

## **A. Test Results: CRIS/CABS Invoicing Functional Billing Test (BLG-1)**

### **1.0 Description**

The objective of the Customer Records Information System (CRIS)/Carrier Access Billing System (CABS) Invoicing Functional Test (BLG-1) was to evaluate BellSouth's ability to deliver timely and accurate invoices to Competitive Local Exchange Carriers (CLECs). The evaluation consisted of two components: a bill validation component and a process evaluation component.

The bill validation component of this test examined the content and the timeliness of delivery of carrier bills received by KCI in the role of a test CLEC. This evaluation examined BellSouth's ability to accurately bill usage charges, monthly-recurring charges, and non-recurring charges via the appropriate type of Unbundled Network Element (UNE) bill.

In the process evaluation component, KCI examined BellSouth internal procedures associated with the production and distribution of invoices. The objective of this evaluation was to examine the processes by which invoices are produced and distributed to determine whether internal BellSouth procedures are sufficiently complete and monitored to ensure timely and correct invoicing.

### **2.0 Methodology**

This section summarizes the test methodology.

#### **2.1 Business Process Description**

BellSouth prepares many types of bills that are distributed over the course of a monthly billing period. Each bill type covers a specific set of products and services. Bills are produced by two primary billing systems, CABS and CRIS. The CABS billing system principally serves CLECs who choose to lease unbundled services. The CRIS billing system principally produces bills for non-UNE services.

Table VI-1.1 describes the bill types and formats selected for evaluation. KCI selected a subset of UNE product and service offerings for evaluation based on the requirements documented in the BellSouth - Georgia OSS Evaluation *Master Test Plan*, Appendix A: Product Selection & Description.

BellSouth's CLEC bills are structured in a hierarchical manner. At the top of the hierarchy is the Master Account or "Q" Account. Charges for multiple individual Billing Telephone Numbers (BTNs) and Earning Telephone Numbers (ETNs) are aggregated under the "Q" Account.

Bill validation was conducted over multiple bill periods. The majority (over 80%) of test cases were validated over at least two bill periods for the same set of customers. This allowed for evaluation of pro-rated charges for accounts migrated during a billing period, appropriate one-time charges, and monthly recurring charges encompassing an entire billing cycle. Test cases also allowed for evaluation of the billing of local, intra-LATA toll, operator-handled calls, and other usage generated during the Access Daily Usage File (ADUF)/Optional Daily Usage File (ODUF) Functional Evaluation (BLG-2).

**Table VI-1.1: Bill Types and Formats Reviewed for the CRIS/CABS Invoicing Functional Test**

Bill Type	Description	Format
CABS “N” Bill	SL1 Loops (2-Wire Analog Non-Designed Loops) SL2 Loops (2-Wire Analog Designed Loops)	Paper Billing Output Specifications-Billing Data Tape (BOS BDT) Diskette Analyzer Bill (DAB) Paper Image CD-ROM
CABS “J” Bill	2-Wire Analog Ports 2-Wire Analog Port-Loop Combinations Associated usage	Paper BOS-BDT DAB Paper Image CD-ROM
CRIS Bill	Local Number Portability (LNP) Interim Number Portability (INP) Administrative charges (e.g., bill media)	Customized Large User Bill (CLUB) Paper Bill DAB transmitted via File Transfer Protocol (FTP) Push DAB Paper Image CD-ROM

## 2.2 Scenarios

Scenarios that included execution of the following activities were performed on test lines for the bill validation component of the BLG-1 evaluation:

### Migration/Conversion

- Migrate a BellSouth customer “as is/as specified”
- Change to Customer (Add/Modify/Delete)
- Add features to existing CLEC UNE customers
- Add new line to existing CLEC UNE customers
- Disconnect a CLEC UNE customer.

These activities covered each UNE retail element across eight central offices providing geographic and switch-type coverage. Scenarios were not applicable to the process evaluation component of the BLG-1 test.

### 2.3 Test Targets and Measures

The test target was the completeness and accuracy of the CRIS/CABS carrier billing and the processes that support timely and accurate production and distribution of the carrier bills in accordance with BellSouth's published specifications. 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 and Analysis."

**Table VI-1.2: Test Target Cross-Reference**

Sub-Process	Function	Evaluation Criteria	Test Cross-Reference
Adjustment	Enter adjustments	Presence of Functionality Accuracy of Response	BLG-1-1-1 BLG-1-1-3 BLG-1-1-4 BLG-1-1-5 BLG-1-1-8 BLG-1-1-9 BLG-1-1-15 BLG-1-1-16
	Track adjustments	Presence of Functionality Accuracy of Response	BLG-1-1-1 BLG-1-1-3 BLG-1-1-4 BLG-1-1-5 BLG-1-1-8 BLG-1-1-9 BLG-1-1-15 BLG-1-1-16
Maintain Bill Balance	Carry balance forward	Presence of Functionality Accuracy of Response	BLG-1-1-1 BLG-1-1-3 BLG-1-1-4 BLG-1-1-5 BLG-1-1-8 BLG-1-1-9 BLG-1-1-13 BLG-1-1-15 BLG-1-1-16
Review Bills	Verify normal recurring charges	Presence of Functionality Accuracy of Response	BLG-1-1-4 BLG-1-1-5 BLG-1-1-6 BLG-1-1-13 BLG-1-1-14 BLG-1-1-18

Sub-Process	Function	Evaluation Criteria	Test Cross-Reference
	Verify one-time charges	Presence of Functionality Accuracy of Response	BLG-1-1-7 BLG-1-1-11 BLG-1-1-17
	Verify prorated recurring charges	Presence of Functionality Accuracy of Response	BLG-1-1-7 BLG-1-1-11 BLG-1-1-17 BLG-1-1-18
	Verify usage charges	Presence of Functionality Accuracy of Response	BLG-1-1-6 BLG-1-1-12 BLG-1-1-19
	Verify adjustments (debits and credits)	Presence of Functionality Accuracy of Response	BLG-1-1-4 BLG-1-1-5 BLG-1-1-8 BLG-1-1-13
	Verify late charges	Presence of Functionality Clarity of Information Accuracy of Document(s)	BLG-1-1-5 BLG-1-1-10
Balance Cycle	Define balancing and reconciliation procedures	Process Validation Presence of Functionality Clarity of Information Accuracy of Document(s)	BLG-1-1-29 through BLG-1-1-37, BLG-1-1-39 through BLG-1-1-42
	Produce control reports	Presence of Functionality Clarity of Information Accuracy of Document(s)	BLG-1-1-33 through BLG-1-1-37, BLG-1-1-39
	Release cycle	Presence of Functionality Clarity of Information Accuracy of Document(s)	BLG-1-1-33 through BLG-1-1-39
Deliver Bill	Deliver bill media	Presence of Functionality Timeliness of Response	BLG-1-1-20, BLG-1-1-21 through BLG-1-1-28
Maintain Bill History	Maintain billing information	Process Validation Presence of Functionality Clarity of Information Accuracy of Document(s)	BLG-1-1-42 BLG-1-1-43 BLG-1-1-45 BLG-1-1-47 BLG-1-1-49
	Access billing information	Presence of Functionality Clarity of Information Accuracy of Document(s)	BLG-1-1-44 BLG-1-1-45 BLG-1-1-46 BLG-1-1-48 BLG-1-1-49

Sub-Process	Function	Evaluation Criteria	Test Cross-Reference
Request Re-send	Deliver bill media	Process Validation Presence of Functionality Accuracy of Document(s) Timeliness of Response	BLG-1-1-46

