F.   Test Results: xDSL Process Parity Evaluation (PO&P16)

1.0   Description

The objective of the xDSL Process Parity Evaluation was to review the pre-order, order, and provisioning processes and systems for wholesale operation and compare them with the corresponding processes and systems in BellSouth's retail operation. The review focused on the following areas:

- Pre-Order, Ordering, and Provisioning Processes and Systems

- Workflow definitions

- Workforce scheduling

- Facility administration

- Service activation

- Exception handling

- Completion notices

The evaluation consisted of targeted interviews of key process-owners along with structured reviews of process, system, and interface documentation. Structured walk-throughs, interviews with BellSouth work center personnel, and direct observation of personnel performing their daily work supplemented the process-owner interviews and documentation reviews.

2.0   Methodology

This section summarizes the test methodology.

2.1   Business Process Description

BellSouth's xDSL service offerings are categorized as either "Retail," "Resale," or "Wholesale."   BellSouth sells its Consumer-Class Asymmetrical Digital Subscriber Line (ADSL) service to both Network Service Providers (NSPs) (i.e., Internet service providers, corporations, and universities) and BellSouth.net (BellSouth Internet Services), who subsequently resell the service using their own brand names. Bellsouth.net is considered to provide retail xDSL service, while the NSPs are considered to provide resale xDSL service. BellSouth provides wholesale xDSL service by leasing Unbundled Network Element (UNE) loops to facilities-based Competitive Local Exchange Carriers (CLECs).

CLECS provide xDSL service to customers using their own xDSL equipment. BellSouth's Unbundled ADSL and High Bit-rate Digital Subscriber Line (HDSL) Loops (UALs and UHLs, respectively) are capable of supporting specific xDSL

services.   CLECs may also lease Unbundled Copper Loops (UCLs) from BellSouth, which may or may not be capable of supporting xDSL service.

For purposes of this evaluation, the term "Retail" is used to describe the xDSL service offerings that BellSouth.net sells to end-user customers, such as consumers and small businesses. BellSouth.net's Retail ADSL offering is sold under the FastAccess[SM] brand name. BellSouth.net outsources Retail pre-order and order processing functions to Client Logic, a third-party provider of call center services. The term "Resale" is used to indicate service sold by BellSouth to NSPs, who resell the service to end-user customers. The term "Wholesale" is used to describe the UNE xDSL capable loops that CLECs purchase to provide service to their end-user customers.

xDSL Pre-Order Process

Prior to submission of a firm order for an xDSL loop(s), a service provider must first determine if the line(s) at a particular service address is qualified to support xDSL service. The loop qualification process for xDSL service is in addition to the pre-order activities required to gather and identify information required to submit an order. Pre-order process steps required for all order types such as Address Validation, View Customer Service Record, Calculate Due Date, etc. were not evaluated in this test.

Retail Pre-Order Process

Retail pre-order activity begins with the execution of a loop qualification query via the Loop Qualification System (LQS), also known as "Loopy." LQS provides feedback on the existence of xDSL qualified loops, supplying either an "available," "planned" or "not qualified" response with associated reason codes.   LQS response information is derived from the Loop Engineering Assignment Data (LEAD) database. This database contains a snapshot (executed on a monthly basis) of the information contained within the Loop Facilities and Assignment Control System (LFACS).

Loop Make-Up information is not required for retail xDSL pre-ordering. Only ADSL service is available for retail customers and the ADSL loop make-up information is considered in the generation of the LQS response to pre-order service inquiries.

Wholesale Pre-Order Process

Wholesale service providers, who chose to perform their own loop qualification may execute mechanized loop qualification queries via the same LQS system used for retail loop qualification. In addition, UNE providers may obtain more comprehensive loop characteristic data via the Loop Make-Up (LMU) process. Information returned in response to an LMU request includes the composition of

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loop material (i.e., copper or fiber; the existence, location, and type of equipment on the loop [e.g., digital loop carrier, feeder/distribution interfaces, bridge taps, load coils]; loop length; wire gauge; and electrical parameters).

UNE LMU requests may be performed manually or electronically. Manual LMU requests, submitted via e-mail or Fax, are handled by the CRSG. Electronic LMU requests, submitted via the LENS, TAG, or RoboTAG interfaces, are fed into LFACS. LMU pre-order inquiries (both manual and electronic) may be executed on working facilities or spare facilities.   In addition, CLECs can request a reservation of spare facilities in conjunction with the LMU request. This pre-order is referred to as an LMU with Facility Reservation Number (FRN). Reservations are good for up to four days.

CLECs that do not wish to perform their own loop qualification or that want BellSouth to perform the loop qualification must follow a manual Service Inquiry (SI) and Local Service Request (LSR) submission process. To execute this manual process, the CLEC e-mails or faxes the SI form and the completed LSR to the Complex Resale Service Group (CRSG). The CRSG forwards the SI to the Service Advocacy Center (SAC). The SAC determines whether or not the desired loop is qualified for the xDSL service requested and returns a qualified or not qualified response to the CRSG, which in turn notifies the CLEC of the result.

xDSL Ordering Process

Retail Ordering Process

Assuming that a qualified loop exists for the line queried/tested, Retail ADSL service ordering begins when a retail customer's order for end-to-end ADSL service is entered into one of three Web front-end systems (Consumer, Small Business and Fast Access Sales and Service (FASS) [used by Client Logic]). The service order flows through to the Service Order Entry Gateway (SOEG) system and then into the Service Order Control System (SOCS). Service orders flow automatically through a variety of systems unless errors are present, in which case they fall out for manual processing. The Digital Subscriber Group (DSG) provides support for NSP and retail (BellSouth.net) ADSL orders that have fallen out of the mechanized process due to errors or exceptions. Orders that fall out in the DSG for manual processing are entered into the Broadband Administrative Support System (BASS) within 24 hours of receipt. Once cleared of errors, these orders flow to SOCS and enter the provisioning process

Wholesale Ordering Process

Orders for wholesale xDSL service may be requested via a manual or automated process. If, in the pre-order function, the CLEC requested that BLS qualify the

loop and submitted a manual SI to the CRSG, and the CLEC receives confirmation that a given loop is qualified to support ADSL service, the CRSG faxes the LSR to the Local Carrier Service Center (LCSC) for review and entry into BellSouth's Local Order Number (LON) system for tracking. If additional information is required from the CLEC, BellSouth faxes a Clarification to the CLEC. Once BellSouth deems that the LSR is error-free, address and customer record information are then validated using the ORION, Regional Street Address Guide (RSAG), and Business Office Customer Record Information System (BOCRIS) systems, respectively. The LSR information is subsequently entered into the Exchange Access Control and Tracking (EXACT) system, assigned a service order number, and submitted to the SOCS system for processing. Firm Order Confirmations (FOCs) or Clarifications for manual orders are faxed to CLECs within a targeted 48 hour interval.

