SOUTHWESTERN BELL TELEPHONE

NONPROPRIETARY COST STUDY SCHEDULES

OF

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NP

NONPROPRIETARY COST STUDY SCHEDULE

OF

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MISSOURI
1997-1999
UNBUNDLED LOCAL SWITCHING FEATURES
NONRECURRING COST STUDY

OVERVIEW

STUDY PURPOSE

The purpose of this study is to identify the nonrecurring cost associated with providing standard features to Local Service Providers (LSPS) commonly available with the following port categories:

- Analog Line Port – A line side switch connection available in either a loop or ground start signaling configuration used primarily for switched voice communications.

- ISDN Basic Rate Interface (BRI) Port – A line side switch connection which provides ISDN Basic Rate Interface (BRI) based capabilities.

SERVICE DESCRIPTION

Southwestern Bell Telephone (SWBT) will provide certain features referred to as "standard features" with the Analog Line Port, the Analog Line Port with Centrex-Like Applications or the ISDN BRI Port.

Analog Line Port Standard Features

The following list of features are considered standard and are available where facilities permit for use with the standard Analog Line Port:

Call Waiting	Selective Call Rejection
Call Forwarding Variable	Automatic Recall/Call Return
Call Forwarding -Busy Line	Customer Originated Call Trace
Call Forwarding-Don't Answer	Selective Call Forwarding
Three-Way Calling	Distinctive Ringing/Priority Call
Speed Dialing-8	Calling Number Delivery/Caller ID
Speed Dialing-30	Calling Name Delivery/Caller ID
Residence Distinctive Alerting/ Teen Service/ Personalized Ring	Calling Number/Name Delivery Block
	Anonymous Call Rejection
Automatic Callback	Hunting Arrangements

Analog Line Port Standard Features for Centrex-Like Offering
ISDN BRI Port Standard Features

The standard features for Centrex-Like Offering (Analog and ISDN) are listed in the "Unbundled Local Switching-Centrex-Like Features-Analog and ISDN Study".

MISSOURI
1997-1999
UNBUNDLED LOCAL SWITCHING FEATURES
NONRECURRING COST STUDY

COST CONSIDERATIONS

This study includes the nonrecurring costs associated with system data processing and the labor effort necessary to provide standard features, used with the standard Analog Line Port, to LSPS. The incremental cost study was developed using a 1997-1999 planning period. It was assumed that the data processing and labor expense would be the same for all of the "Standard Features", listed above, except for the following:

Personalized Ring (Standard Features only)
Hunting Arrangements (Standard Features and Standard Features for Centrex-Like Offering-Analog and ISDN)

Because of the difference in the labor effort, costs were developed separately for "Standard Features", "Personalized Ring", "Hunting Arrangements", and "Standard Features for Centrex-Like Offering-Analog and ISDN".

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1997-1999
UNBUNDLED LOCAL SWITCHING FEATURES
NONRECURRING COST STUDY

METHODOLOGY

This study identifies the nonrecurring costs for providing features. These costs, stated on a "per feature basis" includes the labor and data processing expense associated with providing Analog Port Features to LSPS. The costs components listed below were identified in determining costs:

Local Service Provider Service Center (LSPSC)

Nonrecurring cost in the LSPSC includes the service representatives' labor expense while typing and reviewing orders for distribution.

The LSPSC labor cost per feature was developed (separately for each of the exceptions listed in the "Overview" on the preceding page) by multiplying the labor hours by the appropriate labor rate and applying a levelized inflation factor to reflect planning period.

Directory-White Pages

Nonrecurring Directory costs include labor and data processing expenses associated with the insertion or deletion of a listing in the White Pages Directory (see note).

Note: Directory White Pages costs are included only in the nonrecurring costs of providing Personalized Ring.

Recent Change Memory Administration Center (RCMAC)

Nonrecurring cost in the RCMAC includes the Line Translation Specialist's labor expense associated with providing Hunting Arrangements (see note). Tasks include reviewing customer requests and manually creating recent change memory translations.

The RCMAC labor cost per Hunting Arrangement was developed by multiplying the labor hours by the appropriate labor rate and applying a levelized inflation factor to reflect planning period.

Note: RCMAC costs are included only in the nonrecurring costs of providing a Hunting Arrangement.

MARCH Data Processing

Data processing costs identified include the Centralized Processing Unit (CPU) costs associated with the mechanical translations of an order via the MARCH System.