## 2.4 Data Sources

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

**Table VI-1.3: BLG-1 Data Sources for CRIS/CABS Invoicing Functional Test**

Document	File Name	Location in Work Papers	Source
<i>Magnetic Tape Billing Plan Specifications &amp; Change Document</i>	No Electronic Copy	BLG-1-A	BLS
<i>Product Information</i>	<a href="http://www.interconnect.ion.bellsouth.com/products">Http://www.interconnect.ion.bellsouth.com/products</a> Also in hardcopy	BLG-1-B	BLS
<i>General Subscriber Service Tariff</i>	<a href="http://cpr.bst.bellsouth.com/pdf/ga/a996.pdf">Http://cpr.bst.bellsouth.com/pdf/ga/a996.pdf</a> Also in hardcopy	BLG-1-C	BLS
<i>Facility Based Activation Requirements – Interconnection Services</i>	<a href="http://www.interconnect.ion.bellsouth.com/guides/actreq2_fac/index.htm">Http://www.interconnect.ion.bellsouth.com/guides/actreq2_fac/index.htm</a> Also in hardcopy	BLG-1-D	BLS
<i>CLEC Training Unbundled Network Elements</i>	No Electronic Copy	BLG-1-E	BLS
<i>Facility Based – CLEC Starter Kit</i>	<a href="http://www.interconnect.ion.bellsouth.com/guides/guidepdf/stfb_is2.pdf">Http://www.interconnect.ion.bellsouth.com/guides/guidepdf/stfb_is2.pdf</a> Also in hardcopy	BLG-1-F	BLS
<i>CLUB*EDI Customer Handbook</i>	No Electronic Copy	BLG-1-G-1	BLS
<i>Electronic Payment System Implementation Guidelines</i>	No Electronic Copy	BLG-1-G-2	BLS
<i>Sample CLUB Bill</i>	No Electronic Copy	BLG-1-G-3	BLS
<i>Beyond DAB</i>	No Electronic Copy	BLG-1-G-4	BLS
<i>Diskette Analyzer Bill User's Guide</i>	No Electronic Copy	BLG-1-G-5	BLS
<i>Batch File Processing with DAB</i>	No Electronic Copy	BLG-1-G-6	BLS
<i>FTP Protocol</i>	No Electronic Copy	BLG-1-G-7	BLS

Document	File Name	Location in Work Papers	Source
<i>Diskette Billing System ASCII Data Exporting</i>	No Electronic Copy	BLG-1-G-8	BLS
<i>How to Retrieve Data Files and Install/Activate Analyzer Software</i>	No Electronic Copy	BLG-1-G-9	BLS
<i>CRIS Billing Media Options</i>	No Electronic Copy	BLG-1-G-10	BLS
Bill Samples – “N” & “J” Bill Formats	<a href="http://www.interconnect.bellsouth.com/carrier/carrier_pdf/91081502.pdf">Http://www.interconnect.bellsouth.com/carrier/carrier_pdf/91081502.pdf</a> Also in hardcopy	BLG-1-H	BLS
BLS FCC Tariff Information	<a href="http://cpr.bst.bellsouth.com/pdf/fcc/fcc.htm">Http://cpr.bst.bellsouth.com/pdf/fcc/fcc.htm</a>	N/A	BLS
BLS GA Intrastate Tariff Information	<a href="http://cpr.bst.bellsouth.com/pdf/ga/ga.htm">Http://cpr.bst.bellsouth.com/pdf/ga/ga.htm</a>	N/A	BLS
BLS CLEC Customer Guides	<a href="http://www.interconnect.bellsouth.com/guides/guides.html">Http://www.interconnect.bellsouth.com/guides/guides.html</a>	N/A	BLS
CLEC UNE Call Scenarios	No Electronic Copy	BLG-1-I	BLS
TelView Online Tariff Research Service	<a href="http://www.ccmi.com">Http://www.ccmi.com</a>	N/A	BLS
Interview Summary/Report: 1	No Electronic Copy	BLG-1-J-1	KCI
BLS Response to Interview Summary/Report: 1	No Electronic Copy	BLG-1-J-2	BLS
Interview Summary/Report: 2	No Electronic Copy	BLG-1-J-3	KCI
BLS Response to Interview Summary/Report: 2	No Electronic Copy	BLG-1-J-4	BLS
Interview Summary/Report: 3	No Electronic Copy	BLG-1-J-5	KCI
BLS Response to Interview Summary/Report: 3	No Electronic Copy	BLG-1-J-6	BLS
Interview Summary/Report: 4	No Electronic Copy	BLG-1-J-7	KCI
BLS Response to Interview Summary/Report: 4	No Electronic Copy	BLG-1-J-8	BLS
Interview Summary/Report: 8	No Electronic Copy	BLG-1-J-9	KCI
BLS Response to Interview Summary/Report: 8	No Electronic Copy	BLG-1-J-10	BLS
Interview Summary/Report: 9	No Electronic Copy	BLG-1-J-11	KCI

Document	File Name	Location in Work Papers	Source
Interview Summary/Report: 11	No Electronic Copy	BLG-1-J-12	KCI
Interview Summary/Report: 12 & 13	No Electronic Copy	BLG-1-J-13	KCI
Sample of lists of CABS service order hold file errors	No Electronic Copy	BLG-1-J-14	BLS
Sample screens from CABS service order hold file tracking system	No Electronic Copy	BLG-1-J-15	BLS
BBI/ICSC agreement on handling hold file service orders that describes prioritization of hold file errors and timeliness guidelines	No Electronic Copy	BLG-1-J-16	BLS
Process documentation for handling rate entry and verification and samples of documents	No Electronic Copy	BLG-1-J-17	BLS
Procedures that describe control checks for BIBS using UNITECH software balancing tool and samples of output UNITECH reports	No Electronic Copy	BLG-1-J-18	BLS
Requirements and plan for mechanical changes for verification of ACCESS bill balances	No Electronic Copy	BLG-1-J-19	BLS
Training procedures used for Bill Verification	No Electronic Copy	BLG-1-J-20	BLS
Internal work sheets used by Bill Distribution for checking job flows	No Electronic Copy	BLG-1-J-21	BLS
Sample of report / transmittal logs used for Magnetic tape – SA 14CO3	No Electronic Copy	BLG-1-J-22	BLS
Sample of worksheets/logs for CD-ROM	No Electronic Copy	BLG-1-J-23	BLS
Sample of worksheets/logs for tapes (serial number)	No Electronic Copy	BLG-1-J-24	BLS
Sample of sign-off of print bill sheets for when printed bills complete	No Electronic Copy	BLG-1-J-25	BLS

Document	File Name	Location in Work Papers	Source
Consolidated report for logging measurements	No Electronic Copy	BLG-1-J-26	BLS
Monthly statistical report of bill volumes/postage	No Electronic Copy	BLG-1-J-27	BLS
Report Showing Numbers of Bills Held – Recent Month	No Electronic Copy	BLG-1-J-28	BLS
Sample Hold Bill and Bill Verification Documentation	No Electronic Copy	BLG-1-J-29	BLS
Sample (Sampling Chart) Showing Items CRIS Bill Verification has reviewed	No Electronic Copy	BLG-1-K-1	BLS
Sample of Letter Used to Notify Customer Operations Unit (COU) of Billing Errors	No Electronic Copy	BLG-1-K-2	BLS
Sample of Fax Sent to Bill Mailing for Bill Release	No Electronic Copy	BLG-1-K-3	BLS
Sample Trouble Ticket (TTS) With Summary of Actions Taken	No Electronic Copy	BLG-1-K-4	BLS
Sample Report Card from Recent CRIS / CABS Release	No Electronic Copy	BLG-1-K-5	BLS
Sample Daily MAPPS Report (e-mail Version)	No Electronic Copy	BLG-1-K-6	BLS
Process Flow Description of Tracking Group Processes	No Electronic Copy	BLG-1-K-7	BLS
Sample Flex Report	No Electronic Copy	BLG-1-K-8	BLS
Copy of Form RF-602	No Electronic Copy	BLG-1-K-9	BLS
Sample Treasury Wire Transfer Notification Summary Report	No Electronic Copy	BLG-1-K-10	BLS
Sample Pocket Cut Ticket	No Electronic Copy	BLG-1-K-11	BLS
Sample Form 6355	No Electronic Copy	BLG-1-K-12	BLS
PRO Process Flow Description	No Electronic Copy	BLG-1-K-13	BLS
Sample Service Fulfillment Report	No Electronic Copy	BLG-1-K-14	BLS
Copy of organization charts (BBI)	No Electronic Copy	BLG-1-K-15	BLS
Top Level Menu for CDIA	No Electronic Copy	BLG-1-K-16	BLS
Two Samples of CDIA Documents	No Electronic Copy	BLG-1-K-17	BLS



