

C. Test Results: EDI/TAG Normal Volume Performance Test (O&P-3)

1.0 Description

The objective of the Electronic Data Interchange (EDI)/Telecommunications Access Gateway (TAG) Normal Volume Performance Test (O&P-3) was to evaluate BellSouth's Operating Support Systems (OSS) associated with ordering at specified volumes. Competitive Local Exchange Carriers (CLECs) submit orders to BellSouth's OSS via two primary Application Program Interfaces: EDI and TAG. O&P-3 evaluated BellSouth's ability to accurately and quickly process orders using the EDI and TAG interfaces under "normal" year-end 2001 (YE01) projected transaction load conditions¹ in the Reengineered Services, Installation and Maintenance Management System (RSIMMS) environment².

2.0 Methodology

This section summarizes the test methodology.

2.1 Business Process Description

See Section V, "Ordering & Provisioning Overview" for a description of the BellSouth ordering process via EDI and TAG.

2.2 Scenarios

Test scenarios for the EDI/TAG Normal Volume Test fall into two categories: Resale and Unbundled Network Elements (UNEs).

2.2.1 Resale

Appendix B-2: Resale Ordering Scenarios of the *Master Test Plan (MTP)*³ describes 26 resale test scenarios. During the initial pre-testing of the BellSouth ordering systems, six of the scenarios would not flow-through⁴ the system and therefore were not used for the test. From the remaining 20 scenarios, 20 test seeds were generated by applying BellSouth's OSS electronic ordering business rules⁵ and

¹ KCI forecasted hourly transaction rates for individual order and pre-order types drawing on data from current order and pre-order daily volume rates, BellSouth 2001 transaction forecasts and from CLEC 2001 transaction forecasts, where obtainable.

² See the *RSIMMS and Production System Review* for a description of the differences between the production and RSIMMS environments.

³ Version 4.1, March 28, 2000.

⁴ Flow-through is defined as electronic transmission through a gateway and acceptance into BellSouth's back-office ordering systems without manual intervention by a customer service representative.

⁵ KCI used the *Local Exchange Ordering (LEO) Implementation Guide*, Volume 1, Issues 7J, 7K, 7L, 7M, 7N, 7O, 7P, and 7Q to apply BellSouth's business rules.

logical business requirements to format orders. The following table describes each of the Resale scenarios used during this test:

Table V-3.1: Resale Scenarios

Scenario Number	Scenario Category	Scenario Description
201	Resale	Migration “As Is” of a business customer from BellSouth with Plain Old Telephone Service (POTS) lines to CLEC.
202	Resale	Migration “As Is” of a residential customer with POTS line from BellSouth to CLEC.
204	Resale	Partial migration of a business customer with POTS lines from BellSouth to CLEC on a trial basis.
205	Resale	Migration “As Specified” of a residential POTS customer from BellSouth to CLEC.
206	Resale	Partial migration of a residential customers second POTS line from BellSouth to CLEC.
207	Resale	New business customer installs POTS lines.
208	Resale	New residence customer installs POTS line.
209	Resale	Add five POTS lines to existing CLEC business customer.
210	Resale	Add POTS line to existing residential CLEC customer.
213	Resale	Suspend POTS service of a CLEC residential customer (seasonal suspend).
214	Resale	Restore POTS service of a CLEC residential customer.
218	Resale	Change TN of CLEC residential customer with POTS line.
219	Resale	CLEC residential customer with two POTS lines requests TN change on ancillary line.
220	Resale	Change Long Distance Service Provider for a CLEC residential POTS customer.
221	Resale	Change Long Distance Service Provider for a CLEC business POTS customer.
222	Resale	Partially disconnect four of six business POTS lines.
223	Resale	Disconnect a CLEC business customers five POTS lines.
224	Resale	Disconnect a residential CLEC customers two POTS lines.
225	Resale	Change information in directory listing (DL) for a residential customer with POTS service.
226	Resale	CLEC residential customer with POTS line changes information on DL.

2.2.2 Unbundled Network Element (UNE)-based Scenarios

Appendix B-3: UNE Ordering Scenarios of the MTP describes 40 UNE test scenarios intended for use in the EDI/TAG Normal Volume Performance Test. During the initial pre-testing of the BellSouth ordering systems, 29 of the scenarios did not flow through the system and were therefore not used for the test⁶. From the remaining 11 scenarios, 11 test seeds were generated by applying BellSouth's OSS electronic ordering business rules and logical business requirements to format orders. The following table describes each of the UNE scenarios used during this test:

Table V-3.2: UNE Scenarios

Scenario Number	Scenario Category	Scenario Description
301	Loop	A CLEC orders two new SL1 unbundled analog loops from BLS in support of a customer's service request.
305	Loop	A CLEC orders two SL1 unbundled analog loops in support of a full migration service request from an existing BLS customer. The customer lines are migrated "as-specified" to the CLEC business.
350	Loop LNP	A CLEC orders two SL1 unbundled analog loops with LNP in support of a full migration service request from an existing BLS customer. The customer lines are migrated "as-specified" to the CLEC.
387	LNP	A CLEC orders Local Number Portability (LNP) for two lines in support of an existing resale customer migration to CLEC facilities.
395	Port	A CLEC orders two new business unbundled analog ports from BLS in support of a new business customer's service request.
397	Port	A CLEC orders two new residential unbundled analog ports from BLS in support of a new business customer's service request.
420	Combo	A CLEC orders two new business unbundled analog loop – port combinations from BLS in support of a new business customer's service request.
422	Combo	A CLEC orders two new residential unbundled analog loop – port combinations from BLS in support of a new residential customer's service request.
428	Combo	A CLEC orders two residential unbundled analog loop – port combinations from BLS for one of its resale residential customers.
445	Combo	An existing CLEC customer is moving to another state. The CLEC orders BLS to disconnect both of its unbundled loop-port combinations.
610	Combo	A CLEC changes the Billing Telephone Number (BTN) of an analog

⁶ The volume test methodology is designed to assess electronic interface and back-end system processing capabilities, not manual processes. Therefore, orders that must fall out for manual processing are not included in the test.

Scenario Number	Scenario Category	Scenario Description
		loop/port combination two-line residential customer.

2.3 Test Targets & Measures

The test target was the EDI and TAG interfaces and back-end systems⁷ supporting order processing. Sub-processes, functions, and evaluation criteria are summarized in the following table. The last column “Test Cross-Reference” indicates where the particular measures are addressed in section 3.1 “Results & Analysis.”

Table V-3.3: Test Target Cross-Reference

Sub-Process	Function	Evaluation Criteria	Test Cross-Reference
Submit Orders in Projected Normal Volumes	Create order transactions	Availability of Interface	O&P-3-1-1 O&P-3-1-2
		Timeliness of Response	O&P-3-3-1 O&P-3-3-2
	Send orders in LSR format	Availability of Interface	O&P-3-1-1 O&P-3-1-2
	Receive acknowledgements	Availability of Interface	O&P-3-1-1 O&P-3-1-2
		Accuracy of Response	O&P-3-2-1 O&P-3-2-1 O&P-3-4-1 O&P-3-4-2
		Timeliness of Response	O&P-3-3-1 O&P-3-3-2
	Receive FOCs or error/reject notifications	Availability of Interface	O&P-3-1-1 O&P-3-1-2
		Accuracy of Response	O&P-3-2-1 O&P-3-2-1 O&P-3-4-1 O&P-3-4-2
		Timeliness of Response	O&P-3-3-3 O&P-3-3-4

⁷ The RSIMMS environment is designed to access copies of the PSIMMS, COFFI, BOCRIS, BOCABS and LMOS/Host systems, and to access the production COFIUSOC, ATLAS, RSAG, and DSAP systems.

2.4 Data Sources

The data collected for the test are summarized in the table below.

Table V-3.4: Data Sources for EDI/TAG Normal Volume Performance Test (O&P-3)

Document	File Name	Location in Work Papers	Source
<i>Local Exchange Ordering (LEO) Implementation Guide, Volume 1</i> Issues 7J, 7K, 7M, 7N, 7O, And 7P were utilized.	No Electronic Copy	O&P-1-B-1	BLS
<i>LEO Implementation Guide, Volume 2.</i> Issue 6B, July 99	No Electronic Copy	O&P-1-B-2	BLS
<i>LEO Implementation Guide, Volume 3.</i> Issue3A August 98	No Electronic Copy	O&P-1-B-3	BLS
<i>LEO Implementation Guide, Volume 4.</i> Issue 7F October 99	No Electronic Copy	O&P-1-B-4	BLS
<i>Product and Services Interval Guide</i>	No Electronic Copy	O&P-1-B-5	BLS
<i>Local Service Request Error Messages</i> (Version TCIF 7)	O&P_errors.pdf	O&P-1-A-4	BLS
<i>CLEC Service Order Tracking System (CSOTS) Users Guide</i>	O&P_csots.pdf	O&P-1-A-1	BLS
<i>Local Number Portability (LNP) Ordering Guide</i> (Issue 1b-October 1999)	O&P_LNPgd.pdf	O&P-1-A-3	BLS
<i>EDI Interfacing Testing Agreement-LNP</i>	O&P-EDInvalid.doc	O&P-1-A-8	BLS
<i>Telecommunications Access Gateway (TAG) API Reference Guide, Versions 2.2.0.2, 2.2.0.4, 2.2.0.5, 2.2.0.7, 2.2.0.8, and 2.2.1.1</i>	No Electronic Copy	PRE-1-A-3	BLS
<i>BellSouth 3 Month Hourly Order History</i>	Order history.xls	O&P-3-A-1	BLS
<i>2000, 2001 Bellsouth LSR Volume Forecast</i>	BSTFORCAST.xls	O&P-3-A-2	BLS
<i>2000, 2001 Aggergated CLEC Forecast</i>	CLEC_BST_FORECAST.xls	O&P-3-A-3	CLECs
<i>YE2001 Normal and Peak Forecast</i>	Fcast Summary.ppt	O&P-3-A-4	KCI