CLEC xDSL orders may also be submitted electronically through the TAG, LENS, or EDI interfaces. The xDSL capable loop orders are processed like all other requests for Unbundled Network Element (UNE) Loops. If the order is error free, it flows to SOCS and enters the provisioning process.

The Atlanta Local Carrier Service Center (LCSC) handles xDSL orders that fall out of the mechanized process with errors. The Provisioning Analyst Work Station (PAWS) system is used for exception handling of xDSL orders. The Service Representatives (SR) log on to PAWS and can view the queue of pending xDSL orders with errors. The SR requests the next work package from PAWS and reviews the Request for Manual Assistance (RMA). The representative resolves the exception using their knowledge of order processing and available systems (DOE, SONGS, SOCS, RSAG, ATLAS, etc.) Following correction of the error, the SR marks the exception as "Complete" or "Resolved." Once the order exception has been resolved, the order enters the provisioning process.

xDSL Provisioning Process

Retail and Wholesale Process

The provisioning of retail and wholesale orders is supported by the DSG, Address Facility Inventory Group (AFIG), Circuit Provisioning Group (CPG), and various Work Management Centers (WMC) and Central Offices (CO). Wholesale order provisioning activity is also supported by the LCSC and UNE Centers.

The AFIG and CPG support xDSL provisioning primarily by resolving order errors and assigning cable pairs. The AFIG and CPG do not distinguish between Retail, Resale, and UNE orders. The UNE Centers also work with the AFIG, CPG, and LCSC to facilitate provisioning by identifying orders requiring cable pair assignments and engineering/design work. The DSG troubleshoots xDSL

devices (e.g., DSLAMs), handles calls from NSPs and Bellsouth.net, and also resolves order errors. The WMC assigns work orders to service technicians in the field who provide installation and turn-up of xDSL orders. In addition to testing copper loops for load coils, loss, etc., the CO completes the facility based provisioning and turn-up of xDSL orders.

2.2   Scenarios

Scenarios were not applicable to this test.

2.3   Test Targets & Measures

The test target was BellSouth's xDSL Pre-order, Order, and Provisioning processes. Processes, sub-processes, and evaluation measures, 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 IV-6.1: Test Target Cross-Reference

Process	**Sub-Process**	**Evaluation Measure**	**Test Cross-Reference**
xDSL Pre-order	xDSL Service Inquiry	Non-discriminatory processes between wholesale and retail	PO&P-16-1-1 PO&P-16-1-6 PO&P-16-1-11
	xDSL Loop Qualification	Non-discriminatory processes between wholesale and retail	PO&P-16-1-2 PO&P-16-1-7 PO&P-16-1-12
xDSL Ordering	xDSL Order Submission	Non-discriminatory processes between wholesale and retail	PO&P-16-1-3 PO&P-16-1-8 PO&P-16-1-13
	xDSL Order Entry	Non-discriminatory processes between wholesale and retail	PO&P-16-1-3 PO&P-16-1-8 PO&P-16-1-13
xDSL Provisioning	xDSL Workflow Management	Non-discriminatory processes between wholesale and retail	PO&P-16-1-14 PO&P-16-1-15
	xDSL Workforce Management	Non-discriminatory processes between wholesale and retail	PO&P-16-1-4 PO&P-16-1-5
	xDSL Facilities Assignment	Non-discriminatory processes between wholesale and retail	PO&P-16-1-4 PO&P-16-1-9 PO&P-16-1-14

Process	Sub-Process	Evaluation Measure	Test Cross-Reference
	xDSL Service Activation	Non-discriminatory processes between wholesale and retail	PO&P-16-1-5 PO&P-16-1-10 PO&P-16-1-15

2.4   Data Sources

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

Table IV-6.2: Data Sources for xDSL Process Parity Evaluation

Document	File Name	Location in Work Papers	Source
BellSouth Practices/BellSouth Telecommunications Standard--Unbundled Local Loops (ULL), Draft Issue 3/18/1999	No Electronic Copy	PO&P-15-A-2	BLS
MARCH System Reference, Issue 1, March, 2000	No Electronic Copy	PO&P-15-A-3	BLS
HairPIN and SIDEdoor, Issue 1, January, 2000	No Electronic Copy	PO&P-15-A-4	BLS
Turn-Up Non-Designed Combined Inside and Outside Conversions, Issue 2a, March, 2000	No Electronic Copy	PO&P-15-A-5	BLS
SOCS – UNE, Issue 1, July, 1999	No Electronic Copy	PO&P-15-A-6	BLS
UNE Work Types, Issue 1, March, 1997	No Electronic Copy	PO&P-15-A-7	BLS
UNE Center Provisioning Process for Stand-Alone Interim Local Number Portability, Issue 2, March, 2000	No Electronic Copy	PO&P-15-A-8	BLS
UNE – 2W Designed Voice Grade Port and Voice Grade Loop, Issue 1a, February 2000.	No Electronic Copy	PO&P-15-A-9	BLS
Unbundled Network Elements (UNE) Reference, Products, Systems, and Links, Issue 4d, March, 2000	No Electronic Copy	PO&P-15-A-10	BLS
[miscellaneous information on "wholesale" purchasing from BellSouth]	No Electronic Copy	PO&P-15-A-11	BLS

