 6, 2001, in which it stated the following proposed data retention policy:

"It is the policy of BellSouth Performance Measurements to retain the early-stage data for a period of eighteen months to facilitate detailed audits of PMAP reports. 'Early-stage data' is defined as that which is extracted from source systems (CABS, CRIS, EXACT, WFA, SOCS, LMOS, etc.) and maintained as ASCII flat files for the purpose of generating SQM reports. 'Early-stage' data is further defined as source system data that is transmitted manually for said purpose. The mechanical flat files and the manual files of early-stage data will be retained for a period of eighteen months.

"BellSouth will retain PMAP raw data for a minimum of three years. 'PMAP raw data' is defined as that which is available for download for the current month from the BellSouth website. Further, BellSouth will retain for three years the monthly aggregate database,
i. e., that which has been processed and normalized from raw data, and the resources necessary to re-create the SQM reports from that database."

Full implementation of the above-stated data retention policy is tentatively scheduled for 3Q01. KCI and BellSouth are continuing discussions regarding this proposal.

Not Complete – Supplemental Test Plan PMR 2-2-3, 2-2-4, 2-21-3, and 2-21-4

The objective of the Metrics Definition Documentation and Implementation Verification and Validation Review (PMR 2) was to evaluate the definitions of the SQMs and the associated descriptions of the calculations in the October 22, 1999, version of BellSouth's Georgia SQM documentation.

In Exception 133, KCI found that BellSouth does not compute its Operations Support System (OSS) Interface Availability SQM in accordance with the definitions and business rules that appear in the *Service Quality Measurements Georgia Performance Reports (SQM Reports)* for Pre-Ordering and Maintenance and Repair.

BellSouth responded to this exception on March 7, 2001. It explained that the measurements for Interface Availability (OSS-2 for Pre-Ordering/Ordering and OSS-3 for Maintenance/Repair) are based upon the BellSouth problem management process, a tool developed by BellSouth to track and measure OSS performance. Originally created for internal BellSouth use, the process was designed to report outages of specific applications and the hardware on which they reside, enabling the internal measurement of OSS availability. Although the process is now applied to interfaces utilized by external customers, the original intent and interpretation of the OSS measurement process, as developed by BellSouth, have not changed. It is upon this historical interpretation that the benchmark of ≥99.5% for these SQMs was derived.

BellSouth agreed that the definitions and business rules in the Georgia SQMs for Interface Availability (OSS 2 and OSS-3) are not worded such that the intended interpretation is clear. Therefore, BellSouth has rewritten the definitions and business rules and will incorporate them into future revisions of the Georgia SQM.

Further, BellSouth indicated that an internal analysis of PMAP-reported values revealed that not all assets had been appropriately mapped to Renaissance Enterprise Management (REM), the tool used to compile trouble report data. It subsequently corrected January Encore data and implemented a plan of action to ensure future compliance:

- Completed detailed review of REM assets and linkages to applications
- Established additional linkages, where appropriate
- Established procedure for reporting transport outages directly associated with specific applications
- Enhanced Project Management Organization (PMO) to better manage the internal change control process
- Dedicated resource to manage business requirements
- Established process for monthly review of REM assets
- Established process for periodic internal audits
- Established process for monthly reconciliation of CLEC-reported REM-reported outages

KCI and BellSouth are continuing discussions regarding the proposed SQM language.

Not Complete – Supplemental Test Plan PMR 2-4-2, 2-4-3, 2-5-2, and 2-5-3

In Exception 122, KCI stated that "Definitions and Business Rules in the *Service Quality Measurements Georgia Performance Reports (SQM Reports)* are incomplete or inaccurate for the Firm Order Confirmation (FOC) Timeliness and Reject Interval Ordering Service Quality Measurements."

KCI indicated that time stamps from EDI, LENS, and TAG should be used in the calculation of these measurements as per the business rules. However, KCI found that time stamps from LEO are used in such calculations.

BellSouth has rewritten the definitions of FOC Timeliness and Reject Interval in the Georgia SQM to completely and accurately describe the measurements. Pending change requests will enable BellSouth to correctly capture time stamps from EDI, LENS, and TAG for calculation of the FOC and reject intervals. These change requests are scheduled for implementation on April 1, 2001. KCI plans to reevaluate these test criteria, using data for March 2001.

Not Complete – Supplemental Test Plan PMR 4-1-1

The objective of the Metrics Data Integrity Verification and Validation Review (PMR 4) was to evaluate the accuracy and completeness of the SQM raw data produced by BellSouth during recent months. The evaluation also assessed the adequacy and completeness of the related data transfer process and the internal controls on the processes.

In Exception 89.3, KCI stated that "raw data used in the calculation of BellSouth Service Quality Measurement (SQM) reports are not accurately derived from or supported by their component early-stage data" for OSS Response Interval – Pre-Ordering.

BellSouth provided an amended response to this exception on February 23, 2001. It was determined that the discrepancies were due to invalid negative numbers generated by middleware used by LENS, TAG, RNS, and ROS to produce the measure. Source system teams are currently working to correct or eliminate generation of these invalid values. BellSouth estimates that implementation of the required changes will be completed by mid-year 2001.

Not Complete – Supplemental Test Plan PMR 4-3-1, 4-3-2, 4-4-1, 4-4-2, 4-5-1, and 4-5-2

KCI stated in Exception 131 that "BellSouth's raw data used in the calculation of the BellSouth Ordering SQM reports is not accurately derived from or supported by its component early-stage data" for Percent Rejected Service Requests, Reject Interval, and Firm Order Confirmation (FOC) Timeliness.

In a response provided to KCI on February 23, 2001, BellSouth clarified 23 of the 24 PON discrepancies with valid business and technical explanations. The remaining PON discrepancy was due to the inability of PMAP to properly capture FOC timestamps for orders in LEO with manual FOCs. A change request was implemented on February 1, 2001 to address this issue. KCI plans to reevaluate these test criteria, using data for February 2001.

For the month tested, only ~.97% of the FOCs produced by LEO were manual. Therefore, impact on reported results is negligible.

Not Complete – Supplemental Test Plan PMR 4-13-1

KCI stated in Exception 86.1 that it could not replicate "BellSouth's reported Service Quality Measurements (SQMs)." This included Percent Provisioning Troubles within 30 days of Service Order Activity in the provisioning non-trunks category for the CLEC Aggregate and BellSouth Retail.

KCI was unable to replicate the measure by using the corresponding raw data files. Change requests to correct the irregularities in PMAP were implemented on March 1, 2001. Retesting will be conducted on data for February 2001.

Not Complete – Supplemental Test Plan PMR 4-38-1 and 4-39-1

In Exception 89.2, KCI states that "raw data used in the calculation of BellSouth Service Quality Measurement (SQM) reports are not accurately derived from or supported by their component early-stage data" for the Trunk Group Service Report and the Trunk Group Service Detail.

KCI found that BellSouth-reported derived raw data values do not agree with the KCI-calculated values for this SQM. BellSouth implemented a code change in January 2001, to address the root cause of the discrepancies identified. KCI is currently conducting a retest to confirm the effectiveness of the change.

Not Complete – Supplemental Test Plan PMR 5-11-2

The objective of the Calculation and Reporting Verification and Validation Review (PMR 5) was to evaluate the accuracy of the information produced by BellSouth's SQM report production processes. In this evaluation, KCI determined whether BellSouth's SQM calculations were accurately reported the CLEC aggregate and for BellSouth retail in October 1999. KCI based its evaluations on the raw data and computation instructions provided by BellSouth. This evaluation complemented the related Performance Measures Evaluation conducted under the *Master Test Plan*, which focused on the SQMs reported for the KCI test CLEC for all months of the transaction testing period.

KCI stated in Exception 86.1 that it could not replicate "BellSouth's reported Service Quality Measurements (SQMs)." This included Percent Provisioning Troubles within 30 days of Service Order Activity in the provisioning non-trunks category for the CLEC Aggregate and BellSouth Retail.

KCI was unable to replicate the measure by using the corresponding raw data files. Change requests to correct the irregularities in PMAP were implemented on March 1, 2001. Retesting will be conducted on data for February 2001.

BellSouth Telecommunications, Inc.
OSS Evaluation – Georgia
Supplemental Test Plan

Version 2.0~~1~~

Submitted by:

KPMG Consulting

March 16~~7~~, 2001~~0~~

Contents

I. Document Control

A. Distribution

Table I-1: Distribution List for Document

Contact	Organization	Date Sent
David Burgess	Georgia Public Service Commission	
Leon Bowles	Georgia Public Service Commission	
Dennis Sewell	Georgia Public Service Commission	
Kathy Wilson-Chu	BellSouth	
Milton McElroy	BellSouth	
William Stacy	BellSouth	
Bennett Ross	BellSouth	
Claudia Fox	FCC	
Lisa Harvey	Florida Public Service Commission	
Stephanie Folse	Louisiania Public Service Commission	
Brent Marshall	US Department of Justice	
Anu Seam	US Department of Justice	
Frances Marshall	US Department of Justice	
Raymond Sears	KPMG Consulting, Inc.	
Michael Weeks	KPMG Consulting, Inc.	
David Frey	KPMG Consulting, Inc.	
Chuck King	KPMG Consulting, Inc.	
Mike Adderly	KPMG Consulting, Inc.	
Carrie Thielemann	KPMG Consulting, Inc.	
Ted Glickman	KPMG Consulting, Inc.	
Gregory Pulaski	KPMG Consulting, Inc.	
Elizabeth Fuccillo	KPMG Consulting, Inc.	
Terry Trudgian	KPMG Consulting, Inc.	
Brian Rutter	KPMG Consulting, Inc.	

B. Approved By

Table I-2: Approval List for Document

Person	Department	Date
David Burgess	Georgia Public Service Commssion	

Table I-3: Version Control

Version	Date	Reason
1.0	January 22, 2000	Initial Draft Release
1.1	March 1, 2000	Draft Release
2.0	March 17, 2000	Updated Release
2.1	March 16, 2001	Updated Release

C. Revision Notes

Final Release 2.01 March 167, 2000	
Location	Description of Change
Global	Name of company (KPMG Consulting)
Test Plan Cover Page	Version and date
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Page 18	Table IV-2 – changes to Evaluation Measures
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Page 22	Table IV-4 – text changes to Sub-process / Attribute and Evaluation Measures; 4.6 Test Approach – numbering changes
Page 23	4.6 Test Approach – numbering changes
Page 24	Table IV-5 – changes to Sub-process / Attributes, Evaluation Measures, Evaluation Techniques and Criteria Types
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~~Pages 46-48~~	~~Elimination of Test 6.0~~
~~Page 48-51~~	~~Revision of numbering to reflect Test 7.0 change to new Test 6.0~~
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II. Introduction

A. Background

The Telecommunications Act of 1996 (the Act) requires BellSouth Telecommunications, Inc. (BLS) in Georgia to:

- Provide just, reasonable, and nondiscriminatory access to its operations support systems (OSS);
- Provide the documentation and support necessary for competitive local exchange carriers (CLECs) to access and use these systems; and
- Demonstrate that BLS's systems are operationally ready and meet prescribed performance standards.

Compliance with these requirements will allow competitors to obtain pre-ordering information, submit service orders for resold services and unbundled network elements (UNEs), submit trouble reports, and obtain billing information at a level deemed to be non-discriminatory when compared with BLS's retail operations.

The Georgia Public Service Commission (GAPSC) and BLS have directed ~~KPMG~~KPMG Consulting, ~~LLP~~ Inc. (~~KPMG~~KPMG Consulting) to design and execute this Supplemental Test Plan. This test, in combination with additional OSS evaluations executed under the direction of the GAPSC and described in *BellSouth - Georgia OSS Evaluation Master Test Plan* (Master Test Plan) will assist the GAPSC in assessing whether BLS is meeting the requirements of the Act.

B. Scope

This document describes the plan to evaluate BLS's OSS systems, interfaces, and processes that enable CLECs to compete with BLS for customers' local telephone service, beyond the scope of activities described by the GAPSC in the Master Test Plan.

The supplemental plan has been divided into five test areas to organize and facilitate testing:

- Performance Metrics Review
- Pre-Order, Order & Provisioning
- Maintenance & Repair (*x*DSL)
- Billing
- Change Management

Within each of the test areas, the methods and processes to be applied to measure BLS's performance are described along with the specific points in the systems and processes

where BLS performance will be evaluated. The results of the test will be compared against measures and criteria identified by the GAPSC and other measures and criteria as deemed appropriate by the GAPSC. This plan also describes the application of scenarios to be used within the Pre-Order, Ordering & Provisioning test family in evaluating BLS's OSS and related support services. ~~KPMG~~KPMG Consulting will develop scenarios used in the test to evaluate the functionality of BLS's pre-ordering, ordering, and provisioning systems for resale and *x*DSL products and services. The scenarios will be designed to depict real-world situations that CLECs currently face or may face in the near future. The test will be conducted using the BLS interfaces in production for both electronic and manual order submission. These interfaces will include TAG (machine-to-machine) and EDI for resale products, and manual processes for *x*DSL products.

This supplemental plan will adopt the military-style test philosophy, which suggests a "test until you pass" approach. This is believed to be in the best interest of all parties seeking an open, competitive market for local services in Georgia.

C. Objective

The overall objective of this document is to provide a description of a plan to test additional BLS OSS systems, interfaces, and processes beyond those described in the GAPSC-approved Master Test Plan. This Supplemental Test Plan shall be the basis by which individual tests can be developed and executed. The test results will further assist the GAPSC in determining whether BLS's provision of access to OSS functionality enables and supports CLEC entry in the local market. To meet these objectives, ~~KPMG~~KPMG Consulting developed this Supplemental Test Plan that will evaluate components of the CLEC/ILEC relationship under real world conditions.

D. Audience

The audience for this document falls into two main categories:

1. Readers using this document during the testing process
2. Interested parties who have some stake in the result of the BLS OSS evaluation and wish to have insight into the evaluation effort

The primary user of this document is ~~KPMG~~KPMG Consulting, identified by BLS and the GAPSC as Test Manager. Others are the GAPSC, BLS, the CLECs, the Department of Justice (DOJ), the Federal Communications Commission (FCC), and other State Commissions.

