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BELLSOUTH

BellSouth Telecommunications, Inc.
333 Commerce Street
Suite 2101
Nashville, TN 37201-3300

guy.hicks@bellsouth.com

Guy M. Hicks
General Counsel

615 214-6301
Fax 615 214-7406

RECD TN REGULATORY AUTH
'00 OCT 2 PM 2 43
EXECUTIVE SECRETARY

October 2, 2000

VIA HAND DELIVERY

David Waddell, Executive Secretary
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37238

Re: *Generic Docket to Establish UNE Prices for Line Sharing per FCC 99-355 and Riser Cable and Terminating Wire as Ordered in TRA Docket No. 98-00123*
Docket No. 00-00544

Dear Mr. Waddell:

Enclosed please find the original and four paper copies of the cost studies required by the Hearing Officer's August 10, 2000 Report. The cost studies include a Summary. Consistent with recent rules promulgated by the Authority, a CD Rom (electronic) version of the non-proprietary portions of the cost studies is also enclosed. Proprietary portions of the cost studies are being provided under separate cover subject to the terms of the Protective Order. Copies of the CD ROM (electronic) versions of both the proprietary and non-proprietary portions of the cost studies are being provided to counsel of record for all parties.

BellSouth understands that during its September 26, 2000 Directors' Conference, the Authority ordered BellSouth to revise its cost studies to (1) include reasonable incremental cost recovery for OSS modifications caused by line sharing (2) make modifications with regard to cross connects to reflect whether or not the splitter if located within BellSouth's MDF and (3) make modifications to reflect whether or not a CLEC provides a splitter in its own cage or in a common area of a central office, and to reflect whether or not the CLEC is self-provisioning the splitter within the CLEC's space.

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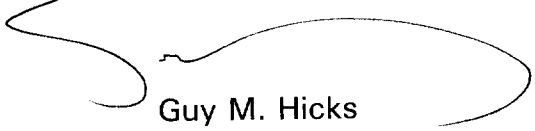
POSTED 10-3-00

First, as to the OSS, BellSouth believes that it is in full compliance with the Authority's directives. The Telcordia costs for OSS have been included in the cost studies. Directives (2) and (3) will require BellSouth to do an additional cost study which will include the nonrecurring cost applicable in situations where CLECs provide their own splitters. BellSouth will prepare this cost study and submit it promptly to the Authority.

Very truly yours,



Guy M. Hicks

GMH:ch
Enclosure

CERTIFICATE OF SERVICE

I hereby certify that on October 2, 2000, a copy of the foregoing document was served on the parties of record, via the method indicated:

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[ ] Facsimile
[ ] Overnight

Jon E. Hastings, Esquire
Boult, Cummings, et al.
P. O. Box 198062
Nashville, TN 37219-8062

[ ] Hand
[ ] Mail
[ ] Facsimile
[ ] Overnight

James Wright, Esq.
United Telephone - Southeast
14111 Capitol Blvd.
Wake Forest, NC 27587

[ ] Hand
[ ] Mail
[ ] Facsimile
[ ] Overnight

Charles B. Welch, Esquire
Farris, Mathews, et al.
205 Capitol Blvd, #303
Nashville, TN 37219

[ ] Hand
[ ] Mail
[ ] Facsimile
[ ] Overnight

James Lamoureux, Esquire
AT&T
1200 Peachtree St., NE
Atlanta, GA 30309

[ ] Hand
[ ] Mail
[ ] Facsimile
[ ] Overnight

T. G. Pappas, Esquire
R. Dale Grimes, Esquire
Bass, Berry & Sims
315 Deaderick Street
Nashville, TN 37238

[ ] Hand
[ ] Mail
[ ] Facsimile
[ ] Overnight

Henry Walker, Esquire
Boult, Cummings, et al.
414 Union Ave., #1600
P. O. Box 198062
Nashville, TN 39219-8062

[ ] Hand
[ ] Mail
[ ] Facsimile
[ ] Overnight

Michael Bressman, Esquire
BlueStar Communications
5 Corp. Centre
801 Crescent Centre Drive, #600
Franklin, TN 37067

TENNESSEE DOCKET NO. 00-00544

BELLSOUTH TELECOMMUNICATIONS, INC.

UNBUNDLED NETWORK ELEMENT COST STUDIES

OCTOBER 2, 2000

PUBLIC VERSION

TENNESSEE DOCKET NO. 00-00544
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ELECTRONIC COPIES OF FILING, MODELS, SPREADSHEETS AND INSTRUCTIONS (PROPRIETARY AND NONPROPRIETARY)

TENNESSEE DOCKET NO. 00-00544
SECTION 1
EXECUTIVE SUMMARY

STATEMENT OF PURPOSE

In its August 3,2000 pre-hearing conference, the Tennessee Regulatory Authority (TRA) expanded the scope of this docket. Specifically, BellSouth Telecommunications, Inc. (hereinafter referred to as BellSouth or the Company) was required to develop costs for all unbundled network elements (UNEs) outlined by the Federal Communication Commission's (FCC's) Third Report and Order that are subject to arbitration in Tennessee. UNEs previously filed in Docket No. 97-01262 have not been restudied.

Included in this document are Total Element Long Run Incremental Cost (TELRIC) studies, including shared and common costs, which comply with the orders and regulations established by the TRA in Docket No. 97-01262. The shared and common factors used in these studies are those adopted by the TRA in Docket No. 97-01262. Other factors and labor rates, not specifically addressed by the TRA in Docket No. 97-01262, have been updated from the values presented in Docket No. 97-01262 to reflect a 2000-2002 study period.

BellSouth TELRIC Calculator
Unbundled Network Cost Elements Summary Report
Tennessee
Combined Recurring and Nonrecurring

9/28/2000

	Cost Element	Recurring	Non Recurring	Non-Recurring First	Non-Recurring Additional	Non-Recurring Initial	Non-Recurring Subsequent	Testing spread over service life: Service Life	Testing spread over service life: Cost	Testing spread over service life: Monthly Cost
A.0	UNBUNDLED LOCAL LOOP									
A.2	SUB-LOOP									
A.2.11	Sub-Loop Distribution Per 4-Wire Analog Voice Grade Loop	$7.59		$147.93	$75.11					
A.2.13	Network Interface Device Cross Connect			$11.11	$11.11					
A.2.14	2-Wire Intrabuilding Network Cable (INC)	$1.47		$107.63	$34.81					
A.2.15	4-Wire Intrabuilding Network Cable (INC)	$2.55		$119.40	$46.58					
A.2.17	Sub-Loop - Per Cross Box Location - CLEC Feeder Facility Set-Up		$517.25							
A.2.18	Sub-Loop - Per Cross Box Location - Per 25 Pair Panel Set-Up		$42.68							
A.2.19	Sub-Loop - Per Building Equipment Room - CLEC Feeder Facility Set-Up		$358.04							
A.2.20	Sub-Loop - Per Building Equipment Room - Per 25 Pair Panel Set-Up		$105.13							
A.2.21	Sub-Loop - Per Cross Box Location - CLEC Distribution Facility Set-Up		$517.25							
A.2.24	Sub-Loop - Per 4-Wire Analog Voice Grade Loop / Feeder Only	$22.68		$137.31	$61.93					
A.2.25	Sub-Loop - Per 2-Wire ISDN Digital Grade Loop / Feeder Only	$16.51		$142.83	$67.45					
A.2.29	Sub-Loop - Per 4-Wire 56 or 64 Kbps Digital Grade Loop / Feeder Only	$27.88		$116.00	$40.62					
A.2.30	Sub-Loop - Per 2-Wire Copper Loop / Feeder Only	$9.42		$114.27	$38.89					
A.2.32	Sub-Loop - Per 4-Wire Copper Loop / Feeder Only	$14.61		$123.41	$48.03					
A.2.40	Sub-Loop - Per 2-Wire Copper Loop / Distribution Only	$5.26		$110.71	$37.89					
A.2.42	Sub-Loop - Per 4-Wire Copper Loop / Distribution Only	$6.52		$117.12	$44.30					
A.2.44	Network Interface Device (NID) - 2 line			$89.69	$54.56					
A.2.45	Network Interface Device (NID) - 6 line			$129.65	$94.51					
A.2.1198	Sub-Loop Distribution Per 4-Wire Analog Voice Grade Loop - Testing			$28.13	$28.13			52	$28.13	$0.67
A.2.1199	Sub-Loop Distribution Per 4-Wire Analog Voice Grade Loop - Disconnect			$99.96	$16.98					
A.2.1499	2-Wire Intrabuilding Network Cable (INC) - Disconnect			$94.41	$13.09					
A.2.1599	4-Wire Intrabuilding Network Cable (INC) - Disconnect			$99.96	$16.98					
A.2.2498	Sub-Loop - Per 4-Wire Analog Voice Grade Loop / Feeder Only - Testing			$69.97	$82.27			52	$69.97	$1.66
A.2.2499	Sub-Loop - Per 4-Wire Analog Voice Grade Loop / Feeder Only - Disconnect			$118.04	$30.13					
A.2.2598	Sub-Loop - Per 2-Wire ISDN Digital Grade Loop / Feeder Only - Testing			$65.16	$62.77			46	$65.16	$1.71
A.2.2599	Sub-Loop - Per 2-Wire ISDN Digital Grade Loop / Feeder Only - Disconnect			$104.67	$18.53					
A.2.2998	Sub-Loop - Per 4-Wire 56 or 64 Kbps Digital Grade Loop / Feeder Only - Testing			$66.99	$64.60			52	$66.99	$1.59
A.2.2999	Sub-Loop - Per 4-Wire 56 or 64 Kbps Digital Grade Loop / Feeder Only - Disconnect			$106.82	$18.91					
A.2.3098	Sub-Loop - Per 2-Wire Copper Loop / Feeder Only - Testing			$51.39	$49.00			46	$51.39	$1.35
A.2.3099	Sub-Loop - Per 2-Wire Copper Loop / Feeder Only - Disconnect			$104.67	$18.53					
A.2.3298	Sub-Loop - Per 4-Wire Copper Loop / Feeder Only - Testing			$69.00	$66.61			52	$69.00	$1.64
A.2.3299	Sub-Loop - Per 4-Wire Copper Loop / Feeder Only - Disconnect			$110.44	$22.53					
A.2.4098	Sub-Loop - Per 2-Wire Copper Loop / Distribution Only - Testing			$24.11	$24.11			52	$24.11	$0.57
A.2.4099	Sub-Loop - Per 2-Wire Copper Loop / Distribution Only - Disconnect			$94.41	$13.09					
A.2.4298	Sub-Loop - Per 4-Wire Copper Loop / Distribution Only - Testing			$36.16	$36.16			52	$36.16	$0.86
A.2.4299	Sub-Loop - Per 4-Wire Copper Loop / Distribution Only - Disconnect			$99.96	$16.98					
A.2.4499	Network Interface Device (NID) - 2 line - Disconnect			$0.6391	$0.6391					
A.2.4599	Network Interface Device (NID) - 6 line - Disconnect			$0.6522	$0.6522					
A.3	LOOP CHANNELIZATION AND CO INTERFACE (INSIDE CO)									
A.3.12	Unbundled Loop Concentration - System A (TR008)	$500.18		$613.60						
A.3.13	Unbundled Loop Concentration - System B (TR008)	$54.82		$255.67						
A.3.14	Unbundled Loop Concentration - System A (TR303)	$539.00		$613.60						
A.3.15	Unbundled Loop Concentration - System B (TR303)	$92.37		$255.67						
A.3.16	Unbundled Loop Concentration - DS1 Line Interface Card	$5.16		$74.39	$53.07					
A.3.17	Unbundled Loop Concentration - POTS Card	$2.05		$8.69	$8.65					
A.3.18	Unbundled Loop Concentration - ISDN (Brite Card)	$8.19		$8.69	$8.65					
A.3.19	Unbundled Loop Concentration - SPOTS Card	$12.18		$8.69	$8.65					
A.3.20	Unbundled Loop Concentration - Specials Card	$7.26		$8.69	$8.65					

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Unbundled Network Cost Elements Summary Report
Tennessee
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9/28/2000

				Non-Recurring				Testing spread over service life		
	Cost Element	Recurring	Non Recurring	First	Additional	Initial	Subsequent	Service Life	Cost	Monthly Cost
A.3.21	Unbundled Loop Concentration - TEST CIRCUIT Card	$35.50		$8.69	$8.65					
A.3.22	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data	$10.76		$8.69	$8.65					
A.3.1698	Unbundled Loop Concentration - DS1 Line Interface Card - Testing			$44.93	$33.81			52	$44.93	$1.07
A.3.1699	Unbundled Loop Concentration - DS1 Line Interface Card - Disconnect			$30.23	$8.46					
A.3.1798	Unbundled Loop Concentration - POTS Card - Testing			$11.18	$11.11			52	$11.18	$0.27
A.3.1799	Unbundled Loop Concentration - POTS Card - Disconnect			$9.71	$9.65					
A.3.1898	Unbundled Loop Concentration - ISDN (Brite Card) - Testing			$11.18	$11.11			52	$11.18	$0.27
A.3.1899	Unbundled Loop Concentration - ISDN (Brite Card) - Disconnect			$9.71	$9.65					
A.3.1998	Unbundled Loop Concentration - SPOTS Card - Testing			$11.18	$11.11			52	$11.18	$0.27
A.3.1999	Unbundled Loop Concentration - SPOTS Card - Disconnect			$9.71	$9.65					
A.3.2098	Unbundled Loop Concentration - Specials Card - Testing			$11.18	$11.11			52	$11.18	$0.27
A.3.2099	Unbundled Loop Concentration - Specials Card - Disconnect			$9.71	$9.65					
A.3.2198	Unbundled Loop Concentration - TEST CIRCUIT Card - Testing			$11.18	$11.11			52	$11.18	$0.27
A.3.2199	Unbundled Loop Concentration - TEST CIRCUIT Card - Disconnect			$9.71	$9.65					
A.3.2298	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data - Testing			$11.18	$11.11			52	$11.18	$0.27
A.3.2299	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data - Disconnect			$9.71	$9.65					
A.5	2-WIRE ISDN DIGITAL GRADE LOOP									
A.5.6	Universal Digital Channel	$21.58		$228.92	$152.42					
A.5.698	Universal Digital Channel - Testing			$89.27	$86.88			46	$89.27	$2.34
A.5.699	Universal Digital Channel - Disconnect			$110.01	$21.63					
A.6	2-WIRE ASYMMETRICAL DIGITAL SUBSCRIBER LINE (ADSL) COMPATIBLE LOOP									
A.6.5	2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (Nonrecurring w/ LMU)			$219.87	$99.88					
A.6.6	2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (Nonrecurring w/o LMU)			$120.79	$43.31					
A.6.598	2-Wire ADSL Compatible Loop (Nonrecurring w/ LMU) - Testing			$70.36	$67.97			46	$70.36	$1.85
A.6.599	2-Wire ADSL Compatible Loop (Nonrecurring w/ LMU)- Disconnect			$118.67	$18.85					
A.6.698	2-Wire ADSL Compatible Loop (Nonrecurring w/o LMU) - Testing			$70.36	$67.97			46	$70.36	$1.85
A.6.699	2-Wire ADSL Compatible Loop (Nonrecurring w/o LMU)- Disconnect			$101.05	$13.41					
A.7	2-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP									
A.7.5	2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/ LMU)			$219.87	$99.88					
A.7.6	2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/o LMU)			$133.76	$43.31					
A.7.598	2-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Testing			$86.69	$84.30			46	$86.69	$2.27
A.7.599	2-Wire HDSL Compatible Loop (Nonrecurring w/ LMU)- Disconnect			$118.67	$18.85					
A.7.698	2-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Testing			$86.69	$67.97			46	$86.69	$2.27
A.7.699	2-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Disconnect			$101.05	$13.41					
A.8	4-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP									
A.8.5	4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/ LMU)			$284.20	$153.83					
A.8.6	4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/o LMU)			$185.12	$107.64					
A.8.598	4-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Testing			$47.67	$47.67			52	$47.67	$1.13
A.8.599	4-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Disconnect			$180.85	$76.61					
A.8.698	4-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Testing			$103.81	$101.42			52	$103.81	$2.46
A.8.699	4-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Disconnect			$106.73	$17.30					
A.9	4-WIRE DS1 DIGITAL LOOP									
A.9.21	Sub-Loop Feeder Per 4-Wire DS1 Digital Loop	$43.35		$116.00	$40.62					
A.9.2198	Sub-Loop Feeder Per 4-Wire DS1 Digital Loop - Testing			$66.99	$64.60			52	$66.99	$1.59
A.9.2199	Sub-Loop Feeder Per 4-Wire DS1 Digital Loop - Disconnect			$106.82	$18.91					
A.12	CONCENTRATION PER SYSTEM PER FEATURE ACTIVATED (OUTSIDE CENTRAL OFFICE)									
A.12.1	Unbundled Loop Concentration - System A (TR008)	$554.30		$384.75	$209.58					
A.12.2	Unbundled Loop Concentration - System B (TR008)	$79.61		$384.75	$209.58					

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Tennessee
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9/28/2000

				Non-Recurring				Testing spread over service life		
	Cost Element	Recurring	Non Recurring	First	Additional	Initial	Subsequent	Service Life	Cost	Monthly Cost
A.12.3	Unbundled Loop Concentration - System A (TR303)	$590.18		$384.75	$209.58					
A.12.4	Unbundled Loop Concentration - System B (TR303)	$115.49		$384.75	$209.58					
A.12.5	Unbundled Sub-loop Concentration - USLC Feeder Interface	$59.30		$116.00	$40.62					
A.12.6	Unbundled Loop Concentration - POTS Card	$2.16		$8.69	$8.65					
A.12.7	Unbundled Loop Concentration - ISDN (Brite Card)	$8.66		$8.69	$8.65					
A.12.8	Unbundled Loop Concentration - SPOTS Card	$12.87		$8.69	$8.65					
A.12.9	Unbundled Loop Concentration - Specials Card	$7.67		$8.69	$8.65					
A.12.10	Unbundled Loop Concentration - TEST CIRCUIT Card	$37.51		$8.69	$8.65					
A.12.11	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data	$11.37		$8.69	$8.65					
A.12.199	Unbundled Loop Concentration - System A (TR008) - Disconnect			$229.31	$72.71					
A.12.299	Unbundled Loop Concentration - System B (TR008) - Disconnect			$229.31	$72.71					
A.12.399	Unbundled Loop Concentration - System A (TR303) - Disconnect			$229.31	$72.71					
A.12.499	Unbundled Loop Concentration - System B (TR303) - Disconnect			$229.31	$72.71					
A.12.598	Unbundled Sub-loop Concentration - USLC Feeder Interface - Testing			$66.99	$64.60			52	$66.99	$1.59
A.12.599	Unbundled Sub-loop Concentration - USLC Feeder Interface - Disconnect			$106.82	$18.91					
A.12.698	Unbundled Loop Concentration - POTS Card - Testing			$11.18	$11.11			52	$11.18	$0.27
A.12.699	Unbundled Loop Concentration - POTS Card - Disconnect			$9.71	$9.65					
A.12.798	Unbundled Loop Concentration - ISDN (Brite Card) - Testing			$11.18	$11.11			52	$11.18	$0.27
A.12.799	Unbundled Loop Concentration - ISDN (Brite Card) - Disconnect			$9.71	$9.65					
A.12.898	Unbundled Loop Concentration - SPOTS Card - Testing			$11.18	$11.11			52	$11.18	$0.27
A.12.899	Unbundled Loop Concentration - SPOTS Card - Disconnect			$9.71	$9.65					
A.12.998	Unbundled Loop Concentration - Specials Card - Testing			$11.18	$11.11			52	$11.18	$0.27
A.12.999	Unbundled Loop Concentration - Specials Card - Disconnect			$9.71	$9.65					
A.12.1098	Unbundled Loop Concentration - TEST CIRCUIT Card - Testing			$11.18	$11.11			52	$11.18	$0.27
A.12.1099	Unbundled Loop Concentration - TEST CIRCUIT Card - Disconnect			$9.71	$9.65					
A.12.1198	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data - Testing			$11.18	$11.11			52	$11.18	$0.27
A.12.1199	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data - Disconnect			$9.71	$9.65					
A.13	2-WIRE COPPER LOOP									
A.13.1	2-Wire Copper Loop - short	$13.10								
A.13.7	2-Wire Copper Loop - long	$45.66								
A.13.8	2-Wire Copper Loop - short (Nonrecurring w/ LMU)			$218.34	$98.35					
A.13.9	2-Wire Copper Loop - short (Nonrecurring w/o LMU)			$119.26	$41.78					
A.13.10	2-Wire Copper Loop - long (Nonrecurring w/ LMU)			$286.20	$163.82					
A.13.11	2-Wire Copper Loop - long (Nonrecurring w/o LMU)			$187.12	$107.25					
A.13.898	2-Wire Copper Loop - short (Nonrecurring w/ LMU) - Testing			$70.14	$67.75			46	$70.14	$1.84
A.13.899	2-Wire Copper Loop - short (Nonrecurring w/ LMU) - Disconnect			$118.67	$18.85					
A.13.998	2-Wire Copper Loop - short (Nonrecurring w/o LMU) - Testing			$70.14	$67.75			46	$70.14	$1.84
A.13.999	2-Wire Copper Loop - short (Nonrecurring w/o LMU) - Disconnect			$101.05	$13.41					
A.13.1098	2-Wire Copper Loop - long (Nonrecurring w/ LMU) - Testing			$70.14	$67.75			46	$70.14	$1.84
A.13.1099	2-Wire Copper Loop - long (Nonrecurring w/ LMU) - Disconnect			$122.85	$20.81					
A.13.1198	2-Wire Copper Loop - long (Nonrecurring w/o LMU) - Testing			$70.14	$67.75			46	$70.14	$1.84
A.13.1199	2-Wire Copper Loop - long (Nonrecurring w/o LMU) - Disconnect			$105.23	$15.36					
A.14	4-WIRE COPPER LOOP									
A.14.1	4-Wire Copper Loop - short	$18.12								
A.14.7	4-Wire Copper Loop - long	$61.59								
A.14.8	4-Wire Copper Loop - short (Nonrecurring w/ LMU)			$330.70	$208.32					
A.14.9	4-Wire Copper Loop - short (Nonrecurring w/o LMU)			$231.62	$151.75					
A.14.10	4-Wire Copper Loop - long (Nonrecurring w/ LMU)			$330.70	$208.32					
A.14.11	4-Wire Copper Loop - long (Nonrecurring w/o LMU)			$231.62	$151.75					
A.14.898	4-Wire Copper Loop - short (Nonrecurring w/ LMU) - Testing			$103.81	$101.42			52	$103.81	$2.46
A.14.899	4-Wire Copper Loop - short (Nonrecurring w/ LMU) - Disconnect			$128.99	$24.85					
A.14.998	4-Wire Copper Loop - short (Nonrecurring w/o LMU) - Testing			$103.81	$101.42			52	$103.81	$2.46

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9/28/2000

	Cost Element	Recurring	Non Recurring	Non-Recurring First	Non-Recurring Additional	Non-Recurring Initial	Non-Recurring Subsequent	Testing spread over service life: Service Life	Testing spread over service life: Cost	Testing spread over service life: Monthly Cost
A.14.999	4-Wire Copper Loop - short (Nonrecurring w/o LMU) - Disconnect			$111.01	$19.29					
A.14.1098	4-Wire Copper Loop - long (Nonrecurring w/ LMU) - Testing			$103.81	$101.42			52	$103.81	$2.46
A.14.1099	4-Wire Copper Loop - long (Nonrecurring w/ LMU) - Disconnect			$128.99	$24.85					
A.14.1198	4-Wire Copper Loop - long (Nonrecurring w/o LMU) - Testing			$103.81	$101.42			52	$103.81	$2.46
A.14.1199	4-Wire Copper Loop - long (Nonrecurring w/o LMU) - Disconnect			$111.01	$19.29					
A.15	UNBUNDLED NETW ORK TERMINATING WIRE (NTW)									
A.15.1	Unbundled Network Terminating Wire (NTW) per Pair	$0.3878	$59.77							
A.15.199	Unbundled Network Terminating Wire (NTW) per Pair - Disconnect		$0.5814							
A.16	HIGH CAPACITY UNBUNDLED LOCAL LOOP									
A.16.1	High Capacity Unbundled Local Loop - DS3 - Facility Termination	$368.15		$595.37	$304.50					
A.16.2	High Capacity Unbundled Local Loop - DS3 - Per Mile	$9.19								
A.16.3	High Capacity Unbundled Local Loop -DS3 -Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84					
A.16.4	High Capacity Unbundled Local Loop - OC3 - Facility Termination	$615.60		$787.84	$262.31					
A.16.5	High Capacity Unbundled Local Loop - OC3 - Per Mile	$6.97								
A.16.6	High Capacity Unbundled Local Loopl - OC3 - Incremental Cost Manual Svc Order vs Electronic			$36.84	$36.84					
A.16.7	High Capacity Unbundled Local Loop - OC12 - Facility Termination	$2,243		$992.37	$262.31					
A.16.8	High Capacity Unbundled Local Loop - OC12 - Per Mile	$8.58								
A.16.9	High Capacity Unbundled Local Loop -OC12 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84					
A.16.10	High Capacity Unbundled Local Loop - OC48 - Facility Termination	$1,487		$1,190	$255.01					
A.16.11	High Capacity Unbundled Local Loop - OC48 - Per Mile	$28.14								
A.16.12	High Capacity Unbundled Local Loop - OC48 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84					
A.16.13	High Capacity Unbundled Local Loop - OC48 - Interface OC12 on OC48	$675.56		$177.59	$163.78					
A.16.14	High Capacity Unbundled Local Loop - OC48 - Interface-Incremental Cost-Manual Svc Order vs Electronic			$36.84	$36.84					
A.16.15	High Capacity Unbundled Local Loop - STS-1 - Facility Termination	$383.26		$595.37	$304.50					
A.16.16	High Capacity Unbundled Local Loop - STS-1 - Per Mile	$9.19								
A.16.17	High Capacity Unbundled Local Loop - STS-1 - Incremental Cost - Manual Svc. Order vs. Electronic			$36.84	$36.84					
A.16.198	High Capacity Unbundled Local Loop - DS3 - Facility Termination - Testing			$256.58	$193.73			52	$256.58	$6.09
A.16.199	High Capacity Unbundled Local Loop - DS3 - Facility Termination - Disconnect			$234.83	$170.16					
A.16.399	High Capacity Unbundled Local Loop -DS3 -Incremental Cost - Manual Svc Order vs. Electronic - Disconnect			$19.01	$19.01					
A.16.498	High Capacity Unbundled Local Loop - OC3 - Facility Termination - testing			$138.17	$138.17			52	$138.17	$3.28
A.16.499	High Capacity Unbundled Local Loop - OC3 - Facility Termination - Disconnect			$109.04	$105.91					
A.16.699	High Capacity Unbundled Local Loopl - OC3 - Inc. Cost Man. Svc Order vs Electronic - Disconnect			$19.01	$19.01					
A.16.798	High Capacity Unbundled Local Loop - OC12 - Facility Termination - Testing			$138.17	$138.17			52	$138.17	$3.28
A.16.799	High Capacity Unbundled Local Loop - OC12 - Facility Termination - Disconnect			$109.04	$105.91					
A.16.999	High Capacity Unbundled Local Loop -OC12 - Inc. Cost - Man. Svc Order vs. Electronic - Disconnect			$19.01	$19.01					
A.16.1098	High Capacity Unbundled Local Loop - OC48 - Facility Termination - Testing			$130.87	$130.87			52	$130.87	$3.11
A.16.1099	High Capacity Unbundled Local Loop - OC48 - Facility Termination - Disconnect			$128.05	$124.92					
A.16.1398	High Capacity Unbundled Local Loop - OC48 - Interface OC12 on OC48 - Testing			$130.87	$130.87			52	$130.87	$3.11
A.16.1399	High Capacity Unbundled Local Loop - OC48 - Interface OC12 on OC48 - Disconnect			$109.04	$105.91					
A.16.1499	High Capacity Unbundled Local Loop - OC48 - Interface-Inc. Cost-Man. Svc Order vs Electronic - Disconnect			$19.01	$19.01					
A.16.1598	High Capacity Unbundled Local Loop - STS-1 - Facility Termination - Testing			$256.58	$193.73			52	$256.58	$6.09
A.16.1599	High Capacity Unbundled Local Loop - STS-1 - Facility Termination - Disconnect			$215.82	$151.15					
A.16.1799	High Capacity Unbundled Local Loop - STS-1 - Inc. Cost - Man. Svc. Order vs. Electronic - Disconnect			$19.01	$19.01					
A.17	LOOP CONDITIONING									
A.17.1	Unbundled Loop Modification - Load Coil / Equipment Remov al - short		$61.45							
A.17.2	Unbundled Loop Modification - Load Coil / Equipment Remov al - long - First and Additional			$667.25	$22.41					
A.17.3	Unbundled Loop Modification - Bridged Tap Remov al		$61.49							
A.17.4	Unbundled Loop Modification - Additive			$98.87	$98.87					
A.17.5	Unbundled Sub-Loop Modification - 2W/4W Copper Distribution Load Coil/Equipment Remov al First/Add'l			$335.36	$7.82					
A.17.6	Unbundled Sub-Loop Modification - 2W/4W Copper Distribution Bridged Tap Remov al First/Add'l			$528.48	$9.74					