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Document	File Name	Location in Work Papers	Source
UNEC, CLEC Collocation (M&Ps)	No Electronic Copy	PO&P-15-A-12	BLS
UNE—2W Voice Grade Port and Voice Grade Loop Combination Services, Issue 1a, February, 2000	No Electronic Copy	PO&P-15-A-13	BLS
UNEC/CLEC Timing for Acceptance, MARCH input, Jeopardy, MFC and Completions Policy, Issue 1a, December, 1999	No Electronic Copy	PO&P-15-A-14	BLS
CCSS Procedures, Issue 2, January, 2000	No Electronic Copy	PO&P-15-A-15	BLS
AIN—LNP Unbundled Network Elements, Issue 1a, December, 1999	No Electronic Copy	PO&P-15-A-16	BLS
Unbundled Network Element Combination, Issue 2, February, 2000	No Electronic Copy	PO&P-15-A-17	BLS
DSG Failed Provisioning Report	No Electronic Copy	PO&P-15-A-18	BLS
DSG Failed Validation Report	No Electronic Copy	PO&P-15-A-19	BLS
Jeopardy Codes/Missed Function Codes and SOCS Missed Appointment Codes, Issue 1, March, 2000	No Electronic Copy	PO&P-15-A-20	BLS
Loop Make-Up Service Order Exhibits, 2/23/2000	No Electronic Copy	PO&P-15-A-21	BLS
CLEC Requirements for Unbundled Loops, Issue 3c, October, 1999	No Electronic Copy	PO&P-15-B-32	BLS
DS3, Channelized DS1, and STS-1, Issue 1, February, 2000	No Electronic Copy	PO&P-15-B-33	BLS
Calendar Events, Issue 1, December, 1999	No Electronic Copy	PO&P-15-B-34	BLS
LMOS Codes and Procedures, Issue 1a, August, 1999	No Electronic Copy	PO&P-15-B-40	BLS

Document	File Name	Location in Work Papers	Source
Screening—Non-Designed Provisioning, Issue 2, February, 2000	No Electronic Copy	PO&P-15-B-45	BLS
Screening—Designed, Issue 2, March, 2000	No Electronic Copy	PO&P-15-B-46	BLS
Past Due Service Order handling, CLEC DD miss., Issue 1, March, 2000	No Electronic Copy	PO&P-15-B-48	BLS
Past Due Service Order Due to PF, Issue 1, March, 2000	No Electronic Copy	PO&P-15-B-49	BLS
Past Due Service Order due to BellSouth, Not PF, Issue 1, March, 2000	No Electronic Copy	PO&P-15-B-50	BLS
Non-Switched, Unbundled Network Element Combinations, Issue 1e, March, 2000	No Electronic Copy	PO&P-15-B-51	BLS
Email and BellSouth ADSL Service (Tariffed) Documents	No Electronic Copy	PO&P-15-B-53	BLS
Georgia ADSL-Equipped Wire Centers, 3/09/2000	No Electronic Copy	PO&P-15-B-54	BLS
BST ADSL Service-Loop Qualification System, Process Flow Diagram	No Electronic Copy	PO&P-15-B-55	BLS
Small Business FastAccess DSL Service – Online Ordering Screen Documentation, Issue 1, 12/13/1999	No Electronic Copy	PO&P-15-B-56	BLS
Sales and Service Section 1: Scripts for Handling General Inquiries, 2/07/00	No Electronic Copy	PO&P-15-B-57	BLS
Unbundled Local Loop – Technical Specifications, February, 2000	No Electronic Copy	PO&P-15-B-58	BLS
FastAccess Initial Training, Putting It All Together Sales and Service Customer Contacts	No Electronic Copy	PO&P-15-B-59	BLS

Document	File Name	Location in Work Papers	Source
Work Management Center Dispatch Procedures for Installation and Maintenance of ADSL Service	No Electronic Copy	PO&P-15-B-60	BLS
Workload Distribution, 7/01/00	No Electronic Copy	PO&P-15-B-61	BLS
ADSL Loop Qualification System (LQS) 7/10/00	No Electronic Copy	PO&P-15-B-62	BLS
LSR Volume Report by Datasource for 3/1/00 to 3/31/00	No Electronic Copy	PO&P-15-B-67	BLS
BRITE System Reports for Thursday, April 6, 2000	No Electronic Copy	PO&P-15-B-68	BLS
CRSG On Line Job Aid UNE New: Responses to SIs, Clarifications	No Electronic Copy	PO&P-15-B-69	BLS
BASS User Guide	No Electronic Copy	PO&P-15-C-1	BLS
NMS User Guide	No Electronic Copy	PO&P-15-C-2	BLS
Forecasting Spreadsheet for the LCSC	No Electronic Copy	PO&P-15-C-3	BLS
Unbundled Local Loops, CO Job Aides	No Electronic Copy	PO&P-15-C-4	BLS
Circuit Provisioning Methods and Procedures for Unbundled Hi-Capacity Services (ADSL, HDSL, DS1, DS3, UIT, UC, Dark Fier) from the CPG	No Electronic Copy	PO&P-15-C-5	BLS
SAC UNE Job Aid	No Electronic Copy	PO&P-15-C-11	BLS
UNE ADSL/HDSL Without Modification, Network and Carrier Services	Resale.doc	PO&P-15-C-16	BLS
N&CS Forecasting Process	Totals.gif	PO&P-15-C-17	BLS
BellSouth FASS Overview	No Electronic Copy	PO&P-15-C-18	BLS
ENCORE User Requirements for EIO Support of the Processing of UNE ADSL, HDSL and UCL	No Electronic Copy	PO&P-15-C-21	BLS