Test Manager

~~KPMG~~KPMG Consulting, as Test Manager, has overall responsibility for the management of the testing process described in this document. This document will be used by ~~KPMG~~KPMG Consulting to guide the various parties involved in this testing

effort, including any additional entities utilized by ~~KPMG~~KPMG Consulting to simulate the CLEC/ILEC relationship.

Georgia Public Service Commission

The Georgia Public Service Commission is responsible for providing input on additional tests, measures, or criteria that should be considered. ~~KPMG~~KPMG Consulting will provide results and preliminary evaluation of the results to the GAPSC. The GAPSC is responsible for the final evaluation of the test results.

BellSouth

BLS will use this document to understand the supplemental testing framework and requirements in order to prepare for and support test execution.

The CLEC Community

The CLECs will use this document to understand the breadth and depth of the supplemental testing. In addition, this document describes the elements required of the CLECs to prepare for their role in the tests. The terms ALECs and CLECs are synonymous, and the term CLECs will be used throughout this document.

Department of Justice

The Department of Justice may observe the process of developing, conducting, and evaluating the tests.

The Federal Communications Commission

The Federal Communications Commission may observe the process of developing, conducting, and evaluating the tests.

E. Assumptions

This section describes the assumptions made in the development of this Supplemental Test Plan.

- BLS will provide suitable resources in sufficient numbers to assist ~~KPMG~~KPMG Consulting with the evaluation effort.
- BLS will provide access to appropriate documentation.
- BLS will provide the necessary resources, facilities, and support for ~~KPMG~~KPMG Consulting and/or designated vendor(s) to establish connectivity with its systems and to create the test bed required to execute the tests (e.g., office space; equipment; IDs; security access; customer accounts and addresses; and appropriate company codes).
- BLS will process test transactions as part of normal processing including the provisioning of some scenarios/test cases.

- BLS and, where appropriate, CLECs will provide the facilities required to execute the live scenarios.
- BLS and, where appropriate, CLECs will allow ~~KPMG~~KPMG Consulting to observe retail and wholesale processes on-site during the evaluation effort.
- BLS and the CLECs will give ~~KPMG~~KPMG Consulting access to historical data and current operational reports, as needed, to complete the evaluation.
- BLS will allow the inspection of algorithms that may have a bearing on parity access.
- BLS will maintain a stable environment for the duration of the evaluation.
- Regulatory, legal, and confidentiality issues or concerns can be resolved without significant impact to either the intent of the tests, the ability to execute the tests, or the schedules for their execution.

In some cases, certain order types, troubles, and processes may not be practically tested within the test. Examples include orders with very long interval periods or high volumes of test provisioning transactions. Accordingly, the test may take the form of an interview, inspection, live orders review, review of historical performance or operational reports, or some other method that will capture the performance of BLS with respect to the order types and processes in question. The Test Plans will identify the tests that can be executed live and those that must be executed by other means. Long interval tests that prove to have no alternative test methods that foreshorten the test will be referred, with a recommendation for disposition, to the GAPSC. The GAPSC will make the final decision regarding the disposition of such tests.

Operational, time, and resource constraints make it impossible to construct a completely exhaustive test suite. Provision has been made in the plan to amend or extend the test coverage if, in the judgment of the GAPSC, an amendment or extension is deemed justified.

F. Document Structure

This section describes the structure of the document. It includes a table that lists each major section number along with a brief description.

Table II-1 Document Overview

Sect. No.	Section	Content
I	Document Control	Identifies document distribution and necessary approvals.
II	Introduction to the Document	Documents project background, scope, and objectives, assumptions, and limitations. Includes who should read the document, and how it is structured.

Sect. No.	Section	Content
III	Test Plan Framework	Describes the methodologies for additional testing of BLS's systems, interfaces and processes. Includes how testing is segmented and organized, testing components, entrance and exit criteria, data acquistion, and traceability.
IV	Performance Metrics Review Test Section	Describes the methods and procedures for additional evaluation of BLS's data collection, transfer, and processing into its performance metrics.
V	Pre-Order, Order & Provisioning Test Section	Describes the methods and procedures for verifying and validating BLS's core systems and processes associated with ordering and provisioning resale and *x*DSL products, and through a series of transaction tests, manually submitted orders, and inspection.
VI	Maintenace and Repair Test Section	Describes the methods and procedures for evaluating BLS's processes for *x*DSL trouble reporting and repairs, and TAFI and ECTA functionality for resale services.
VII	Billing Test Section	Describes the methods and procedures for evaluating BLS's resale service billing and usage generation systems and processes.
VIII	Change Management Test Section	Describes the methods and procedures for evaluating BLS's processes for, and implementation of, its OSS '99 release.
Appendix A	Statistical Approach	Describes the statistical methods and procedures for evaluating BLS's performance for all Performance Metrics Review tests.
Appendix B	Resale Products for Functional Evaluation	Describes the methodology for testing BLS Resale products and services for functional evaluation.
Appendix C	Test Scenarios	Describes the scenarios for functional evaluation of Resale and *x*DSL products and services.

III. Test Plan Framework.

The supplemental evaluations of BLS's OSS are designed to build on those described in the Master Test Plan approved by the GAPSC. In constructing a Supplemental Test Plan, many factors were considered, including the systems and processes to be tested, the measurement points and respective evaluation criteria, and the necessary conditions required to stage successful, efficient, and objective evaluations. ~~KPMG~~KPMG Consulting will execute all tests listed in this plan.

The supplemental test plan framework was defined along four key dimensions:

- Test Scenarios
- Test Domains
- Test Processes
- Evaluation Criteria

The test scenarios and the test domains define **what is to be tested**. *Test scenarios* provide the contextual basis for testing by defining the transactions, products, volumes, data elements, and other variables that must be considered and included during testing. The *test domains* define the systems and processes to be tested.

Test processes and evaluation criteria define **how testing will be conducted**. *Test processes* define the techniques, measures, inputs, activities, and outputs of each component test. *Evaluation criteria* serve as the basis for evaluation by defining the norms against which test results are compared.

These concepts are discussed in more detail in the following sections.

A. Test Scenarios

Based on ~~KPMG~~KPMG Consulting's industry experience, the knowledge gained from the New York Public Service Commission Test and the Pennsylvania Public Utility Commission Test, as well as a review of the evaluations described in the Master Test Plan, ~~KPMG~~KPMG Consulting has developed a representative set of additional test scenarios for evaluation in Georgia.

The test scenarios describe, at a high level, realistic situations in which CLECs purchase wholesale services from BLS to be resold to the CLECs' end-user customers on a retail basis. The key principles applied in generating the additional scenarios include: (1) emulating real world coverage, mix, and types of transactions while (2) balancing the requirement for practical and reasonably executable transactions that would not unduly disrupt normal production or negatively affect customer service. In general, each test scenario describes a real-world situation that will be used to create test cases. A summary of the scenarios is provided in Appendix C.

B. Test Domains

The areas subject to testing exist in four domains that mirror major business functions performed by a telecommunications carrier:

- Pre-Order, Order, and Provisioning (PO&P)
- Maintenance and Repair (M&R)
- Billing (BLG)
- Change Management (CM)

These four domains correspond to four respective business functions that comprise, in part, the BLS/CLEC relationship.

Pre-Order, Order, and Provisioning Domain

This domain is comprised of the systems, processes, and other operational elements associated with BLS's support for Pre-Ordering, Ordering, and Provisioning activities for wholesale services. The purpose of the specified tests is to evaluate resale interface functionality and provisioning processes, to evaluate manual ordering and provisioning processes for *x*DSL services, to evaluate compliance with prescribed measurements, and to provide a basis for comparing this operational area to parallel systems and processes supporting BLS's Retail Operations.

Maintenance and Repair Domain

This domain is comprised of the systems, processes, and other operational elements associated with BLS's support for Wholesale Maintenance and Repair activities. The purpose of the specified tests is to evaluate Maintenance and Repair activities on resale services and *x*DSL-capable loops.

Billing Domain

This domain is comprised of the systems, processes and other operational elements associated with BLS's support for Wholesale Billing. The purpose of the specified tests is to evaluate activities for resale service billing and usage generation systems.

Change Management Domain

This domain is comprised of the policies and practices for managing change in the systems, processes and other operational elements necessary for BLS's establishment and maintenance of business relationships with the CLECs. Supplemental test activities in Change Management will focus on an evaluation of BLS's OSS '99 release.

C. Test Processes

Within each of the test domains, specific test processes to be executed have been defined.

In general, two kinds of tests have been developed:

- Transaction-Driven System Analysis - those that rely on initiation of transactions, tracking of transaction progress, and analysis of transaction completion results to evaluate a system under test.
- Operational Analysis - those that focus on the form, structure, and content of the business process under study. This test method will be used to evaluate day-to-day operations and operational management practices, including policy development, procedural development, and procedural change management.

CLEC Involvement

CLECs operating in Georgia will be given an opportunity to participate in specified components of this test. The inclusion of selected CLEC live transactions provides an alternative test method for transactions which may not be practical to provide through the test infrastructure, and facilitates a more realistic depiction of real world production. CLEC participation will also be solicited to provide real test cases during the test period.

Additionally, ~~KPMG~~KPMG Consulting will organize regularly scheduled meetings with the GAPSC and the CLECs to keep interested parties apprised of all relevant aspects of the test activities described in this Supplemental Test Plan, as well as the activities described in the Master Test Plan.

D. Evaluation Criteria

Measures and their corresponding evaluation criteria provide the basis for conducting tests. Evaluation criteria are the norms, benchmarks, standards, and guidelines used to evaluate measures identified for testing. Evaluation criteria provide a framework for the scope of tests, the types of measures that must be taken during testing, and the approach necessary for analyzing results.

There are four types of evaluation criteria:

Table III-1: Evaluation Criteria

Evaluation Criteria Type	Description	Examples
Quantitative	These criteria set a threshold for performance where a numerical range of values is possible, such as response time.	System response time is four seconds or less.
Qualitative	These criteria set a threshold for performance	Documentation defining change

Evaluation Criteria Type	Description	Examples
	where a range of quality values is possible, such as level of customer satisfaction.	notification procedures is adequate.
Parity	These are criteria that require two measurements to be developed and compared, such as whether external response time is at least as good as internal response time.	CLEC transaction time is no greater than BLS Retail transaction time.
Existence	These are criteria where only two possible test results can exist (e.g., true/false, presence/absence), such as whether a document exists or not.	Documentation defining change notification procedures exists.

The evaluation criteria to be applied in the overall test effort are based largely on the legal and regulatory requirements for functionality and performance applicable to BLS's OSS. Overall, evaluation criteria are derived from three types of sources, as shown below.

Table III-2: Sources of Evaluation Criteria

Evaluation Criteria Source Types	Description
Legal and Regulatory Requirements	Requirements specified by statute and regulation, such as FCC orders, court orders, GAPSC regulations, federal and state statutes, and other binding requirements resulting from judicial or governmental proceedings.
Consensus Requirements	Norms, benchmarks and standards developed by formal consensus proceedings.
Good Management Practices (GMP)	Widely recognized standards and guidelines promulgated by sanctioned industry and governmental organizations and other bodies (e.g., Telecommunications and Industry Forum); also includes benchmarks, performance goals, and guidelines derived from industry and topic area experts, BLS and CLEC performance targets, publications, academic journals and other sources.

E. Test Process Elements

The test process includes a description of the test, its objectives, the targets and scope of the test, the measures to be used, the test scenarios which apply to the test, the test's inputs, activities, and outputs, as well as entrance and exit criteria. Each test process specifies the evaluation techniques used to capture and analyze information developed during testing and the evaluation measures used to conduct testing.

1.0 Entrance Criteria

Entrance criteria are those requirements that must be met before individual tests can commence. Global entrance criteria, which apply to every individual test (except where noted otherwise), include the following:

1. **The Test Plan has been approved.**

   The Supplemental Test Plan must be approved by the GAPSC.

2. **All legal dependencies have been resolved.**

   Any pending legal and regulatory proceedings that impact the ability to perform the additional test activities must be concluded in a manner, which allow testing to proceed. Any necessary legal or regulatory approvals must be secured.

3. **All required BLS interface capabilities must be operationally ready.**

   Electronic interfaces to all OSS access functions of Pre-Ordering, Ordering, and Provisioning must be fully tested and operational.

   For transaction tests to begin, the test infrastructure established for the test activities identified in the Master Test Plan must continue to be operationally ready.

Table III-3: Global Entrance Criteria

Criteria	Responsible Party
The Test Plan has been approved.	GAPSC
All legal dependencies have been resolved.	BLS, GAPSC
Resolutions to legal dependencies approved.	GAPSC
All required BLS interface capabilities must be operationally ready.	BLS
The Interface Test Tool must be operationally ready.	~~KPMG~~KPMG Consulting

2.0 Exit Criteria

Exit criteria are the requirements that must be met before the tests defined in the Test Plan can be concluded.

Global exit criteria, which apply to every individual test (except where noted otherwise), include the following:

1. **All test activities required by the test plan must be completed.**

   For each test, all fact finding and analysis activities must be completed. All results and test methodologies have been documented. Any exceptions must be resolved or re-testing completed, unless specifically exempted by the GAPSC.

2. **All change control, verification, and confirmation steps have been completed.**

   The results of test activities must be documented and reviewed for accuracy. Any results that require clarification or follow-up are confirmed.

In addition to these global exit criteria, test-specific exit criteria, where applicable, are defined within each test.

Table III-4: Exit Criteria

Criteria	Responsible Party
All required test activities must be completed	~~KPMG~~KPMG Consulting
All change control, verification, and confirmation steps have been completed	~~KPMG~~KPMG Consulting

3.0 Evaluation Techniques

Each test relies on one or more techniques to collect and record measurements and analyze the results. The five types of techniques defined for this test are described in the chart below.

