

## **F. Test Results – ODUF/ADUF Documentation Evaluation (BLG-6)**

### **1.0 Description**

The Optional Daily Usage Feed/Access Daily Usage Feed (ODUF/ADUF) Documentation Evaluation evaluated Daily Usage Feed (DUF) documentation provided by BellSouth for use by the Competitive Local Exchange Carriers (CLECs).

The objective of this test was to determine whether the DUF documentation provided by BellSouth adequately supports CLECs in receipt and validation of BellSouth-provided local port (ODUF) and access (ADUF) usage records.

The ODUF/ADUF Documentation Evaluation consisted of four sub-tests. The first sub-test evaluated individual BellSouth documents for structure and format as they affect usability by the CLEC customer.

The second sub-test evaluated BellSouth billing documentation for content. The review encompassed considerations of topical coverage, depth of coverage, and general usability of the documentation. As KCI conducted this review, CLECs were consulted for guidance on perceived documentation problems and issues. Topics considered included:

- Understanding DUF
- Receiving and Processing DUF
- Set-up and Testing DUF
- Validating DUF
- Getting Help

Documents considered for the structure and content sub-tests are identified in “Table VI-6.1References,” as indicated by an asterisk (\*).

The third sub-test examined the procedures used by BellSouth to produce and distribute the subject documentation.

The fourth sub-test evaluated the accuracy of the BellSouth documents by identifying errors (discrepancies between the DUF documentation and BellSouth practice or between BellSouth DUF related documents) that significantly impacted the DUF transaction testing. The DUF transaction testing itself relied heavily on the accuracy of the BellSouth documentation.

## 2.0 Methodology

This section summarizes the test methodology.

### 2.1 Business Process Description

Daily usage file production and distribution begins with collection of usage data from the network. The usage is edited and a determination is made as to which CLEC customer the usage belongs. If the criteria for forwarding the usage records to the customer are met (generally that the usage record is the result of a billable event), the records are packaged and formatted according to industry standards. Usage is then transmitted to the customer. Customers may request that prior period usage be re-sent.

BellSouth wholesale customers receive and process the DUF in order to validate the BellSouth charges and bill their own customers in turn. Receipt and processing of the BellSouth DUF files relies upon timely, accurate and comprehensive billing information that is to be found in BellSouth-provided documentation.

Based upon changes in BellSouth DUF-related procedures, industry standards or perception of need for the provision of new or changed DUF-related information, BellSouth develops or revises DUF documentation and makes it available to affected CLEC customers.

### 2.2 Scenarios

Scenarios were not applicable to this test.

### 2.3 Test Targets & Measures

The test target was BellSouth-provided DUF documentation. 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 VI-6.1: Test Target Cross-Reference**

Sub-Process	Function	Evaluation Criteria	Test Cross-Reference
Daily Usage File Documentation	Document Structure and Format	Existence of Structural Elements Completeness of Data	BLG-6-1-1 BLG-6-1-2 BLG-6-1-3
	Document Content	Clarity of Information Completeness of data	BLG-6-2-1 BLG-6-2-2 BLG-6-2-3 BLG-6-2-4 BLG-6-2-5

Sub-Process	Function	Evaluation Criteria	Test Cross-Reference
	Release Management	Existence and Adequacy of the Update Process Availability of Documentation Accuracy of Documentation	BLG-6-3-1 BLG-6-3-2 BLG-6-3-3 BLG-6-3-4 BLG-6-3-5 BLG-6-3-6 BLG-6-3-7 BLG-6-3-8 BLG-6-3-9 BLG-6-3-10 BLG-6-3-11
	Document Accuracy	Accuracy of Documents	BLG-6-4-1

## 2.4 Data Sources

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

**Table VI-6.2: Data Sources for ODUF/ADUF Documentation Evaluation**

Document <sup>1</sup>	File Name	Location in Work Papers	Source
BellSouth Access Daily Usage File (ADUF) *	No Electronic Copy	BLG-6-A-2	BLS
BellSouth Optional Daily Usage File (ODUF) *	No Electronic Copy	BLG-6-A-3	BLS
BellSouth Optional Daily Usage File Document *	No Electronic Copy	BLG-6-A-4	BLS
Data Delivery: ADUF Setup and Testing *	No Electronic Copy	BLG-6-A-5	BLS
Data Delivery: Overview of ADUF *	No Electronic Copy	BLG-6-A-6	BLS
Data Delivery: ADUF Problems/Issues *	No Electronic Copy	BLG-6-A-7	BLS
Data Delivery: Timing of ADUF Messages *	No Electronic Copy	BLG-6-A-8	BLS
Data Delivery: ADUF Recreations/Resends *	No Electronic Copy	BLG-6-A-9	BLS
Facility Based CLEC Starter Kit – Daily Usage File *	No Electronic Copy	BLG-6-A-10	BLS
Billing Format Options – Daily Usage File *	No Electronic Copy	BLG-6-A-11	BLS