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	Cost Element	Recurring	Non Recurring	Non-Recurring First	Non-Recurring Additional	Non-Recurring Initial	Non-Recurring Subsequent	Testing Service Life	Testing spread over service life Cost	Testing spread over service life Monthly Cost
A.19	LOOP TESTING BEYOND VOICE GRADE									
A.19.1	Loop Testing Beyond VG - Basic per 1/2 hour			$115.94	$55.45					
A.19.2	Loop Testing Beyond VG - Overtime per 1/2 hour			$151.69	$72.75					
A.19.3	Loop Testing Beyond VG - Premium per 1/2 hour			$187.43	$90.06					
D.0	UNBUNDLED TRANSPORT AND LOCAL I NTEROFFICE TRANSPORT									
D.5	LOCAL CHANNEL - DEDI CATED									
D.5.7	Local Channel - Dedicated - DS3 - Per Mile	$7.15								
D.5.8	Local Channel - Dedicated - DS3 - Facility Termination	$605.21		$595.37	$304.50					
D.5.9	Local Channel - Dedicated - DS3 -Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84					
D.5.10	Local Channel - Dedicated - OC3 - Per Mile	$6.00								
D.5.11	Local Channel - Dedicated - OC3 - Facility Termination	$1,317		$787.84	$262.31					
D.5.12	Local Channel - Dedicated - OC3 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84					
D.5.13	Local Channel - Dedicated - OC12 - Per Mile	$8.58								
D.5.14	Local Channel - Dedicated - OC12 - Facility Termination	$7,846		$992.37	$262.31					
D.5.15	Local Channel - Dedicated - OC12 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84					
D.5.16	Local Channel - Dedicated - OC48 - Per Mile	$28.14								
D.5.17	Local Channel - Dedicated - OC48 - Facility Termination	$1,905		$985.07	$255.01					
D.5.18	Local Channel - Dedicated - OC48 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84					
D.5.19	Local Channel - Dedicated - OC48 - Interface OC12 on OC48	$641.71		$382.12	$163.78					
D.5.20	Local Channel - Dedicated - OC48 - Interface - Inc. Cost - Man. Svc Order vs. Electronic			$36.84	$36.84					
D.5.21	Local Channel - Dedicated - STS-1 - Facility Termination	$593.50		$588.07	$297.20					
D.5.22	Local Channel - Dedicated - STS-1 - Incremental Cost - Manual Svc. Order vs. Electronic			$36.84	$36.84					
D.5.23	Local Channel - Dedicated - STS-1 -Per Mile	$7.15								
D.5.898	Local Channel - Dedicated - DS3 - Facility Termination - Testing			$256.58	$193.73			52	$256.58	$6.09
D.5.899	Local Channel - Dedicated - DS3 - Facility Termination - Disconnect			$215.82	$151.15					
D.5.999	Local Channel - Dedicated - DS3 -Inc. Cost - Man. Svc Order vs. Electronic - Disconnect			$19.01	$19.01					
D.5.1198	Local Channel - Dedicated - OC3 - Facility Termination - Testing			$138.17	$138.17			52	$138.17	$3.28
D.5.1199	Local Channel - Dedicated - OC3 - Facility Termination - Disconnect			$109.04	$105.91					
D.5.1299	Local Channel - Dedicated - OC3 - Inc. Cost - Man. Svc Order vs. Electronic - Disconnect			$19.01	$19.01					
D.5.1498	Local Channel - Dedicated - OC12 - Facility Termination - Testing			$138.17	$138.17			52	$138.17	$3.28
D.5.1499	Local Channel - Dedicated - OC12 - Facility Termination - Disconnect			$109.04	$105.91					
D.5.1599	Local Channel - Dedicated - OC12 - Inc. Cost - Man. Svc Order vs. Electronic - Disconnect			$19.01	$19.01					
D.5.1798	Local Channel - Dedicated - OC48 - Facility Termination - Testing			$130.87	$130.87			52	$130.87	$3.11
D.5.1799	Local Channel - Dedicated - OC48 - Facility Termination - Disconnect			$109.04	$105.91					
D.5.1899	Local Channel - Dedicated - OC48 -Inc. Cost - Man. Svc Order vs. Electronic - Disconnect			$19.01	$19.01					
D.5.1998	Local Channel - Dedicated - OC48 - Interface OC12 on OC48 - Testing			$130.87	$130.87			52	$130.87	$3.11
D.5.1999	Local Channel - Dedicated - OC48 - Interface OC12 on OC48 - Disconnect			$109.04	$105.91					
D.5.2099	Local Channel - Dedicated - OC48 - Interface -Inc. Cost - Man. Svc Order vs. Elect.-Disconnect			$19.01	$19.01					
D.5.2198	Local Channel - Dedicated - STS-1 - Facility Termination - Testing			$256.58	$193.73			52	$256.58	$6.09
D.5.2199	Local Channel - Dedicated - STS-1 - Facility Termination - Disconnect			$215.82	$151.15					
D.5.2299	Local Channel - Dedicated - STS-1 - Inc. Cost - Man. Svc Order vs. Electronic - Disconnect			$19.01	$19.01					
D.6	INTEROFFICE TRANSPORT - DEDI CATED - DS3									
D.6.1	Interoffice Transport - Dedicated - DS3 - Per Mile	$2.34								
D.6.2	Interoffice Transport - Dedicated - DS3 - Facility Termination	$845.88		$395.29	$176.56					
D.6.3	Interoffice Transport - DS3 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84					
D.6.298	Interoffice Transport - Dedicated - DS3 - Facility Termination - Testing			$130.87	$130.87			52	$130.87	$3.11
D.6.299	Interoffice Transport - Dedicated - DS3 - Facility Termination - Disconnect			$109.04	$105.91					
D.6.399	Interoffice Transport - DS3 - Inc. Cost - Man. Svc Order vs. Elect. - Disconnect			$19.01	$19.01					

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	Cost Element	Recurring	Non Recurring	Non-Recurring First	Non-Recurring Additional	Non-Recurring Initial	Non-Recurring Subsequent	Testing spread over service life: Service Life	Testing spread over service life: Cost	Testing spread over service life: Monthly Cost
D.7	INTEROFFICE TRANSPORT - DEDI CATED - OC3									
D.7.1	Interoffice Transport - Dedicated - OC3 - Per Mile	$4.43								
D.7.2	Interoffice Transport - Dedicated - OC3 - Facility Termination	$2,358		$689.30	$163.78					
D.7.3	Interoffice Transport - Dedicated - OC3 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84					
D.7.298	Interoffice Transport - Dedicated - OC3 - Facility Termination - Testing			$130.87	$130.87			52	$130.87	$3.11
D.7.299	Interoffice Transport - Dedicated - OC3 - Facility Termination - Disconnect			$109.04	$105.91					
D.7.399	Interoffice Transport - Dedicated - OC3 - Inc. Cost - Man. Svc Order vs. Elect. - Disconnect			$19.01	$19.01					
D.8	INTEROFFICE TRANSPORT - DEDI CATED - OC12									
D.8.1	Interoffice Transport - Dedicated - OC12 - Per Mile	$14.41								
D.8.2	Interoffice Transport - Dedicated - OC12 - Facility Termination	$9,121		$893.84	$163.78					
D.8.3	Interoffice Transport - Dedicated - OC12 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84					
D.8.298	Interoffice Transport - Dedicated - OC12 - Facility Termination - Testing			$130.87	$130.87			52	$130.87	$3.11
D.8.299	Interoffice Transport - Dedicated - OC12 - Facility Termination - Disconnect			$109.04	$105.91					
D.8.399	Interoffice Transport - Dedicated - OC12 - Inc. Cost - Man. Svc Order vs. Elect. - Disconnect			$19.01	$19.01					
D.9	INTEROFFICE TRANSPORT - DEDI CATED - OC48									
D.9.1	Interoffice Transport - Dedicated - OC48 - Per Mile	$26.52								
D.9.2	Interoffice Transport - Dedicated - OC48 - Facility Termination	$13,226		$893.84	$163.78					
D.9.3	Interoffice Transport - Dedicated - OC48 - Incremental Cost - Manual Svc. Order vs. Electronic			$36.84	$36.84					
D.9.4	Interoffice Transport - Dedicated - OC48 - Interface OC12 on OC48	$1,309		$382.12	$163.78					
D.9.5	Interoffice Transport - OC48 Interface - Incremental Cost-Manual Svc Order vs Elec			$36.84	$36.84					
D.9.298	Interoffice Transport - Dedicated - OC48 - Facility Termination - Testing			$130.87	$130.87			52	$130.87	$3.11
D.9.299	Interoffice Transport - Dedicated - OC48 - Facility Termination - Disconnect			$109.04	$105.91					
D.9.399	Interoffice Transport - Dedicated - OC48 - Inc. Cost - Man. Svc. Order vs. Elect. - Disconnect			$19.01	$19.01					
D.9.498	Interoffice Transport - Dedicated - OC48 - Interface OC12 on OC48 - Testing			$130.87	$130.87			52	$130.87	$3.11
D.9.499	Interoffice Transport - Dedicated - OC48 - Interface OC12 on OC48 - Disconnect			$109.04	$105.91					
D.9.599	Interoffice Transport - OC48 Interface - Inc. Cost-Man. Svc Order vs Elec - Disconnect			$19.01	$19.01					
D.10	INTEROFFICE TRANSPORT - DEDI CATED - STS-1									
D.10.1	Interoffice Transport - Dedicated - STS-1 - Per Mile	$2.34								
D.10.2	Interoffice Transport - Dedicated - STS-1 - Facility Termination	$846.19		$395.29	$176.56					
D.10.3	Interoffice Transport - STS-1 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84					
D.10.298	Interoffice Transport - Dedicated - STS-1 - Facility Termination - Testing			$130.87	$130.87			52	$130.87	$3.11
D.10.299	Interoffice Transport - Dedicated - STS-1 - Facility Termination - Disconnect			$109.04	$105.91					
D.10.399	Interoffice Transport - STS-1 - Incremental Cost - Manual Svc Order vs. Electronic			$19.01	$19.01					
D.12	INTEROFFICE TRANSPORT - DEDI CATED - 4-WIRE VOICE GRADE									
D.12.1	Interoffice Transport - Dedicated - 4-Wire Voice Grade - Per Mile	$0.0054								
D.12.2	Interoffice Transport - Dedicated - 4-Wire Voice Grade - Facility Termination	$23.36		$37.87	$26.02					
D.12.3	Interoffice Transpor t- Dedicated - 4-Wire VG-Incremental Cost-Manual Svc Order vs Elec			$15.08	$15.08					
D.12.298	Interoffice Transport - Dedicated - 4-Wire Voice Grade - Facility Termination - Testing			$30.89	$24.57			52	$30.89	$0.73
D.12.299	Interoffice Transport - Dedicated - 4-Wire Voice Grade - Facility Termination - Disconnect			$30.78	$13.07					
D.12.399	Interoffice Transpor t- Dedicated - 4-Wire VG-Inc. Cost-Man. Svc Order vs Elec - Disconnect			$8.66	$8.66					
E.0	SIGNALING NETWORK, DATA BASES, & SERVI CE MANAGEMENT SY STEMS									
E.3	CCS7 SIGNALING TRANSPORT									
E.3.7	CCS7 Signaling Connection, Per link (A link) (Same as E.3.1)	ee note 1								
E.3.8	CCS7 Signaling Connection, Per link (B link) (also known as D link)(Same as E.3.1)	ee note 1								
E.3.9	CCS7 Signaling Usage, Per ISUP Message(Same as E.3.3)	ee note 1								
E.3.10	CCS7 Signaling Usage Surrogate, per link per LATA per mo (9)(Same as E.3.5)	ee note 1								
E.3.11	CCS7 Signaling Point Code, Establishment or Change, per STP affected		$121.77							

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	Cost Element	Recurring	Non Recurring	Non-Recurring First	Non-Recurring Additional	Non-Recurring Initial	Non-Recurring Subsequent	Testing Service Life	Testing spread over service life Cost	Testing spread over service life Monthly Cost
E.4	BELLSOUTH CALLING NAME (CNAM) DATABASE (DB) SERVICE									
E.4.1	CNAM for DB Owners - Service Establishment, Manual					$43.27				
E.4.2	CNAM for Non DB Owners - Service Establishment, Manual					$43.27				
E.4.3	CNAM for DB Owners Service Provisioning with Point Code Establishment					$1,868	$1,382			
E.4.4	CNAM for Non DB Owners Service Provisioning with Point Code Establishment					$645.50	$462.23			
E.4.5	CNAM for DB and Non DB Owners, Per Query	0.0010541								
E.4.199	CNAM for DB Owners - Service Establishment, Manual - Disconnect					$39.79				
E.4.299	CNAM for Non DB Owners - Service Establishment, Manual - Disconnect					$39.79				
E.4.399	CNAM for DB Owners Service Provisioning with Point Code Establishment - Disconnect					$507.09	$372.86			
E.4.499	CNAM for Non DB Owners Service Provisioning with Point Code Establishment - Disconnect					$519.01	$372.86			
E.5	BELLSOUTH ACCESS TO 911 SERVICE									
E.5.1	BellSouth E911 Access - Local Channel - Dedicated - 2-wire Voice Grade (Same as D.5.1)	ee note 1								
E.5.2	BellSouth E911 Access - Interoffice Transport - Dedicated - 2-wire Voice Grade Per Mile (Same as D.2.1)	ee note 1								
E.5.3	BellSouth E911 Access - Interoffice Transport - Dedicated - 2-wire VGPer Facility Term (Same as D.2.2)	ee note 1								
E.5.4	BellSouth E911 Access - Local Channel - Dedicated - DS1 (Same as D.5.3)	ee note 1								
E.5.5	BellSouth E911 Access - Interoffice Transport - Dedicated - DS1 Per Mile (Same as D.4.1)	ee note 1								
E.5.6	BellSouth E911 Access - Interoffice Transport - Dedicated - DS1 Per Facility Termination (Same as D.4.2)	ee note 1								
E.6	LNP QUERY SERVICE									
E.6.1	LNP Cost Per query	0.0009277								
E.6.2	LNP Service Establishment Manual					$23.60				
E.6.3	LNP Service Provisioning with Point Code Establishment					$1,119	$571.71			
E.6.299	LNP Service Establishment Manual - Disconnect					$21.71				
E.6.399	LNP Service Provisioning with Point Code Establishment - Disconnect					$507.09	$372.86			
G.0	SELECTIVE ROUTING									
G.11	SELECTIVE CARRIER ROUTING (AIN SOLUTION)									
G.11.1	Service Establishment per CLEC		$190,638							
G.11.2	Service Establishment per End Office		$317.55							
G.11.4	Query Cost	0.0206047								
G.11.199	Service Establishment per CLEC - Disconnect		$16,200							
G.11.299	Service Establishment per End Office - Disconnect		$3.19							
H.0	COLLOCATION									
H.3	ASSEMBLY POINT									
H.3.1	Assembly Point: 2-Wire Cross Connects	$0.9659		$11.03	$10.09					
H.3.2	Assembly Point: 4-Wire Cross Connects	$1.93		$11.21	$10.22					
H.3.3	Assembly Point: DS-1 Cross Connects	$12.45		$28.30	$16.79					
H.3.4	Assembly Point 2-Wire Cross Connect Incremental Cost Manual vs. Electronic Service Order			$1.87	$1.87					
H.3.5	Assembly Point 4-Wire Cross Connect Incremental Cost Manual vs. Electronic Service Order			$1.87	$1.87					
H.3.6	Assembly Point DS1 Cross Connect Incremental Cost Manual vs. Electronic Service Order			$1.87	$1.87					
H.3.198	Assembly Point: 2-Wire Cross Connects - Testing			$12.37	$12.37			46	$12.37	$0.32
H.3.199	Assembly Point: 2-Wire Cross Connects - Disconnect			$11.29	$10.19					
H.3.298	Assembly Point: 4-Wire Cross Connects - Testing			$12.37	$12.37			52	$12.37	$0.29
H.3.299	Assembly Point: 4-Wire Cross Connects - Disconnect			$11.58	$10.40					
H.3.398	Assembly Point: DS-1 Cross Connects - Testing			$13.46	$13.46			52	$13.46	$0.32
H.3.399	Assembly Point: DS-1 Cross Connects - Disconnect			$11.61	$10.50					
H.3.499	Assembly Point 2-Wire Cross Connect Inc. Cost Man. vs. Electronic Service Order - Disconnect			$1.13	$1.13					
H.3.599	Assembly Point 4-Wire Cross Connect Inc. Cost Man. vs. Electronic Service Order - Disconnect			$1.16	$1.16					

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			Non	Non-Recurring				Testing spread over service life		
	Cost Element	Recurring	Recurring	First	Additional	Initial	Subsequent	Service Life	Cost	Monthly Cost
H.3.699	Assembly Point DS1 Cross Connect Inc. Cost Man. vs. Electronic Service Order - Disconnect			$1.16	$1.16					
H.6	Physical Collocation In The Remote Terminal (RT)									
H.6.1	Physical Collocation In The Remote Terminal - Application Fee		$580.20							
H.6.2	Physical Collocation In The Remote Terminal - Per Rack/Bay	$220.41								
H.6.3	Physical Collocation In The Remote Terminal - Security Access Key		$24.69							
H.6.4	Physical Collocation in the RT - Space Availability Report per premises requested		$218.49							
H.6.5	Physical Collocation in the RT- Remote Site CLLI Code Request, per CLLI Code Requested		$70.81							
H.6.199	Physical Collocation In The Remote Terminal - Application Fee - Disconnect		$312.76							
J.0	OTHER									
J.1	DARK FIBER									
J.1.2	Dark Fiber, Per Four Fiber Strands, Per Route Mile or Fraction Thereof - Local Channel/Loop	$55.14		$1,121	$153.19					
J.1.3	Dark Fiber, Per Four Fiber Strands, Per Route Mile or Fraction Thereof - Interoffice	$25.05		$1,121	$153.19					
J.1.298	Dark Fiber, Per Four Fiber Strands, Per Rt Mile or Fraction Thereof - LC/Loop - Testing			$155.56	$111.97			52	$155.56	$3.69
J.1.299	Dark Fiber, Per Four Fiber Strands, Per Rt Mile or Fraction Thereof - LC/Loop - Disconnect			$580.26	$357.17					
J.1.398	Dark Fiber, Per Four Fiber Strands, Per Route Mile or Fraction Thereof - Interoffice - Testing			$155.56	$111.97			52	$155.56	$3.69
J.1.399	Dark Fiber, Per Four Fiber Strands, Per Rt Mile or Fraction Thereof - Interoffice - Disconnect			$580.26	$357.17					
J.3	LOOP MAKE-UP									
J.3.1	Mechanized Loop Make-up	0.7644187								
J.3.3	Manual Loop Make-up w/o Facility Reservation Number		$99.61							
J.3.4	Manual Loop Make-up w/ Facility Reservation Number		$105.06							
J.4	LINE SHARING SPLITTER IN THE CENTRAL OFFICE									
J.4.1	Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office	$183.79		$343.31	$15.63					
J.4.2	Line Sharing Splitter - per Splitter System 24-Line Capacity in the Central Office	$45.95		$343.31	$15.63					
J.4.3	Line Sharing Splitter - per Line Activation in the Central Office	$8.45		$39.39	$15.70					
J.4.4	Line Sharing Splitter - per Subsequent Activity per Line Arrangement			$34.56	$12.62					
J.4.199	Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office - Disconnect			$332.83	$18.26					
J.4.299	Line Sharing Splitter - per Splitter System 24-Line Capacity in the Central Office - Disconnect			$332.83	$18.26					
J.4.398	Line Sharing Splitter - per Line Activation in the Central Office - Testing			$9.57	$5.69			46	$9.57	$0.25
J.4.399	Line Sharing Splitter - per Line Activation in the Central Office - Disconnect			$35.06	$10.79					
J.4.498	Line Sharing Splitter - per Subsequent Activity per Line Arrangement - Testing			$10.40	$4.22			46	$10.40	$0.27
J.4.499	Line Sharing Splitter - per Subsequent Activity per Line Arrangement - Disconnect			$16.43	$1.64					
J.5	ACCESS TO THE DCS									
J.5.1	Customer Reconfiguration Establishment			$2.78						
J.5.2	DS1 DCS Termination with DS0 Switching	$23.18		$41.14	$34.25					
J.5.3	DS1 DCS Termination with DS1 Switching	$13.29		$27.79	$20.90					
J.5.4	DS3 DCS Termination with DS1 Switching	$150.71		$41.14	$34.25					
J.5.199	Customer Reconfiguration Establishment - Disconnect			$3.32						
J.5.298	DS1 DCS Termination with DS0 Switching - Testing			$7.03	$2.81			52	$7.03	$0.17
J.5.299	DS1 DCS Termination with DS0 Switching- Disconnect			$29.94	$24.08					
J.5.398	DS1 DCS Termination with DS1 Switching - Testing			$7.03	$2.81			52	$7.03	$0.17
J.5.399	DS1 DCS Termination with DS1 Switching- Disconnect			$21.99	$16.12					
J.5.498	DS3 DCS Termination with DS1 Switching - Testing			$7.03	$2.81			52	$7.03	$0.17
J.5.499	DS3 DCS Termination with DS1 Switching- Disconnect			$29.94	$24.08					
L.0	ACCESS DAILY USAGE FILE (ADUF)									
L.1	ACCESS DAILY USAGE FILE (ADUF)									
L.1.1	ADUF, Message Processing, per message	0.0158054								

BellSouth TELRIC Calculator
Unbundled Network Cost Elements Summary Report
Tennessee
Combined Recurring and Nonrecurring

9/28/2000			Non	Non-Recurring				Testing	spread over service life	
	Cost Element	Recurring	Recurring	First	Additional	Initial	Subsequent	Service Life	Cost	Monthly Cost
L.1.3	ADUF, Data Transmission (CONNECT:DI RECT), per message	0.0001387								
M.0	DAILY USAGE FILES									
M.1	ENHANCED OPTI ONAL DAILY USAGE FILE									
M.1.1	Enhanced Optional Daily usage File: Message Processing, Per Message	0.2921174								

Note 1: These elements were not processed through the TELRI C Calculator. Refer to existing rates.

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TOTAL ELEMENT LONG RUN INCREMENTAL COST (TELRIC)

The studies submitted with this filing adhere to the Total Element Long Run Incremental Cost (TELRIC) methodology as envisioned by the Federal Communications Commission (FCC). The basic guidelines that form the foundation of a TELRIC study are:

1) The studies should reflect a long-run perspective. Long run implies a period long enough that all costs are variable. In other words, this principle assumes all costs are avoidable in the long run.

2) Cost causation is a key concept in incremental costing. Thus, only those costs that are directly caused by the particular item being studied are considered. This principle mandates the identification of costs directly attributable to providing a "service" (network capability).

3) The increment being studied should be the entire quantity of service. This point recognizes that costs normally thought of as shared in a service-specific study, would be included in a study of a network capability. For example, in a service study, the planning engineer's costs associated with loops would be shared across many product lines, e.g. ESSX, coin, business. In an unbundled network element study, this cost would be directly attributable to the loop element.

4) Any function necessary to produce a service must have an associated cost. In essence, this guideline states that no sunk costs should be included.

5) Common overheads are not part of a long run incremental cost study. However, the FCC's TELRIC methodology allows for the recovery of "a reasonable allocation of forward-looking common costs". Thus, BellSouth has considered common costs to produce the TELRIC economic cost.

6) The technology used should reflect the least cost, most efficient technology.

7) Costs should be forward-looking.

There are two generic types of costs that have been studied: recurring and nonrecurring.

RECURRING COSTS

The monthly costs resulting from capital investments deployed to provision network elements are called recurring costs. Recurring costs include capital and

operating costs. Capital costs include depreciation, cost of money and income tax. Operating costs include the expenses for maintenance, ad valorem and other taxes and represent ongoing costs associated with upkeep of the initial capital investment. Gross receipts tax (which includes municipal license taxes and PSC fees) is added.

The first step in developing recurring TELRIC studies is to determine the forward-looking network architecture that, when deployed, represents the most efficient design to provision the network element. The material prices for the equipment necessary to implement the forward-looking design are gathered. Next, account specific Telephone Plant Indexes (TPIs) are applied, when necessary, to trend material prices to the base study period. Telecommunications equipment and plant placements are typically "lumpy". Thus, utilization (or fill) factors are applied to the material prices to reflect BellSouth's forward-looking actual utilization of the plant. Also, when multiple vendors are used, it is necessary to determine the average material price for a typical element based on the probability of occurrence. Inflation Factors, by plant account code, are then applied to the material prices to trend the base-year material price to levelized amounts that are valid for a three-year planning period. In order to convert the material prices to installed investments, account specific inplant loadings are applied to the material prices. The inplant loadings include engineering and installation labor (both BellSouth and vendor) exempt material and sales taxes.

Supporting equipment and power loadings are added, as appropriate to specific investment accounts. Next, supporting structure investments for land, building, poles and conduit are developed. These supporting structure investments are identified by their relationship to the respective item of plant being supported. For example, applying a pole-loading factor against the aerial cable investment develops the pole investment.

2000-2002 level Annual Cost Factors are used to calculate the direct cost of capital, plant specific expenses and taxes. Account specific factors for each Uniform System of Accounts – Field Reporting Code (USOA-FRC) are applied to the investment by account code, yielding an annual cost per account code. Account specific shared cost factors are applied to produce forward-looking TELRIC costs. Then the common cost allocation factor and the gross receipts tax factor are applied. The result is the monthly economic cost.

The generic steps for developing recurring cost can be summarized as shown below. The unique technical characteristics and physical makeup of each service cost element must be taken into consideration.

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Step 1: Determine the forward looking network designs (architectures) which will be used in deployment of the network element.

Step 2: Determine current material prices for the items of plant used in each design. Material prices are obtained from BellSouth contracts with various vendors.

Step 3: Apply material Telephone Plant Indexes (TPIs) as appropriate to determine the base year material prices. Material TPIs estimate the changes in material prices over time.

Step 4: Adjust the material prices for utilization to account for spare capacity using a reasonable projection of actual total usage.

Step 5: Weight the material prices, as appropriate, to determine the average material price for a typical element by USOA-FRC, i.e., plant account.

Step 6: Apply material inflation factors, referred to as levelization factors, to the material prices to convert the utilized base year material prices to material prices representative of a three year planning period.

Step 7: Apply inplant loadings to the levelized material prices to convert the material prices to an installed investment, which includes the cost of material, engineering labor and installation labor.

Step 8: Apply support loadings to the investments to determine investments for support equipment and power, land, buildings, poles and conduit as appropriate.

Step 9: Convert the investments by FRC to annual costs by applying account specific TELRIC annual cost factors to the various investments. The annual cost factors calculate the capital costs (depreciation, cost of money, and income tax) and operating expenses (plant specific expense, ad valorem taxes, and other taxes). Add the annual costs for the various FRCs. Next divide by 12 to determine the direct monthly cost.

Step 10: Apply the shared cost (account specific) factors. Then apply the gross receipts tax factor. The result is TELRIC.

Step 11: Apply the common cost allocation factor to determine economic costs.

