BellSouth Service Quality Measurement Plan (SQM)

Kentucky Performance Metrics

Measurement Descriptions Version 3.01<u>02</u>

Effective Date: April 19, 2008 July 18, 2009

Note: This SQM version is issued to reflect the OSS architecture changes implemented on April 19, 2008 July 18, 2009.

Introduction

BellSouth Service Quality Measurement Plan (SQM) describes in detail the measurements produced to evaluate the quality of service delivered to BellSouth's wholesale customers. The SQM was developed to respond to the requirements of the Communications Act of 1996 Section 251 (96 Act) which required BellSouth to provide non-discriminatory access to Competitive Local Exchange Carriers (CLEC)¹. The reports produced by the SQM provide regulators, CLECs and BellSouth the information necessary to monitor the delivery of non-discriminatory access.

The Georgia Public Service Commission issued its *Order Granting Joint Motion to Approve New Performance Measurement Plan* on July 18, 2005, and this plan includes the same SQM approved by the Georgia Commission. This SQM is to be implemented by BellSouth pursuant to orders issued by the Kentucky Public Service Commission (the "Commission") in Docket No. 2004-00391 (dated June 20, 2005) and in Docket No. 2001-00105 (dated May 11, 2004) instructing BellSouth to continue with the Georgia performance plan, along with any future modifications. This SQM includes modifications resulting from the implementation of OSS architecture changes on April 19, 2008 and July 18, 2009.

The SQM and the reports flowing from it must change to reflect the dynamic requirements of the industry. New measurements are added as new products, systems, and processes are developed and fielded. New products and services are added as the markets develop and the processes stabilize. The measurements will be changed to reflect the dynamic changes described above and to correct errors, respond to 3rd Party audits, Orders of the KPSC, FCC and the appropriate Courts of Law.

This document is intended for use by someone with knowledge of the telecommunications industry, information technologies and a functional knowledge of the subject areas covered by BellSouth Performance Measurements and the reports that flow from them.

Report Publication Dates

Each month, preliminary SQM reports will be posted to BellSouth's PMAP website (<u>http://pmap.bellsouth.com</u>) by 8:00 AM EST on the 21st day of each month or the first business day after the 21st. The validated SQM reports will be posted by 8:00 AM on the last day of the month or the first business day after the last day of the month.

For details on SEEM, please refer to the SEEM Administrative Plan.

BellSouth shall retain the performance measurement Supporting Data Files (SDF) for a period of 18 months and further retain the monthly reports produced in PMAP for a period of three years. Instructions for replicating the reports in the SQM are contained in the Supporting Data User Manual (SDUM). The SDUM is available on the PMAP website and is automatically provided with each SDF download.

¹Alternative Local Exchange Companies (ALEC) and Competing Local Providers (CLP) are referred to as Competitive Local Exchange Carriers (CLEC) in this document.

Report Delivery Methods

CLEC SQM and SEEM reports will be considered delivered when posted to the website. The State/Federal Commissions have been given access to the website.



Appendix A: Glossary of Acronyms and Terms

Symbols used in calculations

A mathematical operator representing subtraction.

+

A mathematical operator representing addition.

1

A mathematical operator representing division.

<

A mathematical symbol that indicates the metric on the left of the symbol is less than the metric on the right.

<=

A mathematical symbol that indicates the metric on the left of the symbol is less than or equal to the metric on the right.

>

A mathematical symbol that indicates the metric on the left of the symbol is greater than the metric on the right.

>=

A mathematical symbol that indicates the metric on the left of the symbol is greater than or equal to the metric on the right.

()

Parentheses, used to group mathematical operations which are completed before operations outside the parentheses.

Α

ACD

Automatic Call Distributor - A service that provides status monitoring of agents in a call center and routes high volume incoming telephone calls to available agents while collecting management information on both callers and attendants.

Aggregate

Sum total of all items in a like category, e.g. CLEC aggregate equals the sum total of all CLEC data for a given reporting level.

ALEC

Alternative Local Exchange Company – A BellSouth wholesale customer who competes with the Incumbent Local Exchange Carrier (ILEC) and other carriers in providing local service.