<sup>1</sup> An asterisk (\*) indicates material that is generally available to CLECs, and that was used in the document structure, content, and accuracy sub-tests (BLG-6-1, BLG-6-2, and BLG-6-4).

Document <sup>1</sup>	File Name	Location in Work Papers	Source
Interview Summary/Report: 5 & 6	No Electronic Copy	BLG-6-A-13	BLS
BLS Response to Interview Summary/Report: 5 & 6	No Electronic Copy	BLG-6-A-14	BLS
Interview Summary/Report: 5 & 6 Follow-On	No Electronic Copy	BLG-A-15	BLS
Interview Summary/Report: 14	No Electronic Copy	BLG-6-A-16	BLS
BLS Response to Interview Summary/Report: 14	No Electronic Copy	BLG-6-A-17	BLS

#### 2.4.1 Data Generation/Volumes

This test did not rely on data generation or volume testing.

#### 2.5 Evaluations Methods

BellSouth billing document structure and format was evaluated based upon KCI's definition of three major structural considerations (see table VI-6.3) that determine usability of the documentation. The documents were evaluated for effective and consistent implementation of those considerations.

BellSouth billing document content was evaluated based upon KCI's definition of five key topical areas (see table VI-6.3) that must be addressed to effectively support the CLECs' receipt and processing of wholesale bills. Each topical area was evaluated for breadth and depth of topical coverage by test manager subject matter experts (SMEs) participating in the billing transaction-based testing.

The evaluation of BellSouth release management procedures was based upon criteria developed by KCI prior to start of the testing. Interviews with the responsible BellSouth parties and reviews of supporting internal documentation provided by BellSouth were the basis for determining the extent to which the criteria were satisfied.

To evaluate documentation accuracy, KCI implemented procedures to log instances of documentation errors (defined as cases where documentation differed from actual BellSouth practice or where contradictory information was identified). Logging was limited to examples where the error resulted in significant impact to the conduct of the transaction-based testing. The transaction-based testing covered relevant aspects of BellSouth provided usage data for UNEs and relied heavily on the availability of accurate information.

## 2.6 Analysis Methods

The ODUF/ADUF Documentation Evaluation included a checklist of evaluation criteria developed by KCI during the initial phase of the BellSouth - Georgia OSS Evaluation. These evaluation criteria, detailed in the *Master Test Plan*, provided the framework of norms, standards, and guidelines for the ODUF/ADUF Documentation Evaluation.

The data collected from documentation reviews and interviews were analyzed employing the evaluation criteria referenced above.

## 3.0 Results Summary

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-6.3: BLG-6 Evaluation Criteria and Results**

Test Cross-Reference	Evaluation Criteria	Result	Comments
<i>Document Structure and Format</i>			
BLG-6-1-1	Organization and flow of the documents facilitate ready understanding and access to needed information.	Satisfied	<p>Document reviews indicate that organization and flow of the subject documents support the reader in understanding and accessing the information content.</p> <p>The following qualifications were noted:</p> <ul style="list-style-type: none"> <li>• Redundant information is provided in several documents.</li> <li>• Documentation contains various tables that are not self-explanatory, as they lack headers that provide sufficient guidance.</li> <li>• Some documents are excerpted from other documents, with no reference to the original source.</li> </ul> <p>Qualifications regarding the organization and flow of BLS-provided documentation do not prevent CLECs from utilizing the documentation in an acceptably efficient manner.</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
BLG-6-1-2	References are provided to facilitate efficient usage of the documentation.	Satisfied	<p>Review of the <i>BLS ODUF/ADUF</i> documentation indicates that references, such as glossaries, indices, and internet links generally facilitate usage of the subject documents. The following qualifications were noted in the original documentation review:</p> <ul style="list-style-type: none"> <li>• Forms referenced in the documentation are not attached and their location is not provided.</li> <li>• Terms and acronyms used throughout the documents are not defined (e.g., ISC-AE, ITB-Andersen, BBI).</li> <li>• Tables of content, indices, and glossaries are missing.</li> <li>• CLEC documents are not located in a centralized repository.</li> </ul> <p>These qualifications were addressed in the 6/1/2000 reissue of the BLS ODUF/ADUF documentation per the guidelines contained in the BLS documentation writer's guide.</p>
BLG-6-1-3	Style elements that facilitate document use are defined consistently and effectively implemented.	Satisfied	<p>Document reviews indicate that style elements generally facilitate reader usage of the subject documents. The following qualifications were noted:</p> <ul style="list-style-type: none"> <li>• Documents contain word omissions and typographical errors.</li> <li>• Process flow diagrams are not generally provided.</li> <li>• Documentation includes tables with no explanations or table headers.</li> <li>• The writing style is informal.</li> <li>• The page designs (margins, tables, fonts, bolding, paragraph headings) are inconsistent among chapters.</li> <li>• Internal items are referenced without explanation (e.g., Open Mail – Id).</li> </ul>