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NONRECURRING COSTS

Nonrecurring costs are one-time expenses associated with provisioning, installing and disconnecting a network capability. These costs include four major categories of activity: service order processing, engineering, connect and test, and technician travel time. Examples of the work activities in each of these categories are:

Service Order Processing - Prepare and issue service orders
Engineering - Assign cable and pair; design circuit; order plug-in; perform translations in the switch
Connect and Test - Install circuit; test circuit; disconnect
Technician Travel Time - Travel to the customer's premises

The first step in developing nonrecurring costs is to determine the cost elements associated with the network capability. These cost elements are then described by the individual activities required to provision the cost element. Individuals familiar with the network capability identify which activities are applicable. Subject matter experts identify the amount of time required to perform the task and also determine the probability that the activity will occur. Provisioning costs are developed by multiplying the work time for each work function by the labor rate for the work group performing the function.

Utilizing work functions, work times, and labor rates, disconnect costs are calculated in the same manner as the installation costs.

The generic steps for developing nonrecurring costs are summarized in the following steps:

Step 1: Determine the cost elements to be developed.
Step 2: Define the work functions.
Step 3: Establish work flows.
Step 4: Determine work times for each work function.
Step 5: Develop labor costs for each work function (labor rate x work time).
Step 6: Accumulate work function costs to determine the total nonrecurring costs for each cost element. Add gross receipts tax. The result is TELRIC.
Step 7: Apply the Common Cost Allocation factor to determine the economic costs.

The TELRIC Calculator©, a model developed by BellSouth, produces long run incremental cost studies. The model was designed to accept variable inputs that are applied according to a user-controlled matrix. The TELRIC Calculator© was used to produce the TELRIC studies included in this filing. Additionally, this is the same model presented to the TRA in Docket No. 97-01262.

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DESCRIPTION OF MODELS AND PRICE CALCULATORS

1. TELRIC Calculator©

The TELRIC Calculator© consists of three Microsoft Excel templates. The templates consist of twenty-one sheets each, eight for receiving input data and thirteen for calculations. All templates perform calculations in exactly the same manner and differ only in the number of decimal places displayed. It should be noted that no rounding is done in any of the sheets.

The TELRIC Calculator© User Interface takes information from the default data sources or from the user-modified sources and inputs them into the appropriate template depending on the cost element selected. Investments are entered by Field Reporting Code (FRC), Sub Field Reporting Code (Sub-FRC), and cost element number into the sheet called "Investments". The sub-FRC is used by the TELRIC Calculator© to determine the appropriate application of factors and loadings, which are applied based on a matrix contained in "Factor Matrix". Factors and loadings are placed by FRC on the sheet labeled "Factors". Recurring and nonrecurring work times are placed by function and Job Function Code (JFC) or Payband into the sheets labeled "Recurring Labor" and "Nonrecurring Labor", respectively. Other recurring and nonrecurring expenses are entered by description into the sheet called "Additives". Lastly, direct labor rates are placed by JFC or Payband into the sheet called "Labor Rates".

The inputs then flow automatically through the "calculator" portions of the template. These sheets are labeled TELRIC Recurring Summary, INVEST-VS, INVEST-VI, LBPC-VS, LBPC-VI, FRCTELRIC-VS, FRCTELRIC-VI, RECEXP, TELRIC NRC Summary A, NR-NR, TELRIC NRC Summary B, NR-1A, and NR-IS. The function and detail of these sheets are outlined in the following narrative.

TELRIC Calculator© Recurring Worksheets

Investment Development (Excluding Land, Building, Pole, & Conduit)
Investment development begins in the worksheets INVEST-VS and INVEST-VI, where volume sensitive and volume insensitive investments by FRC and sub-FRC flow from the input sheets. The inflation factors, inplant loadings and supporting equipment and/or power loadings are applied, if applicable. As stated previously, the application of these factors/loadings is driven by a matrix contained within the template. If the factor/loading is not applicable to the FRC and sub-FRC, the investment is multiplied by the default value of one. All calculations are detailed above each cell. These investments flow to the Land,

Building, Pole, & Conduit Development sheet and to the Recurring Cost Development sheet.

Land, Building, Pole, & Conduit Investment Development
Investments from the Investment Development sheets flow into the sheets LBPC-VS and LBPC-VI. These worksheets apply land, building, pole, and conduit loadings to the investments. Land, building, pole, and conduit investments carried from the Investment Development sheets are multiplied by a factor of one. If one or all of these factors do not apply to an FRC, excluding land, building, pole, and conduit FRCs, the factor defaults to zero. The results are then summed and totaled at the top of the sheet and flow to the next sheet. All calculations are detailed above each cell.

Recurring Cost Development
The investments from the Investment Development and the Land, Building, Pole, and Conduit Investment Development sheets are summed to the FRC level and flow into the sheets called FRCTELRIC-VS and FRCTELRIC-VI. These sheets apply depreciation, cost of money (COM), income tax, plant specific, and ad valorem tax factors to the investments. If a factor does not apply, the default is zero. These results are then summed to produce direct cost. All calculations are detailed above each cell. The shared cost factor is applied to the investments to produce shared cost and then added to direct cost to produce TELRIC. The user has the option of designating the type of cost produced, e.g. whether the final cost is billed on a monthly basis or on a per minute of use (MOU) basis. Thus, if the input investments are annual investments, the resulting cost outputs are divided by twelve to produce monthly costs. The results then flow to the summary sheet. The common cost factor is applied on the summary sheet to produce economic cost.

Recurring Labor Expense Development
Recurring labor work times flow to the worksheet called RECEXP. The times are associated with a work function and a JFC or Payband. The associated direct labor rates, and TELRIC labor rates, determined by the JFC or Payband, are applied to the work times to produce both the direct expenses and TELRIC expenses. These expenses flow to the summary sheet. All calculations are detailed above each cell.

Recurring Cost Development
Recurring direct costs from sheets FRCTELRIC-VS and FRCTELRIC-VI, recurring direct expenses from sheet RECEXP, and other expenses from the input sheet "Additives" flow to the sheet called TELRIC Recurring Summary. All costs and expenses are summed to a total cost. This cost is then multiplied by

Gross Receipts Tax and Common Cost factors to obtain the volume sensitive and volume insensitive recurring costs. These two costs are summed to produce economic costs.

All, some, or none of the previously described recurring cost development sheets will be included with a cost element, depending on their applicability.

TELRIC Calculator© Nonrecurring Worksheets

Nonrecurring Cost Development

Installation and disconnect work times by work function and JFC or Payband flow from the input sheet "Nonrecurring Labor" to the three nonrecurring cost development sheets called NR-NR, NR-1A, and NR-IS. The three sheets exist to accommodate different types of nonrecurring charge structures. The sheet NR-NR develops cost for a single nonrecurring charge, the sheet NR-1A develops cost for charges which are first and additional, and the sheet NR-IS develops cost for charges which are initial and subsequent. Only one of these three sheets is populated with actual work times for a cost element; the other sheets receive work time values of zero. The cost development methodology is the same for all three sheets.

The TELRIC Calculator© User Interface calculates the disconnect factor and places this factor into the "Factors" input sheet which causes it to flow to the three nonrecurring cost development sheets. Disconnect factors are used to develop the present value of a labor cost that will take place in the future. The interface develops this factor by first locating the factor associated with the study midpoint date in the working database. The end-point date is then determined by adding the cost element life, in months, to the midpoint date. The factor associated with this date is then divided by the midpoint factor. If there is no cost element life indicated (i.e., value equals zero), the disconnect factor is one. If the disconnect cost is to be collected at the time of disconnect, a future value is calculated. Disconnect cost is not converted to a present value.

To develop the direct cost, the appropriate direct labor rate for the JFC or Payband is applied to the installation and disconnect work times for each function to produce the install cost and the disconnect cost. The costs then flow to the appropriate summary sheet. All calculations are detailed above each cell.

To develop the TELRIC cost, the appropriate TELRIC labor rate for the JFC or Payband is applied to the installation and disconnect work times for each function to produce the install TELRIC and the disconnect TELRIC. The steps are then the same as those for developing the direct cost.

Nonrecurring Cost Development
Nonrecurring direct costs from sheets NR-NR, NR-1A, NR-IS, and other expenses from the input sheet "Additives" flow to the sheets called "TELRIC NRC Summary A" and "TELRIC NRC Summary B". The first sheet summarizes a single nonrecurring cost; the second sheet summarizes first and additional costs or initial and subsequent costs. Costs and expenses are summed to a total cost. This cost is then multiplied by Gross Receipts Tax and Common Cost factors to produce the nonrecurring economic costs.

Depending on the structure of the nonrecurring cost, only two of the cost development sheets will be included with a cost element. The sheets NR-NR and TELRIC NRC Summary A will be included with the single cost structure. The sheets NR-1A and TELRIC NRC Summary B will be included with the first and additional cost structure. The sheets NR-IS and TELRIC NRC Summary B will be included with the initial and subsequent cost structure. The previously described nonrecurring cost development sheets will not be included with a cost element for which nonrecurring costs are not applicable.

2. Capital Cost Calculator

The Capital Cost Calculator is a Visual Basic model designed by BellSouth. It was developed to provide a process that is open, understandable and easily verifiable. The calculator output determines annual capital cost factors by FRC. The calculator produces depreciation, cost of money and income tax factors which are applied to investments to calculate the capital costs. See Section 4, Annual Cost Factors, for discussion of depreciation, cost of money and income tax factors.

The Capital Cost Calculator provides the user with the ability to use and modify a set of input variables. The input variables are: debt ratio, cost of money, debt interest rate, corporate income tax rate, net salvage ratio and economic life of assets. The calculator is designed with on-screen instructions and options which allow the user to view or modify the input section and view or print the calculations. Calculations are automatic when input variables are modified. Explanatory notes are included in each column heading and footnotes are included at the bottom of the calculations.

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The overall cost of capital of 9.93% used in these studies was approved by the TRA in their order in Docket No. 97-01262.

ILLUSTRATIVE CAPITAL COST CALCULATIONS:

The following is an illustrative calculation of capital costs, the inputs, and resulting capital cost factors:

CAPITAL COST ILLUSTRATIVE CALCULATION - UNDERGROUND CABLE METALLIC 5C

Inputs:

r = Debt Ratio = .40
i_d = Debt Interest Rate = .0650
t = Composite Income Taxes = .3857
Economic Life = 12 Years

i = Composite Cost of Money = .1125
n = Periods = 12
Net Salvage = -.08

1) Calculate Annuity of a Present Amount (A/P):

$$A/P = \frac{i(1+i)^n}{(1+i)^n - 1}$$

$$A/P = \frac{.1125(1+.1125)^{12}}{(1+.1125)^{12} - 1}$$

A/P = .1558662) Calculate Present Worth of Net Salvage (S_{pw}):

$$S_{pw} = \frac{\text{Net Salvage}}{(1+i)^n}$$

$$S_{pw} = \frac{-.08}{(1+.1125)^{12}}$$

S_{pw}= -.022258

3) Calculate PHI factor:

$$\Phi = \frac{t}{1-t} \times \left(1 - \frac{r(i_d)}{i}\right)$$

$$\Phi = \frac{.3857}{1 - .3857} \times \left(1 - \frac{.40(.0650)}{.1125}\right)$$

Φ = .482762

4) Calculate Depreciation Expense Factor:

Depreciation Expense Factor = (1 - Net Salvage)/Economic Life

Depreciation Expense Factor = (1 - (-.08))/12

Depreciation Expense Factor = .090000

5) Calculate Cost of Money Factor:

Cost of Money Factor=Annuity of a Present Amount X (1- S_{pw}) - Depreciation Exp Factor

Cost of Money Factor = .155866 X (1 - (-.022258)) - .090000

Cost of Money Factor = .069335

6) Calculate Income Tax Factor:

Income Tax Factor = Cost of Money Factor X PHI Factor

Income Tax Factor = .069335 X .482762

Income Tax Factor = .033472

7) Summary of Capital Cost Factors:

Depreciation Expense Factor	.090000
Cost of Money Factor	.069335
Income Tax Factor	.033472
Total Capital Cost Factors	.192807

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3. Loop Model

The 1997 Loop Model (Version 1.1) produces the material for an average loop by field reporting code based on a sampling of loop characteristics in the state of Tennessee. The Loop Model is used to produce average material for unbundled loop elements.

Using BellSouth Outside Plant Engineering Records, a circuit layout is determined for each loop in the sample. The layout or makeup includes each item of plant from the central office to the customer premises. The type of information included is cable type (aerial, buried, underground, copper, fiber, etc.), cable size, cable gauge, cable length, bridge tap or end section (if applicable), cross connect box/terminal size, feeder or distribution, etc. Bridge tap or end section is any cable length that is not in the resistive path between the customer location and the central office. End section is the cable length beyond the location where a cable pair is served and the location where a cable pair ends. Next, each loop makeup is placed in a database for processing.

Each sample is analyzed to determine the appropriate forward-looking design for that loop including the most cost effective forward-looking technology. Loops 12 kilofeet (KFT) and greater are redesigned to be served with Digital Loop Carrier (DLC) and fiber feeder. Loops less than 12 KFT in length are redesigned to be served on either 26 gauge or a combination of 26 and 24 gauge copper cable. Distribution plant is redesigned to a combination of 26 and 24 gauge copper cable, and bridge tap is designed to a maximum of 2,500 feet with a single bridge tap limited to 2,000 feet. Each loop is assigned a design number based on its redesigned feeder characteristics.

The redesigned loop makeups are stored in an Access Database file that is converted to a Microsoft Excel file. This file is used as a base point for the aggregate characteristics described below. Individual loop data maintained in the Access databases is used to develop information required on a per loop basis.

The Loop Model performs the following steps to develop the material price for an average loop:

1) Aggregates characteristics of the sampled loops by design, material size, field reporting code (FRC), class of service (COS), and Feeder (F) or Distribution (D) and sums all the units (feet or occurrences).

2) Applies utilization and DS0 equivalents to material prices (vendor prices averaged by type and size of cable) to derive the circuit-level material price. Units from Step 1 are multiplied by the circuit-level material price to gather total material for the aggregated data.
3) Electronic equipment (if applicable) material is added based on design number and number of loops with each design.
4) All material by FRC and COS is summed and divided by the number of loops in the sample to derive an average material for each field reporting code by class of service.
5) The average material by FRC is then weighted by residence and business percentages.
6) Material for the main distributing frame, drop wire/NID, and test points (if applicable) is added by FRC.
7) Results from Steps 5 and 6 are input to the TELRIC Calculator©.

Loop Model Components
Each of the following components may be used in deriving the average material price:

Utilization
DS0 equivalents
Material price
Main Distributing Frame
Drop / NID
Test Points
Design
Number of loops
Residence/Business Weighting

Utilization
Utilization of cable segments and associated material is based on percentages adopted by the TRA Order in Docket No. 97-01262.

Copper Feeder	65.1%
Copper Distribution	50.2%
Fiber Feeder	74.0%

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DS0 Equivalents

In the loop studies, DS0 refers to one voice grade circuit. One copper cable pair is equivalent to one voice grade circuit as shown in the equivalency table below:

	# DS0 Equivalents
Copper Circuit (2-Wire, 1 Pair)	1
Copper Circuit (4-Wire, 2-Pair)	.5
Fiber Circuit (2-Wire)	175
Fiber Circuit (4-Wire)	87
Fiber Circuit (56/64)	70
Fiber Circuit (ISDN)	117

Material Price (Copper, Cross Connect Box)

Material prices and ordering quantities for all types of cable and cross connect boxes were received from Supply Chain Management (SCM) in a spreadsheet format. The information (including Product Identification [PID], description, contract, supplier, price per unit, FRC, size, gauge) was based on the information in the PIDs database as of June 15, 1999. The quantities ordered were based on a database match by PID from the material and purchase order recording system called CAPRI for the period between January and December of 1998.

This data was assembled for items with quantities ordered and sorted by FRC and size. The material price for items within a given category were averaged and given a unique PID (i.e., all 100 pair aerial 24 gauge cable is ALL100A24). Each unique PID becomes an entry on the material tables known as 1999 Material Table and 1999 Crossbox/Terminal Material Table.

Main Distributing Frame Investments

Each unbundled loop extends from the main distributing frame (MDF) to a customer's premises. The MDF is located in an end office and is the point at which the unbundled loop is terminated prior to connection with a collocated space or interoffice facility. The characteristic of an unbundled loop is such that it is not carried through a switching facility. Therefore, when the loop is served on digital loop carrier, the carrier must be nonintegrated.

The materials associated with the MDF include a protector, connector, tie cables, and distribution frame for both copper and fiber (digital loop carrier) facilities.

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Drop Wire/NID

Residence and Business single-line loops can be connected to the premises inside wire by placement of a drop wire with termination on a network interface device (NID). Drop wire, also referred to as service wire, can be either aerial or buried. The typical NID serving a 2-wire loop is equipped with one protector and one interface. The NID housing is capable of serving up to six pairs.

Contract labor is used to place buried drops and telco labor is used to place aerial drops. Telco labor (which includes an average travel time to the customer's premises) applies to the installation of the NID and installation and termination of the drop regardless of type.

The average aerial or buried drop/NID investment reflects the occurrence of the loop terminating with drop as well as the placement of either an aerial or buried drop. Because multiple pair drops are placed, the investment also represents an adjustment for the average number of lines served per residence or business customer.

The 100 foot average drop length for aerial and buried drop used in these studies was established by the TRA in Docket No. 97-01262.

Test Access Points

Test points are installed with each unbundled digital loop. These test points are located in an end office and allow the capability to initiate a mechanized test of an individual circuit from a remote location. The test point is located on a test bay that includes connector shelves, plug-ins, and distribution panels. Each test access point applies for a 2-wire or a 4-wire circuit..

Designs

Each loop is categorized based on its feeder characteristics and assigned a design number. The design descriptions are:

Design 1 - All copper feeder
Design 2 - All copper feeder to a building terminal

Residence / Business Weighting

The residence and business weighting used is this filing was established by the TRA in Docket 97-01262.

Residence	62.89%
Business	37.11%

Loop Survey

The loop survey took place in stages beginning April of 1995 with Step 1 and ending in November of 1995 with Step 6 below. Explanations of each step follow:

1) Determine sample size through statistical reference -

Sample Size	**Universe 4/95**
Residence 246 loops	1,685,485 lines = 79.99%(Ordered = 62.89%)
Business 244 loops	421,676 lines = 20.01%(Ordered = 37.11%)

2) Identify universe using Customer Record Information System (CRIS) through appropriate USOCs by class of service - The universe includes residence and business lines. The universe of business lines consists of voice grade business access lines (small and large).

3) Randomly select Circuit IDs from universe (CRIS) based on sample size - The CRIS database is ordered by telephone number and was provided prior to the sampling process in that manner. Samples were pulled based on relevant USOC (residence and business) considering every nth working loop with a random start.

4) Match Circuit ID with the Loop Maintenance Operations System (LMOS) data (add wire center, cable and pair and serving address) - Prior to accessing field records, additional information such as wire center, cross connect box and terminal address had to be added to the circuit ID information. The LMOS database was used to populate the information.

5) Access field records and manually populate loop makeup form - Loop design drawings were made for each loop in the sample.

6) Load loop makeup data into database - The drawings were entered into a database that became the loop makeup database contained in the loop model. The loop makeup includes class of service, size, gauge, cable

length, cross connect box/terminal size, field reporting code, and description. The loop makeup data was again verified by employees knowledgeable in telephone plant engineering and sent back to the Network Planning Organization for verification prior to input into the database.

7) Verification of data -

Prior to input:
Verify that all surveys are received and accounted for
Check for duplicate surveys (paper and mechanized)
Check for and request missing surveys
Develop log for recording survey data (date, data entered, error report)

During Input to Access Model (built in checks):
Automatic calculation of loop miles checked with hand-calculated mileage
If mileage is off, review each input and cable segment length
Only valid sizes, gauges, descriptions, and field reporting codes are allowed

After Input to Access Model:
Record loop surveys input (date and data entered)
Send questions/errors back to field
Correct questions/errors
Review Access loop makeup tables for item class and description quality

Loop Model Investment Checks and Balances:
Mechanized loops are checked for correct cable size and description
Access database inputs are combined into one large Paradox database
Unfamiliar cable sizes and descriptions are reviewed and edited
Duplicate or odd data is reviewed and checked against original inputs

Illustrative Loop Model Example:

1) Characteristics of the samples are aggregated for all units by loop design, material size, field-reporting code, class of service, feeder or distribution.

2) Utilization and DS0 equivalents are applied to material price to derive the circuit-level material information. Units are multiplied by the results of Step 2 to gather total material for each of the characteristics.

Illustrative Example:

Copper Feeder – Business - FRC 22C

1200 pair aerial-copper cable	
Material per sheath foot	$4.48
Copper Feeder Utilization	70%
# Of DS0 equivalents	1200 x 70% = 840
Conversion from sheath to circuit	$4.48 / 840 = $.005333
# Of cable feet	600
Total circuit-level material	600 x $.005333 = $3.20

3) The total material is divided by the number of loops in the sample to derive an average material for each field reporting code.

Total Material -All Business Feeder FRC 12C	= $181.79
# Of Loops	=293
Unweighted Avg.-Business Feeder FRC12C	= $181.79 / 293 = $0.62

4) The unweighted average material by FRC is then weighted by residence and business percentages and added together. This information becomes input to the TELRIC Calculator©.

Illustrative Example:

Unweighted Material Bus.	FRC12C	=	$0.62
Unweighted Material Res.	FRC12C	=	$0.66
Business Weighting		=	20.00%
Residence Weighting		=	80.00%
Weighted Avg. Business	FRC 12C	=	$0.12
Weighted Avg. Residence	FRC 12C	=	$0.53
Weighted 12C Material		=	$0.65

4. SONET Price Calculator

The SONET Price Calculator determines prices for individual components of the SONET network. The prices for the components are expressed at various transmission levels, such as DS3, STS1, OC48, OC12, and OC3. The Calculator also uses the capacity of the equipment to express the fiber transport at the stated speeds.

The SONET Price Calculator uses material prices and configurations acquired from the suppliers or vendors. The actual vendor pricing is proprietary and, as a result, this model is proprietary.

The calculator is composed of three parts:

1. PARTS TABLE: This part of the calculator takes the individual equipment items associated with a particular SONET system such as cards and shelves, etc., and applies account specific Telephone Plant Indexes to bring the unit prices to a current level.

2. PRIMITIVES TABLE: This part of the calculator combines the individual equipment items into a particular primitive (for example a multiplexer, working card, or low speed multiplexer card might comprise a particular system element). It identifies the quantity required, multiplies it by its base unit price from the PARTS TABLE, and divides it by the unit's capacity. The results are divided by the element's utilization factor resulting in a utilized unit material price.

3. FUNDAMENTAL MATERIAL: This part of the calculator combines the parts and primitives into a larger element, such as a central office node. The node consists of a multiplexer, fiber jumpers, fiber pigtails, fiber termination, and a DSX panel. The unit material prices are weighted by vendor probability of occurrence.

The SONET Price Calculator provides data to the following cost studies: Interoffice Transport - Dedicated, Local Channel-Dedicated, and Unbundled Loops via the Loop Multiplexer Price Calculator.

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Illustrative Example of a SONET Fundamental Material Price Calculation:

Material Price (Input to PARTS TABLE)		$50,000.00
Multiplied by Telephone Plant Index (PARTS TABLE)	x	0.98
Results in Current Material Price (Output of PARTS)		$49,000.00
Multiplied by the Quantity of Item required (Identified in PRIMITIVES TABLE)	x	2
Results in Total Material Price		$98,000.00
Divided by Unit capacity (Identified in PRIMITIVES)	/	84
Results in Unit Material Price		$ 1,166.67
Divided by the Utilization Factor (Identified in PRIMITIVES)	/	.67
Results in Utilized Unit Material Price		$ 1741.30
Multiplied by the Probability of Occurrence (Identified in the Fundamental Material)	x	.50
Results in Weighted-Utilized Material		$ 870.65

5. Digital Loop Carrier Price Calculator

The Digital Loop Carrier Price Calculator develops material prices for the digital loop carrier systems associated with loops. The utilization factors in this model are projected actual fills. The channel unit plug-in is considered to be 100% because breakage is calculated on deferrable plug-ins, assuming there is on average one-half plug-in spare in a channel bank.

In the Digital Loop Carrier Price Calculator, the material price of a system is divided by the number of channels it provides to develop the per circuit material price. The results are multiplied by the probability of occurrence resulting in a weighted per circuit material price. A utilization factor is applied to the result to produce a weighted-utilized material price per circuit.

The Digital Loop Carrier Price Calculator provides data to the Unbundled Loop cost studies.

Illustrative Example of a Digital Loop Carrier Price Calculation: Central Office and Remote Terminal

Hardwire, Commons, DSX-1 Panel Material		$10,000.00
Number of Channels	/	224
Per Circuit Material	$	44.64
Probability of Occurrence	x	.40
Weighted per Circuit Material	$	17.86
Utilization Factor	/	.53
Weighted-Utilized per Circuit Material	$	33.70

6. Loop Multiplexer Price Calculator

The Loop Multiplexer Price Calculator is used to identify the material prices associated with loop multiplexing equipment required by unbundled loops. This model calculates materials for SONET Multiplexers deployed in the Outside Plant Loop based on SONET ring architecture consisting of a 4-node ring (one central office node and 3 remote terminal nodes). It includes the hardwire and common plug-ins, as well as the low speed multiplexer and protection cards.

The material prices are obtained from the SONET Price Calculator.

The multiplexer equipment prices are first expressed on a per DS1 level and then divided by the number of channels the equipment provides to develop the per circuit material price. This price is then adjusted for utilization. The prices, by vendor, are weighted by probability of occurrence. The Loop Multiplexer Price Calculator provides data to the unbundled loop cost studies.

Illustrative Example of a Loop Multiplexer Price Calculation: Central Office and Remote Terminal

Multiplexer Material	
Hardwire and Common Material (per DS1)	$ 250.00
DS1 Card (per DS1)	$ 200.00
Fiber Terminal (per DS1)	$ 2.50
Pigtails (per DS1)	$ .50
Fiber Jumpers (per DS1)	$ 1.00
	+
Total Material per System (per DS1)	$ 454.00
System Probability of Occurrence	x .50
Weighted Material per System (per DS1)	$ 227.00
Number of Voice Grade Units (per DS1)	/ 24
Weighted per Circuit Material	$ 9.46
Utilization Factor	/ .53
Weighted-Utilized per Circuit Material	$17.85

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DESCRIPTION OF MODELS AND PRICE CALCULATORS

7. DS1 Channelization Price Calculator

The DS1 Channelization Price Calculator develops the material prices of D4 Channel Banks and their associated common plug-ins.

The price calculator applies TPI (Telephone Plant Indexes) factors to material prices, if needed, to bring material prices to current levels. Prices are divided by the capacity of the circuit being studied (DS0, DS1, etc.). All material except deferrable plug-ins have an 85% utilization factor applied to them. Channel plug-ins are dedicated to each circuit. This produces a utilized material price at a specified capacity or transmission level.

Illustrative Example of the DS1 Channelization Price Calculator:
DSX-1 Panel at DS0 Level

DSX-1 Panel material price	$12,600
Number of DS1 ports available	/ 840
Material price per DS1 per port	$ 15.00
Number of DS0 ports available per DS1	/ 24
Material price per DS0 per port	$ .625
Utilization Factor	/ .85
Utilized Material Price per DS0 Port	$ .735

8. Shared and Common Cost Model

The Shared and Common Cost Model used in this filing is the version adopted by the TRA in Docket No. 97-01262.

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SECTION 4
INPUTS - LOADINGS AND FACTORS

BELLSOUTH REGION TELEPHONE PLANT INDEXES

The BellSouth Region Telephone Plant Indices (TPIs) are used in cost studies to estimate the change in the material price and/or installed investment from one year to a future year. The TPIs are price indices that measure the relative changes in the prices BellSouth pays for the construction of telephone plant between specific periods of time. A TPI is an average of prices, or of price relatives at specific points or periods of time, constructed for a specific purpose. It should also be noted that TPI forecasts are forecasts of price changes of equipment that is being installed. They are not intended to be forecasts of technology changes or productivity improvements.