Document	File Name	Location in Work Papers	Source
ENCORE User Requirements for Mechanization of Loop Make-Up for CLEC xDSLs	No Electronic Copy	PO&P-15-C-22	BLS
NO.5ESS Integrated Digital Carrier Unit TIRKS Inventory & Design Methods & Procedures, Issue A, April 1993	No Electronic Copy	PO&P-15-C-23	BLS
Subscriber Carrier Module SLC96 (SMS) DMS 100TIRKS Inventory AND Provisioning Methods AND Procedures	No Electronic Copy	PO&P-15-C-24	BLS
Welcome to the Atlanta Local Carrier Service Center, March, 2000	No Electronic Copy	PO&P-15-C-25	BLS
UNE Center Cut Sheet	No Electronic Copy	PO&P-15-D-1	BLS
KPMG BellSouth Atlanta UNE Center Provisioning Meeting, 5/9/00	No Electronic Copy	PO&P-15-D-2	BLS
UNE 4 Wire Digital ISDN PRI Port/Loop	No Electronic Copy	PO&P-15-D-3	BLS
Unbundled Copper Loop, CLEC Information Package, February 24, 2000	No Electronic Copy	PO&P-15-D-4	BLS
BellSouth Unbundled ADSL.HDSL Capable Loops, CLEC Information Package, February 24, 2000	No Electronic Copy	PO&P-15-D-5	BLS
UNEC Methods and Procedures for Unbundled Loop Modification, 3/13/00	No Electronic Copy	PO&P-15-D-6	BLS
ADSL NMS Login, 11/08/99	No Electronic Copy	PO&P-15-D-7	BLS
UNE Loop Make-Up, Methods and Procedures (DRAFT) 3/12/2000	No Electronic Copy	PO&P-15-D-9	BLS
Marketing Sales Package, Unbundled Loop Make-Up	No Electronic Copy	PO&P-15-D-10	BLS
Loop Make-Up Implementation Guide	No Electronic Copy	PO&P-15-D-11	BLS

Document	File Name	Location in Work Papers	Source
Address and Facility Inventory Group Unbundled Network Elements Methods and Procedures Loop Make Up 319 Remand	No Electronic Copy	PO&P-15-D-12	BLS
BLS Unbundled Digital Loop – Service Description, Characteristics, etc – from BLS Interconnection services Web site, 3/8/2000	No Electronic Copy	PO&P-15-D-13	BLS
Mpower and BellSouth, CRSG Review, March 23, 2000	No Electronic Copy	PO&P-15-D-14	BLS
UNEC Methods and Procedures for Unbundled ADSL Capable Loops, Unbundled HDSL Capable Loops, and Unbundled Copper Loops	No Electronic Copy	PO&P-15-D-15	BLS
UNEC Methods and Procedures for Unbundled Loop Modification	No Electronic Copy	PO&P-15-D-16	BLS
UNE ADSL/HDSL Compatible Loops – General Information	No Electronic Copy	PO&P-15-D-17	BLS
UNE – ADSL/HDSL Without Modification	No Electronic Copy	PO&P-15-D-18	BLS
BellSouth DSL Family of Products, BellSouth Interconnection Services	No Electronic Copy	PO&P-15-D-19	BLS
BellSouth ADSL Service (Interconnection Web site document)	No Electronic Copy	PO&P-15-D-20	BLS
BellSouth ADSL Service – Rates and Charges	No Electronic Copy	PO&P-15-D-25	BLS
Consumer-Class ADSL Systems and Interface	No Electronic Copy	PO&P-15-D-26	BLS
BellSouth Consumer-Class ADSL Service Activation Process CPE Installation by BST Technician	No Electronic Copy	PO&P-15-D-27	BLS

Document	File Name	Location in Work Papers	Source
BellSouth Consumer-Class ADSL Service Activation Process CPE Installation by NSP/ISP Technician	No Electronic Copy	PO&P-15-D-28	BLS
BellSouth Consumer-Class ADSL Provisioning Timeline	No Electronic Copy	PO&P-15-D-29	BLS
BellSouth Business-Class ADSL Service Activation Process Flow, 07/16/99	No Electronic Copy	PO&P-15-D-30	BLS
High Speed Data Service Order Entry Gateway System (SOEG)	No Electronic Copy	PO&P-15-D-31	BLS
Fast Access Training: Pre-Sale Process	No Electronic Copy	PO&P-15-D-32	BLS
Unbundled ADSL, HDSL andUCL Loop Job Aid	No Electronic Copy	PO&P-15-D-34	BLS
AFIG/ SOC Error Report	No Electronic Copy	PO&P-15-D-35	BLS
Unbundled Local Loop Technical Specifications, April, 2000	No Electronic Copy	PO&P-15-D-38	BLS
KPMG Draft Exception 128 with BellSouth response	No Electronic Copy	PO&P-15-D-39	BLS
KPMG Draft Exception 129 with BellSouth response	No Electronic Copy	PO&P-15-D-40	BLS
Works Management Center Interview Summary with BellSouth feedback	No Electronic Copy	PO&P-15-D-42	BLS
UNE Center (Birnmingham, AL) Interview Summary with BellSouth feedback.	No Electronic Copy	PO&P-15-D-43	BLS
SAC Interview Summary with BellSouth feedback	No Electronic Copy	PO&P-15-D-44	BLS
LCSC (Birmingham, AL) Interview Summary with BellSouth feedback	No Electronic Copy	PO&P-15-D-45	BLS
LCSC (Atlanta, GA) Interview Summary with BellSouth feedback	No Electronic Copy	PO&P-15-D-46	BLS

