## A. Pre-Ordering (PRE)

This section provides a summary of the Pre-Ordering (PRE) domain testing activities. For more information on planned testing, refer to Section IV: *Pre-Ordering Test* in the *Master Test Plan.* For more detailed information on the test design, analysis, and results from the execution of the tests, refer to Section IV: *Pre-Ordering Test Section* in this document.

### *1.0 PRE-1: TAG Pre-Ordering Functional Test*

This section provides a summary of the PRE-1: TAG Pre-Ordering Functional Test.

*1.1 Objective*

The objective of this test was to evaluate the functionality of the Telecommunications Access Gateway (TAG) for electronically ordered Unbundled Network Elements (UNEs) in accordance with the TAG Documentation.

*1.2 Evaluation Methods*

In order to accomplish this objective, Pre-Order transactions were developed and submitted via TAG using CLEC data. The test included both stand-alone accounts and integrated pre-order/order transactions.

*1.3 Analysis Methods*

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

*1.4 Summary Results*

The following tables present the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Complete, No Result Determination Made, or Not Satisfied) are provided in Section II.

***Table III-A.1: PRE-1: TAG Pre-Ordering Functional Test – Summary Results***

| Evaluation Criteria – Satisfied | |
|---|---|
| PRE-1-1-1 | TAG pre-order transaction capability is consistently available during scheduled hours of operation. |
| PRE-1-2-1 | BLS's TAG interface provides expected system responses. |
| PRE-1-2-2 | BLS systems or representatives provide required pre-ordering functionality. |
| PRE-1-3-1 | The TAG interface provides timely pre-order responses from BLS's RSAG-TN back end system. |
| PRE-1-3-2 | The TAG interface provides timely pre-order responses from BLS's RSAG-Address back end system. |
| PRE-1-3-3 | The TAG interface provides timely pre-order responses from BLS' DSAP back end system. |

| | |
|---|---|
| PRE-1-3-4 | The TAG interface provides timely pre-order responses from BLS's ATLAS back end system. |
| PRE-1-3-5 | The TAG interface provides timely pre-order responses from BLS's CRSECSR and CSRACCTs back end system. |
| PRE-1-3-6 | The TAG interface provides timely pre-order responses from BLS's ATLAS-MLH back end system. |
| PRE-1-3-7 | The TAG interface provides timely pre-order responses from BLS's ATLAS-DID back end system. |
| PRE-1-3-8 | The TAG interface provides timely pre-order responses from BLS's OASIS back end system. |
| PRE-1-3-9 | The TAG interface provides timely pre-order responses to Calculate Due Date (CDD) inquiries. |
| PRE-1-4-1 | BLS system or representative provides clear, accurate, and complete pre-order success responses. |
| PRE-1-4-2 | BLS system or representative provides clear, accurate, and complete back end or TAG API errors. |

## *2.0 PRE-2: Pre-Ordering Performance Results Comparison*

This section provides a summary of the PRE-2: Pre-ordering Performance Results Comparison.

### *2.1 Objective*

The first objective of this test was to assess the accuracy and completeness of the Pre-Ordering Service Quality Measurements (SQMs) calculated and reported by BellSouth for the KCI test CLEC. The second objective was to assess the accuracy of the raw data used by BellSouth to perform these calculations.

### *2.2 Evaluation Methods*

In order to accomplish the first objective, KCI calculated the SQMs based on calculation instructions provided by BellSouth. KCI used the raw data provided by BellSouth to perform its calculations and then compared its results to the reported SQM values, using the pre-established evaluation criteria. To accomplish the second objective, KCI collected data on its test transactions and compared the values in the collected data to the raw data values provided by BellSouth to determine whether they agreed, according to the evaluation criteria.

### *2.3 Analysis Methods*

Given the calculation instructions, KCI developed its own computer programs to perform independent calculations of SQMs. To prepare for the data comparisons, KCI mapped its test data elements to the corresponding elements in BellSouth's raw data for Pre-Ordering SQMs.