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UNBUNDLED LOCAL SWITCHING FEATURES
NONRECURRING COST STUDY

The CPU cost was determined by multiplying the average number of CPU minutes per order by the CPU cost per second and applying a levelized inflation factor to reflect planning period to arrive at CPU cost per order.

Total Cost

The LSPSC, Directory White Pages (Personalized Ring only), RCMAC (Hunting Arrangements only), and March Data Processing costs were summed to product cost per feature. A Commission Assessment Factor was then applied to arrive at total cost per feature.

MISSOURI
1997-1999
UNBUNDLED LOCAL SWITCHING FEATURES
NONRECURRING COST STUDY

NONREUCRRING COST PER FEATURE

STANDARD FEATURE *	**$_____**
PERSONALIZED RING	**$_____**
HUNTING ARRANGEMENT	**$_____**
CENTREX-LIKE OFFERING **	**$_____**

* EXCLUDING PERSONALIZED RING AND HUNTING ARRANGEMENTS

** TO BE USED IN THE UNBUNDLED LOCAL SWITCHING-CENTREX-LIKE FEATURES-ANALOG STUDY

HIGHLY CONFIDENTIAL

MISSOURI
1997 – 1999
UNBUNDLED PRIMARY RATE INTERFACE PORT FEATURES
NONRECURRING COST

OVERVIEW / METHODOLOGY

10/97

Purpose

This study identifies the nonrecurring cost for features provided with the unbundled Integrated Services Digital Network (ISDN) Primary Rate Interface (PRI) ports. The features are Dynamic Channel Allocation, Back-up D Channel and Calling Number Delivery.

Overview

Primary Rate Interface (PRI) provides access for circuit switched voice and data communications. This capability is provided using Integrated Services Digital Network (ISDN) architecture. Primary Rate Interface technology is typically divided into twenty-three B channels and one D channel. The B channels provide voice and data communications while the D channel provides out-of-band signaling.

Dynamic Channel Allocation allows the customer to designate on a call by call basis the B channels for either Direct Outward Dial (DOD) or Direct Inward Dial (DID) services.

Back-up D Channel provides enhanced continuity of service by allowing a D channel of one interface to automatically take over for a failed D channel of another interface in arrangements that include two or more interfaces.

Calling Number Deliver allows the number of the calling party to be delivered to the called party.

Methodology

Nonrecurring costs are developed by multiplying the estimated labor hours for the translation work functions by the associated labor rate. A state commission assessment factor is applied to the nonrecurring cost.

There are no nonrecurring costs for Calling Number Delivery because it is an inherent feature of the 5ESS ISDN switch.

MISSOURI
1997 – 1999
UNBUNDLED PRIMARY RATE INTERFACE PORT FEATURES
NONRECURRING COST

RESULTS

	NONRECURRING
Dynamic Channel Allocation, per PRI	**$ **
Calling Number Delivery, per PRI	**$ **
Back-up D Channel, per PRI	**$ **

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MISSOURI
UNBUNDLED BASIC RATE INTERFACE PORT FEATURES
NONRECURRING COST
1997 -- 1999
OVERVIEW/METHODOLOGY

PURPOSE

This study identifies the nonrecurring cost associated with the Basic and Call Appearance Call Handling (CACH) Electronic Key Telephone System (EKTS) feature package translation activities.

OVERVIEW

A Basic Rate Interface (BRI) unbundled port offers two 64 Kilobits per second (Kbps) B channels and one 16 Kbps D channel. One or both B channels may be configured for circuit switching or packet switching. Calls over a B channel configured for circuit switching may be either voice or data. The D channel carries out-of-band signaling for the B channel (s) and may also be configured for packet switching. The port, when configured for circuit switching, provides access to and from the Public Switched Telephone Network (PSTN). Two feature packages are available, Basic and CACH, and contain many popular features. Also, when configured for packet switching, the port provides access to SWBT's Public Packet Switched Network (PPSN).

METHODOLOGY

The nonrecurring cost is labor related and based on the estimated amount of time the particular translation activities need. The estimated labor hours are multiplied by the associated hourly labor cost. An operating expense levelized inflation factor is applied to represent the planning period. A state commission assessment factor is applied to obtain the final cost.