Table III-5: Evaluation Techniques

Technique	Description
Transaction Generation	Transaction generation is the use of live, historical, and/or generated data which is executed through the system under review. The results of this test are evaluated for quality.
Report Review	Review and analysis of historical data, reports, metrics, and other information in order to assess the effectiveness of a particular system or business function. This includes performance measurement reports and other management reports.
Inspection	Physical review of process activities and products, including site visits, walk-throughs, read-throughs, interviews, and work center observations.
Logging	Monitoring activities and collecting information by logging process events and products as they happen. Logging can be mechanized or manual.
Document Review	Compilation and review of books, manuals, and other publications related to the process and system under study.

IV. Performance Metrics Review Test

A. Purpose

The purpose of this document is to define the specific tests to be undertaken in evaluating the systems, processes, and other operational elements associated with BLS's support for Performance Metrics (Service Quality Measurements). These tests are in addition to the initial metrics-related tests described in the *BellSouth - Georgia OSS Evaluation Master Test Plan*.

- PRE-2: Pre-Ordering Performance Results Comparison
- O&P-7: O&P Performance Results Comparison
- BLG-~~5~~1: Billing Performance Results Comparison
- M&R-7: M&R Performance Results Comparison

B. Organization

The Performance Metrics Review is organized into three test target areas, which represent the key focus areas for testing in this domain. The three test target areas are:

- Standards & Definitions
- Data Processing
- Data Retention

The Performance Metrics scope section contains a series of tables that identify the specific tests to be associated with each target test area. The tables are organized based upon subject test matter.

The subsequent section, Performance Metrics Review "Test Process," provides additional information and tables that further define the testing approach, inputs, outputs, as well as entrance and exit criteria.

C. Scope

The Performance Metrics Review test family comprises three test target areas, representing important and generally distinct areas of effort undertaken by BLS. The three test target areas are:

- Standards & Definitions
- Data Processing
- Data Retention

Each target test area is further broken down into a number of increasingly discrete Process and Sub Process Areas that serve to identify the particular area of interest under test.

The Performance Metrics Review Test extends to all OSS process domains: Pre-Ordering; Ordering; Provisioning; Maintenance & Repair; Billing; Operator Services (Toll) & Directory Assistance; E911; and Trunk Group Performance and Collocation.

D. Test Process

Six tests have been designed to address the three test target areas. The organization of the subject test processes is as follows:

PMR1: Data Collection and Storage Verification and Validation Review

PMR2: Metrics Definition Documentation and Implementation Verification and Validation Review

PMR3: Metrics Change Management Verification and Validation Review

PMR4: Metrics Data Integrity Verification and Validation Review

PMR5: Metrics Calculation and Reporting Verification and Validation Review

PMR6: Statistical Evaluation of Transactions-Test Metrics

The three test target areas and six metrics tests will review Service Quality Measurements reported by BLS, in part based on requirements of state and federal regulators.

The metrics tests will involve an examination of both live industry data and, where applicable, data from the test transactions performed by ~~KPMG~~KPMG Consulting. Both CLEC (Resale and UNE) and Retail data will be included in the test.

1.0 Test PMR1: Data Collection and Storage Verification and Validation Review

1.1 Description

This test evaluates key policies and practices for collecting and storing raw and target data necessary for the creation of performance metrics. Both the procedures for data used in the calculation of the reported metrics and for data required in the calculation of retail analogs will be included. This test will rely on checklists and inspections.

1.2 Objectives

The objectives of this test are to determine the adequacy and completeness of key policies and procedures for collecting and storing performance data.

1.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Interview guides/questionnaire developed	~~KPMG~~KPMG Consulting
Interviewees identified and scheduled	BLS, ~~KPMG~~KPMG Consulting
Detailed evaluation checklists completed	~~KPMG~~KPMG Consulting

1.4 Test Scope

Table IV-1 Test Target: Data Collection and Storage Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Collection of Data	Data c~~C~~ollection policies & procedures for CLEC and retail data	Adequacy and completeness of data collection policies and procedures	Inspection Document review Report review	Qualitative
	Identified data collection points	Applicability of and measurability from control points	Inspection	Qualitative
	Data c~~C~~ollection tools	Adequacy and scalability of data collection tools	Inspection	Qualitative
	Internal Controls	Adequacy and completeness of the internal control process	Inspection Document review Report Review	Qualitative
Storage of Data	Data s~~S~~torage policies & procedures for CLEC and retail data	Adequacy and completeness of data storage policies and procedures	Inspection Document review Report review	Qualitative
	Identified storage sites	Applicability of and measurability from control points	Inspection	Qualitative
	Data s~~S~~torage tools	Adequacy and scalability of data storage tools	Inspection	Qualitative
	Internal Controls	Adequacy and completeness of the internal control process	Inspection Document review Report Review	Qualitative

1.5 Scenarios

This test does not rely on scenarios.

1.6 Test Approach

1.6.1 Inputs

1. BLS Metrics Policies and Processes documentation

2. PMAP documentation
3. Other procedural and technical documentation
4. Evaluation checklists
5. Interview guides

1.6.2 Activities

1. Gather information
2. Review collection and storage policies and procedures for both CLEC data and data used in calculations of retail analogs
3. Perform walkthrough of BLS facilities that are relevant to the production of performance measurements
4. Perform interviews and documentation reviews
5. Complete evaluation checklists and interview summaries
6. Develop and document findings

1.6.3 Outputs

1. Completed evaluation checklists and interview summaries
2. Summary report

1.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

2.0 Test PMR2: Metrics Definition Documentation and Implementation Verification and Validation Review

2.1 Description

This test evaluates the overall policies and practices for documenting and implementing metrics definitions. This includes policies and practices associated with both CLEC and retail measurements. This test will rely on checklists, document reviews and inspections.

2.2 Objectives

The objectives of this test are to determine the adequacy, completeness, accuracy, and logic of the performance metrics as documented. Implementation of the definitions in this test covers both the exclusions and business rules applied in the creation of the raw data and any exclusions and business rules that are applied in the calculation of the metrics from the raw data. This goes beyond the activities outlined in the Performance Results Comparison tests described in the Master Test Plan which seek to determine

whether the metrics as produced by BLS are consistent with the documented definitions.

2.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Interview guides/questionnaire developed	~~KPMG~~KPMG Consulting
Interviewees identified and scheduled	BLS, ~~KPMG~~KPMG Consulting
Detailed evaluation checklists completed	~~KPMG~~KPMG Consulting

2.4 Test Scope

Table IV-2 Test Target: Metrics Definition Documentation and Implementation Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Metrics Definition	Documentation of metrics definitions	Adequacy and completeness of ~~Metrics~~ the SQM d~~D~~efinitions	Inspection Document review Report review	Qualitative
	Documentation of calculation of metrics	~~Accuracy~~ Adequacy, completeness, and logic of the ~~documented~~ SQM calculation ~~of metrics~~ description	Inspection Document review Report review	Qualitative
	Implementation of exclusions and business rules in creation of raw data and calculation of metrics	Consistency between ~~documented exclusions and business rules, and exclusions and business rules used~~(a) the SQM calculation description and exclusions, and (b) computation instructions provided by BLS	Inspection Document review Report review	Qualitative
	Validity of instructions for calculation of metrics	Consistency between ~~documented~~ the stated ~~definitions and documented instructions for calculation~~exclusions and their implementation in the raw data creation process	Inspection Document review Report review	Qualitative

2.5 Scenarios

This test does not rely on scenarios.

2.6 Test Approach

2.6.1 Inputs

1. BLS metrics development documentation
2. PMAP documentation
3. Other procedural and technical documentation that may be appropriate
4. Evaluation checklists
5. Interview guides

2.6.2 Activities

1. Gather information
2. Perform interviews and documentation reviews
3. Complete evaluation checklists and interview summaries
4. Analyze the adequacy and appropriateness of the measures provided in BLS's SQM
5. Develop and document findings

2.6.3 Outputs

1. Completed evaluation checklists and interview summaries
2. Summary report

2.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

3.0 Test PMR3: Metrics Change Management Verification and Validation Review

3.1 Description

This test evaluates the overall policies and practices for managing changes in BLS's production and reporting of metrics. The changes of concern relate to the management and communication of: metrics definitions and standards, information systems, reports, raw data, documentation, and any related processes. The policies and practices involved relate to both CLEC measurements and, where the standards are retail

analogs, retail measurements. This test will rely on checklists, document reviews and inspections.

3.2 Objectives

The objectives of this test are to determine the adequacy and completeness of key procedures for developing, conducting, monitoring, and publicizing change management of the performance metrics.

3.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Interview guides/questionnaire developed	~~KPMG~~KPMG Consulting
Interviewees identified and scheduled	BLS, ~~KPMG~~KPMG Consulting
Detailed evaluation checklists completed	~~KPMG~~KPMG Consulting

3.4 Test Scope

Table IV-3 Test Target: Metrics Change Management Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Change Management	~~Developing~~ Development of change proposals	Completeness and consistency of the change development process	Inspection Document review Report review	Qualitative
	~~Evaluating~~ Evaluation of change proposals	Completeness and consistency of the change evaluation process	Inspection Document review Report review	Qualitative
	~~Implementing~~ Implementation of changes	Completeness and consistency of the change implementation process	Inspection Document review Report review	Qualitative
	Determination of change iIntervals	Reasonableness of the change interval	Inspection Document review Report review	Qualitative
	Updating of d~~D~~ocumentation	Timeliness of documentation updates	Inspection Document review Report review	Qualitative
	Tracking of change proposals	Adequacy and completeness of change management tracking process	Inspection Document review Report review	Qualitative

3.5 Scenarios

This test does not rely on scenarios.

3.6 Test Approach

3.6.1 Inputs

1. BLS metrics development documentation
2. PMAP documentation
3. Other procedural and technical documentation that may be appropriate
4. Evaluation checklists
5. Interview guides

3.6.2 Activities

1. Gather information
2. Perform interviews and documentation reviews
3. Complete evaluation checklists and interview summaries
4. Develop and document findings

3.6.3 Outputs

1. Completed evaluation checklists and interview summaries
2. Summary report

3.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

4.0 Test PMR4: Metrics Data Integrity Verification and Validation Review

4.1 Description

This test evaluates the overall policies and practices for processing the data used by BLS in the production of the reported performance metrics and standards. This test will rely on document reviews, inspections, and comparison of samples of data from different stages of processing. Historical CLEC-aggregate and retail data will be the subjects of the test.

4.2 Objectives

The objective of this test is to determine the integrity of key procedures for processing the data necessary to produce performance metrics.

4.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Interview guides/questionnaire developed	~~KPMG~~KPMG Consulting

Criteria	Responsible Party
Interviewees identified and scheduled	BLS, ~~KPMG~~KPMG Consulting
Detailed evaluation checklists completed	~~KPMG~~KPMG Consulting

4.4 Test Scope

Table IV-4 Test Target: Metrics Data Integrity Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Data Integrity	Transfer of data from point(s) of collection, with emphasis ~~on inappropriate deletions~~ on distortions	~~Adequacy and completeness of the data transfer process~~Accurate transformation of the earlier stage data into raw data (i.e., no differences in data values)	Inspection Document review Report review	Qualitative, Quantitative
	Conversion of data from unprocessed to processed form with emphasis ~~on distortions~~on inappropriate deletions	~~Adequacy and completeness of the conversion policies and procedures~~Complete transformation of the earlier stage data into raw data (i.e., no inappropriate omissions of earlier stage data)	Inspection Document review Report review	Qualitative, Quantitative
Data Transfer	Data transfer policies and procedures for CLEC and retail data	Adequacy and completeness of data transfer policies ~~and procedures~~	Inspection Document review Report review	Qualitative
	Internal controls	Adequacy and completeness of the internal control process	Inspection Document review Report review	Qualitative

4.5 Scenarios

This test does not rely on scenarios.

4.6 Test Approach

4.6.1 Inputs

~~1.BLS Metrics Change Management Policies and Procedures documentation~~

~~2.~~1. PMAP documentation

~~3.~~2. Other appropriate procedural and technical documentation

~~4.~~3. Evaluation checklists

~~5.~~4. Interview guides

4.6.2 Activities

1. Gather documentation
2. Perform interviews and documentation reviews
3. Complete evaluation checklists and interview summaries
4. Gather sample of data
5. Analyze data
6. Develop and document findings

4.6.3 Outputs

1. Completed evaluation checklists and interview summaries
2. Summary report

4.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

5.0 Test PMR5: Metrics Calculation and Reporting Verification and Validation Review

5.1 Description

This test evaluates the processes used to calculate performance metrics and retail analogs. The test will rely on re-calculating CLEC-aggregate metrics and retail analogs from raw data and reconciling any discrepancies to verify and validate the reporting of the metrics. The test will use retrospective data. The test will rely on checklists, document reviews, and inspections.

5.2 Objectives

The objectives of this test are to determine the accuracy of recent metrics calculations and reports.

5.3 Entrance Criteria

Criteria	Responsible Party
All global entrance requirements satisfied	See Table III-3
Successful Completion of PMR3	~~KPMG~~KPMG Consulting

5.4 Test Scope

Table IV-5 Test Target: Metrics Calculation and Reporting Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Metrics Calculations	Replication of metrics calculations	~~Agreement between re-calculated and reported metrics values~~ Accuracy and completeness of reported performance measure disaggregation levels	Calculation Comparison	Quantitative
	~~Reconciliation of discrepancies~~	~~Reconciliation of re-calculated and reported metrics values~~	~~Revision of calculations~~	~~Qualitative~~
	Implementation of instructions for calculation of metrics	~~Consistency between documented calculation and calculation performed~~ Agreement between KCL-calculated and BLS-reported SQM values.	Calculation Comparison	Quantitative

5.5 Scenarios

This test does not rely on scenarios.