Document	File Name	Location in Work Papers	Source
Document Showing Scope of ISO 9000 Audit	No Electronic Copy	BLG-1-K-18	BLS
Document Showing ISO 9000 Certification	No Electronic Copy	BLG-1-K-19	BLS
Sample of Two BDATS Cases Which Have Been Completed	No Electronic Copy	BLG-1-K-20	BLS
Sample of Two ARS Cases Which Have Been Closed	No Electronic Copy	BLG-1-K-21	BLS
Sample of Metrics Used for Review of CPU Utilization and Other Resources	No Electronic Copy	BLG-1-K-22	BLS
Sample Off-Site Pull List (From EDS Data Center Ops)	No Electronic Copy	BLG-1-K-23	BLS
Sample Software Control Management (SCM) Plan	No Electronic Copy	BLG-1-K-24	BLS
Sample STS Batch Process Report	No Electronic Copy	BLG-1-K-25	BLS
Sample SCCB Form	No Electronic Copy	BLG-1-K-26	BLS
Sample MAPS Document for Implementing Software Changes	No Electronic Copy	BLG-1-K-27	BLS
Examples of Completed DCR	No Electronic Copy	BLG-1-K-28	BLS
Examples of Incident Report	No Electronic Copy	BLG-1-K-29	BLS
Sample of Escalation Procedures	No Electronic Copy	BLG-1-K-30	BLS
Sample Summary of Failures for Billing / Corporate Finance Jobs	No Electronic Copy	BLG-1-K-31	BLS
Sample Implementation Guide	No Electronic Copy	BLG-1-K-32	BLS
List of KCI CLEC Billing Account Numbers (BANs) and Bill Media Types	No Electronic Copy	BLG-1-K-33	BLS
<i>Carrier Access Billing System (CABS) Billing Output Specifications</i>	No Electronic Copy	BLG-1-L thru BLG-1-AD	Telcordia Technologies
<i>Facility Based Advisory Guide</i>	No Electronic Copy	BLG-1-AF	BLS

Document	File Name	Location in Work Papers	Source
<i>BellSouth CLEC Billing Guide</i> (7/28/00)	<a href="http://www.interconnect.ion.bellsouth.com/guides/html/understanding_bill.html">http://www.interconnect.ion.bellsouth.com/guides/html/understanding_bill.html</a> Also in hardcopy	BLG-5-A-22	BLS
<i>Understanding Your Bill</i> (7/28/00; Issue 1.0)	<a href="http://www.interconnect.ion.bellsouth.com/billing_a_clec/content/index.htm">http://www.interconnect.ion.bellsouth.com/billing_a_clec/content/index.htm</a> Also in hardcopy	BLG-5-A-19	BLS

#### 2.4.1 Data Generation/Volumes

Data included in the bill validation component of the evaluation were gathered from multiple sources including Local Service Requests (LSRs), Firm Order Confirmations (FOCs), Customer Service Requests (CSRs), Daily Usage Files (DUFs), and the BellSouth carrier bills delivered to KCI. These data were analyzed to create expected results. This evaluation did not rely on volume testing.

#### 2.5 Evaluation Methods

The bill validation component of the CRIS/CABS Invoicing Functional Test (BLG-1) centered on the validation of carrier bills; whereas the process evaluation component centered on the BellSouth procedures associated with the production and distribution of carrier bills. For validation of the bills of the test CLEC, KCI reviewed BellSouth documentation related to bill structure, content, and UNE bill elements for each of the relevant bill types (CRIS and CABS). KCI conducted meetings with BellSouth subject matter experts to review bill format layouts and to determine the applicable rate elements for various services. Upon CLEC request, BellSouth provides sample bill formats supplemented with meetings via conference call to explain the bill formats. Using this information, KCI constructed a detailed test plan and bill validation procedures.

The test framework targeted the various bill types and bill delivery methods provided by BellSouth. Based on the scenarios in appendix B3 of the *Master Test Plan (MTP)*, test cases were developed and utilized to create LSRs for the products and order activities specified. From this list of scenarios, a comprehensive test bed of retail and new CLEC lines was developed, against which KCI placed orders for purposes of bill validation. This test bed provided the proper mix of line types and line activity to ensure that the test case scenarios of the *MTP* were properly executed. The KCI billing team submitted

LSRs for bill validation purposes independent of the KCI order evaluations.<sup>1</sup> In turn, BellSouth processed the LSRs, resulting in the creation of carrier bill invoices.

CSRs, reflecting the completed order activity from test case (LSR) transactions, were used to create an expected billable charge. Expected results were defined for each test case based on the policies and rate structure specified in BellSouth documentation and procedures. These expected results were compared to billing invoices produced by BellSouth to verify that charges were appropriately and accurately billed.

Validation procedures included an examination of recurring and non-recurring charges, pro-ratio calculations, service establishment and disconnection dates, adjustments, late payment charges, and unpaid balances. From one to three bill cycles were reviewed, based on the activity being validated. KCI reviewed bills covering the period from September 1999 through January 2000. KCI also examined bills that contained usage charges for billable messages to verify the accuracy of the usage billing components, rates, and quantities.

Daily Usage File (DUF) records, created during the ADUF/ODUF Functional Usage Evaluation (BLG-2) and delivered to KCI, were used to validate billing details for usage-related charges. KCI created expected results based on a subset of calls placed during the Functional Usage Evaluation (BLG-2) and the application of BellSouth business rules governing the billing of usage. Expected results were compared to charges on corresponding bill invoices.

KCI evaluated bill formats to verify that required sections (e.g., pro-rations, Other Charges & Credits [OC&C] recurring charges, and usage charges) appeared on the appropriate bill. KCI also examined both aggregated billing information and customer-level (BTN and/or ETN) information.

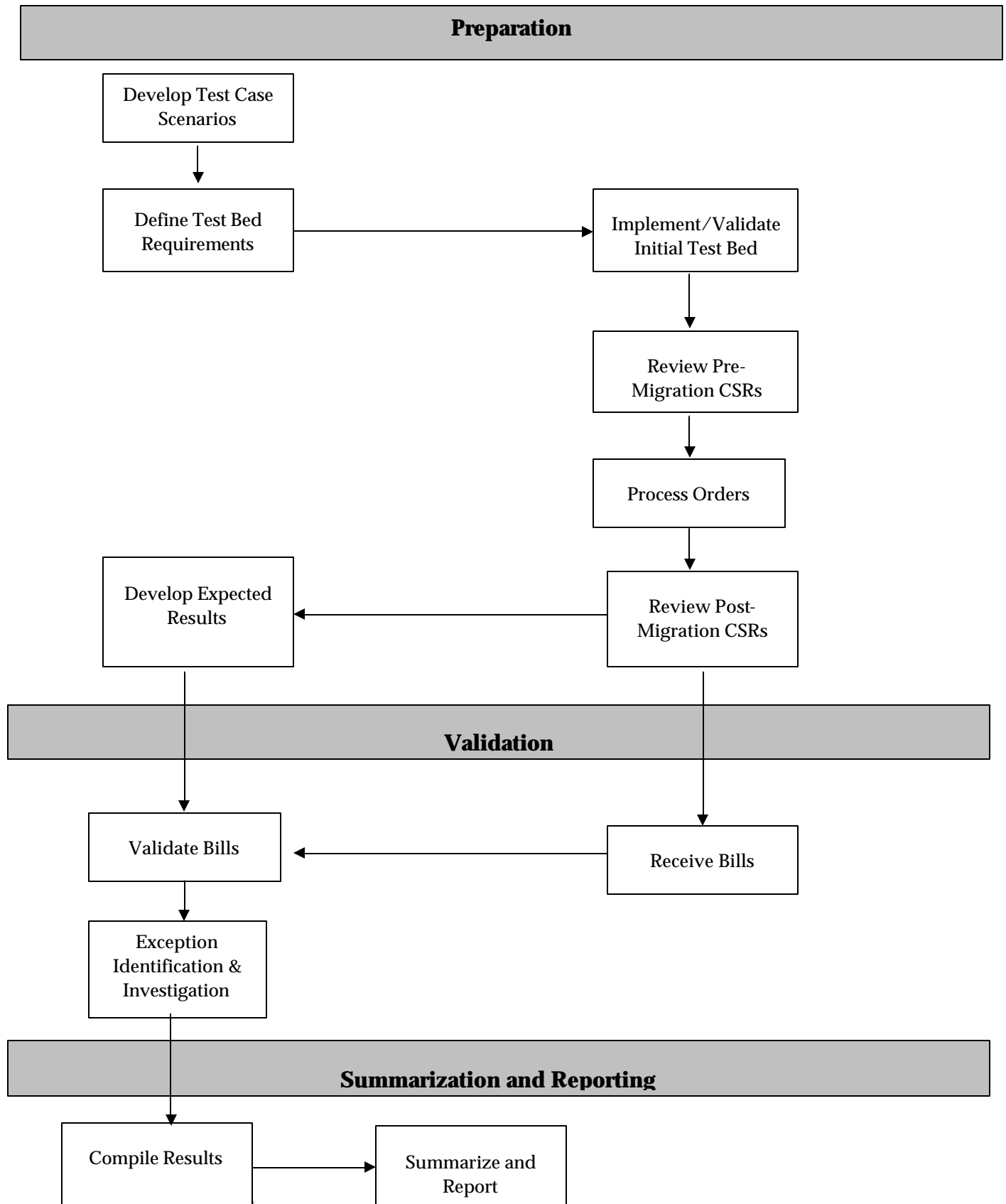
KCI analyzed the timeliness of delivery of electronically transmitted invoices. As electronic bill files were received from BellSouth, the invoice and receipt dates were recorded. The number of elapsed business/calendar days was calculated based on the interval in days between the close of the bill cycle and the day that the bills were received. These statistics were evaluated to determine the Mean Time to Deliver Invoices, as defined in the BellSouth Georgia Service Quality Measurements Plan<sup>2</sup>.