Document	File Name	Location in Work Papers	Source
<i>Local Exchange Ordering (LEO) Implementation Guide, Volume 1</i> Issues 7J, 7K, 7M, 7N, 7O, And 7P were utilized.	No Electronic Copy	O&P-1-B-1	BLS
<i>Methodology</i>			
<i>Volume Test RSIIMS Test Scenarios</i>	Volum_Test_Cases.xls	O&P-3-A-5	KCI
<i>Normal Volume Test Schedule</i>	Schedule.xls	O&P-3-A-6	KCI
<i>System Readiness Test Log</i>	SRT_by_date_.doc	O&P-3-A-7	KCI
<i>Results Data Tables</i>	CD ROM	O&P-3-A-8	KCI
<i>GPSC Order Adopting Standards and Benchmarks</i>	GPSC_standards.tif	O&P-3-A-9	GPSC

2.4.1 Data Generation/Volumes

The TAG/EDI Normal Volume Test evaluated BellSouth's performance by sending approximately 35,000 orders with 118,000 associated pre-orders on two occasions over a ten-hour period. This test and the pre-ordering (PRE-4) volume test were executed concurrently.

Volumes for this test were determined by forecasting BellSouth's expected order volume for year-end 2001. To support forecast development, KCI obtained a detailed order history and anticipated transaction growth rates from CLECs and BellSouth. Transaction types were forecasted individually based on expected growth rates for each order and pre-order type. KCI also analyzed the distribution of transactions over the course of a normal business day. These data were then combined to determine the number and type of orders to be sent each hour. Orders were then scheduled for transmission to BellSouth via TAG and EDI. 60% of the transactions submitted were via the TAG interface, while 40% were via EDI⁸.

Table V-3.5 shows the order volumes submitted during each day of the Normal Volume Test⁹.

⁸ Volumes for order transmission interface type (EDI or TAG) were determined based on current CLEC usage and projected implementation dates provided by CLECs. To best replicate the actual ordering process, EDI orders were "batched" prior to transmission to BellSouth.

⁹ Two normal volume test cycles were initially planned. However, BellSouth performance failure required "re-testing" of Normal Volume Day 1 on three subsequent days. Following implementation of system fixes by BellSouth, KCI/HP conducted System Readiness Testing (SRTs) to verify that BellSouth's

Table V-3.5: Normal Test Generated Volumes

Delivery Method	Day 1 06/02/00	Day 1, Retest 1¹⁰ 06/14/00	Day 1, Retest 2 06/20/00	Day 1, Retest 3 07/24/00	Day 2 08/1/00
DL	646	646	646	646	644
LNP	3,396	3,396	3,396	3,396	3,395
Loop with LNP	5,097	5,097	5,097	5,097	5,096
Resale	15,288	15,282	15,288	15,289	15,269
UNE Loop	1,988	1,987	1,988	1,988	1,986
UNE Loop-Port Combo	8,474	8,474	8,474	8,474	8,469
UNE Port	67	67	67	67	65
Total	34,956	34,949	34,956	34,957	34,924

2.5 Evaluation Methods

In preparation for the test, order transaction seeds were written according to BellSouth business rules, and loaded into the KCI transaction test system. These templates were then submitted to Hewlett Packard (HP) and to BellSouth during Systems Readiness Testing (SRT)¹¹. SRT confirmed the functionality of HP and KCI's transactional systems and verified that orders would flow-through the BellSouth system. The order seeds were used as templates to build the order volumes used in the subsequent tests. Orders were submitted on a scheduled submission date and time determined by KCI prior to the start of the test. As appropriate, testers made final updates (e.g., desired due dates or other information) and processed the transactions.

The EDI/TAG Normal Volume Performance Test (O&P-3) evaluated BellSouth's interfaces and systems at year-end, 2001 (YE01) projected order volumes in BellSouth's RSIMMS environment for two ten-hour periods. This test was executed by submitting Resale and UNE orders against test-bed accounts¹² that were provisioned by BellSouth based on KCI's specifications and verified by KCI prior to initiation of the test.

system was functioning. After these SRTs, additional Normal Volume Day 1 tests were conducted. Normal Volume Day 2 was executed successfully in one attempt.

¹⁰ The Normal Volume test was originally scheduled for two test cycles. KCI conducted retests in accordance with the "test until you pass" testing philosophy specified in the MTP.

¹¹ KCI conducted a number of SRTs between April 11, 2000 and August 1, 2000. After completing several of the SRTs, BellSouth requested additional testing. These additional tests were used by BellSouth to ensure that its back-end systems and the Interfaces were functioning correctly.

¹² Refer to Section V, "Overview" for a detailed description of the Ordering and Provisioning test bed process and detail of accounts.