Joel Popkin and Company, as BellSouth consultants, assists BellSouth's Network Department with the development of the TPIs. In general, the methodology uses econometric techniques to establish a mathematical relationship between the historical movement in each of the labor and materials components that make up the TPIs and the historical movement in the explanatory variables. The explanatory variables are usually aggregate measures of the U.S. economy, such as price deflators from the national income and product accounts, the U.S. union wage rate, copper prices and other macroeconomic variables. What these econometric techniques provide is a systematic, quantifiable statement of what has happened in the past. Use of those relationships implicitly makes the assumption that history will more or less repeat itself. It is important to re-estimate the relationships as new index values are added each year.

A summary of Labor TPIs and TPIs by account is included in Appendix A.

INVESTMENT INFLATION FACTORS

Over the life of an investment, inflation causes fluctuations in the forward-looking investment amount. Thus, the investment amount should be levelized over the time period in which the study results will be used. Investment inflation factors by account are used to trend plant investment in base year dollars to a levelized amount that is valid for a three to five year period. The investment inflation factors are the cumulative average of three years' projected inflation rates from the BellSouth Region TPIs. When the base year investment is multiplied by the investment inflation loading, the result is a forward-looking investment representative for a three to five year period.

A worksheet showing the development of the levelized Investment Inflation Factors used in these studies is included in Appendix A.

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INPUTS - LOADINGS AND FACTORS

INPLANT LOADINGS

The In-Plant Loading factors add engineering and installation labor and miscellaneous equipment to the material price and/or vendor installed price, that is, the In-Plant Loading converts the material price to an installed investment. The installed investment is the dollar amount that is recorded in the capital accounts. In-Plant loadings are account specific. There are two types of in-plant loadings used in these studies: 1) Material Loading, 2) Telco Loading. The Material Loading is applied to a material price and the Telco Loading to the vendor-installed investment. The data sources are the 1998 State and Local Sales Taxes, Resource Tracking Analysis and Planning (RTAP) System, and Special Report/File 542 - 1998 Investments.

A summary of the InPlant Loadings used in these studies and worksheets showing their development are included in Appendix A.

SUPPORTING EQUIPMENT AND POWER LOADINGS

Supporting Equipment and Power Loading factors are used to calculate the incremental investment for such items as power equipment (rectifiers, power supplies, batteries, some fuse panels and emergency power generators), distributing frames, ladders, tools, alarms and test sets, required to support an additional dollar of central office (CO) investment. The Supporting Equipment and Power Loadings are developed from investment data obtained from a 1998 Central Office Monthly Allocation Process (COMAP) extract of power and supporting equipment.

A summary worksheet showing the development of Supporting Equipment and Power Loadings is included in Appendix A.

LAND AND BUILDING LOADINGS

Land and Building Loadings are translators used to determine the amount of investment in land and building associated with central office investment. Ratios are developed between land investments and central office equipment investments and between building (central office) investments and central office equipment investments.

In order to develop these ratios, regulated investment dollars are taken from extracts from BellSouth financial systems for the years ending 1997 and 1998. The EOY investments are averaged to develop an average investment level for 1998. The projected view of 1999 through 2002, from Network, is based on plant additions less retirements and is added to the 1998 EOY investment levels. Current Cost Factors are

applied to average 1998 investment levels only. Projected net additions for 1999 through 2002 are added to represent the current forward looking period (2000 – 2002).

The 2000 through 2002 land and building projected investments are added, multiplied by the percent of land and building associated with central office equipment, and each is respectively divided by the three years of total central office equipment to derive the loading factors.

Worksheets showing the development of Land and Building Loadings used in these TELRIC studies are included in Appendix A.

POLE AND CONDUIT LOADINGS

Pole and conduit loadings are translators used to determine the amount of investment in poles and conduit associated with aerial and underground cable investment.

The pole loading is developed by comparing the investment in poles to the investment in aerial cable. A ratio is then developed that allows each dollar of aerial cable investment to include a fraction of the pole investment. The conduit loading is developed by comparing the investment in conduit to the investment in underground cable. A ratio is then developed that allows each dollar of underground cable investment to include a fraction of the conduit investment.

The regulated investment dollars used in developing these factors are taken from extracts from BellSouth financial systems for the years ending 1997 and 1998. The projected view of 1999 through 2002 received from Network is based on plant additions less retirements and is added to the 1998 EOY investment levels. Current Cost Factors are applied to 1998 average investment levels only. Projected net additions for 1999 through 2002 are added to represent the current forward looking period. The pole loading is developed by dividing three years cumulative pole investment by three years cumulative aerial cable investment. The conduit loading is developed by dividing three years cumulative conduit investment by three years cumulative underground cable investment.

A worksheet showing the Pole and Conduit Loadings development is included in Appendix A.

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INPUTS - LOADINGS AND FACTORS

ANNUAL COST FACTORS

GENERAL

Annual cost factors are translators used to determine the amount of recurring cost for one year associated with acquiring and using a particular piece of investment. Annual cost factors were developed for each category of plant investment for each state. When the dollar amount for a particular piece of investment is multiplied by the annual cost factor for that particular category of plant investment, the product reflects the annual recurring cost incurred by the company for that particular piece of investment. There are basically two types of cost associated with investment: capital related costs and operating related costs.

The initial purchase price of plant equipment and any installation costs are paid with a combination of investor supplied funds and retained earnings. The investors who provide the "loan" may be either bondholders or stockholders. The plant placed must be able to generate enough revenues to cover capital costs associated with its placement and usage. Capital related costs consist of three major categories: depreciation, cost of money, and income tax. The capital related cost factors are developed using the Capital Cost Calculator, which uses various financial data and plant investment characteristics to compute the annual capital costs by category of plant.

Plant investments must also be maintained to provide for continuing operations. Ordinary repairs and maintenance, as well as rearrangements and changes, are necessary costs for all categories of plant (except land) in order to provide proper service. These maintenance costs, as well as ad valorem taxes and other taxes must be covered by the revenues received from the use of the asset. The operating related cost factors are developed using various spreadsheets, which basically compute the annual operating related costs by category of plant, and divide that amount by the investment in that category of plant.

CAPITAL RELATED COSTS

DEPRECIATION - the allocation of the initial plant investment over the years service provided by the plant. Depreciation is determined by the total investment, less net salvage, divided by the estimated life of the investment. Depreciation lives and salvage values used in this filing were established by the TRA in its Order in Docket No. 97-01262.

COST OF MONEY - the annual cost to the firm of the debt and equity on capital invested in the business. This annual cost is determined in the financial market as it represents the investors' expected return on their investment. The cost of money used in this filing was established by the TRA in its Order in Docket No. 97-01262.

INCOME TAX - the composite of income taxes paid to the Federal and state governments based on the taxable net income of the company.

OPERATING RELATED COSTS

PLANT SPECIFIC EXPENSE - the expense required to keep existing telephone plant, circuits, and service up to standards, as well as rents paid for facilities. This includes trouble clearing, rearrangements, and replacing defective elements.

AD VALOREM AND OTHER TAX - tax levied by city and county governments based on the assessed value of property. This includes property taxes, capital stock taxes, and other taxes.

FACTOR DEVELOPMENT - CAPITAL COST

Depreciation is the allocation of the initial plant investment over the years of service provided by the plant. The straight-line method requires that the difference between gross investment and net salvage be spread ratably over the life of the plant. The straight-line depreciation expense rate is calculated as follows:

$$\frac{\text{Initial Investment - (Gross Salvage - Cost of Removal)}}{\text{Life of Investment}}$$

Cost of money is the amount of money which must be paid to investors for the use of investor supplied funds. This amount to be paid investors is the annual cost to the company of the debt and equity capital invested in the company. Cost of money is determined in part by the financial market and, as it represents the investors' expected return on their investment, and may differ considerably from the actual earnings a company generates. The overall cost of money rate provided by BellSouth Treasury depends on the cost of equity financing, the cost of debt financing, and the debt to equity ratio of the capital structure of the company.

Income tax expense is the federal and state taxes levied on "taxable income." For income tax purposes, what is considered gross income and what expenses are deductible are defined by laws and codes. The income tax factor is developed using the PHI factor. The PHI factor assumes that tax depreciation equals book depreciation (i.e., no depreciation-related tax timing differences), but dividends paid to stockholders

are not tax deductions (nor are they accounting expenses). Interest paid to bondholders is a booked expense and deductible for income tax purposes. A company must pay income taxes on the equity portion of return, but the debt portion is tax-exempt. The PHI factor is calculated as follows:

$$\Phi = \frac{\text{Composite Income Tax Rate}}{1 - \text{Composite Income Tax Rate}} \times \left(1 - \frac{\text{Debt Ratio x Debt Rate}}{\text{Cost of Money Rate}}\right)$$

Capital Cost Calculator Model calculations are included in Appendix A.

FACTOR DEVELOPMENT - OPERATING RELATED

PLANT SPECIFIC EXPENSE

The plant specific expense factor, which includes the cost of material used and direct labor, is a ratio developed to reflect the expenses for plant category by the respective investment. The factor also includes maintenance-type expenses for existing plant that cannot be directly assigned to a given plant category, such as transmission power, when applicable. Certain amounts have been excluded from the appropriate categories of plant, specifically service order activity-related expenses. These costs are excluded because: 1) they should be separately identified for each service, or 2) they should be included in nonrecurring cost studies. The maintenance expenses used in calculating the Plant Specific Expense Factors include those associated with the following types of operations:

(a) inspecting and reporting on the condition of plant investment to determine the need for repairs, replacements, rearrangements and changes

(b) performing routine work to prevent trouble

(c) replacing items of plant other than retirement units

(d) rearranging and changing the location of plant not retired

(e) repairing material for reuse

(f) restoring the condition of plant damaged by storms, floods, fire and other casualties (other than the cost of replacing retirement units)

(g) inspecting after repairs have been made

(h) only salaries, wages and expense associated with plant craft and work reporting engineers, as well as their immediate supervision and office support.

The plant specific expense factors are developed in personal computer spreadsheets. The factors are based on three years of projected expense and investment data. The 1998 expenses used in the study were pulled from the Cost Separations System (CSS). Rent expense is excluded from building expense; net rent (rent revenue less rent expense) is included in pole and conduit expenses. Projected view data was obtained from the Finance Budget Group for the expenses for 2000 through 2002 and spread based on actual expenses. Service order-related expenses were excluded from the study because such expenses are recovered in a direct manner rather than through the use of a factor. The 2000 through 2002 projected expense amounts are averaged to represent the projected annual expense.

The investment dollars are 1998 actuals and projected 1999 through 2002 from Network. The 1998 dollars were taken from the Investment Over Accumulated Depreciation Report for mid and end of year and adjusted by applying a current cost to book cost ratio. The projected investments are based on plant additions less retirements. The projected net additions for each year are added to 1998 adjusted investment to arrive at the total projected investment. The projected investments for 2000 - 2002 are then summed and divided by three to obtain the average annual investment. Expenses are then divided by the investments, resulting in the unloaded plant specific expense factors. Power expense loadings are then added to the factors for central office equipment investment. These plant specific expense factor calculations result in a factor for each category of plant representative of the average expense per investment expected in the future for each plant category.

Worksheets showing the development of the Plant Specific Expense Factors used in these studies are included in Appendix A.

AD VALOREM AND OTHER TAXES

The ad valorem and other tax factor is an effective tax factor furnished by the BellSouth Tax Department. The BellSouth Tax Department develops the factor by calculating the ratio of certain tax expenses to the telephone plant in service, as follows:

$$\frac{\text{Accounts } 7240.1000 + 7240.3000 + 7240.9000}{\text{Telephone Plant In Service}}$$

Account 7240.1000 includes taxes levied upon the assessed value of property.

Account 7240.3000 includes taxes levied upon the value or number of shares of outstanding capital stock, upon invested capital, upon rate of dividends paid, etc.

Account 7240.9000 includes other nonincome, nonrevenue taxes such as municipal license taxes, state privilege taxes, state self-insurer's tax, etc.
A summary of ad valorem and other tax and gross receipts tax factors used in these studies is included in Appendix A.

GROSS RECEIPTS TAX FACTOR

Some states and municipalities tax the revenues that a company receives from services provided within the state/municipality. The taxes may be designed to fund such things as PSC fees, franchise taxes, license taxes, or other similar items, but because the taxes are levied on the basis of revenues, they are commonly referred to as a gross receipts tax. Unlike some taxes that are billed to the customer and flowed through to the taxing authority, a gross receipts tax is a cost of doing business to BellSouth.

The BellSouth Tax Department provides the effective tax rate at which BellSouth is charged by the taxing authority and that rate is "grossed up" to reflect the following formula:

$$\frac{\text{GROSS RECEIPTS TAX RATE}}{(1 - \text{GROSS RECEIPTS TAX RATE})}$$

A summary of ad valorem and other tax and gross receipts tax factors used in these studies is included in Appendix A.

DISCONNECT FACTORS

Disconnect factors are translators used to determine the costs associated with disconnecting a service. These factors are developed because there is a difference in time between when a service is disconnected and when BellSouth recovers this disconnect cost. Disconnect costs are typically included in the one-time up front service establishment charges. The customer is billed now for work that will be done in the future.

The calculation of the disconnect factors is based on the following data: the expected life of the service being studied and an interest rate that is comparable to the highest rate BellSouth is required to pay its customers for customer deposit payments held by BellSouth. The disconnect factor inflates the labor cost to the period of the future

disconnect and discounts these costs to the present. Disconnect factors are calculated by month for twelve years for the company on a regional basis. The data sources for these factors are the 1998 forecasted labor inflation rates from the BellSouth Region TPIs and a discount rate based on simple interest calculations.

If disconnect costs are recovered at the time of disconnect, the factor equals the inflation portion of the Disconnect Factor.

Disconnect factor worksheets are included in Appendix A.

LABOR RATES

Labor rates for specific work groups are developed annually based on extracts of previous year's data from the Financial Front End System. This extract collects labor expense and hours and a PC application processes the information to produce labor rates. During processing, the actual costs for a given work group are accumulated by expenditure type (e.g., direct labor productive, premium, other employee, etc.). These actual costs are divided by the actual hours (classified productive hours for plant and engineering work groups and total productive hours for cost groups) reported by work group to determine the basic rates. The base year of labor rate data collection was the 1998 calendar year. A labor inflation factor is developed from the BellSouth Region TPIs and is applied to inflate these rates to the study period 2000-2002. The actual labor rate inflation development process can be seen under the inflation factor tab of the Labor Rate file in Appendix A.

LABOR RATE COMPONENTS:
The following are various cost components that make up labor rates:

DIRECT SALARIES AND WAGES

1. Direct Labor - Productive (RESOURCE TYPE CODE (RTC) 111, 121)
   Represents the wage and salary costs associated with work reporting employees for regularly scheduled time and overtime spent performing productive work. Also includes the costs of salaries paid to management employees when performing productive work. Classified and unclassified productive hours are used as the basis for Direct Labor Costs.

2. Direct Labor - Premium (RTC 122)
   Represents the wage and salary costs associated with premium hours paid for hours worked beyond the normally scheduled work period.

3. Direct Labor - Other Employee (RTC 199, 19B, 19C, 193)
   Covers the costs associated with the periodic incentive compensation payments made to management employees based on corporate service and financial performance, the annual bonus paid to non-management employees, all costs associated with commissions paid to employees, cash awards paid for any approved program, etc.

4. Direct Labor - Annual Paid Absence (RTC 132, 19E)
   Identifies the cost of payments to be made over the year to occupational work reporting employees for accrued costs of holidays, vacations, and excused days.

5. Direct Administration (RTC 111, 121, 122, 199, 19B, 19C, 19E, 193, 132)
   Identifies the costs of salaries paid during the month to the first level of supervision responsible for supervising occupational work reporting employees, and salaries and wages paid to employees and immediate supervisors who perform basic office services for occupational work reporting employees. Also included are the wages paid to occupational work reporting employees loaned to perform supervisory or clerical functions.

6. Other Tools - Salaries (RTC CQR)
   Identifies the salary portion of the distributed costs associated with tools.

7. Motor Vehicles - Salaries (RTC CQM)
   Identifies the salary portion of the plant motor vehicle expenses distributed to construction, removal or plant specific operations expense accounts based on the classified productive hours of the labor groups using the motor vehicles.

OTHER DIRECT

1. Direct Labor - Other Costs (Various RTCs)
   Identifies the costs incurred for office, traveling and other costs of employees whose wage and salary costs are direct labor.

2. Other Tools - Benefits (RTC CQS)
   Identifies the distributed benefits costs associated with tools.

3. Other Tools - Rents (RTC CQK)
   Identifies the distributed rent costs associated with tools.

4. Other Tools - Other (RTC CQL)
   Identifies the distributed other expense costs associated with tools.

5. Motor Vehicles - Benefits (RTC CQN)
   Identifies the benefits portion of the plant motor vehicle expenses distributed to construction, removal or plant specific operations expense accounts based on the classified productive hours of the labor groups using the motor vehicles.

6. Motor Vehicle - Rents (RTC CQP)
   Identifies the rents portion of the plant motor vehicle expenses distributed to construction, removal or plant specific operation expense accounts based on the classified productive hours of the labor groups using the motor vehicles.

7. Motor Vehicle - Other (RTC CQQ)
   Identifies the other costs portion of the plant motor vehicle expenses distributed to construction, removal or plant specific operations expense accounts based on the classified productive hours of the labor groups using the motor vehicles.

8. Benefits (RTC KB1)
   Identifies amounts for the payroll related benefits and taxes. These costs include pension accruals; company matching portion of savings plan; dental, medical, and group insurance plan reimbursements; and company portion of social security and unemployment payroll taxes.

TOTAL PRODUCTIVE HOURS

1. Classified Productive Hours
   Hours of work reporting employees which are reported to final accounting classifications.

2. Unclassified Productive Hours
   The working hours of plant work reporters devoted to activities of such a general nature as to not be assignable to specific accounting classifications. Unclassified activities include: attending conferences or meetings (including travel time) which are general in nature; attending first aid classes or safety meetings; paid time spent on union activities; paid time spent on quality of work life activities; time spent in a classroom (including travel time) for general or job specific training; and other unclassified activities such as attending assessment centers.

Labor Rate worksheets are included in Appendix A.

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SECTION 4
INPUTS - LOADINGS AND FACTORS

SHARED AND COMMON COST ALLOCATION FACTORS

The Shared and Common Cost factors used in this filing are the factors adopted by the TRA in Docket No. 97-01262.

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SECTION 5
UNBUNDLED NETWORK ELEMENT STUDIES

INTRODUCTION

This section contains a description of cost elements and an overview of the study process for each category of elements studied by BellSouth. Additionally, inputs and workpapers for each individual UNE are provided.

The studies included in this filing are all based on a three (3) year study period (2000 - 2002). All long run costs associated with providing the service cost elements are identified and included in the TELRIC studies.

The following pages contain a listing of the unbundled network cost elements provided in this filing package. Each cost element is represented by a designated cost element number that is referenced throughout the studies.

Testing costs are identified as separate costs and included in recurring rates as indicated on the summary report.

Following this listing are the narratives for each category of cost elements describing the elements, study technique, and specific study assumptions. After the narratives are the TELRIC Calculator© outputs recurring and nonrecurring. Following the outputs, Microsoft Excel spreadsheets containing the inputs and workpapers are included. In some instances, the spreadsheet may contain inputs and workpapers for several cost elements. In such situations, the file is provided in order of the first cost element number contained in that file.

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SECTION 5
UNBUNDLED NETWORK ELEMENT STUDIES

		Filename
A.0	**UNBUNDLED LOCAL LOOP**	
A.2	**SUB-LOOP**	
A.2.11	Sub-Loop Distribution Per 4-Wire Analog Voice Grade Loop	TN-USL.xls
A.2.13	Network Interface Device Cross Connect	TN-NID.xls
A.2.14	2-Wire Intrabuilding Network Cable (INC)	TN-USL.xls
A.2.15	4-Wire Intrabuilding Network Cable (INC)	TN-USL.xls
A.2.17	Sub-Loop - Per Cross Box Location - CLEC Feeder Facility Set-Up	TN-USL.xls
A.2.18	Sub-Loop - Per Cross Box Location - Per 25 Pair Panel Set-Up	TN-USL.xls
A.2.19	Sub-Loop - Per Building Equipment Room - CLEC Feeder Facility Set-Up	TN-USL.xls
A.2.20	Sub-Loop - Per Building Equipment Room - Per 25 Pair Panel Set-Up	TN-USL.xls
A.2.21	Sub-Loop - Per Cross Box Location - CLEC Distribution Facility Set-Up	TN-USL.xls
A.2.24	Sub-Loop - Per 4-Wire Analog Voice Grade Loop / Feeder Only	TN-USL.xls
A.2.25	Sub-Loop - Per 2-Wire ISDN Digital Grade Loop / Feeder Only	TN-USL.xls
A.2.29	Sub-Loop - Per 4-Wire 56 or 64 Kbps Digital Grade Loop / Feeder Only	TN-USL.xls
A.2.30	Sub-Loop - Per 2-Wire Copper Loop / Feeder Only	TN-USL.xls
A.2.32	Sub-Loop - Per 4-Wire Copper Loop / Feeder Only	TN-USL.xls
A.2.40	Sub-Loop - Per 2-Wire Copper Loop / Distribution Only	TN-USL.xls
A.2.42	Sub-Loop - Per 4-Wire Copper Loop / Distribution Only	TN-USL.xls
A.2.44	Network Interface Device (NID) - 2 line	TN-NID.xls
A.2.45	Network Interface Device (NID) - 6 line	TN-NID.xls
A.2.1198	Sub-Loop Distribution Per 4-Wire Analog Voice Grade Loop - Testing	TN-USL.xls
A.2.1199	Sub-Loop Distribution Per 4-Wire Analog Voice Grade Loop - Disconnect	TN-USL.xls
A.2.1499	2-Wire Intrabuilding Network Cable (INC) - Disconnect	TN-USL.xls
A.2.1599	4-Wire Intrabuilding Network Cable (INC) - Disconnect	TN-USL.xls
A.2.2498	Sub-Loop - Per 4-Wire Analog Voice Grade Loop / Feeder Only - Testing	TN-USL.xls
A.2.2499	Sub-Loop - Per 4-Wire Analog Voice Grade Loop / Feeder Only - Disconnect	TN-USL.xls
A.2.2598	Sub-Loop - Per 2-Wire ISDN Digital Grade Loop / Feeder Only - Testing	TN-USL.xls
A.2.2599	Sub-Loop - Per 2-Wire ISDN Digital Grade Loop / Feeder Only - Disconnect	TN-USL.xls
A.2.2998	Sub-Loop - Per 4-Wire 56 or 64 Kbps Digital Grade Loop / Feeder Only - Testing	TN-USL.xls
A.2.2999	Sub-Loop - Per 4-Wire 56 or 64 Kbps Digital Grade Loop / Feeder Only - Disconnect	TN-USL.xls
A.2.3098	Sub-Loop - Per 2-Wire Copper Loop / Feeder Only - Testing	TN-USL.xls
A.2.3099	Sub-Loop - Per 2-Wire Copper Loop / Feeder Only - Disconnect	TN-USL.xls
A.2.3298	Sub-Loop - Per 4-Wire Copper Loop / Feeder Only - Testing	TN-USL.xls
A.2.3299	Sub-Loop - Per 4-Wire Copper Loop / Feeder Only - Disconnect	TN-USL.xls
A.2.4098	Sub-Loop - Per 2-Wire Copper Loop / Distribution Only - Testing	TN-USL.xls
A.2.4099	Sub-Loop - Per 2-Wire Copper Loop / Distribution Only - Disconnect	TN-USL.xls
A.2.4298	Sub-Loop - Per 4-Wire Copper Loop / Distribution Only - Testing	TN-USL.xls
A.2.4299	Sub-Loop - Per 4-Wire Copper Loop / Distribution Only - Disconnect	TN-USL.xls
A.2.4499	Network Interface Device (NID) - 2 line - Disconnect	TN-NID.xls

A.2.4599	Network Interface Device (NID) - 6 line - Disconnect	TN-NID.xls
A.3	**LOOP CHANNELIZATION AND CO INTERFACE (INSIDE CO)**	
A.3.12	Unbundled Loop Concentration - System A (TR008)	ULC-IN.xls
A.3.13	Unbundled Loop Concentration - System B (TR008)	ULC-IN.xls
A.3.14	Unbundled Loop Concentration - System A (TR303)	ULC-IN.xls
A.3.15	Unbundled Loop Concentration - System B (TR303)	ULC-IN.xls
A.3.16	Unbundled Loop Concentration - DS1 Line Interface Card	ULC-IN.xls
A.3.17	Unbundled Loop Concentration - POTS Card	ULC-IN.xls
A.3.18	Unbundled Loop Concentration - ISDN (Brite Card)	ULC-IN.xls
A.3.19	Unbundled Loop Concentration - SPOTS Card	ULC-IN.xls
A.3.20	Unbundled Loop Concentration - Specials Card	ULC-IN.xls
A.3.21	Unbundled Loop Concentration - TEST CIRCUIT Card	ULC-IN.xls
A.3.22	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data	ULC-IN.xls
A.3.1698	Unbundled Loop Concentration - DS1 Line Interface Card - Testing	ULC-IN.xls
A.3.1699	Unbundled Loop Concentration - DS1 Line Interface Card - Disconnect	ULC-IN.xls
A.3.1798	Unbundled Loop Concentration - POTS Card - Testing	ULC-IN.xls
A.3.1799	Unbundled Loop Concentration - POTS Card - Disconnect	ULC-IN.xls
A.3.1898	Unbundled Loop Concentration - ISDN (Brite Card) - Testing	ULC-IN.xls
A.3.1899	Unbundled Loop Concentration - ISDN (Brite Card) - Disconnect	ULC-IN.xls
A.3.1998	Unbundled Loop Concentration - SPOTS Card - Testing	ULC-IN.xls
A.3.1999	Unbundled Loop Concentration - SPOTS Card - Disconnect	ULC-IN.xls
A.3.2098	Unbundled Loop Concentration - Specials Card - Testing	ULC-IN.xls
A.3.2099	Unbundled Loop Concentration - Specials Card - Disconnect	ULC-IN.xls
A.3.2198	Unbundled Loop Concentration - TEST CIRCUIT Card - Testing	ULC-IN.xls
A.3.2199	Unbundled Loop Concentration - TEST CIRCUIT Card - Disconnect	ULC-IN.xls
A.3.2298	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data - Testing	ULC-IN.xls
A.3.2299	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data - Disconnect	ULC-IN.xls
A.5	**2-WIRE ISDN DIGITAL GRADE LOOP**	
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A.5.698	Universal Digital Channel - Testing	TN-DIG.xls
A.5.699	Universal Digital Channel - Disconnect	TN-DIG.xls
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A.6.5	2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (Nonrecurring w/ LMU)	TN-xdsl.xls
A.6.6	2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (Nonrecurring w/o LMU)	TN-xdsl.xls
A.6.598	2-Wire ADSL Compatible Loop (Nonrecurring w/ LMU) - Testing	TN-xdsl.xls
A.6.599	2-Wire ADSL Compatible Loop (Nonrecurring w/ LMU)- Disconnect	TN-xdsl.xls
A.6.698	2-Wire ADSL Compatible Loop (Nonrecurring w/o LMU) - Testing	TN-xdsl.xls
A.6.699	2-Wire ADSL Compatible Loop (Nonrecurring w/o LMU)- Disconnect	TN-xdsl.xls
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A.7.6	2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/o LMU)	TN-xdsl.xls
A.7.598	2-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Testing	TN-xdsl.xls
A.7.599	2-Wire HDSL Compatible Loop (Nonrecurring w/ LMU)- Disconnect	TN-xdsl.xls
A.7.698	2-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Testing	TN-xdsl.xls
A.7.699	2-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Disconnect	TN-xdsl.xls
A.8	**4-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP**	
A.8.5	4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/ LMU)	TN-xdsl.xls
A.8.6	4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/o LMU)	TN-xdsl.xls
A.8.598	4-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Testing	TN-xdsl.xls
A.8.599	4-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Disconnect	TN-xdsl.xls
A.8.698	4-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Testing	TN-xdsl.xls
A.8.699	4-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Disconnect	TN-xdsl.xls
A.9	**4-WIRE DS1 DIGITAL LOOP**	
A.9.21	Sub-Loop Feeder Per 4-Wire DS1 Digital Loop	4wds1fdr.xls
A.9.2198	Sub-Loop Feeder Per 4-Wire DS1 Digital Loop - Testing	4wds1fdr.xls
A.9.2199	Sub-Loop Feeder Per 4-Wire DS1 Digital Loop - Disconnect	4wds1fdr.xls
A.12	**CONCENTRATION PER SYSTEM PER FEATURE ACTIVATED (OUTSIDE CENTRAL OFFICE)**	
A.12.1	Unbundled Loop Concentration - System A (TR008)	USLC-OUT.xls
A.12.2	Unbundled Loop Concentration - System B (TR008)	USLC-OUT.xls
A.12.3	Unbundled Loop Concentration - System A (TR303)	USLC-OUT.xls
A.12.4	Unbundled Loop Concentration - System B (TR303)	USLC-OUT.xls
A.12.5	Unbundled Sub-loop Concentration - USLC Feeder Interface	4WDS1slc.xls
A.12.6	Unbundled Loop Concentration - POTS Card	USLC-OUT.xls
A.12.7	Unbundled Loop Concentration - ISDN (Brite Card)	USLC-OUT.xls
A.12.8	Unbundled Loop Concentration - SPOTS Card	USLC-OUT.xls
A.12.9	Unbundled Loop Concentration - Specials Card	USLC-OUT.xls
A.12.10	Unbundled Loop Concentration - TEST CIRCUIT Card	USLC-OUT.xls
A.12.11	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data	USLC-OUT.xls
A.12.199	Unbundled Loop Concentration - System A (TR008) - Disconnect	USLC-OUT.xls
A.12.299	Unbundled Loop Concentration - System B (TR008) - Disconnect	USLC-OUT.xls
A.12.399	Unbundled Loop Concentration - System A (TR303) - Disconnect	USLC-OUT.xls
A.12.499	Unbundled Loop Concentration - System B (TR303) - Disconnect	USLC-OUT.xls
A.12.598	Unbundled Sub-loop Concentration - USLC Feeder Interface - Testing	4WDS1slc.xls
A.12.599	Unbundled Sub-loop Concentration - USLC Feeder Interface - Disconnect	4WDS1slc.xls
A.12.698	Unbundled Loop Concentration - POTS Card - Testing	USLC-OUT.xls
A.12.699	Unbundled Loop Concentration - POTS Card - Disconnect	USLC-OUT.xls
A.12.798	Unbundled Loop Concentration - ISDN (Brite Card) - Testing	USLC-OUT.xls
A.12.799	Unbundled Loop Concentration - ISDN (Brite Card) - Disconnect	USLC-OUT.xls
A.12.898	Unbundled Loop Concentration - SPOTS Card - Testing	USLC-OUT.xls
A.12.899	Unbundled Loop Concentration - SPOTS Card - Disconnect	USLC-OUT.xls
A.12.998	Unbundled Loop Concentration - Specials Card - Testing	USLC-OUT.xls