Test Cross-Reference	Evaluation Criteria	Result	Comments
			<ul style="list-style-type: none"> <li>Examples are given without explanation.</li> </ul> <p>Qualifications regarding the organization and flow of BLS-provided documentation do not prevent CLECs from utilizing the documentation in an acceptably efficient manner.</p>
<i>Document Content</i>			
BLG-6-2-1	The BLS-provided billing documentation provides CLECs with an adequate understanding of BLS DUF policies, practices and customer options.	Satisfied	<p>The BLS ODUF/ADUF documentation provides CLECs with an adequate understanding of BLS DUF policies, practices, and customer options.</p> <p>The following qualification was noted in the original documentation review, and has since been satisfied by the 6/1/2000 reissue of the BLS ODUF/ADUF Documentation per the guidelines contained in the BLS documentation writer's guide:</p> <ul style="list-style-type: none"> <li>Information detailing the BLS conventions followed for producing usage files is missing. There is a general statement that the EMI industry standard is followed in the DUF production, but the BLS implementation considerations are not described (e.g., the BLS business rule governing the creation of a billable service record for an uncompleted operator assisted call).</li> </ul> <p>The following qualification remains:</p> <ul style="list-style-type: none"> <li>Escalation procedures are not delineated in the ODUF and ADUF documentation or in the Standard General Agreement.</li> </ul> <p>This information was obtained from document reviews and input from KCI DUF tests.</p> <p>Qualifications regarding document content do not prevent CLECs from utilizing the documentation in an acceptably efficient manner.</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
BLG-6-2-2	The BLS-provided billing documentation provides CLECs with an adequate understanding of how to prepare and test for receipt of DUF files.	Satisfied	<p>Initial document reviews indicated that the BLS ODUF/ADUF documentation was deficient in the following areas:</p> <p>Although various BLS departments are referenced in the DUF documentation for the set-up and testing participation of DUF receipt, the department names are abbreviated and no explanation of the departmental responsibilities is provided.</p> <ul style="list-style-type: none"> <li>• A process flow that details the set-up process is not available.</li> <li>• Information is provided that states that test data can be requested through a generic file. However, information is not provided that includes instructions for obtaining the generic file.</li> <li>• There is no explanation regarding the CLECs need for the DUF generic test data or its intended purpose.</li> <li>• There is no mention of how the testing results are distributed and/or communicated back to the CLECs.</li> <li>• The “CLECPROB.DOC” form is referenced but not included.</li> </ul> <p>As a result of these deficiencies, KCI issued Exception 34.</p> <p>This exception was satisfied by the 6/1/2000 reissue of the BLS ODUF/ADUF Documentation per the guidelines contained in the BLS Billing, Inc. Documentation Writer’s Guide with the following qualification:</p> <ul style="list-style-type: none"> <li>• Information concerning the estimated time required for DUF set-up from the initial request to test completion is not contained in the documentation. Set-up procedures are discussed with the CLEC during a conference call</li> </ul>

Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>following the submission of the ODUF Test File Request Form. A conference call is arranged between BLS and the CLEC. The documentation does not explain how the call is initiated or the estimated time interval between the receipt of the form and the scheduling of the call.</p> <p>This information was obtained from document reviews and input from KCI DUF tests.</p> <p>See Exception 34 for additional information on this issue. Exception 34 is closed.</p>
BLG-6-2-3	The BLS-provided billing documentation provides CLECs with an adequate understanding of steps necessary to receive and process the DUF.	Satisfied	<p>Initial document reviews indicated that the BLS ODUF/ADUF documentation was deficient in the following areas:</p> <ul style="list-style-type: none"> <li>• Information is provided that outlines that DUFs will be created on a daily basis, i.e., specifically Monday through Friday, except holidays. However, the observed holidays are not listed.</li> <li>• A delivery schedule and a time line detailing the time lapse between actual recording of usage and usage data delivery is not provided.</li> <li>• Although the timing of ADUF messages is detailed in a schedule, column headings are undefined and no reference exists to indicate exceptions to the schedule, such as holidays.</li> <li>• Information detailing the procedure to return incomplete, damaged, or unreadable usage records is not provided.</li> <li>• Data retention periods are missing.</li> </ul> <p>As a result of these deficiencies, KCI issued Exception 34.</p> <p>This exception has been addressed</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>by the 6/1/2000 reissue of the BLS ODUF/ADUF Documentation per the guidelines contained in the BLS Billing Inc. documentation writer's guide.</p> <p>This information was obtained from document reviews and input from KCI DUF tests.</p> <p>See Exception 34 for additional information on this issue. Exception 34 is closed.</p>
BLG-6-2-4	The BLS-provided billing documentation provides CLECs with an adequate understanding of how to validate BLS provided DUF data.	Satisfied	<p>Initial document reviews indicated that the BLS ODUF/ADUF documentation was deficient in the following areas:</p> <ul style="list-style-type: none"> <li>• The primary tool by which a CLEC can validate the DUF records is the Exchange Message Interface (EMI) standard, as published by the Alliance for Telecommunications Industry Solutions (ATIS). As its content is not maintained by BLS, CLECs are expected to obtain this directly from ATIS.</li> <li>• BLS documentation does occasionally "excerpt" the EMI documentation, which taken alone, is inadequate to support DUF validation. The reader cannot be sure what has been excerpted from relevant EMI documentation.</li> <li>• The DUF documentation provided by BLS does not adequately identify the DUF records actually produced for each type of telephone call, and is therefore insufficient to allow validation of the received DUF files.</li> <li>• Information detailing the types of calls and details that will be provided on the DUF for rated and/or unrated calls is missing.</li> <li>• Explanations for Alternate Billed Calls (ABC) are not provided.</li> </ul>

Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>There are no definitions or explanations for ABC variables.</p> <p>As a result of these deficiencies, KCI issued Exception 34.</p> <p>This exception has been addressed by the 6/1/2000 reissue of the BLS ODUF/ADUF documentation per the guidelines contained in the BLS Documentation Writer's Guide.</p> <p>This information was obtained from document reviews and input from KCI DUF tests.</p> <p>See Exception 34 for additional information on this issue. Exception 34 is closed.</p>
BLG-6-2-5	The BLS-provided billing documentation provides CLECs with an adequate understanding of how to request and follow-up on BLS assistance with DUF issues and questions.	Satisfied	<p>Initial document reviews indicated that the BLS ODUF/ADUF Documentation was deficient in the following areas:</p> <ul style="list-style-type: none"> <li>• Account Executives or Account Teams are referenced for channeling questions. Individual contact names and telephone numbers are not consistently provided.</li> <li>• Data transmission schedules and data retention periods are not provided.</li> <li>• A form for requesting re-transmissions of ODUFs is provided, however no information is provided regarding the time intervals for the re-transmissions. No retention periods are listed to define cut-off periods for re-transmission requests.</li> <li>• Procedures for ADUF recreations/resends are not clear.</li> <li>• Information for placing trouble calls is missing.</li> <li>• Escalation procedures are missing.</li> <li>• A central point of contact for requesting help is not available. However, in most instances, the Account Executive is referenced as</li> </ul>

Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>a source of assistance.</p> <ul style="list-style-type: none"> <li>No information is provided to assist CLEC customers with requesting changes to distribution media, documentation, or with filing a change of address notification.</li> </ul> <p>As a result of these deficiencies, KCI issued Exception 34.</p> <p>This exception has been satisfied by the 6/1/2000 reissue of the BLS ODUF/ADUF Documentation per the guidelines contained in the BLS Billing Inc. Documentation Writer's Guide.</p> <p>This information was obtained from document reviews and input from KCI DUF tests.</p> <p>See Exception 34 for additional information on this issue. Exception 34 is closed.</p>
<i>Release Management Procedures</i>			
BLG-6-3-1	Responsibilities and procedures for developing, updating, and correcting documentation are clearly defined.	Satisfied	Interviews indicate that responsibilities are generally well defined, and rest with a limited set of BLS personnel, although documentation of these responsibilities was not available.
BLG-6-3-2	Responsibilities and procedures for maintaining distribution lists and distributing documentation are clearly defined.	Satisfied	<p>Interviews indicate that distribution of DUF documentation is accomplished adequately and occurs in a variety of ways: at an initial meeting with a new CLEC, during which DUF alternatives and processing requirements are discussed; via posting to the Web site; and via distribution to Account Managers who, in turn, provide them to the CLEC customer.</p> <p>While these responsibilities were described during the interviews, documentation of specific procedures was not provided.</p> <p>As responsibility for ensuring that the CLECs have the latest DUF</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
			documentation is shared with the customer, no centralized lists of documentation users are maintained, and no formal procedures exist to ensure that all customers have actually received the documentation.
BLG-6-3-3	Distribution procedure allows latest document version to be made available to interested parties in electronic and paper versions in a timely manner.	Satisfied	Interviews indicate that documentation changes that affect how a customer receives and processes DUF files are posted on the Web ( <a href="http://www.interconnection.bellsouth.com/notifications/carrier/index.html">www.interconnection.bellsouth.com/notifications/carrier/index.html</a> ) 90 days prior to implementation.
BLG-6-3-4	Process includes procedures for accepting change requirements from all stakeholders.	Satisfied	Interviews indicate that the primary reasons for changes to DUF documentation are changes to EMI standards, and their corresponding BLS implementation. These change requirements are monitored and managed.  Documentation reviews of the BLS documentation writer's guide indicate that the procedure provides for soliciting/gathering requirements from all stakeholders for topics to be included in BLS documentation.
BLG-6-3-5	The process includes procedures for change, version, and effective date management.	Satisfied	Document reviews and interviews indicate that dates are applied to the documents, but not in a standardized manner.  Although no single reference listing current versions or version dates of all documents exists, the latest version of a document can be retrieved from the BLS Web site.  Flagging of changes between versions is not a BLS requirement for issuing revised user documentation.
BLG-6-3-6	The process includes procedures to define documentation topical coverage (breadth and depth) requirements.	Satisfied	Documentation reviews indicate that the procedure provides for soliciting/gathering CLEC requirements for topics to be included in BLS documentation.

Test Cross-Reference	Evaluation Criteria	Result	Comments
BLG-6-3-7	The process includes style (organization, format, etc.) guidance.	Satisfied	Interviews indicate that, although no explicit style guides are applicable across documents, BLS internal documents are stylistically consistent, while more rigorous requirements are used by the BLS External Response Team (ERT) for Web postings.
BLG-6-3-8	The process provides for independent Quality Assurance (QA) of coverage and style.	Satisfied	Interviews indicate that for certain Web postings (i.e., customer notifications), coverage and style are reviewed by the External Response Team (ERT). Furthermore, documentation reviews indicate that the process includes independent Quality Assurance (QA) of the topical content of billing documentation.
BLG-6-3-9	The process provides independent validation of correctness.	Satisfied	<p>Interviews indicate that some of the documents provided to the CLEC customers are also used internally by BLS in creating and transmitting the DUF. In such cases, BLS clerks, utilizing the materials in both training and production, provide validation of correctness in a non-formal way.</p> <p>The ERT is responsible for ensuring that BLS subject matter experts have reviewed Carrier Notifications posted to the BLS Web site.</p> <p>Although scope and procedures for validation of correctness were not provided, no DUF documentation errors of sufficient severity to impede the transactional analysis of Daily Usage files were recorded.</p>
BLG-6-3-10	The procedure provides for independent evaluation of usability.	Satisfied	Documentation reviews indicate that the procedure provides for independent evaluation of usability.

Test Cross-Reference	Evaluation Criteria	Result	Comments
BLG-6-3-11	DUF document production and distribution procedures are carried out in compliance with described responsibilities and available documentation.	Satisfied	The procedures, as described during the interviews, were followed.
<i>Document Accuracy</i>			
BLG-6-4-1	BLS-provided DUF documentation contains no errors that significantly impact a CLEC's ability to receive and process daily usage files.	Satisfied	No billing documentation errors that seriously impacted KCI's DUF transaction-based testing were encountered.