Document	File Name	Location in Work Papers	Source
DSG Interview Summary with BellSouth response	No Electronic Copy	PO&P-15-D-47	BLS
CRSG Interview Summary with BellSouth response	No Electronic Copy	PO&P-15-D-48	BLS
CPG Interview Summary with BellSouth response	No Electronic Copy	PO&P-15-D-49	BLS
CO Interview Summary with BellSouth response	No Electronic Copy	PO&P-15-D-50	BLS
AFIG Interview Summary with BellSouth response	No Electronic Copy	PO&P-15-E-1	BLS
UNE Center (Atlanta, GA) Interview Summary with BellSouth response	No Electronic Copy	PO&P-15-E-2	BLS
Exception 107	No Electronic Copy	PO&P-15-E-3	BLS
BellSouth response to Exception 107	No Electronic Copy	PO&P-15-E-4	BLS
BellSouth amended response to Exception 107	No Electronic Copy	PO&P-15-E-5	BLS
Exception 108	No Electronic Copy	PO&P-15-E-6	BLS
BellSouth response to Exception 108	No Electronic Copy	PO&P-15-E-7	BLS
Loop Qualification System (LQS) DLEC/CLEC Job Aid, Issue 1, October 16, 2000	No Electronic Copy	PO&P-15-E-10	BLS
BellSouth Unbundled ADSL/HDSL Compatible Loops, ADSL Loop and HDSL Loop CLEC Information Package, 10/13/00	No Electronic Copy	PO&P-15-E-11	BLS
PAWS – Provisioning Analyst Work Station, Network Services, Customer Services, Issue 2, 01/01	No Electronic Copy	PO&P-15-E-12	BLS
BellSouth Interconnection Services, Carrier Notification SN91082201	No Electronic Copy	PO&P-15-E-13	BLS

Document	File Name	Location in Work Papers	Source
BellSouth Products & Services Interval Guide – 4B – Unbundled Network Elements, pages 31-38	No Electronic Copy	PO&P-15-E-14	BLS
BellSouth Loop Make-up (LMU) CLEC Information Package, Version 3, October 23, 2000	No Electronic Copy	PO&P-15-E-15	BLS
BellSouth Pre-Ordering and Ordering Overview Guide, 3/31/00	No Electronic Copy	PO&P-15-E-16	BLS
Loop Make-up and Electronic Ordering of CLEC xDSL UNE, 6/14/00	No Electronic Copy	PO&P-15-E-17	BLS
High Speed Data Service Order Entry Gateway System (SOEG), Issue 1.0A, 10/22/99	No Electronic Copy	PO&P-15-E-18	BLS
BellSouth Unbundled ADSL/HDSL/UCL Compatible Loops Account Team Information	No Electronic Copy	PO&P-15-E-19	BLS
LCSC (Atlanta, GA) Second Interview Summary	No Electronic Copy	PO&P-15-E-21	BLS

2.4.1 Data Generation/Volumes

This test relied on interviews with BellSouth personnel, documentation reviews, and structured walk-throughs of BellSouth work centers.

2.5   Evaluation Methods

The evaluation of xDSL Process Parity began with a review of xDSL pre-order, order, and provisioning process documentation.   KCI identified relevant systems and interfaces and conducted interviews with center personnel, including process owners and staff. Structured center walk-throughs and direct observation of personnel performing their daily work supplemented the planned test interviews and document reviews.   Physical systems and communications environments were inspected and process models were developed to assess the parity between wholesale and retail pre-order, order, and provisioning processes.

2.6   Analysis Methods

The xDSL Process Parity Evaluation included a checklist of evaluation measures developed by KCI during the preparation of test activities for the BellSouth - Georgia OSS Evaluation. These evaluation measures provided the framework of norms, standards, and guidelines for the xDSL Process Parity Evaluation.

3.0   Results Summary

This section identifies the discrete 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 IV-6.3: POP16 Evaluation Criteria and Results

Test Cross-Reference	Evaluation Criteria	Result	Comments
PO&P-16-1-1	Documented procedures for the xDSL Pre-Order Loop Qualification process are consistent, repeatable, and non-discriminatory between retail and wholesale	Satisfied	KCI's evaluation of BLS documented procedures revealed that both retail and wholesale (UNE) customers may access BellSouth's Loop Qualification System (LQS) to determine if an existing telephone number is served by a BLS loop capable of supporting BLS ADSL service. BLS Retail and Resale LQS access is automated. While wholesale (UNE) access initially involved a manual process, representing a discriminatory difference between the Retail and UNE processes, BLS subsequently made the LQS system available to CLECs via an electronic interface[1]. See Exception 107 for additional information on this issue. Exception 107 is closed.
			BLS's *Loop Qualification System (LQS) DLEC/CLEC Job Aid, Issue 1*[2] provides LQS access information for wholesale (UNE) customers (CLECs). The document outlines instructions for

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[1] KCI did not conduct feature-function testing associated with this capability.

[2] The *Loop Qualification System (LQS) DLEC/CLEC Job Aid, Issue 1* was posted to the BLS Interconnection Web site on October 16, 2000.

Test Cross-Reference	Evaluation Criteria	Result	Comments
			accessing, installing and utilizing the Web-based LQS application, and provides information on the possible results returned for queries. The document entitled *Small Business FastAccess DSL Service—Online Ordering Screen Documentation* outlines a process through which retail and resale customers may access LQS via a Web-based application to determine if a specific phone number qualifies for BLS FastAccess^{SM} DSL service (i.e., whether a loop is available to support ADSL service). The documents entitled *BST ADSL Service-Loop Qualification System* and *BellSouth ADSL Service (Tariffed)* reference several methods through which NSPs, upon written request to BLS, may access LQS. Client Logic has access to LQS through the FASS system.

Test Cross-Reference	Evaluation Criteria	Result	Comments
PO&P-16-1-2	Documented procedures for the xDSL Pre-Order Loop Make-Up (LMU) process are consistent, repeatable, and non-discriminatory between retail and wholesale	Satisfied	Loop Make-Up information is not required for retail xDSL pre-ordering. Only ADSL service is available for retail customers and the ADSL loop make-up information is considered in the generation of the LQS response to pre-order service inquiries. During KCI's initial evaluation, wholesale (UNE) customers could obtain loop make-up information only through a manual process. The manual process for determining the availability and specific characteristics of an ADSL capable loop, is described in the *ADSL/HDSL Capable Loop – CLEC Information Package,* dated February 24, 2000. As of November 18, 2000, wholesale xDSL customers gained electronic access to BLS's mechanized LMU service. In addition to the LQS, the data returned by the LMU service provides the CLEC with the underlying loop qualification information. The document *BellSouth Loop Makeup (LMU) CLEC Information Package* provides specific instructions for UNE customer use of BLS's mechanized LMU service. See Exception 107 for additional information on this issue. Exception 107 is closed.
PO&P-16-1-3	Documented procedures for xDSL Order Submission and Order Entry are consistent, repeatable, and non-discriminatory between retail and wholesale	Satisfied	During KCI's initial evaluation, wholesale xDSL order submission process was entirely manual, as outlined in the *Unbundled ADSL, HDSL, & UCL Loop Job Aid.* Retail Order Submission is supported via on-line mechanized process. The document entitled *Small Business FastAccess DSL Service-Online Ordering Screen Documentation* outlines the procedures used by Client Logic to submit retail ADSL orders taken on