Figure VI-1.1 below depicts the process flow included in the bill validation process methodology.

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<sup>1</sup> Note: The billing LSRs were submitted using the EDI-PC interface to the EDI gateway available for purchase by CLECs from BellSouth.

<sup>2</sup> September 2000 version.

**Figure VI-1.1: CRIS/CABS Invoicing Validation Test Process Flow**

For the process evaluation component of this evaluation, KCI conducted interviews with BellSouth subject matter experts, observed BellSouth work operations, and reviewed BellSouth documentation pertaining to the production and distribution of CLEC bills. Using the information gathered, KCI evaluated the processes in place which support the timely and accurate production and distribution of CLEC bills.

Bill production processes evaluated included cycle balancing, reconciliation, and the maintenance of bill history. Bill balancing and reconciliation procedures were evaluated for completeness and effectiveness. KCI reviewed the production of control reports for cycle balancing for completeness and accuracy in generation of control elements. Release cycle procedures were examined for compliance with balancing and reconciliation procedures. In addition, the maintenance of billing information was evaluated for timeliness, accessibility and controllability of billing information.

Bill distribution processes evaluated included timeliness and controls of media delivery and requests for resending of bills. KCI reviewed the delivery of bill media for timeliness and controls. Requests for resending of bills were also examined for timeliness and accuracy of the delivery of the bill media.

## 2.6 Analysis Methods

The CRIS/CABS Invoicing Functional Billing Test included a checklist of evaluation criteria developed by KCI during the initial phase of the BellSouth - Georgia OSS Evaluation. These evaluation criteria provided the framework of norms, standards and guidelines for the CRIS/CABS Invoicing Functional Billing Test.

## 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 VI-1.4: BLG-1: Evaluation Criteria and Results**

Test Cross-Reference	Evaluation Criteria	Result	Comments
<i>Bill Format – Master Account Level</i>			
BLG-1-1-1	The appropriate major bill sections appear on the bills per BLS's	Satisfied	The appropriate major bill sections appeared on the nine types of bills evaluated. However, some elements

Test Cross-Reference	Evaluation Criteria	Result	Comments
	documentation		of bill sections did not appear as indicated in the “N” & “J” Bill format samples provided by BLS. For example, the Late Payment Charges Detail Section on the “N” Bill did not contain such line items as the Total Local Late Payment Charge for Invoice and the Base Amount, Factor, and LPC headings. While this makes calculation of such charges more difficult, it does not prevent verification of the accuracy of such charges.
BLG-1-1-2	The appropriate data appears on the page headers per BLS’s documentation	Satisfied	The appropriate data such as the Operating Company Number (OCN), billing account number, invoice date, and page number always appeared on the page headers. This finding was consistent with BLS documentation.
BLG-1-1-3	The appropriate data appears on the remittance page per BLS’s documentation	Satisfied	For bill types that included a remittance page, KCI found that appropriate data such as the billing account number, customer name, and customer address appeared on the bill as per BLS documentation.
BLG-1-1-4	The appropriate data appear in the Summary Billing section per BLS’s documentation	Satisfied	The appropriate data appeared in the Summary Billing section of the nine bill types evaluated. Data such as the balance forward, monthly access charges, and other charges & credits consistently appeared on the bills. This finding was consistent with the BLS documentation.
BLG-1-1-5	Appropriate details appear in the Summary Billing section per BLS’s documentation	Satisfied	During initial testing, credit adjustments provided by BLS were mislabeled in the Detail of Adjustments Applied section of the bill. In particular, three Credit Adjustments requested by KCI appeared as one aggregated amount in the Adjustment Detail Section of the bills and were incorrectly labeled as “Credit for Service Disconnected.” KCI detailed this issue in Exception

Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>16.</p> <p>In response, BLS implemented a fix on 4/19/00 to correct the mislabeling of credits as “Credits for Service Disconnected” to match the phrases used for processing adjustments for retail customers.</p> <p>Upon investigation, BLS determined that the multiple credits requested by KCI were aggregated due to human error. KCI submitted additional credit adjustment requests and found that the adjustments were labeled and itemized appropriately on the July 2000 invoices.</p> <p>KCI has recommended closure of Exception 16 to the GPSC. See Exception 16 for additional information on this issue.</p>
BLG-1-1-6	The appropriate details appear in the Current Charges section per BLS’s documentation	Satisfied	Appropriate details including the monthly access charges, other charges and credits, and taxes line items consistently appeared on the bills as per BLS documentation.
BLG-1-1-7	The appropriate details appear in the Other Charges and Credits section per BLS’s documentation	Satisfied	<p>Appropriate details, such as the From &amp; Thru Dates, the Purchase Order Numbers (PONs), and the Service Order Ids (SOIDs), appear in the Other Charges and Credits section per the BLS documentation.</p> <p>However, KCI encountered an instance when the PON did not appear on the bill, but the corresponding SOID did appear on the bill. This discrepancy did not have a substantive impact on either bill verification or revenue.</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
BLG-1-1-8	Summary Page calculations correspond with the calculation definition	Satisfied	The calculations on the Summary Page of the bill correctly corresponded with the calculation definitions provided by BLS in the bill overview work sessions and sample bills. For example, the Total Amount Due was correctly calculated as the sum of the Total Balance Due, Late Payment Charges, and the Total Current Charges.
BLG-1-1-9	Balance Due calculations cross-total as appropriate	Satisfied	The Balance Due calculations on the bills correctly corresponded with the calculation definitions provided by BLS in bill overview work sessions and sample bills. For example, the Total Balance Due was correctly calculated as the sum of the Total Amount of Last Bill less Adjustments Applied.
BLG-1-1-10	Late Payment Charge calculations correspond with the calculation definition in the BLS documentation	Satisfied	The Late Payment Charge calculations on the bills correctly corresponded with the calculation definitions provided by BLS in bill overview work sessions and documentation. For example, KCI found that the Late Payment Charge calculation for CRIS bills as defined in the BLS documentation was correctly calculated on the bills.
BLG-1-1-11	Non-recurring charges correspond appropriately with the BLS tariffs or Interconnection Agreement <sup>3</sup>	Satisfied	KCI's initial test analysis found that BLS generated bills with undocumented or incorrectly rated charges. KCI detailed these issues in Exceptions 16, 35 and 124.  BLS billed the KCI test CLEC for non-recurring charges for the USOCs SOMECS and UEAC2 that were not documented in either the BLS tariffs or in rates established for the KCI test CLEC. Upon investigation, BLS determined that no non-recurring charge rate was established for either

<sup>3</sup> BLS provided KCI with a rate spreadsheet in lieu of an Interconnection Agreement.



Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>the USOC SOMEK or the USOC UEAC2 in the rate tables for the KCI test CLEC.</p> <p>An interim process was developed by BLS to ensure that an accurate USOC rating would occur until a permanent Service Order edit solution could be implemented in December 2000. Upon review, KCI deemed this interim process to adequately address the issues found in the cases of USOCs SOMEK and UEAC2. The permanent Service Order edit solution was implemented on December 21, 2000. KCI submitted orders in January 2001 to test the permanent Service Order edit and found that the non-recurring charges for the USOCs SOMEK and UEAC2 were billed appropriately and accurately.</p> <p>Initial testing demonstrated that the non-recurring rate for the USOC VE1R2 was not documented in the BLS tariffs or in the rates established for the KCI test CLEC. Upon investigation, BLS discovered that a non-recurring rate for the USOC VE1R2 had been developed and added into the applicable rating tables in advance of an approved tariff. Further, BLS determined that no CLECs other than the KCI test CLEC were billed for this USOC. BLS added the USOC VE1R2 to the Standard Agreement in 4Q00 and provided KCI with the applicable section of the revised Standard Agreement. KCI confirmed that the documented rate matched the non-recurring rate seen on its invoices. KCI found in its initial testing that, for the USOC UEAL2, BLS incorrectly billed the first and additional non-recurring charges on the test CLEC bills at \$0.00. BLS updated the CRIS rate tables with the business rate for</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>the non-recurring charge for USOC UEAL2 on 2/23/00 to correct this issue on a going forward basis. KCI reviewed invoices following the rate table update and verified that the update had taken effect. However, KCI noted that first and additional non-recurring charges were being billed using the same rate, rather than at the appropriate rates for first and additional service.</p> <p>In its initial testing, KCI found that BLS also incorrectly billed the first and additional non-recurring charge for the USOC UEPLX using the same rate, rather than at the appropriate rates for first and additional service. BLS implemented a system enhancement to support a two-tier pricing structure for SL1 services on November 24, 2000.</p> <p>KCI submitted orders in January 2001 to test the two-tier pricing structure system enhancement. After review of the corresponding invoices, KCI found that the first and additional non-recurring charges for SL1 services were billed appropriately and accurately on the KCI test CLEC invoices.</p> <p>As a result of these findings, KCI closed investigation of the issues noted above.</p> <p>See Exceptions 16, 35 and 124 for additional information on these issues. KCI has recommended closure of Exceptions 16, 35, and 124 to the GPSC. See Table VI-1.8 for details on Dollar-Based Billing Accuracy measurements.</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
BLG-1-1-12	Usage rates correspond with those defined in the BLS tariffs or Interconnection Agreement	Satisfied	The usage rates appearing on the bills matched those listed in the BLS tariffs and in the rates established for the KCI CLEC.
BLG-1-1-13	Summary Charge calculations correspond with the calculation definition contained in the BLS tariffs or Interconnection Agreement	Satisfied	Calculations for summary normal recurring charges correspond to calculation definitions in the BLS tariffs or in the rates established for the KCI CLEC. Specifically, the monthly access charges on the summary page of the bill were aggregated correctly from the detail level charges provided in the CSR section of the bill.
BLG-1-1-14	Detailed Charge calculations correspond with the calculation definition contained in the BLS tariffs or Interconnection Agreement	Satisfied	KCI's calculations of Detail Charges on the bills corresponded to the definitions in the BLS tariffs or in the rates established for the KCI CLEC.
BLG-1-1-15	Remittance totals cross-total appropriately	Satisfied	On bills with remittance pages, all remittance totals cross-totaled appropriately. For example, the Total Amount Due on the remittance page corresponded to the Total Amount Due on the Summary Page of the bill.
BLG-1-1-16	Summary sections/page correspond with appropriate totals elsewhere in the bills	Satisfied	The totals on the Summary Page of the bill corresponded appropriately to the totals on the Detail Charges pages of the bills. For example, the Other Charges and Credits total on the Summary Page of the bill corresponded to the Total Other Charges and Credits at the end of the Detail of Other Charges and Credits section of the bill.

Test Cross-Reference	Evaluation Criteria	Result	Comments
BLG-1-1-17	Pro-rated monthly recurring charges in the Other Charges & Credits (OC&C) section are applied in accordance with definitions in BLS tariffs and documentation	Satisfied	<p>During validation of the initial test CLEC invoices, KCI found that BLS applied pro-rated monthly-recurring charges in the OC&amp;C section in accordance with definitions in BLS tariffs and documentation. For example, pro-ration calculations were appropriately based on a 30-day month. The problems uncovered with the pro-rated monthly recurring charges in the OC&amp;C section of several bills were a result of the incorrect billing and rating of monthly recurring charge USOCs, as outlined in evaluation criteria BLG-1-1-18. Applicable fixes put in place by BLS and KCI findings are also noted in evaluation criteria BLG-1-1-18. KCI detailed these issues in Exception 16 and Exception 124. KCI has recommended closure of Exceptions 16 and 124 to the GPSC. See Exceptions 16 and 124 for additional information on these issues.</p> <p>See Table VI-1.8 for details on Dollar-Based Billing Accuracy measurements.</p>
BLG-1-1-18	Monthly Recurring Charge detail matches expected results	Satisfied	<p>During validation of the CSR section of the test CLEC invoices, KCI found that BLS billed monthly recurring charges for certain USOCs that did not match expected results. KCI detailed these issues in Exception 16 and Exception 124.</p> <p>The monthly-recurring rate for the USOC VE1R2 was not documented in the BLS tariffs or in the rates established for the KCI test CLEC. Upon investigation, BLS discovered that a monthly-recurring rate for the USOC VE1R2 had been developed and added into the applicable rating tables in advance of an approved tariff. BLS added the USOC VE1R2 to the Standard Agreement in 4Q00,</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>and provided KCI with the applicable section of the revised Standard Agreement KCI confirmed that the documented rate matched the monthly-recurring rate seen on its invoices.</p> <p>In its initial testing, KCI found that BLS also applied a \$0.00 monthly-recurring charge instead of the expected \$16.51 rate for the USOC UEAL2. Upon investigation, BLS found that the CRIS rate had only been updated for the residence rate for USOC UEAL2. The issue encountered by KCI affected business accounts. BLS updated the CRIS rate table with the business rate for the monthly-recurring charge for the USOC UEAL2 on 3/1/00 to correct this issue. KCI reviewed invoices following the rate table update and verified that the update had taken effect.</p> <p>KCI submitted SL1 Loop orders in January 2001 to test the monthly-recurring charge for USOC UEAL2. After review of the corresponding invoices, KCI found that, in most instances, the charges for the USOC UEAL2 matched the expected results. In one instance, KCI found that the monthly-recurring charge for the USOC UEAL2 was billed twice. Further research by KCI revealed additional instances of double-billing of the monthly-recurring charge for the USOC UEAL2. Upon investigation, BLS and KCI determined the orders in question were submitted with two instances of the USOC UEAL2 which resulted in the duplicate appearances of that USOC on the KCI test CLEC invoices. Based on this finding, KCI determined that the duplicate billing of the monthly-recurring USOC</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>UEAL2 was appropriate. In its initial testing, KCI found that BLS billed the KCI test CLEC for monthly-recurring charges for the USOC UEAC2 which was not documented in either the BLS tariffs or in rates established for the KCI test CLEC. Upon investigation, BLS determined that no monthly-recurring charge rate was established for the USOC UEAC2 in the rate tables for the KCI test CLEC. An interim process was developed by BLS to ensure that accurate USOC rating would occur until a permanent Service Order edit solution could be implemented. Upon review, KCI deemed this interim process to adequately address the issues found in the case of USOC UEAC2. The permanent Service Order edit solution was implemented on December 21, 2000. KCI submitted orders in January 2001 to test the permanent Service Order edit with respect to the USOC UEAC2. After validating the orders against the KCI test CLEC invoices, KCI found that the monthly-recurring charges for the USOC UEAC2 were billed appropriately and accurately according to the rates provided by BLS.</p> <p>BLS applied a monthly-recurring rate of \$2.89 or \$1.40 instead of the expected \$3.50 rate for the USOC NPU on KCI test CLEC invoices. Upon investigation, BLS found that the KCI test CLEC business Resale discount rate of 17.30% had been applied to the USOC NPU monthly-recurring rate of \$3.50 to yield the \$2.89 rate seen on the invoices. Further, BLS's investigation determined that the \$1.40 rate was the result of the application of the KCI test CLEC residential Resale discount rate of 20.30% and the application of</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>the suspend service discount of 50%. KCI confirmed these findings against the relevant sections of the <i>Georgia General Subscriber Service Tariff</i> and its <i>Georgia Resale Interconnection Agreement</i>, and was able to determine that charges for the USOC NPU were appropriately and accurately applied to the KCI test CLEC invoices.</p> <p>KCI has recommended closure of Exceptions 16 and 124 to the GPSC. See Exception 16 and Exception 124 for additional information on these issues.</p> <p>See Table VI-1.8 for details on Dollar-Based Billing Accuracy measurements.</p>
BLG-1-1-19	Usage charge(s) match expected results	Satisfied	<p>During validation of the initial test CLEC invoices the expected usage charges did not match the bill. Specifically, the billed amount of usage charges for messages generated by KCI did not match the Exchange Message Interface (EMI) records sent by BLS. KCI detailed this issue in Exception 91.</p> <p>KCI conducted additional testing in April 2000 following system changes by BLS. Upon review of the May 2000 invoices, KCI concluded that BLS was correctly billing all usage charges with the exception of underbilling for verification and interrupt calls. BLS scheduled a system modification for September 2000 to rectify this remaining problem.</p> <p>Exception 91 is closed. See Exception 91 for additional information on this issue.</p> <p>See Table VI-1.7 and Table VI-1.7 for details on Dollar-Based Billing Accuracy of Usage Charges.</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
BLG-1-1-20	Bill delivery timeliness corresponds with the BLS standard	Satisfied	All CRIS and CABS bills sent electronically by BLS were delivered within the BLS standard of 6 business days and 8 calendar days, respectively, of the Bill Period date. KCI evaluated a total of 98 CRIS FTP bills and 99 CABS BOS BDT bills for this criterion and found the bills were delivered in a timely manner 100 percent of the time.  See Table VI-1.5 for details on the Timeliness of Delivery of Carrier Bills.
<i>Procedural Scope and Objectives</i>			
BLG-1-1-21	Scope and objectives of the bill delivery services cover all key customer requirements	Satisfied	Interviews indicate that all key customer requirements for the delivery of bills are addressed.
BLG-1-1-22	Bill delivery responsibilities and activities are clearly defined	Satisfied	Responsibilities are vested in a number of different BLS organizations. They are sufficiently well defined and understood by the interviewees, but neither documentation of these responsibilities nor formal definition of organizational interactions was available.
<i>Customer Interface</i>			
BLG-1-1-23	Customer can readily obtain assistance in the event of problems with bill delivery	Satisfied	The customer is instructed to initiate assistance requests through the Account Manager, and help is accessible through a variety of routes (e.g., the Local Carrier Service Center [LCSC]).  Proactive notification to the customers regarding problems with bill delivery (e.g., a failed transmission) is at the discretion of the Account Manager. There are no established standards for bill delivery problem resolution intervals.



