BELLSOUTH/ICG
RATES
LOCAL INTERCONNECTION

DESCRIPTION	USOC	TN
LOCAL INTERCONNECTION (CALL TRANSPORT AND TERMINATION)		
End Office Switching, per mou	N/A	See Ex A-1
Direct Local Interconnection, per mou		NA
Tandem Switching, per mou	N/A	See Ex A-1
Tandem Local Interconnection, per mou (includes end office switching element)	N/A	NA
Multiple Tandem Switching, per mou (applies to initial tandem only), effective 10/99	N/A	NA
Local Intermediary, per mou (applies to transit traffic only)	N/A	NA
Tandem Intermediary Charge, per mou*	N/A	NA
*(This charge is applicable only to transit traffic and is applied in addition to applicable switching and/or interconnection charges.)		
TRUNK CHARGE		
Interim charges, both non-recurring and recurring, associated with interconnecting trunk groups between BellSouth and ICG shall be as set forth in this Exhibit. At such time as BellSouth develops a final cost based rate for such interconnecting trunk groups, the Parties shall amend this agreement to include such final cost based rates and shall true up such charges in accordance with this Attachment.		
Installation Trunk Side Service - per DS0		
NRC - 1st	TPP++	$334.29
NRC - Add'l	TPP++	$57.01
INTEROFFICE TRANSPORT		
Common (Shared) Transport		
Common (Shared) Transport per mile per mou	N/A	See Ex A-1
Common (Shared) Transport Facilities Termination per mou	N/A	See Ex A-1
Interoffice Channel Transport - Dedicated - VG		
Interoffice Transport - Dedicated - 2-wire VG		
2-Wire VG - per mile per month	1L5XF	See Ex A-1
2-Wire VG - Facility Termination per month	1L5XF	See Ex A-1
NRC - 2-wire VG - Facility Termination -1st	1L5XF	See Ex A-1
NRC - 2-wire VG - Facility Termination - Add'l	1L5XF	See Ex A-1
NRC - 2-wire VG -Facility Termination - Disconnect Charge -1st	1L5XF	See Ex A-1
NRC - 2-wire VG - Facility Termination - Disconnect Charge -Add'l	1L5XF	See Ex A-1
NRC - Manual Svc Order, per LSR	SOMAN	See Ex A-1
NRC - Manual Svc Order, per LSR disconnect	SOMAN	See Ex A-1
NRC - Electronic Svc Order, per LSR	SOMEC	See Ex A-1
NRC - Electronic Svc Order, per LSR disconnect	SOMEC	See Ex A-1
NRC - 2-wire VG - Incremental Charge--Manual Svc Order - 1st	SOMAN	See Ex A-1
NRC - 2-wire VG - Incremental Charge--Manual Svc Order - Add'l	SOMAN	See Ex A-1
NRC - 2-wire VG - Incremental Charge--Manual Svc Order-Disconnect--1st	SOMAN	See Ex A-1
NRC - 2-wire VG - Incremental Charge--Manual Svc Order-Disconnect--Add'l	SOMAN	See Ex A-1
Interoffice Transport - Dedicated - DS0 - 56/64 KBPS		
DS0 - per mile per month	1L5XK	See Ex A-1
DS0 - Facility Termination per month	1L5XK	See Ex A-1
NRC - DS0 - Facility Termination - 1st	1L5XK	See Ex A-1
NRC - DS0 - Facility Termination - Add'l	1L5XK	See Ex A-1
NRC - DS0 -Facility Termination - Disconnect Charge - 1st	1L5XK	See Ex A-1
NRC - DS0 - Facility Termination - Disconnect Charge - Add'l	1L5XK	See Ex A-1
NRC - Manual Svc Order, per LSR	SOMAN	See Ex A-1
NRC - Manual Svc Order, per LSR disconnect	SOMAN	See Ex A-1
NRC - Electronic Svc Order, per LSR	SOMEC	See Ex A-1
NRC - Electronic Svc Order, per LSR disconnect	SOMEC	See Ex A-1
NRC - DS0 -Incremental Charge--Manual Svc Order - 1st	SOMAN	See Ex A-1
NRC -DS0 - Incremental Charge--Manual Svc Order - Add'l	SOMAN	See Ex A-1
NRC - DS0 -Incremental Charge--Manual Svc Order-Disconnect--1st	SOMAN	See Ex A-1
NRC - DS0 -Incremental Charge--Manual Svc Order-Disconnect—Add'l	SOMAN	See Ex A-1
Interoffice Transport - Dedicated - DS1		
DS1 - per mile per month	1L5XL	See Ex A-1
DS1 -Facility Termination per month	1L5XL	See Ex A-1
NRC - DS1-Facility Termination - 1st	1L5XL	See Ex A-1
NRC - DS1 - Facility Termination - Add'l	1L5XL	See Ex A-1
NRC - DS1 - Facility Termination - Disconnect Charge - 1st	1L5XL	See Ex A-1
NRC - DS1 - Facility Termination -Disconnect Charge - Add'l	1L5XL	See Ex A-1
NRC - Manual Svc Order, per LSR	SOMAN	See Ex A-1
NRC - Manual Svc Order, per LSR disconnect	SOMAN	See Ex A-1
NRC - Electronic Svc Order, per LSR	SOMEC	See Ex A-1
NRC - Electronic Svc Order, per LSR disconnect	SOMEC	See Ex A-1
NRC - DS1 - Incremental Charge--Manual Svc Order - 1st	SOMAN	See Ex A-1
NRC -DS1 - Incremental Charge--Manual Svc Order - Add'l	SOMAN	See Ex A-1
NRC - DS1 - Incremental Charge--Manual Svc Order-Disconnect--1st	SOMAN	See Ex A-1
NRC - DS1 - Incremental Charge--Manual Svc Order-Disconnect—Add'l	SOMAN	See Ex A-1
Interoffice Transport - Dedicated - DS3		
DS3 - per mile per month	1L5XM	$5.89
DS3 -Facility Termination per month	1L5XM	$760.20
NRC - DS3 - Facility Termination -1st	1L5XM	$625.91
NRC - DS3 - Facility Termination - Add'l	1L5XM	$311.39
NRC - DS3 - Facility Termination - Disconnect Charge - 1st	1L5XM	$103.36
NRC - DS3 - Facility Termination - Disconnect Charge - Add'l	1L5XM	$100.59
NRC - Manual Svc Order, per LSR	SOMAN	$19.99

BELLSOUTH/ICG
RATES
LOCAL INTERCONNECTION

DESCRIPTION	USOC	TN
NRC - Manual Svc Order, per LSR disconnect	SOMAN	NA
NRC - Electronic Svc Order, per LSR	SOMEC	$3.50
NRC - Electronic Svc Order, per LSR disconnect	SOMEC	NA
NRC - DS3 - Incremental Charge--Manual Svc Order - 1st	SOMAN	NA
NRC - DS3 - Incremental Charge--Manual Svc Order - Add'l	SOMAN	NA
NRC - DS3 - Incremental Charge--Manual Svc Order-Disconnect--1st	SOMAN	NA
NRC - DS3 - Incremental Charge--Manual Svc Order-Disconnect—Add'l	SOMAN	NA
Local Channel - Dedicated		
Local Channel - Dedicated - 2-Wire VG		
Monthly Recurring per month	TEFV2	See Ex A-1
NRC - 2-wire VG - Facility Termination - 1st	TEFV2	See Ex A-1
NRC - 2-wire VG - Facility Termination - Add'l	TEFV2	See Ex A-1
NRC - 2-wire VG - Facility Termination - Disconnect - 1st	TEFV2	See Ex A-1
NRC - 2-wire VG - Facility Termination - Disconnect - Add'l	TEFV2	See Ex A-1
NRC - Manual Svc Order, per LSR	SOMAN	See Ex A-1
NRC - Manual Svc Order, per LSR disconnect	SOMAN	See Ex A-1
NRC - Electronic Svc Order, per LSR	SOMEC	See Ex A-1
NRC - Electronic Svc Order, per LSR disconnect	SOMEC	See Ex A-1
NRC - 2-wire VG - Incremental Charge--Manual Svc Order - 1st	SOMAN	See Ex A-1
NRC - 2-wire VG - Incremental Charge--Manual Svc Order - Add'l	SOMAN	See Ex A-1
NRC - 2-wire VG - Incremental Cost - Manual Svc. Order vs. Elect-Disconnect-1st	SOMAN	See Ex A-1
Local Channel - Dedicated - 4-Wire VG		
Monthly Recurring per month	TEFV4	See Ex A-1
NRC - 4-Wire VG - 1st	TEFV4	See Ex A-1
NRC - 4-Wire VG - Add'l	TEFV4	See Ex A-1
NRC - 4-Wire VG - Disconnect Chg - 1st	TEFV4	See Ex A-1
NRC - 4-Wire VG - Disconnect Chg - Add'l	TEFV4	See Ex A-1
NRC - Manual Svc Order, per LSR	SOMAN	See Ex A-1
NRC - Manual Svc Order, per LSR disconnect	SOMAN	See Ex A-1
NRC - Electronic Svc Order, per LSR	SOMEC	See Ex A-1
NRC - Electronic Svc Order, per LSR disconnect	SOMEC	See Ex A-1
NRC - 4-Wire VG - Incremental Charge--Manual Svc Order - 1st	SOMAN	See Ex A-1
NRC - 4-Wire VG - Incremental Charge--Manual Svc Order - Add'l	SOMAN	See Ex A-1
Local Channel - Dedicated - DS1		
DS1 Monthly Recurring per month	TEFHG	See Ex A-1
NRC - DS1 - 1st	TEFHG	See Ex A-1
NRC - DS1 - Add'l	TEFHG	See Ex A-1
NRC - DS1 - Disconnect Chg - 1st	TEFHG	See Ex A-1
NRC - DS1 - Disconnect Chg - Add'l	TEFHG	See Ex A-1
NRC - Manual Svc Order, per LSR	SOMAN	See Ex A-1
NRC - Manual Svc Order, per LSR disconnect	SOMAN	See Ex A-1
NRC - Electronic Svc Order, per LSR	SOMEC	See Ex A-1
NRC - Electronic Svc Order, per LSR disconnect	SOMEC	See Ex A-1
NRC - DS1 - Incremental Charge--Manual Svc Order - 1st	SOMAN	See Ex A-1
NRC - DS1 - Incremental Charge--Manual Svc Order - Add'l	SOMAN	See Ex A-1
Local Channel - Dedicated - DS3		
DS3 - Facility Termination per month	TEFHJ	$633.15
NRC - DS3 - Facility Termination - 1st	TEFHJ	$726.16
NRC - DS3 - Facility Termination - Add'l	TEFHJ	$411.64
NRC - DS3 - Facility Termination - Disconnect - 1st	TEFHJ	$103.36
NRC - DS3 - Facility Termination - Disconnect - Add'l	TEFHJ	$100.59
NRC - Manual Svc Order, per LSR	SOMAN	$19.99
NRC - Manual Svc Order, per LSR disconnect	SOMAN	NA
NRC - Electronic Svc Order, per LSR	SOMEC	$3.50
NRC - Electronic Svc Order, per LSR disconnect	SOMEC	NA
NRC - DS3 -Incremental Charge--Manual Svc Order - 1st	SOMAN	NA
NRC - DS3 - Incremental Charge--Manual Svc Order - Add'l	SOMAN	NA
NRC - DS3 - Incremental Charge--Manual Svc Order-Disconnect -1st	SOMAN	NA
NRC - DS3 - Incremental Charge--Manual Svc Order-Disconnect-Add'l	SOMAN	NA
CHANNELIZATION		
DS3 Channelization (DS3 to DS1)		
per Channelized System (28 DS1) per month	SATCS	See Ex A-1
NRC - 1st	SATCS	See Ex A-1
NRC - Add'l	SATCS	See Ex A-1
NRC -1st - Disconnect	SATCS	See Ex A-1
NRC -Add'l - Disconnect	SATCS	See Ex A-1
per Interface per month (COCI)	SATCO	See Ex A-1
NRC - 1st	SATCO	See Ex A-1
NRC - Add'l	SATCO	See Ex A-1
NRC - Manual Svc Order, per LSR	SOMEC	See Ex A-1
NRC - Manual Svc Order, per LSR disconnect	SOMAN	See Ex A-1
NRC - Electronic Svc Order, per LSR	SOMAN	See Ex A-1
NRC - Electronic Svc Order, per LSR disconnect	SOMAN	See Ex A-1
Channel System - Incremental Cost - Manual Svc. Order vs. Electronic -1st	SOMAN	See Ex A-1
Channel System - Incremental Cost - Manual Svc. Order vs. Electronic -Add'l	SOMAN	See Ex A-1
DS1 Channelization (DS1 to DS0)		
per Channelized System (24 DS0) per month	SATC1	See Ex A-1
NRC - 1st	SATC1	See Ex A-1

BELLSOUTH/ICG
RATES
LOCAL INTERCONNECTION

DESCRIPTION	USOC	TN
NRC - Add'l	SATC1	See Ex A-1
NRC - 1sr - Disconnect	SATC1	See Ex A-1
NRC -Add'l - Disconnect	SATC1	See Ex A-1
- Interface (COCI)		
per OCU-DP(data) card per month (2.4-64kbs)		
NRC - 1st	SATSA	See Ex A-1
NRC - Add'l	SATSA	See Ex A-1
per BRITE card per month	SATSA	See Ex A-1
NRC - 1st	SATSA	See Ex A-1
NRC - Add'l	SATSA	See Ex A-1
per VG card per month (DS0)	SATSA	See Ex A-1
NRC - 1st	SATSA	See Ex A-1
NRC - Add'l	SATSA	See Ex A-1
NRC - Manual Svc Order, per LSR	SATSA	See Ex A-1
NRC - Manual Svc Order, per LSR disconnect	SOMAN	See Ex A-1
NRC - Electronic Svc Order, per LSR	SOMAN	See Ex A-1
NRC - Electronic Svc Order, per LSR disconnect	SOMEC	See Ex A-1
Channel System - Incremental Cost - Manual Svc. Order vs. Electronic -1st	SOMEC	See Ex A-1
Channel System - Incremental Cost - Manual Svc. Order vs. Electronic -Add'l	SOMAN	See Ex A-1
Incremental Cost-Manual Svc. Order vs. Elect -Disconnect - 1st	SOMAN	See Ex A-1
Incremental Cost-Manual Svc. Order vs. Elect -Disconnect - Add'l	SOMAN	See Ex A-1
Local Interconnection Mid-Span Meet	SOMAN	See Ex A-1
Local Channel - Dedicated - DS1		
DS1 Monthly Recurring per month		
NRC - DS1 - 1st	TEFHG	$17.90
NRC - DS1 - Add'l	TEFHG	$547.48
NRC - DS1 - Disconnect Chg - 1st	TEFHG	$472.29
NRC - DS1 - Disconnect Chg - Add'l	TEFHG	TBD
NRC - DS1 - Incremental Charge--Manual Svc Order - 1st	TEFHG	TBD
NRC - DS1 - Incremental Charge--Manual Svc Order - Add'l	SOMAN	$89.14
NRC - DS1 - Incremental Charge--Manual Svc Order-Disconnect	SOMAN	$89.14
Local Channel - Dedicated - DS3	SOMAN	TBD
DS3 - Facility Termination per month		
NRC - DS3 - Facility Termination - 1st	TEFHJ	$285.50
NRC - DS3 - Facility Termination - Add'l	TEFHJ	$1,068.00
NRC - DS1 - Disconnect Chg - 1st	TEFHJ	$671.85
NRC - DS1 - Disconnect Chg - Add'l	TEFHJ	TBD
NRC - DS3 -Incremental Charge--Manual Svc Order - 1st	TEFHJ	TBD
NRC - DS3 - Incremental Charge--Manual Svc Order - Add'l	SOMAN	$94.63
NRC - DS1 - Incremental Charge--Manual Svc Order-Disconnect	SOMAN	$94.63
	SOMAN	TBD
NOTES:		
If no rate is identified in the contract, the rate for the specific service or function will be as set forth in applicable BellSouth tariff or as negotiated by the Parties upon request by either Party.		

UNBUNDLED NETWORK ELEMENT	BCS	USOC	RATES					OSS RATES					
			Recurring	Nonrecurring First	Nonrecurring Add'l	Nonrecurring Disconnect First	Nonrecurring Disconnect Add'l	Svc Order Submitted Elec per LSR	Svc Order Submitted Manually per LSR	Incremental Charge - Manual Svc Order vs. Electronic-1st	Incremental Charge - Manual Svc Order vs. Electronic-Add'l	Incremental Charge - Manual Svc Order vs. Electronic-Disc 1st	Incremental Charge - Manual Svc Order vs. Electronic-Disc Add'l
								SOMEC	SOMAN	SOMAN	SOMAN	SOMAN	SOMAN
LOCAL INTERCONNECTION (CALL TRANSPORT AND TERMINATION)													
END OFFICE SWITCHING													
End Office Switching Function, Per MOU			$0.0008041										
TANDEM SWITCHING													
Tandem Switching Function Per MOU			$0.0009778										
LOCAL INTERCONNECTION (TRANSPORT)													
COMMON TRANSPORT (Shared)													
Common Transport - Per Mile, Per MOU			$0.0000064										
Common Transport - Facilities Termination Per MOU			$0.0003871										
INTEROFFICE CHANNEL - DEDICATED TRANSPORT - VOICE GRADE													
Interoffice Channel - Dedicated Transport - 2-Wire Voice Grade - Per Mile per month	U1TVX	1L5XF	$0.0174										
Interoffice Channel - Dedicated Transport- 2-W VG - Facility Termination per month	U1TVX	1L5XF	$18.58	$55.39	$17.37	$27.96	$3.51			$20.35	$21.09	$9.80	$10.54
INTEROFFICE CHANNEL - DEDICATED TRANSPORT - 56/64 KBPS													
Interoffice Channel - Dedicated Transport - 56 kbps - per mile per month	U1TDX	1L5XK	$0.0174										
Interoffice Channel - Dedicated Transport - 56 kbps - Facility Termination per month	U1TDX	1L5XK	$17.98	$55.39	$17.37	$27.96	$3.51			$20.35	$21.09	$9.80	$10.54
Interoffice Channel - Dedicated Transport - 64 kbps - per mile per month	U1TDX	1L5XK	$0.0174										
Interoffice Channel - Dedicated Transport - 64 kbps - Facility Termination per month	U1TDX	1L5XK	$17.98	$55.39	$17.37	$27.96	$3.51			$20.35	$21.09	$9.80	$10.54
INTEROFFICE CHANNEL - DEDICATED TRANSPORT - DS1													
Interoffice Channel - Dedicated Channel - DS1 - Per Mile per month	U1TD1	1L5XIL	$0.3562										
Interoffice Channel - Dedicated Tranport - DS1 - Facility Termination per month	U1TD1	1L5XIL	$77.86	$112.40	$76.27	$19.55	$14.99			$20.35	$21.09	$9.80	$10.54
LOCAL CHANNEL - DEDICATED TRANSPORT													
Local Channel - Dedicated - 2-Wire Voice Grade per month - Zone 1	ULDVX	TEFV2	$17.18	$199.33	$24.16	$54.81	$4.80			$20.35	$10.54	$13.30	$0.00
Local Channel - Dedicated - 2-Wire Voice Grade per month - Zone 2	ULDVX	TEFV2	$22.44	$199.33	$24.16	$54.81	$4.80			$20.35	$10.54	$13.30	$0.00
Local Channel - Dedicated - 2-Wire Voice Grade per month - Zone 3	ULDVX	TEFV2	$29.34	$199.33	$24.16	$54.81	$4.80			$20.35	$10.54	$13.30	$0.00
Local Channel - Dedicated - 4-Wire Voice Grade per month - Zone 1	ULDDX	TEFV4	$18.18	$201.53	$24.83	$55.52	$5.51			$20.35	$10.54	$13.30	$0.00

Local Channel - Dedicated - 4-Wire Voice Grade per month - Zone 2	ULDDX	TEFV4	$23.74	$201.53	$24.83	$55.52	$5.51			$20.35	$10.54	$13.30	$0.00
Local Channel - Dedicated - 4-Wire Voice Grade per month - Zone 3	ULDDX	TEFV4	$31.05	$201.53	$24.83	$55.52	$5.51			$20.35	$10.54	$13.30	$0.00
Local Channel - Dedicated - DS1 per month - Zone 1	ULDD1	TEFHG	$36.24	$277.35	$233.26	$33.18	$22.30			$45.68	$1.76	$21.75	$1.76
Local Channel - Dedicated - DS1 per month - Zone 2	ULDD1	TEFHG	$47.33	$277.35	$233.26	$33.18	$22.30			$45.68	$1.76	$21.75	$1.76
Local Channel - Dedicated - DS1 per month - Zone 3	ULDD1	TEFHG	$61.89	$277.35	$233.26	$33.18	$22.30			$45.68	$1.76	$21.75	$1.76
MULTIPLEXERS													
Channelization - DS1 to DS0 Channel System	UXTD1	SATC1	$80.77	$141.87	$77.11	$14.51	$13.46			$20.35	$9.80	$11.49	$1.18
OCU-DP COCI (data) - DS1 to DS0 Channel System - per month (2.4-64kbs)	UDL	SATSA	$1.82	$6.07	$4.66					$20.35	$9.80	$11.49	$1.18
2-wire ISDN COCI (BRITE) - DS1 to DS0 Channel System - per month	UDN	SATSA	$3.10	$6.07	$4.66					$20.35	$9.80	$11.49	$1.18
Voice Grade COCI - DS1 to DS0 Channel System - per month	UEA	SATSA	$.91	$6.07	$4.66					$20.35	$9.80	$11.49	$1.18
DS3 to DS1 Channel System per month	UXTD3	SATCS	$222.98	$308.03	$108.47	$44.47	$42.62			$20.35	$9.80	$11.49	$1.18
DS3 Interface Unit (DS1 COCI) per month	USL	SATCO	$17.58	$6.07	$4.66					$20.35	$9.80	$11.49	$1.18

Attachment 4

Physical Collocation

BELLSOUTH
PHYSICAL COLLOCATION

1. SCOPE OF ATTACHMENT

1.1 Scope of Attachment. The rates, terms, and conditions contained within this Attachment shall only apply when ICG is occupying the collocation space as a sole occupant or as a Host pursuant to Section 4.

1.2 Right to occupy. Subject to Section 4 of this Attachment, BellSouth hereby grants to ICG a right to occupy that certain area designated by BellSouth within a BellSouth central office premises, of a size which is specified by ICG and agreed to by BellSouth (hereinafter "Collocation Space"). Notwithstanding the foregoing, BellSouth shall consider in its designation for cageless collocation any unused space within the BellSouth central office premises. The size specified by ICG may contemplate a request for space sufficient to accommodate ICG's growth within a two year period unless otherwise agreed to by the Parties.

1.2.1 Space Reclamation. In the event of space exhaust within a central office premises, ICG may be required to release space to BellSouth to be allocated to other physical collocation applicants when a minimum of fifty percent of the total amount of space in ICG's collocation arrangement is not being utilized within the first year of operation, or 100% of the total amount of space by the end of the second year of operation.

1.3 Use of Space. ICG shall use the Collocation Space for the purposes of installing, maintaining and operating ICG's equipment (to include testing and monitoring equipment) used or useful primarily to interconnect with BellSouth services and facilities, including access to unbundled network elements, for the provision of telecommunications services. Pursuant to Section 5 following, ICG may at its option, place ICG-owned fiber entrance facilities to the Collocation Space. In addition to, and not in lieu of, interconnection to BellSouth services and facilities, ICG may connect to other interconnectors within the designated BellSouth Central Office (including to its other virtual or physical collocated arrangements) through co-carrier cross connect facilities designated by ICG pursuant to section 5.6 following. The Collocation Space may be used for no other purposes except as specifically described herein or authorized in writing by BellSouth.

1.4 Rates and charges. ICG agrees to pay the rates and charges identified at Exhibit A attached hereto.

2. SPACE NOTIFICATION

2.1 Availability of Space. Upon submission of an application pursuant to Section 6, BellSouth will permit ICG to physically collocate, pursuant to the terms of this Attachment, at any BellSouth central office premises, unless BellSouth has determined that there is no space available due to space limitations or no space available due to technical infeasibility. BellSouth

will respond to an application within ten (10) business days as to whether space is available or not available within a BellSouth central office premise.

2.2 Reporting. Upon request from ICG, BellSouth will provide a written report specifying the amount of collocation space available at the central office premises requested, the number of collocators present at the central office premises, any modifications in the use of the space since the last report or the central office premises requested and the measures BellSouth is taking to make additional space available for collocation arrangements.

2.2.1 The request from ICG must be written and must include the central office premises and Common Language Location Identification (CLLI) code of the central office premises. Such information regarding central office premises and CLLI code is located in the National Exchange Carriers Association (NECA) Tariff FCC No. 4.

2.2.2 BellSouth will respond to a request for a particular Central Office location within ten (10) business days of receipt of such request. BellSouth will make best efforts to respond in ten (10) business days to such a request when the request includes up to and including five (5) Central Office locations within the same state. The response time for requests of more than five (5) shall be negotiated between the Parties. If BellSouth cannot meet the ten business day response time, BellSouth shall notify ICG and inform ICG of the time frame under which it can respond.

2.3 Denial of Application. After notifying ICG that BellSouth has no available space in the requested Central Office ("Denial of Application"), BellSouth will allow ICG, upon request, to tour the entire Central Office within ten (10) business days of such Denial of Application. In order to schedule said tour within ten (10) business days, the request for a tour of the Central Office must be received by BellSouth within five (5) business days of the Denial of Application.

2.4 Filing of Petition for Waiver. Upon Denial of Application BellSouth will timely file a petition with the Commission pursuant to 47 USC § 251(c)(6).

2.5 Waiting List. On a first come first served basis, BellSouth will maintain a waiting list of requesting carriers who have either received a Denial of Application or, where it is publicly known that the central office premises is out of space, have submitted a Letter of Intent to collocate. BellSouth will notify the telecommunications carriers on the waiting list when space becomes available according to how much space becomes available and the position of telecommunications carrier on said waiting list. Upon request BellSouth will advise ICG as to its position on the list.

2.6 Public Notification. BellSouth will maintain on its Interconnection Services website a notification document that will indicate all central office premises that are without available space. BellSouth shall update such document within ten (10) business days of the Denial of Application date. BellSouth will also post a document on its Interconnection Services website that contains a general notice where space has become available in a Central Office

previously on the space exhaust list. BellSouth shall allocate said available space pursuant to the waiting list referenced in Section 2.5.

2.7 State Agency Procedures. Notwithstanding the foregoing, should the Tennessee Regulatory Authority impose a procedure different than procedures set forth in this section, that procedure shall supersede the requirements set forth herein.

3. COLLOCATION OPTIONS

3.1 Cageless. Except where local building code does not allow cageless collocation, BellSouth shall allow ICG to collocate ICG's equipment and facilities without requiring the construction of a cage or similar structure and without requiring the creation of a separate entrance to the Collocation Space. BellSouth shall allow ICG to have direct access to its equipment and facilities but may require ICG to use a central entrance to the BellSouth Central Office. BellSouth shall make cageless collocation available in single bay increments pursuant to Section 7. Except where ICG's equipment requires special technical considerations (e.g., special cable racking, isolated ground plane), BellSouth shall assign cageless Collocation Space in conventional equipment rack lineups where feasible. For equipment requiring special technical considerations, ICG must provide the equipment layout, including spatial dimensions for such equipment pursuant to generic requirements contained in BellCore (Telcordia) GR-63-Core and shall be responsible for constructing all special technical requirements associated with such equipment pursuant to Section 6.5 following.

3.2 Cages and Adjacent Arrangement Enclosures. BellSouth shall authorize the enclosure of ICG's equipment and facilities at ICG's option or if required by local building code. ICG must arrange with a BellSouth certified contractor to construct a collocation arrangement enclosure in accordance with BellSouth's guidelines and specifications and at its sole expense. BellSouth will provide guidelines and specifications upon request. Where local building codes require enclosure specifications more stringent than BellSouth's standard enclosure specification, ICG and ICG's BellSouth certified contractor must comply with local building code requirements. ICG's BellSouth certified contractor shall be responsible for filing and receiving any and all necessary permits and/or licenses for such construction. The Certified Vendor shall bill ICG directly for all work performed for ICG pursuant to this Attachment and BellSouth shall have no liability for nor responsibility to pay such charges imposed by the Certified Vendor. ICG must provide the local BellSouth building contact with two Access Keys used to enter the locked enclosure. Except in case of emergency, BellSouth will not access ICG's locked enclosure prior to notifying ICG.

3.2.1 BellSouth has the right to review ICG's plans and specifications prior to allowing construction to start. BellSouth has the right to inspect the enclosure after construction to make sure it is designed and constructed according to BellSouth's guidelines and specifications and to require ICG to remove or correct at ICG's cost any structure that does not meet these standards.

3.3 Shared (Subleased) Caged Collocation. ICG may allow other telecommunications carriers to share ICG's caged collocation arrangement pursuant to terms and conditions agreed to by ICG ("Host") and other telecommunications carriers ("Guests") and pursuant to this section with the following exceptions: (1) where local building code does not allow Shared (Subleased) Caged Collocation and (2) where the BellSouth central office premises is located within a leased space and BellSouth is prohibited by said lease from offering such an option. ICG will provide to BellSouth a certified or notarized statement from the Guest that its use of the BellSouth space is subject to the terms of the Interconnection Agreement between BellSouth and ICG. Further, said agreement shall incorporate by reference the rates, terms, and conditions of this Attachment between BellSouth and ICG.

3.3.1 ICG shall be the sole interface and responsible party to BellSouth for the purpose of submitting applications for initial and additional equipment placements of Guest; for assessment of rates and charges contained within this Attachment; and for the purposes of ensuring that the safety and security requirements of this Attachment are fully complied with by the Guest, its employees and agents. The initial Guest application shall require the assessment of an Application Fee, as set forth in Exhibit A. Notwithstanding the foregoing, Guest may arrange directly with BellSouth for the provision of the interconnecting facilities between BellSouth and Guest and for the provisions of the services and access to unbundled network elements.

3.3.2 ICG shall indemnify and hold harmless BellSouth from any and all claims, actions, causes of action, of whatever kind or nature arising out of the presence of ICG's Guests in the Collocation Space.

3.4 Adjacent Collocation. BellSouth will provide adjacent collocation arrangements ("Adjacent Arrangement") where space within the Central Office is legitimately exhausted, subject to technical feasibility, where the Adjacent Arrangement does not interfere with access to existing or planned structures or facilities on the Central Office property and where permitted by zoning and other applicable state and local regulations. The Adjacent Arrangement shall be constructed or procured by ICG and in conformance with BellSouth's design and construction specifications. Further, ICG shall construct, procure, maintain and operate said Adjacent Arrangement(s) pursuant to all of the terms and conditions set forth in this Attachment. Rates shall be negotiated at the time of the request for Adjacent Collocation.

3.4.1 Should ICG elect such option, ICG must arrange with a BellSouth certified contractor to construct an Adjacent Arrangement structure in accordance with BellSouth's guidelines and specifications. BellSouth will provide guidelines and specifications upon request. Where local building codes require enclosure specifications more stringent than BellSouth's standard specification, ICG and ICG's contractor must comply with local building code requirements. ICG's contractor shall be responsible for filing and receiving any and all necessary zoning, permits and/or licenses for such construction. ICG's BellSouth Certified Vendor shall bill ICG directly for all work performed for ICG pursuant to this Attachment and BellSouth shall have no liability for nor responsibility to pay such charges imposed by the Certified Vendor. ICG must provide the local BellSouth building contact with two cards, keys or other access device

used to enter the locked enclosure. Except in cases of emergency, BellSouth shall not access ICG's locked enclosure prior to notifying ICG.

3.4.2 BellSouth maintains the right to review ICG's plans and specifications prior to construction of an Adjacent Arrangement(s). BellSouth may inspect the Adjacent Arrangement(s) following construction and prior to commencement, as defined in Section 4.1 following, to ensure the design and construction comply with BellSouth's guidelines and specifications. BellSouth may require ICG, at ICG's sole cost, to correct any deviations from BellSouth's guidelines and specifications found during such inspection(s), up to and including removal of the Adjacent Arrangement, within five (5) business days of BellSouth's inspection, unless the Parties mutually agree to an alternative time frame.

3.4.3 ICG shall provide a concrete pad, the structure housing the arrangement, HVAC, lighting, and all facilities that connect the structure (i.e. racking, conduits, etc.) to the BellSouth point of interconnection. At ICG's option, BellSouth shall provide an AC power source and access to physical collocation services and facilities subject to the same nondiscriminatory requirements as applicable to any other physical collocation arrangement.

3.4.4 BellSouth shall allow Shared (Subleased) Caged Collocation within an Adjacent Arrangement pursuant to the terms and conditions set forth in Section 3.3 preceding.

3.5 Shared (Subleased) Cageless Collocation. ICG may allow other telecommunications carriers to share ICG's cageless collocation arrangement as well as to lease the equipment located within the cageless arrangement pursuant to the terms and conditions of this section and section 3.3 of this Attachment. Notwithstanding the forgoing, sharing of cageless space or leasing of equipment within the cageless arrangement shall not be authorized (1) where lcoal building codes do not allow shared cageless collocation; or (2) where the BellSouth central office premises is located within a leased space and BellSouth is prohibited by that lease from offering shared cageless collocation or (3) where the only remaining space of ICG's cageless collocation arrangement requires ICG's equipment to be commingled with BellSouth equipment. For purposes of this section, commingled means that the location of the ICG cageless arrangement in the BellSouth equipment lineup is such that BellSouth is not able to enclose BellSouth's equipment.

3.5.1 ICG shall coordinate with its Guest and BellSouth to limit the number of parties working within the shared cageless collocation arrangement at the same time. BellSouth agrees to waive this provision in the event a specific project requires the presence of multiple parties all at the same time.

4. OCCUPANCY

4.1 Commencement Date. The "Commencement Date" shall be the day ICG's equipment becomes operational as described in Article 4.2, following.

4.2 Occupancy. BellSouth will notify ICG in writing that the Collocation Space is ready for occupancy.. ICG must place operational telecommunications equipment in the Collocation Space and connect with BellSouth's network within one hundred eighty (180) days after receipt of such notice. ICG must notify BellSouth in writing that collocation equipment installation is complete and is operational with BellSouth's network. BellSouth may, at its option, not accept orders for interconnected service until receipt of such notice. If ICG fails to place operational telecommunications equipment in the Collocation Space within 180 calendar days and such failure continues for a period of thirty (30) days after receipt of written notice from BellSouth, then and in that event ICG's right to occupy the Collocation Space terminates and BellSouth shall have no further obligations to ICG with respect to said Collocation Space. Termination of ICG's rights to the Collocation Space pursuant to this paragraph shall not operate to release ICG from its obligation to reimburse BellSouth for all costs reasonably incurred by BellSouth in preparing the Collocation Space, but rather such obligation shall survive this Attachment. For purposes of this paragraph, ICG's telecommunications equipment will be deemed operational when cross-connected to BellSouth's network for the purpose of service provision.

4.3 Termination. Except where otherwise agreed to by the Parties, ICG may terminate occupancy in a particular Collocation Space upon thirty (30) days prior written notice to BellSouth. Upon termination of such occupancy, ICG at its expense shall remove its equipment and other property from the Collocation Space. ICG shall have thirty (30) days from the termination date to complete such removal, including the removal of all equipment and facilities of ICG's Guests; provided, however, that ICG shall continue payment of monthly fees to BellSouth until such date as ICG has fully vacated the Collocation Space. Should ICG fail to vacate the Collocation Space within thirty (30) days from the termination date, BellSouth shall have the right to remove the equipment and other property of ICG at ICG's expense and with no liability for damage or injury to ICG's property unless caused by the gross negligence or intentional misconduct of BellSouth. Upon expiration of this Attachment, ICG shall surrender the Collocation Space to BellSouth in the same condition as when first occupied by the ICG except for ordinary wear and tear. ICG shall be responsible for the cost of removing any enclosure, together with all support structures (e.g., racking, conduits), of an Adjacent Collocation arrangement at the termination of occupancy and restoring the grounds to their original condition.

5. USE OF COLLOCATION SPACE

5.1 Equipment Type. BellSouth permits the collocation of any type of equipment used or useful for interconnection to BellSouth's network or for access to unbundled network elements in the provision of telecommunications services. Such equipment used or useful for interconnection and access to unbundled network elements includes, but is not limited to transmission equipment including, but not limited to, optical terminating equipment and multiplexers, and digital subscriber line access multiplexers, routers, asyncronous transfer mode multiplexers, and remote switching modules. Nothing in this section requires BellSouth to permit collocation of equipment used solely to provide enhanced services; provided, however,

that BellSouth may not place any limitations on the ability of requesting carriers to use all the features, functions, and capabilities of equipment collocated pursuant to this section.

5.1.1 Such equipment must at a minimum meet the following BellCore (Telcordia) Network Equipment Building Systems (NEBS) General Equipment Requirements: Criteria Level 1 requirements as outlined in the BellCore (Telcordia) Special Report SR-3580, Issue 1; equipment design spatial requirements per GR-63-CORE, Section 2; thermal heat dissipation per GR-063-CORE, Section 4, Criteria 77-79; acoustic noise per GR-063-CORE, Section 4, Criterion 128, and National Electric Code standards.

5.1.2 ICG shall not use the Collocation Space for marketing purposes nor shall it place any identifying signs or markings in the area surrounding the Collocation Space or on the grounds of the central office premises.

5.1.3 ICG shall place a plaque or other identification affixed to ICG's equipment necessary to identify ICG's equipment, including a list of emergency contacts with telephone numbers.

5.2 Entrance Facilities. ICG may elect to place ICG-owned or ICG-leased fiber entrance facilities into the Collocation Space. BellSouth will designate the point of interconnection in close proximity to the Central Office building housing the Collocation Space, such as an entrance manhole or a cable vault which are physically accessible by both parties. ICG will provide and place fiber cable at the point of interconnection of sufficient length to be pulled through conduit and into the splice location. ICG will provide and install a sufficient length of fire retardant riser cable, to which the entrance cable will be spliced, which will extend from the splice location to the ICG's equipment in the Collocation Space. In the event ICG utilizes a non-metallic, riser-type entrance facility, a splice will not be required. ICG must contact BellSouth for instructions prior to placing the entrance facility cable in the manhole. ICG is responsible for maintenance of the entrance facilities. At ICG's option BellSouth will accommodate where technically feasible a microwave entrance facility pursuant to separately negotiated terms and conditions.

5.2.1 Dual Entrance. BellSouth will provide at least two interconnection points at each central office premise where there are at least two such interconnection points available and where capacity exists. Upon receipt of a request for physical collocation under this Attachment, BellSouth shall provide ICG with information regarding BellSouth's capacity to accommodate dual entrance facilities. If conduit in the serving manhole(s) is available and is not reserved for another purpose for utilization within 12 months of the receipt of an application for collocation, BellSouth will make the requested conduit space available for installing a second entrance facility to ICG's arrangement. The location of the serving manhole(s) will be determined at the sole discretion of BellSouth. Where dual entrance is not available due to lack of capacity, BellSouth will so state in the Application Response.

5.2.2 Shared Use. ICG may utilize spare capacity on an existing interconnector entrance facility for the purpose of providing an entrance facility to another ICG collocation

arrangement within the same BellSouth Central Office. ICG must arrange with BellSouth for BellSouth to splice the utilized entrance facility capacity to ICG-provided riser cable.

5.3 Splicing in the Entrance Manhole. Although not generally permitted, should ICG request a splice to occur in the entrance manhole(s), BellSouth, at its sole discretion, may grant such a request, provided that BellSouth will not unreasonably withhold approval of requests to make such a splice. When the request for a splice is granted to ICG by BellSouth, ICG shall ensure its employees or agents entering and/or performing work in the entrance manhole(s) are trained and comply with BellSouth procedures and OSHA requirements regarding access to manholes and that BellSouth personnel are notified and present for all entrances and work performed in the entrance manhole(s). Manhole covers shall be properly closed and secured at the conclusion of entry and/or work. Advance notification to BellSouth shall occur at a minimum of 48 hours prior to desired entry for normal work activities and at a minimum of 2 hours prior to desired entry in an out of service condition.

5.4 Demarcation Point. BellSouth will designate the point(s) of interconnection between ICG's equipment and/or network and BellSouth's network. Each party will be responsible for maintenance and operation of all equipment/facilities on its side of the demarcation point. For 2-wire and 4-wire connections to BellSouth's network, the demarcation point shall be a common block on the BellSouth designated conventional distributing frame. ICG shall be responsible for providing, and ICG's BellSouth Certified Vendor shall be responsible for installing and properly labeling/stenciling, the common block, and necessary cabling pursuant to Section 6.4. For all other terminations BellSouth shall designate a demarcation point on a per arrangement basis. ICG or its agent must perform all required maintenance to equipment/facilities on its side of the demarcation point, pursuant to subsection 5.5, following, and may self-provision cross-connects that may be required within the collocation space to activate service requests. At ICG's option, a Point of Termination (POT) bay or frame may be placed in the Collocation Space.

5.5 ICG's Equipment and Facilities. ICG, or if required by this Attachment, ICG's BellSouth certified vendor, is solely responsible for the design, engineering, installation, testing, provisioning, performance, monitoring, maintenance and repair of the equipment and facilities used by ICG. Such equipment and facilities may include but are not limited to cable(s); equipment; and point of termination connections.

5.6 Co-Carrier Cross-connect. In addition to, and not in lieu of, obtaining interconnection with, or access to, BellSouth telecommunications services, unbundled network elements, and facilities, ICG may directly connect to other Interconnectors within the designated BellSouth Central Office (including to its other virtual or physical collocated arrangements) through facilities owned by ICG or through BellSouth facilities designated by ICG, at ICG's option. Such connections to other carriers may be made using either optical or electrical facilities. ICG may deploy such optical or electrical connections directly between its own facilities and the facilities of other Interconnector(s) without being routed through BellSouth equipment.

5.6.1 If ICG requests a co-Carrier cross-connect after the initial installation, ICG must submit an application with a Subsequent Application Fee. ICG must use a Certified Vendor to place the co-Carrier cross connect, except in cases where the ICG equipment and the equipment of the other Interconnector are located within contiguous collocation spaces. In cases where ICG's equipment and the equipment of the other Interconnector are located in contiguous collocation spaces, ICG will have the option to deploy the co-Carrier cross connects between the sets of equipment. Where cable support structure exists for such connection there will be a recurring charge per linear foot of support structure used. When cable support structures do not exist and must be constructed, a non-recurring charge for the individual case will be assessed.

5.7 Easement Space. From time to time BellSouth may require access to the Collocation Space. BellSouth retains the right to access such space for the purpose of making BellSouth equipment and building modifications (e.g., running, altering or removing racking, ducts, electrical wiring, HVAC, and cables). BellSouth will give reasonable notice to ICG when access to the Collocation Space is required. ICG may elect to be present whenever BellSouth performs work in the Collocation Space. The Parties agree that ICG will not bear any of the expense associated with this work.

5.8 Access. Pursuant to Section 11, ICG shall have access to the Collocation Space twenty-four (24) hours a day, seven (7) days a week. ICG agrees to provide the name, date of birth, and state driver's license number of each employee, contractor, or agents provided with Access Keys or cards ("Access Keys") prior to the issuance of said Access Keys. Access Keys shall not be duplicated under any circumstances. ICG agrees to be responsible for all Access Keys and for the return of all said Access Keys in the possession of ICG employees, contractors, Guests, or agents after termination of the employment relationship, contractual obligation with ICG or upon the termination of this Attachment or the termination of occupancy of an individual collocation arrangement.