ADSL

Asymmetrical Digital Subscriber Line - A transmission technology that allows the use of one existing local twisted-pair to provide high-bandwidth data and voice services simultaneously.

ASR

Access Service Request - A request for access service terminating delivery of carrier traffic into a local exchange carrier's network.

ATLAS

Application for Telephone Number Load Administration System - The BellSouth Operations System used to administer the pool of available telephone numbers and to reserve selected numbers from the pool for use on pending service requests/service orders.

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Auto Clarification

A LSR that was electronically rejected from LESOG and electronically returned to the CLEC for correction.

В

BILLING

The process and functions by which billing data is collected and by which account information is processed in order to render accurate and timely billing.

BOCRIS

Business Office Customer Record Information System (Front-end to the CRIS database) – System used to maintain customer account information which includes, but is not limited to bills, payment history, and memo notations made during customer contact.

BRI

Basic Rate ISDN – This product offering is a two-way line side digital port on a two-wire digital loop. The two-wire digital loop is a dedicated digital transmission facility.

BRC

Business Repair Center - The BellSouth Business Systems trouble receipt center which serves business and CLEC customers.

С

CABS

Carrier Access Billing System – The BellSouth proprietary corporate database and billing system for access and certain UNE customers and/or services.

CCC

Coordinated Customer Conversions – A simultaneous coordination between the disconnection of existing service and the reconnection of the new service.

CCP OSS (Change Management)

Change Control Process OSS – The Change Control Process (CCP) methods and procedures, a collaborative documented process, used by BellSouth and the CLECs to initiate OSS changes to BellSouth pre-ordering, ordering, and provisioning interfaces. The process includes change requests, CLEC prioritization, release management, defect management, etc.

CCP SQM

Change Control Process SQM – The methods and procedures used by BellSouth to implement changes to performance metrics that have been ordered by a state regulatory commission. This process is documented in the PMQAP.

Centrex

A business telephone service, offered by local exchange carriers, which is similar to a Private Branch Exchange (PBX) but the switching equipment is located in the telephone company Central Office (CO).

CISC

Carrier Interconnection Switching Center – Formerly known as the LISC, the BellSouth Center dedicated to handling CLEC access service requests for interconnection trunks.

CKTID

Circuit Identifier - A unique identifier for elements combined in a service configuration.

CLEC

Competitive Local Exchange Carrier – A BellSouth wholesale customer who competes with the Incumbent Local Exchange Carrier (ILEC) and other carriers in providing local service.

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CLP

Competitive Local Provider – A BellSouth wholesale customer who competes with the Incumbent Local Exchange Carrier (ILEC) and other carriers in providing local service.

CMDS

Centralized Message Distribution System - National system used to transfer specially formatted messages among companies.

CM OSS

Change Management OSS - See CCP OSS for definition.

CM SQM

Change Management SQM - See CCP SQM for definition.

COFFI

Central Office Feature File Interface - Provides information about USOCs and class of service. COFFI indicates all services available to a customer.

COG

Corporate Gateway - System designed for the electronic submission of xDSL Local Service Requests.

CRIS

Customer Record Information System - The BellSouth proprietary corporate database and billing system for non-access customers and/or services.

CRSG

Complex Resale Support Group - The group within BellSouth which serves as the interface between the LCSC and the outside plant engineering group. The responsibility of this organization is to provide the parameters for the type of facilities available to provision the service the CLEC has selected.

C-SOTS

CLEC Service Order Tracking System – Provides CLECs the ability to query the service order database to monitor the progess of CLEC service order activity from service order issuance to order completion.

CSR

Customer Service Record – A record of the customer/end-user information including detail about the services and physical address of the end-user.

CTTG

Common Transport Trunk Group - Trunk groups between BellSouth, Independent end offices, and the BellSouth access tandems.

CWINS Center

Customer Wholesale Interconnection Network Services Center (formerly the UNE Center) – This center provides CLECs with provisioning and maintenance for designed and non-designed local service.

D

Design

Design Service is defined as any special or plain old telephone service order which requires BellSouth design engineering activities.