Test Cross-Reference	Evaluation Criteria	Result	Comments
			behalf of BLS. Therefore, KCI's initial testing revealed that BLS's documented procedures for xDSL Order Submission were discriminatory between retail and wholesale. As a result, KCI issued Exception 108. In response to Exception 108, on February 12, 2001 BLS implemented a system change to provide all CLECs the ability to order xDSL capable loops electronically through the TAG, LENS, and EDI interfaces. The *BellSouth Business Rules for Local Ordering (BBR-LO),* Issue 9K and *Encore User Requirements for EIO Support of the Processing of UNE ADSL, HDSL, and UCL, ENC7794.doc, Version 5.0*, document procedures for use of BLS's mechanized system for UNE order submission. KCI found that the BBR-LO was not updated to incorporate changes introduced by the mechanization of the wholesale xDSL ordering process. However, to support the CLECs as they implement electronic xDSL order submission, BLS Account Teams provide additional clarifying information as outlined in the document *BellSouth Unbundled ADSL/HDSL/UCL Compatible Loops Account Team Information, ADSL/HDSL/UCL Loop Electronic Ordering*. Based on a review of the documentation[3], the newly available electronic ordering functionality is adequate to support CLEC order submission requirements and is non-discriminatory to retail. See Exception 108 for additional information on this issue. KCI has recommended closure of Exception 108 to the GPSC.

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[3] KCI did not conduct feature-function testing for electronically submitted xDSL orders.

Test Cross-Reference	Evaluation Criteria	Result	Comments
PO&P-16-1-4	Documented procedures for xDSL Facility Assignment are consistent, repeatable, and non-discriminatory between retail and wholesale	Satisfied	The AFIG and CPG maintain documented procedures for xDSL Facility Assignment that do not distinguish/differentiate between Retail, Resale, and UNE orders. The AFIG's *Address and Facility Inventory Group Unbundled Network Elements Methods and Procedures--Loop Makeup 319 Remand* document outlines the AFIG's role in entering loop make-up information into the LFACS system. The documents entitled *NO.5ESS Integrated Digital Carrier Unit TIRKS Inventory & Design Methods & Procedures* and *Subscriber Carrier Module SLC96 (SMS) DMS 100TIRKS Inventory AND Provisioning Methods AND Procedures* outline the CPG's role in building TIRKS inventory records for two types of circuits: hairpin and side door. No distinction is made among Retail, Resale, and Wholesale (UNE) orders.
PO&P-16-1-5	Documented procedures for xDSL Service Activation are consistent, repeatable, and non-discriminatory between retail and wholesale	Satisfied	The DSG, WMC, COs, and the UNE Centers maintain documented procedures for xDSL Service Activation. The DSG's service activation procedures, which include confirming orders, tracking due dates, and trouble shooting DSLAMs for retail and resale orders, are referenced in the *BellSouth Business-Class ADSL Service Activation Process Flow.* The WMC supports service activation primarily by assigning orders to Service Technicians. The procedures for doing so are referenced in the document entitled *Work Management Center Dispatch Procedures for Installation and Maintenance of ADSL Service.* BLS COs support service activation

Test Cross-Reference	Evaluation Criteria	Result	Comments
			procedures by completing facility-based provisioning and turn-up on xDSL orders, and by testing copper loops for load coils. CO provisioning activities do not differentiate between Retail and Wholesale (UNE) orders. The *UNEC Methods and Procedures for Unbundled Loop Modification* and *UNEC Methods and Procedures for Unbundled ADSL Capable Loops and Unbundled Copper Loops* documents outline the UNE Centers' roles in wholesale (UNE) service activation.
PO&P-16-1-6	Systems in the Pre-Order loop qualification process are non-discriminatory between retail and wholesale	Satisfied	During KCI's initial evaluation, wholesale (UNE) customers could obtain loop make-up information only through a manual process. As a result, KCI issued Exception 107. In response to Exception 107, BLS made the LQS system available for wholesale use and posted CLEC LQS access information on the Interconnection Web site on October 16, 2000 in the document titled *Loop Qualification System (LQS) DLEC/CLEC Job Aid, Issue 1*. Loop qualification information in support of Retail service is obtained from the LQS system via an automated query. LQS contains information derived from the LEAD database, updated monthly with data from LFACS. Retail and wholesale requests via LQS for loop qualification information are processed by the same systems and are non-discriminatory between retail and wholesale. For additional information, refer to Exception 107, which is closed.
PO&P-16-1-7	Systems in the Pre-Order Loop Make-Up (LMU) process are non-discriminatory between	Satisfied	Loop Make-Up information is not required for retail xDSL pre-ordering. Only ADSL service is available for retail customers and the ADSL loop