5.8.1 Lost or Stolen Access Keys. ICG shall notify BellSouth in writing immediately in the case of lost or stolen Access Keys. ICG will pay BellSouth $250.00 per Access Key(s) lost or stolen. Should it become necessary for BellSouth to re-key buildings as a result of a lost Access Key(s) or for failure to return an Access Key(s), ICG shall pay for all reasonable costs associated with the re-keying.

5.9 Interference or Impairment. Notwithstanding any other provisions of this Attachment, equipment and facilities placed in the Collocation Space shall not interfere with or impair service provided by BellSouth or by any other Interconnector located in the Central Office; shall not endanger or damage the facilities of BellSouth or of any other Interconnector, the Collocation Space, or the Central Office; shall not compromise the privacy of any communications carried in, from, or through the Central Office; and shall not create an unreasonable risk of injury or death to any individual or to the public. If BellSouth reasonably determines that any equipment or facilities of ICG violates the provisions of this paragraph, BellSouth shall give written notice to ICG, which notice shall direct ICG to cure the violation within forty-eight (48) hours of ICG's actual receipt of written notice or, at a minimum, to commence curative measures within 24 hours and to exercise reasonable diligence to complete

such measures as soon as possible thereafter. After receipt of the notice, the parties agree to consult immediately and, if necessary, to inspect the arrangement. If ICG fails to take curative action within 48 hours or if the violation is of a character which poses an immediate and substantial threat of damage to property, injury or death to any person, or interference/impairment of the services provided by BellSouth or any other interconnector, then and only in that event BellSouth may take such action as it deems appropriate to correct the violation, including without limitation the interruption of electrical power to ICG's equipment. BellSouth will endeavor, but is not required, to provide notice to ICG prior to taking such action and shall have no liability to ICG for any damages arising from such action, except to the extent that such action by BellSouth constitutes willful misconduct.

5.10 Personalty and its Removal. Subject to requirements of this Attachment, ICG may place or install in or on the Collocation Space such facilities and equipment, including storage for and spare equipment, as it deems desirable for the conduct of business; Provided that such equipment is telecommunications equipment, does not violate floor loading requirements, imposes or could impose or contains or could contain environmental conditions or hazards. Personal property, facilities and equipment placed by ICG in the Collocation Space shall not become a part of the Collocation Space, even if nailed, screwed or otherwise fastened to the Collocation Space, but shall retain their status as personalty and may be removed by ICG at any time. Any damage caused to the Collocation Space by ICG's employees, agents or representatives during the removal of such property shall be promptly repaired by ICG at its expense.

5.11 Alterations. In no case shall ICG or any person acting on behalf of ICG make any rearrangement, modification, improvement, addition, repair, or other alteration to the Collocation Space or the BellSouth Central Office without the written consent of BellSouth, which consent shall not be unreasonably withheld. The cost of any such specialized alterations shall be paid by ICG.

5.12 Janitorial Service. ICG shall be responsible for the general upkeep and cleaning of the Caged Collocation Space and shall arrange directly with a BellSouth certified contractor for janitorial services. BellSouth shall provide a list of such contractors on a site-specific basis upon request.

6. ORDERING AND PREPARATION OF COLLOCATION SPACE

6.1 Application for Space. ICG shall submit an application document when ICG or ICG's Guest(s), as defined in Section 3.3, desires to request or modify the use of the Collocation Space.

6.1.1 Initial Application. For ICG or ICG's Guest(s) initial equipment placement, ICG shall submit to BellSouth a complete and accurate Application and Inquiry document (Bona Fide Application), together with payment of the Application Fee as stated in Exhibit A. The Bona Fide Application shall contain a detailed description and schematic

drawing of the equipment to be placed in ICG's Collocation Space(s) and an estimate of the amount of square footage required.

6.1.2 Subsequent Application Fee. In the event ICG or ICG's Guest(s) desire to modify the use of the Collocation Space, ICG shall complete an Application document detailing all information regarding the modification to the Collocation Space together with payment of the minimum Subsequent Application Fee as stated in Exhibit A. Said minimum Subsequent Application Fee shall be considered a partial payment of the applicable Subsequent Application Fee which shall be calculated as set forth below. BellSouth shall determine what modifications, if any, to the Central Office premises are required to accommodate the change requested by ICG in the Application. Such necessary modifications to the Central Office premises may include but are not limited to, floor loading changes, changes necessary to meet HVAC requirements, changes to power plant requirements, and equipment additions. The fee paid by ICG for its request to modify the use of the Collocation Space shall be dependent upon the modification requested. Where the subsequent application does not require provisioning or construction work by BellSouth, no Subsequent Application Fee will be required and the pre-paid fee shall be refunded to ICG. The fee for an application where the modification requested has limited effect (e.g., does not require capital expenditure by BellSouth) shall be the Subsequent Application Fee as set forth in Exhibit A. All other modifications shall require a Subsequent Application Fee assessed at the applicable application fee. In the event such modifications require the assessment of a full Application Fee as set forth in Exhibit A, the outstanding balance shall be due by ICG within 30 calendar days following ICG's receipt of a bill or invoice from BellSouth.

6.2 Application Response. In addition to the notice of space availability pursuant to Section 2.1, BellSouth will respond within ten (10) business days of receipt of an Application whether the Application is Bona Fide, and if it is not Bona Fide, the items necessary to cause the Application to become Bona Fide. When space has been determined to be available, BellSouth will provide a comprehensive written response within thirty (30) business days of receipt of a complete application. When multiple applications are submitted within a fifteen business day window, BellSouth will respond to the applications as soon as possible, but no later than the following: within thirty (30) business days for applications 1-5; within thirty-six (36) business days for applications 6-10; within forty-two (42) business days for applications 11-15. Response intervals for multiple applications submitted within the same timeframe for the same state in excess of 15 must be negotiated. All negotiations shall consider the total volume from all requests from telecommunications companies for collocation. The Application Response will detail whether the amount of space requested is available or if the amount of space requested is not available, the amount of space that is available. The response will also include the configuration of the space. When BellSouth's response includes an amount of space less than that requested by ICG or differently configured, ICG must amend its application to reflect the actual space available prior to submitting a Bona Fide Firm Order.

6.3 Bona Fide Firm Order. ICG shall indicate its intent to proceed with equipment installation in a BellSouth Central Office by submitting a Bona Fide Firm Order to BellSouth. A Bona Fide Firm Order requires ICG to complete the Application/Inquiry process described in Subsection 6.1, preceding, and submit the Expanded Interconnection Bona Fide Firm Order

document (BSTEI-1P-F) indicating acceptance of the written application response provided by BellSouth ("Bona Fide Firm Order") and all appropriate fees. The Bona Fide Firm Order must be received by BellSouth no later than thirty (30) calendar days after BellSouth's response to ICG's Application/Inquiry. If ICG makes changes to its application in light of BellSouth's written Application Response, BellSouth will be required to re-evaluate and respond to the change(s). In this event, BellSouth's provisioning interval will not start until the re-evaluation and response to the change(s) is complete and the Bona Fide Firm Order is received by BellSouth and all appropriate fees and duties have been executed. If BellSouth needs to reevaluate ICG's application as a result of changes requested by ICG to ICG's original application, then BellSouth will charge ICG a fee based upon the additional engineering hours required to do the reassessment. Major changes such as requesting additional space or adding additional equipment may require ICG to resubmit the application with an application fee.

6.3.1 BellSouth will establish a firm order date, per request, based upon the date BellSouth is in receipt of a Bona Fide Firm Order. BellSouth will acknowledge the receipt of ICG's Bona Fide Firm Order within five (5) business days of receipt indicating that the Bona Fide Firm Order has been received. A BellSouth response to a Bona Fide Firm Order will include a Firm Order Confirmation containing the firm order date.

6.3.2 BellSouth will permit one accompanied site visit to ICG's designated collocation arrangement location after receipt of the Bona Fide Firm Order without charge to ICG.

6.3.3 Space preparation for the Collocation Space will not begin until BellSouth receives the Bona Fide Firm Order and all applicable fees.

6.3.4 ICG must submit to BellSouth the completed Access Control Request Form (RF-2906-A) for all employees or agents requiring access to the BellSouth Central Office a minimum of 30 calendar days prior to the date ICG desires access to the Collocation Space.

6.4 Construction and Provisioning Interval. BellSouth will negotiate construction and provisioning intervals per request on an individual case basis. Excluding the time interval required to secure the appropriate government licenses and permits, BellSouth will use best efforts to complete construction for collocation arrangements under ordinary conditions as soon as possible and within a maximum of 90 business days from receipt of a complete and accurate Bona Fide Firm Order. Ordinary conditions are defined as space available with only minor changes to support systems required, such as but not limited to, HVAC, cabling and the power plant(s). Excluding the time interval required to secure the appropriate government licenses and permits, BellSouth will use best efforts to complete construction of all other collocation space ("extraordinary conditions") within 130 business days of the receipt of a complete and accurate Bona Fide Firm Order. Extraordinary conditions are defined to include but are not limited to major BellSouth equipment rearrangement or addition; power plant addition or upgrade; major mechanical addition or upgrade; major upgrade for ADA compliance; environmental hazard or hazardous materials abatement.

6.4.1 Joint Planning Meeting. Unless otherwise agreed to by the Parties, a joint planning meeting or other method of joint planning between BellSouth and ICG will commence within a maximum of 15 business days from BellSouth's receipt of a Bona Fide Firm Order and the payment of agreed upon fees. At such meeting, the Parties will agree to the preliminary design of the Collocation Space and the equipment configuration requirements as reflected in the Application and affirmed in the Bona Fide Firm Order. The Collocation Space Completion time period will be provided to ICG during the joint planning meeting or as soon as possible thereafter. BellSouth will complete all design work following the joint planning meeting.

6.4.2 Permits. Each Party or its agents will diligently pursue filing for the permits required for the scope of work to be performed by that Party or its agents within 7 business days of the completion of finalized construction designs and specifications.

6.4.3 Acceptance Walk Through. ICG and BellSouth will complete an acceptance walk through of each Collocation Space requested from BellSouth by ICG. BellSouth will correct any deviations to ICG's original or jointly amended requirements within five (5) business days after the walk through, unless the Parties jointly agree upon a different time frame. Prior to the time ICG is approved as a BellSouth Certified Vendor, BellSouth will allow ICG an additional visit, as a field trial at a security escort charge, to the collocation arrangement before the time ICG begins installation of the equipment.

6.5 Use of Certified Vendor. ICG shall select a vendor which has been approved as a BellSouth Certified Vendor to perform all engineering and installation work required in the Collocation Space. In some cases, ICG must select separate BellSouth Certified Vendors for transmission equipment, switching equipment and power equipment. BellSouth shall provide ICG with a list of Certified Vendors upon request. The Certified Vendor(s) shall be responsible for installing ICG's equipment and components, installing co-carrier cross connects, extending power cabling to the BellSouth power distribution frame, performing operational tests after installation is complete, and notifying BellSouth's equipment engineers and ICG upon successful completion of installation. The Certified Vendor shall bill ICG directly for all work performed for ICG pursuant to this Attachment and BellSouth shall have no liability for nor responsibility to pay such charges imposed by the Certified Vendor. BellSouth shall consider certifying ICG or any vendor proposed by ICG. When ICG applies to BellSouth to become a BellSouth certified vendor, the process of BellSouth certification shall be non-discriminatory and pursuant to procedures mutually agreed to by the Parties. Said procedures shall be incorporated herein by this reference.

6.6 Alarm and Monitoring. BellSouth shall place environmental alarms in the Central Office for the protection of BellSouth equipment and facilities. ICG shall be responsible for placement, monitoring and removal of environmental and equipment alarms used to service ICG's Collocation Space. Upon request, BellSouth will provide ICG with applicable tariffed service(s) to facilitate remote monitoring of collocated equipment by ICG. Both parties shall use best efforts to notify the other of any verified environmental hazard known to that party. The parties agree to utilize and adhere to the Environmental Hazard Guidelines identified as Exhibit B attached hereto.

6.7 Basic Telephone Service. Upon request of ICG, BellSouth will provide basic telephone service to the Collocation Space under the rates, terms and conditions of the current tariff offering for the service requested.

6.8 Space Preparation. BellSouth shall pro rate the costs of any renovation or upgrade to Central Office space or support mechanisms which is required to accommodate physical collocation. ICG's pro rated share will be calculated by multiplying such cost by a percentage equal to the amount of square footage occupied by ICG divided by the total Central Office square footage receiving renovation or upgrade. For this section, support mechanisms provided by BellSouth may include, but not be limited to heating/ventilation/air conditioning (HVAC) equipment, HVAC duct work, cable support structure, fire wall(s), mechanical upgrade, asbestos abatement, or ground plane addition. Such renovation or upgrade will be evaluated and the charges assessed on a per Central Office basis. BellSouth will reimburse ICG in an amount equal to ICG reasonable, demonstrative and mitigated expenditures incurred as a direct result of delays to the completion and turnover dates caused by BellSouth.

6.9 Virtual Collocation Transition. BellSouth offers Virtual Collocation pursuant to the rates, terms and conditions set forth in its FCC Tariff No. 1. For the interconnection to BellSouth's network and access to BellSouth unbundled network elements, ICG may purchase 2-wire and 4-wire Cross-Connects as set forth in Exhibit A, and ICG may place within its Virtual Collocation arrangements the telecommunications equipment set forth in Section 5.1.

6.9.1 Upon ICG's submission of a physical collocation Application requesting the conversion of an ICG virtual collocation arrangement to a physical collocation arrangement ("Conversion Application"), BellSouth will evaluate each request and will advise ICG of its conversion options and the location of the physical collocation arrangement in BellSouth's written Application Response. The conversion will either change ICG's virtual collocation arrangement to a cageless physical collocation arrangement without the relocation of the arrangement ("V to P in place") or the conversion will require the relocation of the equipment arrangement to another location within the BellSouth Central Office premises ("V to P move").

6.9.2 The V to P in place conversion option will not be unreasonably withheld by BellSouth provided however that said option will not available where local building codes do not allow cageless collocation; or where the BellSouth central office premises is located within a leased space and BellSouth is prohibited by lease from offering cageless collocation; or where ICG's virtual collocation arrangement is commingled with BellSouth equipment and adequate space is available for physical collocation elsewhere within the BellSouth central office premises; or where ICG requires an arrangement enclosure that cannot be accommodated in the existing virtual collocation arrangement space. For purposes of this subsection, commingled means that the location of the ICG virtual arrangement bay(s) in the BellSouth lineup are such that BellSouth is not able to enclose its own equipment.

6.9.3 Concurrent with the submission of the Conversion Application, ICG will submit a fee of one-half of the full Application Fee set forth in Exhibit A. Said fee shall be

interim and shall recover the costs associated with assessing the feasibility of a V to P in place conversion. BellSouth shall, within 90 days of the execution of this Agreement, develop and file with the appropriate state regulatory agency a TELRIC cost study to determine the Conversion Application Fee. Once the Conversion Application fee is determined by the state regulatory agency or otherwise agreed upon between the Parties, the Parties will amend this Agreement to incorporate the Conversion Application fee. If, after evaluation of the Conversion Application, BellSouth determines that ICG's request requires a V to P move, BellSouth shall so advise ICG in BellSouth's Application Response. The difference between the Conversion Application Fee and the full Application Fee set forth in Exhibit A and the other agreed upon fees required pursuant to section 6.3 shall be due from ICG upon its Bona Fide Firm Order of the V to P move conversion.

6.9.4 In regards to V to P in place conversions, ICG will arrange directly with its BellSouth certified vendor for any physical changes required to bring the virtual collocation arrangement into conformance with the cageless collocation requirements of this Attachment. BellSouth will charge ICG an administrative change charge equal to the TELRIC costs BellSouth actually incurs to complete administrative and billing records changes. ICG shall work cooperatively with BellSouth in completing any rearrangements or administrative changes required to execute the V to P in place conversion.

6.9.5 In regards to V to P move conversions, ICG will arrange directly with a BellSouth Certified Vendor to install the new physical collocation arrangement in the location designated by BellSouth and, once the cutover is complete, the BellSouth Certified Vendor will remove the ICG virtual collocation arrangement.

6.9.6 The provisioning interval for all V to P in place conversions as well as all V to P move conversions will be determined on a case-by-case basis. At the joint planning meeting required by section 6.4.1, BellSouth will provide an estimated timeline for the interval and work with ICG to coordinate the activities associated with the conversion. BellSouth will work cooperatively with ICG and will use its best efforts to implement the conversion as soon as possible within the intervals contained within section 6.4 of this Attachment.

6.9.7 Any work done prior to the Tennessee Regulatory Authority setting permanent rates for the rates marked as interim on Exhibit A will be trued up upon the establishment of permanent rates pursuant to section 7.7 of this Attachment.

6.10 Cancellation. If, at anytime, ICG cancels its order for the Collocation Space(s), ICG will reimburse BellSouth for any expenses incurred up to the date that written notice of the cancellation is received. In no event will the level of reimbursement under this paragraph exceed the maximum amount ICG would have otherwise paid for work undertaken by BellSouth if no cancellation of the order had occurred.

6.11 Licenses. ICG, at its own expense, will be solely responsible for obtaining from governmental authorities, and any other appropriate agency, entity, or person, all rights,

privileges, and licenses necessary or required to operate as a provider of telecommunications services to the public or to occupy the Collocation Space.

7. RATES AND CHARGES

7.1 Non-recurring Fees. In addition to the Application Fee referenced in Section 6, preceding, ICG shall remit payment of a Cable Installation Fee and one-half (1/2) of the estimated Space Preparation Fee, as applicable, coincident with submission of a Bona Fide Firm Order. The outstanding balance of the actual Space Preparation Fee shall be due thirty (30) calendar days following ICG's receipt of a bill or invoice from BellSouth. Once the installation of the initial equipment arrangement is complete, a subsequent application fee may apply (as described in Subsection 7.4, when ICG requests a modification to the arrangement.

7.2 Documentation. BellSouth shall provide documentation to establish the actual Space Preparation Fee. The Space Preparation Fee will be pro rated as prescribed in Section 6, preceding.

7.3 Cable Installation. Cable Installation Fee(s) are assessed per entrance fiber placed.

7.4 Floor Space. The floor space charge includes reasonable charges for lighting, heat, air conditioning, ventilation and other allocated expenses associated with maintenance of the Central Office but does not include amperage necessary to power ICG's equipment. When the Collocation Space is enclosed, ICG shall pay floor space charges based upon the number of square feet so enclosed. When the Collocation Space is not enclosed, ICG shall pay floor space charges based upon the following floor space calculation: [(depth of the equipment lineup in which the rack is placed) + (0.5 x maintenance aisle depth) + (0.5 x wiring aisle depth)] X (width of rack and spacers). For purposes of this calculation, the depth of the equipment lineup shall consider the footprint of equipment racks plus any equipment overhang. BellSouth will assign unenclosed Collocation Space in conventional equipment rack lineups where feasible. In the event ICG's collocated equipment requires special cable racking, isolated grounding or other treatment which prevents placement within conventional equipment rack lineups, ICG shall be required to request an amount of floor space sufficient to accommodate the total equipment arrangement. Floor space charges are due beginning with the date on which BellSouth releases the Collocation Space for occupancy or on the date ICG first occupies the Collocation Space, whichever is sooner.

7.5 Power. BellSouth shall supply –48 Volt (-48V) DC power for ICG's Collocation Space within the central office premises and shall make available AC power at ICG's option for Adjacent Arrangement collocation.

7.5.1 Charges for -48V DC power will be assessed per ampere per month based upon the certified vendor engineered and installed power feed fused ampere capacity. Rates include redundant feeder fuse positions (A&B) and cable rack to ICG's equipment or space enclosure. When obtaining power from a BellSouth Battery Distribution Fuse Bay, fuses and

power cables (A&B) must be engineered (sized), and installed by ICG's certified vendor. When obtaining power from a BellSouth Power Board, power cables (A&B) must be engineered (sized), and installed by ICG's certified power vendor. ICG's certified vendor must also provide a copy of the engineering power specification prior to the Commencement Date. In the event BellSouth shall be required to construct additional DC power plant or upgrade the existing DC power plant in a Central Office as a result of ICG's request to collocate in that Central Office ("Power Plant Construction"), ICG shall pay its pro-rata share of costs associated with the Power Plant Construction. The determination of whether Power Plant Construction is necessary shall be within BellSouth's sole, but reasonable, discretion. BellSouth shall comply with all BellCore (Telcordia) and ANSI Standards regarding power cabling, including BellCore (Telcordia) Network Equipment Building System (NEBS) StandardGR-63-CORE. BellSouth will notify ICG of the need for the Power Plant Construction and will estimate the costs associated with the Power Plant Construction if BellSouth were to perform the Power Plant Construction. The costs of power plant construction shall be pro-rated and shared among all who benefit from that construction. ICG shall pay BellSouth one-half of its pro rata share of the estimated Power Plant Construction costs prior to commencement of the work. ICG shall pay BellSouth the balance due (actual cost less one-half of the estimated cost) within thirty (30) days of completion of the Power Plant Construction. ICG has the option to perform the Power Plant Construction itself; provided, however, that such work shall be performed by a BellSouth certified contractor and such contractor shall comply with BellSouth's guidelines and specifications. Where the Power Plant Construction results in construction of a new power plant room, upon termination of this Attachment ICG shall have the right to remove its equipment from the power plant room, but shall otherwise leave the room intact. Where the Power Plant Construction results in an upgrade to BellSouth's existing power plant, upon termination of this Attachment, such upgrades shall become the property of BellSouth.

7.5.2 Charges for AC power will be assessed per breaker ampere per month based upon the certified vendor engineered and installed power feed fused ampere capacity. Rates include the provision of commercial and standby AC power. When obtaining power from a BellSouth Service Panel, fuses and power cables must be engineered (sized), and installed by ICG's certified vendor. ICG's certified vendor must also provide a copy of the engineering power specification prior to the Commencement Date. Charges for AC power shall be assessed pursuant to the rates specified in Exhibit A. AC power voltage and phase ratings shall be determined on a per location basis.

7.6 Security Escort. A security escort will be required whenever ICG or its approved agent desires access to the entrance manhole or must have access to the Central Office Premises after the one accompanied site visit allowed pursuant to subsection 6.2.2 prior to completing BellSouth's Security Training requirements and/or prior to Space Acceptance. Rates for a security escort are assessed in one-half (1/2) hour increments according to the schedule appended hereto as Exhibit A. Security escorts are not required for ICG when ICG acts in its capacity as a certified vendor and upon ICG's compliance with the security requirements found in Sections 5.8 and 11 of Attachment.

7.7 Rate "True-Up." The Parties agree that the prices reflected as interim herein shall be "trued-up" (up or down) based on final prices either determined by further agreement or by final order, including any appeals, in a proceeding involving BellSouth before the Tennessee Regulatory Authority or any other body having jurisdiction over this agreement (hereinafter "Commission"). Under the "true-up" process, the interim price for each service shall be multiplied by the volume of that service purchased to arrive at the total interim amount paid for that service ("Total Interim Price"). The final price for that service shall be multiplied by the volume purchased to arrive at the total final amount due ("Total Final Price"). The Total Interim Price shall be compared with the Total Final Price. If the Total Final Price is more than the Total Interim Price, ICG shall pay the difference to BellSouth. If the Total Final Price is less than the Total Interim Price, BellSouth shall pay the difference to ICG. Each party shall keep its own records upon which a "true-up" can be based and any final payment from one party to the other shall be in an amount agreed upon by the Parties based on such records. In the event of any disagreement as between the records or the Parties regarding the amount of such "true-up," the Parties agree that the Commission shall be called upon to resolve such differences.

7.8 Other. If no rate is identified in the contract, the rate for the specific service or function will be negotiated by the parties upon request by either party. Payment of all other charges under this Attachment shall be due thirty (30) days after receipt of the bill (payment due date). ICG will pay a late payment charge of one and one-half percent (1-1/2%) assessed monthly on any balance which remains unpaid after the payment due date.

8. INSURANCE

8.1 ICG shall, at its sole cost and expense, procure, maintain, and keep in force insurance as specified in this Article VI and underwritten by insurance companies licensed to do business in the states applicable under this Attachment and having a BEST Insurance Rating of B ++ X (B ++ ten).

8.2 ICG shall maintain the following specific coverage:

8.2.1 Commercial General Liability coverage in the amount of ten million dollars ($10,000,000.00) or a combination of Commercial General Liability and Excess/Umbrella coverage totaling not less than ten million dollars ($10,000,000.00). BellSouth shall be named as an ADDITIONAL INSURED on ALL applicable policies as specified herein.

8.2.2 Statutory Workers Compensation coverage and Employers Liability coverage in the amount of one hundred thousand dollars ($100,000.00) each accident, one hundred thousand dollars ($100,000.00) each employee by disease, and five hundred thousand dollars ($500,000.00) policy limit by disease.

8.2.3 ICG may elect to purchase business interruption and contingent business interruption insurance, having been advised that BellSouth assumes no liability for loss of profit or revenues should an interruption of service occur.

8.3 The limits set forth in Subsection 6.2 above may be increased by BellSouth from time to time during the term of this Attachment upon thirty (30) days notice to ICG to at least such minimum limits as shall then be customary with respect to comparable occupancy of BellSouth structures.

8.4 All policies purchased by ICG shall be deemed to be primary and not contributing to or in excess of any similar coverage purchased by BellSouth. All insurance must be in effect on or before the date equipment is delivered to BellSouth's Central Office and shall remain in effect for the term of this Attachment or until all ICG's property has been removed from BellSouth's Central Office, whichever period is longer. If ICG fails to maintain required coverage, BellSouth may pay the premiums thereon and seek reimbursement of same from ICG.

8.5 ICG shall submit certificates of insurance reflecting the coverage required pursuant to this Section a minimum of ten (10) days prior to the commencement of any work in the Collocation Space. Failure to meet this interval may result in construction and equipment installation delays. ICG shall arrange for BellSouth to receive thirty (30) days advance notice of cancellation from ICG's insurance company. ICG shall forward a certificate of insurance and notice of cancellation to BellSouth at the following address:

BellSouth Telecommunications, Inc.
Attn.: Risk Management Coordinator
17H53 BellSouth Center
675 W. Peachtree Street, NE
Atlanta, GA 30375

8.6 ICG must conform to recommendations made by BellSouth's fire insurance company to the extent BellSouth has agreed to, or shall hereafter agree to, such recommendations.

8.7 Failure to comply with the provisions of this Section will be deemed a material breach of this Attachment.

9. MECHANICS LIENS

9.1 If any mechanics lien or other liens shall be filed against property of either party (BellSouth or ICG), or any improvement thereon by reason of or arising out of any labor or materials furnished or alleged to have been furnished or to be furnished to or for the other party or by reason of any changes, or additions to said property made at the request or under the direction of the other party, the other party directing or requesting those changes shall, within thirty (30) days after receipt of written notice from the party against whose property said lien has been filed, either pay such lien or cause the same to be bonded off the affected property in the manner provided by law. The party causing said lien to be placed against the property of the other shall also defend, at its sole cost and expense, on behalf of the other, any action, suit or proceeding which may be brought for the enforcement of such liens and shall pay any damage and discharge any judgment entered thereon.

10. INSPECTIONS

10.1 BellSouth shall conduct an inspection of ICG's equipment and facilities in the Collocation Space(s) prior to the activation of facilities between ICG's equipment and equipment of BellSouth. BellSouth may conduct an inspection if ICG adds equipment and may otherwise conduct routine inspections at reasonable intervals mutually agreed upon by the Parties. BellSouth shall provide ICG with a minimum of forty-eight (48) hours or two (2) business days, whichever is greater, advance notice of all such inspections. All costs of such inspection shall be borne by BellSouth.

11. SECURITY AND SAFETY REQUIREMENTS

11.1 Only BellSouth employees, BellSouth certified vendors and authorized employees, authorized Guests, pursuant to Section 3.3, preceding, or authorized agents of ICG will be permitted in the BellSouth Central Office. ICG shall provide its employees and agents with picture identification which must be worn and visible at all times while in the Collocation Space or other areas in or around the Central Office. The photo Identification card shall bear, at a minimum, the employee's name and photo, and the ICG name. BellSouth reserves the right to remove from its premises any employee of ICG not possessing identification issued by ICG. ICG shall hold BellSouth harmless for any damages resulting from such removal of its personnel from BellSouth premises. ICG shall be solely responsible for ensuring that any Guest of ICG is in compliance with all subsections of this Section 11.

11.1.1 ICG will be required, at its own expense, to conduct a statewide investigation of criminal history records for each ICG employee being considered for work on the BellSouth Central Office, for the states/counties where the ICG employee has worked and lived for the past five years. Where state law does not permit statewide collection or reporting, an investigation of the applicable counties is acceptable.

11.1.2 ICG will be required to administer to their personnel assigned to the BellSouth Central Office security training either provided by BellSouth, or meeting criteria defined by BellSouth.

11.1.3 ICG shall not assign to the BellSouth Central Office any personnel with records of felony criminal convictions. ICG shall not assign to the BellSouth Central Office any personnel with records of misdemeanor convictions, excluding traffic and traffic related offenses, without advising BellSouth of the nature and gravity of the offense(s) to the extent the information is known by ICG. BellSouth reserves the right to refuse building access to any ICG personnel who have been identified to have misdemeanor criminal convictions.

11.1.4 For each ICG employee requiring access to a BellSouth Central Office pursuant to this agreement, ICG shall furnish BellSouth, prior to an employee gaining such access, a notarized affidavit certifying that the aforementioned background check and security training were completed. The affidavit will contain a statement certifying no felony convictions were found and certifying that the security training was completed by the employee. If the

employee's criminal history includes misdemeanor convictions, excluding traffic and traffic related offenses, ICG will disclose, to the extent the information is known to ICG, the nature of the convictions to BellSouth at that time.

11.1.5 At BellSouth's request, ICG shall promptly remove from the BellSouth premises any employee of ICG BellSouth does not wish to grant access to its premises pursuant to any investigation conducted by BellSouth. Within 20 days of ICG's removal of its employee, the Parties shall discuss the circumstances leading to the removal and BellSouth, if necessary, will review its decision.

11.2 Notification to BellSouth. BellSouth reserves the right to interview ICG's employees, agents, or contractors. ICG and its contractors shall cooperate fully with BellSouth's investigation into allegations of wrongdoing or criminal conduct committed by or involving ICG's employees, agents, or contractors. Additionally, BellSouth reserves the right to bill ICG for all costs associated with investigations involving its employees, agents, or contractors if it can be reasonably established that ICG's employees, agents, or contractors are responsible for the alleged act. BellSouth shall bill ICG for BellSouth property which is stolen or damaged where an investigation determines the culpability of ICG's employees, agents, or contractors. ICG shall notify BellSouth in writing immediately in the event that the CLEC discovers one of its employees already working on the BellSouth premises is a possible security risk. BellSouth reserves the right to permanently remove from its premises any employee of ICG identified as posing a security risk to BellSouth or any other CLEC, or having violated BellSouth policies set forth in the BellSouth CLEC Security Training. ICG shall hold BellSouth harmless for any damages resulting from such removal of its personnel from BellSouth premises.

11.3 Use of Supplies and Equipment. Unauthorized use of telecommunications equipment or supplies by either Party, whether or not used routinely to provide telephone service (e.g. plug-in cards,) will be strictly prohibited and handled appropriately. Reasonable costs associated with such unauthorized use, including all associated investigative costs, may be charged to the offending Party if the investigation determines that the use of said telecommunications equipment or supplies was unauthorized.

11.4 Use of Official Lines by ICG Employees. Except for local calls necessary in the performance of their work, ICG employees shall not use the telephones in the BellSouth Central Office. Charges for unauthorized telephone calls made by ICG's employees may be charged to ICG as may be all associated investigative costs. At BellSouth's request, ICG shall promptly and permanently remove from BellSouth's premises any employee of ICG found to be in violation of this rule.

11.5 Accountability. Full compliance with the Security requirements of this section shall in no way limit the accountability of any CLEC for the improper actions of its employees.

12. DESTRUCTION OF COLLOCATION SPACE

12.1 In the event a Collocation Space is wholly or partially damaged by fire,

windstorm, tornado, flood or by similar causes to such an extent as to be rendered wholly unsuitable for ICG's permitted use hereunder, then either party may elect within ten (10) days after such damage, to terminate this Attachment, and if either party shall so elect, by giving the other written notice of termination, both parties shall stand released of and from further liability under the terms hereof. If the Collocation Space shall suffer only minor damage and shall not be rendered wholly unsuitable for ICG's permitted use, or is damaged and the option to terminate is not exercised by either party, BellSouth covenants and agrees to proceed promptly without expense to ICG, except for improvements not the property of BellSouth, to repair the damage. BellSouth shall have a reasonable time within which to rebuild or make any repairs, and such rebuilding and repairing shall be subject to delays caused by storms, shortages of labor and materials, government regulations, strikes, walkouts, and causes beyond the control of BellSouth, which causes shall not be construed as limiting factors, but as exemplary only. ICG may, at its own expense, accelerate the rebuild of its collocated space and equipment provided however that a certified vendor is used and the necessary space preparation has been completed. Rebuild of equipment must be performed by a BellSouth Certified Vendor. If ICG's acceleration of the project increases the cost of the project, then those additional charges will be incurred by ICG. Where allowed and where practical, ICG may erect a temporary facility while BellSouth rebuilds or makes repairs. In all cases where the Collocation Space shall be rebuilt or repaired, ICG shall be entitled to an equitable abatement of rent and other charges, depending upon the unsuitability of the Collocation Space for ICG's permitted use, until such Collocation Space is fully repaired and restored and ICG's equipment installed therein (but in no event later than thirty (30) days after the Collocation Space is fully repaired and restored). Where ICG has placed an Adjacent Arrangement pursuant to section 3.4, ICG shall have the sole responsibility to repair or replace said Adjacent Arrangement provided herein. Pursuant to this section, BellSouth will restore the associated services to the Adjacent Arrangement.

13. EMINENT DOMAIN

13.1 If the whole of a Collocation Space or Adjacent Arrangement shall be taken by any public authority under the power of eminent domain, then this Attachment shall terminate as of the day possession shall be taken by such public authority and rent and other charges for the Collocation Space or Adjacent Arrangement shall be paid up to that day with proportionate refund by BellSouth of such rent and charges as may have been paid in advance for a period subsequent to the date of the taking. If any part of the Collocation Space or Adjacent Arrangement shall be taken under eminent domain, BellSouth and ICG shall each have the right to terminate this Attachment and declare the same null and void, by written notice of such intention to the other party within ten (10) days after such taking.

14. NONEXCLUSIVITY

14.1 ICG understands that this Attachment is not exclusive and that BellSouth may enter into similar agreements with other parties. Assignment of space pursuant to all such agreements shall be determined by space availability and made on a first come, first served basis.

EXHIBIT A: BELLSOUTH/ICG RATES – TENNESSEE PHYSICAL COLLOCATION

Rates marked with an asterisk (*) are interim and are subject to true-up

USOC	Rate Element Description	Unit	Recurring Rate (RC)	Non-Recurring Rate (NRC)
PE1BA	Application Fee	Per request	NA	$3,850.00
PE1CA	Subsequent Application Fee (Note 1)	Per request	NA	$1,600.00 Minimum
	Space Preparation Fees			
PE1SJ	Firm Order Processing*			$1,211.00
PE1SK	Central Office Modifications*	Per sq. ft.	$2.58	
PE1SL	Common Systems Modifications - Cageless*	Per sq. ft.	$2.96	
PE1SM	Common Systems Modifications – Caged *	Per cage	$100.66	
	Space Enclosure (100 sq. ft. minimum)			
PE1BW	Welded Wire-mesh	Per first 100 sq. ft.	$190.79	NA
PE1CW	Welded Wire-mesh	Per add'l 50 sq. ft.	$19.38	NA
PE1PJ	Floor Space	Per sq. ft.	$7.50	NA
PE1BD	Cable Installation	Per cable	NA	$2,750.00
PE1PM	Cable Support Structure	Per entrance cable	$13.35	NA
	Power			
PE1PL	-48V DC Power*	Per amp	$8.86	
PE1FB	120V AC Power single phase*	Per breaker amp	$5.50	ICB
PE1FD	240V AC Power single phase*	Per breaker amp	$11.00	ICB
PE1FE	120V AC Power three phase*	Per breaker amp	$16.50	ICB
PE1FG	277 AC Power three phase*	Per breaker amp	$38.20	ICB

				First/Add'l
	Cross Connects (Note 1)	Per cross connect		
PE1P2	2-wire		$.30	$19.20/$19.20
PE1P4	4-wire		$.50	$19.20/$19.20
PE1P1	DS-1		$8.00	$155.00/27.00
PE1P3	DS-3		$72.00	$155.00/27.00
PE1F2	2-fiber		$15.64	$41.56/29.82
PE1F4	4-fiber		$28.11	$50.53/$38.78
	Co-Carrier Cross-Connect			
PE1ES	Fiber Cable Support Structure,	Per linear ft.	$0.03	$540.00
PE1DS	Copper or Coaxial Cable Support Structure	Per linear ft.	$0.04	$540.00
PE1AX	Security Access System Security System	Per central office	$52.00	
	New Access Card Activation	Per card		$55.00
PE1AA	Administrative change, existing card	Per card		$35.00
PE1AR	Replace lost or stolen card	Per card		$250.00
PE1SR	Space Availability Report*	Per premises requested		$550.00
	POT Bay Arrangements	Per cross connect		
	Prior to 6/1/99			
PE1PE	2-Wire Cross-Connect		$0.40	NA
PE1PF	4-Wire Cross-Connect		$1.20	NA
PE1PG	DS1 Cross-Connect		$1.20	NA
PE1PH	DS3 Cross-Connect		$8.00	NA
PE1B2	2-Fiber Cross-Connect		$38.79	NA
PE1B4	4-Fiber Cross-Connect		$52.31	NA
AEH	Additional Engineering Fee (Note 6)	Per request, First half hour/add'l half hour		First/Add'l Basic Time $31.00/$22.00 Overtime $37.00/$26.00
	Security Escort	Per half hr/add'l half hr		
PE1BT	Basic Time		NA	$41.00/$25.00
PE1OT	Overtime		NA	$48.00/$30.00
PE1PT	Premium Time		NA	$55.00/$35.00

Note(s):

N/A refers to rate elements which do not have a negotiated rate.

(1) **Cross Connects:** For interconnection to BellSouth's network and access to BellSouth unbundled network elements, ICG may purchase 2-wire and 4-wire cross-connects for use within its Virtual Collocation arrangements, which are available through the FCC Tariff No. 1, Section 20.

EXHIBIT B

ENVIRONMENTAL AND SAFETY PRINCIPLES

The following principles provide basic guidance on environmental and safety issues when applying for and establishing Physical Collocation arrangements.

1. GENERAL PRINCIPLES

1.1 Compliance with Applicable Law. BellSouth and ICG agree to comply with applicable federal, state, and local environmental and safety laws and regulations including U.S. Environmental Protection Agency (USEPA) regulations issued under the Clean Air Act (CAA), Clean Water Act (CWA), Resource Conservation and Recovery Act (RCRA), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Superfund Amendments and Reauthorization Act (SARA), the Toxic Substances Control Act (TSCA), and OSHA regulations issued under the Occupational Safety and Health Act of 1970, as amended and NFPA and National Electrical Codes (NEC) and the NESC ("Applicable Laws"). Each party shall notify the other if compliance inspections are conducted by regulatory agencies and/or citations are issued that relate to any aspect of this agreement.

1.2 Notice. BellSouth and ICG shall provide notice to the other, including Material Safety Data Sheets (MSDSs), of known and recognized physical hazards or Hazardous Chemicals existing on site or brought on site. Each party is required to provide specific notice for known potential Imminent Danger conditions. ICG should contact 1-800-743-6737 for BellSouth MSDS sheets.

1.3 Practices/Procedures. BellSouth may make available additional environmental control procedures for ICG to follow when working at a BellSouth Premise (See Section 2, below). These practices/procedures will represent the regular work practices required to be followed by the employees and contractors of BellSouth for environmental protection. ICG will require its contractors, agents and others accessing the BellSouth Premises to comply with these practices. Section 2 lists the Environmental categories where BellSouth practices should be followed by ICG when operating in the BellSouth Premises.

1.4 Environmental and Safety Inspections. BellSouth reserves the right to inspect the ICG space with proper notification. BellSouth reserves the right to stop any ICG work operation that imposes Imminent Danger to the environment, employees or other persons in the area or Facility.

1.5 Hazardous Materials Brought On Site. Any hazardous materials brought into, used, stored or abandoned at the BellSouth Premises by ICG are owned by ICG. ICG will indemnify BellSouth for claims, lawsuits or damages to persons or property caused by these materials. Without prior written BellSouth approval, no substantial new safety or environmental hazards can be created by ICG or different hazardous materials used by ICG at BellSouth Facility. ICG must demonstrate adequate emergency response capabilities for its materials used or remaining at the BellSouth Facility.

1.6 Spills and Releases. When contamination is discovered at a BellSouth Premise, the party discovering the condition must notify BellSouth. All Spills or Releases of regulated materials will immediately be reported by ICG to BellSouth.

1.7 Coordinated Environmental Plans and Permits. BellSouth and ICG will coordinate plans, permits or information required to be submitted to government agencies, such as emergency response plans, spill prevention control and countermeasures (SPCC) plans and community reporting. If fees are associated with filing, BellSouth and ICG will develop a cost sharing procedure. If BellSouth's permit or EPA identification number must be used, ICG must comply with all of BellSouth's permit conditions and environmental processes, including environmental "best management practices (BMP)" (see Section 2, below) and/or selection of BellSouth disposition vendors and disposal sites.

1.8 Environmental and Safety Indemnification. BellSouth and ICG shall indemnify, defend and hold harmless the other party from and against any claims (including, without limitation, third-party claims for personal injury or death or real or personal property damage), judgments, damages, (including direct and indirect damages, and punitive damages), penalties, fines, forfeitures, costs, liabilities, interest and losses arising in connection with the violation or alleged violation of any Applicable Law or contractual obligation or the presence or alleged presence of contamination arising out of the acts or omissions of the indemnifying party, its agents, contractors, or employees concerning its operations at the Facility.

2. CATEGORIES FOR CONSIDERATION OF ENVIRONMENTAL ISSUES

When performing functions that fall under the following Environmental categories on BellSouth's Premises, ICG agrees to comply with the applicable sections of the current issue of BellSouth's Environmental and Safety Methods and Procedures (M&Ps), incorporated herein by this reference. ICG further agrees to cooperate with BellSouth to ensure that ICG's employees, agents, and/or subcontractors are knowledgeable of and satisfy those provisions of BellSouth's Environmental M&Ps which apply to the specific Environmental function being performed by ICG, its employees, agents and/or subcontractors.

The most current version of reference documentation must be requested from BellSouth.