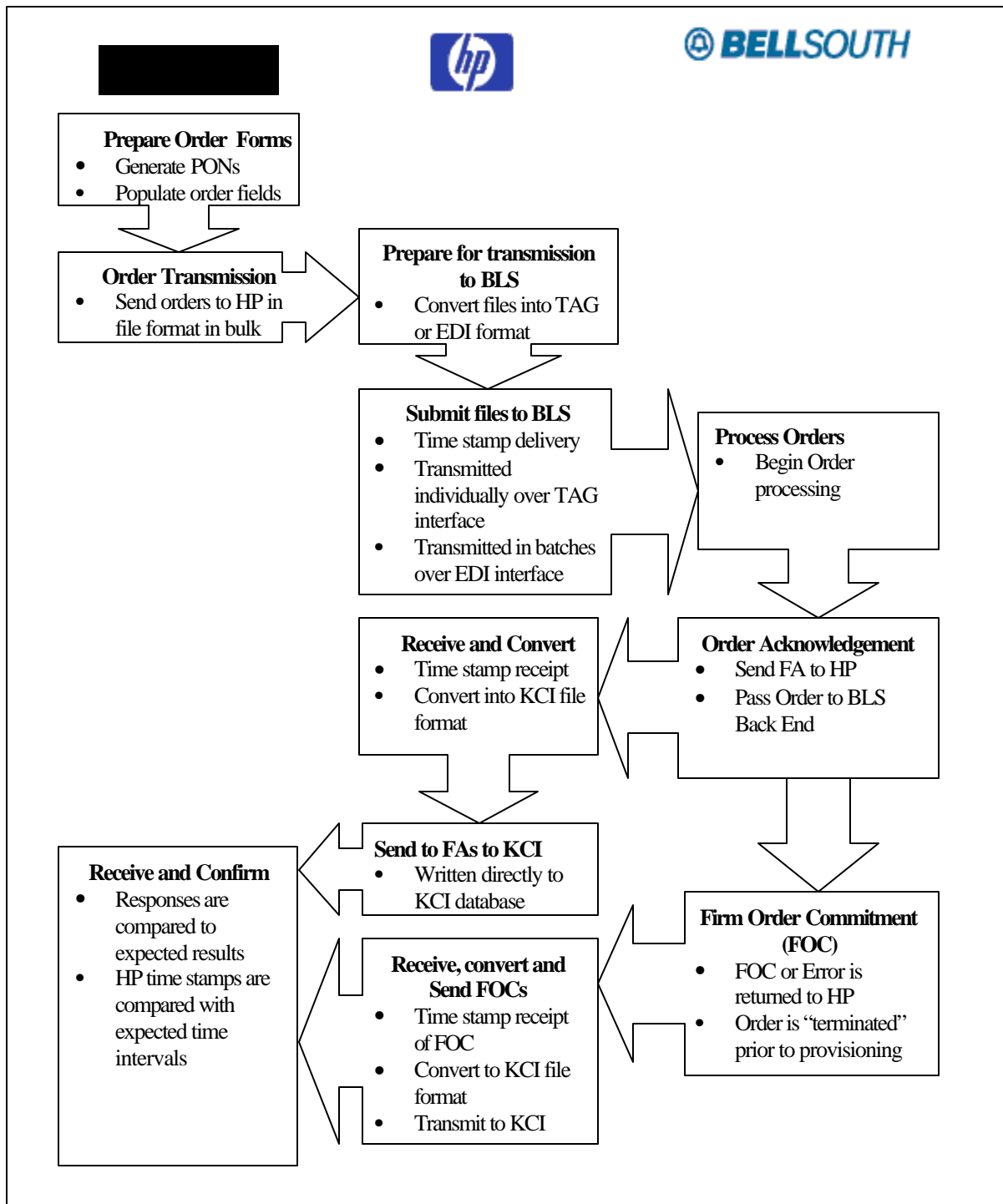
In order to fully test the capacity of BellSouth's OSS supporting ordering under realistic load conditions, the test was conducted simultaneously with the TAG Normal Volume Performance Test (PRE-4), which tested the OSS components supporting pre-ordering. The order transaction loads were distributed geographically across four Central Offices (COs) in the state of Georgia. BellSouth established and configured customer test accounts prior to initiation of the test.

The test cases for the EDI/TAG Normal Volume Test were submitted in an automated fashion. Transactions were provided in bulk to HP for conversion from the business file format to the TAG and EDI formats. HP time-stamped and forwarded the transactions to BellSouth for processing according to the schedule provided by KCI. BellSouth processed the transactions and returned Functional Acknowledgements (FAs) and Firm Order Commitments (FOCs) to HP. The test process is depicted in Figure V-3.1.¹³

As pre-order and order volume transactions were submitted, error messages or positive responses were returned. A transaction was deemed complete if a Functional Acknowledgment (FA) and a Firm Order Confirmation (FOC) were received (or if an expected error was received). The results were logged and compared to expected ordering system functionality and business processes, as outlined in Section V, "Ordering & Provisioning Overview." A representative number of intentional errors were included in a specified number of orders. These orders were sent to test BellSouth's ability to process errors and to ensure that systems could not be programmed for automatic response. Fifty EDI orders and 75 TAG orders containing planned errors were submitted during the EDI/TAG Normal Volume Test.

Transactions (LSRs) were submitted and the results logged and compared to the expected ordering system functionality and business processes, as outlined in Section V, "Ordering & Provisioning Overview." The number, timeliness, and correctness of responses were recorded and evaluated.

¹³ See Section V, "Ordering & Provisioning Overview" for a complete description of the file transfer process.