5.6 Test Approach

5.6.1 Inputs

1. BLS definitions and standards as verified by PMR2
2. BLS's target database as verified and validated by PMR1
3. PMAP documentation
4. Other appropriate procedural and technical documentation
5. Evaluation checklists
6. Interview guides

5.6.2 Activities

1. Gather information
2. Perform interviews and documentation reviews
3. Complete evaluation checklists and interview summaries
4. Gather data
5. Recreate performance metrics from target data
6. Develop and document findings

5.6.3 Outputs

1. Completed evaluation checklists and interview summaries
2. Completed performance metrics calculations
3. Summary report

5.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

6.0 Test PMR6: Statistical Evaluation of Transactions Test Metrics

6.1 Description

This test evaluates BLS's service performance for the ~~KPMG~~KPMG Consulting Test CLEC using statistical methods to make comparisons to parity and benchmark standards. The test will rely on statistical methods deemed to be appropriate by ~~KPMG~~KPMG Consulting, BLS, and other concerned parties. Comparisons will not be conducted for performance measures for which a retail analog or benchmark has not been established.

6.2 Objectives

The objective of this test is to compare BLS's performance metrics generated for the ~~KPMG~~KPMG Consulting Test CLEC with the metrics for BLS retail analogs or with a predetermined value.

6.3 Entrance Criteria

Criteria	Responsible Party
All global entrace requirements satisfied	See Table III-3
Successful Completion of PMR5	~~KPMG~~KPMG Consulting

6.4 Test Scope

Table IV-6 Test Target: Statistical Evaluation of Transactions Test Metrics

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Statistical Evaluation	~~Calculate and compare test statistic to critical value, depending on metric~~KPMG Consulting Test CLEC performance, comparable BLS measures, and GPSC benchmarks	~~Test statistic exceeds critical value~~ Calculate and compare test statistic to critical value, depending on metric	Calculation Comparison	Quantitative

6.5 Scenarios

This test does not rely on scenarios.

6.6 Test Approach

6.6.1 Inputs

1. BLS definitions and standards as verified by PMR2
2. BLS's target database as verified and validated by PMR1
3. PMAP documentation
4. Other procedural and technical documentation that may be appropriate
5. Evaluation checklists

6.6.2 Activities

1. Gather information
2. Perform documentation reviews
3. Complete evaluation checklists
4. Gather data
5. Calculate test statistics from performance measures
6. Develop and document findings

6.6.3 Outputs

1. Completed evaluation checklists
2. Completed performance metrics calculations
3. Summary report

6.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

V. Pre-Ordering, Ordering, and Provisioning Test Section

A. Purpose

The purpose of this section is to define the specific tests to be undertaken in evaluating the systems, processes, and other operational elements associated with BLS's support of pre-ordering, ordering and provisioning tests for resale and *x*DSL products. The purpose of the specified tests is to evaluate functionality, compliance with measurement agreements, procedures to accommodate increases in *x*DSL order volume, and to provide a basis for comparing this operational area to parallel systems and processes supporting BLS's retail operations. Additional order and pre-order tests are described in *BellSouth - Georgia OSS Evaluation Master Test Plan*.

- O&P-1: EDI Functional Test
- O&P-2: TAG Functional Test
- O&P-3: EDI/TAG Normal Volume Performance Test
- O&P-4: EDI/TAG Peak Volume Performance Test
- O&P-5: Provisioning Verification Test
- O&P-6: Order Processing Systems Capacity Management Evaluation
- O&P-7: O&P Performance Results Comparison
- O&P-8: EDI Documentation Evaluation
- O&P-9: TAG Documentation Evaluation
- O&P-10: EDI/TAG Production Volume Performance Test
- PRE-1: TAG Pre-Ordering Functional Test
- PRE-2: Pre-Ordering Performance Results Comparison
- PRE-3: TAG Pre-Ordering Documentation Evaluation
- PRE-4: TAG Pre-Ordering Normal Volume Test
- PRE-5: TAG Pre-Ordering Peak Volume Test
- PRE-6: Pre-Ordering Processing Systems Capacity Management Evaluation

B. Organization

The Ordering and Provisioning Test is comprised of three test target areas. These test target areas include:

1. Pre-Ordering and Ordering
2. Provisioning Verification
3. Ordering and Provisioning Documentation

Each test target area is further broken down in the "Scope" section that follows into a number of discrete Process and Sub Process Areas that serve to identify the particular area of interest to be tested and the types of measures that apply.

For Pre-Ordering, Ordering, and Provisioning there is not a one-to-one correspondence between the test target areas and the Test Processes. One or more tests have been developed to evaluate each test target area dependent on the scope of the testing required in each area. In an effort to simulate the end-to-end ordering and provisioning procedures, evaluation processes will be defined for the following:

- PO&P11: EDI and Tag Resale Functional Evaluation
- PO&P12: *x*DSL Functional Evaluation
- PO&P13: Resale & *x*DSL Provisioning Verification Evaluation
- PO&P14: Resale & *x*DSL Documentation Evaluation
- PO&P15: Work Center Capacity Management Evaluation - *x*DSL
-
- PO&P16: *x*DSL Process Parity Evaluation

C. Scope

The purpose of this section is to identify the system, process, and document areas that will be tested within the Ordering and Provisioning Test Processes.

The following order types will be tested:

- New install
- Disconnect
- Inside move of the physical termination within a building
- Outside move of an end user location
- Change or modification to an existing Local Service Provider's (LSP) end user
- Record activity for ordering administrative changes
- Suspend
- Restore

- Conversion to new LSP
- Conversion as is

The order types identified above will be ordered using applicable BLS service delivery methods. The following service delivery methods will be tested:

- Resale
- *x*DSL-capable loops

In addition to service activities, directory-listing activities will also be tested.

Transactions will be submitted with known error conditions. Supplements and Cancels will also be tested. Transactions will be submitted during normal CLEC interface operational hours, as documented by BLS.

Multiple end-offices and cities will be tested. Service locations supported by different BLS ordering, provisioning, and Central Office switching and transmission configurations will be tested.

Only a portion of the test cases will be physically provisioned. Some orders will be future dated, allowing them to be canceled prior to work scheduling and provisioning. In addition to test orders, CLECs will be solicited for "live" orders to assist in the testing of *x*DSL services. Agreed upon interface business rules and formats negotiated between BLS and the CLECs will be included in the test transaction formats.

Documentation affecting ordering and provisioning of resale and *x*DSL provided to the CLECs will be reviewed as part of the documentation review.

D. Test Process

This section contains the specific evaluations to be performed in this analysis of BLS's support of resale and *x*DSL Ordering and Provisioning operations.

1.0 Test PO&P11: EDI and TAG Resale Functional Evaluation

1.1 Description

The EDI and TAG Resale Functional Evaluation will evaluate the functional elements of Pre-Ordering, Ordering, and Provisioning; the achievement of prescribed measures; and an analysis of performance in comparison to BLS's retail systems. This test will be executed by submitting local service requests (LSRs) for resale products against BLS test bed accounts and allowing the process to continue through the return of either a firm order confirmation (FOC) or reject/error notice. These transactions will be permitted to proceed through the physical provisioning process and the return of an electronic completion notice (CN). This test will address electronically ordered resale requisition type and activity type combinations for business and residence customers based on the

product and feature list described in Appendices B and C. Other functional elements of the resale ordering and provisioning process to be tested include flow-through and non-flow-through orders, full and partial migrations, error conditions, order supplements, directory listings, cancels, dispatch and non-dispatch provisioning, expedites, service order status inquiries, and jeopardy notices delivered through EDI and TAG interfaces.

Orders will be submitted both as stand-alone transactions and as integrated pre-order/order transactions. For a defined set of integrated transactions, information returned on the pre-order response will be used to populate fields on orders. This activity is undertaken to simulate the system-related activities of a CLEC integrating the pre-order and order functions.

The EDI and TAG ordering and provisioning tests will require BLS to establish a test bed of customer accounts against which to place the requisite service requests. Customer test accounts will be distributed geographically across multiple Georgia Central Offices and switching/transmission equipment configurations. Test performance data will also be collected through test management tools.

1.2 Objective

The objective of the EDI and TAG Functional Evaluation is to validate the existence, functionality, and behavior of the electronic interfaces and electronic and manual processes established by BLS for pre-ordering, ordering, and provisioning transaction requests and responses.

1.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Identification of EDI and TAG data entry/response tracking techniques completed	~~KPMG~~KPMG Consulting
Transaction submission tools installed and configured	~~KPMG~~KPMG Consulting
BLS measurements available at the CLEC level	BLS
Test bed data bases and facilities in place and CSR's provisioned	BLS
Test Scenarios selected	~~KPMG~~KPMG Consulting
Specific Test Cases and expected results developed	~~KPMG~~KPMG Consulting
Detailed "Go/No Go" checklist created	~~KPMG~~KPMG Consulting
Specific Evaluation techniques developed	~~KPMG~~KPMG Consulting
EDI and TAG documentation and training materials obtained	~~KPMG~~KPMG Consulting
Provisioning log and activity checklist developed	~~KPMG~~KPMG Consulting
Manual jeopardy/delay notification log developed	~~KPMG~~KPMG Consulting
Successful completion of QA/SRT testing	BLS, ~~KPMG~~KPMG Consulting
Test Case execution schedule developed	~~KPMG~~KPMG Consulting
All appropriate Systems Readiness Test (SRT) activities completed	~~KPMG~~KPMG Consulting
Test Plan and evaluation criteria defined and approved	~~KPMG~~KPMG Consulting
Test execution team staffed, scheduled, and trained	~~KPMG~~KPMG Consulting

1.4 Test Scope

Ordering transactions consist of three distinct, but related, processes.

- Pre-Order Processing - submission of requests for information required to complete orders;
- Order Processing - submission of orders required to add/delete/change a customer's service; and
- Provisioning - physical work performed by BLS as a result of the submitted orders.

The following chart contains the processes and sub-processes that will be used in evaluating BLS's pre-ordering, ordering, and provisioning functionality and performance.

Table V-1: Test Target: EDI and TAG Resale Functional Evaluation

Process Area	Sub-Process	Evaluation Measure
Pre-ordering	Retrieve customer CSR	Presence of functionality ~~Timeliness of response~~ Accuracy of response
	~~Validate Customer Address~~	~~Presence of functionality~~ ~~Timeliness of response~~ ~~Accuracy of response~~
	~~Reserve and release telephone numbers~~	~~Presence of functionality~~ ~~Timeliness of response~~ ~~Accuracy of response~~
	Request information about services, features~~, facilities, and PIC/LPIC~~ choices available to customers	Presence of functionality ~~Timeliness of response~~ Accuracy of response
	~~Determine~~ Calculate due date~~/appointment availability~~	Presence of functionality ~~Timeliness of response~~ ~~Accuracy of response~~
Ordering	Submit an order for the migration of a customer from BLS to a CLEC "as is"	Presence of functionality ~~Timeliness of response~~ ~~Accuracy of response~~
	Submit an order for the migration of a customer from BLS to a customer "as specified"	Presence of functionality ~~Timeliness of response~~ ~~Accuracy of response~~
	Submit an order for the partial migration of a customer from BLS to a CLEC	Presence of functionality ~~Timeliness of response~~ ~~Accuracy of response~~
	Submit an order for establishing service for a new customer of a CLEC	Presence of functionality ~~Timeliness of response~~ ~~Accuracy of response~~

Process Area	Sub-Process	Evaluation Measure
	Submit an order for feature changes to an existing CLEC customer	Presence of functionality ~~Timeliness of response~~ ~~Accuracy of response~~
	Submit an order for adding lines to an existing CLEC customer.	Presence of functionality ~~Timeliness of response~~ ~~Accuracy of response~~
	Submit an order for a telephone number change for an existing CLEC customer	Presence of functionality ~~Timeliness of response~~ ~~Accuracy of response~~
	Submit an order for a directory change for an existing CLEC customer	Presence of functionality ~~Timeliness of response~~ ~~Accuracy of response~~
	Submit an order for an inside move of an existing CLEC customer	Presence of functionality ~~Timeliness of response~~ ~~Accuracy of response~~
	Submit an order for the outside move of an existing CLEC customer	Presence of functionality ~~Timeliness of response~~ ~~Accuracy of response~~
	Submit an order for suspending service of an existing CLEC customer	Presence of functionality ~~Timeliness of response~~ ~~Accuracy of response~~
	Submit an order for restoring service to an existing CLEC customer	Presence of functionality ~~Timeliness of response~~ ~~Accuracy of response~~
	Submit an order for disconnecting service from an existing CLEC customer	Presence of functionality ~~Timeliness of response~~ ~~Accuracy of response~~
	Submit an order for disconnecting some lines/circuits for an existing CLEC customer	Presence of functionality ~~Timeliness of response~~ ~~Accuracy of response~~
	Receive order confirmation	Timeliness of response Accuracy of response Clarity and completeness of response
Supplement and Order	Create supplement transaction(s)	Presence of functionality
	Submit supplement	Presence of functionality ~~Timeliness of response~~ ~~Accuracy of response~~
	Receive acknowledgment	Timeliness of response ~~Accuracy of response~~
	Receive FOC/error/reject notification	Timeliness of response Accuracy of response Clarity and completeness of error message.
	Correct error(s)	~~Timeliness of response~~ ~~Accuracy of response~~ Clarity and completeness of error message
	Re-send supplement	Presence of functionality
	Receive FOC	Timeliness ~~or~~ of response Accuracy of response
Receive Completion Notice (CN)	Receive CN	Timeliness of response Accuracy of response Clarity and completeness of response

1.5 Test Approach

~~KPMG~~KPMG Consulting will utilize various pre-order and order transactions. EDI and TAG transaction test cases and test instances will be developed based on the Ordering and Provisioning Test Case Scenarios. The objective of this test is to validate the accuracy, completeness, and behavior of the EDI and TAG interfaces to BLS for ordering transaction requests and responses.