2. Categories for Consideration of Environmental Issues (cont.)

ENVIRONMENTAL CATEGORIES	ENVIRONMENTAL ISSUES	ADDRESSED BY THE FOLLOWING DOCUMENTATION
Disposal of hazardous material or other regulated material (e.g., batteries, fluorescent tubes, solvents & cleaning materials)	Pollution liability insurance EVET approval of contractor	Std T&C 450 GU-BTEN-001BT, Chapter 4 Std T&C 660-3 GU-BTEN-001BT, Chapter 10
Emergency response	Hazmat/waste release/spill firesafety emergency	GU-BTEN-001BT, Chapter Building Emergency Operations Plan (EOP) (specific to Premises)
Contract labor/outsourcing for services with environmental implications to be performed on BellSouth Premises (e.g., disposition of hazardous material/waste; maintenance of storage tanks)	Performance of services in accordance with BST's environmental M&Ps Insurance	Std T&C 450 Std T&C 450-B (Contact E/S or your DEC/LDEC for copy of appropriate E/S M&Ps.) Std T&C 660
Transportation of hazardous material	Pollution liability insurance EVET approval of contractor	Std T&C 450 GU-BTEN-001BT, Chapter 4 Std T&C 660-3 GU-BTEN-001BT, Chapter 10
Maintenance/operations work which may produce a waste Other maintenance work	Protection of BST employees and equipment	Std T&C 450 GU-BTEN-001BT, Chapter 10 29CFR 1910.147 29CFR 1910 Subpart O
Janitorial services	All waste removal and disposal must conform to all applicable federal, state and local regulations All HazMat & Waste Asbestos notification protection of BST employees and equipment	P&SM Manager - Procurement GU-BTEN-001BT, Chapter 4, GU-BTEN-001BT, Chapter 3 BSP 010-170-001BS (Hazcom)
Manhole cleaning	Pollution liability insurance Manhole entry requirements EVET approval of contractor	Std T&C 450 Std T&C 660-3 BSP 620-145-011PR Issue A, August 1996 GU-BTEN-001BT, Chapter 10 RL9706008BT
Removing or disturbing building materials that may contain asbestos	Asbestos work practices	GU-BTEN-001BT, Chapter 3

3. DEFINITIONS

Generator. Under RCRA, the person whose act produces a Hazardous Waste, as defined in 40 CFR 261, or whose act first causes a Hazardous Waste to become subject to regulation. The Generator is legally responsible for the proper management and disposal of Hazardous Wastes in accordance with regulations.

Hazardous Chemical. As defined in the U.S. Occupational Safety and Health (OSHA) hazard communication standard (29 CFR 1910.1200), any chemical which is a health hazard or physical hazard.

Hazardous Waste. As defined in section 1004 of RCRA.

Imminent Danger. Any conditions or practices at a facility which are such that a danger exists which could reasonably be expected to cause immediate death or serious harm to people or immediate significant damage to the environment or natural resources.

Spill or Release. As defined in Section 101 of CERCLA.

4. ACRONYMS

DEC/LDEC - Department Environmental Coordinator/Local Department Environmental Coordinator

GU-BTEN-001BT - BellSouth Environmental Methods and Procedures

EVET - Environmental Vendor Evaluation Team

P&SM - Property & Services Management

Std. T&C - Standard Terms & Conditions

NESC - National Electrical Safety Codes

Attachment 5

Access to Numbers and Number Portability

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ACCESS TO NUMBERS AND NUMBER PORTABILITY

1. Non-Discriminatory Access to Telephone Numbers

All the negotiated rates, terms and conditions set forth in this Attachment pertain to the provisioning of local number portability.

1.1 During the term of this Agreement, ICG shall contact Neustar for the assignment of numbering resources. In order to be assigned a Central Office Code, ICG will be required to complete the Central Office Code (NXX) Assignment Request and Confirmation Form (Code Request Form) in accordance with Industry Numbering Committee's Central Office Code (NXX) Assignment Guidelines (INC 95-0407-008).

1.2 For the purposes of the resale of BellSouth's telecommunications services by ICG, BellSouth will provide ICG with on line access to telephone numbers for reservation on a first come first served basis. Such reservations of telephone numbers, on a pre-ordering basis shall be for a period of ninety (90) days. ICG acknowledges that there may be instances where there is a shortage of telephone numbers in a particular CLLIC and in such instances BellSouth may request that ICG cancel its reservations of numbers. ICG shall comply with such request.

1.3. Further, upon ICG request and for the purposes of the resale of BellSouth's telecommunications services by ICG, BellSouth will reserve up to 100 telephone numbers per Common Language Location Identifier Code (CLLIC), for ICG's sole use. Such telephone number reservations shall be transmitted to ICG via electronic file transfer. Such reservations shall be valid for ninety (90) days from the reservation date. ICG acknowledges that there may be instances where there is a shortage of telephone numbers in a particular CLLIC and in such instances BellSouth shall use its best efforts to reserve for a ninety (90) day period a sufficient quantity for ICG's reasonable need in that particular CLLIC.

2. Number Portability Permanent Solution

2.1 The FCC, the Commissions, and industry forums have developed and BellSouth is implementing a permanent approach to providing service provider number portability. Both Parties will implement a permanent approach as developed and approved by the Commission, the FCC and industry forums. Consistent with the requirements to move to Permanent Number Portability (PNP) as set forth in Section 5 of the Attachment, Interim Service Provider Number Portability (SPNP) may be available only until such permanent solution is implemented in an end office.

2.2 End User Line Charge. Recovery of charges associated with implementing PNP through a monthly charge assessed to end users has been authorized by the FCC. This end user line charge will be as filed in FCC No. 1 and will be billed to ICG where ICG is a subscriber to local switching or where ICG is a reseller of BellSouth telecommunications services. This charge will not be discounted.

3. Service Provider Number Portability

3.1 Definition. Until the industry-wide permanent solution is implemented in an end office, BellSouth shall provide Service Provider Number Portability ("SPNP"). SPNP is an interim service arrangement whereby an end user who switches subscription of his local exchange service from BellSouth to a CLEC, or vice versa, is permitted to retain the use of his existing assigned telephone number, provided that the end user remains at the same location for his local exchange service or changes locations and service providers but stays within the same serving wire center of his existing number.

3.2 Methods of Providing Number Portability. SPNP is available through either remote call forwarding or direct inward dialing trunks, at the election of ICG. Remote call forwarding (SPNP-RCF) is an existing switch-based BellSouth service that redirects calls within the telephone network. Direct inward dialing trunks (SPNP-DID) allow calls to be routed over a dedicated facility to the ICG switch that serves the subscriber.

3.3 Signaling Requirements. SS7 Signaling is required for the provision of SPNP services. SPNP-DID is available from BellSouth on a per DS0, DS1, or DS3 basis. Where SPNP-DID is technically feasible and is provided on a DS1 or a DS3 basis, the applicable channelization rates are those specified in Section E6 in BellSouth's Intrastate Access Tariffs, incorporated herein by this reference. SPNP is available only for basic local exchange service.

3.4 Rates

Rates for SPNP are set out in Exhibit A to this Attachment. If no rate is identified in the contract, the rate for the specific service or function will be as set forth in applicable BellSouth tariff or as negotiated by the Parties upon request by either Party.

4. SPNP Implementation

4.1 SPNP is available only where a CLEC or BellSouth is currently providing, or will begin providing concurrent with provision of SPNP, basic local exchange service to the affected end user. SPNP for a particular telephone number is available only from the central office originally providing local exchange service to the end user. SPNP for a particular assigned telephone number will be disconnected when any end user, Commission, BellSouth, or CLEC initiated activity (*e.g.*, a change in exchange boundaries) would normally result in a telephone number change had the end user retained his initial local exchange service.

4.2 SPNP-RCF, as contemplated by this Agreement, is a telecommunications service whereby a call dialed to an SPNP-RCF equipped telephone number is automatically forwarded to an assigned seven- or ten- digit telephone number within the local calling area as defined in BellSouth's General Subscriber Services Tariff. The

forwarded-to number shall be specified by the CLEC or BellSouth, as appropriate. The forwarding Party will provide identification of the originating telephone number, via SS7 signaling, to the receiving Party. Identification of the originating telephone number to the SPNP-RCF end user cannot be guaranteed, however. SPNP-RCF provides a single call path for the forwarding of no more than one simultaneous call to the receiving Party's specified forwarded-to number.

4.3 SPNP-DID service, as contemplated by this Agreement, provides trunk side access to end office switches for direct inward dialing to the other Party's premises equipment from the telecommunications network to lines associated with the other Party's switching equipment and must be provided on all trunks in a group arranged for inward service. A SPNP-DID trunk termination charge, provided with SS7 Signaling only, applies for each trunk voice grade equivalent. In addition, direct facilities are required from the end office where a ported number resides to the end office serving the ported end user customer. The rates for a switched local channel and switched dedicated transport apply as contained in BellSouth's Intrastate Access Services tariff, as said tariff is amended from time to time. Transport mileage will be calculated as the airline distance between the end office where the number is ported and the Point of Interface ("POI") using the V&H coordinate method. SPNP-DID must be established with a minimum configuration of two channels and one unassigned telephone number per switch, per arrangement for control purposes. Transport facilities arranged for SPNP-DID may not be mixed with any other type of trunk group, with no outgoing calls placed over said facilities. SPNP-DID will be provided only where such facilities are available and where the switching equipment of the ordering Party is properly equipped. Where SPNP-DID service is required from more than one wire center or from separate trunk groups within the same wire center, such service provided from each wire center or each trunk group within the same wire center shall be considered a separate service. Only customer-dialed sent-paid calls will be completed to the first number of a SPNP-DID number group; however, there are no restrictions on calls completed to other numbers of a SPNP-DID number group. Interface group arrangements provided for terminating the switched transport at the Party's terminal location are as set forth in of BellSouth's Intrastate Access Services Tariff, § E6.1.3.A as amended from time to time.

4.3.1 SPNP-DID Service requires ordering consecutive telephone numbers in blocks of twenty. To order non-consecutive telephone numbers or telephone numbers in less than blocks of twenty, the BFR/NBR process must be used. SS7 Signaling is required for the provision of either of these services.

4.4 The calling Party shall be responsible for payment of the applicable charges for sent-paid calls to the SPNP number. For collect, third-party, or other operator-assisted non-sent paid calls to the ported telephone number, BellSouth or the CLEC shall be responsible for the payment of charges under the same terms and conditions for which the end user would have been liable for those charges. Either Party may request that the other block collect and third party non-sent paid calls to the SPNP-assigned telephone number. If a Party does not request blocking, the other Party will provide

itemized local usage detail for the billing of non-sent paid calls on the monthly bill of usage charges provided at the individual end user account level. The detail will include itemization of all billable usage. Each Party shall have the option of receiving this usage data on a daily basis via a data file transfer arrangement. This arrangement will utilize the existing industry uniform standard, known as EMR standards, for exchange of billing data. Files of usage data will be created daily for the optional service. Usage originated and recorded in the sending BellSouth RAO will be provided in unrated or rated format, depending on processing system. CLEC usage originated elsewhere and delivered via CMDS to the sending BellSouth RAO shall be provided in rated format.

4.5 Each Party shall be responsible for obtaining authorization from the end user for the handling of the disconnection of the end user's service, the provision of new local service and the provision of SPNP services. Each Party shall be responsible for coordinating the provision of service with the other to assure that its switch is capable of accepting SPNP ported traffic. Each Party shall be responsible for providing equipment and facilities that are compatible with the other's service parameters, interfaces, equipment and facilities and shall be required to provide sufficient terminating facilities and services at the terminating end of an SPNP call to adequately handle all traffic to that location and shall be solely responsible to ensure that its facilities, equipment and services do not interfere with or impair any facility, equipment, or service of the other Party or any of its end users. In the event that either Party determines in its reasonable judgment that the other Party will likely impair or is impairing, or interfering with any equipment, facility or service or any of its end users, that Party may either refuse to provide SPNP service or may terminate SPNP service to the other Party after providing appropriate notice.

4.6 Each Party shall be responsible for providing an appropriate intercept announcement service for any telephone numbers subscribed to SPNP services for which it is not presently providing local exchange service or terminating to an end user. Where either Party chooses to disconnect or terminate any SPNP service, that Party shall be responsible for designating the preferred standard type of announcement to be provided.

4.7 Each Party shall be the other Party's single point of contact for all repair calls on behalf of each Party's end user. Each Party reserves the right to contact the other Party's customers if deemed necessary for maintenance purposes.

4.8 Neither Party shall be responsible for adverse effects on any service, facility or equipment from the use of SPNP services. End-to-end transmission characteristics may vary depending on the distance and routing necessary to complete calls over SPNP facilities and the fact that another carrier is involved in the provisioning of service. Therefore, end-to-end transmission characteristics cannot be specified by either Party for such calls. Neither Party shall be responsible to the other if any necessary change in protection criteria or in any of the facilities, operation, or

procedures of either renders any facilities provided by the other Party obsolete or renders necessary modification of the other Party's equipment.

4.9 For terminating IXC traffic ported to either Party which requires use of either Party's tandem switching, the tandem provider will bill the IXC tandem switching, the interconnection charge, and a portion of the transport, and the other Party will bill the IXC local switching, the carrier common line and a portion of the transport. If the tandem provider is unable to provide the necessary access records to permit the other Party to bill the IXC directly for terminating access to ported numbers, then the tandem provider will bill the IXC full terminating switched access charges at the tandem provider's rate and will compensate the other Party at the tandem Party's tariff rates via a process used by BellSouth to estimate the amount of ported switched access revenues due the other Party. If an intraLATA toll call is delivered, the delivering Party will pay terminating access rates to the other Party. This subsection does not apply in cases where SPNP-DID is utilized for number portability.

5. Transition to Permanent Number Portability

5.1 Once PNP is implemented in an end office both Parties must withdraw their SPNP offerings. The transition from existing SPNP arrangements to PNP shall occur within one hundred twenty (120) days from the date PNP is implemented in the end office. Neither Party shall charge the other Party for conversion from SPNP to PNP. The Parties shall comply with any SPNP/PNP transition processes established by the FCC and State commissions and appropriate industry number portability work groups.

5.2 Notwithstanding the foregoing, the Parties acknowledge that the FCC has determined once PNP has been deployed pursuant to the FCC's orders, rules and regulations, that all local exchange carriers (LECs) have the duty to provide PNP. Therefore, either Party, at any time, may seek appropriate legal or regulatory relief concerning the transition from SPNP to PNP or other related issues.

6. True-up

6.1 The interim prices for Network Elements and Other Services and Local Interconnection shall be subject to true-up according to the following procedures:

The interim prices shall be trued-up, either up or down, based on final prices determined either by further agreement between the Parties, or by a final order (including any appeals) of the Commission which final order meets the criteria of (3) below. The Parties shall implement the true-up by comparing the actual volumes and demand for each item, together with interim prices for each item, with the final prices determined for each item. Each Party shall keep its own records upon which the true-up can be based, and any final payment from one Party to the other shall be in an amount agreed upon by the Parties based on such records. In the event of any disagreement as between the records or the Parties regarding the amount of such true-up, the Parties agree that the body having jurisdiction over the matter shall be called upon to resolve such differences, or the Parties may mutually agree to submit the

matter to the Dispute Resolution process in accordance with the provisions in the General Terms and Conditions and Attachment 1 of this Agreement.

6.2 The Parties may continue to negotiate toward final prices, but in the event that no such agreement is reached within nine (9) months, either Party may petition the Commission to resolve such disputes and to determine final prices for each item. Alternatively, upon mutual agreement, the Parties may submit the matter to the Dispute Resolution Process set forth in the General Terms and Conditions and Attachment 1 of the Agreement, so long as they file the resulting Agreement with the Commission as a "negotiated Agreement" under Section 252(e) of the Act.

6.3 A final order of this Commission that forms the basis of a true-up shall be the final order as to prices based on appropriate cost studies, or potentially may be a final order in any other Commission proceeding which meets the following criteria:

(a) BellSouth and ICG are entitled to be a full Party to the proceeding;
(b) It shall apply the provisions of the federal Telecommunications Act of 1996, including but not limited to Section 252(d)(1) (which contains pricing standards) and all then-effective implementing rules and regulations; and,
(c) It shall include as an issue the geographic deaveraging of network element prices, which deaveraged prices, if any are required by said final order, shall form the basis of any true-up.

7. Operational Support System (OSS) Rates

BellSouth has developed and made available the following mechanized systems by which ICG may submit LSRs electronically.

LENS	Local Exchange Navigation System
EDI	Electronic Data Interface
EDI-PC	Electronic Data Interface – Personal Computer
TAG	Telecommunications Access Gateway

LSRs submitted by means of one of these interactive interfaces will incur an OSS electronic ordering charge as specified in the table below. An individual LSR will be identified for billing purposes by its Purchase Order Number (PON). LSRs submitted by means other than one of these interactive interfaces (mail, fax, courier, etc.) will incur a manual order charge as specified in the table below:

OPERATIONAL SUPPORT SYSTEMS	**TN**
OSS **LSR** charge, per LSR received from the CLEC by one of the OSS interactive interfaces	$3.50 SOMEC
Incremental charge per LSR received from the CLEC by means other than one of the OSS interactive interfaces	$19.99 SOMAN

Note: In addition to the OSS charges, applicable discounted service order and related discounted charges apply per the tariff.

Denial/Restoral OSS Charge

In the event ICG provides a list of customers to be denied and restored, rather than an LSR, each location on the list will require a separate PON and, therefore will be billed as one LSR per location.

Cancellation OSS Charge

ICG will incur an OSS charge for an accepted LSR that is later canceled by ICG.

Note: Supplements or clarifications to a previously billed LSR will not incur another OSS charge.

Threshold Billing Plan

The Parties agree that ICG will incur the mechanized rate for all LSRs, both mechanized and manual, if the percentage of mechanized LSRs to total LSRs **meets or** exceeds the threshold percentages shown below:

Year	Ratio: Mechanized/Total LSRs
2000	80%
2001	90%

The threshold plan will be discontinued in 2002.

BellSouth will track the total LSR volume for each CLEC for each quarter. At the end of that time period, a Percent Electronic LSR calculation will be made for that quarter based on the LSR data tracked in the LCSC. If this percentage exceeds the threshold volume, all of that CLEC's future manual LSRs will be billed at the mechanized LSR rate. To allow time for obtaining and analyzing the data and updating the billing system, this billing change will take place on the first day of the second month following the end of the quarter (e.g. May 1 for 1Q, Aug 1 for 2Q, etc.). There will be no adjustments to the amount billed for previously billed LSRs.

BELLSOUTH/ICG RATES
SERVICE PROVIDER
NUMBER PORTABILITY

DESCRIPTION	USOC	TN
INTERIM SERVICE PROVIDER NUMBER PORTABILITY - RCF (1)		
RCF, per number ported (Business Line), 10 paths	TNPBL	NA
RCF, per number ported (Residence Line), 6 paths	TNPRL	NA
RCF, per number ported (Business Line)	TNPBL	$1.50
NRC	TNPBL	NA
NRC - Disconnect Charge	TNPBL	NA
RCF, per number ported (Residence Line)	TNPRL	$1.25
NRC	TNPRL	NA
NRC - Disconnect Charge	TNPRL	NA
RCF, add'l capacity for simultaneous call forwarding, per additional path	N/A	$0.50
RCF, per service order, per location	(++) Bus = TNPBD Res = TNPRD	
NRC - 1st	TNP++	$25.00
NRC - Add'l	TNP++	$25.00
NRC - Disconnect - 1st	TNP++	NA
NRC - Disconnect - Add'l	TNP++	NA
NRC - Incremental Charge - Manua. Service Order - 1st	SOMAN	NA
NRC - Incremental Charge - Manual Service Order - Add'l	SOMAN	NA
NRC - Incremental Charge - Manual Service Order - Disconnect - 1st	SOMAN	NA
NRC - Incremental Charge - Manual Service Order - Disconnect - Add'l	SOMAN	NA
INTERIM SERVICE PROVIDER NUMBER PORTABILITY - DID		
DID per number ported, Residence - NRC	TNPDR	NA
DID per number ported, Residence - NRC - Disconnect	TNPDR	NA
DID per number ported, Business - NRC	TNPDB	NA
DID per number ported, Business - NRC - Disconnect	TNPDB	NA
DID per service order, per location		
NRC - 1st	TNPRD	NA
NRC - Add'l	TNPRD	NA
NRC - Disconnect - 1st	TNPRD	NA
NRC - Disconnect - Add'l	TNPRD	NA
NRC - Incremental Charge - Manual Service Order - 1st	SOMAN	NA
NRC - Incremental Charge - Manual Service Order - Add'l	SOMAN	NA
NRC - Incremental Charge - Manual Service Order - Disconnect - 1st	SOMAN	NA
NRC - Incremental Charge - Manual Service Order - Disconnect - Add'l	SOMAN	NA
DID, per trunk termination, Initial	TNPT2	NA
DID, per trunk termination, Initial - NRC	TNPT2	NA
DID, per trunk termination, Initial - Disconnect	TNPT2	NA
DID, per trunk termination, Subsequent	TNPT2	NA
DID, per trunk termination, Subsequent - NRC	TNPT2	NA
DID, per trunk termination, Subsequent - Disconnect	TNPT2	NA

NOTES:
If no rate is identified in the contract, the rate for the specific service or function will be as set forth in applicable BellSouth tariff or as negotiated by the Parties upon request of either Party.

Attachment 6

Ordering and Provisioning

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ORDERING AND PROVISIONING

1. Quality of Ordering and Provisioning

All the negotiated terms and conditions set forth in this Attachment pertain to ordering and provisioning.

1.1 BellSouth shall provide ordering and provisioning services to ICG that are equal to the ordering and provisioning services BellSouth provides to itself or any other CLEC, where technically feasible. Detailed guidelines for ordering and provisioning are set forth in BellSouth's Local Interconnection and Facility Based Ordering Guide and Resale Ordering Guide, as appropriate, and as they are amended from time to time during this Agreement.

1.2 BellSouth will perform provisioning services during the following normal hours of operation:

Monday - Friday: 8:00AM - 5:00PM location time (excluding holidays)
(Resale/Network Element non coordinated, coordinated orders and order coordinated - Time Specific)

Saturday: 8:00 AM - 5:00 PM location time (excluding holidays)
(Resale/Network Element non-coordinated orders)

Times are either Eastern or Central time based on the location of the work being performed.

1.3 All other ICG requests for provisioning and installation services are considered outside of the normal hours of operation and may be performed subject to the application of overtime billing charges.

2. Access to Operational Support Systems

2.1 BellSouth shall provide ICG access to several operations support systems. Access to these support systems is available through a variety of means, including electronic interfaces. BellSouth also provides the option of placing orders manually (e.g., via facsimile) through the Local Carrier Service Center. The operations support systems available are:

2.2 Pre-Ordering. BellSouth provides electronic access to the following pre-ordering functions: service address validation, telephone number selection, service and feature availability, due date information, and upon Commission approval of confidentiality protections, to customer record information. Access is provided through the Local

Exchange Navigation System (LENS) and the Telecommunications Access Gateway (TAG). Customer record information includes Customer Record Information includes but is not limited to, customer specific information in CRIS and RSAG. In addition, ICG shall provide to BellSouth access to customer record information including electronic access where available. Otherwise, ICG shall provide paper copies of customer record information within a reasonable period of time upon request by BellSouth. Customer Record Information is equivalent to but not limited to the type of customer specific information contained in CRIS and RSAG. The parties agree not to view, copy, or otherwise obtain access to the customer record information of any customer without that customer's permission and further agrees that ICG and BellSouth will obtain access to customer record information only in strict compliance with applicable laws, rules, or regulations of the State in which the service is provided.

2.3 Service Ordering and Provisioning. BellSouth provides electronic options for the exchange of ordering and provisioning information. BellSouth provides an Electronic Data Interchange (EDI) arrangement for resale requests and certain network elements and other services. The EDI interface can be integrated with the TAG pre-ordering interface by ICG. As an alternative to the EDI arrangement, BellSouth also provides ordering and provisioning capability through TAG that can be integrated with the TAG preordering capability by ICG. Also, as an alternative, BellSouth provides integrated pre-ordering, ordering and provisioning capability through the LENS interface.

2.4 Service Trouble Reporting and Repair. Service trouble reporting and repair allows ICG to report and monitor service troubles and obtain repair services. BellSouth shall offer ICG service trouble reporting in a non-discriminatory manner that provides ICG the equivalent ability to report and monitor service troubles that BellSouth provides to itself. BellSouth also provides ICG an estimated time to repair, an appointment time or a commitment time, as appropriate, on trouble reports. BellSouth provides two options for electronic trouble reporting. For exchange services, BellSouth offers ICG access to the Trouble Analysis Facilitation Interface (TAFI). For individually designed services, BellSouth provides electronic trouble reporting through an electronic communications gateway. If ICG requests BellSouth to repair a trouble after normal working hours, ICG will be billed the appropriate overtime charges associated with this request pursuant to BellSouth's tariffs.

2.5 Migration of ICG to New BellSouth Software Releases for National Standard Machine-to-Machine Electronic Interfaces. BellSouth will issue new software releases for new national standards its national standard, machine-to-machine electronic interfaces as needed to improve operations and meet standards and regulatory requirements. When a new release of new national standards is implemented, BellSouth will continue to support both the new release (N) and the prior release (N-1). When BellSouth makes the next release (N+1), BellSouth will eliminate support for the (N-1) release and support the two newest releases (N and N+1). Thus, BellSouth will always support the two most current releases. BellSouth

will issue documents to ICG with sufficient notice to allow ICG to make the necessary changes to their systems and operations to migrate to the newest release in a timely fashion.

2.6 Rates. All costs incurred by BellSouth to develop and implement operational interfaces shall be recovered from the carriers who utilize the services. Charge for use of Operational Support Systems shall be as set forth in Attachments 1 and 2 of this Agreement.

3. Miscellaneous Ordering and Provisioning Guidelines

3.1 Pending Orders. To ensure the most efficient use of facilities and resources, orders placed in the hold or pending status by ICG will be held for a maximum of thirty (30) days from the date the order is placed on hold. After such time, if ICG wishes to reinstate an order, ICG may be required to submit a new service order.

3.2 Single Point of Contact. ICG will be the single point of contact with BellSouth for ordering activity for network elements and other services used by ICG to provide services to its end users, except that BellSouth may accept an order directly from another CLEC, or BellSouth, acting with authorization of the affected end user. ICG and BellSouth shall each execute a blanket letter of authorization with respect to customer orders. The Parties shall each be entitled to adopt their own internal processes for verification of customer authorization for orders, provided, however, that such processes shall comply with applicable state and federal law including, until superseded, the FCC guidelines and orders applicable to Presubscribed Interexchange Carrier (PIC) changes including Un-PIC. Pursuant to such an order, BellSouth may disconnect any network element associated with the service to be disconnected and being used by ICG to provide service to that end user and reuse such network elements or facilities to enable such other LEC to provide service to the end user. BellSouth will notify ICG that such an order has been processed, but will not be required to notify ICG in advance of such processing.

3.3 Use of Facilities. When a customer of a CLEC elects to discontinue service and transfer service to another local exchange carrier, including BellSouth, BellSouth shall have the right to reuse the facilities provided to CLEC by BellSouth for retail or resale service, loop and/or port for that customer. In addition, BellSouth may disconnect and reuse facilities when the facility is in a denied state and BellSouth has received an order to establish new service or transfer of service from a customer or a customer's CLEC at the same address served by the denied facility.

3.3.1 Upon receipt of a service order, BellSouth will do the following:

3.3.1.1 Process disconnect and reconnect orders to provision the service which shall be due dated using current interval guidelines.

3.3.1.2 Reuse the serving facility for the retail, resale service, or network element at the same location.

3.3.1.3 Notify ICG subsequent to the disconnect order being completed.

3.4 Contact Numbers. The Parties agree to provide one another with toll-free contact numbers for the purpose of ordering, provisioning and maintenance of services.

3.5 Subscription Functions. In cases where BellSouth performs subscription functions for an interexchange carrier (i.e. PIC and LPIC changes via Customer Account Record Exchange (CARE)), BellSouth will provide the affected interexchange carriers with the Operating Company Number (OCN) of the local provider for the purpose of obtaining end user billing account and other end user information required under subscription requirements.

3.6 Cancellation Charges. If ICG cancels an order for network elements or other services, any costs incurred by BellSouth in conjunction with the provisioning of that order will be recovered in accordance with FCC No. 1, Section 5.4.

Attachment 7

Billing and Billing Accuracy Certification

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BILLING AND BILLING ACCURACY CERTIFICATION

1. Payment and Billing Arrangements

All negotiated rates, terms and conditions set forth in this Attachment pertain to billing and billing accuracy certifications.

1.1 Billing. BellSouth agrees to provide billing through the Carrier Access Billing System (CABS) and through the Customer Records Information System (CRIS) depending on the particular service(s) that ICG requests. BellSouth will bill and record in accordance with this Agreement those charges ICG incurs as a result of ICG purchasing from BellSouth Network Elements and Other Services as set forth in this Agreement. BellSouth will format all bills in CBOS Standard or CLUB/EDI format, depending on the type of service ordered. For those services where standards have not yet been developed, BellSouth's billing format will change as necessary when standards are finalized by the industry forum.

1.1.1 For any service(s) BellSouth orders from ICG, ICG shall bill BellSouth in CABS format.

1.1.2 If either Party requests multiple billing media or additional copies of bills, the Billing Party will provide these at a reasonable cost.

1.2 Master Account. After receiving certification as a local exchange company from the appropriate regulatory agency, ICG will provide the appropriate BellSouth account manager the necessary documentation to enable BellSouth to establish a master account for Local Interconnection, Network Elements and Other Services, and/or resold services. Such documentation shall include the Application for Master Account, proof of authority to provide telecommunications services, an Operating Company Number ("OCN") assigned by the National Exchange Carriers Association ("NECA"), Carrier Identification Code (CIC), Group Access Code (GAC), Access Customer Name and Abbreviation (ACNA) and a tax exemption certificate, if applicable.

1.3 Payment Responsibility. Payment of all charges will be the responsibility of ICG. ICG shall make payment to BellSouth for all services billed. BellSouth is not responsible for payments not received by ICG from ICG's customer. BellSouth will not become involved in billing disputes that may arise between ICG and its customer. Payments made to BellSouth as payment on account will be credited to an accounts receivable master account and not to an end user's account.

1.4 Payment Due. The payment will be due by the next bill date (i.e., same date in the following month as the bill date) and is payable in immediately available funds. Payment is considered to have been made when received by BellSouth.

If the payment due date falls on a Sunday or on a Holiday which is observed on a Monday, the payment due date shall be the first non-Holiday day following such Sunday or Holiday. If the payment due date falls on a Saturday or on a Holiday which is observed on Tuesday, Wednesday, Thursday, or Friday, the payment due date shall be the last non-Holiday day preceding such Saturday or Holiday. If payment is not received by the payment due date, a late payment penalty, as set forth in Section 1.6, below, shall apply.

1.5 Tax Exemption. Upon proof of tax exempt certification from ICG, the total amount billed to ICG will not include those taxes or fees for which ICG is exempt. ICG will be solely responsible for the computation, tracking, reporting and payment of all taxes and like fees associated with the services provided to the end user of ICG.

1.6 Late Payment. If any portion of the payment is received by either Party after the payment due date as set forth preceding, or if any portion of the payment is received by either Party in funds that are not immediately available, then a late payment penalty shall be due. The late payment penalty shall be the portion of the payment not received by the payment due date times a late factor and will be applied on a per bill basis. The late factor shall be as set forth in Section A2 of the BellSouth General Subscriber Services Tariff, Section B2 of the BellSouth Private Line Service Tariff or Section E2 of the BellSouth Intrastate Access Tariff, whichever the Party determines is appropriate. A fee for all returned checks as set forth in Section A2 of the BellSouth General Subscriber Services Tariff or in applicable state law.

1.7 Discontinuing Service to ICG. The procedures for discontinuing service to ICG are as follows:

1.7.1 BellSouth reserves the right to suspend or terminate service for nonpayment or in the event of prohibited, unlawful or improper use of BellSouth facilities or service or any other violation or noncompliance by ICG of the rules and regulations contained in BellSouth's tariffs.

1.7.2 If payment of account is not received by the bill day in the month after the original bill day, BellSouth may provide written notice to ICG that additional applications for service will be refused and that any pending orders for service will not be completed if payment is not received by the fifteenth day following the date of the notice. In addition, BellSouth may, at the same time, give thirty days notice to ICG at the billing address to discontinue the provision of existing services to ICG at any time thereafter.

1.7.3 In the case of such discontinuance, all billed charges, as well as applicable termination charges, shall become due.

1.7.4 If BellSouth does not discontinue the provision of the services involved on the date specified in the thirty days notice and ICG's noncompliance continues, nothing

contained herein shall preclude BellSouth's right to discontinue the provision of the services to ICG without further notice.

1.7.5 If payment is not received or satisfactory arrangements made for payment by the date given in the written notification, ICG's services will be discontinued. Upon discontinuance of service on ICG's account, service to the ICG's end users will be denied. BellSouth will reestablish service at the request of the end user or ICG for BellSouth to reestablish service upon payment of the appropriate connection fee and subject to BellSouth's normal application procedures. ICG is solely responsible for notifying the end user of the proposed service disconnection. If within fifteen days after an end user's service has been denied and no arrangements to reestablish service have been made consistent with this subsection, the end user's service will be disconnected.

1.8 Deposit Policy. When purchasing services from BellSouth, ICG will be required to complete the BellSouth Credit Profile and provide information regarding credit worthiness. Based on the results of the credit analysis, BellSouth reserves the right to secure the account with a suitable form of security deposit. Such security deposit shall take the form of cash, an Irrevocable Letter of Credit (BellSouth form), Surety Bond (BellSouth form) or in its sole discretion some other form of security. Any such security deposit shall in no way release the customer from his obligation to make complete and timely payments of his bill. Such security shall be required prior to the inauguration of service. If, in the sole opinion of BellSouth, circumstances so warrant and/or gross monthly billing has increased beyond the level initially used to determine the level of security, BellSouth reserves the right to request additional security and/or file a Uniform Commercial Code (UCC1) security interest in ICG's "accounts receivables and proceeds." Interest on a security deposit, if provided in cash, shall accrue and be paid in accordance with the terms in the appropriate BellSouth tariff.

1.9 Rates. Rates for Optional Daily Usage File (ODUF), Enhanced Optional Daily Usage File (EODUF), Access Daily Usage File (ADUF), and Centralized Message Distribution Service (CMDS) are set out in Exhibit A to this Attachment. If no rate is identified in the contract, the rate for the specific service or function will be as set forth in applicable BellSouth tariff or as negotiated by the Parties upon request by either Party.

2. Billing Accuracy Certification

2.1 Upon request, BellSouth and ICG will agree upon a billing quality assurance program for all billing elements covered in this Agreement that will eliminate the need for post-billing reconciliation. Appropriate terms for access to any BellSouth documents, systems, records, and procedures for the recording and billing of charges will be part of that program.

2.2 As part of the billing quality assurance program, BellSouth and ICG will develop standards, measurements, and performance requirements for a local billing measurements process. On a regular basis BellSouth will provide ICG with mutually agreed upon performance measurement data that substantiates the accuracy, reliability, and integrity of the billing process for local billing. In return, ICG will pay all bills received from BellSouth in full by the payment due date.

2.3 Local billing discrepancies will be addressed in an orderly manner via a mutually agreed upon billing exemption process.

2.3.1 Each Party agrees to notify the other Party upon identifying a billing discrepancy. The Parties shall endeavor to resolve any billing discrepancy within sixty (60) calendar days of the notification date. A mutually agreed upon escalation process will be established for resolving local billing discrepancies as part of the billing quality assurance program.

2.3.2 Closure of a specific billing period will occur by joint agreement of the Parties whereby the Parties agree that such billing period is closed to any further analysis and financial transactions except those resulting from regulatory mandates. Closure will take place within a mutually agreed upon time interval from the Bill Date. The month being closed represents those charges that were billed or should have been billed by the designated Bill Date.

3. Billing Disputes

3.1 Where the Parties have not agreed upon a billing quality assurance program, billing disputes shall be handled pursuant to the terms of this section.

3.1.1 Each Party agrees to notify the other Party in writing upon the discovery of a billing dispute. In the event of a billing dispute, the Parties will endeavor to resolve the dispute within sixty (60) calendar days of the notification date.

3.2 If a Party disputes a charge and does not pay such charge by the payment due date, or if a payment or any portion of a payment is received by either Party after the payment due date, or if a payment or any portion of a payment is received in funds which are not immediately available to the other Party, then a late payment penalty shall be assessed. For bills rendered by either Party for payment, the late payment charge for both Parties shall be calculated based on the portion of the payment not received by the payment due date times the late factor as set forth in the following BellSouth tariffs: for services purchased from the General Subscribers Services Tariff for purposes of resale and for ports and non-designed loops, Section A2 of the General Subscriber Services Tariff; for services purchased from the Private Line Tariff for purposes of resale, Section B2 of the Private Line Service Tariff; and for network elements and other services and local interconnection charges, Section E2 of the Access Service Tariff. In no event, however, shall interest be assessed by either Party

on any previously assessed late payment charges. The Parties shall assess interest on previously assessed late payment charges only in a state where it has the authority pursuant to its tariffs.

4. RAO Hosting

4.1 RAO Hosting, Calling Card and Third Number Settlement System (CATS) and Non-Intercompany Settlement System (NICS) services provided to ICG by BellSouth will be in accordance with the methods and practices regularly adopted and applied by BellSouth to its own operations during the term of this Agreement, including such revisions as may be made from time to time by BellSouth.

4.2 ICG shall furnish all relevant information required by BellSouth for the provision of RAO Hosting, CATS and NICS.

4.3 Compensation amounts, if applicable, will be billed by BellSouth to ICG on a monthly basis in arrears. Amounts due from one Party to the other (excluding adjustments) are payable within thirty (30) days of receipt of the billing statement.

4.4 ICG must have its own unique hosted RAO code. Requests for establishment of RAO status where BellSouth is the selected Centralized Message Distribution System (CMDS) interfacing host, require written notification from ICG to the BellSouth RAO Hosting coordinator at least eight (8) weeks prior to the proposed effective date. The proposed effective date will be mutually agreed upon between the Parties with consideration given to time necessary for the completion of required Telcordia (formerly BellCore) functions. BellSouth will request the assignment of an RAO code from its connecting contractor, currently Telcordia (formerly BellCore), on behalf of ICG and will coordinate all associated conversion activities.

4.5 BellSouth will receive messages from ICG that are to be processed by BellSouth, another LEC or CLEC in the BellSouth region or a LEC outside the BellSouth region.

4.6 BellSouth will perform invoice sequence checking, standard EMI format editing, and balancing of message data with the EMI trailer record counts on all data received from ICG.

4.7 All data received from ICG that is to be processed or billed by another LEC or CLEC within the BellSouth region will be distributed to that LEC or CLEC in accordance with the Agreement(s) which may be in effect between BellSouth and the involved LEC or CLEC.

4.8 All data received from ICG that is to be placed on the CMDS network for distribution outside the BellSouth region will be handled in accordance with the agreement(s) which may be in effect between BellSouth and its connecting contractor (currently Telcordia (formerly BellCore)).

4.9 BellSouth will receive messages from the CMDS network that are destined to be processed by ICG and will forward them to ICG on a daily basis.

4.10 Transmission of message data between BellSouth and ICG will be via CONNECT: Direct.

4.11 All messages and related data exchanged between BellSouth and ICG will be formatted in accordance with accepted industry standards for EMI formatted records and packed between appropriate EMI header and trailer records, also in accordance with accepted industry standards.

4.12 ICG will ensure that the recorded message detail necessary to recreate files provided to BellSouth will be maintained for back-up purposes for a period of three (3) calendar months beyond the related message dates.

4.13 Should it become necessary for ICG to send data to BellSouth more than sixty (60) days past the message date(s), ICG will notify BellSouth in advance of the transmission of the data. If there will be impacts outside the BellSouth region, BellSouth will work with its connecting contractor and ICG to notify all affected Parties.

4.14 In the event that data to be exchanged between the two Parties should become lost or destroyed, both Parties will work together to determine the source of the problem. Once the cause of the problem has been jointly determined and the responsible Party (BellSouth or ICG) identified and agreed to, the company responsible for creating the data (BellSouth or ICG) will make every effort to have the affected data restored and retransmitted. If the data cannot be retrieved, the responsible Party will be liable to the other Party for any resulting lost revenue. Lost revenue may be a combination of revenues that could not be billed to the end users and associated access revenues. Both Parties will work together to estimate the revenue amount based upon historical data through a method mutually agreed upon. The resulting estimated revenue loss will be paid by the responsible Party to the other Party within three (3) calendar months of the date of problem resolution, or as mutually agreed upon by the Parties.

4.15 Should an error be detected by the EMI format edits performed by BellSouth on data received from ICG, the entire pack containing the affected data will not be processed by BellSouth. BellSouth will notify ICG of the error condition. ICG will correct the error(s) and will resend the entire pack to BellSouth for processing. In the event that an out-of-sequence condition occurs on subsequent packs, ICG will resend these packs to BellSouth after the pack containing the error has been successfully reprocessed by BellSouth.

4.16 In association with message distribution service, BellSouth will provide ICG with associated intercompany settlements reports (CATS and NICS) as appropriate.

4.17 In no case shall either Party be liable to the other for any direct or consequential damages incurred as a result of the obligations set out in this Agreement.

4.18 RAO Compensation

4.18.1 Rates for message distribution service provided by BellSouth for ICG are as set forth in Exhibit A to this Attachment.

4.18.2 Rates for data transmission associated with message distribution service are as set forth in Exhibit A to this Attachment.

4.18.3 Data circuits (private line or dial-up) will be required between BellSouth and ICG for the purpose of data transmission. Where a dedicated line is required, ICG will be responsible for ordering the circuit, overseeing its installation and coordinating the installation with BellSouth. ICG will also be responsible for any charges associated with this line. Equipment required on the BellSouth end to attach the line to the mainframe computer and to transmit successfully ongoing will be negotiated on a case by case basis. Where a dial-up facility is required, dial circuits will be installed in the BellSouth data center by BellSouth and the associated charges assessed to ICG. Additionally, all message toll charges associated with the use of the dial circuit by ICG will be the responsibility of ICG. Associated equipment on the BellSouth end, including a modem, will be negotiated on a case by case basis between the Parties.

4.18.4 All equipment, including modems and software, that is required on the ICG end for the purpose of data transmission will be the responsibility of ICG.

4.19 Intercompany Settlements Messages

4.19.1 This Section addresses the settlement of revenues associated with traffic originated from or billed by ICG as a facilities based provider of local exchange telecommunications services outside the BellSouth region. Only traffic that originates in one Bell operating territory and bills in another Bell operating territory is included. Traffic that originates and bills within the same Bell operating territory will be settled on a local basis between ICG and the involved company(ies), unless that company is participating in NICS.

4.19.2 Both traffic that originates outside the BellSouth region by ICG and is billed within the BellSouth region, and traffic that originates within the BellSouth region and is billed outside the BellSouth region by ICG, is covered by this Agreement (CATS). Also covered is traffic that either is originated by or billed by ICG, involves a company other than ICG, qualifies for inclusion in the CATS settlement, and is not originated or billed within the BellSouth region (NICS).

4.19.3 Once ICG is operating within the BellSouth territory, revenues associated with calls originated and billed within the BellSouth region will be settled via Telcordia (formerly BellCore)'s, its successor or assign, NICS system.

4.19.4 BellSouth will receive the monthly NICS reports from Telcordia (formerly BellCore), its successor or assign, on behalf of ICG. BellSouth will distribute copies of these reports to ICG on a monthly basis.

4.19.5 BellSouth will receive the monthly Calling Card and Third Number Settlement System (CATS) reports from Telcordia (formerly BellCore), its successor or assign, on behalf of ICG. BellSouth will distribute copies of these reports to ICG on a monthly basis.