Figure V-3.1: O&P Normal Volume Test Process

2.6 Analysis Methods

The EDI/TAG Normal Volume Performance Test included a checklist of evaluation criteria developed by KCI during the initial phase of the BellSouth - Georgia OSS Evaluation. These evaluation criteria provided a framework of norms, standards and guidelines for the EDI/TAG Normal Volume Performance Test.

The Georgia Public Service Commission (GPSC) voted on June 6, 2000 to approve a set of Service Quality Measurement- (SQM-) related measures and standards to be used for purposes of this evaluation.¹⁴ In many cases, results in this section were calculated based on KCI/HP times tamps, which may differ significantly from the BellSouth time measurement points reported in the SQMs. For those evaluation criteria that do not map to the GPSC-approved measures, KCI has applied its own standard, based on our professional judgment.

For quantitative evaluation criteria where the test result did not meet or exceed the established standard or KCI benchmark, KCI conducted a review to determine whether the differential was statistically significant.

3.0 Results Summary

This section identifies the evaluation criteria and test results.

3.1 Results & Analysis

The results of this test are presented in the table below. Definitions of evaluation criteria, possible results, and exceptions are provided in Section II.

Table V-3.6: O&P-3 Test Evaluation Criteria and Results¹⁵

Test Cross-Reference	Evaluation Criteria	Result	Comments
<i>Interface Availability</i>			
O&P-3-1-1	EDI order transaction capability is consistently available during scheduled hours of operation.	Satisfied	The GPSC-approved standard is 99.5% system availability during scheduled hours of operation ¹⁶ . BLS maintained 100% EDI availability throughout each iteration of the test ¹⁷ .

¹⁴ On January 16, 2001, the GPSC issued an order requiring BellSouth to report for business purposes a set of measures that differs in some cases from the requirements of the June 6 test standards.

¹⁵ See Tables V-3.7 through V-3.11 for detailed results on each test day. Percentages are rounded to the nearest whole number.

Test Cross-Reference	Evaluation Criteria	Result	Comments
O&P-3-1-2	TAG order transaction capability is consistently available during scheduled hours of operation.	Satisfied	The GPSC-approved standard is 99.5% system availability during scheduled hours of operation ¹⁶ . HP continuously sent orders and pre-orders throughout each iteration of the test. While connectivity was maintained throughout the test, HP and BLS conducted “coordinated bounces” of their servers on several occasions. These system restarts were conducted primarily to recover BLS back-end functionality. The combined duration of downtime resulting from these restarts was less than 0.5% of test time.
<i>System Functionality</i>			
O&P-3-2-1	The EDI interface provides expected system responses ¹⁸ .	Satisfied	The KCI standard is 99% of expected system responses received. The Normal Volume test results are as follows: Day 1 - Initial: — 64% (9,001 / 13,983) of expected FAs and 63% (8,748 / 13,983) of expected FOCs were received. Day 1 - Retest 1: — 100% (13,979 / 13,979) of expected FAs and 94% (13,079 / 13,979) of expected FOCs were received. Day 1 - Retest 2: — 100% (13,983 / 13,983) of expected FAs and 75% (10,506 / 13,983) of

¹⁶ Regularly scheduled hours of availability for the TAG/EDI interfaces are published on the BellSouth Interconnection Web site (www.interconnection.bellsouth.com/oss/oss_hour.html). Notices of specific scheduled system downtime (e.g., for a new system release or fix) are communicated through Carrier Notifications posted on the BellSouth Web site.

¹⁷ During the execution of the Normal Volume test, KCI/HP continuously submitted transactions, via the EDI interface, according to a predetermined schedule. During this period, HP maintained continuous connectivity with BellSouth via EDI and successfully transmitted all of the orders at their scheduled times.

¹⁸ An expected system response is defined for this criterion as an FA for each order, an FOC for each correctly formatted error, and an error or clarification (ERR/CLR) for each invalid service request.

Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>expected FOCs were received.</p> <p>Day 1 - Retest 3:</p> <ul style="list-style-type: none"> — 100% (13,983/13,983) of expected FAs and 99% (13,872/13,983) of expected FOCs were received. <p>Day 2:</p> <ul style="list-style-type: none"> — 100% (13,973/13,973) of expected FAs and 99% (13,838/13,973) of expected FOCs were received.
O&P-3-2-2	The TAG interface provides expected system responses ¹⁸ .	Satisfied	<p>The KCI standard is 99% of expected system responses received. The Normal Volume test results are as follows:</p> <p>Day 1 - Initial</p> <ul style="list-style-type: none"> — 100% (20,906/20,951) of expected FAs and 97% (20,348/20,951) of expected FOCs were received. <p>Day 1 - Retest 1:</p> <ul style="list-style-type: none"> — 84% (17,524/20,968) of expected FAs and 77% (16,073/20,968) of expected FOCs were received. <p>Day 1 - Retest 2:</p> <ul style="list-style-type: none"> — 100% (20,880/20,973) of expected FAs were received and 99% (20,725/20,973) of expected FOCs were received. <p>Day 1 - Retest 3:</p> <ul style="list-style-type: none"> — 100% (20,929/20,974) of expected FAs and 99% (20,829/20,974) of expected FOCs were received. <p>Day 2:</p> <ul style="list-style-type: none"> — 99% (20,904/20,951) of expected FAs and 99% (20,776/20,951) of expected FOCs were received.
Timeliness of System Response ¹⁹			

¹⁹ See Tables V-3.7 through 3.11 and Figures V-3.2 and V-3.3 for additional detail on timeliness of response results.