### *2.4 Summary Results*

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

***Table III-A.2: PRE-2: Pre-Ordering Performance Results Comparison – Summary Results***

| Evaluation Criteria – Satisfied | |
|---|---|
| PRE-2-1-1 | BLS reports are correctly disaggregated and complete - Average OSS Response Time and Response Interval. |
| PRE-2-1-2 | KCI-calculated SQM values agree with BLS-reported SQM values - Average OSS Response Time and Response Interval. |
| PRE-2-2-1 | BLS reports are correctly disaggregated and complete - OSS Interface Availability. |
| PRE-2-2-2 | KCI-calculated SQM values agree with BLS-reported SQM values - OSS Interface Availability. |

## *3.0 PRE-3: Pre-Ordering Documentation Evaluation*

This section provides a summary of the PRE-3: Pre-Ordering Documentation Evaluation.

### *3.1 Objective*

The objective of this test was to assess whether the documentation provided by BellSouth adequately assists CLECs in understanding how to implement and use all of the TAG pre-order functions available to them.

### *3.2 Evaluation Methods*

In order to accomplish this objective KCI reviewed the availability, accuracy, and completeness of BellSouth's pre-ordering documentation using a variety of operational analysis techniques.

### *3.3 Analysis Methods*

The data collected from the Pre-Ordering Performance Documentation Evaluation were analyzed, and the results were assessed employing test specific evaluation criteria.

### *3.4 Summary Results*

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

## *Table III-A.3: PRE-3: Pre-Ordering Performance Documentation Evaluation – Summary Results*

| Evaluation Criteria – Satisfied | |
|---|---|
| PRE-3-1-1 | BLS documentation is readily available via the BLS Web site or in hardcopy. |
| PRE-3-1-2 | BLS makes updates to documents readily available to the CLECs. |
| PRE-3-1-3 | Training is available for use of documentation. |
| PRE-3-1-4 | Responsibilities and procedures for developing, updating, and correcting documentation are clearly defined. |
| PRE-3-1-5 | Responsibilities and procedures for distributing documentation are clearly defined. |
| PRE-3-2-1 | Document version is indicated clearly within and throughout each document. |
| PRE-3-2-2 | BLS document organization is consistent with its intended use. |
| PRE-3-2-3 | BLS documents contain information that is relevant to its intended audience. |
| PRE-3-2-4 | BLS documents contain tables of contents. |
| PRE-3-2-5 | BLS documents are logically organized with clear page numbering and section labeling. |
| PRE-3-2-6 | BLS documents contain contact / help desk numbers. |
| PRE-3-2-7 | BLS documents clearly indicate purpose and scope. |
| PRE-3-2-8 | Cross-references are clearly stated, directing readers to relevant sources of additional information. |
| PRE-3-2-9 | BLS documents clearly instruct users how to notify BLS of document errors and omissions. |
| PRE-3-3-1 | BLS documents provide description of all error messages and potential steps for resolution. |
| PRE-3-3-2 | BLS documents clearly identify inputs / outputs of the specific processes. |
| PRE-3-3-3 | BLS documents include expected results of process and cycle times. |
| PRE-3-4-1 | BLS documents correctly define all data fields. |
| PRE-3-4-2 | BLS documents accurately define acceptable formats for all data fields. |
| PRE-3-4-3 | BLS documents clearly identify required and optional fields. |
| PRE-3-4-4 | BLS documents clearly describe expected system responses / outputs. |
| PRE-3-4-5 | BLS documents contain methods and procedures to correctly execute processes. |

## *4.0 PRE-4: Pre-Ordering Normal Volume Test*

This section provides a summary of the PRE-4: Pre-Ordering Normal Volume Test.

### *4.1 Objective*

The objective of this test was to evaluate the behavior and performance of the TAG interface under "normal" YE01 projected transaction load conditions. This test was executed in a manner consistent with the forecasted daily usage patterns and transaction mix by submitting large volumes of pre-order test cases.