1.5.1 Inputs

1. Test scenarios and cases
2. Test case execution schedule
3. Interface availability
4. BLS documentation
5. Trained personnel to execute test cases
6. Test "Go/No Go" checklist
7. Detailed operational test plan

1.5.2 Activities

1. Use test cases to develop transactions and transaction content based upon instructions provided in the appropriate documentation
2. Submit EDI and TAG test case transactions according to schedule. Submittal date, time, and appropriate transaction information logged
3. Receive transaction responses via EDI and TAG. Receipt date, time, response transaction type, and response condition (valid vs. reject) are logged
4. Match transaction response to original transaction. Verify that matching transaction can be found and record mismatches
5. Verify that transaction response contains expected data and flag unexpected errors
6. Manually review unexpected errors. Identify error source (~~KPMG~~KPMG Consulting or BLS). Identify and log reason for the error. Determine if test should be discontinued
7. Correct expected errors. Re-submittal date, time, and appropriate information are logged
8. Identify transactions for which responses have not been received. Where multiple responses are expected for the

same request, the receipt of each response will be monitored.

9. Record missing responses
10. Log documentation issues uncovered during transactions creation and submission process
11. Review status of pending orders. Verify and record accuracy of response
12. Jeopardy, Pending Facilities Status and delay notifications are recognized and logged. Any jeopardy or delay notifications not received electronically are logged using the jeopardy/delay notification log
13. Generate reports

1.5.3 Outputs

1. Variance between actual test performance and the standards of performance defined in BLS methods and procedures
2. Report of expected results versus actual results
3. Rejects received after confirmation notification and percentage of total
4. Report of unexpected errors categorized by type of problem
5. Transaction counts, error ratio, response time, etc. by transaction type, product family and delivery method
6. Minimum, maximum, mean, average, and aggregate response time/interval per transaction set
7. Transaction counts per response time/interval range per transaction set
8. Orders erred after initial confirmation
9. Completed jeopardy / delay notification logs
10. Summary Report

1.6 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

2.0 Test PO&P12: xDSL Functional Evaluation

2.1 Description

The *x*DSL Order Processing Functional Evaluation will evaluate the functional elements of the Pre-Ordering, Ordering, and Provisioning process for *x*DSL (Digital Subscriber Line) products as delivered to CLECs through the BLS-supported manual process. Pre-ordering will include the use of the Loop Make-Up (LMU) process to obtain loop make-up information. Pre-ordering will also include submission of Service Inquiries (SI) to BellSouth to determine loop characteristics. This test cycle will be executed by submitting local service requests (LSRs) (which are submitted concurrently with Service Inquiries) for *x*DSL products against BLS test bed accounts and allowing the process to continue through the return of either a firm order confirmation (FOC) or reject/error notice. A number of these transactions will be permitted to proceed through the physical provisioning process and ~~the return of a faxed~~ completion of provisioning activity. Completion status will be obtained through the BellSouth CLEC Service Order Tracking (CSOTs) website.notice (CN).

CLECs participating in this test will be interviewed and their experiences will be incorporated into the test results after validation by the Test Manager. In addition, for some types of transactions, involvement will be sought from CLECs to participate in some aspects of the live transaction testing. CLEC participation will be important for complex orders that cannot be simulated adequately in the test environment.

This test cycle will address manually ordered loops capable of *x*DSL service. _Other functional elements of the *x*DSL ordering and provisioning process to be tested include full and partial migrations, error conditions, order supplements, directory listings, cancels, dispatch and non-dispatch provisioning, expedites, service order status inquiries, and jeopardy notices delivered through the manual interfaces.

Orders will be submitted as integrated pre-order /order transactions. This activity is undertaken to simulate the activities of a CLEC integrating the pre-order and order functions for *x*DSL-capable loops.

The *x*DSL ordering and provisioning tests will require BLS to establish a test bed of customer accounts against which to place the requisite service requests. Customer test accounts will be distributed geographically across multiple Georgia Central Offices and switching/transmission equipment configurations.

2.2 Objective

The objective of the *x*DSL functional evaluation is to validate the existence, functionality, and behavior of the manual interfaces established by BellSouth for pre-ordering and ordering of *x*DSL-capable loops.

2.3 Entrance Criteria

Criteria	Responsible Party

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
All documentation pertaining to Manual Order processing pertaining to *x*DSL obtained	BLS
Identification of Manual Ordering data entry/response tracking techniques completed	~~KPMG~~KPMG Consulting
BLS measurements available at the CLEC level	BLS
Test bed data bases and facilities in place and CSR's provisioned	BLS
Test Scenarios selected	~~KPMG~~KPMG Consulting
Identify CLEC participants in order to utilize *x*DSL capabilities	~~KPMG~~KPMG Consulting, CLEC(s)
Specific Test Cases and expected results developed	~~KPMG~~KPMG Consulting
Detailed "Go/No Go" checklist created	~~KPMG~~KPMG Consulting
Specific Evaluation techniques developed	~~KPMG~~KPMG Consulting
Successful completion of QA/SRT testing	BLS, ~~KPMG~~KPMG Consulting
Test Case execution schedule developed	~~KPMG~~KPMG Consulting
Test Plan and evaluation criteria defined and approved	~~KPMG~~KPMG Consulting
Test execution team staffed, scheduled, and trained	~~KPMG~~KPMG Consulting

2.4 Test Scope

The table below outlines the processes and sub-processes involved in evaluating BLS's *x*DSL Ordering functionality and performance

Table V-2: Test Target: xDSL Functional Evaluation

Process Area	Sub-Process	Evaluation Measure
Submit a Service Inquiry	Submit Loop Inquiry	Presence of functionality for manual process
	Receive response to Loop Inquiry	Timeliness of response Accuracy and completeness of response
Submit an Order	Create order transaction(s).	Accessibility of fax interface
	Submit Local Service Request (LSR).	Presence of functionality for manual processing
	Receive acknowledgment.	Presence of response
	Receive Firm Order Confirmation (FOC)/error/reject notification.	Timeliness of response Accuracy and completeness of response
	Submit expedited order transaction.	Accuracy and completeness of response Timeliness of Response
Submit an Error	Create error transaction(s).	Timeliness of response Accuracy of response Clarity and completeness of error message
	Receive acknowledgment.	Timeliness of response Accuracy and completeness of error message.
	Receive planned error/reject notification.	Timeliness of response Accuracy of response Clarity and completeness of error message
	Correct error(s).	Timeliness of response Accuracy of response
	Re-send integrated LSR.	Accessibility of fax interface
	Receive FOC.	Timeliness of response Accuracy of response

Table V-2: Test Target: xDSL Functional Evaluation

Process Area	Sub-Process	Evaluation Measure
Supplement an Order	Create supplement transaction(s).	Presence of functionality
	Submit supplement.	Presence of functionality Timeliness of response Accuracy of response
	Receive acknowledgment.	Timeliness of response Accuracy of response
	Receive FOC/error/reject notification.	Timeliness of response Accuracy of response Clarity and completeness of error message
	Correct error(s).	Timeliness of response Accuracy of response
	Re-send supplement.	Presence of functionality for manual processing
	Receive FOC.	Timeliness of response Accuracy of response
Receive Completion Notice (CN)	Receive CN transaction.	Timeliness of response Accuracy of response
Receive Pending Facility Status	Receive pending facility (PF) notification.	Timeliness of response Accuracy of response
Receive Jeopardy Notification	Receive jeopardy notification transaction.	Timeliness of response Accuracy and completeness of response
Check Service Order Status	Check service order status.	Accuracy of response

2.5 Test Approach

~~KPMG~~KPMG Consulting will utilize various *x*DSL transaction test cases and test instances developed based on the ordering and provisioning test case scenarios. The objective of this test is to validate the accuracy and completeness of orders to BLS for ordering transaction requests and responses.

2.5.1 Inputs

1. *x*DSL test cases for ordering
2. Test case execution schedule
3. Manual order handling methods and procedures
4. BLS documentation
5. Trained personnel to execute test cases
6. Test "Go / No Go" checklist
7. Detailed operational test plan

2.5.2 Activities

1. Use test cases to develop transactions and transaction content based upon instructions provided in the appropriate documentation

2. Submit ordered test case transactions for Ordering according to schedule. (CLEC participation may be required)
3. Receive transaction response receipt date, time, response transaction type, and response condition.
4. Match transaction response to original transaction. Verify that matching transaction can be found and record mismatches
5. Verify that transaction response contains expected data and flag non-expected errors
6. Manually review non-expected errors. Identify error source (~~KPMG~~KPMG Consulting or BLS). Identify and log reason for the error. Determine if test should be discontinued
7. Correct expected errors. Re-submittal date, time, and appropriate information are logged
8. Identify transactions for which responses have not been received. Where multiple responses are expected for the same request, the receipt of each response will be monitored. Record missing responses
9. Log documentation issues uncovered during transactions creation and submission process
10. Review status of pending orders. Verify and record accuracy of response
11. Jeopardy, Pending Facilities Status, and delay notifications are recognized and logged. Any jeopardy or delay notifications not received electronically are logged using the jeopardy/delay notification log

~~12.~~

~~13.~~12. Generate reports

2.5.3 Outputs

1. Variance between actual test performance and the standards of performance defined in BLS methods and procedures
2. Report of expected results versus actual results
3. Rejects received after confirmation notification and percentage of total

4. Report of unexpected errors categorized by type of problem
5. Transaction counts, error ratio, response time, etc. by transaction type, product family and delivery method
6. Minimum, maximum, mean, average, and aggregate response time/interval per transaction set
7. Transaction counts per response time/interval range per transaction set
8. Orders erred after initial confirmation
9. Completed jeopardy / delay notification logs
10. Summary Report

2.6 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

3.0 Test PO&P13: Resale & xDSL Provisioning Verification Evaluation

3.1 Description

The Provisioning Verification Test will evaluate BLS's ability to accurately and expeditiously complete the provisioning of service requests placed in the PO&P11 EDI and TAG Functional Evaluation. This analysis will focus on electronically ordered resale products. In addition, to test the full functionality of BLS's provisioning process, orders will be supplemented and canceled, require outside dispatch, and require validation of record changes associated with resale orders and address provisioning of new services or functionality.

The Provisioning Verification Test will also evaluate BLS's ability to accurately and expeditiously complete the provisioning of service requests placed in the PO&P12 *x*DSL Functional Evaluation. This analysis will focus on manually orderable *x*DSL products, and involves the physical inspection of BLS's provisioning process. To test the end-to-end provisioning process on *x*DSL orders, participation of real CLECs will be solicited for observation of provisioning activities. In addition, to test the full functionality of BLS's provisioning process, orders will be supplemented and canceled, require outside dispatch, and address customer coordination.

Test performance data will be collected by a ~~KPMG~~KPMG Consulting on-site observer, and results will be included as inputs to the final report.

3.2 Objective

The objective of the Provisioning Evaluation Test is to measure BLS's capability to meet agreed-upon functionality and measures of service for provisioning of *x*DSL and Resale products.

3.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
PO&P11 and PO&P12: EDI, TAG, and *x*DSL Order Functional Tests successfully executed	~~KPMG~~KPMG Consulting
Transaction submission tools (electronic or manual) installed and configured/in place	~~KPMG~~KPMG Consulting
BLS measurements/methods and procedures available at the CLEC level	BLS
Test bed data bases and facilities in place and CSR's provisioned	BLS
CLEC participant(s) for *x*DSL capabilities (*x*DSL-Capable Loop) identified	~~KPMG~~KPMG Consulting, CLEC(s)
Test Scenarios selected	~~KPMG~~KPMG Consulting
Specific Test Cases and expected results developed	~~KPMG~~KPMG Consulting
Detailed "Go/No Go" checklist created	~~KPMG~~KPMG Consulting
Specific Evaluation techniques developed	~~KPMG~~KPMG Consulting
Interview guide/questionnaire(s) completed for BLS & CLEC	~~KPMG~~KPMG Consulting
Provisioning log and activity checklist developed	~~KPMG~~KPMG Consulting
Manual jeopardy/delay notification log developed	~~KPMG~~KPMG Consulting
Test Case execution schedule developed	~~KPMG~~KPMG Consulting
All appropriate Systems Readiness Test (SRT) activities completed	~~KPMG~~KPMG Consulting
Test Plan and evaluation criteria defined and approved	~~KPMG~~KPMG Consulting
Test execution team staffed, scheduled, and trained	~~KPMG~~KPMG Consulting

3.4 Test Scope

The table below outlines the processes and sub-processes involved in evaluating BLS's provisioning of *x*DSL and Resale products.

Table V-3: Test Target: Resale & xDSL Provisioning Verification Evaluation

Process Area	Sub-Process	Evaluation Measure
Receive completion notification	Receive completion notification transaction	Timeliness of response Timeliness of dates Accuracy of data
	Match response to order transaction and confirmation	Accuracy of provisioning
	Verify receipt of completion notification	Completion notification received for all transactions
Provision BLS Service	Receive design documents	Accuracy of data
	Confirm provisioning date and time - determine coordinated/non-coordinated/coordinated-time specific.	Accuracy of data
	Perform provisioning activities.	Timeliness of dates Timeliness of completion
	Perform testing activities.	Accuracy of provisioning Timeliness of response
	Turn up service.	Accuracy of data Timeliness of closure Timeliness of notification

Table V-3: Test Target: Resale & xDSL Provisioning Verification Evaluation

Process Area	Sub-Process	Evaluation Measure
Receive jeopardy notification	Receive jeopardy notification	Timeliness of notification Timeliness of dates Accuracy of data Frequency of notification
	Identify reason for jeopardy	Accuracy of response
	Monitor follow-up activities	Timeliness of closure Compliance with procedures
Receive delay notification	Receive delay notification transaction	Timeliness of response Timeliness of dates Accuracy of data Frequency of delay
	Match response to transaction	Accuracy of response
	Identify reason for delay	Accuracy of response Availability of support
Follow up on delayed provisioning activities	Monitor to closure	Timeliness of closure Compliance to procedures

3.5 Test Approach

~~KPMG~~KPMG Consulting will utilize various order transactions test instances developed based on the ordering and provisioning test case scenarios. The objective of this test is to validate the accuracy, completeness, and timeliness of BLS provisioning for resale and *x*DSL orders.