4.19.6 BellSouth will collect the revenue earned by ICG from the Bell operating company in whose territory the messages are billed (CATS), less a per message billing and collection fee of five cents ($0.05), on behalf of ICG. BellSouth will remit the revenue billed by ICG to the Bell operating company in whose territory the messages originated, less a per message billing and collection fee of five cents ($0.05), on behalf on ICG. These two amounts will be netted together by BellSouth and the resulting charge or credit issued to ICG via a monthly Carrier Access Billing System (CABS) miscellaneous bill.

4.19.7 BellSouth will collect the revenue earned by ICG within the BellSouth territory from another CLEC also within the BellSouth territory (NICS) where the messages are billed, less a per message billing and collection fee of five cents ($0.05), on behalf of ICG. BellSouth will remit the revenue billed by ICG within the BellSouth region to the CLEC also within the BellSouth region, where the messages originated, less a per message billing and collection fee of five cents ($0.05). These two amounts will be netted together by BellSouth and the resulting charge or credit issued to ICG via a monthly CABS miscellaneous bill.

BellSouth and ICG agree that monthly netted amounts of less than fifty dollars ($50.00) will not be settled.

5. Optional Daily Usage File

5.1 Upon written request from ICG, BellSouth will provide the Optional Daily Usage File (ODUF) service to ICG pursuant to the terms and conditions set forth in this section.

5.2 ICG shall furnish all relevant information required by BellSouth for the provision of ODUF.

5.3 The Optional Daily Usage Feed will contain billable messages that were carried over the BellSouth Network and processed in the BellSouth Billing System, but billed to an ICG customer.

Charges for delivery of ODUF will appear on ICG's monthly bills. The charges are as set forth in Exhibit A to this Attachment.

5.4 The Optional Daily Usage Feed will contain both rated and unrated messages. All messages will be in the standard Alliance for Telecommunications Industry Solutions (ATIS) EMI record format.

5.5 Messages that error in the billing system of ICG will be the responsibility of ICG. If, however, ICG should encounter significant volumes of errored messages that prevent processing by ICG within its systems, BellSouth will work with ICG to determine the source of the errors and the appropriate resolution.

5.6 The following specifications shall apply to the Optional Daily Usage Feed.

5.6.1 Usage To Be Transmitted

5.6.1.1 The following messages recorded by BellSouth will be transmitted to ICG:

- Message recording for per use/per activation type services (examples: Three Way Calling, Verify, Interrupt, Call Return, etc.)
- Measured billable Local
- Directory Assistance messages
- IntraLATA Toll
- WATS & 800 Service
- N11
- Information Service Provider Messages
- Operator Services Messages
- Operator Services Message Attempted Calls (Network Element only)
- Credit/Cancel Records
- Usage for Voice Mail Message Service

5.6.1.2 Rated Incollects (originated in BellSouth and from other companies) can also be on ODUF. Rated Incollects will be intermingled with BellSouth recorded rated and unrated usage. Rated Incollects will not be packed separately.

5.6.1.3 BellSouth will perform duplicate record checks on records processed to ODUF. Any duplicate messages detected will be deleted and not sent to ICG.

5.6.1.4 In the event that ICG detects a duplicate on ODUF they receive from BellSouth, ICG will drop the duplicate message (ICG will not return the duplicate to BellSouth).

5.6.2 Physical File Characteristics

5.6.2.1 ODUF will be distributed to ICG via an agreed medium with CONNECT: Direct

being the preferred transport method. The Daily Usage Feed will be a variable block format (2476) with an LRECL of 2472. The data on the Daily Usage Feed will be in a non-compacted EMI format (175 byte format plus modules). It will be created on a daily basis (Monday through Friday except holidays). Details such as data set name and delivery schedule will be addressed during negotiations of the distribution medium. There will be a maximum of one data set per workday per OCN.

5.6.2.2 Data circuits (private line or dial-up) may be required between BellSouth and ICG for the purpose of data transmission. Where a dedicated line is required, ICG will be responsible for ordering the circuit, overseeing its installation and coordinating the installation with BellSouth. ICG will also be responsible for any charges associated with this line. Equipment required on the BellSouth end to attach the line to the mainframe computer and to transmit successfully ongoing will be negotiated on a case by case basis. Where a dial-up facility is required, dial circuits will be installed in the BellSouth data center by BellSouth and the associated charges assessed to ICG. Additionally, all message toll charges associated with the use of the dial circuit by ICG will be the responsibility of ICG. Associated equipment on the BellSouth end, including a modem, will be negotiated on a case by case basis between the Parties. All equipment, including modems and software, that is required on ICG's end for the purpose of data transmission will be the responsibility of ICG.

5.6.3 Packing Specifications

5.6.3.1 A pack will contain a minimum of one message record or a maximum of 99,999 message records plus a pack header record and a pack trailer record. One transmission can contain a maximum of 99 packs and a minimum of one pack.

5.6.3.2 The OCN, From RAO, and Invoice Number will control the invoice sequencing. The From RAO will be used to identify to ICG which BellSouth RAO that is sending the message. BellSouth and ICG will use the invoice sequencing to control data exchange. BellSouth will be notified of sequence failures identified by ICG and resend the data as appropriate.

The data will be packed using ATIS EMI records.

5.6.4 Pack Rejection

5.6.4.1 ICG will notify BellSouth within one business day of rejected packs (via the mutually agreed medium). Packs could be rejected because of pack sequencing discrepancies or a critical edit failure on the Pack Header or Pack Trailer records (i.e. out-of-balance condition on grand totals, invalid data populated). Standard ATIS EMI Error Codes will be used. ICG will not be required to return the actual rejected data to BellSouth. Rejected packs will be corrected and retransmitted to ICG by BellSouth.

5.6.5 Control Data

ICG will send one confirmation record per pack that is received from BellSouth. This confirmation record will indicate ICG received the pack and the acceptance or rejection of the pack. Pack Status Code(s) will be populated using standard ATIS EMI error codes for packs that were rejected by ICG for reasons stated in the above section.

5.6.6 Testing

Upon request from ICG, BellSouth shall send test files to ICG for ODUF. The Parties agree to review and discuss the file's content and/or format. For testing of usage results, BellSouth shall request that ICG set up a production (LIVE) file. The live test may consist of ICG's employees making test calls for the types of services ICG requests on ODUF. These test calls are logged by ICG, and the logs are provided to BellSouth. These logs will be used to verify the files. Testing will be completed within 30 calendar days from the date on which the initial test file was sent.

6. Access Daily Usage File

6.1. Upon written request from ICG, BellSouth will provide the Access Daily Usage File (ADUF) service to ICG pursuant to the terms and conditions set forth in this section.

6.2 ICG shall furnish all relevant information required by BellSouth for the provision of ADUF.

6.3 The Access Daily Usage Feed will contain access messages associated with a port that ICG has purchased from BellSouth

6.4 Charges for delivery of ADUF will appear on ICG's monthly bills. The charges are as set forth in Exhibit A to this Attachment. All messages will be in the standard ATIS EMI record format.

6.5 Messages that error in the billing system of ICG will be the responsibility of ICG. If, however, ICG should encounter significant volumes of errored messages that prevent processing by ICG within its systems, BellSouth will work with ICG to determine the source of the errors and the appropriate resolution.

6.6 Usage To Be Transmitted

6.6.1 The following messages recorded by BellSouth will be transmitted to ICG:

Interstate and intrastate access records associated with a port.
Undetermined jurisdiction access records associated with a port.

6.6.2 When ICG purchases Network Element ports from BellSouth and calls are made using these ports, BellSouth will handle the calls as follows:

Originating from Network Element and carried by Interexchange Carrier:

BellSouth will bill network element to CLEC and send access record to ICG via ADUF

Originating from network element and carried by BellSouth (ICG is BellSouth's toll customer):

BellSouth will bill resale toll rates to ICG and send toll record for the end user toll billing purposes via ODUF. Access record will be sent to ICG via ADUF.

Terminating on network element and carried by Interexchange Carrier:

BellSouth will bill network element to ICG and send access record to ICG.

Terminating on network element and carried by BellSouth:

BellSouth will bill network element to ICG and send access record to ICG.

6.6.3 BellSouth will perform duplicate record checks on records processed ADUF. Any duplicate messages detected will be dropped and not sent to ICG.

6.6.4 In the event that ICG detects a duplicate on ADUF they receive from BellSouth, ICG will drop the duplicate message (ICG will not return the duplicate to BellSouth.)

6.6.5 Physical File Characteristics

6.6.5.1 ADUF will be distributed to ICG via an agreed medium with CONNECT: Direct being the preferred transport method. The Daily Usage Feed will be a fixed block format (2476) with an LRECL of 2472. The data on the Daily Usage Feed will be in a non-compacted EMI format (210 byte format plus modules). It will be created on a daily basis (Monday through Friday except holidays). Details such as data set name and delivery schedule will be addressed during negotiations of the distribution medium. There will be a maximum of one data set per workday per OCN.

6.6.5.2 Data circuits (private line or dial-up) may be required between BellSouth and ICG for the purpose of data transmission. Where a dedicated line is required, ICG will be responsible for ordering the circuit, overseeing its installation and coordinating the installation with BellSouth. ICG will also be responsible for any charges associated with this line. Equipment required on the BellSouth end to attach the line to the mainframe computer and to transmit successfully ongoing will be negotiated on a case by case basis. Where a dial-up facility is required, dial circuits will be installed in the

BellSouth data center by BellSouth and the associated charges assessed to ICG. Additionally, all message toll charges associated with the use of the dial circuit by ICG will be the responsibility of ICG. Associated equipment on the BellSouth end, including a modem, will be negotiated on a case by case basis between the Parties. All equipment, including modems and software, that is required on ICG's end for the purpose of data transmission will be the responsibility of ICG.

6.6.6 Packing Specifications

6.6.6.1 A pack will contain a minimum of one message record or a maximum of 99,999 message records plus a pack header record and a pack trailer record. One transmission can contain a maximum of 99 packs and a minimum of one pack.

6.6.6.2 The OCN, From RAO, and Invoice Number will control the invoice sequencing. The From RAO will be used to identify to ICG which BellSouth RAO that is sending the message. BellSouth and ICG will use the invoice sequencing to control data exchange. BellSouth will be notified of sequence failures identified by ICG and resend the data as appropriate.

The data will be packed using ATIS EMI records.

6.6.7 Pack Rejection

6.6.7.1 ICG will notify BellSouth within one business day of rejected packs (via the mutually agreed medium). Packs could be rejected because of pack sequencing discrepancies or a critical edit failure on the Pack Header or Pack Trailer records (i.e. out-of-balance condition on grand totals, invalid data populated). Standard ATIS EMI Error Codes will be used. ICG will not be required to return the actual rejected data to BellSouth. Rejected packs will be corrected and retransmitted to ICG by BellSouth.

6.6.8 Control Data

ICG will send one confirmation record per pack that is received from BellSouth. This confirmation record will indicate ICG received the pack and the acceptance or rejection of the pack. Pack Status Code(s) will be populated using standard ATIS EMI error codes for packs that were rejected by ICG for reasons stated in the above section.

6.6.9 Testing

6.6.9.1 Upon request from ICG, BellSouth shall send test files to ICG for ADUF. Testing shall consist of actual calls made from live accounts. A call log shall be supplied along with test request information. The Parties agree to review and discuss the file's content and/or format.

7. Enhanced Optional Daily Usage File

7.1 Upon written request from ICG, BellSouth will provide the Enhanced Optional Daily Usage File (EODUF) service to ICG pursuant to the terms and conditions set forth in this section. EODUF will only be sent to existing ODUF subscribers who request the EODUF option.

7.2 ICG shall furnish all relevant information required by BellSouth for the provision of EODUF.

7.3 EODUF will provide usage data for local calls originating from resold Flat Rate Business and Residential Lines.

Charges for delivery of EODUF will appear on ICG's monthly bills. The charges are as set forth in Exhibit A to this Attachment.

7.4 All messages will be in the standard ATIS EMI record format.

7.5 Messages that error in the billing system of ICG will be the responsibility of ICG. If, however, ICG should encounter significant volumes of errored messages that prevent processing by ICG within its systems, BellSouth will work with ICG to determine the source of the errors and the appropriate resolution.

7.6 The following specifications shall apply to the Optional Daily Usage Feed.

7.6.1 Usage To Be Transmitted

7.6.1.1 The following messages recorded by BellSouth will be transmitted to ICG:

Customer usage data for flat rated local call originating from CLEC end user lines (1FB or 1FR). The EODUF record for flat rate messages will include:

Date of Call
From Number
To Number
Connect Time
Conversation Time
Method of Recording
From RAO
Rate Class
Message Type
Billing Indicators
Bill to Number

7.6.1.2 BellSouth will perform duplicate record checks on EODUF records processed to ODUF. Any duplicate messages detected will be deleted and not sent to ICG.

7.6.1.3 In the event that ICG detects a duplicate on EODUF they receive from BellSouth, ICG will drop the duplicate message (ICG will not return the duplicate to BellSouth).

7.6.2 Physical File Characteristics

7.6.2.1 The Enhanced Optional Daily Usage Feed will be distributed to ICG over their existing ODUF feed. EODUF messages will be intermingled among ICG's ODUF messages. EODUF will be a variable block format (2476) with an LRECL of 2472. The data on the EODUF will be in a non-compacted EMI format (175 byte format plus modules). It will be created on a daily basis (Monday through Friday except holidays).

7.6.2.2 Data circuits (private line or dial-up) may be required between BellSouth and ICG for the purpose of data transmission. Where a dedicated line is required, ICG will be responsible for ordering the circuit, overseeing its installation and coordinating the installation with BellSouth. ICG will also be responsible for any charges associated with this line. Equipment required on the BellSouth end to attach the line to the mainframe computer and to transmit successfully ongoing will be negotiated on a case by case basis. Where a dial-up facility is required, dial circuits will be installed in the BellSouth data center by BellSouth and the associated charges assessed to ICG. Additionally, all message toll charges associated with the use of the dial circuit by ICG will be the responsibility of ICG. Associated equipment on the BellSouth end, including a modem, will be negotiated on a case by case basis between the Parties. All equipment, including modems and software, that is required on ICG's end for the purpose of data transmission will be the responsibility of ICG.

7.6.3 Packing Specifications

7.6.3.1 A pack will contain a minimum of one message record or a maximum of 99,999 message records plus a pack header record and a pack trailer record. One transmission can contain a maximum of 99 packs and a minimum of one pack.

7.6.3.2 The Operating Company Number (OCN), From Revenue Accounting Office (RAO), and Invoice Number will control the invoice sequencing. The From RAO will be used to identify to ICG which BellSouth RAO is sending the message. BellSouth and ICG will use the invoice sequencing to control data exchange. BellSouth will be notified of sequence failures identified by ICG and resend the data as appropriate.

The data will be packed using ATIS EMI records.

BELLSOUTH/ICG RATES
ODUF/EDOUF/ADUF/CMDS

DESCRIPTION	USOC	TN
ODUF/EODUF/ADUF/CMDS		
ODUF: Recording, per message	N/A	$0.0000044
ODUF: Message Processing, per message	N/A	$0.0027366
EODUF: Message Processing, per message	N/A	$0.004
ADUF: Message Processing, per message	N/A	$0.004
CMDS: Message Processing, per message	N/A	$0.004
ODUF: Message Processing, per magnetic tape provisioned	N/A	$52.75
EODUF: Message Processing, per magnetic tape provisioned	N/A	$47.30
ODUF: Data Transmission (CONNECT:DIRECT), per message	N/A	$0.0000339
EODUF: Data Transmission (CONNECT:DIRECT), per message	N/A	$0.0000364
ADUF: Data Transmission (CONNECT:DIRECT), per message	N/A	$0.001
CMDS: Data Transmission (CONNECT:DIRECT), per message	N/A	$0.001

NOTES:
If no rate is identified in the contract, the rate for the specific service or function will be as set forth in applicable BellSouth tariff or as negotiated by the parties upon request by either party.

Attachment 8

Rights-of-Way, Conduits and Pole Attachments

Rights-of-Way, Conduits and Pole Attachments

BellSouth will provide nondiscriminatory access to any pole, duct, conduit, or right-of-way owned or controlled by BellSouth pursuant to 47 USC § 224, as amended by the Act, and pursuant to terms and conditions of a license agreement subsequently negotiated with BellSouth's Competitive Structure Provisioning Center.

Attachment 9

Performance Measurements

1. Scope

This Attachment includes Enforcement Measurements with corresponding Enforcement Mechanisms applicable to this Agreement.

2. Reporting

2.1 In providing services pursuant to this Agreement, BellSouth will report its performance to ICG in accordance with BellSouth's Service Quality Measurements, which are contained in this Attachment as Exhibit A and in accordance with BellSouth's Enforcement Measurements, which are contained in this Attachment as Exhibit B.

2.2 BellSouth will make performance reports available to ICG on a monthly basis. The reports will contain information collected in each performance category and will be available to ICG through some electronic medium to be determined by BellSouth. BellSouth will also provide electronic access to the raw data underlying the performance measurements. Within thirty (30) days of execution of this Agreement, BellSouth will provide a detailed session of instruction to ICG regarding access to the reports and to the raw data as well as the nature of the format of the data provided.

3. Modifications to Measurements

3.1 Service Quality Measurements

3.1.1 BellSouth will update the Service Quality Measurements contained in Exhibit A of this Attachment each calendar quarter. BellSouth will not delete any Service Quality Measurement without prior written consent of ICG. ICG may provide input to BellSouth regarding any suggested additions, deletions or other modifications to the Service Quality Measurements. BellSouth will provide notice of all changes to the Service Quality Measurements via BellSouth's internet website.

3.1.2 Notwithstanding the foregoing, BellSouth may, from time to time, be ordered by a regulatory or judicial body to modify or amend the Service Quality Measurements. BellSouth will make all such changes to the Service Quality Measurements pursuant to Section 16.5 of the General Terms and Conditions of this Agreement, incorporated herein by reference. Nothing herein shall preclude either party from participating in any proceeding involving BellSouth's Service Quality Measurements or from advocating that those Measurements be modified from those contained herein.

3.1.3 Notwithstanding any other provision of this Agreement, in the event a dispute arises regarding the modification or amendment of the Service Quality Measurements, the parties will refer the dispute to

the Commission.

3.2 Enforcement Measurements and Statistical Test

3.2.1 In order for BellSouth to accurately administer the Enforcement Measurements contained in Exhibit B of this Attachment, the Enforcement Measurements shall be modified or amended only if BellSouth determines such modification or amendment is necessary. However, BellSouth will not delete any Enforcement Measurement without prior written consent of ICG. BellSouth will notify ICG of any such modification or amendment to the Enforcement Measurements via BellSouth's internet website.

3.2.2 Notwithstanding the foregoing, BellSouth may, from time to time, be ordered by a regulatory or judicial body to modify or amend the Enforcement Measurements and/or Statistical Test. BellSouth will make all such changes to the Enforcement Measurements and/or Statistical Test pursuant to Section 16.5 of the General Terms and Conditions of this Agreement, incorporated herein by reference. Nothing herein shall preclude either party from participating in any proceeding involving the Enforcement Measurements and/or Statistical Test or from advocating that those Measurements or Test be modified from those contained herein.

3.2.3 Notwithstanding any other provision of this Agreement, in the event a dispute arises regarding the modification or amendment of the Enforcement Measurements and/or Statistical Test, the parties will refer the dispute to the Commission.

4. Enforcement Mechanisms

4.1 Purpose

This section establishes meaningful and significant enforcement mechanisms voluntarily provided by BellSouth to verify and maintain compliance between BellSouth and ICG's operations as well as to maintain access to Operational Support System (OSS) functions. This section provides the terms and conditions for such self-effectuating enforcement mechanisms. To the extent the FCC issues an order authorizing BellSouth to provide interLATA telecommunications service under section 271 of the Act that contains enforcement mechanisms that deviate from those contained herein, BellSouth and ICG agree to amend this Attachment to conform to the FCC's order.

4.2 Effective Date

Tier-1 Enforcement Mechanisms shall become effective in all BellSouth states upon an effective FCC order, which has not been stayed, authorizing BellSouth to provide interLATA telecommunications service under section 271 of the Act within any given state. Tier-2 and Tier-3 Enforcement Mechanisms set forth in this section shall only become

effective upon an effective FCC order, which has not been stayed, authorizing BellSouth to provide interLATA telecommunications services under section 271 of the Act within a particular state and shall only apply to BellSouth's performance in any state in which the FCC has granted BellSouth inter LATA authority.

4.3 Definitions

4.3.1 Enforcement Measurement Elements means the performance measurements set forth in Exhibit B, attached hereto and incorporated herein by this reference.

4.3.2 Enforcement Measurement Benchmark means a competitive level of performance negotiated by BellSouth used to compare the performance of BellSouth and ICG where no analogous process, product or service is feasible. See Exhibit B.

4.3.3 Enforcement Measurement Compliance means comparing performance levels provided to BellSouth retail customers with performance levels provided by BellSouth to the CLEC customer, as set forth in Exhibit C, attached hereto and incorporated herein by this reference.

4.3.4 Test Statistic and Balancing Critical Value is the means by which enforcement will be determine using statistically valid equations. See Exhibit C.

4.3.5 Cell is the point (below the wire center level) at which like-to-like comparisons are made. For example, all BellSouth retail POTS services, for residential customers, requiring a dispatch in a particular wire center, at a particular point in time will be compared directly to ICG resold services for residential customers, requiring a dispatch, in the same wire center, at a particular point in time. When determining compliance, these cells can have a positive or negative value. See Exhibit C.

4.3.6 Affected Volume means that proportion of the total ICG volume or CLEC Aggregate volume for which remedies will be paid.

4.3.7 Parity Gap refers to the incremental departure from a compliant-level of service. (See Exhibit D). This is also referred to as "diff" in the Statistical paper (See Exhibit C).

4.3.8 Tier-1 Enforcement Mechanisms means self-executing liquidated damages paid directly to ICG when BellSouth delivers non-compliant performance of any one of the Enforcement Measurement Elements *for* any month as calculated by BellSouth.

4.3.9 Tier-2 Enforcement Mechanisms means Assessments paid directly to a state Public Service Commission ("Commission") or its designee. Tier 2 Enforcement Mechanisms are triggered by three consecutive monthly failure

in a quarter in which BellSouth performance is out of compliance or does not meet the benchmarks for the aggregate of all CLEC data as calculated by BellSouth for a particular Enforcement Measurement Element.

4.3.10 Tier-3 Enforcement Mechanisms means the voluntary suspension of additional marketing and sales of long distance services triggered by excessive repeat failures of those specific submeasures as defined in Exhibit D attached hereto and incorporated herein by this reference.

4.4 Application

4.4.1 The application of the Tier-1, Tier-2, and Tier-3 Enforcement Mechanisms does not foreclose other non-contractual legal and regulatory claims and remedies available to ICG.

4.4.2 Proof of damages resulting from BellSouth's failure to maintain Enforcement Measurement Compliance would be difficult to ascertain and, therefore, liquidated damages are a reasonable approximation of any contractual damage. Liquidated damages under this provision are not intended to be a penalty.

4.5 Methodology

4.5.1 Tier-1 Enforcement Mechanisms will be triggered by BellSouth's failure to achieve Enforcement Measurement Compliance or Enforcement Measurement Benchmarks for the State for a given Enforcement Measurement Element in a given month based upon a test statistic and balancing critical value calculated by BellSouth utilizing BellSouth generated data. The method of calculation is attached hereto as Exhibit D and incorporated herein by this reference.

4.5.1.1 Tier-1 Enforcement Mechanisms apply on a per transaction basis for each negative cell and will escalate based upon the number of consecutive months that BellSouth has reported non-compliance.

4.5.1.2 Fee Schedule for Tier-1 Enforcement Mechanisms is shown in Table-1 attached hereto as Exhibit E and incorporated herein by this reference. Failures beyond Month 6 (as set forth in Table 1) will be subject to Month 6 fees.

4.5.2 Tier-2 Enforcement Mechanisms will be triggered by BellSouth's failure to achieve Enforcement Measurement Compliance or Enforcement Measurement Benchmarks for the State in a given calendar quarter based upon a statistically valid equation calculated by BellSouth utilizing BellSouth generated data. The method of calculation is attached hereto as Exhibit D and incorporated herein by reference.

4.5.2.1 Tier- 2 Enforcement Mechanisms apply, for an aggregate of all CLEC data generated by BellSouth, on a per transaction basis for each negative cell for a particular Enforcement Measurement Element.

4.5.2.2 Fee Schedule for Total Quarterly Tier-2 Enforcement Mechanisms is shown in Table-2 attached hereto as Exhibit E and incorporated herein by this reference.

4.5.3 Tier-3 Enforcement Mechanisms will be triggered by BellSouth's failure to achieve Enforcement Measurement Compliance or Enforcement Measurement Benchmarks for a State in a given calendar quarter. The method of calculation for specified submeasures is identical to the method of calculation for Tier-2 Enforcement Mechanisms as described above. The specific submeasures which are the mechanism for triggering and removing a Tier-3 Enforcement Mechanisms are described in more detail in Exhibit D attached hereto and incorporated herein by this reference.

4.6 Payment of Tier-1 and Tier-2 Amounts

4.6.1 If BellSouth performance triggers an obligation to pay Tier-1 Enforcement Mechanisms to ICG or an obligation to remit Tier-2 Enforcement Mechanisms to the Commission, BellSouth shall make payment in the required amount on or before the thirtieth (30th) day following the due date of the performance measurement report for the month in which the obligation arose.

4.6.2 For each day after the due date that BellSouth fails to pay ICG the required amount, BellSouth will pay interest to ICG at the maximum rate permitted by state law.

4.6.3 For each day after the due date that BellSouth fails to pay the Tier-2 Enforcement Mechanisms, BellSouth will pay the Commission an additional $1,000 per day.

4.6.4 If ICG disputes the amount paid to ICG for Tier-1 Enforcement Mechanisms, ICG shall submit a written claim to BellSouth within sixty (60) days after the date of the performance measurement report for which the obligation arose. BellSouth shall investigate all claims and provide ICG written findings within thirty (30) days after receipt of the claim. If BellSouth determines ICG is owed additional amounts, BellSouth shall pay ICG such additional amounts within thirty (30) days after its findings along with interest paid at the maximum rate permitted by law.

4.6.5 At the end of each calendar year, BellSouth will have its independent auditing and accounting firm certify that the results of all Tier-1 and Tier-2 Enforcement Mechanisms were paid and accounted for in accordance with Generally Accepted Account Principles (GAAP).

4.7 Limitations of Liability

4.7.1 BellSouth will not be responsible for ICG acts or omissions that cause performance measures to be missed or fail, including but not limited to accumulation and submission of orders at unreasonable quantities or times or failure to submit accurate orders or inquiries. BellSouth shall provide ICG with reasonable notice of such acts or omissions and provide ICG any such supporting documentation.

4.7.2 BellSouth shall not be obligated for Tier-1, Tier-2 or Tier 3 Enforcement Mechanisms for non-compliance with a performance measure if such non-compliance was the result of an act or omission by ICG that is in bad faith.

4.7.3 BellSouth shall not be obligated to pay Tier-1 Enforcement Mechanisms or Tier-2 Enforcement Mechanism for non-compliance with a performance measurement if such non-compliance was the result of any of the following: a Force Majeure event as set forth in the General Terms and Conditions of this Agreement; an act or omission by ICG that is contrary to any of its obligations under its Interconnection Agreement with BellSouth; an act or omission by ICG that is contrary to any of its obligations under the Act, Commission rule, or state law; an act or omission associated with third-party systems or equipment; or any occurrence that results from an incident reasonably related to the Y2K problem.

4.7.4 It is not the intent of the Parties that BellSouth be liable for both Tier-2 Enforcement Mechanisms and any other assessments or sanctions imposed by the Commission. ICG will not oppose any effort by BellSouth to set off Tier-2 Enforcement Mechanisms from any additional assessment imposed by the Commission.

4.7.5 Payment of any Tier-1 or Tier-2 Enforcement Mechanisms shall not be considered as an admission against interest or an admission of liability or culpability in any legal, regulatory or other proceeding relating to BellSouth's performance. The payment of any Tier-1 Enforcement Mechanisms to ICG shall release BellSouth for any liability associated with or related to the service performance measurement for the month for which the Enforcement Mechanisms was paid to ICG.

4.7.6 ICG acknowledges and argues that the Enforcement Mechanisms contained in this attachment have been provided by BellSouth on a completely voluntary basis in order to maintain compliance between BellSouth and ICG. Therefore, ICG may not use the existence of this section or any payments of any Tier-1 or Tier-2 Enforcement Mechanisms under this section as evidence that BellSouth has not complied with or has violated any state or federal law or regulation.

4.8 Enforcement Mechanism Caps

4.8.1 BellSouth's liability for the payment of Tier-1 and Tier-2 Enforcement Mechanisms shall be collectively capped at $625M per year for the entire BellSouth region as set forth below.

AL - $54M	MS - $44M
FL - $122M	NC - $77M
GA - $131M	SC - $47M
KY - $34M	TN - $57M
LA - $59M	
Regional Total - $625M	

4.8.2 If BellSouth's liability for the payment of Tier-1 and Tier-2 Enforcement Mechanisms exceed the caps referenced in this attachment, ICG may commence a

proceeding with the Commission to demonstrate why BellSouth should pay any amount in excess of the cap. ICG shall have the burden of proof to demonstrate why, under the circumstances, BellSouth should have additional liability.

4.9 Dispute Resolution

4.9.1 Notwithstanding any other provision of this Agreement, any dispute regarding BellSouth's performance or obligations pursuant to this Attachment shall be resolved by the Commission.

EXHIBIT A

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* These reports are subject to change due to regulatory requirements or to correct errors and etc.

PRE-ORDERING - OSS

Report/Measurement :

Average OSS Response Time and Response Interval

Definition:

Average response time and response intervals are the average times and number of requests responded to within certain intervals for accessing legacy data associated with appointment scheduling, service & feature availability, address verification, request for Telephone Numbers (TNs), and Customer Service Records (CSRs).

Exclusions:

None

Business Rules:

The average response time for retrieving pre-order/order information from a given legacy system is determined by summing the response times for all requests submitted to the legacy during the reporting period and dividing by the total number of legacy requests for that day X 100. The response interval starts when the client application (LENS or TAG for CLECs and RNS for BST) submits a request to the legacy system and ends when the appropriate response is returned to the client application. The number of legacy accesses during the reporting period, which take less than 2.3 seconds and the number, which take more than 6 seconds are also captured.

Level of Disaggregation:

- RSAG – Address (Regional Street Address Guide- Address) - stores street address information used to validate customer addresses
- RSAG – TN (Regional Street Address Guide- Telephone Number) - contains information about facilities available and telephone numbers working at a given address.
- ATLAS (Application for Telephone Number Load Administration and Selection) - acts as a warehouse for storing telephone numbers that are available for assignment by the system. It enables CLECs and BST service reps to select and reserve telephone numbers.
- COFFI (Central Office Feature File Interface) - stores information about product and service offerings and availability.
- DSAP (DOE Support Application) - provides due date information.
- HAL (Hands-Off Assignment Logic) - a system used to access the Business Office Customer Record Information System (BOCRIS). It allows BST servers, including LENS, access to legacy systems.
- P/SIMS (Product/Services Inventory Management System) - provides information on capacity, tariffs, inventory and service availability.
- OASIS (Obtain Available Services Information Systems) - Information on feature and rate availability.

Calculation:

Σ[(Date & Time of Legacy Response) – (Date & Time of Request to Legacy)] / (Number of Legacy Requests During the Reporting Period) X 100

Report Structure:

- Not CLEC Specific
- Not product/service specific
- Regional Level

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Report Month • Legacy Contract (per reporting dimension) • Response Interval • Regional Scope	• Report Month • Legacy Contract (per reporting dimension) • Response Interval • Regional Scope

Retail Analog/Benchmark

CLEC Average Response Interval is comparable to BST Average Response Interval

Revision date: 09/14/99 (lg)

LEGACY SYSTEM ACCESS TIMES FOR RNS

System	Contract	Data	< 2.3 sec	> 6 sec	Avg. Sec	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x
ATLAS	ATLAS-TN	TN	x	x	x	x
DSAP	DSAP-DDI	Schedule	x	x	x	x
CRIS	CRSACCTS	CSR	x	x	x	x
OASIS	OASISBSN	Feature/Service	x	x	x	x
OASIS	OASISCAR	Feature/Service	x	x	x	x
OASIS	OASISLPC	Feature/Service	x	x	x	x
OASIS	OASISMTN	Feature/Service	x	x	x	x
OASIS	OASISBIG	Feature/Service	x	x	x	x

LEGACY SYSTEM ACCESS TIMES FOR LENS

System	Contract	Data	< 2.3 sec	> 6 sec	Avg. Sec	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x
ATLAS	ATLAS-TN	TN	x	x	x	x
DSAP	DSAPDDI	Schedule	x	x	x	x
HAL	HAL/CRIS	CSR	x	x	x	x
COFFI	COFFI/USOC	Feature/Service	x	x	x	x
P/SIMS	PSIMS/ORB	Feature/Service	x	x	x	x

LEGACY SYSTEM ACCESS TIMES FOR TAG

System	Contract	Data	< 2.3 sec	> 6 sec	Avg. Sec	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x
ATLAS	ATLASTN	TN	x	x	x	x
DSAP	DSAPDDI	Schedule	x	x	x	x
HAL	HAL/CRIS	CSR	x	x	x	x
CRIS	CRSEINIT	CSR	x	x	x	x
CRIS	CRSECSR	CSR	x	x	x	x

Revision date: 08/10/99 (lg)

PRE-ORDERING - OSS

Report/Measurement:

OSS Interface Availability

Definition:

Percent of time OSS interface is functionally available compared to scheduled availability. Availability percentages for CLEC interface systems and for all Legacy systems accessed by them are captured

Exclusions:

None

Business Rules:

This measurement captures the availability percentages for the BST systems, which are used by CLECs during Pre-Ordering functions. Comparison to BST results allow conclusions as to whether an equal opportunity exists for the CLEC to deliver a comparable customer experience.

Level of Disaggregation:

- Regional Level

Calculation:

(Functional Availability) / (Scheduled Availability) X 100

Report Structure:

- Not CLEC Specific
- Not product/service specific
- Regional Level

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Legacy contract type (per reporting dimension) • Regional Scope	• Report Month • Legacy contract type (per reporting dimension) • Regional Scope

Retail Analog/Benchmark:

CLEC OSS Interface Availability is comparable to BST OSS Interface Availability

Revision date: 09/14/99 (lg)

OSS Interface Availability

OSS Interface	% Availability
LENS	x
LEO Mainframe	x
LEO UNIX	x
LESOG	x
EDI	x
HAL	x
BOCRIS	x
ATLAS/COFFI	x
RSAG/DSAP	x
SOCS	x
TAG	x
	x

ORDERING

Report/Measurement:

Percent Flow Through Service Requests (Summary)

Definition:

The percentage of Local Service Requests (LSR) submitted electronically via the CLEC mechanized ordering process that flow through to SOCS without manual intervention

Exclusions:

- Fatal Rejects
- Auto Clarification
- Manual Fallout
- CLEC System Fallout
- Supplements (subsequent versions) to cancel LSRs that are not LESOG eligible (Under development)

Business Rules:

The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), and flow through to SOCS without manual intervention. These LSRs can be divided into two classes of service; Business and Residence, and three types of service; Resale, Unbundled Network Elements (UNE), and specials. The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier), or are not designed to flow through, i.e., Manual Fallout.

Definitions:

Fatal Rejects: Errors that prevent an LSR, submitted by the CLEC, from being processed further. When an LSR is submitted by a CLEC, LEO will perform edit checks to ensure the data received is correctly formatted and complete. For example, if the PON field contains an invalid character, LEO will reject the LSR and the CLEC will receive a Fatal Reject.

Auto-Clarification: errors that occur due to invalid data within the LSR. LESOG will perform data validity checks to ensure the data within the LSR is correct and valid. For example, if the address on the LSR is not valid according to RSAG, the CLEC will receive an Auto-Clarification.

Manual Fallout: errors that occur by design. Certain LSRs are designed to fallout of the Mechanized Order Process due to their complexity. These LSRs are manually processed by the LCSC. When a CLEC submits an LSR, LESOG will determine if the LSR should be forwarded to LCSC for manual handling. Following are the categories for Manual Fallout.

1. Complex services*
2. Expedites (requested by the CLEC)
3. Special pricing plans
4. Denials-restore and conversion, or disconnect and conversion orders
5. Partial migrations
6. Class of service invalid in certain states with some types of service
7. New telephone number not yet posted to BOCRIS
8. Low volume such as activity type "T" (move)
9. Pending order review required
10. More than 25 business lines
11. Restore or suspend for UNE combos
12. Transfer of calls option for the CLEC's end users
13. CSR inaccuracies such as invalid or missing CSR data in CRIS

* Attached is a list of services, including complex services, and whether LSRs issued for the services are eligible to flow through.

Total System Fallout: Errors that require manual review by the LCSC to determine if the error is caused by the CLEC, or is due to system functionality. If it is determined the error is caused by the CLEC, the LSR will be sent back to the CLEC as clarification. If it is determined the error is BST caused, the LCSC representative will correct the error.

ORDERING - (Percent Flow Through Service Requests (Summary) - Continued)

Calculation:

Percent Flow Through Service Requests = Σ[(Total number of valid service requests that flow-through to SOCS)] / (Total number of valid service requests delivered to SOCS) X 100

Description:

Percent Flow Through = (The total number of LSRs that flow through LESOG to SOCS) / (the number of LSRs passed from LEO to LESOG) - Σ[(the number of LSRs that fall out for manual processing) - (the number of LSRs that are returned to the CLEC for clarification) - (the number of LSRs that contain errors made by CLECs)] X 100.

Report Structure:

- CLEC Aggregate
  - Region

Level of Disaggregation:

- Geography
  - Region
- Product (Under Development)
  - Residence
  - Business
  - UNE
  - Special

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report month • Total number of LSRs received, by interface, by CLEC: ➢ TAG ➢ EDI ➢ LENS • Total number of errors by type, by CLEC: ➢ Fatal rejects ➢ Total fallout for manual processing ➢ Auto clarification ➢ CLEC caused system fallout • Total number of errors by error code	• Report month • Total number of errors by type: ➢ BST system error

Retail Analog/Benchmark:

CLEC Flow Through/benchmark comparison (Under Development)

Revision Date: 09/03/99 (tm)

ORDERING

Report/Measurement:

Percent Flow Through Service Requests (Detail)

Definition:

A detailed list by CLEC of the percentage of Local Service Requests (LSR) submitted electronically via the CLEC mechanized ordering process that flow through to SOCS without manual or human intervention.

Exclusions:

- Fatal Rejects
- Auto Clarification
- Manual Fallout
- CLEC System Fallout
- Supplements (subsequent versions) to cancel LSRs that are not LESOG eligible(Under development)

Business Rules:

The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), and flow through to SOCS without manual intervention. These LSRs can be divided into two classes of service; Business and Residence, and three types of service; Resale, Unbundled Network Elements (UNE) and specials. The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier), or are not designed to flow through, i.e., Manual Fallout.

Definitions:

Fatal Rejects: Errors that prevent an LSR, submitted by the CLEC, from being processed further. When an LSR is submitted by a CLEC, LEO will perform edit checks to ensure the data received is correctly formatted and complete. For example, if the PON field contains an invalid character, LEO will reject the LSR and the CLEC will receive a Fatal Reject.

Auto-Clarification: errors that occur due to invalid data within the LSR. LESOG will perform data validity checks to ensure the data within the LSR is correct and valid. For example, if the address on the LSR is not valid according to RSAG, the CLEC will receive an Auto-Clarification.

Manual Fallout: errors that occur by design. Certain LSRs are designed to fallout of the Mechanized Order Process due to their complexity. These LSRs are manually processed by the LCSC. When a CLEC submits an LSR, LESOG will determine if the LSR should be forwarded to LCSC for manual handling. Following are the categories for Manual Fallout:

1. Complex services*
2. Expedites (requested by the CLEC)
3. Special pricing plans
4. Denials-restore and conversion, or disconnect and conversion orders
5. Partial migrations
6. Class of service invalid in certain states with some types of service
7. New telephone number not yet posted to BOCRIS
8. Low volume such as activity type "T" (move)
9. Pending order review required
10. More than 25 business lines
11. Restore or suspend for UNE combos
12. Transfer of calls option for the CLEC's end users
13. CSR inaccuracies such as invalid or missing CSR data in CRIS

*Attached is a list of services, including complex services, and whether LSRs issued for the services are eligible to flow through.

Total System Fallout: Errors that require manual review by the LCSC to determine if the error is caused by the CLEC, or is due to system functionality. If it is determined the error is caused by the CLEC, the LSR will be sent back to the CLEC as clarification. If it is determined the error is BST caused, the LCSC representative will correct the error.

ORDERING – (Percent Flow Through Service Requests (Detail) – Continued)

Calculation:

Percent Flow Through Service Requests = (Total number of valid service requests that flow-through to SOCS) / (Total number of valid service requests delivered to SOCS) X 100

Description:

Percent Flow Through = The total number of LSRs that flow through LESOG to SOCS (the number of LSRs passed from LEO to LESOG) – Σ[(the number of LSRs that fall out for manual processing - the number of LSRs that are returned to the CLEC for clarification - the number of LSRs that contain errors made by CLECs)] X 100.

Report Structure:

- Provides the flow through percentage for each CLEC (by alias designation) submitting LSRs through the CLEC mechanized ordering process. The report provides the following:
  - CLEC (by alias designation)
  - Number of fatal rejects
  - Mechanized interface used
  - Total mechanized LSRs
  - Total manual fallout
  - Number of auto clarifications returned to CLEC
  - Number of validated LSRs
  - Number of BST caused fallout
  - Number of CLEC caused fallout
  - Number of Service Orders Issued
  - Base calculation
  - CLEC error excluded calculation

Level of Disaggregation:

- CLEC Specific (by alias designation to protect CLEC specific proprietary data)
- Geographic:
  - Region
- Product (Under development)
  - Residence
  - Business
  - UNE
  - Special

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report month • Total number of LSRs received, by interface, by CLEC. ➢ TAG ➢ EDI ➢ LENS • Total number of errors by type, by CLEC ➢ Fatal rejects ➢ Total fallout for manual processing ➢ Auto clarification ➢ CLEC errors • Total number of errors by error code	• Report month • Total number of errors by type: ➢ BST system error

Retail Analog/Benchmark:

CLEC Flow Through/benchmark comparison (Under development)

Revision Date: 09/03/99 (tm)

ORDERING

Report/Measurement:

Flow Through Error Analysis

Definition:

An analysis of each error type (by error code) that was experienced by the LSRs that did not flow through to SOCS

Exclusions:

Each Error Analysis is error code specific; therefore exclusions are not applicable.

Business Rules:

The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), and flow through to provisioning SOCS without manual intervention. These LSRs can be divided into two classes of service; Business and Residence, and two types of service; Resale and Unbundled Network Elements (UNE). This measurement captures the total number of errors by type. The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier).