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A.12.1098	Unbundled Loop Concentration - TEST CIRCUIT Card - Testing	USLC-OUT.xls
A.12.1099	Unbundled Loop Concentration - TEST CIRCUIT Card - Disconnect	USLC-OUT.xls
A.12.1198	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data - Testing	USLC-OUT.xls
A.12.1199	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data - Disconnect	USLC-OUT.xls
A.13	**2-WIRE COPPER LOOP**	
A.13.1	2-Wire Copper Loop - short	TN-xdsl.xls
A.13.7	2-Wire Copper Loop - long	TN-xdsl.xls
A.13.8	2-Wire Copper Loop - short (Nonrecurring w/ LMU)	TN-xdsl.xls
A.13.9	2-Wire Copper Loop - short (Nonrecurring w/o LMU)	TN-xdsl.xls
A.13.10	2-Wire Copper Loop - long (Nonrecurring w/ LMU)	TN-xdsl.xls
A.13.11	2-Wire Copper Loop - long (Nonrecurring w/o LMU)	TN-xdsl.xls
A.13.898	2-Wire Copper Loop - short (Nonrecurring w/ LMU) - Testing	TN-xdsl.xls
A.13.899	2-Wire Copper Loop - short (Nonrecurring w/ LMU) - Disconnect	TN-xdsl.xls
A.13.998	2-Wire Copper Loop - short (Nonrecurring w/o LMU) - Testing	TN-xdsl.xls
A.13.999	2-Wire Copper Loop - short (Nonrecurring w/o LMU) - Disconnect	TN-xdsl.xls
A.13.1098	2-Wire Copper Loop - long (Nonrecurring w/ LMU) - Testing	TN-xdsl.xls
A.13.1099	2-Wire Copper Loop - long (Nonrecurring w/ LMU) - Disconnect	TN-xdsl.xls
A.13.1198	2-Wire Copper Loop - long (Nonrecurring w/o LMU) - Testing	TN-xdsl.xls
A.13.1199	2-Wire Copper Loop - long (Nonrecurring w/o LMU) - Disconnect	TN-xdsl.xls
A.14	**4-WIRE COPPER LOOP**	
A.14.1	4-Wire Copper Loop - short	TN-xdsl.xls
A.14.7	4-Wire Copper Loop - long	TN-xdsl.xls
A.14.8	4-Wire Copper Loop - short (Nonrecurring w/ LMU)	TN-xdsl.xls
A.14.9	4-Wire Copper Loop - short (Nonrecurring w/o LMU)	TN-xdsl.xls
A.14.10	4-Wire Copper Loop - long (Nonrecurring w/ LMU)	TN-xdsl.xls
A.14.11	4-Wire Copper Loop - long (Nonrecurring w/o LMU)	TN-xdsl.xls
A.14.898	4-Wire Copper Loop - short (Nonrecurring w/ LMU) - Testing	TN-xdsl.xls
A.14.899	4-Wire Copper Loop - short (Nonrecurring w/ LMU) - Disconnect	TN-xdsl.xls
A.14.998	4-Wire Copper Loop - short (Nonrecurring w/o LMU) - Testing	TN-xdsl.xls
A.14.999	4-Wire Copper Loop - short (Nonrecurring w/o LMU) - Disconnect	TN-xdsl.xls
A.14.1098	4-Wire Copper Loop - long (Nonrecurring w/ LMU) - Testing	TN-xdsl.xls
A.14.1099	4-Wire Copper Loop - long (Nonrecurring w/ LMU) - Disconnect	TN-xdsl.xls
A.14.1198	4-Wire Copper Loop - long (Nonrecurring w/o LMU) - Testing	TN-xdsl.xls
A.14.1199	4-Wire Copper Loop - long (Nonrecurring w/o LMU) - Disconnect	TN-xdsl.xls
A.15	**UNBUNDLED NETWORK TERMINATING WIRE (NTW)**	
A.15.1	Unbundled Network Terminating Wire (NTW) per Pair	TN-ntw.xls
A.15.199	Unbundled Network Terminating Wire (NTW) per Pair - Disconnect	TN-ntw.xls
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A.16.2	High Capacity Unbundled Local Loop - DS3 - Per Mile	ds3ull.xls
A.16.3	High Capacity Unbundled Local Loop -DS3 -Incremental Cost - Manual Svc Order vs. Electronic	ds3ull.xls
A.16.4	High Capacity Unbundled Local Loop - OC3 - Facility Termination	oc3ull.xls

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A.16.6	High Capacity Unbundled Local Loopl - OC3 - Incremental Cost Manual Svc Order vs Electronic	oc3ull.xls
A.16.7	High Capacity Unbundled Local Loop - OC12 - Facility Termination	oc12ull.xls
A.16.8	High Capacity Unbundled Local Loop - OC12 - Per Mile	oc12ull.xls
A.16.9	High Capacity Unbundled Local Loop -OC12 - Incremental Cost - Manual Svc Order vs. Electronic	oc12ull.xls
A.16.10	High Capacity Unbundled Local Loop - OC48 - Facility Termination	oc48ull.xls
A.16.11	High Capacity Unbundled Local Loop - OC48 - Per Mile	oc48ull.xls
A.16.12	High Capacity Unbundled Local Loop - OC48 - Incremental Cost - Manual Svc Order vs. Electronic	oc48ull.xls
A.16.13	High Capacity Unbundled Local Loop - OC48 - Interface OC12 on OC48	oc48ull.xls
A.16.14	High Capacity Unbundled Local Loop - OC48 - Interface-Incremental Cost-Manual Svc Order vs Electronic	oc48ull.xls
A.16.15	High Capacity Unbundled Local Loop - STS-1 - Facility Termination	STSULL.XLS
A.16.16	High Capacity Unbundled Local Loop - STS-1 - Per Mile	STSULL.XLS
A.16.17	High Capacity Unbundled Local Loop - STS-1 - Incremental Cost - Manual Svc. Order vs. Electronic	STSULL.XLS
A.16.198	High Capacity Unbundled Local Loop - DS3 - Facility Termination - Testing	ds3ull.xls
A.16.199	High Capacity Unbundled Local Loop - DS3 - Facility Termination - Disconnect	ds3ull.xls
A.16.399	High Capacity Unbundled Local Loop -DS3 -Incremental Cost - Manual Svc Order vs. Electronic - Disconnect	ds3ull.xls
A.16.498	High Capacity Unbundled Local Loop - OC3 - Facility Termination - testing	oc3ull.xls
A.16.499	High Capacity Unbundled Local Loop - OC3 - Facility Termination - Disconnect	oc3ull.xls
A.16.699	High Capacity Unbundled Local Loopl - OC3 - Inc. Cost Man. Svc Order vs Electronic - Disconnect	oc3ull.xls
A.16.798	High Capacity Unbundled Local Loop - OC12 - Facility Termination - Testing	oc12ull.xls
A.16.799	High Capacity Unbundled Local Loop - OC12 - Facility Termination - Disconnect	oc12ull.xls
A.16.999	High Capacity Unbundled Local Loop -OC12 - Inc. Cost - Man. Svc Order vs. Electronic - Disconnect	oc12ull.xls
A.16.1098	High Capacity Unbundled Local Loop - OC48 - Facility Termination - Testing	oc48ull.xls
A.16.1099	High Capacity Unbundled Local Loop - OC48 - Facility Termination - Disconnect	oc48ull.xls
A.16.1598	High Capacity Unbundled Local Loop - STS-1 - Facility Termination - Testing	STSULL.XLS
A.16.1599	High Capacity Unbundled Local Loop - STS-1 - Facility Termination - Disconnect	STSULL.XLS
A.16.1799	High Capacity Unbundled Local Loop - STS-1 - Inc. Cost - Man. Svc. Order vs. Electronic - Disconnect	STSULL.XLS
A.16.1398	High Capacity Unbundled Local Loop - OC48 - Interface OC12 on OC48 - Testing	oc48ull.xls
A.16.1399	High Capacity Unbundled Local Loop - OC48 - Interface OC12 on OC48 - Disconnect	oc48ull.xls

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A.17	**LOOP CONDITIONING**	
A.17.1	Unbundled Loop Modification - Load Coil / Equipment Removal - short	TN_MOD.xls
A.17.2	Unbundled Loop Modification - Load Coil / Equipment Removal - long - First and Additional	TN_MOD.xls
A.17.3	Unbundled Loop Modification - Bridged Tap Removal	TN_MOD.xls
A.17.4	Unbundled Loop Modification - Additive	TN_MOD.xls
A.17.5	Unbundled Sub-Loop Modification - 2W/4W Copper Distribution Load Coil/Equipment Removal First/Add'l	TN_MOD.xls
A.17.6	Unbundled Sub-Loop Modification - 2W/4W Copper Distribution Bridged Tap Removal First/Add'l	TN_MOD.xls
A.19	**LOOP TESTING BEYOND VOICE GRADE**	
A.19.1	Loop Testing Beyond VG - Basic per 1/2 hour	TN_TEST.xls
A.19.2	Loop Testing Beyond VG - Overtime per 1/2 hour	TN_TEST.xls
A.19.3	Loop Testing Beyond VG - Premium per 1/2 hour	TN_TEST.xls

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D.5.8	Local Channel - Dedicated - DS3 - Facility Termination	ds3_lc.xls
D.5.9	Local Channel - Dedicated - DS3 -Incremental Cost - Manual Svc Order vs. Electronic	ds3_lc.xls
D.5.10	Local Channel - Dedicated - OC3 - Per Mile	oc3_lc.xls
D.5.11	Local Channel - Dedicated - OC3 - Facility Termination	oc3_lc.xls
D.5.12	Local Channel - Dedicated - OC3 - Incremental Cost - Manual Svc Order vs. Electronic	oc3_lc.xls
D.5.13	Local Channel - Dedicated - OC12 - Per Mile	oc12_lc.xls
D.5.14	Local Channel - Dedicated - OC12 - Facility Termination	oc12_lc.xls
D.5.15	Local Channel - Dedicated - OC12 - Incremental Cost - Manual Svc Order vs. Electronic	oc12_lc.xls
D.5.16	Local Channel - Dedicated - OC48 - Per Mile	oc48_lc.xls
D.5.17	Local Channel - Dedicated - OC48 - Facility Termination	oc48_lc.xls
D.5.18	Local Channel - Dedicated - OC48 - Incremental Cost - Manual Svc Order vs. Electronic	oc48_lc.xls
D.5.19	Local Channel - Dedicated - OC48 - Interface OC12 on OC48	oc48_lc.xls
D.5.20	Local Channel - Dedicated - OC48 - Interface - Inc. Cost - Man. Svc Order vs. Electronic	oc48_lc.xls
D.5.21	Local Channel - Dedicated - STS-1 - Facility Termination	sts_lc.xls
D.5.22	Local Channel - Dedicated - STS-1 - Incremental Cost - Manual Svc. Order vs. Electronic	sts_lc.xls
D.5.23	Local Channel - Dedicated - STS-1 -Per Mile	sts_lc.xls
D.5.898	Local Channel - Dedicated - DS3 - Facility Termination - Testing	ds3_lc.xls

D.5.899	Local Channel - Dedicated - DS3 - Facility Termination - Disconnect	ds3_lc.xls
D.5.999	Local Channel - Dedicated - DS3 -Inc. Cost - Man. Svc Order vs. Electronic - Disconnect	ds3_lc.xls
D.5.1198	Local Channel - Dedicated - OC3 - Facility Termination - Testing	oc3_lc.xls
D.5.1199	Local Channel - Dedicated - OC3 - Facility Termination - Disconnect	oc3_lc.xls
D.5.1299	Local Channel - Dedicated - OC3 - Inc. Cost - Man. Svc Order vs. Electronic - Disconnect	oc3_lc.xls
D.5.1498	Local Channel - Dedicated - OC12 - Facility Termination - Testing	oc12_lc.xls
D.5.1499	Local Channel - Dedicated - OC12 - Facility Termination - Disconnect	oc12_lc.xls
D.5.1599	Local Channel - Dedicated - OC12 - Inc. Cost - Man. Svc Order vs. Electronic - Disconnect	oc12_lc.xls
D.5.1798	Local Channel - Dedicated - OC48 - Facility Termination - Testing	oc48_lc.xls
D.5.1799	Local Channel - Dedicated - OC48 - Facility Termination - Disconnect	oc48_lc.xls
D.5.1899	Local Channel - Dedicated - OC48 -Inc. Cost - Man. Svc Order vs. Electronic - Disconnect	oc48_lc.xls
D.5.1998	Local Channel - Dedicated - OC48 - Interface OC12 on OC48 - Testing	oc48_lc.xls
D.5.1999	Local Channel - Dedicated - OC48 - Interface OC12 on OC48 - Disconnect	oc48_lc.xls
D.5.2099	Local Channel - Dedicated - OC48 - Interface -Inc. Cost - Man. Svc Order vs. Elect.-Disconnect	oc48_lc.xls
D.5.2199	Local Channel - Dedicated - STS-1 - Facility Termination - Disconnect	sts_lc.xls
D.5.2198	Local Channel - Dedicated - STS-1 - Facility Termination - Testing	sts_lc.xls
D.5.2299	Local Channel - Dedicated - STS-1 - Inc. Cost - Man. Svc Order vs. Electronic - Disconnect	sts_lc.xls
D.6	**INTEROFFICE TRANSPORT - DEDICATED - DS3**	
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D.6.2	Interoffice Transport - Dedicated - DS3 - Facility Termination	Io_ds3.xls
D.6.3	Interoffice Transport - DS3 - Incremental Cost - Manual Svc Order vs. Electronic	Io_ds3.xls
D.6.298	Interoffice Transport - Dedicated - DS3 - Facility Termination - Testing	Io_ds3.xls
D.6.299	Interoffice Transport - Dedicated - DS3 - Facility Termination - Disconnect	Io_ds3.xls
D.6.399	Interoffice Transport - DS3 - Inc. Cost - Man. Svc Order vs. Elect. - Disconnect	Io_ds3.xls
D.7	**INTEROFFICE TRANSPORT - DEDICATED - OC3**	
D.7.1	Interoffice Transport - Dedicated - OC3 - Per Mile	Io_oc_3.xls
D.7.2	Interoffice Transport - Dedicated - OC3 - Facility Termination	Io_oc_3.xls
D.7.3	Interoffice Transport - Dedicated - OC3 - Incremental Cost - Manual Svc Order vs. Electronic	Io_oc_3.xls
D.7.298	Interoffice Transport - Dedicated - OC3 - Facility Termination - Testing	Io_oc_3.xls
D.7.299	Interoffice Transport - Dedicated - OC3 - Facility Termination - Disconnect	Io_oc_3.xls
D.7.399	Interoffice Transport - Dedicated - OC3 - Inc. Cost - Man. Svc Order vs. Elect. - Disconnect	Io_oc_3.xls
D.8	**INTEROFFICE TRANSPORT - DEDICATED - OC12**	
D.8.1	Interoffice Transport - Dedicated - OC12 - Per Mile	Io_oc_12.xls
D.8.2	Interoffice Transport - Dedicated - OC12 - Facility Termination	Io_oc_12.xls

D.8.3	Interoffice Transport - Dedicated - OC12 - Incremental Cost - Manual Svc Order vs. Electronic	Io_oc_12.xls
D.8.298	Interoffice Transport - Dedicated - OC12 - Facility Termination - Testing	Io_oc_12.xls
D.8.299	Interoffice Transport - Dedicated - OC12 - Facility Termination - Disconnect	Io_oc_12.xls
D.8.399	Interoffice Transport - Dedicated - OC12 - Inc. Cost - Man. Svc Order vs. Elect. - Disconnect	Io_oc_12.xls
D.9	**INTEROFFICE TRANSPORT - DEDICATED - OC48**	
D.9.1	Interoffice Transport - Dedicated - OC48 - Per Mile	Io_oc_48.xls
D.9.2	Interoffice Transport - Dedicated - OC48 - Facility Termination	Io_oc_48.xls
D.9.3	Interoffice Transport - Dedicated - OC48 - Incremental Cost - Manual Svc. Order vs. Electronic	Io_oc_48.xls
D.9.4	Interoffice Transport - Dedicated - OC48 - Interface OC12 on OC48	Io_oc_48.xls
D.9.5	Interoffice Transport - OC48 Interface - Incremental Cost-Manual Svc Order vs Elec	Io_oc_48.xls
D.9.298	Interoffice Transport - Dedicated - OC48 - Facility Termination - Testing	Io_oc_48.xls
D.9.299	Interoffice Transport - Dedicated - OC48 - Facility Termination - Disconnect	Io_oc_48.xls
D.9.399	Interoffice Transport - Dedicated - OC48 - Inc. Cost - Man. Svc. Order vs. Elect. - Disconnect	Io_oc_48.xls
D.9.498	Interoffice Transport - Dedicated - OC48 - Interface OC12 on OC48 - Testing	Io_oc_48.xls
D.9.499	Interoffice Transport - Dedicated - OC48 - Interface OC12 on OC48 - Disconnect	Io_oc_48.xls
D.9.599	Interoffice Transport - OC48 Interface - Inc. Cost-Man. Svc Order vs Elec - Disconnect	Io_oc_48.xls
D.10	**INTEROFFICE TRANSPORT - DEDICATED - STS-1**	
D.10.1	Interoffice Transport - Dedicated - STS-1 - Per Mile	IO_STS-1.XLS
D.10.2	Interoffice Transport - Dedicated - STS-1 - Facility Termination	IO_STS-1.XLS
D.10.3	Interoffice Transport - STS-1 - Incremental Cost - Manual Svc Order vs. Electronic	IO_STS-1.XLS
D.10.298	Interoffice Transport - Dedicated - STS-1 - Facility Termination - Testing	IO_STS-1.XLS
D.10.299	Interoffice Transport - Dedicated - STS-1 - Facility Termination - Disconnect	IO_STS-1.XLS
D.10.399	Interoffice Transport - STS-1 - Incremental Cost - Manual Svc Order vs. Electronic	IO_STS-1.XLS
D.12	**INTEROFFICE TRANSPORT - DEDICATED - 4-WIRE VOICE GRADE**	
D.12.1	Interoffice Transport - Dedicated - 4-Wire Voice Grade - Per Mile	IO_VG4.XLS
D.12.2	Interoffice Transport - Dedicated - 4-Wire Voice Grade - Facility Termination	IO_VG4.XLS
D.12.3	Interoffice Transpor t- Dedicated - 4-Wire VG-Incremental Cost-Manual Svc Order vs Elec	IO_VG4.XLS
D.12.298	Interoffice Transport - Dedicated - 4-Wire Voice Grade - Facility Termination - Testing	IO_VG4.XLS
D.12.299	Interoffice Transport - Dedicated - 4-Wire Voice Grade - Facility Termination - Disconnect	IO_VG4.XLS

D.12.399	Interoffice Transport - Dedicated - 4-Wire VG-Inc. Cost-Man. Svc Order vs Elec - Disconnect	IO_VG4.XLS
E.0	**SIGNALING NETWORK, DATA BASES, & SERVICE MANAGEMENT SYSTEMS**	
E.3	**CCS7 SIGNALING TRANSPORT**	
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E.3.9	CCS7 Signaling Usage, Per ISUP Message (Same as E.3.3)	See Note 1
E.3.10	CCS7 Signaling Usage Surrogate, per link (Same as E.3.5)	See Note 1
E.3.11	CCS7 Signaling Point Code, Establishment or Change, per STP affected	CCS7_TN.XLS
E.4	**BELLSOUTH CALLING NAME (CNAM) DATABASE (DB) SERVICE**	
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E.4.2	CNAM for Non DB Owners - Service Establishment, Manual	TNcnam.xls
E.4.3	CNAM for DB Owners Service Provisioning with Point Code Establishment	TNcnam.xls
E.4.4	CNAM for Non DB Owners Service Provisioning with Point Code Establishment	TNcnam.xls
E.4.5	CNAM for DB and Non DB Owners, Per Query	TNcnam.xls
E.4.199	CNAM for DB Owners - Service Establishment, Manual - Disconnect	TNcnam.xls
E.4.299	CNAM for Non DB Owners - Service Establishment, Manual - Disconnect	TNcnam.xls
E.4.399	CNAM for DB Owners Service Provisioning with Point Code Establishment - Disconnect	TNcnam.xls
E.4.499	CNAM for Non DB Owners Service Provisioning with Point Code Establishment - Disconnect	TNcnam.xls
E.5	**BELLSOUTH ACCESS TO 911 SERVICE**	
E.5.1	BellSouth E911 Access - Local Channel - Dedicated - 2-wire Voice Grade (Same as D.5.1)	See Note 1
E.5.2	BellSouth E911 Access - Interoffice Transport - Dedicated - 2-wire Voice Grade Per Mile (Same as D.2.1)	See Note 1
E.5.3	BellSouth E911 Access - Interoffice Transport - Dedicated - 2-wire Voice Grade Per Facility Termination (Same as D.2.2)	See Note 1
E.5.4	BellSouth E911 Access - Local Channel - Dedicated - DS1 (Same as D.5.3)	See Note 1
E.5.5	BellSouth E911 Access - Interoffice Transport - Dedicated - DS1 Per Mile (Same as D.4.1)	See Note 1
E.5.6	BellSouth E911 Access - Interoffice Transport - Dedicated - DS1 Per Facility Termination (Same as D.4.2)	See Note 1
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G.0	**SELECTIVE ROUTING**	
G.11	**SELECTIVE CARRIER ROUTING (AIN SOLUTION)**	
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G.11.2	Service Establishment per End Office	Tnscr.xls
G.11.4	Query Cost	Tnscr.xls
G.11.199	Service Establishment per CLEC - Disconnect	Tnscr.xls
G.11.299	Service Establishment per End Office - Disconnect	Tnscr.xls
H.0	**COLLOCATION**	
H.3	**ASSEMBLY POINT**	
H.3.1	Assembly Point: 2-Wire Cross Connects	TNAsmbPt.xls
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H.3.4	Assembly Point 2-Wire Cross Connect Incremental Cost Manual vs. Electronic Service Order	TNAsmbPt.xls
H.3.5	Assembly Point 4-Wire Cross Connect Incremental Cost Manual vs. Electronic Service Order	TNAsmbPt.xls
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H.3.198	Assembly Point: 2-Wire Cross Connects - Testing	TNAsmbPt.xls
H.3.199	Assembly Point: 2-Wire Cross Connects - Disconnect	TNAsmbPt.xls
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H.3.299	Assembly Point: 4-Wire Cross Connects - Disconnect	TNAsmbPt.xls
H.3.398	Assembly Point: DS-1 Cross Connects - Testing	TNAsmbPt.xls
H.3.399	Assembly Point: DS-1 Cross Connects - Disconnect	TNAsmbPt.xls
H.3.499	Assembly Point 2-Wire Cross Connect Inc. Cost Man. vs. Electronic Service Order - Disconnect	TNAsmbPt.xls
H.3.599	Assembly Point 4-Wire Cross Connect Inc. Cost Man. vs. Electronic Service Order - Disconnect	TNAsmbPt.xls
H.3.699	Assembly Point DS1 Cross Connect Inc. Cost Man. vs. Electronic Service Order - Disconnect	TNAsmbPt.xls
H.6	**Physical Collocation In The Remote Terminal (RT)**	
H.6.1	Physical Collocation In The Remote Terminal - Application Fee	TNcollRT.xls
H.6.2	Physical Collocation In The Remote Terminal - Per Rack/Bay	TNcollRT.xls
H.6.3	Physical Collocation In The Remote Terminal - Security Access Key	TNcollRT.xls
H.6.4	Physical Collocation in the RT - Space Availability Report per premises requested	TNcollRT.xls
H.6.5	Physical Collocation in the RT- Remote Site CLLI Code Request, per CLLI Code Requested	TNcollRT.xls
H.6.199	Physical Collocation In The Remote Terminal - Application Fee - Disconnect	TNcollRT.xls
J.0	**OTHER**	
J.1	**DARK FIBER**	
J.1.2	Dark Fiber, Per Four Fiber Strands, Per Route Mile or Fraction Thereof - Local Channel/Loop	dkfbrll.xls

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J.1.3	Dark Fiber, Per Four Fiber Strands, Per Route Mile or Fraction Thereof - Interoffice	dkfbriof.xls
J.1.298	Dark Fiber, Per Four Fiber Strands, Per Rt Mile or Fraction Thereof - LC/Loop - Testing	dkfbrll.xls
J.1.299	Dark Fiber, Per Four Fiber Strands, Per Rt Mile or Fraction Thereof - LC/Loop - Disconnect	dkfbrll.xls
J.1.398	Dark Fiber, Per Four Fiber Strands, Per Route Mile or Fraction Thereof - Interoffice - Testing	dkfbriof.xls
J.1.399	Dark Fiber, Per Four Fiber Strands, Per Rt Mile or Fraction Thereof - Interoffice - Disconnect	dkfbriof.xls
J.3	**LOOP MAKE-UP**	
J.3.1	Mechanized Loop Make-up	TnmImu.xls
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J.4	**LINE SHARING SPLITTER IN THE CENTRAL OFFICE**	
J.4.1	Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office	TnLineSh.xls
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J.4.3	Line Sharing Splitter - per Line Activation in the Central Office	TnLineSh.xls
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J.4.199	Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office - Disconnect	TnLineSh.xls
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J.4.398	Line Sharing Splitter - per Line Activation in the Central Office - Testing	TnLineSh.xls
J.4.399	Line Sharing Splitter - per Line Activation in the Central Office - Disconnect	TnLineSh.xls
J.4.498	Line Sharing Splitter - per Subsequent Activity per Line Arrangement - Testing	TnLineSh.xls
J.4.499	Line Sharing Splitter - per Subsequent Activity per Line Arrangement - Disconnect	TnLineSh.xls
J.5	**ACCESS TO THE DCS**	
J.5.1	Customer Reconfiguration Establishment	TNDs1Ds3.xls
J.5.2	DS1 DCS Termination with DS0 Switching	TNDs1Ds3.xls
J.5.3	DS1 DCS Termination with DS1 Switching	TNDs1Ds3.xls
J.5.4	DS3 DCS Termination with DS1 Switching	TNDs1Ds3.xls
J.5.199	Customer Reconfiguration Establishment - Disconnect	TNDs1Ds3.xls
J.5.298	DS1 DCS Termination with DS0 Switching - Testing	TNDs1Ds3.xls
J.5.299	DS1 DCS Termination with DS0 Switching- Disconnect	TNDs1Ds3.xls
J.5.398	DS1 DCS Termination with DS1 Switching - Testing	TNDs1Ds3.xls
J.5.399	DS1 DCS Termination with DS1 Switching- Disconnect	TNDs1Ds3.xls
J.5.498	DS3 DCS Termination with DS1 Switching - Testing	TNDs1Ds3.xls
J.5.499	DS3 DCS Termination with DS1 Switching- Disconnect	TNDs1Ds3.xls
L.0	**ACCESS DAILY USAGE FILE (ADUF)**	

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L.1	**ACCESS DAILY USAGE FILE (ADUF)**	
L.1.1	ADUF, Message Processing, per message	ADUF.xls
L.1.3	ADUF, Data Transmission (CONNECT:DIRECT), per message	TNCD2.xls
M.0	**DAILY USAGE FILES**	
M.1	**ENHANCED OPTIONAL DAILY USAGE FILE**	
M.1.1	Enhanced Optional Daily usage File: Message Processing, Per Message	eoduf.xls

Note 1: These elements were not processed through the BellSouth Cost Calculator because the costs are the same as other interoffice elements. For a mapping to these elements, see the description of the elements.