### *4.2 Evaluation Methods*

In order to accomplish this objective, KCI tested BellSouth's interfaces at year-end, 2001 (YE01) projected order volumes in BellSouth's Reengineered Services, Installation and Maintenance Management System (RSIMMS) environment for two ten-hour periods. This test was executed by submitting pre-order requests in support of Resale and UNE orders against BellSouth test-bed accounts and continued through the return of successful pre-order responses, rejections or error notices.

### *4.3 Analysis Method*

The data collected from the Pre-Ordering Normal Volume Test were analyzed, and the results were assessed employing test specific evaluation criteria.

### *4.4 Summary Results*

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

***Table III-A.4: PRE-4: Pre-Ordering Normal Volume Test – Summary Results***

| Evaluation Criteria – Satisfied | |
|---|---|
| PRE-4-1-1 | TAG pre-order transaction capability is consistently available during scheduled hours of operation. |
| PRE-4-2-1 | BLS's TAG interface provides expected system responses. |
| PRE-4-3-1 | The TAG interface provides timely pre-order responses from BLS's Regional Street Access Guide-Telephone Number (RSAG-TN) back-end system. |
| PRE-4-3-2 | The TAG interface provides timely pre-order responses from BLS's RSAG-Address back-end system. |
| PRE-4-3-3 | The TAG interface provides timely pre-order responses from BLS's Direct Order Entry Support Application Program (DSAP) back-end system. |
| PRE-4-3-4 | The TAG interface provides timely pre-order responses from BLS's Application for Telephone Number Load Administration and Selection (ATLAS) back-end system. |

| | |
|---|---|
| PRE-4-3-5 | The TAG interface provides timely pre-order responses from BLS's CRSECSR back-end system. |
| PRE-4-3-6 | The TAG interface provides timely pre-order responses from BLS's ATLAS-MLH back-end system. |
| PRE-4-3-7 | The TAG interface provides timely pre-order responses from BLS's ATLAS-DID back-end system. |
| PRE-4-3-8 | The TAG interface provides timely pre-order responses from BLS's OASIS back-end system. |
| PRE-4-3-9 | The TAG interface provides timely pre-order responses to Calculate Due Date (CDD) inquiries. |
| PRE-4-4-1 | BLS system provides accurate pre-order success responses. |
| PRE-4-4-2 | BLS system provides accurate back-end or TAG API errors. |

## *5.0 PRE-5: Pre-Ordering Peak Volume Test*

This section provides a summary of the PRE-5: Pre-ordering Peak Volume Test.

### *5.1 Objective*

The objective of this test was to evaluate the behavior and performance of the TAG interface under "peak" YE01 projected transaction load conditions. This test was executed in a manner consistent with the forecasted daily usage patterns and transaction mix by submitting large volumes of pre-order test cases.

### *5.2 Evaluation Methods*

In order to accomplish this objective, KCI tested BellSouth's interfaces at year-end, 2001 (YE01) projected order volumes in BellSouth's Reengineered Services, Installation and Maintenance Management System (RSIMMS) environment for two eight-hour periods. This test was executed by submitting pre-order requests in support of Resale and UNE orders against BellSouth test-bed accounts and continued through the return of successful pre-order responses, rejections or error notices.

### *5.3 Analysis Method*

The data collected from the Pre-Ordering Peak Volume Test were analyzed, and the results were assessed employing test specific evaluation criteria.