Disposition & Cause

Types of trouble conditions, (e.g., No Trouble Found (NTF), Central Office Equipment (CO), Customer Premises Equipment (CPE), etc.) – These codes identify the location, equipment and/or disposition of a particular trouble. Trouble reports will be closed to the most service affecting code which describes the trouble condition repaired.

DS0

The worldwide standard speed for one digital voice signal (64,000 bps).

DS1

24 DS0s (1.544Mb/sec.)

DOE

Direct Order Entry System - An internal BellSouth service order entry system used by BellSouth service representatives to input service orders in BellSouth format.

DOM

Delivery Order Manager – Determines the needed processing steps for the service request. It then forwards the request on to each required system, in sequence, checking for errors and accuracy.

DSAP

DOE (Direct Order Entry) Support Application - A BellSouth system which assists a service representative or similar carrier agent in negotiating service provisioning commitments for non-designed services and Unbundled Network Elements.

DSL

Digital Subscriber Line – Allows customers to provide similtaneous two-way transmission of digital signals at speeds of 256 kbps via a two-wire local channel.

DUI

Database Update Information - A functional area measuring the timeliness and accuracy of database updates.

Ε

EDI

Electronic Data Interchange - The computer-to-computer exchange of inter and/or intra-company business documents in a public standard format.

Enhanced Verigate

An onkline Web-based system, which provides CLECs electronic access to pre-order information.

ESSX

BellSouth Centrex Service – A central office housed communications system that provides the customer with direct inward and outward dialing, interconnection to all stations, and custom calling features.

F

Fatal Reject

LSRs electronically rejected from LEO because the required fields are not correctly populated.

Flow-Through

In the context of this document, LSRs submitted electronically via the CLEC mechanized ordering process that flow through to the BellSouth OSS without manual or human intervention.

FOC

Firm Order Confirmation - A notification returned to the CLEC confirming the LSR has been received and accepted, including the specified commitment date.

FX

Foreign Exchange – A network-provided service in which a telephone in a given local exchange area is connected, via a private line, to a central office in another exchange.

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GΗ

HDSL

High Bit Digital Subscriber Line – A dedicated digital transmission facility from BellSouth's Main Distribution Frame (MDF) to an end user's premises.

IJK

ILEC

Incumbent Local Exchange Carrier - Regional Bell Operating Company (RBOC)

INP

Interim Number Portability – When the customer is originally provided service by an ILEC and decides to change service to a CLEC, the customer may retain their ILEC telephone number. Calls to the ILEC number are rerouted to the CLEC using either the Remote Call Forwarding feature or over a dedicated trunk group from the ILEC switch to the CLEC

ISDN

Integrated Services Digital Network – An integrated digital network in which the same time-division switches and digital transmission paths are used to establish connections for different services. ISDN services include telephone, data, electronic mail, and facsmile.

L

LAN

Local Area Network – A data communications system that lies within a limited spatial area, has a specific user group, has a specific topology, and is not a public switched telecommunications network, but may be connected to one.

LASR

Local Access Service Request-Negotiation system for entry and processing of Local Service Requests. Stores all LSRs received mechanically from CLECs. Tracks status of request and all service orders.

LAUTO

The automatic processor in LNP Gateway that validates LSRs and issues service orders.

LCSC

Local Carrier Service Center - The BellSouth center which is dedicated to handling CLEC LSRs and preordering transactions, along with associated expedite requests and escalations.

Legacy System

Term used to refer to BellSouth Operations Support Systems.

LENS

Local Exchange Navigation System - The BellSouth application developed to provide both preordering and ordering electronic interface functions for CLECs.

LERG

Local Exchange Routing Guide – The official document which lists all North American Class 5 office (COs or end offices) and which describes their relationship to Class 4 office (tandem offices). Carriers use the LERG in the network design process.

LESOG

Local Exchange Service Order Generator - A BellSouth system which accepts the service order output of LEO and enters the service order into the Service Order Control System using terminal emulation technology.

LFACS

Loop Facilities Assignment and Control System - Database of facilities inventory and assignment information.