Test Cross-Reference	Evaluation Criteria	Result	Comments
O&P-3-3-1	BLS's EDI interface provides timely Functional Acknowledgements (FAs).	Not Satisfied	<p>The KCI standard is 95% of FAs received in less than 30 minutes.</p> <p>Performance on only one test day met or exceeded the test standard.</p> <p>Results from LSRs submitted during the Normal Volume test:</p> <p>Day 1 - Initial:</p> <ul style="list-style-type: none"> — 2% (21/9,001) of FAs were received within 30 minutes. <p>Day 1 - Retest 1:</p> <ul style="list-style-type: none"> — 93% (12,978/13,979) of FAs were received within 30minutes . <p>Day 1 - Retest 2:</p> <ul style="list-style-type: none"> — 30% (4,122/13,983) of FAs were received within 30 minutes. <p>Day 1 - Retest 3:</p> <ul style="list-style-type: none"> — 18% (2,523/13,983) of FAs were received within 30 minutes²⁰. <p>Day 2:</p> <ul style="list-style-type: none"> — 98% (13,734/13,973) of FAs were received within 30 minutes.
O&P-3-3-2	BLS's TAG interface provides timely Functional Acknowledgements (FAs).	Satisfied	<p>The KCI standard is 95% of FAs received in less than 30 minutes.</p> <p>Results from LSRs submitted during the Normal Volume test are:</p> <p>Day 1 - Initial:</p> <ul style="list-style-type: none"> — 100% (20,906/20,906) of FAs were received within 30 minutes. <p>Day 1 - Retest 1:</p> <ul style="list-style-type: none"> — 100% (17,482/17,524) of FAs were received within 30 minutes. <p>Day 1 - Retest 2:</p> <ul style="list-style-type: none"> — 100% (20,866/20,880) of FAs were received within 30 minutes

²⁰ All Functional Acknowledgements were received within 90 minutes of the LSR being sent.

Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>Day 1 Retest 3:</p> <ul style="list-style-type: none"> — 100% (20,929/20,929) of FAs were received within 30 minutes <p>Day 2:</p> <ul style="list-style-type: none"> — 100% (20,904/20,904) of FAs were received within 30 minutes.
O&P-3-3-3	BLS's EDI interface provides timely Firm Order Confirmations (FOCs).	Satisfied	<p>The GPSC-approved standard for flow-through (FT) FOCs is 95% received within three hours.</p> <p>LSRs submitted during the Normal Volume Day tests received FOCs within the following timeframes²¹:</p> <p>Day 1 – Initial:</p> <ul style="list-style-type: none"> — 1% (79/8,748) of FOCs were received within three hours²². <p>Day 1 - Retest 1:</p> <ul style="list-style-type: none"> — 2% (269/13,079) of FOCs were received within three hours. <p>Day 1 - Retest 2:</p> <ul style="list-style-type: none"> — 81% (8,488/10,506) of FOCs were received within three hours. <p>Day 1 - Retest 3:</p> <ul style="list-style-type: none"> — 100% (13,872/13,872) of FOCs were received within three hours. <p>Day 2:</p> <ul style="list-style-type: none"> — 100% (13,838/13,838) of FOCs were received within three hours.
O&P-3-3-4	BLS's TAG interface provides timely Firm Order Confirmations (FOCs).	Satisfied	<p>The GPSC-approved standard for flow-through (FT) FOCs is 95% received within three hours.</p> <p>LSRs submitted during the Normal volume test yielded the following results²¹:</p> <p>Day 1 – Initial:</p>

²¹ BellSouth implemented system fixes after unsuccessful volume days prior to KCI's retest activity.

²² BellSouth experienced internal system problems during the initial hours of the test. These problems resulted in an order backlog that existed for the remainder of the day.

Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>— 34% (6,922/20,348) of FOCs were received within three hours.</p> <p>Day 1 - Retest 1:</p> <p>— 33% (5,251/16,073) of FOCs were received within three hours.</p> <p>Day 1 - Retest 2:</p> <p>— 100% (20,725/20,725) of FOCs were received within three hours.</p> <p>Day 1 Retest 3:</p> <p>— 100% (20,829/20,829) of FOCs were received within three hours.</p> <p>Day 2:</p> <p>— 100% (20,776/20,776) of FOCs were received within three hours.</p>
<i>Accuracy of System Response</i>			
O&P-3-4-1	BLS systems provide accurate ²³ Firm Order Confirmations (FOCs).	Satisfied	<p>The KCI standard is 95% accuracy of response type.</p> <p>Of the FOCs analyzed, 100% were correct relative to the LSR submitted (i.e. were received in response to a correctly formatted LSR).</p>
O&P-3-4-2	BLS systems provide accurate order errors (ERRs)/clarifications (CLRs).	Satisfied	<p>The KCI standard is 95% accuracy of response type.</p> <p>Of the ERRs/CLRs analyzed, 100% were correct relative to the LSR submitted (i.e. incorrectly formatted LSR received expected response).</p>