Calculation:

Σ Of errors by type

Report Structure:

- Provides an analysis of each error type (by error code). The report is in descending order by count of each error code and provides the following:
  - Error Type (by error code)
  - Count of each error type
  - Percent of each error type
  - Cumulative percent
  - Error Description
  - CLEC Caused Count of each error code
  - Percent of aggregate by CLEC caused count
  - Percent of CLEC by CLEC caused count
  - BST Caused Count of each error code
  - Percent of aggregate by BST caused count
  - Percent of BST by BST caused count

Level of Disaggregation:

Region

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience

• Report month
• Total number of LSRs received
• Total number of errors by type (by error code)
  > CLEC caused error
	• Report month
	• Total number of errors by type (by error code)
	  > BST system error

Retail Analog/Benchmark:

Not Applicable

Revision Date: 09/03/99 (tm)

Attachment
BellSouth Flow-through Analysis
For CLECs LSRs placed via EDI or TAG

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service fall out for a reason other than errors or complex? If so, what reason?
1	Flat Rate Residence	Yes	No	No	no	
2	Flat Rate Business	Yes	No	No	no	
3	Pay Phone Provider	No	No	No	no	
4	Measured Rate/Res.	Yes	No	No	no	
5	Measured Rate/Bus.	Yes	No	No	no	
6	Area Plus	Yes	No	No	no	
7	Package/Complete Choice and area plus	Yes	No	No	no	
8	Optional Calling Plan	Yes	No	No	no	
9	Ga. Community Calling	Yes	No	No	no	
10	Call Waiting Deluxe	Yes	No	No	no	
11	Call Waiting	Yes	No	No	no	
12	Caller ID	Yes	No	No	no	
13	Speed Calling	Yes	No	No	no	
14	3 Way Calling	Yes	No	No	no	
15	Call Forwarding-Variable	Yes	No	No	no	
16	Remote Access to CF	Yes	No	No	no	
17	Enhanced Caller ID	Yes	No	No	no	
18	Memory Call	Yes	No	No	no	
19	Memory Call Ans. Svc.	Yes	No	No	no	
20	MTS	Yes	No	No	no	
21	RCF	Yes	No	No	no	
22	Ringmaster	Yes	No	No	no	
23	Call Tracing	Yes	No	No	no	
24	Call Block	Yes	No	No	no	
25	Repeat Dialing	Yes	No	No	no	
26	Call Selector	Yes	No	No	no	
27	Call Return	Yes	No	No	no	
28	Preferred Call Forward	Yes	No	No	no	
29	Touchtone	Yes	No	No	no	
30	Visual Director	Yes	No	No	no	
31	INP (all types?)	Yes	UNE	No	no	
32	Unbundled Loop-Analog 2W, SL1, SL2	Yes	UNE	No	Yes-designed, no-non-designed	
33	2 wire analog port	Yes	UNE	No	no	
34	Local Number Portability (always?)	Yes	UNE	No	no	
35	Accupulse	No	Yes	Yes	yes	See note at bottom of matrix.
36	Basic Rate ISDN	No	Yes	Yes	yes	LSR electronically submitted; flow through

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fail out for a reason other than errors or complex? If so, what reason?
37	DID	No*	Yes	Yes	Yes	* yes with OSS'99
38	Frame Relay	No	Yes	Yes	yes	
39	Megalink	No	Yes	Yes	yes	
40	Megalink-T1	No	Yes	Yes	yes	
41	Native Mode LAN Interconnection (NMLI)	No	Yes	Yes	yes	
42	Pathlink Primary Rate ISDN	No	Yes	Yes	yes	
43	Synchronet	No	Yes	Yes	yes	LSR electronically submitted, flow through
44	PBX Trunks	No	Yes	Yes	Yes	LSR electronically submitted; flow through
45	LightGate	No	Yes	Yes	yes	
46	Smartpath	No	Yes	Yes	yes	
47	Hunting	No	Yes	no	no	LSR electronically submitted; flow through
48	CENTREX	No	Yes	Yes	no	
49	FLEXSERV	No	Yes	Yes	yes	
50	Multiserv	No	Yes	Yes	yes	
51	Off-Prem Stations	No	Yes	Yes	yes	
52	SmartRING	No	Yes	Yes	yes	
53	FX	No	Yes	Yes	yes	
54	Tie Lines	No	Yes	Yes	Yes	
55	WATS	No	Yes	Yes	yes	
56	4 wire analog voice grade loop	No	UNE	Yes	yes-designed, no-non-designed	
57	4 wire DS1 & PRI digital loop	No	UNE	Yes	yes	
58	2 wire ISDN digital loop	No	UNE	Yes	yes	
59	4 wire DS1 & PRI digital loop	No	UNE	Yes	yes	
60	ADSL	No*	UNE	Yes	yes	* yes as of OSS'99?
61	HDSL	No	UNE	Yes	yes	
62	2 wire analog DID trunk port	No	UNE	Yes	Yes	
63	2 wire ISDN digital line side port	No	UNE	Yes	yes	
64	4 wire ISDN DS1 digital trunk ports	No	UNE	Yes	yes	
65	UNE Combinations	y-loop+port	UNE	Yes	yes	
66	Directory Listings (simple)	No*	UNE	Yes	no	* yes as of OSS'99

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
67	Directory Listings complex)	No*	UNE	yes	no	* yes as of OSS 6.9. captions and indentions
68	ESSX	No	Yes	Yes	no	

Note for last column: For all services that indicate 'No' for flow-through, the following reasons, in addition to errors or complex services, also prompt manual handling: Expedites from CLECs, special pricing plans, for denials – restore and conversion or disconnect and conversion both required, partial migrations (although conversions-as-is flow through), class of service invalid in certain states with some TOS – e.g. gov't, or cannot be changed when changing main TN on C activity, low volume – e.g. activity type T=move, pending order review required, more than 25 business lines, restore or suspend for UNE combos, transfer of calls option for CLEC end user – fixed with release 6.0, new TN not yet posted to BOCRIS. All b ut the last one are unique to the CLEC environment.

ORDERING

Report/Measurement:

Percent Rejected Service Requests

Definition:

Percent Rejected Service Request is the percent of total Local Service Requests (LSRs) received which are rejected due to error or omission. An LSR is considered valid when it is electronically submitted by the CLEC and passes LEO edit checks to insure the data received is correctly formatted and complete.

Exclusions:

Service Requests canceled by the CLEC prior to being rejected clarified.

Business Rules:

Fully Mechanized: An LSR is considered "rejected" when it is submitted electronically but does not pass LEO edit checks in the ordering systems (EDI, TAG, LEO, LESOG) and is returned to the CLEC. There are two types of "Rejects" in the Mechanized category:

- A Fatal Reject occurs when a CLEC attempts to electronically submit an LSR but required fields are not populated correctly and the request is returned to the CLEC before it is considered an LSR. Fatal Rejects are included in the calculation for regional reports only.
- An Auto Clarification is a valid LSR, which is electronically submitted but rejected from LESOG because it does not pass further edit checks for order accuracy.

Partially Mechanized: A valid LSR, which is electronically submitted (via EDI or TAG), but cannot be processed electronically and "falls out" for manual handling. It is then put into "clarification" and (rejected) sent back to the CLEC.

Total Mechanized: Combination of Fully Mechanized and Partially Mechanized LSRs.

Non Mechanized: An LSR which is faxed or mailed to the LCSC for processing and is "clarified" (rejected) back to the CLEC by the BST service representative.

LNP: Under Development

Calculation:

Percent Rejected Service Requests = (Total Number of Rejected Service Requests) / (Total Number of Service Requests Received) X 100 during the month.

Report Structure:

- Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized
- State and Region
- CLEC Specific
- CLEC Aggregate

Level of Disaggregation:

- Resale Residence
- Resale Business
- Resale Specials
- UNE
- UNE Loop with NP
- Other
- Trunks

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Report Month • Total number of LSRs • Total number of Rejects • Total Number of Errors • State and Region	• Report Month • Total number of LSRs • Total number of Errors • Adjusted Error Volume • State and Region

Retail Analog/Benchmark:

Benchmark is under development. Retail Analog also under development

Revision date: 09/13/99 (lg)

ORDERING

Report/Measurement:

Reject Interval

Definition:

Reject Interval is the average reject time from receipt of an LSR to the distribution of a Reject. An LSR is considered valid when it is electronically submitted by the CLEC and passes LEO edit checks to insure the data received is correctly formatted and complete

Exclusions:

Service Requests canceled by CLEC prior to being rejected/clarified

Business Rules:

- **Fully Mechanized**: The elapsed time from receipt of a valid LSR (date and time stamp in ED or TAG) until the LSR is rejected (date and time stamp of reject in LEO). Fatal Rejects and Auto Clarifications are considered in the Fully Mechanized category.
- **Partially Mechanized**: The elapsed time from receipt of a valid LSR (date and time stamp in EDI or TAG) until it falls out for manual handling. The stop time on partially mechanized LSRs is when the LCSC Service Representative clarifies the LSR back to the CLEC via LEO.
- **Total Mechanized**: Combination of Fully Mechanized and Partially Mechanized LSRs.
- **Non-Mechanized**: The elapsed time from receipt of a valid LSR (date and time stamp from FAX stamp) until notice of the reject is returned to the CLEC via LON.
- **LNP**: Under development.

Calculation:

Reject Interval = Σ[(Date and Time of Service Request Rejection) – (Date and Time of Service Request Receipt)] / (Number of Service Requests Rejected in Reporting Period)

Report Structure:

- CLEC Specific
- CLEC Aggregate
- Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized, Trunks

Level of Disaggregation:

- Product Reporting Levels
  - Interconnection Trunks
  - Resale – Residence
  - Resale – Business
  - Resale – Design
  - UNE Design
  - UNE Non- Design
  - UNE Loop with and w/o NP
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order
- Mechanized: 0-4 minutes, 4-8 minutes, 8-12 minutes, 12-60 minutes, 0-1 hour 1-8 hours, 8-24 hours, >24 hours.
- Non-mechanized: 0-1 hour, 1-4 hours, 4-8 hours, 8-12 hours, 12-16 hours, 16-20 hours, 20-24 hours >24 hours
- Average Interval in Days
- Trunks:

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Report Month • Reject Interval • Total Number of LSRs • Total number of Errors • State and Region	• Report Month • Reject Interval • Total number of LSRs • Total number of Errors • State and Region

Retail Analog/Benchmark:

Benchmark is under development. Retail Analog also under development

Revision date: 09/13/99 (lg)

ORDERING

Report/Measurement:

Firm Order Confirmation Timeliness

Definition:

Interval for Return of a Firm Order Confirmation (FOC Interval) is the average response time from receipt of valid LSR to distribution of a firm order confirmation.

Exclusions:

- Rejected LSRs
- Partially Mechanized or Non-Mechanized LSRs received and/or FOCd outside of normal business hours.

Business Rules:

- **Mechanized**: The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in LENS, EDI, TAG) until the LSR is processed and appropriate service orders are generated in SOCS.
- **Partially Mechanized:** The elapsed time from receipt of a valid electronically submitted LSR which falls out for manual handling by the LCSC personnel until appropriate service orders are issued by a BST service representative via Direct Order Entry (DOE) or Service Order Negotiation Generation System (SONGS) to SOCS.
- **Total Mechanized**: Combination of Fully Mechanized and Partially Mechanized LSRs
- **Non-Mechanized**: The elapsed time from receipt of a valid LSR (fax receive date and time stamp) until appropriate service orders are issued by BST service representative via Direct Order Entry (DOE) or Service Order Negotiation Generation System (SONGS) to SOCS.
- **LNP**: Under development.

Calculation:

Firm Order Confirmation Timeliness = Σ[(Date and Time of Firm Order Confirmation) – (Date and Time of Service Request Receipt)] / (Number of Service Requests Confirmed in Reporting Period)

Report Structure:

- Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized
- CLEC Specific
- CLEC Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - Interconnection Trunks
  - Resale – Residence
  - Resale – Business
  - Resale – Design
  - UNE Design
  - UNE Non- Design
  - UNE Loop with and w/o NP
  - Trunks
- Geographic Scope
  - State, Region and further geographic disaggregation (MSA) as required by State Commission Order
- Mechanized: 0-15 minutes, 15-30 minutes, 30-45 minutes, 45-60 minutes, 60-90 minutes, 90-120 minutes, 120-240 minutes, 4-8 hours, 8-12 hours, 12-16 hours, 16-20 hours, 20-24 hours, 24-48 hours, > 48 hours.
- Non-mechanized: 0-4 hours, 4-8 hours, 8-12 hours, 12-16 hours, 16-20 hours, 20-24 hours, 24-48 hours, > 48 hours.
- Trunks: 0-5 days, 6-8 days, 9-11 days, 12-14 days, 15-17 days, 18-20 days, >20 days
- < 10 and > 10 Circuits / Lines
- Average Interval in Days

ORDERING - (Firm Order Confirmation Timeliness – Continued)

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Report Month • Interval for FOC • Total number of LSRs • State and Region	• Report Month • Interval for FOC • Total Number of LSRs • State and Region
Retail Analog/Benchmark:	
Benchmark is under development. Retail Analog also under development	

Revision date: 09/13/99 (g)

ORDERING

Report/Measurement:
Speed of Answer in Ordering Center
Definition:
Measures the average time a customer is in queue.
Exclusions:
None
Business Rules:
The clock starts when the appropriate option is selected (i.e. 1 for Resale Consumer, 2 for Resale Multiline, and 3 for UNE-LNP, etc.) and the call enters the queue for that particular group in the LCSC. The clock stops when a BST service representative in the LCSC answers the call. The speed of answer is determined by measuring and accumulating the elapsed time from the entry of a CLEC call into the BellSouth automatic call distributor (ACD) until the a service representative in BSTs Local Carrier Service Center (LCSC) answers the CLEC call.
Calculation:
(Total time in seconds to reach the LCSC) / (Total Number of Calls) in the Reporting Period.
Report Structure:
• CLEC Aggregate • BST Aggregate (Combination of Residence Service Center and Business Service Center data under development)
Level of Disaggregation:
• CLEC Aggregate • BST Aggregate (Combination of Residence Service Center and Business Service Center data under development)

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Mechanized tracking through LCSC Automatic Call Distributor	• Mechanized tracking through BST Retail center support systems

Retail Analog/Benchmark:
For CLEC, Speed of Answer in Ordering Center (LCSC) is comparable to Speed of Answer in BST Business Offices.

Revision date: 09/13/99 (lg)

PROVISIONING

Report/Measurement:

Mean Held Order Interval & Distribution Intervals

Definition:

When delays occur in completing CLEC orders, the average period that CLEC orders are held for BST reasons, pending a delayed completion, should be no worse for the CLEC when compared to BST delayed orders

Exclusions:

- Any order canceled by the CLEC will be excluded from this measurement.
- Order Activities of BST associated with internal or administrative use of local services.

Business Rules:

Mean Held Order Interval: This metric is computed at the close of each report period. The held order interval is established by first identifying all orders, at the close of the reporting interval, that both have not been reported as completed in SOCS and have passed the currently committed due date for the order. For each such order, the number of calendar days between the committed due date and the close of the reporting period is established and represents the held order interval for that particular order. The held order interval is accumulated by the standard groupings, unless otherwise noted, and the reason for the order being held. The total number of days accumulated in a category is then divided by the number of held orders within the same category to produce the mean held order interval.

CLEC Specific reporting is by type of held order (facilities, equipment, other), total number of orders held, and the total and average days.

Held Order Distribution Interval: This measure provides data to report total days held and identifies these in categories of >15 days and > 90 days. (orders counted in >90 days are also included in >15 days).

Calculation:

Mean Held Order Interval:

Σ (Reporting Period Close Date – Committed Order Due Date) / (Number of Orders Pending and Past The Commited Due Date) for all orders pending and past the committed due date.

Held Order Distribution Interval:

(# of Orders Held for ≥ 90 days) / (Total # of Orders Pending But Not Completed) X 100

(# of Orders Held for ≥ 15 days) / (Total # of Orders Pending But Not Completed) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - POTS – Residence
  - POTS – Business
  - DESIGN
  - PBX
  - CENTREX
  - ISDN
  - UNE 2 Wire Loop with NP (Design and Non-Design)
  - UNE 2 Wire Loop without NP (Design and Non-Design)
  - UNE Loop Other with NP (Design and Non-Design)
  - UNE Loop Other without NP (Design and Non-Design)
  - UNE Other (Design and Non-Design)
  - Switching (Under development)
  - Local Transport (Under development)
  - Combos (Under development)
  - NP (Under development as separate category)
  - Local Interconnection Trunks
- Geographic Scope
  - State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

PROVISIONING – (Mean Held Order Interval & Distribution Intervals – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number and PON (PON) • Order Submission Date (TICKET_ID) • Committed Due Date (DD) • Service Type(CLASS_SVC_DESC) • Hold Reason • Total line/circuit count (under development) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Order Number • Order Submission Date • Committed Due Date • Service Type • Hold Reason • Geographic Scope

Retail Analog/Benchmark:

CLEC Residence Resale / BST Residence Retail
CLEC Business Resale / BST Business Retail
CLEC Design / BST Design
CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN
Interconnection Trunks-CLEC / Interconnection Trunks –BST
UNEs-Retail Analog (under development at this time)

Revision date: 06/24/99 (taf)

PROVISIONING

Report/Measurement:

Average Jeopardy Notice Interval & Percentage of Orders Given Jeopardy Notice

Definition:

When BST can determine in advance that a committed due date is in jeopardy, it will provide advance notice to the CLEC.

Exclusions:

- Any order canceled by the CLEC will be excluded from this measurement
- Orders held for CLEC end user reasons
- Orders submitted to BST through non-mechanized methods

Business Rules:

When BST can determine in advance that a committed due date is in jeopardy it will provide advance notice to the CLEC. The number of committed orders in a report period is the number of orders that have a due date in the reporting period.

Calculation:

Average Jeopardy Interval =Σ [(Date and Time of Scheduled Due Date on Service Order) - (Date and Time of Jeopardy Notice)]/[Number of Orders Notified of Jeopardy in Reporting Period).
Percent of Orders Given Jeopardy Notice = Σ [(Number of Orders Given Jeopardy Notices in Reporting Period) / (Number of Orders Confirmed (due) in Reporting Period)

Report Structure:

- CLEC Specific and CLEC Aggregate
- BST Aggregate (under development with estimated release date of 8/15/99 for June reporting)

Level of Disaggregation:

- Product Reporting Levels
  - POTS – Residence
  - POTS – Business
  - DESIGN
  - PBX
  - CENTREX
  - ISDN
  - UNE 2 Wire Loop with NP (Design and Non-Design)
  - UNE 2 Wire Loop without NP (Design and Non-Design)
  - UNE Loop Other with NP (Design and Non-Design)
  - UNE Loop Other without NP (Design and Non-Design)
  - UNE Other (Design and Non-Design)
  - Switching (Under development)
  - Local Transport (Under development)
  - Combos (Under development)
  - NP (Under development as separate category)
  - Local Interconnection Trunks
  - Geographic Scope
  - State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

PROVISIONING –
(Average Jeopardy Notice Interval & Percentage of Orders Given Jeopardy Notice – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number and PON • Date and Time Jeopardy Notice sent • Committed Due Date • Service Type **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • CLEC Order Number and PON • Date and Time Jeopardy Notice sent • Committed Due Date • Service Type **NOTE:** Code in parentheses is the corresponding header found in the raw data file.

Retail Analog/Benchmark:

CLEC Residence Resale / BST Residence Retail
CLEC Business Resale / BST Business Retail
CLEC Design / BST Design
CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN
Interconnection Trunks-CLEC / Interconnection Trunks –BST
UNEs-Retail Analog (under development at this time)

Revision date: 09/15/99 (taf)

PROVISIONING

Report/Measurement:

Percent Missed Installation Appointments

Definition:

"Percent missed installation appointments" monitors the reliability of BST commitments with respect to committed due dates to assure that CLECs can reliably quote expected due dates to their retail customer as compared to BST.

Exclusions:

- Canceled Service Orders
- Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.)
- Disconnect (D) & From (F) orders

Business Rules:

Percent Missed Installation Appointments is the percentage of total orders processed for which BST is unable to complete the service orders on the committed due dates. Missed Appointments caused by end-user reasons will be included and reported separately. A business day is any time period within the same date frame, which means there cannot be a cutoff time for commitments as certain types of orders are requested to be worked after standard business hours. Also, during Daylight Savings Time, field technicians are scheduled until 9PM in some areas and the customer is offered a greater range of intervals from which to select.

Calculation:

Percent Missed Installation Appointments = Σ (Number of Orders Not Complete by Committed Due Date in Reporting Period) / (Number of Orders Completed in Reporting Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Report explanation: The difference between End User MA and Total MA is the result of BST caused misses. Here, Total MA is the total % of orders missed either by BST or CLEC end user and End User MA represents the percentage of orders missed by the end user

PROVISIONING – (Percent Missed Installation Appointments – Continued)

Level of Disaggregation:

- Reported in categories of <10 line/circuits; > 10 line/circuits
- Dispatch / No Dispatch
- Product Reporting Levels
  - POTS – Residence
  - POTS – Business
  - DESIGN
  - PBX
  - CENTREX
  - ISDN
  - UNE 2 Wire Loop with NP (Design and Non-Design)
  - UNE 2 Wire Loop without NP (Design and Non-Design)
  - UNE Loop Other with NP (Design and Non-Design)
  - UNE Loop Other without NP (Design and Non-Design)
  - UNE Other (Design and Non-Design)
  - Switching (Under development)
  - Local Transport (Under development)
  - Combos (Under development)
  - NP (Under development as separate category)
  - Local Interconnection Trunks
  - Geographic Scope
  - State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number and PON (PON) • Committed Due Date (DD) • Completion Date (CMPLTN DD) • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Order Number • Committed Due Date • Completion Date • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope

Retail Analog/Benchmark:

CLEC Residence Resale / BST Residence Retail
CLEC Business Resale / BST Business Retail
CLEC Design / BST Design
CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN
Interconnection Trunks-CLEC / Interconnection Trunks –BST
UNEs-Retail Analog (under development at this time)

Revision date: 06/24/99 (taf)

PROVISIONING

Report/Measurement :

Average Completion Interval (OCI) & Order Completion Interval Distribution

Definition:

The "average completion interval" measure monitors the interval of time it takes BST to provide service for the CLEC or its own customers. The "Order Completion Interval Distribution" provides the percentage of orders completed within certain time periods.

Exclusions:

- Canceled Service Orders
- Order Activities of BST or the CLEC associated with internal or administrative use of local services
- (Record Orders, Test Orders, etc.)
- D (Disconnect) and F (From) orders. (From is disconnect side of a move order when the customer moves to a new address).
- "L" Appointment coded orders (where the customer has requested a later than offered interval)

Business Rules:

The actual completion interval is determined for each order processed during the reporting period. The completion interval is the elapsed time from when the order is electronically entered into SOCS after the FOC on a CLEC order, or the date time stamp receipt into SOCS by BST on retail orders to the order completion date. The clock starts when a valid order number is assigned by SOCS and stops when the technician or system completes the order in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed

Calculation:

Average Completion Interval:

Σ [(Completion Date & Time) - (Order Issue Date & Time)] / Σ (Count of Orders Completed in Reporting Period)

Order Completion Interval Distribution:

Σ (Service Orders Completed in "X" days) / (Total Service Orders Completed in Reporting Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

PROVISIONING –
(Average Completion Interval (OCI) & Order Completion Interval Distribution – Continued)

Level of Disaggregation:

- Dispatch/No Dispatch categories applicable to all levels except trunks.
- Residence & Business reported in day intervals = 0,1,2,3,4, 5, 5+
- UNE and Design reported in day intervals = 0-5, 5-10, 10-15, 15-20, 20-25, 25-30, 30+
- All Levels are reported <10 line/circuits; >10 line/circuits
- Product Reporting Levels
  - POTS – Residence
  - POTS – Business
  - DESIGN
  - PBX
  - CENTREX
  - ISDN
  - UNE 2 Wire Loop with NP (Design and Non-Design)
  - UNE 2 Wire Loop without NP (Design and Non-Design)
  - UNE Loop Other with NP (Design and Non-Design)
  - UNE Loop Other without NP (Design and Non-Design)
  - UNE Other (Design and Non-Design)
  - Switching (Under development)
  - Local Transport (Under development)
  - Combos (Under development)
  - NP (Under development as separate category)
  - Local Interconnection Trunks
  - Geographic Scope
  - State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Company Name • Order Number (PON) • Submission Date & Time (TICKET_ID) • Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • CLEC Order Number • Order Submission Date & Time • Order Completion Date & Time • Service Type • Geographic Scope

Retail Analog/Benchmark

CLEC Residence Resale / BST Residence Retail
CLEC Business Resale / BST Business Retail
CLEC Non-UNE Design / BST Design
CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN
Interconnection Trunks-CLEC / Interconnection Trunks-BST
UNEs-Retail Analog (under development at this time)

Revision date: 09/08/99 (taf)

PROVISIONING

Report/Measurement:

Average Completion Notice Interval

Definition:

The Completion Notice Interval is the elapsed time between the BST reported completion of work and the issuance of a valid completion notice to the CLEC.

Exclusions:

- Non-mechanized Orders
- Cancelled Service Orders
- Order Activities of BST associated with internal or administrative use of local services
- D & F orders

Business Rules:

Measurement of interval of completion date and time by a field technician on dispatched orders, and 5PM on the due date for non-dispatched orders; to the release of a notice to the CLEC/BST of the completion status. On all orders (mechanized and non-mechanized) the field technician notifies the CLEC by telephone the work was complete and then he enters the work order completion information and completion time in his computer. This information switches through to the SOCS systems either completing the order or rejecting the order to the Work Management Center (WMC). If the completion is rejected, it is manually corrected and then completed by the WMC. The notice is returned on each individual order submitted and as the notice is sent electronically, it can only be switched to those orders that were submitted by the CLEC electronically.

Calculation:

Σ (Date and Time of Notice of Completion) – (Date and Time of Work Completion) / (Number of Orders Completed in Reporting Period)

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate (in development-expected release date 08/15/99 reporting)

Level of Disaggregation:

- Reporting intervals in Hours: 0-1, 1-2, 2-4, 4-8, 8-12, 12-24, > 24, plus Overall Average Hour Interval
- Reported in categories of <10 line/circuits; > 10 line/circuits
- Product Reporting Levels
  - POTS – Residence
  - POTS – Business
  - DESIGN
  - PBX
  - CENTREX
  - ISDN
  - UNE 2 Wire Loop with NP (Design and Non-Design)
  - UNE 2 Wire Loop without NP (Design and Non-Design)
  - UNE Loop Other with NP (Design and Non-Design)
  - UNE Loop Other without NP (Design and Non-Design)
  - UNE Other (Design and Non-Design)
  - Switching (Under development)
  - Local Transport (Under development)
  - Combos (Under development)
  - NP (Under development as separate category)
  - Local Interconnection Trunks
  - Geographic Scope
  - State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

PROVISIONING – (Average Completion Notice Interval – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number • Work Completion Date • Work Completion Time • Completion Notice Availability Date • Completion Notice Availability Time • Service Type • Activity Type • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • Service Order Number • Work Completion Date • Work Completion Time • Completion Notice Availability Date • Completion Notice Availability Time • Service Type • Activity Type • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.

Retail Analog/Benchmark:

CLEC Residence Resale / BST Residence Retail
CLEC Business Resale / BST Business Retail
CLEC Non-UNE Design / BST Design
CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN
Interconnection Trunks-CLEC / Interconnection Trunks-BST
UNEs-Retail Analog (under development at this time)

Revision date: 09/15/99 (taf)

PROVISIONING

Report/Measurement:

Coordinated Customer Conversions

Definition:

This category measures the average time it takes BST to disconnect an unbundled loop from the BST switch and cross connect it to a CLEC's equipment. This measurement applies to service orders with and without NP, and where the CLEC has requested BST to provide a coordinated cutover.

Exclusions:

- Any order canceled by the CLEC will be excluded from this measurement.
- Delays due to CLEC following disconnection of the unbundled loop
- Unbundled Loops where there is no existing subscriber loop

Business Rules:

Where the service order includes NP, the interval includes the total time for the cutover including the translation time to place the line back in service on the ported line. The interval is calculated for the entire cutover time for the service order and then divided by items worked in that time to give the average per item interval for each service order.

Calculation:

Σ [(Completion Date and Time for Cross Connection of an Unbundled Loop)- (Disconnection Date and Time of an Unbundled Loop)] / Total Number of Unbundled Loop Items for the reporting period.

Report Structure:

- CLEC Specific
- CLEC Aggregate

Level of Disaggregation:

- Reported in intervals <=5 minutes; >5,<15 minutes; >15 minutes, plus Overall Average interval
- Product Reporting Levels
  - UNE Loops without NP
  - UNE Loops with NP
  - Geographic Scope
  - State, Region, and further geographic disaggregation as required by State Commission Order

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number • Committed Due Date (DD) • Service Type (CLASS_SVC_DESC) • Cutover Start Time • Cutover Completion time • Portability start and completion times (NP orders) • Total Items **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• No BST Analog Exists

Retail Analog/Benchmark:

There is no retail analog for this measurement because it measures cutting loops to the CLEC. Benchmark under development.

Revision date: 09/09/99 (taf)

PROVISIONING

Report/Measurement:

% Provisioning Troubles within 30 days of Service Order Activity

Definition:

Percent Provisioning Troubles within 30 days of Installation measures the quality and accuracy of installation activities.

Exclusions:

- Canceled Service Orders
- Order Activities of BST or the CLEC associated with internal or administrative use of local services (R Orders, Test Orders, etc.)
- D & F orders

Business Rules:

Measures the quality and accuracy of completed orders. The first trouble report from a service order after completion is counted in this measure. Subsequent trouble reports are measured in Repeat Report Rate. Reports are calculated searching in the prior report period for completed service orders and following 30 days after completion for a trouble report.
D & F orders are excluded as there is no subsequent activity following a disconnect.

Calculation:

% Provisioning Troubles within 30 days of Service Order Activity = Σ (Trouble reports on all completed orders ≤ 30 days following service order(s) completion) / (All Service Orders completed in the calendar month) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Reported in categories of <10 line/circuits; > 10 line/circuits
- Dispatch / No Dispatch
- Product Reporting Levels
  - POTS – Residence
  - POTS – Business
  - DESIGN
  - PBX
  - CENTREX
  - ISDN
  - UNE 2 Wire Loop with NP (Design and Non-Design)
  - UNE 2 Wire Loop without NP (Design and Non-Design)
  - UNE Loop Other with NP (Design and Non-Design)
  - UNE Loop Other without NP (Design and Non-Design)
  - UNE Other (Design and Non-Design)
  - Switching (Under development)
  - Local Transport (Under development)
  - Combos (Under development)
  - NP (Under development as separate category)
  - Local Interconnection Trunks
  - Geographic Scope
  - State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

PROVISIONING – (% Provisioning Troubles within 30 days of Service Order Activity – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number and PON • Order Submission Date(TICKET_ID) • Order Submission Time (TICKET_ID) • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Order Number • Order Submission Date • Order Submission Time • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope

Retail Analog/Benchmark:

CLEC Residence Resale / BST Residence Retail
CLEC Business Resale / BST Business Retail
CLEC Design / BST Design
CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN
Interconnection Trunks-CLEC / Interconnection Trunks –BST
UNEs-Retail Analog (Under Development at this time)

Revision date: 09/09/99 (taf)

PROVISIONING

Report/Measurement :

Total Service Order Cycle Time (TSOCT) - under development 3Q99)

Definition:

This is a new measurement under development to measure the total service order cycle time from receipt of a valid service order request to the completion of the service order.

Exclusions:

- Canceled Service Orders
- Order Activities of BST or the CLEC associated with internal or administrative use of local services
- (Record Orders, Test Orders, etc.)
- D (Disconnect) and F (From) orders. (From is disconnect side of a move order when the customer moves to a new address).
- "L" Appointment coded orders (where the customer has requested a later than offered interval)
- Orders with CLEC/Subscriber caused delays or CLEC/Subscriber requested due date changes.

Business Rules:

The interval is determined for each order processed during the reporting period. This measurement combines two reports: FOC (Firm Order Confirmation) with Average Order Completion Interval. This interval starts with the receipt of a valid service order request and stops when the technician or system completes the order in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed

Calculation :

Total Service Order Cycle Time (under development)

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- ISDN Orders included in Non Design - GA Only
- Dispatch/No Dispatch categories applicable to all levels except trunks.
- Intervals under development
- Product Reporting Levels
  - Interconnection Trunks
  - POTS – Residence
  - POTS – Business
  - DESIGN
  - PBX
  - CENTREX
  - ISDN
  - UNE 2 Wire Loop with NP (Design and Non-Design)
  - UNE 2 Wire Loop without NP (Design and Non-Design)
  - UNE Loop Other with NP (Design and Non-Design)
  - UNE Loop Other without NP (Design and Non-Design)
  - UNE Other (Design and Non-Design)
  - Switching (Under development)
  - Local Transport (Under development)
  - Combos (Under development)
  - NP (Under development as separate category)
  - Local Interconnection Trunks
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order

PROVISIONING – (Total Service Order Cycle Time (TSOCT) – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Interval for FOC • CLEC Company Name • Order Number (PON) • Submission Date & Time (TICKET_ID) • Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • CLEC Order Number • Order Submission Date & Time • Order Completion Date & Time • Service Type • Geographic Scope
Retail Analog/Benchmark	
Under development (BST retail analog available at this time would be Average Completion Interval)	

Revision date: 09/08/99 (taf)

MAINTENANCE & REPAIR

Report/Measurement:

Missed Repair Appointments

Definition:

The percent of trouble reports not cleared by the committed date and time.

Exclusions:

- Trouble tickets canceled at the CLEC request.
- BST trouble reports associated with internal or administrative service.
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble.

Business Rules:

The negotiated commitment date and time is established when the repair report is received. The cleared time is the date and time that BST personnel clear the trouble and closes the trouble report in his Computer Access Terminal (CAT) or workstation. If this is after the Commitment time, the report is flagged as a "Missed Commitment" or a missed repair appointment. When the data for this measure is collected for BST and a CLEC, it can be used to compare the percentage of the time repair appointments are missed due to BST reasons. Note: Appointment intervals vary with force availability in the POTS environment. Specials and Trunk intervals are standard interval appointments of no greater than 24 hours.

Calculation:

Percentage of Missed Repair Appointments = Σ (Count of Customer Troubles Not Cleared by the Quoted Commitment Date and Time) / Σ (Total Trouble reports closed in Reporting Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

ISDN Troubles included in Non-Design – GA ONLY

- Product Reporting Levels
  - POTS – Residence, Business
  - Design
  - PBX, CENTREX and ISDN
  - UNE 2 Wire Loop (Design and Non – Design)
  - UNE Loop Other (Design and Non Design)
  - UNE Other (Design and Non – Design)
  - Switching, Local Transport and Combos (under development)
  - Local Interconnection Trunks
- Dispatch/No Dispatch categories applicable to all product levels
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area - MSA)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Company Name • Submission Date & Time (TICKET_ID) • Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Company Code • Submission Date & Time • Completion Date • Service Type • Disposition and Cause (Non-Design / Non-Special Only) • Trouble Code (Design and Trunking Services) • Geographic Scope

MAINTENANCE & REPAIR - (Missed Repair Appointments - Continued)

Retail Analog/Benchmark
CLEC Residence-Resale : BST Residence-Retail
CLEC Business-Resale : BST Business-Retail
CLEC Design-Resale : BST Design-Retail
CLEC PBX, Centrex, and ISDN Resale: BST PBX, Centrex, and ISDN Retail
CLEC Trunking-Resale : BST Trunking-Retail
UNEs - Retail Analog (under development at this time.)

Revision date: 06/09/99 (ccc)

MAINTENANCE & REPAIR

Report/Measurement:

Customer-Trouble Report Rate

Definition:

Initial and repeated customer direct or referred troubles reported within a calendar month per 100 lines/circuits in service.

Exclusions:

- Trouble tickets canceled at the CLEC request.
- BST trouble reports associated with administrative service.
- Customer provided Equipment (CPE) troubles or CLEC equipment troubles.

Business Rules:

Customer Trouble Report Rate is computed by accumulating the number of maintenance initial and repeated trouble reports during the reporting period. The resulting number of trouble reports are divided by the total "number of service" lines, ports or combination of existing for the CLEC's and BST respectively at the end of the report month.

Calculation:

Customer Trouble Report Rate = (Count of Initial and Repeated Trouble Reports in the Current Period) / (Number of Service Access Lines in service at End of the Report Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- **ISDN Troubles included in Non Design – GA Only**
- Product Reporting Levels
  - POTS Residence and Business
  - Design
  - PBX, CENTREX, and ISDN
  - UNE 2 Wire Loop (Design and Non – Design)
  - UNE Loop Other (Design and Non – Design)
  - UNE Other (Design and Non – Design)
  - Switching , Local Transport, and Combos (under development)
  - Local Interconnection Trunks
- Dispatch/No Dispatch categories applicable to all product levels
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area - MSA)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • # Service Access Lines in Service at the end of period • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Company Code • Ticket Submission Date & Time • Ticket Completion Date • Service Type • Disposition and Cause (Non-Design / Non-Special Only) • Trouble Code (Design and Trunking Services) • # Service Access Lines in Service at the end of period • Geographic Scope

MAINTENANCE & REPAIR – (Customer Trouble Report Rate – Continued)

Retail Analog Benchmark:
CLEC Residence-Resale · BST Residence -Retail
CLEC Business-Resale · BST Business-Retail
CLEC Design-Resale · BST Design Retail
CLEC PBX, Centrex and ISDN Resale/ BST PBX, Centrex, and ISDN Retail
CLEC Trunking-Resale · BST Trunking-Retail
UNEs - Retail Analog (under development at this time)

Revision date: 06/09/99 (see)

MAINTENANCE & REPAIR

Report/Measurement:

Maintenance Average Duration

Definition:

The Average duration of Customer Trouble Reports from the receipt of the Customer Trouble Report to the time the trouble report is cleared.

Exclusions:

- Trouble reports canceled at the CLEC request
- BST trouble reports associated with administrative service
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Troubles.
- Trouble reports greater than 10 days

Business Rules:

For Average Duration the clock starts on the date and time of the receipt of a correct repair request. The clock stops on the date and time the service is restored (when the technician completes the trouble ticket on his/her CAT or work system).

Calculation:

Maintenance Average Duration = Σ(Date and Time of Service Restoration) – (Date and Time Trouble Ticket was Opened) / Σ(Total Closed Troubles in the reporting period)

Report Structure:

- CLEC Specific
- BST Aggregate
- CLEC Aggregate

Level of Disaggregation:

ISDN Troubles included in Non Design – GA Only

- Product Reporting Levels
  - POTS– Residence and Business
  - Design
  - PBX, CENTREX, and ISDN
  - UNE 2 Wire Loop (Design Non – Design)
  - UNE Loop Other (Design Non – Design)
  - UNE Other (Design Non – Design)
  - Switching, Local Transport and Combos (under development)
  - Local Interconnection Trunks
- Dispatch/No Dispatch categories applicable to all product levels
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area – MSA)

MAINTENANCE & REPAIR – (Maintenance Average Duration – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Total Tickets (LINE_NBR) • CLEC Company Name • Ticket Submission Date & Time (TIME_ID) • Ticket Completion Date (CMPLTN_DT • Service Type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • Total Tickets • BST Company Code • Ticket Submission Date • Ticket submission Time • Ticket completion Date • Ticket Completion Time • Total Duration Time • Service Type • Disposition and Cause (Non – Design / Non-Special Only) • Trouble Code (Design and Trunking Services) • Geographic Scope

Retail Analog/Benchmark:

CLEC Residence-Resale / BST Residence-Resale
CLEC Business-Resale / BST Business-Retail
CLEC Design-Resale / BST Design-Retail
CLEC PBX, Centrex and ISDN Resale / BST PBX, Centrex and ISDN Retail
CLEC Trunking-Resale /BST Trunking-Retail
UNEs - Retail Analog (under development at this time)

Revision date: 06/09/99 (see)

MAINTENANCE & REPAIR

Report/Measurement:

Percent Repeat Troubles within 30 Days

Definition:

Trouble reports on the same line/circuit as a previous trouble report received within 30 calendar days as a percent of total troubles reported.

Exclusions:

- Trouble Reports canceled at the CLEC request
- BST Trouble Reports associated with administrative service
- Customer Provided Equipment (CPE) Troubles or CLEC Equipment Troubles.

Business Rules:

Includes Customer trouble reports received within 30 days of an original Customer trouble report.

Calculation:

Percentage of Missed Repair Appointments = (Count of Customer Troubles where more than one trouble report was logged for the same service line within a continuous 30 days) / (Total Trouble Reports Closed in Reporting Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

ISDN Troubles included in Non Design – GA Only

- Product Reporting Levels
  - POTS Residence and Business
  - Design
  - PBX, CENTREX and ISDN
  - UNE 2 Wire Loop (Design and Non – Design)
  - UNE Loop Other (Design and Non – Design)
  - UNE Other (Design Non – Design)
  - Switching, Local Transport and Combos (under development)
  - Local Interconnection Trunks
- Dispatch/No Dispatch categories applicable to all product levels
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area - MSA)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Total Tickets (LINE_NBR) • CLEC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMPLTN_DT) • Total and Percent Repeat Trouble Reports within 30 Days (TOT_REPEAT) • Service Type • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope NOTE: Code parentheses is the corresponding header format found in the raw data file.	• Report Month • Total Tickets • BST Company Code • Ticket Submission Date • Ticket Submission Time • Ticket Completion Date • Ticket Completion Time • Total and Percent Repeat Trouble Reports within 30 Days • Service Type • Disposition and Cause (Non – Design/ Non-Special only) • Trouble Code (Design and Trunking Services) • Geographic Scope

MAINTENANCE & REPAIR – (Percent Repeat Troubles within 30 Days - Continued)

Retail Analog/Benchmark:
CLEC Residence-Resale / BST Residence-Retail
CLEC Business- Resale / BST Business-Retail
CLEC Design-Resale / BST Design-Retail
CLEC PBX, Centrex and ISDN Resale / BST PBX, Centrex and ISDN Retail
CLEC Trunking-Resale / BST Trunking-Retail
UNEs - Retail Analog (under development at this time)

Revision date: 06/09/99 (see)

MAINTENANCE & REPAIR

Report/Measurement:

Out of Service (OOS) > 24 Hours

Definition:

For Out of Service Troubles (no dial tone, cannot be called or cannot call out) the percentage of troubles cleared in excess of 24 hours. (All design services are considered to be out of service).

Exclusions:

- Trouble Reports canceled at the CLEC request
- BST Trouble Reports associated with administrative service
- Customer Provided Equipment (CPE) Troubles or CLEC Equipment Troubles.

Business Rules:

Customer Trouble reports that are out of service and cleared in excess of 24 hours. The clock begins when the trouble report is created in LMOS and the trouble is counted if the time exceeds 24 hours.

Calculation:

Out of Service (OOS) > 24 hours = (Total Troubles OOS > 24 Hours) / Total OOS Troubles in Reporting Period) X 100

Report Structure:

- CLEC Specific
- BST Aggregate
- CLEC Aggregate

Level of Disaggregation:

ISDN Troubles included in Non Design – GA Only

- Product Reporting Levels
  - POTS Residence and Business
  - Design
  - PBX and CENTREX and ISDN
  - UNE 2 Wire Loop (Design and Non – Design)
  - UNE Loop Other (Design and Non – Design)
  - UNE Other (Design and Non – Design)
  - Switching, Local Transport and Combos (under development)
  - Local Interconnection Trunks
- Dispatch/No Dispatch categories applicable to all product levels
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area - MSA)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Total Tickets. • CLEC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMPLTN_DT • Percentage of Customer Troubles out of Service > 24 Hours (OOS>24_FLAG) • Service type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE-DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • Total Tickets • BST Company Code • Ticket Submission Date • Ticket Submission time • Ticket Completion Date • Ticket Completion Time • Percent of Customer Troubles out of Service > 24 Hours • Service type • Disposition and Cause (Non – Design/ Non-Special only) • Trouble Code (Design and Trunking Services) • Geographic Scope

MAINTENANCE & REPAIR – (Out of Service (OOS) > 24 Hours – Continued)

Retail Analog/Benchmark:
CLEC Residence-Resale / BST Residence- Retail
CLEC Business- Resale / BST Business-Retail
CLEC Design-Resale BST Design-Retail
CLEC PBX, Centrex and ISDN Resale / BST PBX, Centrex and ISDN Retail
CLEC Trunking-Resale BST Trunking- Retail
UNEs Retail Analog (under development at this time.)