LIDB

Line Information Database - Contains information about the user's calling card and other billing data.

LMOS

Loop Maintenance Operations System - A BellSouth operations system that stores the assignment and selected account information for use by downstream OSS and BellSouth personnel during provisioning and maintenance activities.

LMOS HOST

Loop Maintenance Operations System Host Computer

LMU

Loop Make-up - The physical characteristics of the loop facilities, starting at an ILEC's central office and ending at the serving distribution terminal.

LMUSI

Loop Make-up Service Inquiry – The form submitted by the CLEC to obtain the loop make-up information.

LNP

Local Number Portability - In the context of this document, the capability for a subscriber to retain their current telephone number as they transfer to a different local service provider.

LNP Gateway

Local Number Portability (gateway) - A system that provides both internal and external communications with various interfaces and processes including:

- (1) Linking BellSouth to the Number Portability Administration Center (NPAC).
- (2) Allowing for inter-company communications between BellSouth and the CLECs for electronic ordering.
- (3) Providing interface between NPAC and AIN SMS for LNP routing processes.

Loops

Transmission paths from the central office to the customer premises.

LRN

Location Routing Number - A 10-digit number which routes calls to the appropiate end-user's ported telephone number.

LSR

Local Service Request - A request from a CLEC for local resale service or unbundled network elements.

Μ

Maintenance & Repair

The process and function by which trouble reports are sent to BellSouth and the related service problems are resolved.

MARCH

BellSouth Operations System which accepts service orders and other data, interprets the coding contained in the service order image, and constructs the specific switching system recent change command messages for input into end office switches.

Ν

NBR

New Business Request - Process required by BellSouth for CLECs to initiate a service, which is not included within its interconnection agreement.

NC

No Circuits - All circuits busy announcement.

NMLI

Native Mode LAN Interconnection - An intraLATA, shared fiber-based, LAN inter-networking service.

NPA

Numbering Plan Area – Area Code portion of a telephone number.

NXX

The exchange portion of a telephone number. The first three digits in a local telephone number which identify the specific telephone company central office serving that number.

0

OBF

Ordering and Billing Forum Adapter-Provides gateway between EDI/COBRA/Verigate and the variuos BIS systems to retrieve preorder data from legacy systems.

Ordering

The process and functions where resale services or unbundled network elements are ordered from BellSouth, as well as the process by which an LSR or ASR is placed with BellSouth

Ordering Interface Gateways

Gateways for CLECs to submit LSRs electronically

Order Types

The following order types are used in this document:

- (1) T The "to" portion of a change of address. This Order Type is used to connect main service at a new address when a customer moves from one address to another in any of the nine states within the BellSouth region. A "T" Order Type is always pared with an "F" Order Type which will have the same telephone number following the "F" Order Type Code unless the orders are within different central offices.
- (2) N Orders establishing a new account. Also, this Order Type Code is occasionally used when changing from one type of system to another, such as when changing from PBX to Centrex.
- (3) C Order Type used for the following conditions: changes or partial disconnections of service or equipment; change of telephone number, grade or class of main line, additional lines, auxiliary lines, PBX trunks and stations; addition of trunks or lines to existing accounts; move of equipment (other than change of address); temporary suspension and restoration of service at customer's request.
- (4) R Order Type used for the following conditions: additions, removals or changes in directory listings; responsibility change orders, addition, removal or changes in directory and billing information; other record corrections where no field work is involved.

OSPCM

Outside Plant Contract Management System – Provides scheduling and completion information on outside plant construction activities.

OSS

Operations Support System – Multiple support systems and databases which are used to mechanize the flow and performance of work. The term is used to refer to the overall system consisting of complex hardware, computer operating system(s), and applications which are used to provide the support functions.



Out Of Service

Customer has no dial tone and cannot call out

Ρ

PMAP

Performance Measurement Analysis Platform – Provides delivery of performance reports via the web and facilitates analysis of the summary level data.

PMQAP

Performance Measurement Quality Assurance Plan – BellSouth Operational Guide which documents the systematic procedures used by BellSouth Telecommunications (BST) to produce accurate and reliable service quality measurement reports.