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Test Cross-Reference	Evaluation Criteria	Result	Comments
	retail and wholesale		make-up information is considered in the generation of the LQS response to pre-order service inquiries.
			During KCI's initial evaluation, wholesale customers could obtain loop make-up information only through a manual process. No wholesale pre-order systems were available for evaluation.
			As of November 18, 2000, wholesale xDSL customers gained electronic access to BLS's mechanized LMU system. In addition to the LQS, the data returned by the LMU system provides the CLEC with underlying loop qualification information. The document *BellSouth Loop Makeup (LMU) CLEC Information Package* provides specific instructions for wholesale customer use of BLS's mechanized LMU system.
PO&P-16-1-8	Systems in the Order Submission and Order Entry processes are non-discriminatory between retail and wholesale	Satisfied	KCI's initial testing found that retail order submission is mechanized while Wholesale order submission processes were entirely manual and therefore, discriminatory. As a result, KCI issued Exception 108.
			Retail orders for xDSL service are submitted via electronic systems. Client Logic submits retail orders through via the FASS system, and resale orders are submitted electronically, into SOEG. In contrast, processes in place at the time of initial testing revealed that the CRSG submitted wholesale (UNE) orders to the LCSC via fax machines.
			In response to Exception 108, on February 12, 2001 BLS implemented a system change to provide all CLECs the ability to order xDSL capable loops electronically through the TAG, LENS, and EDI interfaces.
			Based on a review of the

Test Cross-Reference	Evaluation Criteria	Result	Comments
			documentation (see comments in PO&P-16-1-3)[4], the newly available electronic ordering functionality is adequate to support CLEC order submission requirements and is non-discriminatory to retail.
			See Exception 108 for additional information on this issue. KCI has recommended closure of Exception 108 to the GPSC.
PO&P-16-1-9	Systems in the Facility assignment process are non-discriminatory between retail and wholesale	Satisfied	Systems in the Facility assignment process are non-discriminatory between retail and wholesale. The AFIG and CPG do not distinguish/differentiate between retail and wholesale orders.
			The AFIG uses PAWS for assigning and managing work and for receiving Requests for Manual Assistance (RMAs) from the Hands-off Assignment Logic (HAL) system. The AFIG uses LFACS for determining the cause of RMAs and also uses SOCS, TANDEM, MOBI, and Computer System for Mainframe Operations (COSMOS) for correcting errors on service orders.
			The CPG uses SOCS to retrieve information used to resolve order errors. The CPG also uses the Trunk Inventory Record Keeping System (TIRKS) for generating lists of erroneous orders to be worked.
PO&P-16-1-10	Systems in the Service Activation process are consistent between retail and wholesale	Satisfied	Systems in the Service Activation process are consistent between retail and wholesale. The WMC and COs do not distinguish between retail and wholesale orders. The UNECs and DSG support UNE and retail/resale provisioning respectively.
			ADSL-related work is dispatched by

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[4] KCI did not conduct feature-function testing for electronically submitted xDSL orders.

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Test Cross-Reference	Evaluation Criteria	Result	Comments
			the WMC via the AELERA database. LMOS is also used to distribute daily work assignments to Service Technicians.

The UNEC uses the Work Force Administration (WFA) system for receiving CLEC UNE orders and for loading orders to Electronic Technicians (ETs). SOCS, MARCH, and TIRKS provide order details used in provisioning.   SOCS is used to verify order information/due dates and to ensure that circuit identification numbers referenced in SOCS match those found in TIRKS WORD documents. MARCH is accessed to find the switch identification number for the Cut sheet, to change the disconnect order release date, and to change the disconnect order status. TIRKS is also used to send FAB tickets to the Circuit Provisioning Group.

The CO receives orders to be worked via WFA. The DSG uses BASS/SOCS to obtain order details used for the turn-up of xDSL retail and resale orders. |
| PO&P-16-1-11 | Loop Qualification pre-order transactions are executed in a consistent, non-discriminatory, and repeatable manner between retail and wholesale. | Satisfied | During KCI's initial evaluation, wholesale (UNE) loop qualification requests were handled by a manual process, while retail requests were handled through a mechanized process accessing LQS, highlighting a discriminatory difference. While retail requests were processed instantaneously, responses to wholesale xDSL loop qualification requests took up to seven business days. As a result, KCI issued Exception 107.

In response to Exception 107, BLS made the LQS system available to CLECs on October 16, 2000. See Exception 107 for additional information on this issue. Exception |

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Test Cross-Reference	Evaluation Criteria	Result	Comments
			107 is closed. As documented in the *Loop Qualification System DLEC/CLEC Job Aid,* retail and wholesale loop qualification requests are handled in the same manner upon submission via the Web-based LQS application. Loop qualification responses, indicating whether a line can adequately support xDSL service or not, are provided in near real time for both retail and wholesale requests.

Test Cross-Reference	Evaluation Criteria	Result	Comments
PO&P-16-1-12	Loop Make-Up (LMU) pre-order transactions are executed in a consistent, non-discriminatory, and repeatable manner between retail and wholesale	Satisfied	Loop Make-Up information is not required for retail xDSL pre-ordering. Only ADSL service is available for retail customers and the ADSL loop make-up information is considered in the generation of the LQS response to pre-order service inquiries. During KCI's initial evaluation, wholesale (UNE) customers could obtain loop make-up information only through a manual process. The manual process for determining the availability and specific characteristics of an ADSL capable loop, is described in the *ADSL/HDSL Capable Loop – CLEC Information Package,* dated February 24, 2000. As of November 18, 2000, wholesale xDSL customers gained electronic access to BLS's mechanized LMU service. In addition to the LQS, the data returned by the LMU service provides the CLEC with the underlying loop qualification information. The document *BellSouth Loop Makeup (LMU) CLEC Information Package* provides specific instructions for UNE customer use of BLS's mechanized LMU service. See Exception 107 for additional information on this issue. Exception 107 is closed.
PO&P-16-1-13	Order transactions are executed in a consistent, non-discriminatory, and repeatable manner between retail and wholesale	Satisfied	KCI's initial testing found that retail order processing is mechanized. Wholesale order processes were entirely manual (submitted by the CRSG to the LCSC via fax machines) and therefore, discriminatory. As a result, KCI issued Exception 108. In response to Exception 108, on February 12, 2001 BellSouth implemented a system change to provide all CLECs the ability to order xDSL capable loops electronically