Revision date: 06/09/99 (see)

MAINTENANCE & REPAIR

Report/Measurement:	
OSS Interface Availability	
Definition:	
The percentage of time the OSS Interface is functionally available compared to scheduled availability. Availability percentage for the CLEC and BST interface systems and for the legacy systems accessed by them are captured.	
Exclusions:	
None	
Business Rules:	
This measure is designed to compare the OSS availability versus scheduled availability of BST's legacy systems.	
Calculation:	
OSS Interface Availability = (Actual System Functional Availability) / (Actual planned System Availability) X 100	
Report Structure:	
• CLEC Aggregate • BST Aggregate • BST/CLEC	
Level of Disaggregation:	
• Region	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Availability of CLEC TAFI • Availability of LMOS HOST, MARCH and SOCS • CRIS, PREDICTOR, LNP, and OSPCM (under development at this time)	• Availability of BST TAFI • Availability of LMOS HOST, MARCH and SOCS
Retail Analog/Benchmark:	
Parity by design; Retail Analog	

Revision date: 06/09/99 (see)

MAINTENANCE & REPAIR

Report/Measurement:
OSS Response Interval and Percentages
Definition:
The response intervals are determined by subtracting the time a request is received on the BST side of the interface until the response is received from the legacy system. Percentages of requests falling into each interval category are reported, along with the actual number of requests falling into those categories.
Exclusions:
Queries received during scheduled system maintenance time.
Business Rules:
This measure is designed to monitor the time required for the CLEC and BST interface system to obtain from BST's legacy systems the information required to handle maintenance and repair functions. The clock starts on the date and time when the request is received and the clock stops when the response has been transmitted through that same point to the requester.
Calculation:
OSS Response Interval = (Query Response Date and Time for Category "X") - (Query Request Date and Time for Category "X") / (Number of Queries Submitted in the Reporting Period) where, "X" is 0-4, $\geq$ 4 to 10, > 10, > 30 seconds.
Report Structure:
• CLEC • BST Residence • BST Business (BST Total is under development at this time) by interface for each legacy • system and function as appropriate.
Level of Disaggregation:
• Region

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• CLEC Transaction Intervals	• BST Business and Residence transaction Intervals

Retail Analog/Benchmark:
Retail Analog Audit Verification

Revision date: 06/09/99 (see)

MAINTENANCE & REPAIR

Report/Measurement:

Average Answer Time – Repair Centers

Definition:

This measure demonstrates an average response time for the CLEC representative to contact a BST representative. The average time a CLEC Rep is in queue waiting for the LCSC or UNE Center Rep to answer.

Exclusions:

None

Business Rules:

This measure is designed to measure the time required for CLEC & BST from the time of the ACD choice to the time of being answered. The clock starts when the CLEC Rep makes a choice to be put in queue for the next repair attendant and the clock stops when the repair attendant answers the call.

Level of Disaggregation:

- Region. CLEC/BST Service Centers and BST Repair Centers are regional.

Calculation:

Average Answer Time for BST's Repair Centers = (Time BST Repair Attendant Answers Call) – (Time of entry into queue until ACD Selection) / (Total number of calls by reporting period)

Report Structure:

- CLEC Aggregate
- BST Aggregate
- CLEC Aggregate

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• CLEC Average Answer Time	• BST Average Answer Time

Retail Analog/Benchmark:

Retail Analog
Audit Verification

Revision date: 06/09/99 (see)

BILLING

Report/Measurement:
Invoice Accuracy
Definition:
This measure provides the percentage of accuracy of the billing invoices rendered to CLECs during the current month.
Exclusions:
• Adjustments not related to billing errors (e.g., credits for service outage, special promotion credits, adjustments to satisfy the customer)
Business Rules:
The accuracy of billing invoices delivered by BST to the CLEC must enable them to provide a degree of billing accuracy comparative to BST bills rendered to retail customers BST. CLECs request adjustments on bills determined to be incorrect. The BellSouth Billing verification process includes manually analyzing a sample of local bills from each bill period. The bill verification process draws from a mix of different customer billing options and types of service. An end-to-end auditing process is performed for new products and services. Internal measurements and controls are maintained on all billing processes.
Calculation:
Invoice Accuracy = (Total Billed Revenues during current month) – (Billing Related Adjustments during current month) / Total Billed Revenues during current month X 100
Report Structure:
• CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation :

• Product / Invoice Type
  > Resale
  > UNE
  > Interconnection
• Geographic Scope
  > Region

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:

• Report Month
• Invoice Type
• Total Billed Revenue
• Billing Related Adjustments
	• Report Month
	• Retail Type
	  > CRIS
	  > CABS
	• Total Billed Revenue
	• Billing Related Adjustments

Retail Analog/Benchmark
CLEC Invoice Accuracy is comparable to BST Invoice Accuracy

Revision date: 09/15/99 (lg)

BILLING

Report/Measurement:

Mean Time to Deliver Invoices

Definition:

This measure provides the mean interval for billing invoices

Exclusions:

Any invoices rejected due to formatting or content errors.

Business Rules:

Measures the mean interval for timeliness of billing records delivered to CLECs in an agreed upon format. CRIS-based invoices are measured in business days, and CABS-based invoices in calendar days.

Calculation:

Mean Time To Deliver Invoices = Σ [(Invoice Transmission Date) – (Close Date of Scheduled Bill Cycle)] / (Count of Invoices Transmitted in Reporting Period)

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Product / Invoice Type
  - > Resale
  - > UNE
  - > Interconnection
- Geographic Scope
  - > Region

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:

• Report Month
• Invoice Type
• Invoice Transmission Count
• Date of Scheduled Bill Close
	• Report Month
	• Retail Type
	  > CRIS
	  > CABS
	• Invoice Transmission Count
	• Date of Scheduled Bill Close

Retail Analog/Benchmark:

- CRIS-based invoices will be released for delivery within six (6) business days
- CABS-based invoices will be released for delivery within eight (8) calendar days.
- CLEC Average Delivery Intervals for both CRIS and CABS Invoices are comparable to BST Average delivery time for both systems.

Revision date: 09/15/99 (lg)

BILLING -

Report/Measurement:

Usage Data Delivery Accuracy

Definition:

This measurement captures the percentage of recorded usage that is delivered error free and in an acceptable format to the appropriate Competitive Local Exchange Carrier (CLEC). These percentages will provide the necessary data for use as a comparative measurement for BellSouth performance. This measurement captures Data Delivery Accuracy rather than the accuracy of the individual usage recording.

Exclusions:

None

Business Rules:

The accuracy of the data delivery of usage records delivered by BST to the CLEC must enable them to provide a degree of accuracy comparative to BST bills rendered to their retail customers. If errors are detected in the delivery process, they are investigated, evaluated and documented. Errors are corrected and the data retransmitted to the CLEC.

Calculations:

Usage Data Delivery Accuracy = Σ [(Total number of usage data packs sent during current month) – (Total number of usage data packs requiring retransmission during current month)] / (Total number of usage data packs sent during current month) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Geographic Scope
  - Region

Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non BellSouth Recorded	• Report Month • Record Type

Retail Analog/Benchmark:

CLEC Usage Data Delivery Accuracy is comparable to BST Usage Data Delivery Accuracy

Revision date: 09/15/99 (lg)

BILLING

Report/Measurement:
Usage Data Delivery Completeness
Definition:
This measurement provides percentage of complete and accurately recorded usage data (usage recorded by BellSouth and usage recorded by other companies and sent to BST for billing) that is processed and transmitted to the CLEC within thirty (30) days of the message recording date. A parity measure is also provided showing completeness of BST messages processed and transmitted via CMDS. BellSouth delivers its own retail usage from recording location to billing location via CMDS as well as delivering billing data to other companies. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.
Exclusions:
None
Business Rules:
The purpose of these measurements is to demonstrate the level of quality of usage data delivered to the appropriate CLEC. Method of delivery is at the option of the CLEC.
Calculation:
Usage Data Delivery Completeness = Σ(Total number of Recorded usage records delivered during the current month that are within thirty (30) days of the message recording date) / Σ(Total number of Recorded usage records delivered during the current month) X 100
Report Structure
• CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
• Geographic Scope ➢ Region

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non BellSouth Recorded	• Report Monthly • Record Type

Retail Analog/Benchmark:
CLEC Usage Delivery Completeness is comparable to BST Usage Delivery Completeness

Revision date: 09/15/99 (lg)

BILLING

Report/Measurement:
Usage Data Delivery Timeliness
Definition:
This measurement provides a percentage of recorded usage data (usage recorded by BST and usage recorded by other companies and sent to BST for billing) that is delivered to the appropriate CLEC within six (6) calendar days from the receipt of the initial recording. A parity measure is also provided showing timeliness of BST messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.
Exclusions:
None
Business Rules:
The purpose of this measurement is to demonstrate the level of timeliness for processing and transmission of usage data delivered to the appropriate CLEC. The usage data will be mechanically transmitted or mailed to the CLEC data processing center once daily. The Timeliness interval of usage recorded by other companies is measured from the date BST receives the records to the date BST distributes to the CLEC. Method of delivery is at the option of the CLEC.
Calculation:
Usage Data Delivery Timeliness = Σ (Total number of usage records sent within six (6) calendar days from initial recording/receipt) / Σ (Total number of usage records sent) X 100
Report Structure:
• CLEC Aggregate • CLEC Specific • BST Aggregate
Level of Disaggregation:
• Geographic Scope ➢ Region

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non-BellSouth Recorded	• Report Monthly • Record Type

Retail Analog/Benchmark:
CLEC Usage Data Delivery Timeliness is comparable to BST Usage Data Delivery Timeliness

Revision date: 09/15/99 (lg)

BILLING

Report/Measurement:

Mean Time to Deliver Usage

Definition:

This measurement provides the average time it takes to deliver Usage Records to a CLEC. A parity measure is also provided showing timeliness of BST messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.

Exclusions:

None

Business Rules:

The purpose of this measurement is to demonstrate the average number of days it takes BST to deliver Usage data to the appropriate CLEC. Usage data is mechanically transmitted or mailed to the CLEC data processing center once daily. Method of delivery is at the option of the CLEC.

Calculation:

Mean Time to Deliver Usage = Σ (Record volume X estimated number of days to deliver the Usage Record) / total record volume

Report Structure:

- CLEC Aggregate
- CLEC Specific
- BST Aggregate

Level of Disaggregation:

- Geographic Scope
  - Region

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non-BellSouth Recorded	• Report Monthly • Record Type

Retail Analog/Benchmark:

Mean Time to Deliver Usage to CLEC is comparable to Mean Time to Deliver Usage to BST

Revision date: 09/15/99 (lg)

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:

Speed to Answer Performance/Average Speed to Answer – Toll

Definition:

Measurement of the average time in seconds calls wait before answered by a toll operator

Exclusions:

Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.

Business Rules:

The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.

Calculation:

The Average Speed to Answer for toll is calculated by using data from monthly system measurement reports taken from the centralized call routing switches. The "total call waiting seconds" is a sub-component of this measure which BST systems calculate by monitoring the number of calls in queue throughout the day multiplied by the time (in seconds) between monitoring events. The "total calls served" is the other sub-component of this measure, which BST systems record as the total number of calls handled by Operator Services toll centers. Since calls abandoned are not reflected in the calculation, the percent answered within the required timeframe is determined by using conversion tables with input for the abandonment rate.

Report Structure:

Reported for the aggregate of BST and CLECs

- State

Level of Disaggregation:

None

Data Retained (on Aggregate Basis)

For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP.

- Month
- Call Type (Toll)
- Average Speed of Answer

Retail Analog/Benchmark

Parity by Design

Revision Date: 06/29/99 (tg)

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:

Speed to Answer Performance/Percent Answered within "X" Seconds – Toll

Definition:

Measurement of the percent of toll calls that are answered in less than "X" seconds. The number of seconds represented by "X" is thirty, except where a different regulatory benchmark has been set against the Average Speed to Answer by a State Commission.

Exclusions:

Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.

Business Rules:

The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.

Calculation:

The Percent Answered within "X" Seconds measurement for toll is derived by using the BellCore Statistical Answer Conversion Tables, to convert the Average Speed to Answer measure into a percent of calls answered within "X" seconds. The BellCore Conversion Tables are specific to the defined parameters of work time, number of operators, max queue size and call abandonment rates.

Report Structure:

Reported for the aggregate of BST and CLECs

- State

Level of Disaggregation:

None

Data Retained (on Aggregate Basis)

For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP.

- Month
- Call Type (Toll)
- Average Speed of Answer

Retail Analog/Benchmark

Parity by Design

Revision Date: 06/29/99 (tg)

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:

Speed to Answer Performance/Average Speed to Answer – Directory Assistance (DA)

Definition:

Measurement of the average time in seconds calls wait before answer by a DA operator.

Exclusions:

Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.

Business Rules:

The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.

Calculation:

The Average Speed to Answer for DA is calculated by using data from monthly system measurement reports taken from the centralized call routing switches. The "total call waiting seconds" is a sub-component of this measure which BST systems calculate by monitoring the number of calls in queue throughout the day multiplied by the time (in seconds) between monitoring events. The "total calls served" is the other sub-component of this measure, which BST systems record as the total number of calls handled by Operator Services DA centers. Since calls abandoned are not reflected in the calculation, the percent answered within the required timeframe is determined by using conversion tables with input for the abandonment rate.

Report Structure:

Reported for the aggregate of BST and CLECs

- State

Level of Disaggregation:

None

Data Retained (on Aggregate Basis)

For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP.

- Month
- Call Type (DA)
- Average Speed of Answer

Retail Analog/Benchmark

Parity by Design

Revision Date: 06/29/99 (tg)

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:

Speed to Answer Performance/Percent Answered within "X" Seconds – Directory Assistance (DA)

Definition:

Measurement of the percent of DA calls that are answered in less than "X" seconds. The number of seconds represented by "X" is twenty, except where a different regulatory benchmark has been set against the Average Speed to Answer by a State Commission.

Exclusions:

Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.

Business Rules:

The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.

Calculation:

The Percent Answered within "X" Seconds measurement for DA is derived by using the BellCore Statistical Answer Conversion Tables, to convert the Average Speed to Answer measure into a percent of calls answered within "X" seconds. The BellCore Conversion Tables are specific to the defined parameters of work time, number of operators, max queue size and call abandonment rates.

Report Structure:

Reported for the aggregate of BST and CLECs

- State

Level of Disaggregation:

None

Data Retained (on Aggregate Basis)

For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP.

- Month
- Call Type (DA)
- Average Speed of Answer

Retail Analog/Benchmark

Parity by Design

Revision Date: 06/29/99 (tg)

E911

Report/Measurement:
E911 Timeliness
Definition:
Measures the percentage of batch orders for E911 database updates (to CLEC resale and BST retail records) processed successfully within a 24-hour period.
Exclusions:
• Any resale order canceled by a CLEC • Facilities-based CLEC orders.
Business Rules:
The 24-hour processing period is calculated based on the date and time processing starts on the batch orders and the date and time processing stops on the batch orders. Mechanical processing starts when SCC (BST's E911 vendor) receives E911 files containing batch orders extracted from BST's Service Order Communication System (SOCS). Processing stops when SCC loads the individual records to the E911 database. No distinctions are made between CLEC resale records and BST retail records.
Calculation:
E911 Timeliness = Σ (Number of batch orders processed within 24 hours ÷ Total number of batch orders submitted) X 100
Report Structure:
Reported for the aggregate of CLEC resale updates and BST retail updates • State • Region
Levels of Disaggregation:
None
Data Retained
• Report month • Aggregate data
Retail Analog/Benchmark
Parity by Design

Revision Date: 06/29/99 (tg)

E911

Report/Measurement:
E911 Accuracy
Definition:
Measures the individual E911 telephone number (TN) record updates (to CLEC resale and BST retail records) processed successfully for E911 with no errors.
Exclusions:
• Any resale order canceled by a CLEC • Facilities-based CLEC orders
Business Rules:
Accuracy is based on the number of records processed without error at the conclusion of the processing cycle. Mechanical processing starts when SCC (BST's E911 vendor) receives E911 files containing telephone number (TN) records extracted from BST's Service Order Communication System (SOCS). No distinctions are made between CLEC resale records and BST retail records.
Calculation:
E911 Accuracy = Σ(Number of record individual updates processed with no errors ÷ Total number of individual record updates) X 100
Report Structure:
Reported for the aggregate of CLEC resale updates and BST retail updates • State • Region
Level of Disaggregation:
None
Data Retained
• Report month • Aggregate data
Retail Analog/Benchmark
Parity by Design

Revision Date: 06/29/99 (tg)

E911

Report/Measurement:

E911 Mean Interval

Definition:

Measures the mean interval processing of E911 batch orders (to update CLEC resale and BST retail records).

Exclusions:

- Any resale order canceled by a CLEC
- Facilities-based CLEC orders

Business Rules:

The processing period is calculated based on the date and time processing starts on the batch orders and the date and time processing stops on the batch orders. Data is posted in 4-hour increments up to and beyond 24 hours. No distinctions are made between CLEC resale records and BST retail records.

Calculation:

E911 Mean Interval = Σ (Date and time of batch order completion – Date and time of batch order submission) ÷ (Number of batch orders completed)

Report Structure:

Reported for the aggregate of CLEC resale updates and BST retail updates

- State
- Region

Level of Disaggregation:

None

Data Retained (on Aggregate Basis)

- Report month
- Aggregate data

Retail Analog/Benchmark

Parity by Design

Revision Date: 06/29/99 (tg)

TRUNK GROUP PERFORMANCE

Report/Measurement:

Trunk Group Service Report

Definition:

A report of the percent blocking above the Measured Blocking Threshold (MBT) on all final trunk groups between CLEC Points of Termination and BST end offices or tandems.

Exclusions:

- Trunk groups for which valid traffic data is not available
- High use trunk groups

Business Rules:

Traffic trunking data measurements are validated and processed by the Total Network Data System/Trunking (TNDS/TK), a Telcordia (BellCore) supported application, on an hourly basis for Average Business Days (Monday through Friday). The traffic load sets, including offered load and observed blocking ratio (calls blocked divided by calls attempted), are averaged for a 20 day period, and the busy hour is selected. The busy hour average data for each trunk group is captured for reporting purposes. Although all trunk groups are available for reporting, the report highlight those trunk groups with blocking greater than the Measured Blocking Threshold (MBT) and the number of consecutive monthly reports that the trunk group blocking has exceeded the MBT. The MBT for CTTG is 2% and the MBT for all other trunk groups is 3%.

Calculation:

Measured blocking = (Total number of blocked calls) / (Total number of attempted calls) X 100

Report Structure:

- BST Aggregate
  - > CTTG
  - > Local
- CLEC Aggregate
  - > BST Administered CLEC Trunk
  - > CLEC Administered CLEC Trunk
- CLEC Specific
  - > BST Administered CLEC Trunk
  - > CLEC Administered CLEC Trunk

Level of Disaggregation:

State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT	• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT. • Percent of trunk groups with blocking greater than the MBT

Retail Analog/Benchmark:

CLEC Trunk Blockage/BST Trunk Blockage

Revision Date: 09/15/99 (tm)

TRUNK GROUP PERFORMANCE

Report/Measurement:

Trunk Group Service Detail

Definition:

A detailed list of all final trunk groups between CLEC Points of Presence and BST end offices or tandems, and the actual blocking performance when the blocking exceeds the Measured Blocking Threshold (MBT) for the trunk groups.

Exclusions:

- Trunk groups for which valid traffic data is not available
- High use trunk groups

Business Rules:

Traffic trunking data measurements are validated and processed by the Total Network Data System/Trunking (TNDS/TK), a Telcordia (Bellcore) supported application, on an hourly basis for Average Business Days (Monday through Friday). The traffic load sets, including offered load and observed blocking ratio (calls blocked divided by calls attempted), are averaged for a 20 day period, and the busy hour is selected. The busy hour average data for each trunk group is captured for reporting purposes. Although all trunk groups are available for reporting, the report highlight those trunk groups with blocking greater than the Measured Blocking Threshold (MBT) and the number of consecutive monthly reports that the trunk group blocking has exceeded the MBT. The MBT for CTTG is 2% and the MBT for all other trunk groups is 3%.

Calculation:

Measured Blocking = (Total number of blocked calls) / (Total number of attempted calls) X 100

Report Structure:

- BST Specific
  - Traffic Identity
  - TGSN
  - Tandem
  - End Office
  - Description
  - Observed Blocking
  - Busy Hour
  - Number Trunks
  - Valid study days
  - Number reports
  - Remarks
- CLEC Specific
  - Traffic Identity
  - TGSN
  - Tandem
  - CLEC POT
  - Description
  - Observed Blocking
  - Busy Hour
  - Number Trunks
  - Valid study days
  - Number reports
  - Remarks

Level of Disaggregation:

State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT • Traffic identity, TGSN, end points, description, busy hour, valid study days, number reports	• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT • Traffic identity, TGSN, end points, description, busy hour, valid study days, number reports

Retail Analog/Benchmark:

CLEC Trunk Blockage/BST Trunk Blockage

Revision Date: 09/15/99 (tm)

COLLOCATION

Report/Measurement:
Collocation/Average Response Time
Definition:
Measures the average time (counted in business days) from the receipt of a complete and accurate collocation application (including receipt of application fees) to the date BellSouth responds in writing
Exclusions:
• Requests to augment previously completed arrangements • Any application cancelled by the CLEC
Business Rules:
The clock starts on the date that BST receives a complete and accurate collocation application accompanied by the appropriate application fee. The clock stops on the date that BST returns a response. The clock will restart upon receipt of changes to the original application request.
Calculation:
Average Response Time = Σ(Request Response Date) – (Request Submission Date) / Count of Responses Returned within Reporting Period.
Report Structure:
• Individual CLEC (alias) aggregate • Aggregate of all CLECs
Level of Disaggregation:
• State, Region and further geographic disaggregation as required by State Commission Order • Virtual • Physical
Data Retained:
• Report period • Aggregate data
Retail Analog/Benchmark:
Under development

Revision Date: 06/29/99 (tg)

COLLOCATION

Report/Measurement:

Collocation/Average Arrangement Time

Definition:

Measures the average time (counted in business days) from the receipt of a complete and accurate Bona Fide firm order (including receipt of appropriate fee) to the date BST completes the collocation arrangement.

Exclusions:

- Any Bona Fide firm order cancelled by the CLEC
- Bona Fide firm orders to augment previously completed arrangements
- Time for BST to obtain permits
- Time during which the collocation contract is being negotiated

Business Rules:

The clock starts on the date that BST receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee. The clock stops upon submission of the permit request and restarts upon receipt of the approved permit. Changes (affecting the provisioning interval or capital expenditures) that are submitted while provisioning is in progress may alter the completion date. The clock stops on the date that BST completes the collocation arrangement.

Calculation:

Average Arrangement Time = Σ(Date Collocation Arrangement is Complete) – (Date Order for Collocation Arrangement Submitted) / Total Number of Collocation Arrangements Completed during Reporting Period.

Report Structure:

- Individual CLEC (alias) aggregate
- Aggregate of all CLECs

Level of Disaggregation:

- State, Region and further geographic disaggregation as required by State Commission Order
- Virtual
- Physical

Data Retained:

- Report period
- Aggregate data

Retail Analog/Benchmark:

Under development

Revision Date: 06/29/99 (tg)

COLLOCATION

Report/Measurement:

Collocation/Percent of Due Dates Missed

Definition:

Measures the percent of missed due dates for collocation arrangements.

Exclusions:

- Any Bona Fide firm order cancelled by the CLEC
- Bona Fide firm orders to augment previously completed arrangements
- Time for BST to obtain permits
- Time during which the collocation contract is being negotiated

Business Rules:

The clock starts on the date that BST receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee. The clock stops on the date that BST completes the collocation arrangement.

Calculation:

% of Due Dates Missed = Σ (Number of Orders not completed w/i ILEC Committed Due Date during Reporting Period) / Number of Orders Completed in Reporting Period) X 100

Report Structure:

- Individual CLEC (alias) aggregate
- Aggregate of all CLECs

Level of Disaggregation:

- State, Region and further geographic disaggregation as required by State Commission Order
- Virtual
- Physical

Data Retained:

- Report period
- Aggregate data

Retail Analog/Benchmark:

Under development

Revision Date: 06/29/99 (tg)

Appendix A: Reporting Scope*

Standard Service Groupings	*Pre-Order Ordering* • Resale Residence • Resale Business • Resale Special • Local Interconnection Trunks • UNE • UNE - Loops w/LNP *Provisioning* • UNE Non-Design • UNE Design • UNE Loops w/LNP • Local Interconnection Trunks • Resale Residence • Resale Business • Resale Design • BST Trunks • BST Residence Retail • BST Business Retail *Maintenance and Repair* • Local Interconnection Trunks • UNE Non-Design • UNE Design • Resale Residence • Resale Business • BST Interconnection Trunks • BST Residence Retail • BST Business Retail Local Interconnection Trunk Group Blockage • BST CTTG Trunk Groups • CLEC Trunk Groups

Appendix A. Reporting Scope

Standard Service Order Activities *These are the generic BST/CLEC service order activities which are included in the Pre-Ordering, Ordering, and Provisioning sections of this document. It is not meant to indicate specific reporting categories.*	• New Service Installations • Service Migrations Without Changes • Service Migrations With Changes • Move and Change Activities • Service Disconnects (Unless noted otherwise)
Pre-Ordering Query Types: **Maintenance Query Types:**	• Address • Telephone Number • Appointment Scheduling • Customer Service Record • Feature Availability
Report Levels	• CLEC RESH • CLEC MSA • CLEC State • CLEC Region • Aggregate CLEC State • Aggregate CLEC Region • BST State • BST Region

* Scope is report, data source and system dependent, and, therefore, will differ with each report.

Appendix B: Glossary of Acronyms and Terms

A	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 like category, e.g. CLEC aggregate equals the sum total of all CLECs' data for a given reporting level.
	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.
	ATLASTN	ATLAS software contract for Telephone Number
	AUTO CLARIFICATION	The number of LSRs that were electronically rejected from LESOG and electronically returned to the CLEC for correction.
B	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 - A front-end presentation manager used by BellSouth organizations to access the CRIS database.
	BRC	Business Repair Center – The BellSouth Business Systems trouble receipt center which serves large business and CLEC customers.
	BST	BellSouth Telecommunications, Inc.
C	CKTID	A unique identifier for elements combined in a service configuration
	CLEC	Competitive Local Exchange Carrier
	CMDS	Centralized Message Distribution System - BellCore administered national system used to transfer specially formatted messages among companies.
	COFFI	Central Office Feature File Interface - A BellSouth Operations System database which maintains Universal Service Order Code (USOC) information based on current tariffs.

Appendix B: Glossary of Acronyms and Terms - Continued

C	COFIUSOC	COFFI software contract for feature/service information
	CRIS	Customer Record Information System - The BellSouth proprietary corporate database and billing system for non-access customers and services.
	CRSACCTS	CRIS software contract for CSR information
	CSR	Customer Service Record
	CTTG	Common Transport Trunk Group - Final trunk groups between BST & Independent end offices and the BST access tandems.
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, Central Office Equipment, Customer Premises Equipment, etc.
	DLETH	Display Lengthy Trouble History - A history report that gives all activity on a line record for trouble reports in LMOS
	DLR	Detail Line Record - All the basic information maintained on a line record in LMOS, e.g. name, address, facilities, features etc.
	DOE	Direct Order Entry System - An internal BellSouth service order entry system used by BellSouth Service Representatives to input business service orders in BellSouth format.
	DSAP	DOE (Direct Order Entry) Support Application - The BellSouth Operations System which assists a Service Representative or similar carrier agent in negotiating service provisioning commitments for non-designed services and UNEs.
	DSAPDDI	DSAP software contract for schedule information
E	E911	Provides callers access to the applicable emergency services bureau by dialing a 3-digit universal telephone number.
	EDI	Electronic Data Interchange - The computer-to-computer exchange of inter and/or intra company business documents in a public standard format.
F	FATAL REJECT	The number of LSRs that were electronically rejected from LEO, which checks to see of the LSR has all the required fields correctly populated
	FLOW-THROUGH	In the context of this document, LSRs submitted electronically via the CLEC mechanized ordering process that flow through to the BST OSS without manual or human intervention.
	FOC	Firm Order Confirmation - A notification returned to the CLEC confirming that the LSR has been received and accepted, including the specified commitment date.

Appendix B: Glossary of Acronyms and Terms - Continued

G		
H	HAL	"Hands Off" Assignment Logic - Front end access and error resolution logic used in interfacing BellSouth Operations Systems such as ATLAS, BOCRIS, LMOS, PSIMS, RSAG and SOCS
	HALCRIS	HAL software contract for CSR information
I	ISDN	Integrated Services Digital Network
K		
L	LCSC	Local Carrier Service Center - The BellSouth center which is dedicated to handling CLEC LSRs, ASRs, and Preordering transactions along with associated expedite requests and escalations.
	LEGACY SYSTEM	Term used to refer to BellSouth Operations Support Systems (see OSS)
	LENS	Local Exchange Negotiation System - The BellSouth LAN/web server/OS application developed to provide both preordering and ordering electronic interface functions for CLECs.
	LEO	Local Exchange Ordering - A BellSouth system which accepts the output of EDI, applies edit and formatting checks, and reformats the Local Service Requests in BellSouth Service Order format.
	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.
	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	LMOS host computer
	LMOSupd	LMOS updates
	LNP	Local Number Portability - In the context of this document, the capability for a subscriber to retain his current telephone number as he transfers to a different local service provider.
	LOOPS	Transmission paths from the central office to the customer premises.
	LSR	Local Service Request – A request for local resale service or unbundled network elements from a CLEC.
M	MAINTENANCE & REPAIR	The process and function by which trouble reports are passed to BellSouth and by which the related service problems are resolved.
	MARCH	A BellSouth Operations System which accepts service orders, 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.

Appendix B: Glossary of Acronyms and Terms – Continued

N	NC	"No Circuits" - All circuits busy announcement
O	OASIS	Obtain Availability Services Information System - A BellSouth front-end processor, which acts as an interface between COFFI and RNS. This system takes the USOCs in COFFI and translates them to English for display in RNS.
	OASISRSN	OASIS software contract for feature/service
	OASISCAR	OASIS software contract for feature/service
	OASISLPC	OASIS software contract for feature/service
	OASISMTN	OASIS software contract for feature/service
	OASISNET	OASIS software contract for feature/service
	OASISOCP	OASIS software contract for feature/service
	ORDERING	The process and functions by which 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.
	OSPCM	Outside Plant Contract Management System - Provides Scheduling Information.
	OSS	Operations Support System - A support system or database which is used to mechanize the flow or performance of work. The term is used to refer to the overall system consisting of hardware complex, computer operating system(s), and application which is used to provide the support functions.
	OUT OF SERVICE	Customer has no dial tone and cannot call out.
P	POTS	Plain Old Telephone Service
	PREDICTOR	The BellSouth Operations system which is used to administer proactive maintenance and rehabilitation activities on outside plant facilities, provide access to selected work groups (e.g. RRC & BRC) to Mechanized Loop Testing and switching system I/O ports, and provide certain information regarding the attributes and capabilities of outside plant facilities.
	PREORDERING	The process and functions by which vital information is obtained, verified, or validated prior to placing a service request.
	PROVISIONING	The process and functions by which necessary work is performed to activate a service requested via an LSR or ASR and to initiate the proper billing and accounting functions.
	PSIMS	Product/Service Inventory Management System - A BellSouth database Operations System which contains availability information on switching system features and capabilities and on BellSouth service availability. This database is used to verify the availability of a feature or service in an NXX prior to making a commitment to the customer.
	PSIMSORB	PSIMS software contract for feature/service

Appendix B: Glossary of Acronyms and Terms – Continued

Q		
R	RNS	Regional Negotiation System - An internal BellSouth service order entry system used by BellSouth Consumer Services to input service orders in BellSouth format.
	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 validated to be accurate with state and local governments.
	RSAGADDR	RSAG software contract for address search
	RSAGTN	RSAG software contract for telephone number search
S	SOCS	Service Order Control System - The BellSouth Operations System which routes service order images among BellSouth drop points and BellSouth Operations Systems during the service provisioning process.
	SOIR	Service Order Interface Record - any change effecting activity to a customer account by service order that impacts 911/E911.
T	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.
	TN	Telephone Number
	TOTAL MANUAL FALLOUT	The number of LSRs which are entered electronically but require manual entering into a service order generator.
U	UNE	Unbundled Network Element
V		
W	WTN	A unique identifier for elements combined in a service configuration
X		
Y		
Z		
Σ		Sum of:

Appendix C

BELLSOUTH'S AUDIT POLICY:

BellSouth currently provides many CLECs with audit rights as a part of their individual interconnection agreements. However, it is not reasonable for BellSouth to undergo an audit for every CLEC with which it has a contract. As of June, 1999, that would equate to over 732 audits per year and that number is continually growing. BellSouth has developed a proposed Audit Plan for use by the parties to an audit. If requested by a Public Service Commission, BellSouth will agree to undergo a comprehensive audit of the aggregate level reports for both BellSouth and the CLECs for each of the next five (5) years (1999 – 2005), to be conducted by an independent third party. The results of that audit will be made available to all the parties subject to proper safeguards to protect proprietary information. This aggregate level audit includes the following specifications:

1. The cost shall be borne 50% by BellSouth and 50% by the CLECs.
2. The independent third party auditor shall be selected with input from BellSouth, the PSC, if applicable, and the CLEC(s).
3. BellSouth, the PSC and the CLECs shall jointly determine the scope of the audit.

BellSouth reserves the right to make changes to this audit policy as growth and changes in the industry dictate.

EXHIBIT B

VSEEM III	*MEASURES AND SUB-METRICS*	Retail Analogue	Benchmark
Pre-Ordering	Percent Response Received within "X" seconds	Resale and UNEs	
	OSS Interface Availability	Retail Analogue + 4 sec	99.5%
Ordering [2]	Percent Flow-Through Service Request (Fully Mechanized only)		90%
	Firm Order Confirmation Timeliness (Mechanized only)		95% < 4 hrs
	Reject Interval (Mechanized only)		95% < 1 hrs
Provisioning	Order Completion Interval (Dispatch only) – Resale POTS	Parity with Retail POTS	
	Order Completion Interval (Dispatch only) – Resale Design	Parity with Retail Design	
	Order Completion Interval (No Dispatch only) – UNE Loop & Port Combos	Retail Residence and Business	
	Order Completion Interval (Dispatch only) – UNE Loops	Design: Retail Design Dispatch 'w' Orders [1] Non-Design: Retail Res, Bus Dispatch 'w' Orders [1]	
	Order Completion Interval (Dispatch only) – IC Trunks	Parity with Retail	
	Percent Missed Installation Appointments – Resale POTS	Parity with Retail POTS	
	Percent Missed Installation Appointments – Resale Design	Parity with Retail Design	
	Percent Missed Installation Appointments – UNE Loop and Port Combos	Retail Residence and Business [1]	
	Percent Missed Installation Appointments – UNE Loops	Design: Retail Design [1] Non-Design: Retail Res, Bus [1]	
	Percent Provisioning Troubles within 4 Days - Resale POTS	Parity with Retail POTS	
	Percent Provisioning Troubles within 4 Days - Resale Design	Parity with Retail Design	
	Percent Provisioning Troubles within 4 Days - UNE Loop and Port Combos	Retail Residence and Business [1]	
	Percent Provisioning Troubles within 4 Days - UNE Loops	Design: Retail Design [1] Non-Design: Retail Res, Bus [1]	
Maintenance	Customer Trouble Report Rate – Resale POTS	Parity with Retail POTS	
	Customer Trouble Report Rate – Resale Design	Parity with Retail Design	
	Customer Trouble Report Rate - UNE Loops	Design: Retail Design [1] Non-Design: Retail Res, Bus [1]	
	Percent Missed Repair Appointments – Resale POTS	Parity with Retail POTS	
	Percent Missed Repair Appointments - Resale Design	Parity with Retail Design	
	Percent Missed Repair Appointments - UNE Loop and Port Combos	Retail Residence and Business [1]	
	Percent Missed Repair Appointments - UNE Loops	Design: Retail Design [1] Non-Design: Retail Res, Bus [1]	

NOTES [1] The retail analog for UNE Non-Design is the average of all dispatch retail residence and dispatch retail business transactions for the particular month. The retail analog for UNE Design is calculated similarly using dispatch retail design results

[2] UD = Under Development

Maintenance Continued	Maintenance Average Duration – Resale POTS	Parity with Retail POTS	
	Maintenance Average Duration – Resale Design	Parity with Retail Design	
	Maintenance Average Duration - UNE Loop and Port Combos	Retail Residence and Business [1]	
	Maintenance Average Duration - UNE Loops	Design: Retail Design [1] Non-Design: Retail Res. Bus [1]	
	Maintenance Average Duration – IC Trunks	Parity with Retail	
	Percent Repeat Troubles within 30 Days – Resale POTS	Parity with Retail POTS	
	Percent Repeat Troubles within 30 Days – Resale Design	Parity with Retail Design	
	Percent Repeat Troubles within 30 Days - UNE Loop and Port Combos	Retail Residence and Business [1]	
	Percent Repeat Troubles within 30 Days - UNE Loops	Design: Retail Design [1] Non-Design: Retail Res. Bus [1]	
Billing	Invoice Accuracy	Parity with Retail	
	Mean Time To Deliver Invoices	Parity with Retail	
	Usage Data Delivery Accuracy	Parity with Retail	
	Usage Data Delivery Timeliness	Parity with Retail	
Trunk Blockage	Trunk Group Service Report (Percent Trunk Blockage)	Retail Trunk Group Category #9	
LNP	Average Disconnect Timeliness Interval		UD [2]
	Percent Missed Installation Appointments		UD [2]
CC Conversions	Coordinated Customer Conversions for UNE Loop w/o INP		95% < 15min
Collocation	% of Due Dates Missed		< 10%

NOTES:

[1] The retail analog for UNE Non-Design is the average of all dispatch retail residence and dispatch retail business transactions for the particular month. The retail analog for UNE Design is calculated similarly using dispatch retail design results.

[2] UD = Under Development

VSEEMIII TIER-1 SUBMETRICS

- ❑ FOC Timeliness (Mechanized only)
- ❑ Reject Interval (Mechanized only)
- ❑ Order Completion Interval (Dispatch only) – Resale POTS
- ❑ Order Completion Interval (Dispatch only) – Resale Design
- ❑ Order Completion Interval (No Dispatch only) – UNE Loop and Port Combos
- ❑ Order Completion Interval ('w' code orders. Dispatch only) – UNE Loops
- ❑ Order Completion Interval (Dispatch only) – IC Trunks
- ❑ Percent Missed Installation Appointments – Resale POTS
- ❑ Percent Missed Installation Appointments – Resale Design
- ❑ Percent Missed Installation Appointments – UNE Loop and Port Combos
- ❑ Percent Missed Installation Appointments – UNE Loops
- ❑ Percent Provisioning Troubles within 4 Days - Resale POTS
- ❑ Percent Provisioning Troubles within 4 Days - Resale Design
- ❑ Percent Provisioning Troubles within 4 Days - UNE Loop and Port Combos
- ❑ Percent Provisioning Troubles within 4 Days - UNE Loops
- ❑ Customer Trouble Report Rate – Resale POTS
- ❑ Customer Trouble Report Rate – Resale Design
- ❑ Customer Trouble Report Rate - UNE Loops
- ❑ Percent Missed Repair Appointments – Resale POTS
- ❑ Percent Missed Repair Appointments - Resale Design
- ❑ Percent Missed Repair Appointments - UNE Loop and Port Combos
- ❑ Percent Missed Repair Appointments - UNE Loops
- ❑ Maintenance Average Duration – Resale POTS
- ❑ Maintenance Average Duration – Resale Design
- ❑ Maintenance Average Duration - UNE Loop and Port Combos
- ❑ Maintenance Average Duration - UNE Loops
- ❑ Maintenance Average Duration – IC Trunks
- ❑ Percent Repeat Troubles within 30 Days – Resale POTS
- ❑ Percent Repeat Troubles within 30 Days – Resale Design
- ❑ Percent Repeat Troubles within 30 Days - UNE Loop and Port Combos
- ❑ Percent Repeat Troubles within 30 Days - UNE Loops
- ❑ Percent Trunk Blockage
- ❑ LNP Disconnect Timeliness
- ❑ LNP Percent Missed Installation Appointment
- ❑ Coordinated Customer Conversions for UNE Loops w/o INP
- ❑ Percent Missed Collocation Due Dates

VSEEMIII TIER-2 SUBMETRICS

- Percent Response Received within "X" seconds – Pre-Order OSS
- OSS Interface Availability
- Order Process Percent Flow-Through (Mechanized only)
- Order Completion Interval (Dispatch only) – Resale POTS
- Order Completion Interval (Dispatch only) – Resale Design
- Order Completion Interval (No Dispatch only) – UNE Loop and Port Combos
- Order Completion Interval (w/ code orders, Dispatch only) – UNE Loops
- Order Completion Interval (Dispatch only) – IC Trunks
- Percent Missed Installation Appointments – Resale POTS
- Percent Missed Installation Appointments – Resale Design
- Percent Missed Installation Appointments – UNE Loop and Port Combos
- Percent Missed Installation Appointments – UNE Loops
- Percent Provisioning Troubles within 4 Days - Resale POTS
- Percent Provisioning Troubles within 4 Days - Resale Design
- Percent Provisioning Troubles within 4 Days - UNE Loop and Port Combos
- Percent Provisioning Troubles within 4 Days - UNE Loops
- Customer Trouble Report Rate – Resale POTS
- Customer Trouble Report Rate – Resale Design
- Customer Trouble Report Rate - UNE Loops
- Percent Missed Repair Appointments – Resale POTS
- Percent Missed Repair Appointments - Resale Design
- Percent Missed Repair Appointments - UNE Loop and Port Combos
- Percent Missed Repair Appointments - UNE Loops
- Maintenance Average Duration – Resale POTS
- Maintenance Average Duration – Resale Design
- Maintenance Average Duration - UNE Loop and Port Combos
- Maintenance Average Duration - UNE Loops
- Maintenance Average Duration – IC Trunks
- Percent Repeat Troubles within 30 Days – Resale POTS
- Percent Repeat Troubles within 30 Days – Resale Design
- Percent Repeat Troubles within 30 Days - UNE Loop and Port Combos
- Percent Repeat Troubles within 30 Days - UNE Loops
- Billing Timeliness
- Billing Accuracy
- Usage Data Delivery Timeliness
- Usage Data Delivery Accuracy
- Percent Trunk Blockage
- LNP Disconnect Timeliness
- LNP Percent Missed Installation Appointment
- Coordinated Customer Conversions for UNE Loops without INP
- Percent Missed Collocation Due Dates

VSEEMIII TIER-3 SUBMETRICS

- Percent Missed Installation Appointments – Resale POTS
- Percent Missed Installation Appointments – Resale Design
- Percent Missed Installation Appointments – UNE Loop and Port Combos
- Percent Missed Installation Appointments – UNE Loops
- Percent Missed Repair Appointments – Resale POTS
- Percent Missed Repair Appointments - Resale Design
- Percent Missed Repair Appointments - UNE Loop and Port Combos
- Percent Missed Repair Appointments - UNE Loops
- Billing Timeliness
- Billing Accuracy
- Percent Trunk Blockage
- Percent Missed Collocation Due Dates

ENFORCEMENT MEASUREMENTS
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* These reports are subject to change due to regulatory requirements, corrections, clarifications, etc.