3.5.1 Inputs

1. Test cases and expected results
2. Test case execution schedule
3. Provisioning documentation
4. Provisioning log and activity checklists
5. Trained personnel to execute test cases
6. Test "Go/No Go" checklist
7. Interview questionnaire for BLS and CLEC personnel

3.5.2 Activities

1. Use test cases to develop transactions and transaction content based upon instructions provided in the appropriate documentation
2. Analyze Firm Order Confirmation (FOC) for provisioning details
3. Match transaction response to original transaction. Verify that matching transaction can be found and record mismatches

4. Verify that transaction response contains expected data and flag non-expected errors
5. Verify appointment date, time and detail. Meet BLS provisioning staff if applicable
6. Review provisioning activities within BLS Central Offices. Identify and log actions, including date and time of process in provisioning checklist
7. Identify actions warranting exceptions and determine next steps in exception process.
8. Log documentation issues uncovered during provisioning activities.
9. Review status of pending orders. Verify and record accuracy of response
10. Jeopardy, Pending Facilities Status and delay notifications are recognized and logged. All jeopardy or delay notifications not received electronically are logged using the jeopardy/delay notification log
11. Verify correct provisioning on a sampling of orders that have been completed. Record results in appropriate provisioning log and activity checklist
12. Conduct interviews with BLS and CLEC personnel
13. Generate reports

3.5.3 Outputs

1. Variance between actual test performance and the standards of performance defined in BLS methods and procedures
2. Report of expected results versus actual results
3. Rejects received after confirmation notification and percentage of total
4. Report of unexpected errors categorized by type of problem
5. Transaction counts, error ratio, response time, etc. by transaction type, product family, and delivery method
6. Transaction counts per response time/interval range per transaction set
7. Completed provisioning logs and checklists
8. Completed jeopardy / delay notification logs

9. Provisioning accuracy and timeliness report
10. Competed interview reports
11. Summary Report

3.6 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

4.0 Test PO&P14: Resale and xDSL Documentation Evaluation

4.1 Description

The Resale and *x*DSL Documentation Evaluation is an analysis of the pre-ordering, ordering, and provisioning documentation provided by BLS to CLECs to interact with the EDI and TAG interfaces, as well as the documentation provided by BLS to CLECs to manually order and provision *x*DSL products. These evaluations are intended to review the availability, accuracy, timeliness and completeness of BLS's pre-ordering, ordering, and provisioning documentation. A variety of operational analysis techniques will be employed in the evaluations.

The test will receive input from the PO&P11: EDI and TAG Resale Functional Evaluation exceptions report and the PO&P12: *x*DSL Functional Evaluation exceptions report. : The exception reports are based on issues pertaining to documentation that addresses whether the manual process matches that described in the business rules documentation.

4.2 Objective

The objective of the Resale and *x*DSL Documentation Evaluation is to determine the accuracy, timeliness, availability and usability of the BLS documentation. It is also to determine if the BLS documentation adequately assists CLECs in understanding how to implement and use all of the EDI, TAG, and manual ordering and provisioning functions available to them.

4.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
All documentation pertaining to EDI, TAG, and Manual Order processing obtained	BLS
Evaluation Checklist for Documentation completed	~~KPMG~~KPMG Consulting
BLS measurements/methods and procedures for development and distribution of documentation available at the CLEC level	BLS
Specific Evaluation techniques developed	~~KPMG~~KPMG Consulting
Interview guide/questionnaire(s) completed for BLS & CLEC	~~KPMG~~KPMG Consulting
Test Plan and evaluation criteria defined and approved	~~KPMG~~KPMG Consulting
Test execution team staffed, scheduled, and trained	~~KPMG~~KPMG Consulting

Criteria	Responsible Party
Exception report(s) arising from documentation issues from PO&P11: EDI and TAG Functional Evaluation, and from PO&P12: xDSL Functional Evaluation obtained	~~KPMG~~KPMG Consulting
BLS and CLEC documentation Order Specialist and User contact information provided	BLS, CLEC(s)

4.4 Test Scope

Table V-4 below identifies the specific documentation to be tested under PO&P14: Resale & *x*DSL Documentation Evaluation. Additional documentation found during the course of testing may be included in the documentation evaluation. Table V-5 below outlines the processes and sub-processes involved in evaluating BLS's documentation for *x*DSL and Resale products.

Table V-4: Documentation to be Tested for PO&P14: Resale & xDSL Documentation Evaluation

Document Name
BellSouth Local Exchange Ordering Guide, Volume 1 (Issue 7M)
BellSouth Local Exchange Ordering Guide, Volume 4 (TCIF 7)
Resale Based Advisory Guide
TAG Programmers Training Guide
Telecommunications Access Gateway (TAG) API Reference Guide
TAG Programmers Job Aid
BellSouth Ordering Guide for CLECs
Product and Service Interval Guide
Resale Activation Requirements

Table V-5: Test Target: Resale and xDSL Documentation Evaluation

Process Area	Sub-Process	Evaluation Measure
Acquire Documentation	Receive current documentation	Availability and timeliness of documentation
Evaluate Documentation	Evaluate documentation format	Organization of documentation
	Evaluate EDI Interface Documentation	Usability, comprehensiveness, and accuracy of documentation
	Evaluate LEO-IG Documentation	Usability, comprehensiveness, and accuracy of documentation
	Evaluate TAG Interface Documentation	Usability, comprehensiveness, and accuracy of documentation
	Evaluate *x*DSL Manual Ordering Documentatoin	Usability, comprehensiveness, and accuracy of documentation

4.5 Test Approach

~~KPMG~~KPMG Consulting will use operational analysis techniques to evaluate BLS's documentation. Prior to the initiation of the test, evaluation checklists will be created to facilitate a structured review of documentation based on standard criteria set forth in

the MTP. ~~KPMG~~KPMG Consulting will perform a structured review of BLS documentation, visit the BLS Interconnection Web site, and verify the accuracy of documentation during live tests of BLS EDI and TAG systems, as well as manual ordering processes. The documentation review conducted during live testing will allow for evaluation of the usefulness of the documentation in a business environment.

4.5.1 Inputs

1. Documentation pertaining to EDI, TAG, and manual ordering for *x*DSL products
2. Log of all documentation issues uncovered during provisioning activities
3. Detailed operational test plan and task checklist
4. Interview questionnaire for BLS and CLEC personnel
5. Documentation evaluation checklist

4.5.2 Activities

1. Conduct documentation evaluation of each document using the documentation evaluation checklist
2. Conduct documentation interviews with BLS documentation specialists and CLEC documentation users
3. Compile results and create summary reports

4.5.3 Outputs

1. Variance between actual test performance and the standards of performance defined in BLS methods and procedures
2. Report of expected results versus actual results
3. Report of unexpected documentation errors categorized by type of problem
4. Completed interview reports
5. Summary Report

4.6 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

5.0 Test PO&P15: Work Center Capacity Management Evaluation – xDSL

5.1 Description

The Work Center Capacity Management Evaluation will assess the scalability of BLS's manual processes for *x*DSL (Digital Subscriber Line) pre-order and order processing. This evaluation will include a detailed review of the safeguards and procedures in place to plan for and manage projected growth in the capacity of the manual processes and associated workforce.

5.2 Objective

The objective of this evaluation is to determine the extent to which procedures to accommodate increases in wholesale *x*DSL orders are being actively managed.

5.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Interview guides/questionnaire developed	~~KPMG~~KPMG Consulting
Interviewees identified and scheduled	BLS, ~~KPMG~~KPMG Consulting
Availability of documentation identified as input	BLS, ~~KPMG~~KPMG Consulting
Detailed evaluation checklists completed	~~KPMG~~KPMG Consulting

5.4 Test Scope

The table below outlines the processes and sub-processes involved in evaluating BLS's management processes and capabilities to support capacity changes in the pre-order and order processes associated with *x*DSL products.

Table V-6: Test Target: PO&P Work Center Capacity Management Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
*x*DSL Pre-Order and Order Processing Capacity Management	Data collection and reporting of business volumes, resource utilization, and performance monitoring	Adequacy and completeness of data collection and reporting	Inspection Document Review	Qualitative
	Data verification and analysis of business volumes, resource utilization, and performance monitoring	Adequacy and completeness of data verification and analysis	Inspection Document Review	Qualitative
	Workforce and Capacity Planning	Adequacy and completeness of workforce and capacity planning	Inspection Document Review	Qualitative

5.5 Scenarios

Scenarios are not used in this test.

5.6 Test Approach

The evaluation of Capacity Management for the manual processes begins with a review of the work center procedural documentation and interviews with work center personnel to collect information about the processing of *x*DSL orders. Structured center walk-throughs and direct observation of personnel performing their daily work will supplement the planned test interviews and document reviews. Business transaction volume and forecast data will be gathered in order to assess current and future workload. Process models will be developed to assess the capacity and scalability of the manual processes. Work force planning procedures and staffing plans will be evaluated through additional interviews and documentation reviews.

5.6.1 Inputs

1. *x*DSL pre-order and order process documentation
2. Staffing and capacity planning process documentation
3. Capacity management evaluation checklist
4. Interview guides
5. Personnel to perform evaluation

5.6.2 Activities

1. Review procedural and other documentation related to *x*DSL pre-order and ordering processing
2. Review procedural documentation related to staffing and capacity planning
3. Conduct center walk-throughs, observations and interviews with key work center personnel, as appropriate
4. Document findings

5.6.3 Outputs

1. Completed capacity management evaluation checklist
2. Interview summaries
3. Summary findings and conclusions

5.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

6.4 Test Scope

The table below outlines the processes and sub-processes involved in evaluating parity for BLS's processes for pre-order, order and provisioning of CLEC and retail *x*DSL products.

Table V-7: Test Target: PO&P16 xDSL Process Parity Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
*x*DSL Pre-order	*x*DSL Service Inquiry	Comparable processes between wholesale and retail	Inspection Document Review	Parity
	*x*DSL Loop Qualification	Comparable processes between wholesale and retail	Inspection Document Review	Parity
*x*DSL Ordering	*x*DSL Order Submission	Comparable processes between wholesale and retail	Inspection Document Review	Parity
	*x*DSL Order Entry	Comparable processes between wholesale and retail	Inspection Document Review	Parity
*x*DSL Provisioning	*x*DSL Workflow Management	Comparable processes between wholesale and retail	Inspection Document Review	Parity
	*x*DSL Workforce Management	Comparable processes between wholesale and retail	Inspection Document Review	Parity
	*x*DSL Facilities Assignment	Comparable processes between wholesale and retail	Inspection Document Review	Parity
	*x*DSL Service Activation	Comparable processes between wholesale and retail	Inspection Document Review	Parity

6.5 Scenarios

Scenarios are not applicable to this test.

6.6 Test Approach

6.6.1 Inputs

1. *x*DSL Pre-order, Order and Provisioning process documentation
2. Interview guide/questionnaire

3. Interviewees (per process area)
    - *x*DSL process owners
    - *x*DSL process staff
4. Interview schedule
5. Detailed xDSL Process Parity Evaluation Checklist
6. Appropriate system documentation

6.6.2 Activities

1. Identify all process documentation needed for review.
2. Identify relevant systems and interfaces.
3. Identify all system documentation available for review.
4. Conduct structured review of documentation using xDSL Process Parity Evaluation Checklist.
5. Conduct center walk-throughs, interviews and direct process observations using the interview guides and questionnaires.
6. Inspect physical systems and communications environments.
7. Document findings.

6.6.3 Outputs

1. Completed xDSL Process Parity Evaluation Checklist
3. Interview summaries
4. Summary findings and conclusions

6.7 Exit Criteria

Criteria	Responsible Party
All global exit criteria	See Table III-4

VI. Maintenance and Repair Test Section

A. Purpose

The purpose of this section is to define the specific tests to be undertaken in evaluating the equivalence of BLS's end-to-end processes for retail and wholesale trouble reporting and repairs of *x*DSL lines, as well as to test TAFI and ECTA functionality on resale lines. These tests are in addition to the initial maintenance and repair tests as described in the *BellSouth - Georgia OSS Evaluation Master Test Plan*, which are as follows:

- M&R-1: TAFI Functional Test
- M&R-2: ECTA Functional Test
- M&R-3: ECTA Normal Volume Performance Test
- M&R-4: ECTA Peak Volume Performance Test
- M&R-5: TAFI Capacity Management Evaluation
- M&R-6: ECTA Capacity Management Evaluation
- M&R-7: M&R Performance Results Comparison
- M&R-8: TAFI Documentation
- M&R-9: ECTA Documentation
- M&R-10: M&R Process Evaluation

B. Organization

The Maintenance and Repair Scope section contains a series of tables that identify the specific tests to be associated with each target test area. The tables are organized based upon subject test matter.

The Maintenance and Repair "Test Process" section provides additional information and tables that further define the testing approach, inputs, outputs, as well as entrance and exit criteria.

C. Scope

The Maintenance and Repair test family is comprised of two test target areas, representing important and generally distinct areas of effort undertaken by BLS. These two test target areas are:

- Performance
- Functionality

Each target test area is further broken down into a number of increasingly discrete Process and Sub Process Areas that serve to identify the particular area of interest under test.

D. Test Process

Three tests have been designed to address the two test target areas. The organization of the subject test processes is as follows:

M&R 11: Maintenance & Repair Process Evaluation of *x*DSL-Capable Loops

M&R 12: TAFI Functional Test of Resale Lines

M&R 13: ECTA Functional Test of Resale Lines

This section contains the specific evaluations to be performed in this analysis of BLS's maintenance and repair operations in support of Resale and *x*DSL services.

1.0 Test M&R11: Maintenance and Repair Process Evaluation of xDSL-Capable Loops

1.1 Description

The test is comprised of two sub-tests. The first, Sub-Test 1, evaluates the functional equivalence of BLS's maintenance and repair processes for wholesale *x*DSL over a CLEC Resale POTS line and retail *x*DSL trouble reports. Process flows for wholesale *x*DSL over a CLEC Resale POTS line and retail trouble management will be reviewed and evaluated along with technician methods and procedures (M&P's) and job aids for wholesale trouble repair. The second element, Sub-Test 2, involves the execution and observation of selected maintenance and repair test scenarios involving *x*DSL to evaluate BLS's performance in making repairs under the conditions of various wholesale maintenance scenarios.