### *5.4 Summary Results*

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

***Table III-A.5: PRE-5: Pre-Ordering Peak Volume Test – Summary Results***

| Evaluation Criteria – Satisfied | |
|---|---|
| PRE-5-1-1 | TAG pre-order transaction capability is consistently available during scheduled hours of operation. |
| PRE-5-2-1 | BLS's interface provides expected system responses. |
| PRE-5-3-1 | The TAG interface provides timely pre-order responses from BLS's Regional Street Access Guide Telephone Number (RSAG-TN) back-end system. |
| PRE-5-3-2 | The TAG interface provides timely pre-order responses from BLS's RSAG-Address back-end system. |
| PRE-5-3-3 | The TAG interface provides timely pre-order responses from BLS's Direct Order Entry Support Application Program (DSAP) back-end system. |
| PRE-5-3-4 | The TAG interface provides timely pre-order responses from BLS's Application for Telephone Load Administration and Selection (ATLAS) back-end system. |
| PRE-5-3-5 | The TAG interface provides timely pre-order responses from BLS's CRSECSR back-end system. |
| PRE-5-3-6 | The TAG interface provides timely pre-order responses from BLS's ATLAS-MLH back-end system. |
| PRE-5-3-7 | The TAG interface provides timely pre-order responses from BLS's ATLAS-DID back-end system. |
| PRE-5-3-8 | The TAG interface provides timely pre-order responses from BLS's OASIS back-end system. |
| PRE-5-3-9 | The TAG interface provides timely pre-order responses to Calculate Due Date (CDD) inquiries. |
| PRE-5-4-1 | BLS system provides clear and accurate pre-order success responses. |
| PRE-5-4-2 | BLS system provides clear, accurate, and complete back-end or TAG API errors. |

## *6.0 PRE-6: Pre-Order Processing System Capacity Management Evaluation*

This section provides a summary for the PRE-6: Pre-Order Processing Systems Capacity Management Evaluation.

### *6.1 Objective*

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

### *6.2 Evaluation Methods*

In order to accomplish this objective, systems documentation and process flows for pre-order processing were reviewed. Interviews were conducted with system administration personnel responsible for the operation of the pre-order processing systems. These interviews were supplemented with an analysis of BellSouth's documented capacity management procedures as well as collection of evidence of related activities such as periodic capacity management reviews, system

reconfiguration/load balancing, load increase induced upgrades, and resource utilization and performance management reporting.

*6.3 Analysis Methods*

The Pre-Order Processing Systems Capacity Management Evaluation included a checklist of evaluation criteria developed by KCI during the initial phase of the BellSouth - Georgia OSS Evaluation. The data collected from inspections and interviews were analyzed employing the evaluation criteria.

*6.4 Summary Results*

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

***Table III-A.6: PRE-6: Pre-Order Processing System Capacity Management Evaluation – Summary Results***

| **Evaluation Criteria – Satisfied** | |
|---|---|
| PRE-6-1-1 | There is an established process for capturing business and transaction volumes. |
| PRE-6-1-2 | There is an established process for capturing resource utilization. |
| PRE-6-1-3 | Resource utilization is monitored for system components and elements. |
| PRE-6-1-4 | Instrumentation and other tools are used to collect resource utilization data. |
| PRE-6-1-5 | Performance is monitored at all applicable levels (e.g. network, database server, application server, client, etc.). |
| PRE-6-1-6 | Instrumentation and other tools are used to monitor performance. |
| PRE-6-1-7 | There is an established process for forecasting business volumes and transactions. |
| PRE-6-1-8 | The business volume tracking and forecasting data is at an appropriate level of detail to use for capacity management. |
| PRE-6-1-9 | There is an established process for reviewing the performance of the business and transaction volume forecasting process. |
| PRE-6-1-10 | There is an established process for verification and validation of performance data. |
| PRE-6-1-11 | Performance monitoring results are compared to service level agreements and other metrics. |
| PRE-6-1-12 | Capacity Management process is defined and documented. |
| PRE-6-1-13 | Resource usage and capacity is considered in the planning process for capacity management. |
| PRE-6-1-14 | Performance monitoring results are considered in the planning process for capacity management. |
| PRE-6-1-15 | Capacity Management procedures define performance metrics to trigger the addition of capacity, load re-balancing or system tuning. |