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NARRATIVES

A.2	UNBUNDLED SUB-LOOP (USL)
A.2.11	SUB-LOOP DISTRIBUTION PER 4-WIRE ANALOG VOICE GRADE LOOP
A.2.14	2-WIRE INTRABUILDING NETWORK CABLE (INC)
A.2.15	4-WIRE INTRABUILDING NETWORK CABLE (INC)
A.2.17	SUB-LOOP PER CROSSBOX LOCATION-CLEC FEEDER FACILITY SET-UP
A.2.18	SUB-LOOP PER CROSSBOX LOCATION - PER 25 -PAIR PANEL SET-UP
A.2.19	SUB-LOOP - PER BUILDING EQUIPMENT ROOM - CLEC FEEDER FACILITY SET-UP
A.2.20	SUB-LOOP - PER BUILDING EQUIPMENT ROOM - PER 25 PAIR PANEL SET UP
A.2.21	SUB-LOOP PER CROSSBOX LOCATION-CLEC DISTRIBUTION FACILITY SET-UP
A.2.24	SUB-LOOP-PER 4-WIRE ANALOG VOICE GRADE LOOP/ FEEDER ONLY
A.2.25	SUB-LOOP-PER 2-WIRE ISDN DIGITAL GRADE LOOP/ FEEDER ONLY
A.2.29	SUB-LOOP-PER 19/56/64 Kbps DIGITIAL GRADE LOOP/ FEEDER ONLY
A.2.30	SUB-LOOP-PER 2-WIRE COPPER LOOP / FEEDER ONLY
A.2.32	SUB-LOOP-PER 4-WIRE COPPER LOOP/ FEEDER ONLY
A.2.40	SUB-LOOP-PER 2-WIRE COPPER LOOP/ DISTRIBUTION ONLY
A.2.42	SUB-LOOP-PER 4 WIRE COPPER LOOP/ DISTRIBUTION ONLY
A.9.2	SUB-LOOP FEEDER PER 4-WIRE DS1 DIGITAL LOOP

Element Description

The Unbundled Sub-Loops are 2-wire or 4-wire components of a loop that can be technically unbundled. Sub-Loops consist of Sub-Loop Feeder (USL-F), Sub-Loop Distribution (USL-D), and Intrabuilding Network Cable (INC). USL-F is also provided for the DS1 digital loop.

Sub-loop feeder is the physical transmission facility (or channel or group of channels on such facility) which extends from the main distributing frame connection in the end office to a cross-connect panel within the BellSouth remote terminal, cross-connect box, or other remote structure. If the loop is served by digital loop carrier, a central office digital loop carrier terminal is required to convert the digital signal to voice grade analog for delivery to the CLEC at the remote terminal or cross-connect box. A test point is provisioned with sub-loop feeder for remote test access.

Sub-loop distribution is the physical transmission facility from a BellSouth remote terminal or other cross-connect device to the customer's premises (i.e., NID). This

facility will allow an end user to send and receive telecommunications traffic when it is properly connected to other required network elements, such as, loop feeder facility. This facility includes a Network Interface Device at the customer's location in the loop.

A CLEC will provision a loop feeder system (including any needed concentration devices and cross-connection panels) or a loop distribution system (including drop/NID and customer premises devices) to within a reasonable distance of a BellSouth cross-connect device. The BellSouth cross-connect device could be located within a remote terminal, stand-alone cross-connect box, pole, pedestal in the field or in the equipment room of a building. The CLEC cable should be of sufficient length to reach the existing BellSouth cross-connect device's splice point or termination point. BellSouth will terminate CLEC facilities in 25 pair increments.

In a scenario that involves connection at BellSouth's cross-connect device in the field, the CLEC must provide a cable from its feeder or distribution system to the BellSouth cross-connect device. BellSouth will terminate the CLEC cable to an existing cross-connect panel within the BellSouth cross-connect device. If the cross-connect device does not have any spare cross-connect panels then the CLEC will be required to pay special construction charges to expand/replace the cross connect facility to accommodate the CLEC request. BellSouth will then cross-connect the CLEC feeder or distribution facility to the BellSouth unbundled sub-loop.

In those cases where the BellSouth cross-connect device is located in the building equipment room, BellSouth will install a cross-connect panel on which the USL will be accessed. The CLEC will be responsible for delivering its feeder facility to the cross-connect panel. BellSouth will connect the CLEC feeder facility to the cross-connect panel. When the CLEC cross connects its facility to the BellSouth USL, it will provide a pathway from the CLEC's feeder system, through the BellSouth cross-connect device, to the BellSouth loop distribution facility. At this point, the CLEC would be responsible for ensuring that its feeder system is connected to its switch or other legitimate telecommunications providing equipment.

BellSouth will also provide sub-loop interconnection to the Intrabuilding Network Cable (INC) (riser cable). INC is the distribution facility inside a subscriber's building or between buildings on one customer's same premises (continuous property not separated by a public street or road). USL-INC (riser cable) will include the facility from the cross-connect device in the building equipment room up to and including the end-user's point of demarcation.

Interconnection with USL-INC (riser cable) will be at BellSouth's cross-connect device located in the building equipment room. BellSouth will install a cross-connect panel near BellSouth's cross-connect device on which the USL-INC (riser cable) will be accessed. The CLEC will be responsible for delivering its feeder facility to the cross-connect panel.

BellSouth will connect the CLEC feeder facility to the cross-connect panel. BellSouth will then cross connect the CLEC facility to the BellSouth USL-INC (riser cable).

Study Technique

The Loop Model is used to develop cost for these sub-loops. Material prices for digital loop carrier and multiplexers are provided by the DLC Price Calculator and the Loop Multiplexer Price Calculator.

Microsoft Excel spreadsheets are used to develop nonrecurring cost analyses.

Specific Study Assumptions

The nonrecurring costs associated with a cross-box location or a building equipment room set-up are separate from the provisioning nonrecurring costs. The set-up costs include the following activities and assumptions:

- Service inquiry required to determine availability of facilities
- Outside Plant Engineering to validate cross-connect locations and information
- Assignment to post records and assign panel/terminal
- Contract and/or Construction Labor to set-up cross-box or building terminal
- 25-pair panel equipment for a building equipment room

The nonrecurring costs associated with provisioning for Sub-Loop Feeder include the following activities and assumptions:

- The UNEC coordinates the disconnect, remote call forwarding (RCF), and unbundled loop orders for a reused facility. The Sub-Loop Feeder elements are expected to be reused from existing facilities 10% of the time.
- Designed circuit with a Design Layout Record
- 100% dispatch rate for outside plant
- Special services work groups

The nonrecurring costs for 2-Wire and 4-Wire Sub-Loop Distribution Voice Grade Loops and 2-Wire and 4-Wire Unbundled Copper Loops Feeder and Distribution include the following activities and assumptions:

- Coordination of disconnect, RCF, and unbundled loop orders by the UNE Center for reused facilities charged as a separate element
- 100% dispatch rate for outside plant

- Special service work groups

NETWORK INTERFACE DEVICE ACCESS

A.2.13 NETWORK INTERFACE DEVICE CROSS CONNECT
A.2.44 NETWORK INTERFACE DEVICE (NID) - 2 LINE
A.2.45 NETWORK INTERFACE DEVICE (NID) - 6 LINE

Element Description

NID access is designed to allow a CLEC the opportunity to connect its loop to the inside wiring portion of BellSouth's NID. It is expected that the CLEC will provision a loop and a NID to the customer's location. In these circumstances, the CLEC may perform a physical cross-connect of the inside wire to its loop. This will then provide a communication pathway from the CLEC through BellSouth's NID, to the end user's inside wire.

In those cases where BellSouth may not have a NID, but instead terminates its loops directly to the inside wire of the end user, or where the existing NID is not suitable for connection, BellSouth will install a NID so the CLEC may cross connect its loop to the BellSouth NID; and, at the CLEC's request, install a second NID for the CLEC and will provide the cross-connect from the BellSouth NID to the CLEC NID.

The NID can be a 2-line application or a 6-line application. The NID cost does not represent a building entrance or intrabuilding termination.

Study Technique

Microsoft Excel spreadsheets are used to perform these cost analyses.

Specific Study Assumptions

- The nonrecurring cost includes the following assumptions and activities:
  - NID housing and equipment
  - Work functions for assignment, dispatch, and installation/ maintenance connection and installation/maintenance travel.

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A.3 LOOP CHANNELIZATION AND CO INTERFACE (INSIDE CO)
A.3.12 UNBUNDLED LOOP CONCENTRATION – SYSTEM "A" (TR008)
A.3.13 UNBUNDLED LOOP CONCENTRATION – SYSTEM "B" (TR008)
A.3.14 UNBUNDLED LOOP CONCENTRATION – SYSTEM "A" (TR303)
A.3.15 UNBUNDLED LOOP CONCENTRATION – SYSTEM "B" (TR303)
A.3.16 UNBUNDLED LOOP CONCENTRATION – DS1 LINE INTERFACE CARD
A.3.17 UNBUNDLED LOOP CONCENTRATION – POTS CARD
A.3.18 UNBUNDLED LOOP CONCENTRATION – ISDN (BRITE CARD)
A.3.19 UNBUNDLED LOOP CONCENTRATION – SPOTS CARD
A.3.20 UNBUNDLED LOOP CONCENTRATION – SPECIALS CARD
A.3.21 UNBUNDLED LOOP CONCENTRATION – TEST CIRCUIT CARD
A.3.22 UNBUNDLED LOOP CONCENTRATION – DIGITAL 19, 56, 64 Kbps DATA

Element Description

Unbundled Loop Concentration (ULC) allows a CLEC to concentrate unbundled loops on to a DS1 level circuit within the serving wire center (SWC) where the loop terminates onto the BellSouth Main Distribution Frame (MDF).

ULC can be provided with either a TR-008 or a TR-303 interface. Each ULC System will be dedicated to a single CLEC. System A will allow a CLEC to concentrate up to 96 Unbundled Voice or Digital Loops onto multiple DS1s for the purpose of transporting the circuits to the CLEC's collocation space at a concentrated level. System B would allow the CLEC to concentrate an additional 96 Unbundled Voice or Digital Loops onto multiple DS1s to the CLEC's collocation. System B cannot exist without the corresponding System A, which shares the same dual channel bank assembly (DCBA).

The ULC Line Interface is the loop interface that provides the connection between the MDF and the concentration unit, as well as, the line card in the concentrator. One line interface is required for each loop attached to the concentration unit. The line interface is offered in six different configurations: POTS, ISDN (BRITE CARD), SPOTS, SPECIALS, TEST CIRCUIT and DIGITAL 19, 56, 64 Kbps Data.

The ULC DS1 Line Interface Card is the loop interface in the loop concentration unit. When connected to a DS1 level cross-connect, this element provides the DS1 level bandwidth from the concentrator to the CLEC's collocation space.

Study Technique

A Microsoft Excel spreadsheet is used to develop the UNE material prices.

The components of this UNE are the concentration systems, hardwire, common plug-ins, cross-connects and the working plug-ins. Various vendors supply the common plug-ins; therefore, Network provides probabilities of occurrence to apply to each type of equipment to produce a weighted material price. The material prices of each component are detailed in the Microsoft Excel spreadsheet.

A.5 UNBUNDLED DIGITAL LOOPS

A.5.6 UNIVERSAL DIGITAL CHANNEL (UDC)

Element Description

The Universal Digital Channel (UDC) represents a dedicated digital transmission facility (or channel or group of channels on such facility) which extends from the main distributing frame connection in the end office to a demarcation point at the customer's premises (i.e., the NID). These facilities are provided as a designed circuit and includes a test point.

The UDC facilities are provided in a 2-wire serving environment.

The transmission facility does not enter the BellSouth switch because it is terminated on the main distributing frame. If the loop is served by digital loop carrier, a central office digital loop carrier terminal is required to convert the digital signal to voice grade analog for delivery to the CLEC.

Study Technique

The Loop Model is used to develop the recurring cost for these loops.

Microsoft Excel spreadsheets are used to perform the nonrecurring cost analyses.

Specific Study Assumptions

The nonrecurring costs for the UDC includes the following activities and assumptions:

- Designed circuit with a Design Layout Record
- The UNEC coordinates the disconnect, remote call forwarding (RCF), and unbundled loop orders for a reused facility.
- The Sub-Loop Feeder elements are expected to be reused from existing facilities 10% of the time.
- 100% dispatch rate for outside plant
- Special services work groups

UNBUNDLED X-DSL COMPATIBLE LOOPS

A.6.5	2-WIRE ASYMMETRICAL DIGITAL SUBSCRIBER LINE (ADSL) COMPATIBLE LOOP (NONRECURRING WITH LOOP MAKE-UP)
A.6.6	2-WIRE ASYMMETRICAL DIGITAL SUBSCRIBER LINE (ADSL) COMPATIBLE LOOP (NONRECURRING WITHOUT LOOP MAKE-UP)
A.7.5	2-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP (NONRECURRING WITH LOOP MAKE-UP)
A.7.6	2-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP (NONRECURRING WITHOUT LOOP MAKE-UP)
A.8.5	4-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP (NONRECURRING WITH LOOP MAKE-UP)
A.8.6	4-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP (NONRECURRING WITHOUT LOOP MAKE-UP)

Element Description

The Unbundled X-DSL Compatible Loops include the 2-wire ADSL Compatible Loop and the 2-wire and 4-wire HDSL Compatible Loops. Each loop is offered with or without a loop make-up[1]. These elements represent a dedicated digital transmission facility (or channel or group of channels on such facility) which extends from the main distributing frame connection in the end office to a demarcation point at the customer's premises (i.e., the NID). Each of these facilities is provided as a designed circuit and includes a 2-wire or 4-wire test point. These elements represent the nonrecurring costs including loop make-up and with out a loop make-up.

These facilities are provided in either a 2-wire or 4-wire serving environment. The transmission facility does not enter the BellSouth switch because it is terminated on the main distributing frame. The ADSL-compatible and HDSL-compatible loops are non-loaded copper facilities with the following length parameters:

- The ADSL-compatible loop is a metallic facility that will be provisioned according to Revised Resistance Design guidelines. These loops can extend up to 18,000 feet in length.

[1] Pursuant to the Federal Communications Commission's 319 UNE Remand Order, and in compliance with its mandates for Operational Support Systems, BellSouth will utilize the term "Loop Make-up" in reference to its obligation to provide to competitive LECs access to the underlying loop qualification information contained in its engineering records, plant records, and other back office systems so that a requesting competitive LEC may make a determination of qualification for itself of the queried facility.

- The HDSL-compatible loop is a metallic facility that will be provisioned according to Carrier Serving Area guidelines. These loops can extend up to 12,000 feet in length.

The loops with loop make-up include a manual service inquiry process and a facility reservation. The loops without loop make-up do not include a manual service inquiry process or a facility reservation. A loop without a loop make-up is ordered when either a manual or mechanized loop make-up with reservation is ordered prior to ordering the loop.

Study Technique

Microsoft Excel spreadsheets are used to perform the nonrecurring cost analyses.

Specific Study Assumptions

The nonrecurring costs for the ADSL and HDSL compatible facilities include the following activities and assumptions:

- A manual Service Inquiry to determine availability of facilities, create a loop make-up, and reserve facilities is included in UNE elements with loop make-up.
- The UNEC coordinates the disconnect, remote call forwarding (RCF), and unbundled loop orders for a reused facility. The Sub-Loop Feeder elements are expected to be reused from existing facilities 10% of the time. 100% dispatch for outside plant
- Special services work groups

A.12 CONCENTRATION PER SYSTEM PER FEATURE ACTIVATED (OUTSIDE CENTRAL OFFICE)
A.12.1 SUB-LOOP CONCENTRATION – SYSTEM "A" (TR008)
A.12.2 SUB-LOOP CONCENTRATION – SYSTEM "B" (TR008)
A.12.3 SUB-LOOP CONCENTRATION – SYSTEM "A" (TR303)
A.12.4 SUB-LOOP CONCENTRATION – SYSTEM "B" (TR303)
A.12.5 SUB-LOOP CONCENTRATION – USLC FEEDER INTERFACE
A.12.6 SUB-LOOP CONCENTRATION – POTS CARD
A.12.7 SUB-LOOP CONCENTRATION – ISDN (BRITE CARD)
A.12.8 SUB-LOOP CONCENTRATION – SPOTS CARD
A.12.9 SUB-LOOP CONCENTRATION – SPECIALS CARD
A.12.10 SUB-LOOP CONCENTRATION – TEST CIRCUIT CARD
A.12.11 SUB-LOOP CONCENTRATION – DIGITAL DATA

Element Description

Unbundled Sub-Loop Concentration (USLC) allows a CLEC to concentrate loop distribution elements provided by the CLEC on to multiple DS1s for the purpose of connecting the loop distribution elements (at a concentrated level) to BellSouth's feeder facilities. BellSouth will transport the DS1s carrying the distribution circuits back to the serving wire center (SWC) for termination on a BellSouth DSX1 block and ultimately to the CLEC's collocation space.

USLC can be provided with either a TR-008 or a TR-303 interface. Each USLC System will be dedicated to a single CLEC. System A will allow a CLEC to concentrate up to 96 of their distribution loops on to multiple DS1s for the purpose of transporting the circuits back to the CLEC's collocation space. System B would allow the CLEC to concentrate an additional 96 of their distribution loops onto multiple DS1s to the CLEC's collocation. System B cannot exist without the corresponding System A, which shares the same dual channel bank assembly (DCBA).

The Sub-Loop – 4 Wire DS1 Digital Loop will provide a DS1 interface card in the sub-loop concentration unit, as well as, the DS1 facility that transports the concentrated circuits back to the SWC. A minimum of two Feeder Interfaces will be required for each System A and each System B.

The USLC Line Interface is the loop interface providing the connection between the concentration unit and the CLEC Loop distribution circuits, as well as, the line card in the concentrator. One line interface is required for each loop attached to the concentration unit. The line interface is offered in six different configurations: POTS, ISDN (BRITE CARD), SPOTS, SPECIALS, TEST CIRCUIT and DIGITAL 19, 56, 64 Kbps Data.

USLC will take place at a Remote Terminal (RT) where spare capacity exists. BellSouth will utilize its Service Inquiry process to determine if the location requested by the CLEC is capable of providing USLC. If no capacity exists in the BellSouth RT or cross-box, BellSouth will utilize its special construction process to determine if an additional RT or cross-box can be placed near the existing RT or cross-box to increase the capacity for CLEC use. If there is no spare capacity in the BellSouth RT and no space is available for an additional RT or cross-box, then BellSouth will not be able to provide USLC in the area.

Study Technique

A Microsoft Excel spreadsheet is used to develop the UNE material prices and the remote terminal housing material prices, which are input to the Microsoft Excel spreadsheet.

The components of this UNE are the concentration systems, hardwire, common plug-ins, housing, cross-connects and the working plug-ins. Various vendors supply the common plug-ins; therefore, Network provides probabilities of occurrence to apply to each type of equipment to produce a weighted material price. The material prices of each component are detailed in the Microsoft Excel spreadsheet.

Specific Study Assumptions

- Since the system is located outside the Central Office, bulk power is required.

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UNBUNDLED NETWORK ELEMENT STUDIES

UNBUNDLED COPPER LOOPS

A.13 UNBUNDLED COPPER LOOPS (UCL)

A.13.1 2-WIRE UNBUNDLED COPPER LOOP – SHORT

A.13.7 2-WIRE UNBUNDLED COPPER LOOP – LONG

A.13.8 2-WIRE UNBUNDLED COPPER LOOP – SHORT (NONRECURRING WITH LOOP MAKE-UP)

A.13.9 2-WIRE UNBUNDLED COPPER LOOP – SHORT (NONRECURRING WITHOUT LOOP MAKE-UP)

A.13.10 2-WIRE UNBUNDLED COPPER LOOP – LONG (NONRECURRING WITH LOOP MAKE-UP)

A.13.11 2-WIRE UNBUNDLED COPPER LOOP – LONG (NONRECURRING WITHOUT LOOP-MAKE-UP)

A.14.1 4-WIRE UNBUNDLED COPPER LOOP – SHORT

A.14.7 4-WIRE UNBUNDLED COPPER LOOP – LONG

A.14.8 4-WIRE UNBUNDLED COPPER LOOP – SHORT (NONRECURRING WITH LOOP MAKE-UP)

A.14.9 4-WIRE UNBUNDLED COPPER LOOP – SHORT (NONRECURRING WITHOUT LOOP-MAKE-UP)

A.14.10 4-WIRE UNBUNDLED COPPER LOOP – LONG (NONRECURRING WITH LOOP MAKE-UP)

A.14.11 4-WIRE UNBUNDLED COPPER LOOP – LONG (NONRECURRING WITHOUT LOOP-MAKE-UP)

Element Description

2-Wire and 4-Wire Unbundled Copper Loops (UCL), both Short and Long, are dedicated metallic transmission facilities (or channel or group of channels on such facilities) which extend from the main distributing frame connection in the end office to a demarcation point at the customer premises (i.e., the network interface device or NID). These facilities are provided as designed circuits and include test access points.

These facilities are provided in either a 2-wire or 4-wire serving environment and are offered with and without a loop make-up. The transmission facility does not enter the BellSouth switch rather, it is terminated on the main distributing frame.

The UCL loops are commonly referred to as "dry copper" loops because they have no intervening equipment such as load coils, bridged tap, repeaters, etc., between the end user premises and the Serving Wire Center. The UCL-Short will be designed to Resistance Design on a non-loaded metallic facility up to 18,000 feet in length. The UCL-Long will be any copper loop longer than 18,000 feet in length.

The CLEC may use BellSouth's Unbundled Loop Modification (ULM) offering to remove bridged tap and/or load coils from any loop within the BellSouth network. If load coils are removed from a loop, that loop will then be classified as either an UCL-Short or UCL-Long depending upon the total length of the loop.

These loops may be utilized by the CLEC to provide a wide range of telecommunications services so long as those services do not adversely affect BellSouth's network. However, these loops do not support any particular service and are not guaranteed to provide any specific performance standard.

Study Technique

The Loop Model is used to develop the recurring cost for the UCL-Short loops.

One-hundred twenty four (124) and one-hundred sixty-two (162) business sample loops are used by the Loop Model to develop material prices for the 2-Wire Copper Loop-Short. One hundred sixty-two (162) business sampled loops are used by the Loop Model to develop material price for the 4-wire Copper Loop-Short. See Section 3 for a detailed explanation of the models used.

The material for Unbundled Copper Loops – Long (over 18,000') is developed based on a per foot equivalent matched with the average length of loop for each element. A per foot equivalent of a copper loop is derived by dividing the cost of the UCL-Short loop and dividing it by the average length of same loop. The resulting costs were used as inputs to the TELRIC Calculator© to compute recurring costs.

An illustrative example of cost development for a UCL-Long follows:

Cost for 2-Wire UCL Loop-Long	$15.00
Average Loop Length-Long	10,000
Estimated Cost Per Foot-Long	$.0015
Average 2-Wire UCL Length-Long	30,000
Difference	20,000 (30,000-10,000)
Cost Additive	$30.00 (20,000 x $.0015)
Estimated Cost For 2-Wire UCL	$45.00 ($15.00 + $30.00)

The material prices associated with the main distributing frame come from the SCIS model.

Microsoft Excel spreadsheets are used to perform the nonrecurring cost analyses.

Specific Study Assumptions

The nonrecurring costs associated with provisioning for the 2-Wire and 4-Wire Copper Loops include the following activities and assumptions:

- A Manual Service Inquiry to determine availability of facilities, create a loop make-up, and reserve facilities is included in UNE elements with loop make-up.
- Coordination of disconnect, RCF, and unbundled loop orders by the UNE Center for reused facilities charged as a separate element
- 100% dispatch rate for outside plant
- Special services work groups

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A.15 UNBUNDLED NETWORK TERMINATING WIRE (UNTW)
A.15.1 UNBUNDLED NETWORK TERMINATING WIRE (UNTW) PER PAIR

Element Description

Unbundled Network Terminating Wire (UNTW) is unshielded twisted copper wiring that is used to extend circuits from an intrabuilding network cable (INC) terminal or from a building entrance terminal to an individual customer's point of demarcation. It is the last segment of the field-side loop distribution facilities which in multi-subscriber configurations, represents the point at which the network branches out to serve individual subscribers.

When properly connected to the CLEC's loop distribution, this element will provide a communication pathway from the CLEC to the end user's inside wire. This facility will allow an end user to send and receive telecommunications traffic when it is properly connected to the CLEC's required network elements such as a loop distribution facility, loop feeder facility, or NID.

This element will be provided in Multi-Dwelling Units (MDUs) and/or Multi-Tenants Units (MTUs) where BellSouth provides wiring all the way to the end-users premises. BellSouth will not provide this element in those locations where the property owner provides their own wiring to the end user's premises or where the property owner will not allow BellSouth to place its facilities to the end user.

In a Wiring Closet scenario, BellSouth will cross connect UNTW pairs from the BellSouth cross-connect panel to an Access Terminal designed for CLEC access to the UNTW (e.g., RJ21X, 66 block, etc.) inside the Wiring Closet. It is expected that the CLEC will place it own cross-connect panel on which its distribution facilities are terminated. Once BellSouth has connected the UNTW pairs to the Access Terminal, a CLEC can then access any pair from its cross-connect panel.

In the Garden Terminal (GT) scenario, the CLEC will place its own GT in close proximity to the BellSouth GT. BellSouth will install an Access Terminal close to the BellSouth GT on which the UNTW pairs will be connected by BellSouth. The CLEC will then provide their tie cable from their GT to the BellSouth provided Access Terminal and connect their cable. The CLEC may access any UNTW pair serving each MDU/MTU unit unless BellSouth is using the pair to concurrently provide service.

Study Technique

Microsoft Excel spreadsheets are used to perform this cost analysis.

Specific Study Assumptions

The recurring cost associated with UNTW per pair provisioning is based on a monthly equivalent of NTW expense associated with each accessed Network Terminating Wire.