PRE-ORDERING - OSS

Report/Measurement :
Percent Response Received within "X" seconds
Definition:
Proportion of requests responded to within "X" seconds for accessing legacy data associated with appointment scheduling, service & feature availability, address verification, request for Telephone Numbers (TNs) and Customer Service Records (CSRs).
Exclusions:
None
Business Rules:
The response interval starts when the client application (LENS or TAG for CLECs and RNS for BST) submits a request to the legacy system and ends when the appropriate response is returned to the client application. The number of legacy accesses during the reporting period which take less than "X" seconds are captured.
Level of Disaggregation:
• Region
Calculation:
Σ[(Date & Time of Legacy Response) – (Date & Time of Request to Legacy)] / (Number of Legacy Requests During the Reporting Period) X 100
Report Structure:
• CLEC Aggregate • BST Aggregate

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Report Month • Response Interval • Regional Scope	• Report Month • Response Interval • Regional Scope

Retail Analog/Benchmark
Retail Analog Plus 4 seconds

PRE-ORDERING

Report/Measurement:	
OSS Interface Availability	
Definition:	
Percent of time OSS interface is functionally available compared to scheduled availability. Availability percentages for CLEC interface systems and for all Legacy systems accessed by them are captured	
Exclusions:	
None	
Business Rules:	
This measurement captures the availability percentages for the BST systems, which are used by CLECs during Pre-Ordering functions. Comparison to BST results allow conclusions as to whether an equal opportunity exists for the CLEC to deliver a comparable customer experience.	
Level of Disaggregation:	
• Region	
Calculation:	
(Functional Availability) / (Scheduled Availability) X 100	
Report Structure:	
• CLEC Aggregate • BST Aggregate	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • Regional Scope	• Report Month • Regional Scope
Retail Analog/Benchmark:	
Retail Analog	

ORDERING

Report/Measurement:

Percent Flow Through Service Requests (Summary)

Definition:

The percentage of Local Service Requests (LSR) submitted electronically via the CLEC mechanized ordering process that flow through to SOCS without manual intervention

Exclusions:

- Fatal Rejects
- Auto Clarification
- Manual Fallout
- CLEC System Fallout
- Supplements (Subsequent versions) to cancel LSRs that are not LESOG eligible (under development)

Business Rules:

The CLEC mechanized ordering process includes all LSRs, including supplements which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), and flow through to SOCS without manual intervention. The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier), or are not designed to flow through, i.e., Manual Fallout.

Definitions:

Fatal Rejects: Errors that prevent an LSR, submitted by the CLEC, from being processed further. When an LSR is submitted by a CLEC, LEO will perform edit checks to ensure the data received is correctly formatted and complete. For example, if the PON field contains an invalid character, LEO will reject the LSR and the CLEC will receive a Fatal Reject.

Auto-Clarification: errors that occur due to invalid data within the LSR. LESOG will perform data validity checks to ensure the data within the LSR is correct and valid. For example, if the address on the LSR is not valid according to RSAG, the CLEC will receive an Auto-Clarification.

Manual Fallout: errors that occur by design. Certain LSRs are designed to fallout of the Mechanized Order Process due to their complexity. These LSRs are manually processed by the LCSC. When a CLEC submits an LSR, LESOG will determine if the LSR should be forwarded to LCSC for manual handling. Following are the categories for Manual Fallout.

1. Complex services*
2. Expedites (requested by the CLEC)
3. Special pricing plans
4. Denials-restore and conversion, or disconnect and conversion orders
5. Partial migrations
6. Class of service invalid in certain states with some types of service
7. New telephone number not yet posted to BOCRIS
8. Low volume such as activity type "T" (move)
9. Pending order review required
10. More than 25 business lines
11. Restore or suspend for UNE combos
12. Transfer of calls option for the CLEC's end users
13. CSR inaccuracies such as invalid or missing CSR data in CRIS

* Attached is a list of services, including complex services, and whether LSRs issued for the services are eligible to flow through.

Total System Fallout: Errors that require manual review by the LCSC to determine if the error is caused by the CLEC, or is due to system functionality. If it is determined the error is caused by the CLEC, the LSR will be sent back to the CLEC as clarification. If it is determined the error is BST caused, the LCSC representative will correct the error.

ORDERING - (Percent Flow Through Service Requests (Summary) - Continued)

Calculation:

Percent Flow Through = (The total number of LSRs that flow through LESOG to SOCS) - (the number of LSRs passed from LEO to LESOG) - Σ[(the number of LSRs that fall out for manual processing) - (the number of LSRs that are returned to the CLEC for clarification) - (the number of LSRs that contain errors made by CLECs)] X 100.

Report Structure:

- CLEC Aggregate

Level of Disaggregation:

- Region

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report month ➢ Total number of LSRs received • Total number of errors by type: ➢ Fatal rejects ➢ Total fallout for manual processing ➢ Auto clarification ➢ CLEC caused system fallout • Total number of errors by error code	

Retail Analog/Benchmark:

Benchmark

ORDERING

ATTACHMENT 2
Flowthrough – OSS99

BellSouth Flow-through Analysis
For CLECs LSRs placed via EDI or TAG

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fail out for a reason other than errors or complex? If so, what reason?
1	Flat Rate/Residence	Yes	No	No	no	
2	Flat Rate/Business	Yes	No	No	no	
3	Pay Phone Provider	No	No	No	no	
4	Measured Rate/Res.	Yes	No	No	no	
5	Measured Rate/Bus.	Yes	No	No	no	
6	Area Plus	Yes	No	No	no	
7	Package/Complete Choice and area plus	Yes	No	No	no	
8	Optional Calling Plan	Yes	No	No	no	
9	Ga. Community Calling	Yes	No	No	no	
10	Call Waiting Deluxe	Yes	No	No	no	
11	Call Waiting	Yes	No	No	no	
12	Caller ID	Yes	No	No	no	
13	Speed Calling	Yes	No	No	no	
14	3 Way Calling	Yes	No	No	no	
15	Call Forwarding-Variable	Yes	No	No	no	
16	Remote Access to CF	Yes	No	No	no	
17	Enhanced Caller ID	Yes	No	No	no	
18	Memory Call	Yes	No	No	no	
19	Memory Call Ans. Svc.	Yes	No	No	no	
20	MTS	Yes	No	No	no	
21	RCF	Yes	No	No	no	
22	Ringmaster	Yes	No	No	no	
23	Call Tracing	Yes	No	No	no	
24	Call Block	Yes	No	No	no	
25	Repeat Dialing	Yes	No	No	no	
26	Call Selector	Yes	No	No	no	
27	Call Return	Yes	No	No	no	
28	Preferred Call Forward	Yes	No	No	no	
29	Touchtone	Yes	No	No	no	
30	Visual Director	Yes	No	No	no	
31	INP (all types?)	Yes	UNE	No	no	
32	Unbundled Loop-Analog 2W, SL1, SL2	Yes	UNE	No	Yes-designed, no-non-designed	
33	2 wire analog port	Yes	UNE	No	no	
34	Local Number Portability (always?)	Yes	UNE	No	no	
35	Accupulse	No	Yes	Yes	yes	See note at bottom of matrix.
36	Basic Rate ISDN	No*	Yes	Yes	yes	LSR electronically submitted: flow through

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
37	DID	No*	Yes	Yes	Yes	*LSR electronically submitted - no flow through.*
38	Frame Relay	No	Yes	Yes	yes	
39	Megalink	No	Yes	Yes	yes	
40	Megalink-T1	No	Yes	Yes	yes	
41	Native Mode LAN Interconnection (NMLI)	No	Yes	Yes	yes	
42	Pathlink Primary Rate ISDN	No	Yes	Yes	yes	
43	Synchronet	No	Yes	Yes	yes	LSR electronically submitted; n flow through
44	PBX Trunks	No	Yes	Yes	Yes	LSR electronically submitted; n flow through
45	LightGate	No	Yes	Yes	yes	
46	Smartpath	No	Yes	Yes	yes	
47a	Hunting *(Multiline)*	No*	Yes	no	no	LSR electronically submitted; flow through
47b	*Hunting (Series Completion)*	Yes	Yes	No	No	
48	CENTREX	No	Yes	Yes	no	
49	FLEXSERV	No	Yes	Yes	yes	
50	Multiserv	No	Yes	Yes	yes	
51	Off-Prem Stations	No	Yes	Yes	yes	
52	SmartRING	No	Yes	Yes	yes	
53	FX	No	Yes	Yes	yes	
54	Tie Lines	No	Yes	Yes	Yes	
55	WATS	No	Yes	Yes	yes	
56	4 wire analog voice grade loop	No	UNE	Yes	yes-designed, no-non-designed	
57	*4 wire DS1 and DS0 digital loop*	No*	UNE	Yes	yes	*LSR electronically submitted: flow through*
58	2 wire ISDN digital loop	No	UNE	Yes	yes	
59	4 wire DS1 & PRI digital loop	No	UNE	Yes	yes	
60	ADSL	No	UNE	Yes	yes	
61	HDSL	No	UNE	Yes	yes	
62	2 wire analog DID trunk port	No	UNE	Yes	Yes	

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
63	2 wire ISDN digital line side port	No	UNE	Yes	yes	
64	4 wire ISDN DSI digital trunk ports	No	UNE	Yes	yes	
65	UNE Combinations	Loop-port	UNE	Yes	yes	
66	Directory Listings (simple)	Yes	UNE	Yes	no	

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
67	Directory Listings (complex)	No*	UNE	yes	no	*LSR submitted electronically - no flow through*
68	ESSX	No	Yes	Yes	no	

Note for last column: For all services that indicate 'No' for flow-through, the following reasons, in addition to errors or complex services, also prompt manual handling: Expedites from CLECs, special pricing plans, for denials – restore and conversion or disconnect and conversion both required, partial migrations (although conversions-as-is flow through), class of service invalid in certain states with some TOS – e.g. gov't, or cannot be changed when changing main TN on C activity, low volume – e.g. activity type T=move, pending order review required, more than 25 business lines, restore or suspend for UNE combos, transfer of calls option for CLEC end user – fixed with release 6.0, new TN not yet posted to BOCRIS. All but the last one are unique to the CLEC environment.

ORDERING

Report/Measurement:
Reject Interval
Definition:
Reject Interval is the average reject time from receipt of an LSR to the issuance of a Reject. An LSR is considered valid when it is electronically submitted by the CLEC and passes LEO edit checks to insure the data received is correctly formatted and complete.
Exclusions:
Service Requests canceled by CLEC
Business Rules:
Fully Mechanized: The elapsed time from receipt of a valid LSR (date and time stamp in EDI, TAG) until the LSR is rejected (date and time stamp of reject in LEO). Fatal Rejects and Auto Clarifications are considered in the Fully Mechanized category.
Calculation:
Reject Interval = Σ[(Date and Time of Service Request Rejection) – (Date and Time of Service Request Receipt)] / (Number of Service Requests Rejected in Reporting Period)
Report Structure:
• CLEC Specific
Level of Disaggregation:
• State

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Report Month • Reject Interval • Total Number of LSRs • Total number of Errors • State	

Retail Analog/Benchmark:
Benchmark: Retail Analog is underdevelopment

ORDERING

Report/Measurement:

Firm Order Confirmation Timeliness

Definition:

Interval for Return of a Firm Order Confirmation (FOC Interval) is the average response time from receipt of valid LSR to issuance of a firm order confirmation.

Exclusions:

- Rejected LSRs
- Partially Mechanized or Non-Mechanized LSRs received and/or FOC'd outside of normal business hours.

Business Rules:

- **Mechanized** - The elapsed time from receipt of a valid LSR (date and time stamp in LENS, EDI, TAG) until the LSR is processed and appropriate service orders are generated in SOCS.

Calculation:

Firm Order Confirmation Timeliness = Σ[(Date and Time of Firm Order Confirmation) – (Date and Time of Service Request Receipt)] / (Number of Service Requests Confirmed in Reporting Period)

Report Structure:

- CLEC Specific

Level of Disaggregation:

- State

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Report Month • Interval for FOC • Total number of LSRs • State	

Retail Analog/Benchmark:

Benchmark; Retail Analog is underdevelopment

PROVISIONING

Report/Measurement:

Percent Missed Installation Appointments

Definition:

"Percent missed installation appointments" monitors the reliability of BST commitments with respect to committed due dates to assure that CLECs can reliably quote expected due dates to their retail customer as compared to BST

Exclusions:

- Canceled Service Orders
- Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.)
- Disconnect (D) & From (F) orders

Business Rules:

Percent Missed Installation Appointments (MA) is the percentage of total orders processed for which BST is unable to complete the service orders on the committed due dates. Missed Appointments caused by end-user reasons will be included and reported separately. A business day is any time period within the same date frame, which means there cannot be a cutoff time for commitments as certain types of orders are, requested to be worked after standard business hours. Also, during Daylight Savings Time, field technicians are scheduled until 9PM in some areas and the customer is offered a greater range of intervals from which to select.

Calculation:

Percent Missed Installation Appointments = (Number of Orders Not Complete by Committed Due Date in Reporting Period) / (Number of Orders Completed in Reporting Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Report explanation: The difference between End User MA and Total MA is the result of BST caused misses. Here, Total MA is the total % of orders missed either by BST or CLEC end user and End User MA represents the percentage of orders missed by the end user

Level of Disaggregation:

- Product Reporting Levels
  - Resale POTS
  - Resale Design
  - UNE Loop & Port Combination
  - UNE Loops
- Geographic Scope
  - State.

PROVISIONING (Percent Missed Installation Appointments – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number and PON • Committed Due Date • Completion Date • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope	• Report Month • BST Order Number • Committed Due Date • Completion Date • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope

Retail Analog/Benchmark:

CLEC Resale POTS / BST Retail POTS
CLEC Resale Design / BST Retail Design
CLEC UNE Loop & Port Combination - Retail Analog
CLEC UNE Loops – Retail Analog

PROVISIONING

Report/Measurement :

Order Completion Interval (OCI)

Definition:

The "order completion interval" measure monitors the average time it takes BST to provide service for the CLEC or its' own customers.

Exclusions:

- Canceled Service Orders
- Order Activities of BST or the CLEC associated with internal or administrative use of local services
- Record Orders, Test Orders, etc.)
- D (Disconnect) and F (From) orders. (From is the disconnect side of a move order when the customer moves to a new address).
- "L" Appointment coded orders (where the customer has requested a later than offered interval)

Business Rules:

The actual completion interval is determined for each order processed during the reporting period. The completion interval is the elapsed time from when the order is electronically entered into SOCS after the FOC on a CLEC order, or the date time stamp receipt into SOCS by BST on retail orders to the order completion date. The clock starts when a valid order number is assigned by SOCS and stops when the technician or system completes the order in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed

Calculation:

Average Completion Interval:

Σ [(Completion Date & Time) - (Order Issue Date & Time)] / (Count of Orders Completed in Reporting Period)

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

PROVISIONING –
(Average Completion Interval (OCI) – Continued)

Level of Disaggregation:

- Product Reporting Levels
  - Resale POTS (Dispatch)
  - Resale Design (Dispatch)
  - UNE Loop & Port Combination (No Dispatch)
  - UNE Loops (Dispatch – W Coded Orders Only)
  - IC Trunks (Dispatch)
- Geographic Scope
  - State

A W-code indicates orders where the CLEC accepts the offered interval

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Company Name • Order Number • Submission Date & Time • Completion Date • Service Type • Geographic Scope	• Report Month • BST Order Number • Order Submission Date & Time • Order Completion Date & Time • Service Type • Geographic Scope

Retail Analog/Benchmark

CLEC Resale POTS / BST Retail POTS
CLEC Resale Design / BST Retail Design
CLEC UNE Loop & Port Combination - Retail Analog
CLEC UNE Loops – Retail Analog
CLEC IC Trunks – Retail Analog

PROVISIONING

Report/Measurement:

Coordinated Customer Conversions

Definition:

This category measures the average time it takes BST to disconnect an unbundled loop from the BST switch and cross connect it to a CLEC's equipment. This measurement applies to service orders with and without INP, and where the CLEC has requested BST to provide a coordinated cutover

Exclusions:

- Any order canceled by the CLEC will be excluded from this measurement.
- Delays due to CLEC following disconnection of the unbundled loop
- Unbundled Loops where there is no existing subscriber loop

Business Rules:

Where the service order includes INP, the interval includes the total time for the cutover including the translation time to place the line back in service on the ported line. The interval is calculated for the entire cutover time for the service order and then divided by items worked in that time to give the average per item interval for each service order.

Calculation:

= [(Completion Date and Time for Cross Connection of an Unbundled Loop)- (Disconnection Date and Time of an Unbundled Loop)] / Total Number of Unbundled Loop Items for the reporting period.

Report Structure:

- CLEC Specific
- CLEC Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - UNE Loops without INP
- Geographic Scope
  - State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number • Committed Due Date • Service Type • Cutover Start Time • Cutover Completion time • Portability start and completion times (INP Orders) • Total Items	

Retail Analog/Benchmark:

Benchmark

PROVISIONING

Report/Measurement:

% Provisioning Troubles within 4 days of Service Order Activity

Definition:

Percent Provisioning Troubles within 4 days of Installation measures the quality and accuracy of installation activities.

Exclusions:

- Canceled Service Orders
- Order Activities of BST or the CLEC associated with internal or administrative use of local services (R Orders, Test Orders, etc.)
- Disconnect & From orders

Business Rules:

Measures the quality and accuracy of completed orders. The first trouble report from a service order after completion is counted in this measure. Subsequent trouble reports are measured in Repeat Report Rate. Reports are calculated by searching in the prior report period for completed service orders and following 4 days after completion for a trouble report.
Disconnect & From orders are excluded as there is no subsequent activity following a disconnect.

Calculation:

% Provisioning Troubles within 4 days of Service Order Activity = Σ (Trouble reports on all completed orders ≤ 4 days following service order(s) completion) / (All Service Orders completed in the report calendar month) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - Resale POTS
  - Resale Design
  - UNE Loop & Port Combination
  - UNE Loops
- Geographic Scope
  - State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number and PON • Order Submission Date • Order Submission Time • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope	• Report Month • BST Order Number • Order Submission Date • Order Submission Time • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope

Retail Analog/Benchmark:

CLEC Resale POTS / BST Retail POTS
CLEC Resale Design / BST Retail Design
CLEC UNE Loop & Port Combination - Retail Analog
CLEC UNE Loops – Retail Analog

MAINTENANCE & REPAIR

Report/Measurement:

Missed Repair Appointments

Definition:

The percent of trouble reports not cleared by the committed date and time.

Exclusions:

- Trouble tickets canceled at the CLEC request.
- BST trouble reports associated with internal or administrative service.
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble.

Business Rules:

The negotiated commitment date and time is established when the repair report is received. The cleared time is the date and time that BST personnel clear the trouble and closes the trouble report in his/her Computer Access Terminal (CAT) or workstation. If this is after the Commitment time, the report is flagged as a "Missed Commitment" or a missed repair appointment. When the data for this measure is collected for BST and a CLEC, it can be used to compare the percentage of the time repair appointments are missed due to BST reasons. Note: Appointment intervals vary with force availability in the POTS environment. Specials and Trunk intervals are standard interval appointments of no greater than 24 hours.

Calculation:

Percentage of Missed Repair Appointments =Σ (Count of Customer Troubles Not Cleared by the Quoted Commitment Date and Time) / Σ (Total Trouble reports closed in Reporting Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - Resale POTS
  - Resale DESIGN
  - UNE Loop & Port Combination
  - UNE Loops
- Geographic Scope
  - State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Company Name • Submission Date & Time • Completion Date • Service Type • Disposition and Cause • Geographic Scope	• Report Month • BST Company Code • Submission Date & Time • Completion Date • Service Type • Disposition and Cause (Non-Design / Non-Special Only) • Trouble Code (Design and Trunking Services) • Geographic Scope

Retail Analog/Benchmark

CLEC Resale POTS / BST Retail POTS
CLEC Resale Design / BST Retail Design
CLEC UNE Loop & Port Combination - Retail Analogue
CLEC UNE Loops – Retail Analog

MAINTENANCE & REPAIR

Report/Measurement:

Customer Trouble Report Rate

Definition:

Initial and repeated customer direct or referred troubles reported within a calendar month per 100 lines/ circuits in service.

Exclusions:

- Trouble tickets canceled at the CLEC request.
- BST trouble reports associated with administrative service.
- Customer provided Equipment (CPE) troubles or CLEC equipment troubles.

Business Rules:

Customer Trouble Report Rate is computed by accumulating the number of maintenance, initial and repeated, trouble reports during the reporting period. The resulting number of trouble reports are divided by the total "number of service" lines, ports that exist for the CLEC(s) and BST respectively at the end of the report month.

Calculation:

Customer Trouble Report Rate = (Total Count of Initial and Repeated Trouble Reports in the Current Period) / (Total Number of Service Access Lines in service at End of the Report Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate.

Level of Disaggregation:

- Product Reporting Levels
  - Resale POTS
  - Resale DESIGN
  - UNE Loops
- Geographic Scope
  - State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Company Name • Ticket Submission Date & Time • Ticket Completion Date • Service Type • Disposition and Cause • # Service Access Lines in Service at the end of period • Geographic Scope	• Report Month • BST Company Code • Ticket Submission Date & Time • Ticket Completion Date • Service Type • Disposition and Cause (Non-Design / Non-Special Only) • Trouble Code (Design and Trunking Services) • # Service Access Lines in Service at the end of period • Geographic Scope

Retail Analog/Benchmark:

CLEC Resale POTS / BST Retail POTS
CLEC Resale Design / BST Retail Design
CLEC UNE Loops – Retail Analog

MAINTENANCE & REPAIR

Report/Measurement:

Maintenance Average Duration

Definition:

The Average duration of Customer Trouble Reports from the receipt of the Customer Trouble Report to the time the trouble report is cleared.

Exclusions:

- Trouble reports canceled at the CLEC request
- BST trouble reports associated with administrative service
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Troubles.
- Trouble reports greater than 10 days

Business Rules:

For Average Duration the clock starts on the date and time of the receipt of a correct repair request. The clock stops on the date and time the service is restored (when the technician completes the trouble ticket on his/her CAT or work system).

Calculation:

Maintenance Average Duration = Σ[(Date and Time of Service Restoration) – (Date and Time Trouble Ticket was Opened)] / (Total Closed Troubles in the reporting period)

Report Structure:

- CLEC Specific
- BST Aggregate
- CLEC Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - Resale POTS
  - Resale DESIGN
  - UNE Loop & Port Combination
  - UNE Loops
  - IC Trunks
- Geographic Scope
  - State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Total Tickets • CLEC Company Name • Ticket Submission Date & Time • Ticket Completion Date • Service Type • Disposition and Cause • Geographic Scope	• Report Month • Total Tickets • BST Company Code • Ticket Submission Date • Ticket submission Time • Ticket completion Date • Ticket Completion Time • Total Duration Time • Service Type • Disposition and Cause (Non – Design / Non-Special Only) • Trouble Code (Design and Trunking Services) • Geographic Scope

Retail Analog/Benchmark:

CLEC Resale POTS / BST Retail POTS
CLEC Resale Design / BST Retail Design
CLEC UNE Loop & Port Combination - Retail Analog
CLEC UNE Loops – Retail Analog
IC Trunks – Retail Analog

MAINTENANCE & REPAIR

Report/Measurement:

Percent Repeat Troubles within 30 Days

Definition:

Trouble reports on the same line/circuit as a previous trouble report received within 30 calendar days as a percent of total troubles reported.

Exclusions:

- Trouble Reports canceled at the CLEC request
- BST Trouble Reports associated with administrative service
- Customer Provided Equipment (CPE) Troubles or CLEC Equipment Troubles.

Business Rules:

Includes Customer trouble reports received within 30 days of an original Customer trouble report.

Calculation:

Percentage of Missed Repair Appointments = (Count of Customer Troubles where more than one trouble report was logged for the same service line within a continuous 30 days) / (Total Trouble Reports Closed in Reporting Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - > Resale POTS
  - > Resale DESIGN
  - > UNE Loop & Port Combination
  - > UNE Loops
- Geographic Scope
  - > State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Total Tickets • CLEC Company Name • Ticket Submission Date & Time • Ticket Completion Date • Total and Percent Repeat Trouble Reports within 30 Days • Service Type . • Disposition and Cause • Geographic Scope	• Report Month • Total Tickets • BST Company Code • Ticket Submission Date • Ticket Submission Time • Ticket Completion Date • Ticket Completion Time • Total and Percent Repeat Trouble Reports within 30 days • Service Type • Disposition and Cause (Non – Design/ Non-Special only) • Trouble Code (Design and Trunking Services) • Geographic Scope

Retail Analog/Benchmark:

CLEC Resale POTS / BST Retail POTS
CLEC Resale Design / BST Retail Design
CLEC UNE Loop & Port Combination - Retail Analogue
CLEC UNE Loops – Retail Analog

BILLING

Report/Measurement:
Invoice Accuracy (Billing Accuracy)
Definition:
This measure provides the percentage of accuracy of the billing invoices rendered to CLECs during the current month.
Exclusions:
• Adjustments not related to billing errors (e.g., credits for service outage, special promotion credits, adjustments to satisfy the customer)
Business Rules:
The accuracy of billing invoices delivered by BST to the CLEC must enable them to provide a degree of billing accuracy comparative to BST bills rendered to retail customers. The BellSouth Billing verification process includes manually analyzing a sample of local bills from each bill period. The bill verification process draws from a mix of different customer billing options and types of service. An end-to-end auditing process is performed for new products and services. Internal measurements and controls are maintained on all billing processes.
Calculation:
Invoice Accuracy = (Total Billed Revenues during current month) – (Billing Related Adjustments during current month) / Total Billed Revenues during current month X 100
Report Structure:
• CLEC Aggregate • BST Aggregate
Level of Disaggregation :
• Geographic Scope ➢ Region

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Report Month • Invoice Type • Total Billed Revenue • Billing Related Adjustments	• Report Month • Retail Type ➢ CRIS ➢ CABS • Total Billed Revenue • Billing Related Adjustments

Retail Analog/Benchmark
Retail Analog

BILLING

Report/Measurement:
Mean Time to Deliver Invoices (Billing Timeliness)
Definition:
This measure provides the mean interval for the delivery of billing invoices
Exclusions:
Any invoices rejected due to formatting or content errors.
Business Rules:
Measures the mean interval for timeliness of billing records delivered to CLECs in an agreed upon format. CRIS-based invoices are measured in business days, and CABS-based invoices in calendar days.
Calculation:
Mean Time To Deliver Invoices = Σ [(Invoice Transmission Date)– (Close Date of Scheduled Bill Cycle)] / (Count of Invoices Transmitted in Reporting Period)
Report Structure:
• CLEC Aggregate • BST Aggregate
Level of Disaggregation:
• Geographic Scope ➢ Region

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Report Month • Invoice Type • Invoice Transmission Count • Date of Scheduled Bill Close	• Report Month • Retail Type ➢ CRIS ➢ CABS • Invoice Transmission Count • Date of Scheduled Bill Close

Retail Analog/Benchmark:
Retail Analog

BILLING

Report/Measurement:

Usage Data Delivery Accuracy

Definition:

This measurement captures the percentage of recorded usage that is delivered error free and in an acceptable format to the appropriate CLEC. These percentages will provide the necessary data for use as a comparative measurement for BellSouth performance. This measurement captures Data Delivery Accuracy rather than the accuracy of the individual usage recording.

Exclusions:

None

Business Rules:

The accuracy of the data delivery of usage records delivered by BST to the CLEC must enable them to provide a degree of accuracy comparative to BST bills rendered to their retail customers. If errors are detected in the delivery process, they are investigated, evaluated and documented. Errors are corrected and the data retransmitted to the CLEC.

Calculations:

Usage Data Delivery Accuracy = Σ [(Total number of usage data packs sent during current month) – (Total number of usage data packs requiring retransmission during current month)] / (Total number of usage data packs sent during current month) X 100

Report Structure:

- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Geographic Scope
  - > Region

Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Record Type > BellSouth Recorded > Non BellSouth Recorded	• Report Month • Record Type

Retail Analog/Benchmark:

Retail Analog

BILLING

Report/Measurement:
Usage Data Delivery Timeliness
Definition:
This measurement provides a percentage of recorded usage data (usage recorded by BST and usage recorded by other companies and sent to BST for billing) that is delivered to the appropriate CLEC within six (6) calendar days from the receipt of the initial recording. A comparative measure is also provided showing timeliness of BST messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.
Exclusions:
None
Business Rules:
The purpose of this measurement is to demonstrate the level of timeliness for processing and transmission of usage data delivered to the appropriate CLEC. The usage data will be mechanically transmitted or mailed to the CLEC data processing center once daily. The Timeliness interval of usage recorded by other companies is measured from the date BST receives the records to the date BST distributes to the CLEC. Method of delivery is at the option of the CLEC.
Calculation:
Usage Data Delivery Timeliness = (Total number of usage records sent within six (6) calendar days from initial recording/receipt) / (Total number of usage records sent) X 100
Report Structure:
• CLEC Aggregate • BST Aggregate
Level of Disaggregation:
• Geographic Scope ➢ Region

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non-BellSouth Recorded	• Report Monthly • Record Type

Retail Analog/Benchmark:
Retail Analog

TRUNK GROUP PERFORMANCE

Report/Measurement:

Trunk Group Service Report

Definition:

A report of the percent blocking above the Measured Blocking Threshold (MBT) on all final trunk groups between CLEC Points of Termination and BST end offices or tandems.

Exclusions:

- Trunk groups for which valid traffic data is not available
- High use trunk groups

Business Rules:

Traffic trunking data measurements are validated and processed by the Total Network Data System/Trunking (TNDS/TK), a Telcordia (BellCore) supported application, on an hourly basis for Average Business Days (Monday through Friday). The traffic load sets, including offered load and observed blocking ratio (calls blocked divided by calls attempted), are averaged for a 20 day period, and the busy hour is selected. The busy hour average data for each trunk group is captured for reporting purposes. Although all trunk groups are available for reporting, the report highlight those trunk groups with blocking greater than the Measured Blocking Threshold (MBT) and the number of consecutive monthly reports that the trunk group blocking has exceeded the MBT. The MBT for CTTG is 2% and the MBT for all other trunk groups is 3%.

Calculation:

Measured blocking =.(Total number of blocked calls) / (Total number of attempted calls) X 100

Report Structure:

- BST Aggregate
  - CTTG
  - Local
- CLEC Aggregate
  - BST Administered CLEC Trunk
  - CLEC Administered CLEC Trunk
- CLEC Specific
  - BST Administered CLEC Trunk
  - CLEC Administered CLEC Trunk

Level of Disaggregation:

State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT	• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT

Retail Analog/Benchmark:

Retail Analog

LNP

Report/Measurement :

Average Disconnect Timeliness Interval & Disconnect Timeliness Interval Distribution

Definition:

Disconnect Timeliness is defined as the interval between the time the LNP Gateway receives the 'Number Ported' message from NPAC (signifying the CLEC 'Activate') until the time that the Disconnect service order for an LSR is completed in SOCS. This interval effectively measures BST responsiveness by isolating it from impacts that are caused by CLEC related activities.

Exclusions:

- Canceled Service Orders
- Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable.
- "L" Appointment code orders (indicating the customer has requested a later than offered interval)

Business Rules:

The Disconnect Timeliness interval is determined for the last Disconnect service order processed on an LSR during the reporting period. The Disconnect Timeliness interval is the elapsed time from when BST receives the last 'Number Ported' message for an LSR from NPAC (signifying the CLEC 'Activate') until the last Disconnect service order is completed in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the total number of selected disconnect orders which have been completed.
Mechanized (service orders generated by LSRs submitted via EDI or TAG)

Calculation :

Average Disconnect Timeliness Interval:

Σ [(Disconnect Service Order Completion Date & Time) - ('Number Ported' Message Received Date & Time)] / Σ (Total Number of Disconnect Service Orders Completed in Reporting Period)

Disconnect Timeliness Interval Distribution:

[Σ (Disconnect Service Orders Completed in "X" days) / (Total Disonnect Service Orders Completed in Reporting Period)] X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - LNP
- Geographic Scope
  - State

Retail Analog/Benchmark:

Benchmark is underdevelopment

LNP

Report/Measurement:
Percent Missed Installation Appointments
Definition:
Percent Missed Installation Appointments monitors the reliability of BST commitments with respect to committed due dates to assure that CLECs can reliably quote expected due dates to their retail customer as compared to BST
Exclusions:
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable.
Business Rules:
Percent Missed Installation Appointments (PMI) is the percentage of total orders processed for which BST is unable to complete the service order on the committed due date. Missed Appointments caused by end-user reasons will be included and reported in a separate category. A business day is any time period within the same date frame, which means there cannot be a cutoff time for commitments as certain types of orders are requested to be worked after standard business hours. Also, during Daylight Savings Time, field technicians are scheduled until 9PM in some areas and the customer is offered a greater range of intervals from which to select.
Calculation:
Percent Missed Installation Appointments: [= (Number of Orders Not Completed by Committed Due Date in Reporting Period) / (Number of Orders Completed in Reporting Period)] X 100
Report Structure:
• Mechanized (service orders generated by LSRs submitted via EDI or TAG) • CLEC Specific • CLEC Aggregate **Report explanation:** Total Missed Appointments is the total % of orders missed either by BST or the CLEC end user. End User MA represents the percentage of orders missed by the CLEC end user. The difference between End User Missed Appointments and Total Missed Appointments is the number of BST caused misses.
Level of Disaggregation:
• Product Reporting Levels ➢ LNP • Geographic Scope ➢ State
Retail Analog/Benchmark:
Benchmark is underdevelopment

COLLOCATION

Report/Measurement:

Collocation/Percent of Due Dates Missed

Definition:

Measures the percent of missed due dates for collocation arrangements.

Exclusions:

- Any Bona Fide firm order cancelled by the CLEC
- Bona Fide firm orders to augment previously completed arrangements
- Time for BST to obtain permits
- Time during which the collocation contract is being negotiated

Business Rules:

The clock starts on the date that BST receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee. The clock stops on the date that BST completes the collocation arrangement.

Calculation:

% of Due Dates Missed = Σ (Number of Orders not completed by the BST Committed Due Date during Reporting Period) / Number of Orders Completed in Reporting Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate

Level of Disaggregation:

- State
- Physical

Data Retained:

- Report period
- Aggregate data

Retail Analog/Benchmark:

Benchmark

EXHIBIT C

Statistical Methods for BellSouth Performance Measure Analysis

I. Necessary Properties for a Test Methodology

The statistical process for testing if competing local exchange carriers (CLECs) customers are being treat equally with BellSouth (BST) customers involves more than just a mathematical formula. Three key elements need to be considered before an appropriate decision process can be developed. These are

- the type of data,
- the type of comparison, and
- the type of performance measure.

Once these elements are determined a test methodology should be developed that complies with the following properties.

- Like-to-Like Comparisons. When possible, data should be compared at appropriate levels, e.g. wire center, time of month, dispatched, residential, new orders. The testing process should:
  - Identify variables that may affect the performance measure.
  - Record these important confounding covariates.
  - Adjust for the observed covariates in order to remove potential biases and to make the CLEC and the ILEC units as comparable as possible.
- Aggregate Level Test Statistic. Each performance measure of interest should be summarized by one overall test statistic giving the decision maker a rule that determines whether a statistically significant difference exists. The test statistic should have the following properties.
  - The method should provide a single overall index, on a standard scale.
  - If entries in comparison cells are exactly proportional over a covariate, the aggregated index should be very nearly the same as if comparisons on the covariate had not been done.
  - The contribution of each comparison cell should depend on the number of observations in the cell.
  - Cancellation between comparison cells should be limited.
  - The index should be a continuous function of the observations.
- Production Mode Process. The decision system must be developed so that it does not require intermediate manual intervention, i.e. the process must be a "black box."
  - Calculations are well defined for possible eventualities.

- The decision process is an algorithm that needs no manual intervention.
- Results should be arrived at in a timely manner.
- The system must recognize that resources are needed for other performance measure-related processes that also must be run in a timely manner.
- The system should be auditable, and adjustable over time.

- Balancing. The testing methodology should balance Type I and Type II Error probabilities.
  - P(Type I Error) = P(Type II Error) for well defined null and alternative hypotheses.
  - The formula for a test's balancing critical value should be simple enough to calculate using standard mathematical functions, i.e. one should avoid methods that require computationally intensive techniques.
  - Little to no information beyond the null hypothesis, the alternative hypothesis, and the number of observations should be required for calculating the balancing critical value.

In the following sections we describe appropriate testing processes that adhere as much as possible to the testing principles.

Measurement Types

The performance measures that will undergo testing are of three types:

1) means
2) proportions, and
3) rates

While all three have similar characteristics (a proportion is the average of a measure that takes on only the values of 0 or 1), a proportion or rate is derived from count data while a mean is generally an average of interval measurements.

II. Testing Methodology – The Truncated Z

Many covariates are chosen in order to provide deep comparison levels. In each comparison cell, a Z statistic is calculated. The form of the Z statistic may vary depending on the performance measure, but it should be distributed approximately as a standard normal, with mean zero and variance equal to one. Assuming that the test

statistic is derived so that it is negative when the performance for the CLEC is worse than for the ILEC, a positive truncation is done – i.e. if the result is negative it is left alone. If the result is positive it is changed to zero. A weighted average of the truncated statistics is calculated where a cell weight depends on the volume of BST and CLEC orders in the cell. The weighted average is re-centered by the theoretical mean of a truncated distribution, and this is divided by the standard error of the weighted average. The standard error is computed assuming a fixed effects model.

Proportion Measures

For performance measures that are calculated as a proportion, in each adjustment cell, the truncated Z and the moments for the truncated Z can be calculated in a direct manner. In adjustment cells where proportions are not close to zero or one, and where the sample sizes are reasonably large, a normal approximation can be used. In this case, the moments for the truncated Z come directly from properties of the standard normal distribution. If the normal approximation is not appropriate, then the Z statistic is calculated from the hypergeometric distribution. In this case, the moments of the truncated Z are calculated exactly using the hypergeometric probabilities.

Rate Measures

The truncated Z methodology for rate measures has the same general structure for calculating the Z in each cell as proportion measures. For a rate measure, there are a fixed number of circuits or units for the CLEC, n_{2j} and a fixed number of units for BST, n_{1j}. Suppose that the performance measure is a "trouble rate." The modeling assumption is that the occurrence of a trouble is independent between units and the number of troubles in n circuits follows a Poisson distribution with mean λ n where λ is the probability of a trouble in 1 circuit and n is the number of circuits.

In an adjustment cell, if the number of CLEC troubles is greater than 15 and the number of BST troubles is greater than 15, then the Z test is calculated using the normal approximation to the Poisson. In this case, the moments of the truncated Z come directly from properties of the standard normal distribution. Otherwise, if there are very few troubles, the number of CLEC troubles can be modeled using a binomial distribution with n equal to the total number of troubles (CLEC plus BST troubles.) In this case, the moments for the truncated Z are calculated explicitly using the binomial distribution.

Mean Measures

For mean measures, an adjusted t statistic is calculated for each like-to-like cell which has at least 7 BST and 7 CLEC transactions. A permutation test is used when one or both of the BST and CLEC sample sizes is less than 6. Both the adjusted t statistic and the permutation calculation are described in the technical appendix.

APPENDIX
TECHNICAL DESCRIPTION

We start by assuming that any necessary trimming of the data is complete, and that the data are disaggregated so that comparisons are made within appropriate classes or adjustment cells that define "like" observations.

Notation and Exact Testing Distributions

Below, we have detailed the basic notation for the construction of the truncated z statistic. In what follows the word "cell" should be taken to mean a like-to-like comparison cell that has both one (or more) ILEC observation and one (or more) CLEC observation.

L = the total number of occupied cells

j = $1,\ldots,L$; an index for the cells

n_{1j} = the number of ILEC transactions in cell j

n_{2j} = the number of CLEC transactions in cell j

n_j = the total number transactions in cell j; $n_{1j} + n_{2j}$

X_{1jk} = individual ILEC transactions in cell j; $k = 1,\ldots, n_{1j}$

X_{2jk} = individual CLEC transactions in cell j; $k = 1,\ldots, n_{2j}$

Y_{jk} = individual transaction (both ILEC and CLEC) in cell j

$$= \begin{cases} X_{1jk} & k = 1,K\,,n_{1j} \\ X_{2jk} & k = n_{1j}+1,K\,,n_j \end{cases}$$

$\Phi^{-1}(\cdot)$ = the inverse of the cumulative standard normal distribution function

For Mean Performance Measures the following additional notation is needed.

$\bar{X}_{1j}$ = the ILEC sample mean of cell j

$\bar{X}_{2j}$ = the CLEC sample mean of cell j

s_{1j}^2 = the ILEC sample variance in cell j

s_{2j}^2 = the CLEC sample variance in cell j

y_{jk} = a random sample of size n_{2j} from the set of $Y_{j1},K\,,Y_{jn_j}$; $k = 1,\ldots,n_{2j}$

M_j = the total number of distinct pairs of samples of size n_{1j} and n_{2j};

$$= \binom{n_j}{n_{1j}}$$

The exact parity test is the permutation test based on the "modified Z" statistic. For large samples, we can avoid permutation calculations since this statistic will be normal or Student's t) to a good approximation. For small samples, where we cannot avoid permutation calculations, we have found that the difference between "modified Z" and the textbook "pooled Z" is negligible. We therefore propose to use the permutation test based on pooled Z for small samples. This decision speeds up the permutation computations considerably, because for each permutation we need only compute the sum of the CLEC sample values, and not the pooled statistic itself.

A permutation probability mass function distribution for cell j, based on the "pooled Z" can be written as

$$PM(t) = P(\sum_{k} y_{jk} = t) = \frac{\textit{the number of samples that sum to t}}{M_j},$$

and the corresponding cumulative permutation distribution is

$$CPM(t) = P(\sum_{k} y_{jk} \le t) = \frac{\textit{the number of samples with sum} \le t}{M_j}.$$

For Proportion Performance Measures the following notation is defined

- a_{1j} = the number of ILEC cases possessing an attribute of interest in cell j
- a_{2j} = the number of CLEC cases possessing an attribute of interest in cell j
- a_j = the number of cases possessing an attribute of interest in cell j; $a_{1j} + a_{2j}$

The exact distribution for a parity test is the hypergeometric distribution. The hypergeometric probability mass function distribution for cell j is

$$HG(h) = P(H = h) = \begin{cases} \dfrac{\binom{n_{1j}}{h}\binom{n_{2j}}{a_j - h}}{\binom{n_j}{a_j}}, & \max(0, a_j - n_{2j}) \le h \le \min(a_j, n_{1j}) \\ 0 & \text{otherwise} \end{cases},$$

and the cumulative hypergeometric distribution is

$$CHG(x) = P(H \le x) = \begin{cases} 0 & x < \max(0, a_j - n_{2j}) \\ \sum_{h=\max(0,\, a_j - n_{2j})}^{x} HG(h), & \max(0, a_j - n_{2j}) \le x \le \min(a_j, n_{1j}) \\ 1 & x > \min(a_j, n_{1j}) \end{cases}$$

For Rate Measures, the notation needed is defined as

- b_{1j} = the number of ILEC base elements in cell j
- b_{2j} = the number of CLEC base elements in cell j
- b_j = the total number of base elements in cell j; $b_{1j} + b_{2j}$
- $\bar{a}_j$ = the ILEC sample rate of cell j; n_{1j}/b_{1j}
- $\bar{a}_{1j}$ = the CLEC sample rate of cell j; n_{2j}/b_{2j}
- q_j = the relative proportion of CLEC elements for cell j; b_{2j}/b_j

The exact distribution for a parity test is the binomial distribution. The binomial probability mass function distribution for cell j is

$$BN(k) = P(B = k) = \begin{cases} \binom{n_j}{k} q_j^k (1-q_j)^{n_j - k}, & 0 \le k \le n_j \\ 0 & \text{otherwise} \end{cases}$$

and the cumulative binomial distribution is

$$CBN(x) = P(B \le x) = \begin{cases} 0 & x < 0 \\ \sum_{k=0}^{x} BN(k), & 0 \le x \le n_j \\ 1 & x > n_j \end{cases}$$

Calculating the Truncated Z

The **general methodology** for calculating an aggregate level test statistic is outlined below.