Test Cross-Reference	Evaluation Criteria	Result	Comments
			through the TAG, LENS, and EDI interfaces.
			Retail orders for xDSL service are submitted via electronic systems. Client Logic submits retail orders through via the FASS system, and resale orders are submitted electronically, into SOEG. Retail orders with errors fall out to the DSG, are re-keyed into BASS, flow to SOCS and enter the provisioning process.
			CLEC xDSL orders with errors fall out to PAWS and the exceptions are addressed by the service representatives in the LCSC. The representatives utilize DOE, SONGS, SOCS, RSAG, ATLAS, and other systems to identify and correct errors allowing the order to enter the provisioning process.
			In its January 16, 2001 Docket No. 7892-U, the GPSC specified a benchmark/analog for the UNE xDSL (ADSL, HDSL, UCL) Order Completion Interval of 7 business days without conditioning and 14 business days with conditioning.
			Based on interviews, observations and a review of the documentation (see comments in PO&P-16-1-3)[5], the newly available electronic ordering functionality is adequate to support CLEC order submission requirements and is non-discriminatory to retail.
			See Exception 108 for additional information on this issue. KCI has recommended closure of Exception 108 to the GPSC

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[5] KCI did not conduct feature-function testing for electronically submitted xDSL orders.

Test Cross-Reference	Evaluation Criteria	Result	Comments
PO&P-16-1-14	Facility Assignment transactions are executed in a consistent, non-discriminatory, and repeatable manner between retail and wholesale	Satisfied	In the AFIG, the Facility Assignment and Control System screens and, where possible, automatically assigns facilities to orders from LFACS and the Computer System for Mainframe Operations (COSMOS) databases. If LFACS is unable to assign facilities, HAL (Hands-off Assignment Logic) attempts to assign them. If HAL is unable to make the assignment, the order falls out to the AFIG as an RMA (Request for Manual Assistance) and is held in PAWS, the system used to assign and manage the work in the AFIG.
			When an AFIG supervisor assigns work to a FAS, the work unit(s) appear as packages on the FAS's PC desktop. The FAS opens the work package in PAWS to see the RMA and assigns facilities in LFACS and/or COSMOS. The FAS waits until the status in SOAC (Service Order Analysis & Control) is updated to show that facilities have been assigned.
			If the FAS is unable to resolve the assignment error, he/she calls the database maintenance group to report the problem. The database administrator will either call back to inform the FAS of resolution or the specialist will check the order after one-half hour to see if the assignment has been made. The FAS may also need to call the Central Office (CO or Serving Wire Center) to clarify the assignment information. CO contacts are maintained in a binder on the FAS' desk.
			Provisioning Specialists in the CPG use TIRKS to generate their respective Work Lists. Specialists work orders according to their respective Loop Assignment & Make-Up (LAM) dates, which are typically one to two days

Test Cross-Reference	Evaluation Criteria	Result	Comments
			prior to the Ready and Designed (RID) date. Using the orders obtained from TIRKS, the Provisioning Specialist views the specific orders in SOCS to obtain additional information needed to resolve the error(s).
			To resolve order errors, the Provisioning Specialist sends trouble tickets to the AFIG via the TIRKS Field Assistance screen or contacts the LCSC. Following each contact, the Provisioning Specialist enters notes into the Work Force Administration/ Control (WFA/C) system regarding current order status. Orders then flow to the Design Group. Orders are removed from the TIRKS Work Lists once a "PD" status in SOCS is achieved.
			CPG xDSL orders are identified by the code "LXFU." As orders flow through the BLS facility assignment process, there is no distinction among Retail, Resale, and Wholesale (UNE) order types.
PO&P-16-1-15	Service Activation transactions are executed in a consistent, non-discriminatory, and repeatable manner between retail and wholesale	Satisfied	All WMC assignments are driven by a commitment date made by the DSG. ADSL-related work is dispatched by the WMC via the AELERA database. The WMC Load Balance Manager assigns orders to Service Technicians. The WMC Load Balance Manager sends specific order assignments to the proper Network Managers a day before the actual work is to take place. Network Managers are able to see which of their Service Technicians are working specific orders and distribute these orders (via AELERA/LMOS) for work to begin.
			UNE Center Maintenance Administrators review orders to ensure that they are error-free and resolve any jeopardy conditions/Service Order Control

Test Cross-Reference	Evaluation Criteria	Result	Comments
			System (SOCS) error codes (e.g., AO/FAO) prior to loading orders to Electronic Technicians (ETs) via WFA/C for provisioning. MAs work orders by their respective due dates.
			ADSL-related work is dispatched to the CO by the Work Management Center (WMC) via the Work Force Administration (WFA) system. The WMC assigns the priority for all work flowing into the CO. The CO has no input in deciding what work gets assigned or in which order work is completed.
			The DSG's SAR team works to provide xDSL services to ISPs/NSPs. SAR staff members fulfill three main roles: troubling shooting ADSL installations/maintenance issues, addressing pending provisioning orders, and handling incoming calls from ISPs/NSPs, BellSouth.net, and field technicians. 85% of orders coming into the SAR group automatically flow through, the remaining 15% fall out as a Request for Manual Assistance (RMA or Alert). Provisioning orders enter the SAR group via the Network Management System (NMS). The orders are automatically validated by the ADSL NMS. Multimedia Technicians (MTs) on the Alerts Team address orders that have failed this validation process. Those orders that fail validation are addressed by the Alert team, which attempts to screen and troubleshoot the order in time to meet its specific due date. The Alert team MT reviews order history, checking assignment and port data. If the order does not have facilities assigned, the MT contacts the AFIG. If the cable name cannot be validated, engineers are contacted to correct it or the order is referred to the NAS group. A WFA

Test Cross-Reference	Evaluation Criteria	Result	Comments
			ticket is opened for each order that fails validation. If the MT cannot resolve an alert, Tier Two Technical employees act as support. The Alerts Team relies more heavily on the NMS hotline for support in handling alerts. It is not typical that the Tier Two Technical support employees are approached for "Alerts" assistance since their main focus is on handling installation and repair troubleshooting. There is also an NMS hotline that Technicians can call for advice and troubleshooting assistance.