The activities of setting-up and placing the Access Terminal including the terminal material are recovered as part of the nonrecurring cost. The nonrecurring cost includes the following activities and assumptions:

- Receipt and processing of a manual service inquiry
- Service order issuance for equipment ordering
- Weighted cost of an Access Terminal in a wiring closet or garden terminal
- Activities of Installation and Maintenance to set-up and install Access Terminals
- Activities of engineering and assignment forces for terminal inventory
- The average number of pairs per Access Terminal is 100 pairs
- Tagging of each pair will occur during Access Terminal set-up
- The cost of Access Terminal placement is recovered on a per pair basis as pairs are provisioned for the CLEC
- Average equipment life of an Access Terminal is 7.5 years or 90 months

The nonrecurring costs associated with provisioning activities include the following activity:

- Engineering/assignment assistance for fall-out orders

Element Description

High Capacity Unbundled Local Loop provides a local loop transmission path and the associated electronics between the BellSouth serving wire center (SWC) and the CLEC's customer's premises. These facilities are dedicated to a single customer.

This UNE is offered at STS1, DS3, OC-3, OC-12 and OC-48 transmission levels. At all levels the UNE consists of two elements; a facility termination (the electronics) and a per air mile component (the transport). Additionally, at the OC-48 level the UNE also

contains an OC-12 Interface Unit, allowing the CLEC to activate channels as needed for their customer.

Study Technique

A Microsoft Excel spreadsheet is used to develop the UNE material prices. Material prices for the various components of the High Capacity Unbundled Local Loop are developed in the SONET Price Calculator and populated to the Microsoft Excel spreadsheet.

The components of the High Capacity Unbundled Local Loop UNE are the electronic equipment in the Central Office and at the CLEC's customer's premises as well as fiber transport facilities. The fiber transport is based on SONET architecture.

Specific Study Assumptions

- High Capacity Unbundled Local Loops are offered at five transmission levels: STS1, DS3, OC-3, OC-12 and OC-48.
- STS1 and DS3 Unbundled Local Loops are provisioned on OC-3, OC-12, and OC-48 SONET architecture.
- OC-3 Unbundled Local Loops are provisioned on OC-12 and OC-48 SONET architecture.
- OC-12 and OC-48 Unbundled Local Loops are provisioned on OC-48 SONET architecture .
- An OC-48 Local Loop will deliver an OC-48 bandwidth from the high speed side of the OC-48 multiplexer in the BellSouth Central Office to the CLEC's customer premises with the fibers terminating on lightwave terminating interface equipment (LTIE).

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A.17.0 UNBUNDLED LOOP MODIFICATION (ULM)
A.17.1 UNBUNDLED LOOP MODIFICATION LOAD COIL - SHORT
A.17.2 UNBUNDLED LOOP MODIFICATION LOAD COIL - LONG
A.17.3 UNBUNDLED LOOP MODIFICATION - BRIDGED TAP
A.17.4 UNBUNDLED LOOP MODIFICATION – ADDITIVE
A.17.5 UNBUNDLED SUB-LOOP MODIFICATION - 2W/4W COPPER DISTRIBUTION LOAD COIL/EQUIPMENT REMOVAL
A.17.6 UNBUNDLED SUB-LOOP MODIFICATION - 2W/4W COPPER DISTRIBUTION BRIDGED TAP REMOVAL

Element Description

The Unbundled Loop Modification (ULM) element is based on the CLEC's request to BellSouth to condition a copper or xDSL-capable loop. The activities of conditioning a loop take place through the removal of equipment (such as load coils, low-pass filters, range extenders, etc.) and/or by removing bridged taps that have been attached to the copper loop.

The ULM associated with removing load coils, low-pass filters, and other equipment, such as range extenders, is sub-divided into specific offerings: ULM Load Coil Short (ULM/LC-S) which is for equipment removal on short loops (i.e., 18 kilofeet or less); sub-loop ULM Load Coil Long (ULM/LC-L) which is for equipment removal on long loops (i.e., over 18 kilofeet); and ULM LC and BT for 2-wire or 4-wire copper distribution. The ULM associated with removal of Bridged Tap (ULM-BT) is intended for any length of loop.

Loop facility assumptions associated with ULM/LC and ULM/BT follow:

1. Copper loops up to 18 kilofeet (ULM/LC-S), which require conditioning, are expected to have a weighted average of 2.1 load coils/equipment per loop. Copper loops greater than 18 kilofeet (ULM/LC-L) which require conditioning are expected to have an average of 3.5 load coils/equipment per loop.

2. Of the copper pairs that have load coils, low-pass filters, or other equipment, it is estimated that the majority of pairs requiring ULM/LC reside on underground facilities with a minority residing on aerial or buried facilities. The outside plant construction activity for underground facilities can involve setting-up and clearing multiple manholes.

3. Typically, BellSouth will unload ten pairs per conditioning request for ULM-Short. It is expected that on average two pairs will be ordered initially by the CLEC, four

pairs will be used by BellSouth, and the remaining four pairs will be ordered in the future by the same or different CLEC. The cost of the last four pairs is determined as an Unbundled Loop Modification – Additive (A.17.4). This additive applies to ADSL-capable, HDSL capable, and UCL-Short loops.

An average of three bridged tap/end section removals is expected to significantly affect the transmission of data/digital services.

It is assumed that one of the three (or 1/3) bridged tap locations will reside in underground facilities and the remaining in either an aerial or buried application.

Study Technique

Microsoft Excel spreadsheets are used to perform this cost analysis.

Specific Study Assumptions

The nonrecurring costs for the ULM elements include the following activities and assumptions:

- The ordering procedures for loop conditioning are processed manually through the a Service Inquiry. The loop order and the conditioning order can be issued simultaneously with the loop order status as pending with reserved facilities.
- Outside Plant Engineering will verify equipment locations and prepare records for posting
- Outside Plant Construction is involved in set-up and removal procedures.
- A 100% dispatch rate applies to this work group.

A.19 LOOP TESTING BEYOND VOICE GRADE
A.19.1 LOOP TESTING BEYOND VOICE GRADE - BASIC - PER HALF HOUR
A.19.2 LOOP TESTING BEYOND VOICE GRADE - OVERTIME - PER HALF HOUR
A.19.3 LOOP TESTING BEYOND VOICE GRADE - PREMIUM - PER HALF HOUR

Element Description

By request of a CLEC, BellSouth will provide testing services beyond voice grade transmission for an identified line's features, functions, and capabilities. The testing function is based on a trouble reported on a conditioned line previously ordered by the CLEC.

BellSouth will isolate the source of the transmission trouble through coordinated work-force activities at central office and field locations. The work efforts will require dispatched forces and will be billed in half-hour increments.

Through use of specialized testing equipment, the technicians will be able to identify multiple fault areas and target the transmission error for the CLEC. Transmission information, such as, loss as a result of resistance or capacitance, locations of bridged tap, or locations of load coils, can be identified through this specialized testing.

Study Technique

Microsoft Excel spreadsheets are used to perform this cost analysis.

Specific Study Assumptions

- The nonrecurring costs associated with Loop Testing Beyond Voice Grade are based on a first half hour and each additional half-hour basis. Included in the first half-hour are service order, coordination, and travel activities as well as the first half-hour of technician activities. The technician's activities are required in both the central office and the field when performing the necessary tests. Each additional half-hour increment includes only technician-related activities.
- Three forms of cost structure apply based on basic, overtime, and premium labor rates. These labor rates are initiated on the input sheets and are not contained in

the BellSouth Cost Calculator Labor Rate file. The three forms of pay are defined as follows:

Basic Rate	Exclusive of differentials or extra payments
Overtime Rate	1-1/2 times basic rate of pay
Premium Rate	2 times basic rate of pay

D.5 LOCAL CHANNEL – DEDICATED
D.5.7 LOCAL CHANNEL - DEDICATED DS3 – PER MILE
D.5.8 LOCAL CHANNEL - DEDICATED - DS3 – FACILITY TERMINATION
D.5.9 LOCAL CHANNEL - DEDICATED - DS3 - INCREMENTAL COST - MANUAL SVC ORDER VS. ELECTRONIC
D.5.10 LOCAL CHANNEL - DEDICATED – OC3 – PER MILE
D.5.11 LOCAL CHANNEL - DEDICATED - OC3 – FACILITY TERMINATION
D.5.12 LOCAL CHANNEL - DEDICATED - OC3 - INCREMENTAL COST - MANUAL SVC ORDER VS. ELECTRONIC
D.5.13 LOCAL CHANNEL - DEDICATED – OC12 – PER MILE
D.5.14 LOCAL CHANNEL - DEDICATED – OC12 – FACILITY TERMINATION
D.5.15 LOCAL CHANNEL - DEDICATED – OC12 - INCREMENTAL COST - MANUAL SVC ORDER VS. ELECTRONIC
D.5.16 LOCAL CHANNEL - DEDICATED – OC48 – PER MILE
D.5.17 LOCAL CHANNEL - DEDICATED – OC48 – FACILITY TERMINATION
D.5.18 LOCAL CHANNEL - DEDICATED – OC48 - INCREMENTAL COST - MANUAL SVC ORDER VS. ELECTRONIC
D.5.19 LOCAL CHANNEL - DEDICATED – OC48 – INTERFACE OC12 ON OC48 FACILITY
D.5.20 LOCAL CHANNEL - DEDICATED – OC48 - INCREMENTAL COST - MANUAL SVC ORDER VS. ELECTRONIC
D.5.21 LOCAL CHANNEL - DEDICATED - STS-1 – FACILITY TERMINATION
D.5.22 LOCAL CHANNEL - DEDICATED - STS-1 - INCREMENTAL COST - MANUAL SVC ORDER VS. ELECTRONIC
D.5.23 LOCAL CHANNEL - DEDICATED - STS-1 – PER MILE

Element Description

Unbundled Local Channel - Dedicated provides a transmission path and the associated electronics between the BellSouth serving wire center (SWC) and the CLEC's Point of Presence (POP), Point of Interconnection (POI), or collocation. These facilities are dedicated to a single CLEC.

This UNE is offered at a STS-1, DS3, OC-3, OC-12, and OC-48 transmission level.. At the STS-1, DS3, OC-3, and OC-12 level the UNE consists of two elements, a facility termination cost (the electronics) and a per air mile cost (the transport). At the OC-48 level the UNE also contains an OC-12 Interface Unit, allowing the CLEC to activate channels as needed.

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Study Technique

A Microsoft Excel spreadsheet is used to develop the material prices for the electronics. Material prices for the various components of the Unbundled Local Channel are developed in the SONET Price Calculator and the DS1 Channelization Price Calculator, which are populated to the Microsoft Excel spreadsheet.

The components of the Unbundled Local Channel UNE are the electronic equipment in the Central Office and at the Point of Presence as well as fiber transport facilities. At an OC-48 level an OC-12 interface is also provided for channel activation. The fiber transport is based on SONET architecture.

Specific Study Assumptions

- Local Channel is offered at transmission levels STS-1, DS3, OC-3, OC-12 and OC-48.
- STS-1Local Channels are provisioned on OC-3, OC-12, and OC-48 SONET architectures.
- OC-3 Local Channels are provisioned on OC-12 and OC-48 SONET architectures.
- OC-12 and OC-48 Local Channels are provisioned on OC-48 SONET architectures.

An OC-48 Local Channel will deliver an OC-48 bandwidth from the high-speed side of the OC-48 ADM in the BellSouth Central Office to the CLEC's POP, POI or Collocation area.

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D.6 INTEROFFICE TRANSPORT - DEDICATED - DS3
D.6.1 INTEROFFICE TRANSPORT - DEDICATED - DS3 - PER MILE
D.6.2 INTEROFFICE TRANSPORT - DEDICATED - DS3 - FACILITY TERMINATION
D.6.3 INTEROFFICE TRANSPORT - DEDICATED - DS3 - INCREMENTAL COST - MANUAL SVC ORDER VS. ELECTRONIC
D.7 INTEROFFICE TRANSPORT - DEDICATED - OC3
D.7.1 INTEROFFICE TRANSPORT - DEDICATED - OC3 - PER MILE
D.7.2 INTEROFFICE TRANSPORT - DEDICATED - OC3 - FACILITY TERMINATION
D.7.3 INTEROFFICE TRANSPORT - DEDICATED - OC3 - INCREMENTAL COST - MANUAL SVC ORDER VS. ELECTRONIC

D.8 INTEROFFICE TRANSPORT - DEDICATED - OC12
D.8.1 INTEROFFICE TRANSPORT - DEDICATED - OC12 - PER MILE
D.8.2 INTEROFFICE TRANSPORT - DEDICATED - OC12 - FACILITY TERMINATION
D.8.3 INTEROFFICE TRANSPORT - DEDICATED - OC12 - INCREMENTAL COST - MANUAL SVC ORDER VS. ELECTRONIC

D.9 INTEROFFICE TRANSPORT - DEDICATED - OC48
D.9.1 INTEROFFICE TRANSPORT - DEDICATED - OC48 - PER MILE
D.9.2 INTEROFFICE TRANSPORT - DEDICATED - OC48 - FACILITY TERMINATION
D.9.3 INTEROFFICE TRANSPORT - DEDICATED - OC48 - INCREMENTAL COST - MANUAL SVC ORDER VS. ELECTRONIC
D.9.4 INTEROFFICE TRANSPORT - DEDICATED - OC48 - INTERFACE OC12 ON OC48
D.9.5 INTEROFFICE TRANSPORT - DEDICATED - OC48 - INTERFACE - INCREMENTAL COST - MANUAL SVC ORDER VS. ELECTRONIC

D.10 INTEROFFICE TRANSPORT - DEDICATED - STS-1
D.10.1 INTEROFFICE TRANSPORT - DEDICATED - STS-1 - PER MILE
D.10.2 INTEROFFICE TRANSPORT - DEDICATED - STS-1 - FACILITY TERMINATION
D.10.3 INTEROFFICE TRANSPORT - DEDICATED - STS-1 - INCREMENTAL COST - MANUAL SVC ORDER VS. ELECTRONIC

D.12 INTEROFFICE TRANSPORT - DEDICATED - 4-WIRE VOICE GRADE
D.12.1 INTEROFFICE TRANSPORT - DEDICATED - 4-WIRE VOICE GRADE - PER MILE
D.12.2 INTEROFFICE TRANSPORT - DEDICATED - 4-WIRE VOICE GRADE - FACILITY TERMINATION

D.12.3 INTEROFFICE TRANSPORT - DEDICATED - 4-WIRE VOICE GRADE - INCREMENTAL COST - MANUAL SVC ORDER VS. ELECTRONIC

Element Description

Unbundled Interoffice Transport - Dedicated (UIT – D) provides a transmission path and the associated electronics between BellSouth's end offices so a CLEC can transport DS3, STS-1, OC3, OC12, or OC48 from one location to another. These facilities are dedicated to a single CLEC.

Study Technique

A Microsoft Excel spreadsheet is used to develop the UNE material prices. Material prices for the fiber transport facilities, the regenerating equipment and the facility terminating equipment are developed in the SONET Price Calculator and populated in the Microsoft Excel spreadsheet. Material prices for the channel banks and associated plug-ins are developed in the DS1 Channelization Price Calculator and also populated in the Microsoft Excel spreadsheet.

Network identified thirteen separate designs (network architectures) which represent cost efficient provisioning of Unbundled Interoffice Transport - Dedicated. Probabilities of occurrence for each of these designs were developed by Network based on transmission level. Diagrams of the thirteen network designs are included in Appendix B.

The components of this UNE include Central Office facility terminating equipment, regenerating equipment and fiber transport facilities. At the OC48 transmission level there is also an OC12 interface unit. Each design is studied separately. The material prices are multiplied by the quantities required of each item. The results are weighted by the particular design's probability of occurrence by transmission level. The weighted results are summed to produce the per facility termination element and per mile element.

Specific Study Assumptions

- The facility is dedicated to a single CLEC.
- The Interoffice transport facilities are 100% fiber.
- A three-fiber strand arrangement is used for the SONET Ring.

E.3 CCS7 SIGNALING TRANSPORT
E.3.7 CCS7 SIGNALING CONNECTION, PER LINK (A LINK) (SAME AS E.3.1)
E.3.8 CCS7 SIGNALING CONNECTION, PER LINK (B LINK) (ALSO KNOWN AS D LINK) (SAME AS E.3.1)
E.3.9 CCS7 SIGNALING USAGE, PER ISUP MESSAGE (SAME AS E.3.3)
E.3.10 CCS7 SIGNALING USAGE SURROGATE - PER LINK (SAME AS E.3.5)
E.3.11 CCS7 SIGNALING POINT CODE, ESTABLISHMENT OR CHANGE, PER STP AFFECTED

Element Description

CCS7 signaling transport refers to the capabilities provided by the BellSouth SS7 signaling network. This network is separate from the network that carries voice messages. The signaling network complements the voice network in that it provides for call setup, i.e., Integrated Switched Digital Network User Part, (ISUP), Transaction Capabilities Application Part (TCAP) query messaging, and access to Advanced Intelligent Network (AIN) services.

The Common Channel Signaling Network (CCSN), BellSouth's regional SS7 signaling network, enables a CLEC to not use its voice trunks for signaling purposes. Thus, quicker call setup and disconnect can be achieved. BellSouth's SS7 network allows the CLEC's end users to connect to anyone in the 9-state serving area and, through other hub network providers, the world wide telecommunications network. It also provides for TCAP query messaging to databases such as LIDB, 800, Calling Name, and to Advanced Intelligent Network services.

The Signaling Connection recurring element provides a two-way digital 56 kbps facility dedicated to a specific CLEC, which originates at the CLEC's signaling point of interface and terminates at BellSouth's Signal Transfer Point (STP, packet switch). The Signaling Termination element provides a CLEC with a dedicated point of interface at the Company's STP for each of the CLEC's SS7 Signaling Connections.

The Signaling usage element is comprised of the six mated Gateway STP pairs, the thirteen mated Local STP pairs, the BellSouth signaling links, the Link Monitoring System (LMS) and the Integrated Digital Service Terminals (IDSTs) that make up the CCSN infrastructure.

Access Links connect end offices or Service Switching Points to STPs. Bridge Links and Diagonal Links connect STPs that are at the same or different switching hierarchies in the system respectively. Cross Links are administrative links mating paired STPs. The Link Monitoring System is the network management system for the CCSN. The Integrated Digital Services Terminals are the access points for the LMS.

The signaling usage elements are per call setup (ISUP) and per TCAP (information) message. On an interim basis, where measurement capabilities do not yet exist, a per link structure is used as a usage surrogate.

The CCS7 Signaling Point Code, Establishment or Change element consists of the nonrecurring labor efforts to establish or remove point code information in a STP.

Study Technique

A Microsoft Excel spreadsheet is used to perform the calculations that develop the inputs to the BellSouth Cost Calculator. For the signaling connection and signaling termination elements, the input data are the per unit investments and labor hours for these elements. For the signaling usage, the call setup (ISUP) and TCAP messages, the investments were prorated based on the relative number of annual call setup and TCAP octets. The prorated investments were then divided by their relative annual messages to develop the per unit investment. For the surrogate, the per call setup (ISUP) and per TCAP unit investments were multiplied by the respective average number of messages per link.

Specific Study Assumptions

- The cost of customer links, the Signaling Connection and Termination elements, are excluded. Also excluded are the Access Links to Service Control Points (SCPs, databases) and the SCPs.
- A links were assumed to have the same average mileage as end offices to tandem switches within a LATA. C Links were assumed to have the same average mileage as any two end offices within the LATA.

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E.4 BELLSOUTH CALLING NAME (CNAM) DATABASE (DB) SERVICE
E.4.1 CNAM FOR DB OWNERS - SERVICE ESTABLISHMENT, MANUAL
E.4.2 CNAM FOR NON DB OWNERS - SERVICE ESTABLISHMENT, MANUAL
E.4.3 CNAM FOR DB OWNERS SERVICE PROVISIONING WITH POINT CODE ESTABLISHMENT
E.4.4 CNAM FOR NON DB OWNERS SERVICE PROVISIONING WITH POINT CODE ESTABLISHMENT
E.4.5 CNAM FOR DB AND NON DB OWNERS, PER QUERY

Element Description

Calling Name Database Service provides a method for CLECs owning a CNAM database and selling Calling Name Delivery to gain access to the names of BellSouth customers residing in BellSouth's CNAM database. For CLECs not owning a CNAM database and selling Calling Name Delivery, this service provides a method for them to gain access to the names of their own customers by storing them in BellSouth's CNAM database. CLECs store their names in BellSouth's database via SMS Access Service or over host communication software systems which facilitates the transmission of data over telecommunication lines know as DIRECT Connect™ by Sterling Commerce.

Study Technique

Cost Components for this service includes: (1) Signal Transfer Point (STP) port hardware with associated right to use fees and interconnecting links and (2) Service Control Point (SCP) hardware and RTU fees. Per query investment in STP ports and the interconnecting links were developed by quantifying the total investment for each one of the components and then multiplying by the portion dedicated to CNAM. The result of that calculation was divided by the average annual queries to the database from both BellSouth and CLECs. Per query investment for the SCP component was developed similarly by quantifying the total investment and then multiplying by the portion dedicated to CNAM and dividing by the annual average queries. The per query STP and SCP investments were summed together and then melded with the cost for BellSouth to query other company's CNAM databases.

Specific Study Assumptions

- All service orders are manual.
- Service life is 60 months
- Access for storing names in the CNAM database via SMS Access or DIRECT Connect™ are not included in this service

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E.5 BELLSOUTH ACCESS TO E911 SERVICE

E.5.1 BELLSOUTH E911 ACCESS – LOCAL CHANNEL – DEDICATED – 2 WIRE VOICE GRADE

E.5.2 BELLSOUTH E911 ACCESS – INTEROFFICE TRANSPORT – DEDICATED – 2 WIRE VOICE GRADE PER MILE

E.5.3 BELLSOUTH E911 ACCESS – INTEROFFICE TRANSPORT – DEDICATED – 2 WIRE VOICE GRADE PER FACILITY TERMINATION

E.5.4 BELLSOUTH E911 ACCESS – LOCAL CHANNEL – DEDICATED – DS1

E.5.5 BELLSOUTH E911 ACCESS - INTEROFFICE TRANSPORT – DEDICATED – DS1 PER MILE

E.5.6 BELLSOUTH E911 ACCESS – INTEROFFICE TRANSPORT – DEDICATED – DS1 PER FACILITY TERMINATION

Element Description

CLECs when requested by local government authorities will provide a universal emergency number 911 for use of Public Safety Answering Points (PSAPs) engaged in assisting local governments in the protection and safety of the general public. The CLECs are therefore required to accept 911 calls from its end users in municipalities that subscribe to 911 service and BellSouth is the controlling company and forward those calls to the appropriate BellSouth 911 Tandem office. The above rate elements provide the facilities for the CLEC to connect to the 911 Tandem office. The mapping from the E.5 elements to the appropriate local channels and interoffice for 2 wire voice grade and DS1 rates is listed below.

E911 Rate Elements		Local Channel and Interoffice Rate
E.5.1	Same as	D.5.1
E.5.2	Same as	D.2.1
E.5.3	Same as	D.2.2
E.5.4	Same as	D.5.3
E.5.5	Same as	D.4.1
E.5.6	Same as	D.4.2

Study Technique

See the appropriate local channel and interoffice study descriptions.

Specific Study Assumptions

- If the CLEC orders network elements and other services, then the CLEC is also responsible for providing E911 to its end users.

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E.6 LOCAL NUMBER PORTABILITY (LNP) QUERY SERVICE
E.6.1 LNP COST PER QUERY
E.6.2 LNP SERVICE ESTABLISHMENT MANUAL
E.6.3 LNP SERVICE PROVISIONING WITH POINT CODE ESTABLISHMENT

Element Description

Prior to Local Number Portability the telecommunications network was based on the assumption that an NXX was assigned to a specific central office switch. With number portability, different directory numbers within the same NXX can be served by different LECs and/or switches. LNP is accomplished by using Location Routing Number (LRN) information which associates a ten digit number (i.e., NPA-NXX-XXXX) with each central office switch that serves ported lines. BellSouth LNP Database Service uses Advance Intelligent Network (AIN) technology to query a database to secure network routing instructions before the completion of a call. The database contains information about end users that have ported their service. At a minimum, the database contains the LRN, which identifies the Local Service Provider (LSP) which services each ported end user. The information is used to direct the call to the correct network switch for completion. Where more than one carrier is involved in completing the call, the N-1 Carrier, the carrier just before the terminating network, is responsible for querying an LNP database to secure the LRN. BellSouth will assess a charge for performing this query on behalf of the N-1 Carrier.

Study Technique

The inputs to this study were obtained from BellSouth's Local Number Portability Database Services filing made with the Federal Communications Commission on June 11, 1999, under Transmittal Number 510. Additionally, the service establishment and provisioning work times and the investments and expenses associated with the Service Management System were included based on input from Product Management.

Specific Study Assumptions

- Investment loadings and annual cost factors are specific to this filing.

G.11 SELECTIVE CARRIER ROUTING (AIN SOLUTION)
G.11.1 SERVICE ESTABLISHMENT PER CLEC
G.11.2 SERVICE ESTABLISHMENT PER END OFFICE
G.11.4 QUERY COST

Element Description

In order to support unbundled ports and resale of BellSouth lines by Competitive Local Exchange Companies (CLECs), BellSouth is required to identify 411, 0+411, 1+411, 1+local NPA-555-1212, 0+Local NPA-555-1212, 611, 1+611, 0- and local 0+ calls from these lines. BellSouth is also required to determine which CLEC is serving the caller and route the call based on instructions provided by the CLEC. The AIN Selective Carrier Routing (AIN SCR) service provides an AIN solution to this problem.

AIN SCR will be implemented using a set of unique Line Class Codes (LCCs) in each end office. Separate LCCs are needed for each different "class of service" provided by one or more CLECs. A given LCC however, can be used for multiple CLECs that provide the same "class of service". The LCCs will identify 411, Local NPA 555-12-12, 611 and Operator (0- and 0+) calls from resold lines or Unbundled Ports as requiring special handling and cause them to be routed to an AIN Hub office. At the AIN Hub office, an AIN query will be launched to the BellSouth database to obtain routing instructions based on the end users' telephone number associated with the line/port and the instructions provided by the end users' CLEC. The database will return routing instructions. The CLEC will be responsible for handling those calls once they are delivered to the specified location. Calls generated at the Hub switch, requiring AIN SCR treatment, will need to be sent from the Hub to an end office (Sub Hub) and returned back to the Hub. Because SCR uses the SS7 network to access the AIN hub, lines/ports that are incompatible with SS7 signaling, such as coin "Smartlines", cannot be equipped with SCR.

Study Technique

Cost components for this service includes: (1) Signaling System 7 (SS7), (2) Service Transfer Point Ports (STPs) and Right-To-Use fees, (3) Service Control Point (SCP) and SCR RTU fees, (4) STP to SCP Links, and (5) additional End Office Switching and Trunking. The SS7, and additional End Office Switching and Trunking investment was developed on a call/query bases. The investment for the remaining components were development by quantifying the total investment for each component and then multiplying by the portion dedicated to SCR and dividing by the annual average queries.

The nonrecurring components include (1) Service Establishment per CLEC, which includes work times for the Local Service Request, Local Carrier Service Center, and Hub

translations, and (2) Service Establishment per End Office per CLEC, which includes work times for the Local Service Request and Local Carrier Service Center, and End Office and Sub Hub office translations.

Specific Study Assumptions

- Service Establishment per CLEC and Per End Office are manual orders.
- The CLEC will be provisioned in all hub offices in the region.
- There will be on average 1.5 hubs per LATA.
- The average distance between end offices and hub offices will approximate the distance between end offices and local tandem offices.
- SCR calls are routed over dedicated trunking to hub offices and are switched in the hub office based on routing guidelines by the CLEC.
- The average length of a SCR call is one minute.