1. **Calculate cell weights, W_j.** A weight based on the number of transactions is used so that a cell which has a larger number of transactions has a larger weight. The actual weight formulae will depend on the type of measure.

Mean Measure

$$W_j = \sqrt{\frac{n_{1j} n_{2j}}{n_j}}$$

Proportion Measure

$$W_j = \sqrt{\frac{n_{2j} n_{1j}}{n_j} \cdot \frac{a_j}{n_j} \left(1 - \frac{a_j}{n_j}\right)}$$

Rate Measure

$$W_j = \sqrt{\frac{b_{1j} b_{2j}}{b_j} \cdot \frac{n_j}{b_j}}$$

2. **In each cell, calculate a Z value, Z_j.** A Z statistic with mean 0 and variance 1 is needed for each cell.

   - If $W_j = 0$, set $Z_j = 0$.
   - Otherwise, the actual Z statistic calculation depends on the type of performance measure.

Mean Measure

$$Z_j = \Phi^{-1}(\alpha)$$

where α is determine by the following algorithm.

If $\min(n_{1j}, n_{2j}) > 6$, then determine α as

$$\alpha = P(t_{n_{1j}-1} \le T_j),$$

that is, α is the probability that a t random variable with $n_{1j} - 1$ degrees of freedom, is less than

$$T_j = t_j + \frac{g}{6}\left(\frac{n_{1j} + 2n_{2j}}{\sqrt{n_{1j}\, n_{2j}(n_{1j} + n_{2j})}}\right)\left(t^2 + \frac{n_{2j} - n_{1j}}{2n_{1j} + n_{2j}}\right),$$

where

$$t_i = \frac{\bar{X}_{..} - \bar{X}_{i.}}{s_{..}\sqrt{\frac{1}{n_{..}} - \frac{1}{n_{i.}}}}$$

and the coefficient g is an estimate of the skewness of the parent population, which we assume is the same in all cells. It can be estimated from the ILEC values in the largest cells. This needs to be done only once for each measure. We have found that attempting to estimate this skewness parameter for each cell separately leads to excessive variability in the "adjusted" t. We therefore use a single compromise value in all cells.

Note, that t_i is the "modified Z" statistic. The statistic T_i is a "modified Z" corrected for the skewness of the ILEC data.

If $\min(n_{1j}, n_{2j}) \leq 6$, and

a) $M_j \leq 1{,}000$ (the total number of distinct pairs of samples of size n_{1j} and n_{2j} is 1,000 or less).

- Calculate the sample sum for all possible samples of size n_{2j}.
- Rank the sample sums from smallest to largest. Ties are dealt by using average ranks.
- Let R_0 be the rank of the observed sample sum with respect all the sample sums.

$$\alpha = 1 - \frac{R_0 - 0.5}{M_j}$$

b) $M_j > 1{,}000$

- Draw a random sample of 1,000 sample sums from the permutation distribution.
- Add the observed sample sum to the list. There is a total of 1001 sample sums. Rank the sample sums from smallest to largest. Ties are dealt by using average ranks.
- Let R_0 be the rank of the observed sample sum with respect all the sample sums.

$$\alpha = 1 - \frac{R_0 - 0.5}{1001}.$$

Proportion Measure

$$Z_j = \frac{n_{\cdot j} a_{\cdot} - n_{\cdot} a_j}{\sqrt{\frac{n_{\cdot} n_{\cdot j} a_{\cdot} (n_{\cdot} - a_{\cdot})}{n_{\cdot} - 1}}}.$$

Rate Measure

$$Z_j = \frac{n_{\cdot j} - n_j q_j}{\sqrt{n_j q_j (1 - q_j)}}.$$

3. **Obtain a truncated Z value for each cell, Z_j^*.** To limit the amount of cancellation that takes place between cell results during aggregation, cells whose results suggest possible favoritism are left alone. Otherwise the cell statistic is set to zero. This means that positive equivalent Z values are set to 0, and negative values are left alone. Mathematically, this is written as

$$Z_j^* = \min(0, Z_j).$$

4. **Calculate the theoretical mean and variance of the truncated statistic under the null hypothesis of parity, $E(Z_j^* | H_0)$ and $Var(Z_j^* | H_0)$.** In order to compensate for the truncation in step 3, an aggregated, weighted sum of the Z_j^* will need to be centered and scaled properly so that the final aggregate statistic follows a standard normal distribution.

   - If $W_j = 0$, then no evidence of favoritism is contained in the cell. The formulae for calculating $E(Z_j^* | H_0)$ and $Var(Z_j^* | H_0)$ cannot be used. Set both equal to 0.

   - If $\min(n_{1j}, n_{2j}) > 6$ for a mean measure, $\min\left\{a_{1_j}\left(1 - \frac{a_{1j}}{n_{1_j}}\right), a_{2_j}\left(1 - \frac{a_{1j}}{n_{1_j}}\right)\right\} > 9$ for a proportion measure, or $\min(n_{1_j}, n_{2_j}) > 15$ and $n_j q_j (1 - q_j) > 9$ for a rate measure then

$$E(Z_j^* | H_0) = -\frac{1}{\sqrt{2\pi}}, \text{ and}$$

$$Var(Z_j^* | H_0) = \frac{1}{2} - \frac{1}{2\pi}.$$

- Otherwise, determine the total number of values for Z_j^*. Let z_{ji} and θ_{ji} denote the values of Z_j^* and the probabilities of observing each value, respectively.

$$E(Z_j^* \mid H_0) = \sum_i \theta_{ji} z_{ji} \text{ and}$$

$$Var(Z_j^* \mid H_0) = \sum_i \theta_{ji} z_{ji}^2 - \left[E(Z_j^* \mid H_0)\right]^2$$

The actual values of the z's and θ's depends on the type of measure, and the sums in the equations are over all possible values of the index i.

Mean Measure

$$N_j = \min(M_j, 1{,}000), \quad i = 1, K, N_j$$

$$z_{ji} = \min\left\{0, 1 - \Phi^{-1}\left(\frac{R_i - 0.5}{N_j}\right)\right\} \quad \text{where } R_i \text{ is the rank of sample sum i}$$

$$\theta_{ji} = \frac{1}{N_j}$$

Proportion Measure

$$z_{ji} = \min\left\{0, \frac{n_j i - n_{1j} a_j}{\sqrt{\frac{n_{1j} n_{2j} a_j (n_j - a_j)}{n_j - 1}}}\right\}, \quad i = \min(a_j, n_{2j}), K, \max(0, a_j - n_{1j})$$

$$\theta_{ji} = HG(i)$$

Rate Measure

$$z_{ji} = \min\left\{0, \frac{i - n_j q_j}{\sqrt{n_j q_j (1 - q_j)}}\right\}, \quad i = 0, K, n_j$$

$$\theta_{ji} = BN(i)$$

5. **Calculate the aggregate test statistic, Z^T.**

$$Z^T = \frac{\sum_j W_j Z_j^* - \sum_j W_j E(Z_j^* \mid H_0)}{\sqrt{\sum_j W_j^2 Var(Z_j^* \mid H_0)}}$$

The Balancing Critical Value

There are four key elements of the statistical testing process:

1. the null hypothesis, H_0, that parity exists between ILEC and CLEC services
2. the alternative hypothesis, H_a, that the ILEC is giving better service to its own customers
3. the Truncated Z test statistic, Z^T, and
4. a critical value, c

The decision rule[1] is

- If $Z^T < c$ then accept H_a.
- If $Z^T \geq c$ then accept H_0.

There are two types of error possible when using such a decision rule:

Type I Error: Deciding favoritism exists when there is, in fact, no favoritism.
Type II Error: Deciding parity exists when there is, in fact, favoritism.

The probabilities of each type of each are:

Type I Error: $\alpha = P(Z^T < c \mid H_0)$.
Type II Error: $\beta = P(Z^T \geq c \mid H_a)$.

We want a balancing critical value, c_β, so that $\alpha = \beta$.

It can be shown that

$$c_\beta = \frac{\sum_j W_j M(m_j, se_j) - \sum_j W_j \frac{-1}{\sqrt{2\pi}}}{\sqrt{\sum_j W_j^2 V(m_j, se_j)} + \sqrt{\sum_j W_j^2 \left(\frac{1}{2} - \frac{1}{2\pi}\right)}}$$

where

$$M(\mu, \sigma) = \mu \Phi\left(\tfrac{-\mu}{\sigma}\right) - \sigma \phi\left(\tfrac{-\mu}{\sigma}\right)$$

[1] This decision rule assumes that a negative test statistic indicates poor service for the CLEC customer. If the opposite is true, then reverse the decision rule.

$$V(\mu,\sigma) = (\mu^2 + \sigma^2)\Phi(\frac{\mu}{\sigma}) + \mu\sigma\phi(\frac{\mu}{\sigma}) - M(\mu,\sigma)^2$$

$\Phi(\cdot)$ is the cumulative standard normal distribution function, and $\phi(\cdot)$ is the standard normal density function.

This formula assumes that Z_j is approximately normally distributed within cell j. When the cell sample sizes, n_{1j} and n_{2j}, are small this may not be true. It is possible to determine the cell mean and variance under the null hypothesis when the cell sample sizes are small. It is much more difficult to determine these values under the alternative hypothesis. Since the cell weight, W_j will also be small (see calculate weights section above) for a cell with small volume, the cell mean and variance will not contribute much to the weighted sum. Therefore, the above formula provides a reasonable approximation to the balancing critical value.

The values of m_j and se_j will depend on the type of performance measure.

Mean Measure

For mean measures, one is concerned with two parameters in each cell, namely, the mean and variance. A possible lack of parity may be due to a difference in cell means, and/or a difference in cell variances. One possible set of hypotheses that capture this notion, and take into account the assumption that transaction are identically distributed within cells is:

$$H_0: \mu_{1j} = \mu_{2j},\ \sigma_{1j}^2 = \sigma_{2j}^2$$

$$H_a: \mu_{2j} = \mu_{1j} + \delta_j\sigma_{1j},\ \sigma_{2j}^2 = \lambda_j\sigma_{1j}^2 \qquad \delta_j > 0,\ \lambda_j \geq 1 \text{ and } j = 1,\ldots,L.$$

Under this form of alternative hypothesis, the cell test statistic Z_j has mean and standard error given by

$$m_j = \frac{-\delta_j}{\sqrt{\frac{1}{n_{1j}} + \frac{1}{n_{2j}}}}, \text{ and}$$

$$se_j = \sqrt{\frac{\lambda_j n_{1j} + n_{2j}}{n_{1j} + n_{2j}}}$$

Proportion Measure

For a proportion measure there is only one parameter of interest in each cell, the proportion of transaction possessing an attribute of interest. A possible lack of parity may be due to a difference in cell proportions. A set of hypotheses that take into account the assumption that transaction are identically distributed within cells while allowing for

an analytically tractable solution is:

$$H_0: \frac{p_{2,}(1-p_{.,})}{(1-p_{2,})p_{.,}} = 1$$

$$H_1: \frac{p_{2,}(1-p_{.,})}{(1-p_{2,})p_{.,}} = \psi_j \qquad \psi_j > 1 \text{ and } j = 1,\ldots L.$$

These hypotheses are based on the "odds ratio." If the transaction attribute of interest is a missed trouble repair, then an interpretation of the alternative hypothesis is that a CLEC trouble repair appointment is ψ_j times more likely to be missed than an ILEC trouble.

Under this form of alternative hypothesis, the within cell asymptotic mean and variance of $a_{1,j}$ are given by[1]

$$E(a_{1,j}) = n_{,j}\pi_j^{(1)}$$

$$\text{var}(a_{1,j}) = \frac{n_{,j}}{\frac{1}{\pi_j^{(1)}} + \frac{1}{\pi_j^{(2)}} + \frac{1}{\pi_j^{(3)}} + \frac{1}{\pi_j^{(4)}}}$$

where

$$\pi_j^{(1)} = f_j^{(1)}\left(n_j^2 + f_j^{(2)} + f_j^{(3)} - f_j^{(4)}\right)$$

$$\pi_j^{(2)} = f_j^{(1)}\left(-n_j^2 - f_j^{(2)} + f_j^{(3)} + f_j^{(4)}\right)$$

$$\pi_j^{(3)} = f_j^{(1)}\left(-n_j^2 + f_j^{(2)} - f_j^{(3)} + f_j^{(4)}\right)$$

$$\pi_j^{(4)} = f_j^{(1)}\left(n_j^2\left(\frac{2}{\psi_j}-1\right) - f_j^{(2)} - f_j^{(3)} - f_j^{(4)}\right)$$

$$f_j^{(1)} = \frac{1}{2n_j^2\left(\frac{1}{\psi_j}-1\right)}$$

$$f_j^{(2)} = n_j n_{1,j}\left(\frac{1}{\psi_j}-1\right)$$

$$f_j^{(3)} = n_j a_j\left(\frac{1}{\psi_j}-1\right)$$

$$f_j^{(4)} = \sqrt{n_j^2\left[4n_{1,j}\left(n_{,j}-a_j\right)\left(\frac{1}{\psi_j}-1\right) + \left(n_j + \left(a_j - n_{1,j}\right)\left(\frac{1}{\psi_j}-1\right)\right)^2\right]}$$

[1] Stevens, W. L. (1951) Mean and Variance of an entry in a Contingency Table. *Biometrica*, 38, 468-470.

Recall that the cell test statistic is given by

$$Z_j = \frac{n\, a_j - n_j\, a}{\sqrt{\frac{n\, n_j\, a\,(n-a)}{n-1}}}$$

Using the equations above, we see that Z_j has mean and standard error given by

$$m_j = \frac{n_j \pi^{(1)} - n_j\, a_j}{\sqrt{\frac{n_j\, n_{2j}\, a_j\,(n_j - a_j)}{n_j - 1}}}, \text{ and}$$

$$se_j = \sqrt{\frac{n_j^2 (n_j - 1)}{n_{1j}\, n_{2j}\, a_j\,(n_j - a_j)\left(\frac{1}{\pi_j^{(1)}} + \frac{1}{\pi_j^{(2)}} + \frac{1}{\pi_j^{(3)}} + \frac{1}{\pi_j^{(4)}}\right)}}.$$

Rate Measure

A rate measure also has only one parameter of interest in each cell, the rate at which a phenomenon is observed relative to a base unit, e.g. the number of troubles per available line. A possible lack of parity may be due to a difference in cell rates. A set of hypotheses that take into account the assumption that transaction are identically distributed within cells is:

$$H_0: r_{1j} = r_{2j}$$

$$H_a: r_{2j} = \varepsilon_j r_{1j} \qquad \varepsilon_j > 1 \text{ and } j = 1,\ldots,L.$$

Given the total number of ILEC and CLEC transactions in a cell, n_j, and the number of base elements, b_{1j} and b_{2j}, the number of ILEC transaction, n_{1j}, has a binomial distribution from n_j trials and a probability of

$$q_j^* = \frac{r_{1j} b_{1j}}{r_{1j} b_{1j} + r_{2j} b_{2j}}.$$

Therefore, the mean and variance of n_{1j}, are given by

$$E(n_{1j}) = n_j q_j^*$$

$$\text{var}(n_{1j}) = n_j q_j^* (1 - q_j^*)$$

Under the null hypothesis

$$q_j^* = q_j = \frac{b_{1j}}{b_{1j}}.$$

but under the alternative hypothesis

$$q_j^* = q_j^a = \frac{b_{1j}}{b_{1j} - \varepsilon_j b_{2j}}.$$

Recall that the cell test statistic is given by

$$Z_j = \frac{n_{1j} - n_j q_j}{\sqrt{n_j q_j (1 - q_j)}}.$$

Using the relationships above, we see that Z_j has mean and standard error given by

$$m_j = \frac{n_j (q_j^a - q_j)}{\sqrt{n_j q_j (1 - q_j)}} = (1 - \varepsilon_j) \sqrt{\frac{n_j b_{1j} b_{2j}}{b_{1j} + \varepsilon_j b_{2j}}}, \text{ and}$$

$$se_j = \sqrt{\frac{q_j^a (1 - q_j^a)}{q_j (1 - q_j)}} = \sqrt{\varepsilon_j} \frac{b_j}{b_{1j} + \varepsilon_j b_{2j}}.$$

Determining the Parameters of the Alternative Hypothesis

In this appendix we have indexed the alternative hypothesis of mean measures by two sets of parameters, λ_j and δ_j. Proportion and rate measures have been indexed by one set of parameters each, ψ_j and ε_j respectively. While statistical science can be used to evaluate the impact of different choices of these parameters, there is not much that an appeal to statistical principles can offer in directing specific choices. Specific choices are best left to telephony experts. Still, it is possible to comment on some aspects of these choices:

- **Parameter Choices for λ_j.** The set of parameters λ_j index alternatives to the null hypothesis that arise because there might be greater unpredictability or variability in the delivery of service to a CLEC customer over that which would be achieved for an otherwise comparable ILEC customer. While concerns about differences in the variability of service are important, it turns out that the truncated Z testing which is being recommended here is relatively insensitive to all but very large values of the λ_j. Put another way, reasonable differences in the values chosen here could make very little difference in the balancing points chosen.

- Parameter Choices for δ. The set of parameters δ are much more important in the choice of the balancing point than was true for the λ. The reason for this is that they directly index differences in average service. The truncated Z test is very sensitive to any such differences; hence, even small disagreements among experts in the choice of the δ could be very important. Sample size matters here too. For example, setting all the δ_j to a single value – $\delta = \delta$ – might be fine for tests across individual CLECs where currently in Louisiana the CLEC customer bases are not too different. Using the same value of δ for the overall state testing does not seem sensible, however, since the state sample would be so much larger.

- Parameter Choices for ψ_j or ε_j. The set of parameters ψ_j or ε_j are also important in the choice of the balancing point for tests of their respective measures. The reason for this is that they directly index increases in the proportion or rate of service performance. The truncated Z test is sensitive to such increases; but not as sensitive as the case of δ_j for mean measures. Sample size matters here as well. As with mean measures, using the same value of ψ or ε for the overall state testing does not seem sensible since the state sample would be so much larger.

The bottom line here is that beyond a few general considerations, like those given above, a principled approach to the choice of the alternative hypotheses to guard against, must come from elsewhere.

Decision Process

Once Z^T has been calculated, it is compared to the balancing critical value to determine if the ILEC is favoring its own customers over a CLEC's customers.

This critical value changes as the ILEC and CLEC transaction volume change. One way to make this transparent to the decision maker, is to report the difference between the test statistic and the critical value, *diff* = $Z^T - c_\beta$. If favoritism is concluded when $Z^T < c_\beta$, then the *diff* < 0 indicates favoritism.

This make it very easy to determine favoritism: a positive *diff* suggests no favoritism, and a negative *diff* suggests favoritism.

EXHIBIT D

BST VSEEM REMEDY PROCEDURE

TIER-1 CALCULATION FOR RETAIL ANALOGUES:

1. Calculate the overall test statistic for each CLEC: z^{T}_{CLEC1} (See Exhibit C)
2. Calculate the balancing critical value(${}^{C}B_{CLEC1}$) that is associated with the alternative hypothesis (for fixed parameters δ, υ or ε). (See Exhibit C)
3. If the overall test statistic is equal to or above the balancing critical value, stop here. Otherwise, go to step 4.
4. Calculate the Parity Gap by subtracting the value of step 2. from that of step 1
   $z^{T}_{CLEC1} - {}^{C}B_{CLEC1}$
5. Calculate the Volume Proportion using a linear distribution with slope of ¼. This can be accomplished by taking the absolute value of the Parity Gap from step 4. divided by 4:
   $ABS((z^{T}_{CLEC1} - {}^{C}B_{CLEC1}) / 4)$. All parity gaps equal or greater to 4 will result in a volume proportion of 100%.
6. Calculate the Affected Volume by multiplying the Volume Proportion from step 5. by the Total $CLEC_1$ Volume in the negatively affected cell; where the cell value is negative. (See Exhibit C)
7. Calculate the payment to CLEC-1 by multiplying the result of step 6. by the appropriate dollar amount from the fee schedule.

So, CLEC-1 payment = $\text{Affected Volume}_{CLEC1}$ * $ from Fee Schedule

Example: CLEC-1 Missed Installation Appointments (MIA) for Resale POTS

	n_I	n_C	MIA_I	MIA_C	z^{T}_{CLEC1}	C_ε	Parity Gap	Volume Proportion	Affected Volume
State	50000	600	9%	16%	-1.92	-0.21	1.71	0.4275	
Cell					z_{CLEC1}				
1		150	0.091	0.112	-1.994				
2		75	0.176	0.098	0.734				64
3		10	0.128	0.333	-2.619				
4		50	0.158	0.242	-2.878				4
5		15	0.245	0.075	1.345				21
6		200	0.156	0.130	0.021				
7		30	0.166	0.233	-0.600				
8		20	0.106	0.127	-0.065				13
9		40	0.193	0.218	-0.918				9
10		10	0.160	0.235	-0.660				17
									4
									133

where n_I = ILEC observations and n_C = CLEC-1 observations

Payout for CLEC-1 is (133 units) * ($100/unit) = **$13,300**

TIER-2 CALCULATION for RETAIL ANALOGUES

1. Tier-2 is triggered by three monthly failures of any VSEEM submetric in the same quarter.

2. Calculate the overall test statistic for the CLEC Aggregate using all transactions from the calendar quarter: z^{T}_{CLECA}

3. Calculate the balancing critical value(${}^{C}B_{CLECA}$) that is associated with the alternative hypothesis (for fixed parameters δ, ψ or ε). (See Exhibit C)

4. If the overall test statistic is equal to or above the balancing critical value for the calendar quarter, stop here. Otherwise, go to step 5.

5. Calculate the Parity Gap by subtracting the value of step 3. from that of step 2.: $z^{T}_{CLECA} - {}^{C}B_{CLECA}$

6. Calculate the Volume Proportion using a linear distribution with slope of ¼. This can be accomplished by dividing the Parity Gap from step 5. by 4; $ABS((z^{T}_{CLECA} - {}^{C}B_{CLECA}) / 4)$. All parity gaps equal or greater to 4 will result in a volume proportion of 100%.

7. Calculate the Affected Volume by multiplying the Volume Proportion from step 6. by the Total $CLEC_A$ Volume (CLEC Aggregate) in the negatively affected cell; where the cell value is negative (See Exhibit C).

8. Calculate the payment to State Designated Agency by multiplying the result of step 7. by the appropriate dollar amount from the fee schedule.

   So, State Designated Agency payment = $\text{Affected Volume}_{CLECA}$ * $$ from Fee Schedule

Example: CLEC-A Missed Installation Appointments (MIA) for Resale POTS

State	n_i	n_c	MIA_i	MIA_c	z^{T}_{CLECA}	C_B	Parity Gap	Volume Proportion	Affected Volume
Quarter1	180000	2100	9%	16%	-1.92	-0.21	1.71	0.4275	
Cell					z_{CLECA}				
1		500	0.091	0.112	-1.994				214
2		300	0.176	0.098	0.734				
3		80	0.128	0.333	-2.619				34
4		205	0.158	0.242	-2.878				88
5		45	0.245	0.075	1.345				
6		605	0.156	0.130	0.021				
7		80	0.166	0.233	-0.600				34
8		40	0.106	0.127	-0.065				17
9		165	0.193	0.218	-0.918				71
10		80	0.160	0.235	-0.660				34
									492

where n_i = ILEC observations and n_c = CLEC-A observations

Payout for CLEC-A is (492 units) * $300/unit) = $147,600

Tier-3

Tier-3 uses the monthly CLEC Aggregate results in a given State. Tier-3 is triggered when five of the twelve Tier-3 sub-metrics experience consecutive failures in a given calendar quarter. The table below displays a situation that would trigger a Tier-3 failure, and one that would not.

Process	Measure	TIER-3 FAILURE X = Miss			NOT A TIER-3 FAILURE X = Miss	
[redacted]	Resale POTS	X	X	X	X	
	Resale Design	X			X	X
	UNE Loop & Port Combo		X			
[redacted]	UNE Loops	X	X	X		
	Resale POTS	X	X	X	X	
	Resale Design		X	X		
	UNE Loop / Port Combo					X
	UNE Loops					X
[redacted]	Billing Accuracy	X	X	X	X	
	Billing Timeliness					
[redacted]	Percent Trunk Blockage	X	X	X	X	X
	Percent Missed Collocation Due Dates					

Tier-3 is effective immediately after quarter results, and can only be lifted when two of the five failed sub-metrics show compliance for two consecutive months in the following quarter.

All tiers standalone, such that triggering Tier-3 will not cease payout of any Tier-1 or Tier-2 failures.

TIER-1 CALCULATION FOR BENCHMARKS:

1 For each CLEC, with five or more observations, calculate monthly performance results for the State.

2. CLECs having observations (sample sizes) between 5 and 30 will use Table I below -- only exception will be for Collocation Percent Missed Due Dates.

Table I **Small Sample Size Table**
(95% Confidence)

Sample Size	Equivalent 90% Benchmark	Equivalent 95% Benchmark
5	60.00%	80.00%
6	66.67%	83.33%
7	71.43%	85.71%
8	75.00%	75.00%
9	66.67%	77.78%
10	70.00%	80.00%
11	72.73%	81.82%
12	75.00%	83.33%
13	76.92%	84.62%
14	78.57%	85.71%
15	73.33%	86.67%

Sample Size	Equivalent 90% Benchmark	Equivalent 95% Benchmark
16	75.00%	87.50%
17	76.47%	82.35%
18	77.78%	83.33%
19	78.95%	84.21%
20	80.00%	85.00%
21	76.19%	85.71%
22	77.27%	86.36%
23	78.26%	86.96%
24	79.17%	87.50%
25	80.00%	88.00%
26	80.77%	88.46%
27	81.48%	88.89%
28	78.57%	89.29%
29	79.31%	86.21%
30	80.00%	86.67%

3. If the percentage (or equivalent percentage for small samples) is equal to or below the benchmark standard, stop here. Otherwise, go to step 4.

4. Determine the Volume Proportion by taking the difference between the benchmark and the actual performance result.

5. Calculate the Affected Volume by multiplying the Volume Proportion from step 4. by the Total $CLEC_1$ Volume.

6. Calculate the payment to CLEC-1 by multiplying the result of step 5. by the appropriate dollar amount from the fee schedule.

So, CLEC-1 payment = Affected $Volume_{CLEC1}$ * $$ from Fee Schedule

Example: CLEC-1 Missed Installation Appointments (MIA) for UNE Loops

	n_c	Benchmark	MIA_c	Volume Proportion .03	Affected Volume 18
State	600	9%	12%		

Payout for CLEC-1 is (18 units) * ($400/unit) = $7,200

TIER-1 CALCULATION FOR BENCHMARKS (in the form of a target):

1. For each, with five or more observations, CLEC calculate monthly performance results fo the State.
2. CLECs having observations (sample sizes) between 5 and 30 will use Table I above.
3. Calculate the interval distribution based on the same data set used in step 1.
4. If the 'percent within' is equal to or exceeds the benchmark standard, stop here. Otherwise, go to step 5.
5. Determine the Volume Proportion by taking the difference between benchmark and the actual performance result.
6. Calculate the Affected Volume by multiplying the Volume Proportion from step 5. by the Total $CLEC_1$ Volume.
7. Calculate the payment to CLEC-1 by multiplying the result of step 6. by the appropriate dollar amount from the fee schedule.

So, CLEC-1 payment = $\text{Affected Volume}_{CLEC1}$ * $$ from Fee Schedule

Example: CLEC-1 Reject Timeliness

	n_c	Benchmark	Reject Timeliness_c	Volume Proportion .02	Affect Volun 12
State	600	95% within 1 hour	93% within 1 hour		

Payout for CLEC-1 is (12 units) * ($100/unit) = $1,200

TIER-2 CALCULATIONS for BENCHMARKS:

Tier-2 calculations for benchmark measures are the same as the Tier-1 benchmark calculations except the CLEC Aggregate data having failed for three months in a given calendar quarter is being assessed.

EXHIBIT E

LIQUIDATED DAMAGES TABLE FOR TIER-1 MEASURES

PER AFFECTED ITEM						
Ordering	Month 1	Month 2	Month3	Month4	Month 5	Mont
Provisioning	$40	$50	$60	$70	$80	
Provisioning UNE (Coordinated Customer Conversions)	$100	$125	$175	$250	$325	
Maintenance and Repair	$400	$450	$500	$550	$600	
Maintenance and Repair UNE	$100	$125	$175	$250	$325	
LNP	$400	$450	$500	$550	$650	
IC Trunks	$150	$250	$500	$600	$700	
Collocation	$100	$125	$175	$250	$325	
	$5,000	$5,000	$5,000	$5,000	$5,000	

Table-2

VOLUNTARY PAYMENTS FOR TIER-2 MEASURES

	Per Affected Item
OSS	
Pre-Ordering	$20
Ordering	$60
Provisioning	$300
UNE Provisioning (Coordinated Customer Conversions)	$875
Maintenance and Repair	$300
UNE Maintenance and Repair	$875
Billing	$1.00
LNP	$500
IC Trunks	$500
Collocation	$15,000

EXHIBIT F

Small Sample Size Table
(for Benchmark Measures)

95% Confidence

Sample Size	Equivalent 90% Benchmark	Equivalent 95% Benchmark
5	60.00%	80.00%
6	66.67%	83.33%
7	71.43%	85.71%
8	75.00%	75.00%
9	66.67%	77.78%
10	70.00%	80.00%
11	72.73%	81.82%
12	75.00%	83.33%
13	76.92%	84.62%
14	78.57%	85.71%
15	73.33%	86.67%

Sample Size	Equivalent 90% Benchmark	Equivalent 95% Benchmark
16	75.00%	87.50%
17	76.47%	82.35%
18	77.78%	83.33%
19	78.95%	84.21%
20	80.00%	85.00%
21	76.19%	85.71%
22	77.27%	86.36%
23	78.26%	86.96%
24	79.17%	87.50%
25	80.00%	88.00%
26	80.77%	88.46%
27	81.48%	88.89%
28	78.57%	89.29%
29	79.31%	86.21%
30	80.00%	86.67%

Attachment 10
BellSouth Disaster Recovery Plan

2000
BELLSOUTH
TENNESSEE
DISASTER RECOVERY PLANNING

For

CLECS

CONTENTS

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1.0 PURPOSE

In the unlikely event of a disaster occurring that affects BellSouth's long-term ability to deliver traffic to a Competitive Local Exchange Carrier (CLEC), general procedures have been developed to hasten the recovery process. Since each location is different and could be affected by an assortment of potential problems, a detailed recovery plan is impractical. However, in the process of reviewing recovery activities for specific locations, some basic procedures emerge that appear to be common in most cases.

These general procedures should apply to any disaster that affects the delivery of traffic for an extended time period. Each CLEC will be given the same consideration during an outage and service will be restored as quickly as possible.

This document will cover the basic recovery procedures that would apply to every CLEC.

2.0 SINGLE POINT OF CONTACT

When a problem is experienced, regardless of the severity, the BellSouth Network Management Center (NMC) will observe traffic anomalies and begin monitoring the situation. Controls will be appropriately applied to insure the sanity of BellSouth's network; and, in the event that a switch or facility node is lost, the NMC will attempt to circumvent the failure using available reroutes.

BellSouth's NMC will remain in control of the restoration efforts until the problem has been identified as being a long-term outage. At that time, the NMC will contact BellSouth's Emergency Control Center (ECC) and relinquish control of the recovery efforts. Even though the ECC may take charge of the situation, the NMC will continue to monitor the circumstances and restore traffic as soon as damaged network elements are revitalized.

The telephone number for the BellSouth Network Management Center in Atlanta, as published in Telcordia's National Network Management Directory, is 404-321-2516.

3.0 IDENTIFYING THE PROBLEM

During the early stages of problem detection, the NMC will be able to tell which CLECs are affected by the catastrophe. Further analysis and/or first hand observation will determine if the disaster has affected CLEC equipment only; BellSouth equipment only or a combination. The initial restoration activity will be largely determined by the equipment that is affected.

Once the nature of the disaster is determined and after verifying the cause of the problem, the NMC will initiate reroutes and/or transfers that are jointly agreed upon by the affected CLECs' Network Management Center and the BellSouth NMC. The type and percentage of controls used will depend upon available network capacity. Controls necessary to stabilize the situation will be invoked and the NMC will attempt to re-establish as much traffic as possible.

For long term outages, recovery efforts will be coordinated by the Emergency Control Center (ECC). Traffic controls will continue to be applied by the NMC until facilities are re-established. As equipment is made available for service, the ECC will instruct the NMC to begin removing the controls and allow traffic to resume.

3.1 SITE CONTROL

In the total loss of building use scenario, what likely exists will be a smoking pile of rubble. This rubble will contain many components that could be dangerous. It could also contain any personnel on the premises at the time of the disaster. For these reasons, the local fire marshal with the assistance of the police will control the site until the building is no longer a threat to surrounding properties and the companies have secured the site from the general public.

During this time, the majority owner of the building should be arranging for a demolition contractor to mobilize to the site with the primary objective of reaching the cable entrance facility for a damage assessment. The results of this assessment would then dictate immediate plans for restoration, both short term and permanent.

In a less catastrophic event, i.e., the building is still standing and the cable entrance facility is usable, the situation is more complex. The site will initially be controlled by local authorities until the threat to adjacent property has diminished. Once the site is returned to the control of the companies, the following events should occur.

An initial assessment of the main building infrastructure systems (mechanical, electrical, fire and life safety, elevators, and others) will establish building needs. Once these needs are determined, the majority owner should lead the building restoration efforts. There may be situations where the site will not be totally restored within the confines of the building. The companies must individually determine their needs and jointly assess the cost of permanent restoration to determine the overall plan of action.

Multiple restoration trailers from each company will result in the need for designated space and installation order. This layout and control is required to maximize the amount of restoration equipment that can be placed at the site, and the priority of placements.

Care must be taken in this planning to insure other restoration efforts have logistical access to the building. Major components of telephone and building equipment will need to be removed and replaced. A priority for this equipment must also be jointly established to facilitate overall site restoration. (Example: If the AC switchgear has sustained damage, this would be of the highest priority in order to regain power, lighting, and HVAC throughout the building.)

If the site will not accommodate the required restoration equipment, the companies would then need to quickly arrangé with local authorities for street closures, rights of way or other possible options available.

3.2 ENVIRONMENTAL CONCERNS

In the worse case scenario, many environmental concerns must be addressed. Along with the police and fire marshal, the state environmental protection department will be on site to monitor the situation.

Items to be concerned with in a large central office building could include:

1. Emergency engine fuel supply. Damage to the standby equipment and the fuel handling equipment could have created "spill" conditions that have to be handled within state and federal regulations.

2. Asbestos containing materials that may be spread throughout the wreckage. Asbestos could be in many components of building, electrical, mechanical, outside plant distribution, and telephone systems.

3. Lead and acid. These materials could be present in potentially large quantities depending upon the extent of damage to the power room.

4. Mercury and other regulated compounds resident in telephone equipment.

5. Other compounds produced by the fire or heat.

Once a total loss event occurs at a large site, local authorities will control immediate clean up (water placed on the wreckage by the fire department) and site access.

At some point, the companies will become involved with local authorities in the overall planning associated with site clean up and restoration. Depending on the clean up approach taken, delays in the restoration of several hours to several days may occur.

In a less severe disaster, items listed above are more defined and can be addressed individually depending on the damage.

In each case, the majority owner should coordinate building and environmental restoration as well as maintain proper planning and site control.

4.0 THE EMERGENCY CONTROL CENTER (ECC)

The ECC is located in the Colonnade Building in Birmingham, Alabama. During an emergency, the ECC staff will convene a group of pre-selected experts to inventory the damage and initiate corrective actions. These experts have regional access to BellSouth's personnel and equipment and will assume control of the restoration activity anywhere in the nine-state area.

In the past, the ECC has been involve with restoration activities resulting from hurricanes, ice storms and floods. They have demonstrated their capabilities during these calamities as well as during outages caused by human error or equipment failures. This group has an excellent record of restoring service as quickly as possible.

During a major disaster, the ECC may move emergency equipment to the affected location, direct recovery efforts of local personnel and coordinate service restoration activities with the CLECs. The ECC will attempt to restore service as quickly as possible using whatever means is available; leaving permanent solutions, such as the replacement of damaged buildings or equipment, for local personnel to administer.

Part of the ECC's responsibility, after temporary equipment is in place, is to support the NMC efforts to return service to the CLECs. Once service has been restored, the ECC will return control of the network to normal operational organizations. Any long-term changes required after service is restored will be made in an orderly fashion and will be conducted as normal activity.

5.0 RECOVERY PROCEDURES

The nature and severity of any disaster will influence the recovery procedures. One crucial factor in determining how BellSouth will proceed with restoration is whether or not BellSouth's equipment is incapacitated. Regardless of who's equipment is out of service, BellSouth will move as quickly as possible to aid with service recovery; however, the approach that will be taken may differ depending upon the location of the problem.

5.1 CLEC OUTAGE

For a problem limited to one CLEC (or a building with multiple CLECs), BellSouth has several options available for restoring service quickly. For those CLECs that have agreements with other CLECs, BellSouth can immediately start directing traffic to a provisional CLEC for completion. This alternative is dependent upon BellSouth having concurrence from the affected CLECs.

Whether or not the affected CLECs have requested a traffic transfer to another CLEC will not impact BellSouth's resolve to re-establish traffic to the original destination as quickly as possible.

5.2 BELLSOUTH OUTAGE

Because BellSouth's equipment has varying degrees of impact on the service provided to the CLECs, restoring service from damaged BellSouth equipment is different. The outage will probably impact a number of Carriers simultaneously. However, the ECC will be able to initiate immediate actions to correct the problem.

A disaster involving any of BellSouth's equipment locations could impact the CLECs, some more than others. A disaster at a Central Office (CO) would only impact the delivery of traffic to and from that one location, but the incident could affect many Carriers. If the Central Office is a Serving Wire Center (SWC), then traffic from the entire area to those Carriers served from that switch would also be impacted. If the switch functions as an Access Tandem, or there is a tandem in the building, traffic from every CO to every CLEC could be interrupted. A disaster that destroys a facility hub could disrupt various traffic flows, even though the switching equipment may be unaffected.

The NMC would be the first group to observe a problem involving BellSouth's equipment. Shortly after a disaster, the NMC will begin applying controls and finding re-routes for the completion of as much traffic as possible. These reroutes may involve delivering traffic to alternate Carriers upon receiving approval from the CLECs involved. In some cases, changes in translations will be required. If the outage is caused by the destruction of equipment, then the ECC will assume control of the restoration.

5.2.1 Loss of a Central Office

When BellSouth loses a Central Office, the ECC will

a) Place specialists and emergency equipment on notice;

b) Inventory the damage to determine what equipment and/or functions are lost;

c) Move containerized emergency equipment and facility equipment to the stricken area, if necessary;

d) Begin reconnecting service for Hospitals, Police and other emergency agencies; and

e) Begin restoring service to CLECs and other customers.

5.2.2 Loss of a Central Office with Serving Wire Center Functions

The loss of a Central Office that also serves as a Serving Wire Center (SWC) will be restored as described in section 5.2.1.

5.2.3 Loss of a Central Office with Tandem Functions

When BellSouth loses a Central Office building that serves as an Access Tandem and as a SWC, the ECC will

a) Place specialists and emergency equipment on notice;

b) Inventory the damage to determine what equipment and/or functions are lost;

c) Move containerized emergency equipment and facility equipment to the stricken area, if necessary;

d) Begin reconnecting service for Hospitals, Police and other emergency agencies;

e) Re-direct as much traffic as possible to the alternate access tandem (if available) for delivery to those CLECs utilizing a different location as a SWC;

f) Begin aggregating traffic to a location near the damaged building. From this location, begin re-establishing trunk groups to the CLECs for the delivery of traffic normally found on the direct trunk groups. (This aggregation point may be the alternate access tandem location or another CO on a primary facility route.)

g) Begin restoring service to CLECs and other customers.

5.2.4 Loss of a Facility Hub

In the event that BellSouth loses a facility hub, the recovery process is much the same as above. Once the NMC has observed the problem and administered the appropriate controls, the ECC will assume authority for the repairs. The recovery effort will include

a) Placing specialists and emergency equipment on notice;

b) Inventorying the damage to determine what equipment and/or functions are lost;

c) Moving containerized emergency equipment to the stricken area, if necessary;

d) Reconnecting service for Hospitals, Police and other emergency agencies; and

e) Restoring service to CLECs and other customers. If necessary, BellSouth will aggregate the traffic at another location and build temporary facilities. This alternative would be viable for a location that is destroyed and building repairs are required.

5.3 COMBINED OUTAGE (CLEC AND BELLSOUTH EQUIPMENT)

In some instances, a disaster may impact BellSouth's equipment as well as the CLECs'. This situation will be handled in much the same way as described in section 5.2.3. Since BellSouth and the CLECs will be utilizing temporary equipment, close coordination will be required.

6.0 T1 IDENTIFICATION PROCEDURES

During the restoration of service after a disaster, BellSouth may be forced to aggregate traffic for delivery to a CLEC. During this process, T1 traffic may be consolidated onto DS3s and may become unidentifiable to the Carrier. Because resources will be limited, BellSouth may be forced to "package" this traffic entirely differently then normally received by the CLECs. Therefore, a method for identifying the T1 traffic on the DS3s and providing the information to the Carriers is required.

7.0 ACRONYMS

CO	-	Central Office (BellSouth)
DS3	-	Facility that carries 28 T1s (672 circuits)
ECC	-	Emergency Control Center (BellSouth)
CLEC	-	Competitive Local Exchange Carrier
NMC	-	Network Management Center
SWC	-	Serving Wire Center (BellSouth switch)
T1	-	Facility that carries 24 circuits

Hurricane Information

During a hurricane, BellSouth will make every effort to keep CLECs updated on the status of our network. Information centers will be set up throughout BellSouth Telecommunications. These centers are not intended to be used for escalations, but rather to keep the CLEC informed of network related issues, area damages and dispatch conditions, etc.

Hurricane-related information can also be found on line at http://www.interconnection.bellsouth.com/network/disaster/dis_resp.htm. Information concerning Mechanized Disaster Reports can also be found at this website by clicking on CURRENT MDR REPORTS or by going directly to http://www.interconnection.bellsouth.com/network/disaster/mdrs.htm.

BST Disaster Management Plan

BellSouth maintenance centers have geographical and redundant communication capabilities. In the event of a disaster removing any maintenance center from service another geographical center would assume maintenance responsibilities. The contact numbers will not change and the transfer will be transparent to the CLEC.