Test Cross-Reference	Evaluation Criteria	Result	Comments
<i>Process Scope</i>			
BLG-1-1-24	Process includes procedures to ensure creation of customer bills on appropriate medium	Satisfied	Procedures exist for assisting the customer in selecting the bill media and in establishing bill receipt. During validation testing, an instance of delay in updating the tables that specify customer selected media resulted in an inability to produce certain bills on CD-ROM.
BLG-1-1-25	Process includes procedures to ensure bills are shipped or transmitted to the correct location according to the established schedule	Satisfied	Procedures exist for controlling shipment or transmission of bills according to specifications. Production of bill media (electronic, paper, disk, CD, tape) is monitored and control logs are maintained. A limited set of media quality checks are performed. Procedural documentation was available only for printed bills. During transaction testing, an instance occurred where the customer billing address appeared correctly on the bill, but not on the shipping label.
<i>Process Management</i>			
BLG-1-1-26	Process includes complete and consistent procedures for status tracking, management reporting, and management intervention for bill delivery	Satisfied	Procedures exist that support tracking of bill delivery status. During invoicing testing, multiple instances of transmission failures were reported. The described intervention and problem resolution procedures were not initiated. However, these difficulties were limited to the new "J" -Bill on the CD-ROM format. BLS initiated corrective actions prior to completion of the testing.
<i>Performance Management</i>			
BLG-1-1-27	Process performance measures are defined, measured, and reviewed for bill delivery	Satisfied	Bill production statistics are published internally each month. Timeliness measures (Service Quality Measures [SQMs]) are published on the BLS Web site. Printer usage is reported monthly to ensure adequate capacity to meet

Test Cross-Reference	Evaluation Criteria	Result	Comments
			performance standards.
BLG-1-1-28	Process improvement responsibilities are assigned for bill delivery	Satisfied	Interviews indicate that departmental management is responsible for process improvement and performance. Although no written documentation was available detailing the process improvement methodology, interviews indicated that root cause analyses were performed, the results of which may result in a performance improvement initiative.
<i>Procedural Scope and Objectives</i>			
BLG-1-1-29	Scope and objectives of the bill cycle balancing services cover all key customer requirements	Satisfied	Scope and objectives of BLS's activities address all key customer requirements for production of accurate bills as identified in evaluation criteria BLG-1-1-32 through BLG-1-1-38 below.
BLG-1-1-30	Bill balancing responsibilities and activities are clearly defined	Satisfied	Interviews indicate that responsibilities are vested in a number of different BLS organizations. The responsibilities are defined, but neither documentation of these responsibilities nor formal definition of organizational interactions was available.
<i>Customer Interface</i>			
BLG-1-1-31	Customer can readily obtain assistance in the event of problems with bill content	Satisfied	Interviews indicate that customers are directed to address requests for assistance to the Account Managers, but also have access to other BLS organizations that are capable of providing direct assistance or generating an internal request for such assistance.  There are no externally documented targets for BLS response time, and no escalation procedures provided for the customer. These procedures do exist within the LCSC in regard to the working of adjustments or disputes submitted by customers.

Test Cross-Reference	Evaluation Criteria	Result	Comments
<i>Process Scope</i>			
BLG-1-1-32	Internal change management procedures are in place to correct implementation of billing system changes (e.g., code and tables)	Satisfied	<p>Interviews indicate that BLS procedures address the aspects of change management that must be in place to ensure correct implementation of system changes, including requirements definition, release planning, and packaging, development and testing, implementation preparation, and post-implementation verification. Change management techniques are also employed when it is necessary to implement changes to repair system defects.</p> <p>A variety of testing and/or verification measures are employed by the BLS Billing Control Group, including: regression testing (ensuring no introduction of unwanted changes), event verification (ensuring that a planned change actually appeared), and accounts database validation. Four hundred to 500 CRIS bills may be “held” pending verification of a sample drawn from that population. Rate changes are verified at entry, and reverified against contract rates at the completion of the cycle.</p> <p>Transaction testing revealed isolated instances (particularly relating to implementation of changes to USOCs and rates) for which procedures were either inadequate or improperly executed, resulting in billing errors.</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
BLG-1-1-33	Process includes procedures to ensure all customer data (e.g., service orders, address changes) has been properly introduced and applied	Satisfied	Final validation of service orders occurs at the point of entry to the billing system. Service orders that drop out are routed to a “Hold” file for correction and re-entry. Hold file errors are prioritized by type, and aging information is maintained. During validation testing, KCI noted that BLS was unable to process a global change of address request.
BLG-1-1-34	Process includes procedures to ensure all customer usage has been accounted for and correctly applied	Satisfied	All usage is processed and prepared for billing in the usage processing applications. Refer to the test BLG-2: ODUF/ADUF Usage Functional Test for additional details.  Controls exist to ensure that all processed usage actually enters the billing cycle. There is, however, no final, end-of-cycle balancing that ensures that all the usage has been accounted for.  A higher-level check for potential problems with usage billing is performed after the cycle by analyzing revenue accounts for unanticipated fluctuations.
BLG-1-1-35	Process includes procedures to ensure all payments and adjustments have been properly introduced and applied	Satisfied	Procedures that support the correct receipt, application, and posting of customer payments are in place.  Procedures that support the correct receipt, evaluation, and posting of customer requested billing adjustments are in place. The customer procedure is documented on the BLS Web site.  Dispute status is tracked and internal goals for timeliness of dispute resolution exist. A Root Cause Analysis team meets on a monthly basis to try to reduce the number of causes for disputes.  Error checking of payments and adjustments takes place at point of entry, however, no balancing controls exist to ensure that all entries generated are actually applied during