1.2 Objectives

The objective of Sub-Test 1 is to evaluate the equivalence of BLS's end-to-end processes for trouble reporting and repair for retail *x*DSL lines and wholesale *x*DSL over a CLEC Resale POTS line. The objective of Sub-Test 2 is to evaluate BLS's performance in making repairs to *x*DSL lines under conditions of various wholesale maintenance scenarios.

1.3.1 Entrance Criteria for Sub-Test 1

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Retail and wholesale process flow documentation available	BLS
Retail and wholesale technician job aids (e.g., M&P's) available	BLS
Process evaluation checklists	~~KPMG~~KPMG Consulting

1.3.2 Entrance Criteria for Sub-Test 2

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Global entrance criteria have been satisfied	See Table III-3
Test scenarios selected	~~KPMG~~KPMG Consulting
Product descriptions and business rules for all transactions to be tested are available.	BST
Test-bed circuits provisioned	BST
Faults inserted into test-bed circuits as required by the test scenarios	~~KPMG~~KPMG Consulting

1.4 Test Scope

Table VI-1 Test Target: Maintenance and Repair Process Evaluation of xDSL-Capable Loops

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
End-to-End M&R Process: *x*DSL	Process Flow Documentation	Comparison with Retail	Inspection	Parity
	Process Evaluation	Completeness, consistency, and timeliness of the process	Inspection	Qualitative Parity
End-to-End Trouble Report Processing: *x*DSL	M&R Test Scenarios	Accuracy Timeliness	Inspection	Quantitative Parity

1.5 Scenarios

This test involves the execution and observation of selected maintenance and repair test scenarios involving *x*DSL products to evaluate BLS's performance in making repairs.

1.6 Test Approach

1.6.1 Inputs

1. Retail and wholesale *x*DSL over a CLEC Resale POTS line M&R process flow documentation (*x*DSL)
2. Other BLS procedural documentation
3. Test bed circuits with embedded faults
4. Trouble interface availability
5. BLS procedural and technical documentation
6. Evaluation checklists
7. Interview guides
8. Detailed operational test plan

1.6.2.1 Activities for Sub-Test 1

1. Review and compare wholesale *x*DSL over a CLEC Resale POTS line and retail process flows.
2. Identify differences between the two processes.
3. Analyze process.
4. Assess the potential impact of each difference if possible.
5. Document process analysis results.

1.6.2.2 Activities for Sub-Test 2

1. Conduct circuit test if applicable for each test ID.
2. Note test results.
3. Create and submit trouble tickets via TAFI, ECTA or call-in to the BRMC.
4. Periodically monitor each trouble report throughout its life.
5. Note significant events in the trouble report life cycle (error occurrences, corrections, trouble ticket submission time, time cleared, etc.)
6. Calculate time to repair measurements for each test scenario fault repaired.
7. Document observations.

1.6.3 Outputs

1. Completed evaluation checklists and interview summaries
2. Summary report

1.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

2.0 Test M&R12: TAFI Functional Test of Resale Lines

2.1 Description

The TAFI (Trouble Analysis Facilitation Interface) Functional Test will evaluate the functional elements of the trouble reporting and screening process for resale services as delivered to CLECs via the TAFI interface in BLS's production environment. This test will be executed by exercising a defined set of TAFI functions associated with trouble management activities against test bed accounts.

2.2 Objectives

The objective of the TAFI Functional Test is to validate the existence of TAFI trouble reporting and screening functionality for resale service customers in accordance with the CLEC TAFI End User Training and User Guide.

2.3. Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Detailed Test Plan completed	~~KPMG~~KPMG Consulting
Test Scenarios selected	~~KPMG~~KPMG Consulting
Specific Test Cases and Transaction Sets developed	~~KPMG~~KPMG Consulting
Product descriptions and business rules for all transactions to be tested available	BLS
Basic documentation review completed	~~KPMG~~KPMG Consulting
Detailed functional checklist created	~~KPMG~~KPMG Consulting
Test bed of working services selected and/or established	BLS
Security access to TAFI established	BLS
Evaluation Criteria defined and approved	GAPSC
Checklists and Interview Guides created	~~KPMG~~KPMG Consulting

2.4 Test Scope

Table VI-2 Test Target: TAFI Functional Test of Resale Lines

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Trouble reports	Create trouble report	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
	Modify trouble report	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
	Create repeat report	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
	Create subsequent report	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
	Enter Multiple Trouble Reports	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
	Enter and Retrieve Trouble Reports from Queues	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
	Execute Supervisor Functions	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
	Close Trouble Report	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
	Cancel Trouble Report	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
Access to test capability	Initiate port and loop-port test	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
	View port and loop-port test results	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
Downstream System Reports	Retrieve LMOS recent status report	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
	Obtain customer line record (BOCRIS)	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
	Obtain Predictor results	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
	View DLR (Display Line Record)	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
	View SOCS pending order.	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
Access error reports	Reset communications	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
	Host request errors	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
Trouble history	Retrieve Trouble History	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative
General	TAFI Usability	Functionality exists as documented	Document Review Transaction Generation	Existence Qualitative

2.5 Scenarios

This test involves the execution and observation of selected maintenance and repair test scenarios involving resale lines and features.

2.6 Test Approach

2.6.1 Inputs

1. Test cases
2. Documentation (TAFI End User Guide)
3. Functionality checklists
4. Interview guides
5. Personnel to execute test cases
6. Detailed operational test plan

2.6.2. Activities

1. Use test cases created for this test and appropriate BLS documentation to perform each of the functions listed on the checklist provided via the TAFI interface.

2. Verify that each system function behaves as documented.
3. Note any anomalies in the space provided on the checklist.
4. Note any discrepancies between TAFI documentation and behavior.
5. Ensure that all trouble reports entered in TAFI have been canceled.
6. Use the checklist and interview guide to conduct interviews with BLS personnel selected from the Residence and Business M&R work centers.
7. Observe BLS personnel trouble report activities as identified on the checklist provided.
8. Note the presence and behavior of functions identified on the checklist.
9. Document results and findings.

2.6.3 Outputs

1. Completed evaluation checklists and interview summaries
2. Summary report

2.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

3.0 Test M&R13: ECTA Functional Test of Resale Lines

3.1 Description

The ECTA Functional Test will evaluate the functional elements of the trouble reporting and screening process for resale services as delivered to CLECs via the ECTA interface. This test will be executed by exercising a defined set of ECTA functions associated with trouble management activities against test bed accounts.

3.2 Objectives

The objective of the ECTA Functional Test is to validate the existence of ECTA trouble reporting and screening functionality for resale service customers in accordance with BLS's published specifications.

3.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Detailed Test Plan completed	~~KPMG~~KPMG Consulting
Test Scenarios selected	~~KPMG~~KPMG Consulting
Specific Test Cases and Transaction Sets developed	~~KPMG~~KPMG Consulting

Criteria	Responsible Party
Product descriptions and business rules for all transactions to be tested available	BLS
Basic documentation review completed	~~KPMG~~KPMG Consulting
Detailed functional checklist created	~~KPMG~~KPMG Consulting
Test bed of working services selected and/or established	BLS
Physical access to BellSouth Trouble entry site established	BLS
Security access to ECTA established	BLS
Evaluation Criteria defined and approved	GAPSC
Checklists and Interview Guides created	~~KPMG~~KPMG Consulting

3.4 Test Scope

Table VI-3 Test Target: ECTA Functional Test of Resale Lines

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Trouble Reporting	Create/Enter Trouble Report (TR)	Functionality exists as documented	Inspection	Existence Qualitative Parity
	Modify TR	Functionality exists as documented	Inspection	Existence Qualitative Parity
	Close/Cancel TR	Functionality exists as documented	Inspection	Existence Qualitative Parity
	Retrieve TR Status	Functionality exists as documented	Inspection	Existence Qualitative Parity
Trouble History Access	Retrieve Trouble History	Functionality exists as documented	Inspection	Existence Qualitative Parity
Access To Test Capability	Initiate MLT Test	Functionality exists as documented	Inspection	Existence Qualitative Parity
	Receive MLT Test Results	Functionality exists as documented	Inspection	Existence Qualitative Parity

3.5 Scenarios

This test involves the execution and observation of selected maintenance and repair test scenarios involving resale lines and features.

3.6 Test Approach

3.6.1 Inputs

1. Test cases
2. BLS documentation
3. Functionality checklists
4. Personnel to execute test cases

3.6.2 Activities

1. Use test cases created for this test and appropriate BLS documentation to perform each of the functions listed on the checklist provided via the ECTA interface.
2. Verify that each system function behaves as documented.
3. Note any anomalies in the space provided on the checklist.
4. Note any discrepancies between M&R trouble entry documentation and behavior of the ECTA interface.
5. Ensure that all trouble reports entered via the ECTA interface have been cancelled.
6. Document results and findings.

3.6.3 Outputs

1. Completed evaluation checklists and interview summaries
2. Summary report

3.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

VII. Billing Test Section

A. Purpose

The purpose of this section is to define the specific tests to be undertaken in evaluating the billing and message processing operational elements associated with BLS's support of Resale products and services. Additional billing tests are described in the *BellSouth - Georgia OSS Evaluation Master Test Plan*, as follows:

- BLG-1: CRIS/CABS Invoicing Functional Test
- BLG-2: ODUF/ADUF Usage Functional Test
- BLG-3: Billing Systems Capacity Management Evaluation
- BLG-4: Billing Performance Results Comparison
- BLG-5: CRIS/CABS Invoicing Documentation Evaluation
- BLG-6: ODUF/ADUF Documentation Evaluation

B. Organization

The Billing tests are comprised of the following two test target areas:

- Bill Invoicing
- Usage Processing

Each test target area is broken down into a number of process and sub-process areas, described in sections 1.4 and 2.4. These test target areas delineate particular areas of interest to be assessed in evaluating the effectiveness of BLS's procedures as they relate to the production and delivery of Resale bills and Daily Optional Usage Files.

C. Scope

The purpose of this section is to identify the depth and breadth activities, service types, and line configurations that will be included in the test. ~~KPMG~~KPMG Consulting will create test scenarios to ensure coverage of the electronically orderable services from the top 50 resale services that do not have significant commercial volume, based on analysis defined in Appendix B. Order activity will include the following service requests:

- New Install
- Inside Move
- Outside Move
- Suspend
- Restore

- Conversion to new LSP
- Add/Change features
- Change telephone
- Add line

D. Test Process

This section contains the specific evaluations to be performed in the analysis of application of rates and charges, and the assembly, recording, and delivery of usage associated with BLS's Resale products and services.

1.0 Test BLG7: CRIS Resale Invoicing Functional Evaluation

1.1 Description

The CRIS Resale Invoicing Functional Test will evaluate BLS's ability to accurately bill functional billing elements associated with Resale products. The test will be executed in conjunction with orders submitted during the execution of the EDI and TAG Functional Evaluations and usage generated during the execution of the Resale Usage Functional Test. These tests are detailed in Section V, 1.0, Section V, 2.0, and Section VII, 2.0 of this STP.

~~KPMG~~KPMG Consulting will examine the functional billing elements of CRIS Resale bills resulting from completed order transactions on test accounts for resale products and services. Functional billing elements include measured and flat rate services, monthly recurring and non-recurring charges, pro-rations, adjustments, late payment, and usage charges. The test will also look at bill formats across all billing service delivery methods to evaluate completeness and readability of each format.

1.2 Objectives

The objectives of this test are to determine the adequacy, accuracy, and timeliness of BLS's billing and invoicing procedures associated with Resale products.

1.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
All CRIS baseline bills produced from the initial test bed	BLS
Techniques and instrumentation developed and approved	~~KPMG~~KPMG Consulting
Test bed matches requirements	BLS
Product descriptions and business rules for all transactions to be tested are available	BLS
Test bed completed and ready	BLS
Method for viewing bills implemented	BLS, ~~KPMG~~KPMG Consulting

Criteria	Responsible Party
Inter-Connection Agreement obtained from BLS	BLS, ~~KPMG~~KPMG Consulting
Availability of BSL resources to test and produce CRIS bills	BLS
Calls made during Functional Usage Evaluation processed through to the DUF and available for billing	BLS

1.4 Test Scope

Table VII-1 Test Target: Bill Invoicing

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Billing Accuracy	Verify recurring charges	Accuracy completeness of rates and quantity	Inspection	Quantitative
	Verify non-recurring charges	Accuracy and completeness of rates and quantity	Inspection	Quantitative
	Verify pro-rated charges	Accuracy and completeness of rate, quantity and date ranges	Inspection	Quantitative
	Verify usage charges	Accuracy and completeness of minutes of use and rates	Inspection	Quantitative
	Verify adjustments	Accuracy, completeness, and timelness of adjustments	Inspection	Quantatitive
	Verify balance carried forward	Accuracy of balance	Inspection	Quantitative
	Verify discounts	Accuracy and appropriateness of discount	Inspection	Quantitative
	Verify late charges	Accuracy of rate and calculation	Inspection	Quantitative
	Receive copy of bill	Timeliness of media delivery	Logging	
Completeness and Readability	Verify presentation of bill sections	Completeness and accuracy	Inspection	Qualitative
	Verify page header information	Completeness and accuracy	Inspection	Qualitative
	Verify presence of Customer Service Record	Completeness	Inspection	Qualitative
	Verify pagination	Completeness and accuracy	Inspection	Qualitative
	Verify presence of return page	Completeness and accuracy	Inspection	Qualitative

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
	Verify labeling of charges	Completeness and accuracy	Inspection	Qualitative
	Verify service address	Completeness and accuracy	Inspection	Qualitative

1.5 Test Approach

Test scenarios will be executed in conjunction with orders issued during the O&P EDI and TAG Functional Evaluations. The following order activity will be included: new installs, conversions from BLS to new LSP "as specified," feature adds/changes, telephone number change, additional line, suspend/restore, inside move, and outside move.