PON

Purchase Order Number - Identifier assigned by the customer originating the service request

POTS

Plain Old Telephone Service - A term often used to distinguish basic voice telephone from data and other services.

PREDICTOR

BellSouth system used to administer proactive maintenance and rehabilitation activities on outside plant facilities.

Preordering

The process and functions by which information is obtained, verified, or validated prior to placing a service request.

PRI

Primary Rate ISDN - An integrated services digital network interface standard designated as having 23B+D channels

Provisioning

The process and functions where necessary work is performed to activate a service requested via a LSR/ASR

QR

RRC

Residence Repair Center - The BellSouth Consumer Services trouble receipt center which serves residential customers

RSAG

Regional Street Address Guide - The BellSouth database which contains street addresses that have been validated for accuracy with state and local government records

RSAGADDR

Regional Street Address Guide Address - RSAG software contract for address search

RSAGTN

Regional Street Address Guide Telephone Number - RSAG software contract for telephone number search

S

SAC

Service Advocacy Center- Resolves issues in the provisioning process

SDUM

Supporting Data User Manual

SEEM

Self Effectuating Enforcement Mechanism - A tiered remedy structure in which payments are made either to the CLEC and/or state

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regulatory agency, depending on the type and level of parity/benchmark miss that occurs

SGG

ServiceGate Gateway - A common gateway to receive and send interconnection requests

SOCS

Service Order Control System - BellSouth system which routes service order images among BellSouth provisioning systems.

SOG

Service Order Generator - Designed to generate a service order for xDSL

SONGS

Service Order Negotiation and Generation System – This system supports the Consumer, Small Business and Public COUs by providing data entry screens and prompts to aid negotiation and entry of all order types.

Syntactically Incorrect Query

A query that cannot be fulfilled due to insufficient or incorrect input data from the end user. For example, a CLEC would like to query the legacy system for the following address: 1234 Main St. Entering "1234 Main St." will be considered syntactically correct because valid characters were used in the address field. However, entering "AB34 Main St." will be considered syntactically incorrect because invalid characters (example: alpha characters were entered in numeric slots) were used in the address field.

Т

TAFI

Trouble Analysis Facilitation Interface - The BellSouth Operations System that supports trouble receipt center personnel in taking and handling customer trouble reports.

TAG

Telecommunications Access Gateway – TAG was designed to provide an electronic interface or machine-to-machine interface for the bi-directional flow of information between BellSouth's OSSs and participating CLECs.

Test Transactions/Records

Transactions created by BellSouth, or in tests originated by CLECs, where the CLEC has coordinated the test with BellSouth to enable identification of the transactions as part of a test used to test system functionality.

TN

Telephone Number

Total Manual Fallout

LSRs electronically submitted to BellSouth, which fallout, requiring manual input into a service order generator.

UV

UCL

Unbundled Copper Loop - A dedicated metallic transmission facility from BellSouth's Main Distribution Frame (MDF) to a customer's premises

UNE

Unbundled Network Element – Those parts of BellSouth's network required to be unbundled by the Telecommunications Act of 1996 and the implementing regulatory body

USOC

Universal Service Order Code - A set of alpha or numeric characters identifying a particular service or equipment

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W

WFA

Work Force Administration - Electronic document tracking system for trouble reports

WFM

Work Force Manager-Mechanizes work performed by LSCs.Manages the workload of all paper/email requests for local service.

WMC

Work Management Center – Serves as a single point of contact (SPOC) for all requests for dispatch to the Field Work Group (Central Office or outside technicians)

WTN

Working Telephone Number

ΧYΖ

XML

eXtensible Markup Language – An international standards-based data formatting option designed for information exchange on network systems

XML Gateway

<u>eXtensible Markup Language Gateway – A machine-to-machine electronic interface designed to provide bi-directional flow of information between AT&T's OSS and CLEC's OSS for pre-ordering and ordering functionality.</u>

Appendix C: OSS InterfaceTables

OSS-1 [PRR]: OSS Response Interval (Pre-Ordering/Ordering/Maintenance & Repair)