Test Cross-Reference	Evaluation Criteria	Result	Comments
			the bill calculation.
BLG-1-1-36	Process includes procedures to ensure customer data has been rolled forward from previous cycle	Satisfied	Run-to-run balancing is in place to ensure that correct roll-forward of customer data (e.g., account balances) occurs.
BLG-1-1-37	Process includes adequate error detection and correction procedures, and reasonability checks to catch errors not susceptible to pre-determined balancing procedures	Satisfied	<p>Numerous edits are performed that can result in “holding” individual bills. Held bills are processed somewhat differently in CRIS or CABS, but the end result is that a correction is made, either by changing the print version and associated databases or by releasing the bill as is and creating a corresponding adjustment.</p> <p>The billing is not regenerated for individual bill errors, however, if certain error threshold counts are reached, the cycle may be held and restarted after remedial action is taken. Single bill errors are reported to the Account Manager for the affected CLEC.</p> <p>The billing cycle contains checkpoints and provides control reports as aids to bill verification. A final mechanized balancing of CRIS bills occurs when they are forwarded to CABS for formatting. A final balancing program for CABS, similar to one existing now for access billing, is under consideration.</p> <p>A single “J” and “N” bill from each processing site is selected for verification. A statistical sampling of other CABS bills is pulled for verification. A single CLUB bill is also verified.</p> <p>Additional problems may be uncovered during the verification of system changes.</p> <p>A higher-level check for potential problems with billing is performed after the cycle by analyzing revenue</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
			accounts for unanticipated fluctuations.
BLG-1-1-38	Process provides for visual quality check of bills	Satisfied	Interviews indicate that limited sample visual quality checks (e.g., first and last printed bill) are in place for print, disk and CD-ROM bills.
<i>Process Management</i>			
BLG-1-1-39	Process includes complete and consistent procedures for status tracking, management reporting and management intervention for cycle balancing	Satisfied	Procedures exist that support tracking of bill production status and the detection and correction of problems. The billing runs are actively tracked and procedures for opening and tracking incidents are further supported by problem escalation procedures.
<i>Performance Management</i>			
BLG-1-1-40	Process performance measures are defined, measured and reviewed for cycle balancing	Satisfied	Monthly bill timeliness and accuracy measures (SQMs) are published on the BLS Web site. Billing error statistics (number of bills reported in error divided by total number of bills produced) and billing production failure statistics are reported internally and tracked on a monthly basis. Bill production statistics are reported internally on a monthly basis. No regular reporting of billing errors by type and by time to resolve occurs.
BLG-1-1-41	Process improvement responsibilities are assigned and executed for cycle balancing	Satisfied	Interviews indicate that billing errors are reported via a "Billing Error Notification," which is widely distributed for action. There are inter-organizational mechanisms (e.g., Performance Improvement [PIP] teams) for addressing process problems on an <i>ad hoc</i> basis, but no single point of on-going responsibility for overall bill production performance was identified. One example of a standing organizational level PIP activity was

Test Cross-Reference	Evaluation Criteria	Result	Comments
			noted.

Test Cross-Reference	Evaluation Criteria	Result	Comments
<i>Procedural Scope and Objectives</i>			
BLG-1-1-42	Scope and objectives of the historical bill management services cover all key customer requirements	Satisfied	Interviews indicate that the scope and objectives of BLS's activities address all key customer requirements for the re-sending of bills.  The re-send service is limited to re-transmission of what was previously sent. A re-creation of the bill is not supported. Therefore, if the original bill was not created correctly (e.g., on the customer selected medium) a re-send request will not rectify the problem.  An instance of such a situation was noted during the validation testing. The instance was limited to bills rendered in the months of September and October in CD-ROM format.
BLG-1-1-43	Bill delivery responsibilities and activities are clearly defined	Satisfied	Interviews indicated that responsibilities are vested in a number of different BLS organizations. They are defined, but neither documentation of these responsibilities nor formal definition of organizational interactions was available.
<i>Customer Interface</i>			
BLG-1-1-44	Customers are provided with instructions on how to request, track, expedite and obtain assistance for billing resends	Satisfied	The customer re-send request procedure is documented on the BLS Web site.  Customer access to assistance is provided, but characteristics of this support (such as the procedures other than requesting support from the Account Manager, the scope of support, and the expected response intervals) are not well defined.
<i>Process Scope</i>			
BLG-1-1-45	Process includes procedures to ensure bill history retention requirements are operationally satisfied	Satisfied	Interviews indicated that operational procedures exist to implement defined data retention requirements.



Test Cross-Reference	Evaluation Criteria	Result	Comments
BLG-1-1-46	Process includes procedures to retrieve and transmit customer requested billing information	Satisfied	Interviews indicated that procedures exist to initiate the jobs that result in a bill re-send. The ability to provide handling or distribution instructions that differ from those of a normal production run is present. Otherwise, no significant differences between initial and re-send processing were noted.  No instances of procedural fall-downs associated with a re-send request were experienced.
<i>Process Management</i>			
BLG-1-1-47	Process includes complete and consistent procedures for status tracking, management reporting and management intervention for the maintenance of historical bill information	Satisfied	With the exception of the initiation of the re-send request, no significant procedural differences between the re-send and the original bill production and distribution were noted through interviews.  Procedures exist throughout the bill production and delivery cycle that support tracking of bill delivery status.  No instances of procedural errors associated with a re-send request were experienced during the validation testing.
<i>Performance Management</i>			
BLG-1-1-48	Process performance measures are defined, measured and reviewed for the maintenance of historical bill information	Satisfied	With the exception of the initiation of the re-send request, no significant procedural differences between the re-send and the original bill production and distribution were noted. The same performance measures are in effect.  Bill production statistics are published internally each month. Timeliness measures (SQMs) are published on the Web site.
BLG-1-1-49	Process improvement responsibilities are assigned and executed for the maintenance of historical billing	Satisfied	Responsibility for process performance and improvement is vested in departmental management. While there are mechanisms for addressing process problems on an

Test Cross-Reference	Evaluation Criteria	Result	Comments
	information		<i>ad hoc</i> basis, no formal, on-going programs were described.

### 3.1.1 Analysis of Bill Content

The tables and text below provide additional detail on the results of the bill validation evaluation. The bills were examined to verify that actual charges met KCI's expectations of billable charges, and that bills were formatted according to BellSouth specifications. Content evaluations examined Q Account & TN/circuit level charges, bill calculations, and cross-checks of totals. The following bill types were included in the analysis:

#### CABS "N" Bill

- 2-Wire Unbundled Analog Loops Non-Designed (SL1 Loops)
- 2-Wire Unbundled Analog Loops Designed (SL2 Loops)

#### CABS "J" Bill

- 2-Wire Unbundled Analog Ports
- 2-Wire Unbundled Analog Port-Loop Combinations
- Usage associated with 2-Wire Unbundled Analog Ports and 2-Wire Unbundled Analog Port-Loop Combinations

#### CRIS UNE

- Local Number Portability
- Interim Number Portability
- Administrative charges

### 3.1.2 Analysis of the Timeliness of Carrier Bill Delivery.

KCI utilized the Mean Time to Deliver formula from the Georgia Service Quality Measures to evaluate the timeliness of carrier bill delivery. The sample incorporated CABS BOS BDT bills and CRIS FTP bills for SL1 Loop, SL2 Loop, Port and Port-Loop Combination, LNP, and INP. The statistics reported in the table below represent the time period from October 1999 to February 2000. The metric states that the benchmark for evaluating billing delivery timeliness for CRIS bills is within six business days of the Bill Period date, and for CABS bills within eight calendar days of the Bill Period date.