²³ For this criterion, KCI defined an accurate response to be a system response that is consistent with the technical specifications for EDI/ TAG responses *and* to be consistent with the transaction that initiated the response (e.g., a correctly formatted LSR received a FOC). In the case of error/clarification responses, KCI verified that these were only received for incorrectly formatted LSRs. The contents of the response files (FOCs/ERRs/CLRs) were evaluated for accuracy and completeness for purposes of this test on a sample basis only. A more complete accuracy evaluation for conformance to the BellSouth business rules was undertaken in feature/function testing (OP-1, OP-2, and PO&P-11).

Table V-3.7: Day-One Normal Volume Re-Test Three (July 24, 2000)
Acknowledgement Detailed Results²⁴

Product Type	Interface	LSR Sent	Number of ACKs Received	Percentage of Expected ACKs Received	ACK Received < 30 min	Percentage of ACKs received < 30 min	Average LSR To ACK Business Minutes
DL	EDI	258	258	100.0%	55	21.3%	38.919
LNP	EDI	1,358	1,358	100.0%	274	20.2%	39.490
Loop with LNP	EDI	2,039	2,039	100.0%	383	18.8%	39.045
Resale	EDI	6,118	6,118	100.0%	1,028	16.8%	39.093
UNE Loop	EDI	795	795	100.0%	162	20.4%	38.216
UNE Loop-Port Combo	EDI	3,389	3,389	100.0%	617	18.2%	39.232
UNE Port	EDI	26	26	100.0%	4	15.4%	39.615
Subtotal		13,983	13,983	100.0%	2,523	18.0%	39.106
DL	TAG	388	373	96.1%	373	100.0%	0.003
LNP	TAG	2,038	2,038	100.0%	2,038	100.0%	0.001
Loop with LNP	TAG	3,058	3,058	100.0%	3,058	100.0%	0.000
Resale	TAG	9,171	9,156	99.8%	9,156	100.0%	0.001
UNE Loop	TAG	1,193	1,178	98.7%	1,178	100.0%	0.002
UNE Loop-Port Combo	TAG	5,085	5,085	100.0%	5,085	100.0%	0.001
UNE Port	TAG	41	41	100.0%	41	100.0%	0.024
Subtotal		20,974	20,929	99.8%	20,929	100.0%	0.001
Total		34,957	34,912	99.9%	23,452	67.2%	15.663

²⁴ Data from the two successful test cycles are presented.

Table V-3.8: Day-One Normal Volume Re-Test Three (July 24, 2000)
FOC Detailed Results

Product Type	Interface	LSRs Sent	Number of FOCs Received	Percentage of Expected FOCs Received	FOCs Received < 3 hrs	Percentage of FOCs Received < 3 hrs	Average LSR To FOC Business Minutes
DL	EDI	258	248	96.1%	248	100.0%	83.477
LNP	EDI	1,358	1,351	99.5%	1,351	100.0%	72.493
Loop with LNP	EDI	2,039	2,039	100.0%	2,039	100.0%	70.820
Resale	EDI	6,118	6,045	98.8%	6,045	100.0%	81.913
UNE Loop	EDI	795	784	98.6%	784	100.0%	86.537
UNE Loop-Port Combo	EDI	3,389	3,389	100.0%	3,389	100.0%	88.645
UNE Port	EDI	26	16	61.5%	16	100.0%	51.346
Subtotal		13,983	13,872	99.2%	13,872	100.0%	81.264
DL	TAG	388	373	96.1%	373	100.0%	19.928
LNP	TAG	2,038	2,036	99.9%	2,036	100.0%	11.784
Loop with LNP	TAG	3,058	3,058	100.0%	3,058	100.0%	12.267
Resale	TAG	9,171	9,075	99.0%	9,075	100.0%	17.675
UNE Loop	TAG	1,193	1,178	98.7%	1,178	100.0%	20.431
UNE Loop-Port Combo	TAG	5,085	5,083	100.0%	5,083	100.0%	20.978
UNE Port	TAG	41	26	63.4%	26	100.0%	12.171
Subtotal		20,974	20,829	99.3%	20,829	100.0%	17.301
Total		34,957	34,701	99.3%	34,701	100.0%	42.870

Table V-3.9: Day-Two Normal Volume Test (August 1, 2000)
Acknowledgement Detailed Results