Table 1: Legacy System Access Times For RNS

System	Contract	Data	Avg. Sec.	# of Calls
RSAG	RSAG-TN	Address	x	x
RSAG	RSAG-ADDR	Address	x	x
ATLAS	ATLAS-TN	TN	x	x
DSAP	DSAP-DDI	Schedule	x	x
CRIS	CRSACCTS	CSR	x	x
OASIS	OASISBIG	Feature/Service	x	x

Table 2: Legacy System Access Times For R0S

System	Contract	Data	Avg. sec.	# of Calls
RSAG	RSAG-TN	Address	x	x
RSAG	RSAG-ADDR	Address	x	x
ATLAS	ATLAS-TN	TN	x	X
DSAP	DSAP-DDI	Schedule	x	X
CRIS	CRSOCSR	CSR	x	X
OASIS	OASISBIG	Feature/Service	x	x

Table 3: Legacy System Access Times For LENS/Enhanced Verigate (Pre-Order only)

System	Contract	Data	Avg. sec.	# of Calls
RSAG	RSAG-TN	Address	x	x
RSAG	RSAG-ADDR	Address	x	x
ATLAS	ATLAS-TN	TN	x	x
DSAP	DSAP-DDI	Schedule	x	X
CRIS	CRSECSRL	CSR	x	X
COFFI	COFFI/USOC	Feature/Service	x	X
P/SIMS	PSIMS/ORB	Feature/Service	x	X

Table 4: Legacy System Access Times For TAG/XML/XML Gateway

System	Contract	Data	Avg. sec.	# of Calls
RSAG	RSAG-TN	Address	x	x
RSAG	RSAG-ADDR	Address	x	x
ATLAS	ATLAS-TN	TN	x	X
ATLAS	ATLAS-MLH	TN	x	X
ATLAS	ATLAS-DID	TN	x	X
DSAP	DSAP-DDI	Schedule	x	X
CRIS	CRSECSRL	CSR	x	X
P/SIMS	PSIM/ORB	Feature/Service	x	X



Appendix C: OSS Interface Tables

System	BellSouth & CLEC	Count <= 10
CRIS	Х	х
DLETH	Х	х
DLR	х	х
LMOS	Х	х
LMOSupd	х	х
LNP Gateway	х	х
MARCH	Х	х
OSPCM	х	х
Predictor	Х	х
SOCS	Х	х
NIW	Х	х

Table 5: Legacy System Access Times for M&R (TAFI)

OSS-2 [IA]: OSS Interface Availability (Pre-Ordering/Ordering/Maintenance & Repair)

OSS Table 1: SQM Interface Availability for Pre-Ordering/Ordering

OSS Interface Availability Application	Applicable to	% Availability
EDI	CLEC	X
LENS	CLEC	X
LASR	CLEC	X
WFM	CLEC	X
OBF	CLEC	Х
Enhanced Verigate	CLEC	Х
LESOG	CLEC	X
TAG/XML	CLEC	X
XML Gateway	CLEC	<u>X</u>
LNP Gateway	CLEC	X
COG	CLEC	X
SGG	CLEC	X
DOE	CLEC/BellSouth	X
SONGS	CLEC/BellSouth	X
ATLAS/COFFI	CLEC/BellSouth	X
BOCRIS/CRIS	CLEC/BellSouth	X
DSAP	CLEC/BellSouth	X
RSAG	CLEC/BellSouth	X
SOCS	CLEC/BellSouth	X
LFACS	CLEC/BellSouth	X
RNS	BellSouth	x
ROS	BellSouth	X

OSS Table 2: SQM Interface Availability for Maintenance & Repair

OSS Interface	% Availability
BellSouth TAFI	x
CLEC TAFI	x
CLEC ECTA*	X

BellSouth & CLEC

CRIS	x
LMOS HOST	x
LNP Gateway	X
MARCH	x
OSPCM	x
PREDICTOR	x
SOCS	x

*Note:eRepair will be replacing ECTA. CLECs have until June 1, 2008 to transition to eReapir.From November of 2007 until May of 2008, at&t will report both interfaces. Beginning June 1, 2008, only eRepair will be reported.