**Table VI-1.5: BLG-1 Timeliness of Delivery of Carrier Bills**

Product Type	[(Invoice Transmission Date) – (Close Date of Scheduled Bill Cycle)]	Count of Invoices Transmitted in Reporting Period	Mean Time to Deliver Invoices (days)	Retail/Analog Benchmark (days)	CRIS/CABS	Met/Not Met Relative to Benchmark
<i>UNE</i>						
SL1 Loop	158	34	4.65	8 Calendar Days	CABS	Met
SL2 Loop	184	35	5.26	8 Calendar Days	CABS	Met
Port & Port-Loop Combination	130	30	4.33	8 Calendar Days	CABS	Met
INP	200	49	4.08	6 Business Days	CRIS	Met
LNP	209	49	4.27	6 Business Days	CRIS	Met
<i>Total UNE</i>	<i>881</i>	<i>197</i>	<i>4.47</i>			<i>Met</i>
CRIS Bills	409	98	4.17	6 Business Days	CRIS	Met
CABS Bills	472	99	4.77	8 Calendar Days	CABS	Met
<i>All Bills</i>	<i>881</i>	<i>197</i>	<i>4.47</i>			<i>Met</i>

### 3.1.3 Analysis of Completeness of Usage Charges

Table VI-1.6 reflects the evaluation of billed versus expected usage charges associated with Ports and Port-Loop Combinations for calls placed during the Usage Test conducted in November 1999. The table does not include missing charges. Usage discrepancies are explained more fully by the items listed in Table VI-1.4 under BLG-1-1-19. Table VI-1.6 also reports results for the completeness of BellSouth usage charges. Entries are broken out by the type of usage charge listed on the bills (e.g. local, toll, Directory Assistance, etc.). Overall billed versus expected usage charges revealed a negative 723% accuracy rating as indicated in the table below. However, following systems changes by BLS, KCI conducted additional testing in April 2000. Upon review of the May 2000 invoices, KCI concluded that BLS was correctly billing all usage charges with the exception of under-billing for verification and interrupt calls. BLS scheduled a system modification for September 2000 to rectify this remaining

problem. Table VI-1.7 details the results of the April 2000 Usage Test and the under-billing of the verification and interrupt calls.

**Table VI-1.6: BLG-1 Bill Validation Dollar Based Billing Accuracy Analysis - Usage Charges for November 1999 Usage Test**

Usage Billing Elements	Usage Per EMI Records	Usage Per BLS Invoice	Usage Variance	Rate	Billed Amount Per KCI (\$\$\$)	Billed Amount Per BLS (\$\$\$)	Billing Variance (\$\$\$)	Accuracy Metric <sup>4</sup>
ULS-SF – Total MOU [Unbundled Local Switching (Switching Functionality)]	1,224	1,228	0	0.001633 3	N/A	N/A	N/A	
ULS-SF – Initial MOU	242	242	0	0.001633 3	0.43	0.43	0.00	
ULS-SF – Additional MOU	986	986	0	0.001633 3	1.63	1.63	0.00	
ULS-TP [Unbundled Local Switching (Trunk Port)]	64	64	0	0.000156 4	0.09	0.09	0.00	
UIT-S – mileage [Unbundled Transport (Shared Transport)]	N/A	45	N/A	0.000008	N/A	0.09	N/A <sup>5</sup>	
UIT-S – fixed [Unbundled Transport (Facilities Termination)]	41	41	0	0.000415 2	0.05	0.05	0.00	
UTS-SF [Unbundled Transport (Tandem Switching)]	41	41	0	0.000675 7	0.05	0.05	0.00	
UTS-TP [Unbundled Transport (Tandem Switching – Trunk Port)]	62	62	0	0.000212 6	0.07	0.07	0.00	

<sup>4</sup> (Total Billed Revenue – |Total Adjustments[Variance]|)/Total Billed Revenues) X 100

<sup>5</sup> The data elements to support validation of mileage-based charges do not exist in the EMI record format; excluded from overall variance

Usage Billing Elements	Usage Per EMI Records	Usage Per BLS Invoice	Usage Variance	Rate	Billed Amount Per KCI (\$\$\$)	Billed Amount Per BLS (\$\$\$)	Billing Variance (\$\$\$)	Accuracy Metric <sup>4</sup>
<b>Subtotal (Switching and Transport)</b>							<b>0.00</b>	
800 Access Ten Digit Screening	63	68	5	0.000486 8	0.03	0.04	0.01	
<b>Subtotal (Switching, Transport, and 800 DB)</b>							<b>0.01</b>	
Operator Call Handling	31	0	31	0.968029 6	30.01	0.00	30.01	
Automated Call Handling	9	0	9	0.077640 9	0.70	0.00	0.70	
Verification	4	1	3	0.921083	3.68	0.92	2.76	
Interrupt	3	1	2	0.921083	2.76	0.92	1.84	
DACC	5	0	5	0.034871 2	0.17	0.00	0.17	
<b>Total (All Usage Billing Elements)</b>						<b>4.20</b>	<b>35.29</b>	<b>723%</b>

**Table VI-1.7: BLG-1 Bill Validation Dollar Based Billing Accuracy Analysis -  
Usage Charges for April 2000 Usage Test**

Usage Billing Elements	Usage Per EMI Records	Usage Per BLS Invoice	Usage Variance	Rate	Billed Amount Per KCI (\$\$\$)	Billed Amount Per BLS (\$\$\$)	Billing Variance (\$\$\$)	Accuracy Metric <sup>6</sup>
<b>800 Access Ten Digit Screening/800 Delivery</b>	<b>101</b>	<b>101</b>	<b>0</b>	<b>0.000486 8</b>	<b>0.05</b>	<b>0.05</b>	<b>0.00</b>	
<b>Operator Call Handling<sup>7</sup></b>	<b>53</b>	<b>47</b>	<b>6</b>	<b>0.968029 6</b>	<b>51.31</b>	<b>45.50</b>	<b>5.81</b>	
<b>Automated Call Handling<sup>8</sup></b>	<b>18</b>	<b>18</b>	<b>0</b>	<b>0.077640 9</b>	<b>1.40</b>	<b>1.40</b>	<b>0.00</b>	
<b>Verification</b>	<b>14</b>	<b>3</b>	<b>11</b>	<b>0.921083</b>	<b>12.90</b>	<b>2.76</b>	<b>10.14</b>	
<b>Interrupt</b>	<b>17</b>	<b>3</b>	<b>14</b>	<b>0.921083</b>	<b>15.66</b>	<b>2.76</b>	<b>12.90</b>	
<b>DACC</b>	<b>16</b>	<b>16</b>	<b>0</b>	<b>0.034871 2</b>	<b>0.56</b>	<b>0.56</b>	<b>0.00</b>	
<b>Total (All Usage Billing Elements)</b>						<b>53.02</b>	<b>28.85</b>	<b>45.59%</b>

### 3.1.4 Analysis of Billing Accuracy

The table below reflects BellSouth's billing accuracy as a percent of the total billed revenue of test bills, as defined by BellSouth Billing Accuracy metric. The statistics reported in the table below represent the time periods from October 1999 to January 2000, from September 2000 to November 2000 and from January 2001 to February 2001.

<sup>6</sup> (Total Billed Revenue – |Total Adjustments[Variance]|)/Total Billed Revenues) X 100

<sup>7</sup> EMI standards do not currently support the reporting of operator work time. Therefore, a reasonableness check of billed operator call handling and automated call handling against the actual call durations is use for evaluation purposes.

<sup>8</sup> EMI standards do not currently support the reporting of operator work time. Therefore, a reasonableness check of billed operator call handling and automated call handling against the actual call durations is use for evaluation purposes.

**Table VI-1.8: BLG-1 - Overall Billing Accuracy Analysis**

<b>All Bill Types “J” &amp; CRIS</b>	<b>“N,” Total Billed Revenue (\$\$\$)</b>	<b>Absolute Value of Difference (\$\$\$)</b>	<b>Invoice Accuracy<sup>9</sup></b>
Total Monthly Recurring (Monthly + OC&C – fractional)	\$3,512.81	\$702.49	80.0%
Total Non-Recurring	\$4,069.11	\$741.97	81.8%
Total Usage	\$57.31	\$64.14	-11.9%
Overall Totals	\$7,629.23	\$1,508.60	80.2%

### 3.1.5 Analysis of Invoice Presentation Types

BellSouth offers several bill delivery options. Each option is presented in a format unique to the delivery method. KCI verified each bill presentation, commonly referred to as a ‘type check,’ and found that each met BellSouth specifications. The following bill presentations were reviewed:

- “N” Bill
  - Paper
  - BOS BDT
  - DAB Paper Image CD ROM
- “J” Bill
  - Paper
  - BOS BDT
  - DAB Paper Image CD ROM
- CRIS
  - Paper
  - DAB sent via FTP Push
  - DAB Paper Image CD ROM

<sup>9</sup> (Total Billed Revenue – |Total Adjustments[Variance]|)/Total Billed Revenues) X 100