Product Type	Interface	LSR Sent	Number of ACKs ²⁵ Received	Percentage of Expected ACKs Received	ACK Received < 30 min	Percentage of ACKs received < 30 min	Average LSR To ACK Business Minutes
DL	EDI	258	258	100.0%	248	96.1%	15.298
LNP	EDI	1,358	1,358	100.0%	1,358	100.0%	14.655
Loop with LNP	EDI	2,039	2,039	100.0%	2,025	99.3%	15.077
Resale	EDI	6,108	6,108	100.0%	5,956	97.5%	15.029
UNE Loop	EDI	795	795	100.0%	786	98.9%	15.557
UNE Loop-Port Combo	EDI	3,389	3,389	100.0%	3,337	98.5%	15.683
UNE Port	EDI	26	26	100.0%	24	92.3%	13.577
Subtotal		13,973	13,973	100.0%	13,734	98.3%	15.191
DL	TAG	386	371	96.1%	371	100.0%	0.034
LNP	TAG	2,037	2,037	100.0%	2,037	100.0%	0.021
Loop with LNP	TAG	3,057	3,057	100.0%	3,057	100.0%	0.020
Resale	TAG	9,161	9,145	99.8%	9,145	100.0%	0.021
UNE Loop	TAG	1,191	1,175	98.7%	1,175	100.0%	0.025
UNE Loop-Port Combo	TAG	5,080	5,080	100.0%	5,080	100.0%	0.022
UNE Port	TAG	39	39	100.0%	39	100.0%	0.103
Subtotal		20,951	20,904	99.8%	20,904	100.0%	0.022
Total		34,924	34,877	99.9%	34,638	99.3%	6.099

²⁵ An ACK is a Functional Acknowledgement, which is an electronic acknowledgement sent to a CLEC from BellSouth verifying that BellSouth has received a firm order.

Table V-3.10: Day-Two Normal Volume Test (August 1, 2000)
FOC Detailed Results

Product Type	Interface	LSRs Sent	Number of FOCs Received	Percentage of Expected FOCs Received	FOCs Received < 3 hrs	Percentage of FOCs Received < 3 hrs	Average LSR To FOC Business Minutes
DL	EDI	258	248	96.1%	248	100.0%	56.740
LNP	EDI	1,358	1,358	100.0%	1,358	100.0%	38.830
Loop with LNP	EDI	2,039	1,955	95.9%	1,955	100.0%	41.370
Resale	EDI	6,108	6,087	99.7%	6,087	100.0%	51.715
UNE Loop	EDI	795	785	98.7%	785	100.0%	57.470
UNE Loop-Port Combo	EDI	3,389	3,389	100.0%	3,389	100.0%	59.510
UNE Port	EDI	26	16	61.5%	16	100.0%	26.038
Subtotal		13,973	13,838	99.0%	13,838	100.0%	51.285
DL	TAG	386	371	96.1%	371	100.0%	20.648
LNP	TAG	2,037	2,037	100.0%	2,037	100.0%	11.765
Loop with LNP	TAG	3,057	2,960	96.8%	2,960	100.0%	11.782
Resale	TAG	9,161	9,130	99.7%	9,130	100.0%	17.942
UNE Loop	TAG	1,191	1,174	98.6%	1,174	100.0%	20.976
UNE Loop-Port Combo	TAG	5,080	5,080	100.0%	5,080	100.0%	21.589
UNE Port	TAG	39	24	61.5%	24	100.0%	10.308
Subtotal		20,951	20,776	99.2%	20,776	100.0%	17.561
Total		34,924	34,614	99.1%	34,614	100.0%	31.043

The figures below depict the number of orders received for each response time. Normal volume day two had 4004 FOCs that were received within one minute of the LSR being sent to BellSouth; these data are not depicted on the chart.

Figure V-3.2: Normal Volume Test Day One – Re-Test Three

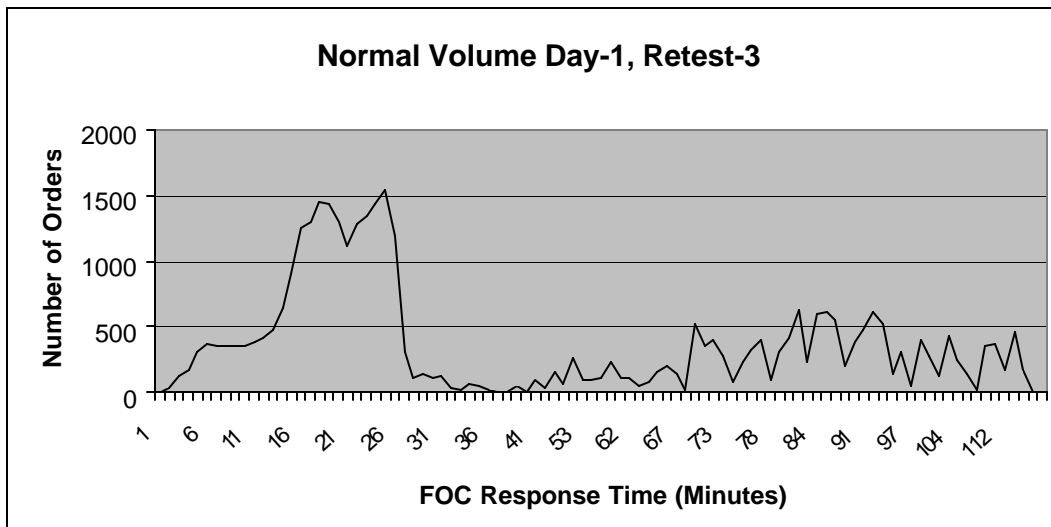


Figure V-3.3: Normal Volume Test Day Two