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H.3.0 ASSEMBLY POINT
H.3.1 ASSEMBLY POINT - 2-WIRE CROSS CONNECTS
H.3.2 ASSEMBLY POINT - 4-WIRE CROSS CONNECTS
H.3.3 ASSEMBLY POINT - DS1 CROSS CONNECTS
H.3.4 ASSEMBLY POINT - 2-WIRE CROSS CONNECTS – INCREMENTAL COST MANUAL VS. ELECTRONIC SERVICE ORDER
H.3.5 ASSEMBLY POINT - 4-WIRE CROSS CONNECTS – INCREMENTAL COST MANUAL VS. ELECTRONIC SERVICE ORDER
H.3.6 ASSEMBLY POINT - DS1 CROSS CONNECTS – INCREMENTAL COST MANUAL VS. ELECTRONIC SERVICE ORDER

Element Description

An assembly point provides an alternate method for CLECs to connect to BellSouth's UNEs. By offering the CLECs the ability to recombine UNEs themselves at an assembly point location, the CLECs can create UNE combinations to provide local exchange service or to deliver dial tone to loops served by a remote office.

The assembly point cross connects provide access to 2-wire, 4-wire and DS1 UNEs. The assembly point cross connect cost is expressed on a monthly and nonrecurring basis per cross connect. A cross connect is required for each UNE in the combination established by the CLEC. The assembly point is established as a stand alone cross connect frame physically separate from the existing office distributing frame/panel. The costs reflect the equipment needed to connect the BellSouth frame where the UNEs are terminated to the assembly point frame where the CLEC will place the jumper connecting the UNEs together. The CLECs will supply any jumpers or patch cords to connect unbundled network elements together at the assembly point frame. The assembly point cost elements are as follows:

H.3.1 Assembly Point: 2–Wire Cross Connects
The 2–wire cross connect runs from the distributing frame to the assembly point frame. It is assumed that one hundred and fifty feet of cable rack and a 100 pair tie cable are required to connect the frames. The cable terminates on a connecting block.

H.3.2 Assembly Point: 4–Wire Cross Connects
The 4–wire cross connect runs from the distributing frame to the assembly point frame. It is assumed that one hundred and fifty feet of cable rack and a 100 pair tie cable are required to connect the frames. The cable terminates on a connecting block. A 4-wire cross connect utilizes twice the capacity and equipment as a 2-wire cross connect.

H.3.3 Assembly Point: DS1 Cross Connects
The DS1 cross connect runs from the DSX-1 frame to the DSX-1 assembly point frame. It is assumed that one hundred and fifty feet of cable rack and cable are required to connect the frames. As a result of the physical separation of the assembly point frame from the existing DSX complex, the maximum allowable length for a DS1 jumper will be exceeded. A bi-directional DS1 intraoffice repeater will be included on every DS1 cross connect to compensate for this distance.

Study Technique

Microsoft Excel spreadsheets were used to calculate the utilized unit material prices and/or investments for these UNEs. Each element was analyzed to determine the components required, and that the appropriate quantities were applied in order to develop the utilized unit material prices.

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H.6.0 PHYSICAL COLLOCATION IN THE REMOTE TERMINAL (RT)
H.6.1 PHYSICAL COLLOCATION IN THE RT - APPLICATION FEE
H.6.2 PHYSICAL COLLOCATION IN THE REMOTE TERMINAL (RT) PER BAY/ RACK
H.6.3 PHYSICAL COLLOCATION IN THE RT - SECURITY ACCESS - KEY
H.6.4 PHYSICAL COLLOCATION IN THE RT - SPACE AVAILABILITY REPORT PER PREMISES REQUESTED
H.6.5 PHYSICAL COLLOCATION IN THE RT- REMOTE SITE CLLI CODE REQUEST, PER CLLI CODE REQUESTED

Element Description

This unbundled network element (UNE) provides for physical collocation in a remote terminal. Remote site locations include cabinets, huts, and controlled environmental vaults (CEV) owned and leased by BellSouth that house BellSouth Network Facilities. Remote Site Physical Collocation can occur where technically feasible, and where space exists. The CLEC shall use the remote collocation space for the purposes of installing, maintaining and operating his equipment used to interconnection with BellSouth services and facilities, including access to unbundled network elements, for the provision of telecommunications services.

The collocator files an application to request remote collocation. The application is a nonrecurring cost. The collocator may also request a written Space Availability Report - per premises requested. The report specifies the amount of remote collocation space that is available at the remote site location and the measures that BellSouth is taking to make additional space available, etc. The report is a nonrecurring cost.

The monthly cost for physical collocation space in the remote terminal is per bay /rack of space. The purchase of space allows placement of collocator-owned facilities and equipment in BellSouth remote sites.

Under Remote Site Collocation, a CLEC may elect to connect to a feeder line as follows: (1) Connection to a BellSouth feeder line (where technically feasible) via the cross connect located near the BellSouth equipment inside the Remote Terminal. In this case, the point of interconnection is the DSX or LGX panel in the Remote site. (2) Connection of the collocator's owned or leased entrance facilities into the remote site connection space from its own point of presence. BellSouth will designate a point of interconnection at the remote site location housing the collocation space, which is physically accessible to both parties, which shall be the point of entrance into the remote site.

Distribution lines will be accessed by the CLEC, who will provide a copper cable from the remote site collocation space to the feeder distribution interface. The cable will be of sufficient length for splicing. BellSouth personnel will splice the cable to a bundle of the distribution cable at the feeder distribution interface. Groups/ bundles are to be provided in 25-pr. Increments. The point of demarcation will be the splice at the feeder distribution interface.

Each party will be responsible for maintenance and operation of all equipment/facilities in its side of the demarcation point. The Collocator will have access to the site by purchasing a key. This is a nonrecurring cost.

Study Technique

Microsoft Excel spreadsheets were used to calculate the utilized unit material prices and/or investments for these UNEs. Each element was analyzed to determine the components required, and that the appropriate quantities were applied in order to develop the utilized unit material prices.

Study Assumptions

- This UNE is ordered only on a manual basis.
- The CLEC will need to order other UNEs to connect to his collocation equipment.

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J.0 OTHER
J.1 DARK FIBER
J.1.2 DARK FIBER, PER FOUR FIBER STRANDS, PER ROUTE MILE OR FRACTION THEREOF - LOCAL CHANNEL/LOOP
J.1.3 DARK FIBER, PER FOUR FIBER STRANDS, PER ROUTE MILE OR FRACTION THEREOF - INTEROFFICE

Element Description

Unbundled Dark Fiber is offered as either a point-to-point arrangement between customer designated premises and a BellSouth Wire Center, or between BellSouth Wire Centers. This arrangement consists of four optical fibers and fiber terminating equipment. No optical signal regeneration is provided to compensate for signal losses. There is no representation made regarding the transmission capability of the facilities.

Study Technique

A Microsoft Excel spreadsheet is used to develop the material price for this UNE. The fiber transport and terminating facilities material prices are developed in the SONET Price Calculator and are input to the Microsoft Excel spreadsheet.

Network identified two separate designs (network architectures) which represent typical fiber transport and provided the average route miles for each of these designs. Diagrams of the two network designs are included in Appendix F.

The components of this UNE are the transport facilities and the terminating equipment at the Central Office and at the customer's premises (LGX Panels, LTIE Panels, Fiber Jumpers, and Fiber Strands). For each design, the material prices are multiplied by the required quantity of each piece of equipment and the terminating equipment material prices are then divided by the average route miles for that particular design in order to express the element on a per route mile basis. The fiber transport is developed on a per route mile basis.

Specific Study Assumptions

- A meld of Aerial, Buried and Underground Fiber is used.
- Service will be available only where unused dark fiber capacity exists.
- Dark fiber capacity will not exist in a particular cross-section if the fiber is currently spare and BellSouth has specific plans to use that capacity.

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J.3 LOOP MAKE-UP
J.3.1 MECHANIZED LOOP MAKE-UP
J.3.3 MANUAL LOOP MAKE-UP WITHOUT FACILITY RESERVATION NUMBER
J.3.4 MANUAL LOOP MAKE-UP WITH FACILITY RESERVATION NUMBER

1. Mechanized Loop Makeup (J.3.1):

Interactive Pre-ordering Loop Makeup:

BellSouth will provide CLECs access to loop make-up information via mechanized interfaces that generate preordering transactions. The Loop Facilities Assignment and Control System (LFACS) database will be accessed and interactive loop data extracts based on the search criteria of customer address and zip code will be facilitated. More specifically, these data extracts will produce the underlying loop makeup data necessary for a CLEC to make its own determination of qualification. The loop makeup data is composed of loop material, including but not limited to: fiber optics or copper; the existence, location and type of any electronic or other equipment on the loop, including but not limited to, digital loop carrier or other remote concentration devices, feeder/distribution interfaces, bridge taps, load coils, pair-gain devices in the same or adjacent binder groups; the loop length, including the length and location of each type of transmission media; the wire gauge(s) of the loop; and the electrical parameters of the loop, which may determine if the loop is capable of supporting xDSL and other advanced technologies.

The CLECs will be allowed to access the BellSouth Internal Network with a single log-on through one of the appropriate BellSouth Operational Support System (OSS) electronic interfaces which include Telecommunications Access Gateway (TAG), Local Exchange Navigational System (LENS) or RoboTAG. CLECs are authorized to have access to the loop makeup information as obtained through the mechanized processes of the LFACS database and the Service Delivery Order Manager (DOM) that performs interactive preordering loop makeup functions.

The electronic interfaces to Mechanized Loop Makeup manage the receipt of the preordering transactions from the CLECs and the sending of data to LFACS. The receipt of such transaction from the CLECs are in the form of a Mechanized Loop Makeup Service Inquiry (Mechanized LMUSI) as submitted over one of the appropriate OSS electronic interfaces. For completion of the mechanized loop makeup preordering function, the LFACS database will be accessed primarily, but the LENS, RSAG, and CRIS may also be accessed to complete the interactive preordering transactions. By revising the OSS interfaces in front of the LFACS Legacy Systems to allow for the submission of Mechanized LMUSIs, the CLEC is not necessarily required to use

manual processes to extract loop makeup data. Other Operational Support Systems (OSS) Electronic Interface systems, such as, LENS, TAG, and the DOM are also impacted and utilized so that the Mechanized LMUSI process can conclude.

2. **Manual Loop Make-up without Facility Reservation Number (J.3.3)**

If the CLEC chooses not to utilize the Mechanized Loop Make-up (J.3.1), they will request a manual process to obtain information about the make-up of the loop in question. This element does not include the reservation of a loop facility.

Manual Loop Make-up without Facility Reservation:

The CLEC, through a manual service inquiry process, contacts the Complex Resale Support Group (CRSG) to request facility Loop Make-up for a given service address or telephone number. The CRSG sends the service inquiry to Outside Plant Engineering to request Loop Make-up information and develop a Loop Make-up from company records. BellSouth will provide to the CLEC the Loop Make-up on the most compatible xDSL loop facility leading to the address specified by the CLEC. The CRSG returns the service inquiry to the CLEC with Loop Make-up information and forwards the Service Inquiry to LCSC for billing.

3. **Manual Loop Make-up with Facility Reservation Number (J.3.4)**

If the CLEC chooses not to utilize the Mechanized Loop Make-up (J.3.1), they will request a manual process to obtain information about the make-up of the loop in question. This element includes the reservation of a facility.

Manual Loop Make-up – With Facility Reservation:

The CLEC, through a manual service inquiry process, contacts the Complex Resale Support Group (CRSG) to request facility Loop Make-up for a given service address or telephone number. The CRSG sends the service inquiry to Outside Plant Engineering to request Loop Make-up information and develop a Loop Make-up from company records. BellSouth will provide to the CLEC the Loop Make-up on the most compatible xDSL loop facility leading to the address specified by the CLEC. The CRSG returns the service inquiry to the CLEC with Loop Make-up information and forwards the Service Inquiry to LCSC for billing.

Study Technique

The recurring costs associated with Mechanized Loop Makeup are based on the investment-related expenses for the newly installed computer servers and data

communications equipment. The vendor-installed prices and installation costs for the incremental investment are identified along with their associated hardware maintenance expenses. The Software RTU expenses for system development composed of Telcordia Application Software, Hewlett-Packard, Third Party Server Software and Andersen Consulting were also included in the recurring costs. The Andersen Consulting, Incorporated contractor expenses incorporate the development, enhancements and implementation for the computer applications for the affected Legacy Systems. The labor requirements for BellSouth Technology Services, Incorporated (BTSI) personnel to project manage the system implementation and ongoing computer application support were also included in the recurring costs.

The cost study sums the vendor-installed prices and installation charges for investments by Field Reporting Codes (FRCs). RTU fees are also summed by FRC 460C, Intangible Software RTU Investments. The cost study sums all the various labor hours by functional category and job grades. Other expenses or additives, such as hardware operations, maintenance, and software maintenance are summed by each expense category. The sum of the resulting total labor hours, investments and other expenses are divided by the sum of the projected cumulative number of CLEC Loops to be qualified and then processed through the BellSouth Cost Calculator.

The cost studies supporting the Manual Loop Make-up are nonrecurring in nature. The costs are based on specific work activities required to provide a loop make-up response in a manual environment.

Microsoft Excel spreadsheets are used to perform these cost analyses.

Specific Study Assumptions

Mechanized Loop Makeup:

- Cost is valid from 2000 through 2002.
- The projected numbers of CLEC Loops to be qualified are midyear projections.
- The portion of all material prices for PC's, Data Communications Devices, Mid-range computers, equipment installation, hardware operations, maintenance and software maintenance attributable to LMU were included.
- This study includes the recurring capital and noncapital related expenses and maintenance. The nonrecurring cost for interface development and installation is also included.
- The recurring volume sensitive costs include the investment and RTU related costs, as well as hardware operations and maintenance expenses. The recurring volume

insensitive costs include the Telcordia and Andersen Consulting ongoing maintenance and BTSI labor support.

- Data Communication Material was an expense due to the cost of each unit being less than $2,000.
- The investment estimates are based on year 2000 material prices and installation charges. RTU fees are also based on year 2000 estimates. All investments and RTU fees will be purchased in 2000.
- In this study, we recover the average annual costs of the equipment and the capitalized Software for the study period.
- CLECs can access TAG via Dial-up, LAN-to-LAN or the Internet.
- The CLEC will be responsible for all charges associated with the ordering, installation of private line or dial-up circuits, related equipment, associated toll charges relative to data transmission and CLEC hardware and software costs on the CLEC's end; such as RoboTAG. Therefore, these costs are not included in this study.
- This study does not include any expenses associated with the Toll charges associated with the CLEC accessing BellSouth's internal network.

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J.4 LINE SHARING SPLITTER IN THE CENTRAL OFFICE & REMOTE TERMINAL

J.4.1 LINE SHARING SPLITTER, PER SYSTEM 96 LINE CAPACITY IN THE CENTRAL OFFICE

J.4.2 LINE SHARING SPLITTER, PER SYSTEM 24 LINE CAPACITY IN THE CENTRAL OFFICE

J.4.3 LINE SHARING SPLITTER - PER LINE ACTIVATION IN THE CENTRAL OFFICE

J.4.4 LINE SHARING SPLITTER - PER SUBSEQUENT ACTIVITY PER LINE REARRANGEMENT

Element Description

This unbundled network element (UNE) unbundles the high frequency data portion of the local loop in the end users' serving wire center. The CLECs can use this UNE to provide xDSL-based services for their end user customers. The loop's remaining transmission frequencies continue to provide voice grade service from BellSouth. The Line Sharing Splitter in the CO UNE is provided on a two wire unloaded line side copper loop that does not exceed 18 KF. For each loop, BellSouth provides this UNE only to a single requesting carrier and only for use at the same customer address. BellSouth will not provide this UNE if BellSouth does not currently provide analog voice service to the customer. Also, if the customer terminates his voice service with BellSouth, this UNE will be disconnected for that customer. However, if the CLEC wants to continue to provide xDSL service to the end user, the CLEC may purchase the full stand-alone loop unbundled network element.

In order to unbundle the high frequency portion of the loop; a 2-wire line-side copper loop is terminated at a splitter located in the serving wire center. The splitter routes the high frequency portion of the circuit to the CLECs xDSL equipment. One splitter or passive signal filter must also be installed at the customer's premises as CPE (Customer Premises Equipment). Since the CPE is the responsibility of the customer or CLEC, the cost of the CPE is not included. BellSouth installs only the splitter in the central office.

The Line Sharing Splitter UNE consists of the following elements: (J.4.1) a per splitter system 96 line capacity and (J.4.2) a per splitter system 24 line capacity, (J.4.3) a per line activation in the central office per occurrence and (J4.4) a per subsequent activity per occurrence. The system splitter consists of a 96-line or 24-line capacity for 96 or 24 individual (line) connections in the central office for line sharing. The CLEC purchases collocation cross connects to connect his xDSL equipment to the splitter frame in the central office. For CO line sharing, the CLEC must have a DSLAM unit collocated in the serving central office of the end user. The line activation in the central office provides for a connection between the collocation cross connect, the splitter and the end user

loop. A line activation charge is applicable for every end user loop that connects to a splitter.

Study Technique

Microsoft Excel spreadsheets are used to develop both recurring and nonrecurring cost analyses.

Specific Study Assumptions

- "N " Unbundled Network Elements apply.
- Loop conditioning is not included. Additional charges apply if conditioning is required.
- The CLEC will need to order collocation in the central office to go with line sharing.
- The end user calls BellSouth for problems related to voice service and calls the CLEC for problems related to data service.

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J.5 ACCESS TO THE DCS
J.5.1 CUSTOMER RECONFIGURATION ESTABLISHMENT
J.5.2 DS1 DCS TERMINATION WITH DS0 SWITCHING
J.5.3 DS1 DCS TERMINATION WITH DS1 SWITCHING
J.5.4 DS3 DCS TERMINATION WITH DS1 SWITCHING

Element Description

Access to the DCS (Digital Cross Connect) - Customer Reconfiguration is a network management system based unbundled network element that allows a CLEC to view their assigned digital cross connects within the BellSouth network, to have real time reconfiguration for their circuit connections and alarm surveillance of their UNE facility network. This UNE allows CLECs to manage DS3, DS1 and DS0 level circuits.

The customer reconfiguration software platform communicates with the individual network elements, to receive alarms and to send commands for reconfigurations. It also serves to partition the CLECs data base so that each CLEC customer has secure access to only his own network elements.

A channel termination on the DCS is required for each switching option the CLEC desires. The types of switching options are: (J.5.2) DS1 DCS port termination with DS0 level switching, (J.5.3) DS1 DCS port termination with DS1 level switching and (J.5.4) DS3 DCS port termination with DS1 level switching. For example, if the CLEC wanted to monitor or reconfigure the 24 DS0 circuits riding on the DS1 channel, the CLEC would purchase a DS1 channel termination with DS0 switching. If the customer doesn't need access to the individual DS0 circuits then the customer could purchase a DS1 channel termination with DS1 switching. An unbundled network element (i.e. loop or local channel) ordered separately, is provisioned with a DCS port termination to provide this reconfiguration capability to the customer. Element (J.5.1) is a nonrecurring cost to set up the customer's database – customer reconfiguration establishment.

Specific Study Assumptions

The CLEC is responsible for providing the terminal equipment required for access to Customer Reconfiguration. The CLEC transmits reconfiguration directions to or receives monitoring information from the company over a switched (dial) service or a private line service. Several types of access are listed in A32.1.2 of the GSST tariff or Section 7.5.18 in the FCC tariff. Each CLEC must purchase at least one type of access to the customer reconfiguration system. This study includes only the customer reconfiguration system and the DCS termination. This UNE can only be provided on a DCS equipped with reconfiguration capability.

No costs for reconfigurations performed by BellSouth personnel are included in this study. No training cost is included.

TENNESSEE DOCKET NO. 00-00544
SECTION 5
UNBUNDLED NETWORK ELEMENT STUDIES

L.0 ACCESS DAILY USAGE FILE (ADUF)
L.1 ACCESS DAILY USAGE FILE
L.1.1 ACCESS DAILY USAGE FILE, MESSAGE PROCESSING, PER MESSAGE
L.1.3 ACCESS DAILY USAGE FILE, DATA TRANSMISSION (CONNECT:DIRECT™), PER MESSAGE

Element Descriptions:

Access Daily Usage File is a service offered to Competitive Local Exchange Companies providing electronic data of billable messages recorded on the BellSouth network and processed in the BellSouth Customer Record Information System (CRIS) billing system (UNE only). ADUF provides daily information of end users' originating and terminating access Carrier messages. ADUF data is billable access detail messages in industry standard Exchange Message Interface (EMI) format. Access Daily Usage File will be distributed to CLECs over the agreed upon available method. The data on ADUF will be in a non-compacted EMI format of 210 bytes.

Access Daily Usage File: Message Processing, Per Message
This element relates to the cost to provide billing records to the CLECs for use in their billing systems. This cost encompasses the processing of messages and transferring the messages to the CLEC.

Access Daily Usage File: Data Transmission (CONNECT:Direct™), Per Message
This element relates to the cost of the computer process to transmit billing records via CONNECT:Direct™ Data Transmission software to the CLEC for its billing purposes.

Study Technique

The Message Processing Per Message cost is comprised of nonrecurring developmental labor for BellSouth Telecommunications, Incorporated and BellSouth Billing, Incorporated personnel and contractors and computer expense, recurring computer operations expense and recurring labor necessary to process the CLEC message data to be sent to the CLEC for billing purposes. The methods used to calculate the different cost types are as follows:

Investment volume insensitive cost for nonrecurring contractor software development expense was multiplied by the contractor labor cost per hour. The resulting intangible software RTU cost was then divided by the sum of the annual messages for the study periods impacted.

Additives volume sensitive for computer expense were derived by dividing the computer utilization statistics by the number of messages processed to yield an average utilization per message. This average utilization per message was multiplied by the computer resource contract cost per asset type to yield an additive cost per message.

Additives volume insensitive were derived by multiplying the annual contractor recurring labor hours by the contractor labor cost per hour. This cost was then divided by the messages processed. Nonrecurring computer utilization was calculated by multiplying the developmental hours by the average computer developmental utilization per hour. The results of this calculation were multiplied by the cost per unit and divided by the number of messages.

Labor volume insensitive sums all the various labor hours by pay band and are processed the same as volume insensitive additives except labor hours are used in place of cost in the calculation.

The results of the volume sensitive and insensitive labor hours, investments and additives per message were sent to the BellSouth Cost Calculator.

The Data Transmission costs consist of computer and communications equipment hardware, software, operations expenses, recurring BellSouth and contractor labor costs and relates to the process used to transmit the customer usage data to the CLEC utilizing the CONNECT:Direct™ Data Transmission software, the primary computer mainframe software. The Data Transmission communications equipment investment is developed on a per message basis by Field Reporting Code and passed to the BellSouth Cost Calculator where the annual cost is developed with the use of Annual Cost Factors for General Purpose Computers. Cost of computer mainframe and communication equipment resources, additives in addition to contractor labor expenses and BellSouth labor hours are derived per message. The BellSouth File Transfer System (BFTS), Mainframe Computers and communications equipment costs are based on capacity cost principles. BFTS, the BellSouth Internal Network Data Transfer Software, is comprised of General-Purpose Computer hardware, software costs and the BellSouth labor hours and contractor labor expenses and is derived on a per message basis. All cost elements pertaining to labor and expense additives are also sent to the BellSouth Cost Calculator.

Specific Study Assumptions

- The nonrecurring costs for Message Processing per Message are recovered over 2000 through 2009.
- This study contains messages associated with an unbundled port.

- Product development and enhancements nonrecurring labor hours are included in all cost studies except for the ADUF: Data Transmission (CONNECT:Direct™) cost study.
- Nonrecurring or developmental and maintenance costs are included in the ADUF: Message Processing, per Message cost study.
- All nonrecurring costs were amortized over a five-year period in the ADUF: Message Processing, per Message cost study.
- The CRIS processing cost associated with billing the Other Charges and Credit (OC&C) charge is recovered in the TELRIC shared and common factors.
- BellSouth Information Technology and BellSouth Billing, Incorporated labor inputs are based on steady state or ongoing support.
- The CLECs will be responsible for all charges associated with the ordering, installation of private line or dial-up circuits, related equipment and associated toll charges relative to ADUF: Data Transmission (CONNECT:Direct™) Cost Study. Therefore, these costs are not included in this study.
- Access Daily Usage File data will be sent to the CLEC via CONNECT:Direct™ data transmission software only. The magnetic tape processing option is not available.
- These ADUF cost studies do not include any expenses associated with the Toll charges associated with the CLEC accessing BellSouth's internal network.
- Costs to establish the data transmission facilities are not included in the ADUF: Data Transmission (CONNECT:Direct™) cost study.
- The Access Daily Usage File: Data Transmission (CONNECT:Direct™) Cost Study includes the contractor programming maintenance expense for CONNECT:Direct™ software as well as the contractor labor expense for connecting, initializing and testing each CLEC who is provisioned to this data transmission service.
- The Access Daily Usage File: Data Transmission (CONNECT:Direct™) Cost Study does not include the cost of the Transmission Control Program/Internet Protocol (TCP/IP) as this software supports many computer applications within BellSouth.
- The COMTEN Front-end communications hardware and software is configured with a back-up machine for each production machine; therefore, both COMTEN machines are

calculated in the capacity costing derivations in the Access Daily Usage File: Data Transmission (CONNECT:Direct™) Cost Study.

- The Access Daily Usage File: Data Transmission (CONNECT:Direct™) Cost Study does not include the costs for the Technical Support Center (Helpdesk) supported by EDS, Incorporated personnel as these expenses are included in the various mainframe and mid-range computer resource charges from EDS to BellSouth.
- The Optional Daily Usage File: Data Transmission (CONNECT:Direct™) Cost Study assumes that BFTS, one of the BellSouth internal data access methods, transports each character of data that CONNECT: Direct™ has transported in and out of the BellSouth region.

List of Acronyms

BFTS	BellSouth File Transfer System
COMTEN®	Communication Equipment
CONNECT:Direct™	Data Transmission Software
FTP	Fulltime Person Contractor Designation
FTE	BellSouth's Fulltime Equivalent Designation
Gigabyte	One billion bytes or characters of computer storage
NETEX®	NETwork Executive Software
OCN	Operating Company Number

M.0 DAILY USAGE FILES
M.1 ENHANCED OPTIONAL DAILY USAGE FILE
M.1.1 ENHANCED OPTIONAL DAILY USAGE FILE: MESSAGE PROCESSING, PER MESSAGE

Element Descriptions:

Enhanced Optional Daily Usage File (EODUF) is an option, for those CLECs who purchase Optional Daily Usage File (ODUF), that provides usage data for local calls originating from resold Flat Rate Business and Residential lines. The EODUF messages are distributed to CLECs over their existing ODUF feed. The EODUF messages will be intermingled among the CLECs' ODUF messages. This element reflects the cost associated with the processing of messages and transferring the messages to the CLEC.

Study Technique

The Message Processing Per Message cost is comprised of nonrecurring developmental labor for BellSouth Telecommunications, Incorporated and BellSouth Billing, Incorporated personnel and contractors and computer expense, recurring computer operations expense and recurring labor necessary to process the CLEC message data to be sent to the CLEC for billing purposes. The methods used to calculate the different cost types are as follows:

Investment volume insensitive cost for nonrecurring contractor software development expense was multiplied by the contractor labor cost per hour. The resulting intangible software RTU cost was then divided by the sum of the annual messages for the study periods impacted.

Additives volume sensitive for computer expense were derived by dividing the computer utilization statistics by the number of messages processed to yield an average utilization per message. This average utilization per message was multiplied by the computer resource contract cost per asset type to yield an additive cost per message.

Additives volume insensitive costs were derived by multiplying the annual contractor recurring labor hours by the contractor labor cost per hour. This cost was then divided by the messages processed. Nonrecurring computer utilization was calculated by multiplying the developmental hours by the average computer developmental utilization per hour. The results of this calculation were multiplied by the cost per unit and divided by the number of messages.

Labor volume insensitive sums all the various labor hours by pay band and are processed the same as volume insensitive additives except labor hours are used in place of cost in the calculation.

The results of the volume sensitive and insensitive labor hours, investments and additives per message were sent to the BellSouth Cost Calculator.

Specific Study Assumptions

- Cost is valid from 2000 through 2002.
- Product development nonrecurring labor hours are included.
- The CRIS processing cost associated with billing the Other Charges and Credit (OC&C) charge is recovered in the TELRIC shared and common factors.
- BellSouth Information Technology and BellSouth Billing, Incorporated labor inputs are based on steady state or ongoing support.
- This study contains flat rated usage data not previously considered in ODUF or ADUF cost studies.

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