Customer Service Records (CSRs) reflecting completed order activity resulting from test case transactions will be used to create an expectation of billable charges. Expected results will be compared against billing invoices produced by BLS to ensure charges are appropriately and accurately billed. Validation procedures will verify whether recurring and non-recurring charges are rated and applied correctly, pro-rations of charges are calculated appropriately, service establishment and disconnection dates are accurately captured, adjustments and late charges are applied correctly, and balances are carried forwarded appropriately. Bills containing usage charges for billable messages will be examined to verify the accuracy of the usage billing components.

Two bill periods will be processed for the same set of customers. The first bill period will consist of baseline bills created for the test bed telephone numbers. The second bill period will consist of bills produced after select scenarios have been executed. This set will include charges for test case activity such as conversions, additions, and usage charges for calls generated during the execution of the Functional Usage Evaluation.

Billing service delivery media utilized for bill validation purposes will include CD-ROMs, Paper, Diskette Analyzer Bill (DAB) and Billing Data Tape (BDT) formats.

1.5.1 Inputs

1. Test scenarios
2. Test case execution
3. Test criteria
4. Detailed test plan
5. Verified baseline bills
6. Test case CSRs
7. Selected usage from Functional Usage Evaluation
8. BLS rate documentation

1.5.2 Activities

1. Develop expected results for each test case
2. Validate baseline bills
3. Validate second bill period
4. Record invoice bill date and actual date received
5. Identify discrepancies
6. Compile results

1.5.3 Outputs

1. Complete evaluation of all test cases
2. Complete evaluation of BLS bill delivery results
3. Final Report

1.6 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

2.0 Test BLG8: Resale Usage Functional Evaluation

2.1 Description

The Resale Usage Functional Test will evaluate BLS's ability to accurately capture and record usage elements associated with the placement of calls over resale test lines. The test will be executed in conjunction with orders submitted during the execution of the EDI and TAG Functional Evaluations and the CRIS Resale Invoicing Functional Evaluation detailed in Section V, 1.0, Section V, 2.0, and Section VII, 1.0 of this STP.

Test calls will be placed using resale test lines provisioned and configured in accordance with test scenarios. Testers will be provided with test scripts that will encompass a broad variety of call types, destinations, billing options, and call placement procedures (direct dialing, operator assisted, etc.). Testers log all calls and attendant call details such as the call to number, bill to number, origination time, and call duration.

~~KPMG~~KPMG Consulting will examine the accuracy and completeness with which usage messages were captured and recorded, based on a comparison of the call details logged by the testers at the time the usage was generated, and the records contained in the DUFs.

Evaluation of the timeliness of delivery of DUFs will be based on the number of calendar days between the record date (not including the call date) and the date the DUF was created.

2.2 Objectives

The objectives of this test are to determine the accuracy, adequacy, and timeliness of all usage types captured on DUFs. The test will evaluate whether all records that should appear actually do appear and records that should not appear are excluded from the file.

2.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Test bed completed and ready	BLS
Product descriptions and business rules for all transactions to be tested are available	BLS, ~~KPMG~~KPMG Consulting
Techniques and instrumentation developed and approved	~~KPMG~~KPMG Consulting
Inter-Connection Agreement obtained from BLS	BLS, ~~KPMG~~KPMG Consulting
BLS resources are available to participate in test	BLS
Detailed test plan completed and approved	~~KPMG~~KPMG Consulting

2.4 Test Scope

Table VII-2 Test Target: Usage Processing

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Reporting of Usage	Track usage	Completeness	Inspection	Quantitative
	Verify usage data	Completeness and accuracy of data	Inspection	Quantitative
	Verify no empty set files	Completeness and accuracy of data	Inspection	Quantitative
Receipt of Usage	Verify Header/Trailer record counts	Completenss of data	Inspection	Quantitative
	Track receipt of files	Timeliness of DUF files and recors	Inspection	Quantitative

2.5 Test Approach

This transaction-driven evaluation will be based on test calls made by ~~KPMG~~KPMG Consulting testers who will be dispatched to various locations within the state of Georgia. One tester will be located outside of Georgia to facilitate the receipt of incoming interstate calls. Test calls will be made using test bed accounts with varying line configurations and services, and which are served from multiple switch types. Calls will be comprised of various types and varying duration as determined by ~~KPMG~~KPMG Consulting. Call details will be recorded on Tester Logs and will be compared to DUF records.

Calls will include incoming and outgoing intraLATA, interLATA, and international calls. Calls will be placed using the following methods: direct dial, calling card, full and partial operator assisted collect, third party, interrupts, busy verification, credit requests, as well as calls placed using Phonesmart and Custom Calling features.

DUF transmissions will be examined to ensure header and trailer record count information corresponds with the number of records contained within the file. The date the record was created will be logged and compared to the call origination date to evaluate the timeliness with which the record was created.

2.5.1 Inputs

1. Test scenarios
2. Test case execution
3. Test criteria
4. Detailed test plan

2.5.2 Activities

1. Develop Call Matrices, which include test call scripts for each location for each tester
2. Assemble tester resources, provide instructions and dispatch testers to calling locations
3. Complete calls and logs
4. Develop expected results for each test case
5. Verify DUF Header/Trailer counts are correct
6. Record "create date" and age of record
7. Validate DUF records
8. Check for empty set files
9. Identify discrepancies
10. Document findings

2.5.3 Outputs

1. Call Log Report
2. DUF Accuracy and Completeness Report
3. Empty DUF Files Report
4. DUF Timeliness Report
5. Final Report

2.6 Exit Criteria

Criteria	Responsible Party

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

VIII. Change Management Test Section

A. Purpose

The purpose of this section is to define the specific Change Management tests to be undertaken in evaluating the systems and related operational elements affected by BLS's OSS '99 release. Additional evaluations of Change Management methods and procedures related to BLS's OSS are described in *BellSouth - Georgia OSS Evaluation Master Test Plan, Change Management Practices Review (CM-1).*

B. Organization

The Change Management "Scope" section contains a table that identifies the types of tests to be associated with the Target Test Area.

The subsequent section, Change Management "Test Process," provides additional information and a table that further define the testing approach, inputs, outputs, as well as entrance and exit criteria.

C. Scope

This Change Management Test consists of a Target Test Area, the OSS '99 Release Evaluation, representing a significant effort undertaken by BLS to support the CLEC wholesale relationship.

The Target Test Area is further broken down into a number of increasingly discrete Process and Sub Process Areas that serve to identify the particular area of interest under test.

Table VIII-1 Test Target: OSS '99 Release Evaluation

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Change Management: OSS '99 Release Evaluation	Implementing Change	Adequacy and completeness of change implementation process	Inspection Document review Report Review	Qualitative
	Documentation	Adequacy, accuracy, completeness, and timeliness of release documentation	Inspection Document review Report review	Qualitative
	Availability of Functioning Test Environments	Availability of functioning test environments for all supported interfaces	Inspection Document review Report review	Qualitative

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
	Provision of Support for Interface Testing	Availability and documentation of provision of support for interface testing	Inspection Document review Report review	Qualitative

D. Test Process

A test process has been designed to address the test target area.

1.0 Test CM2: OSS '99 Release Evaluation

1.1 Description

This test evaluates methods and procedures used by BLS to develop and release the OSS '99 applications package and supporting documentation. This test will rely on checklists and inspections.

The OSS '99 applications package includes enhancements to CLEC interfaces that affect the following operational activities:

- Pre-Ordering
- Ordering

1.2 Objectives

The objective of this test is to determine the adequacy and completeness of key BLS processes for developing and releasing system documentation and related support material.

1.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Interview guides/questionnaire developed	~~KPMG~~KPMG Consulting
Interviewees identified and scheduled	BLS, ~~KPMG~~KPMG Consulting
Detailed evaluation checklists completed	~~KPMG~~KPMG Consulting

1.4 Test Scope

Table VIII-2 Test Target: OSS '99 Release Evaluation

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type

Table VIII-2 Test Target: OSS '99 Release Evaluation

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Change Management: OSS '99 Release Evaluation	Implementing Change	Adequacy and completeness of change implementation process	Inspection Document review Report Review	Qualitative
	Documentation	Adequacy, accuracy, completeness, and timeliness of release documentation	Inspection Document review Report review	Qualitative
	Availability of Functioning Test Environments	Availability of functioning test environments for all supported interfaces	Inspection Document review Report review	Qualitative
	Provision of Support for Interface Testing	Availability and documentation of provision of support for interface testing	Inspection Document review Report review	Qualitative

1.5 Scenarios

This test does not rely on scenarios.

1.6 Test Approach

1.6.1 Inputs

1. Electronic Interface Change Control Process (EICCP) documentation
2. Other procedural and technical documentation
3. Evaluation checklists
4. Interview guides

1.6.2 Activities

1. Gather documentation
2. Perform interviews and documentation reviews
3. Complete evaluation checklists and interview summaries
4. Develop and document findings

1.6.3 Outputs

1. Completed evaluation checklists and interview summaries

2. Comparison of actual versus expected results for interface development deliverables (as defined in the Electronic Interface Change Control Process)
3. Summary report

1.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

Appendix A: Statistical Approach

A. Overview

This test will rely on standard statistical methods to evaluate BLS performance. Each test will define the data population to be observed, the measurements to be taken, and the statistical tests to be used. Data will be normalized, tabulated, and archived in a way that allows verification of test results and re-analysis of data using additional statistical methods, if appropriate.

B. Metrics

The metrics (Service Quality Measurements and generic associated standards) that will serve as parameters for testing are listed in Appendix D-2 in the *BellSouth - Georgia OSS Evaluation Master Test Plan.*

C. Sampling

In instances where sampling is used, sampling will be designed so that samples are sufficiently representative of populations with respect to the measures being studied to ensure that the resulting statistical inferences made about populations are valid. For most tests, simple random sampling will be used.

D. Hypothesis Testing

This test will employ a hypothesis testing approach to frame the analysis of test results. The standard "null" hypothesis will be that BLS is meeting the established standard (i.e., performing adequately). The possibility of an error arises if this hypothesis is rejected when the hypothesis is, in fact, true (Type I error) or is accepted when the hypothesis is, in fact, false (Type II error). An attempt will be made to balance Type I and Type II errors as much as is feasible.

E. Parity Tests and Benchmark Tests

There are two basic types of tests. Parity tests compare a BLS retail average or percentage to a CLEC or test transaction average or percentage. The typical test for this type of comparison is a hypergeometric test for percentages and a two-sample t-test or z-test for averages. For those parity tests where sufficiently large samples can be drawn, hypothesis testing will be done by performing a "z-test" to calculate a "z-score." A z-score is a single number, which indicates the differences between sample data. A low z-score supports the hypothesis of parity (i.e., both CLEC and ILEC performance are from the same "population" in terms of performance). In cases where this test is not appropriate due to small sample size (for tests of averages) or assumption violations, other tests, such as permutation tests, will be performed.

Benchmark tests compare a percentage or average to a fixed standard or benchmark. In this case, the typical test is a binomial test or a one-sample t-test. Once again, alternative statistical tests will be used, where appropriate, based on tests of assumptions and sample sizes.

F. Results

Test results will include a summary of the statistics calculated, the hypotheses postulated for the test, and the conclusion(s) drawn based on the statistical results.

Appendix B: Resale Products for Functional Evaluation

A. Overview

The January 12, 2000 GAPSC Order specified that BLS should perform testing only of the top 50 retail services available for resale that are electronically orderable and that have not experienced significant commercial usage. The GAPSC required that the STP include the order volumes for these services.

B. Proposed Products and Services for Evaluation

After reviewing the data provided by BellSouth in Exhibits 1 and 3 of the February 7, 2000 BellSouth filing, along with additional requisition type and activity type data requested by ~~KPMG~~KPMG Consulting, we are unable to make a recommendation to the Commission on whether the information supports evidence of commercial usage at a service level by interface. ~~KPMG~~KPMG Consulting believes our ability to comment on whether or not the data provided by BellSouth is evidence of commercial usage, and an acceptable CLEC experience underlying the generation of the transaction volumes, would require interviews with CLECs and analysis of actual CLEC orders supporting the transaction and in-service unit data.

Due to difficulties inherent in this historical data review, ~~KPMG~~KPMG Consulting recommends to the Commission, with the concurrence of BellSouth, that all electronically orderable retail services made available for resale be independently tested for pre-ordering, ordering, provisioning, maintenance and repair, and billing, as appropriate.

Appendix C: Test Scenarios

The scenarios listed in this appendix are based on a current understanding of the products and capabilities that are likely to be available at the time the test is executed. Depending on changes in availability, the scenarios may need to be modified before the test begins.

Resale

Activity	Res. POTS	Bus. POTS	Res. ISDN -BRI	Bus. ISDN -BRI	PBX	Syn-chronet
Migration from BLS "as is"	X	X	X	X	X	
~~CLEC to CLEC migration~~	~~X~~	~~X~~				
Feature changes to existing customer	X	X				
Migration from BLS "as specified"	X	X	X	X		~~X~~
New customer	X	X	~~X~~	~~X~~	X	X
Telephone number change	X	X				
Directory change	X	X				
Add lines/trunks/ circuits	X	X	X	X	X	
Suspend/restore service	X	X				
Disconnect (full and partial)	X	X	X	X	X	X
Moves (inside and outside)	X	X				
~~Convert line to ISDN~~			~~X~~	~~X~~		
~~Migrate from CLEC to BLS~~	~~X~~	~~X~~				

Note: Scenarios will include variations such as planned errors and supplements to cancel, change an order, or revise due dates.

xDSL

Activity	Res. xDSL-Capable Loop	Bus. xDSL-Capable Loop
Migration from BST to CLEC	X	X
Add new loops to existing customer	X	X
Purchase loops for a new customer	X	X
Disconnect (full and partial)	X	X