MISSOURI
UNBUNDLED BASIC RATE INTERFACE PORT FEATURES
NONRECURRING COST
1997-- 1999
RESULTS

10/97

	VOLUME SENSITIVE NONRECURRING COST
BASIC EKTS Feature Package per B Channel	**$ **
CACH EKTS Feature Package per B Channel	**$ **
Circuit Switched Voice/Circuit Switched Data per BRI	**$ **

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MISSOURI
UNBUNDLED CALL TRACE PER ACTIVATION
NONRECURRING COST
1997 - 1999

OVERVIEW/METHODOLOGY

PURPOSE

This study identifies the nonrecurring cost associated with the processing of a Call Trace activation.

DESCRIPTION

Call Trace allows the subscriber to initiate action against an individual using the telephone to make threatening, obscene, or harassing calls. When a customer subscribes to Call Trace, they will receive an announcement, confirming that the trace was successful, that the trace could not be completed at this time, or that the call came from outside the scope of the network. On a successful trace, the announcement further gives the subscriber information on keeping a personal log of calls and how to pursue legal action against the caller. The name and number of the trace is not revealed to the subscriber. Information identifying the caller is recorded and kept in the Southwestern Bell Annoying and Anonymous Call Bureau (A&A Bureau), until at least three successful traces have established a pattern of harassment. Then the information is turned over to law enforcement directly. The A&A Bureau contacts the customer after the first and third Call Trace activation. There is a natural fall-off rate of customers who follow through from the first to the third activation.

METHODOLOGY

The nonrecurring cost is labor related and is the estimated amount of time to process the activation on a per occurrence basis. The estimated labor hours are multiplied by the associated hourly labor cost. An operating expense inflation factor is applied to represent the planning period. A state commission assessment factor is applied to obtain the final cost.

MISSOURI
UNBUNDLED CALL TRACE PER ACTIVATION
NONRECURRING COST
1997 - 1999

RESULTS

	Volume Sensitive Nonrecurring Cost
Call Trace Activation, per Occurrence	**$ **

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UNBUNDLED LOCAL SWITCHING
CENTREX-LIKE FEATURES - ANALOG
MISSOURI
1997-1999

OVERVIEW

PURPOSE

The purpose of this study is to identify the forward-looking long run incremental nonrecurring cost associated with providing standard Centrex-like features for analog ports to Local Service Providers (LSP's).

Listed below are the centrex-like components for analog ports:

ANALOG

System Charge	Consultation Hold
Network Sales Support Charge	Speed Calling-Personal
Subsequent System Change Charge	Dial Call Waiting
Automatic Callback Calling	Distinctive Ringing & Call Waiting Tone
Call Hold	
Call Transfer-All Calls	Directed Call Pick-Up - Non Barge-In
Call Forwarding-Busy Line	Directed Call Pick-Up With Barge-In
Call Forwarding-Don't Answer	Hunting-Basic
Call Forwarding-Variable	Circular Hunting
Call Pick-Up	Voice Data Protection
Call Waiting-Intragroup	Class of Service Restriction-Semi-Restricted
Call Waiting-Originating	
Call Waiting-Terminating	Class of Service Restriction-Fully Restricted
Class of Service Restriction-Toll Restriction	Three-Way Calling

METHODOLOGY

The nonrecurring costs include the labor costs to perform the switch and line translations required to activate the feature. Labor hours were identified for the appropriate switch types. These labor hours were multiplied by the appropriate labor rates and weighted based on the percentage of lines served by each of the switch types. The total labor costs were then levelized using a CPI inflation factor to represent the planning period and the commission assessment factor was applied to all expenses. Labor rates and factors were obtained from standard, published tables.

UNBUNDLED LOCAL SWITCHING
CENTREX-LIKE FEATURES - ANALOG
MISSOURI
1997-1999

	NONRECURRING COSTS		
	FEATURE	LINE	SYSTEM
System Charge		--	**$ **
Network Sales Support Charge		--	**$ **
Subsequent System Change Charge		--	**$ **
Standard Features			
Automatic Call Back Calling	**$ **	--	**$ **
Call Hold	**$ **	--	**$ **
Call Transfer-All Calls	**$ **	--	**$ **
Call Forwarding-Variable	**$ **	--	**$ **
Call Forwarding-Busy Line	**$ **	--	**$ **
Call Forwarding-Don't Answer	**$ **	--	**$ **
Call Pickup	**$ **	--	**$ **
Call Waiting-Intragroup	**$ **	--	--
Call Waiting-Originating	**$ **	--	**$ **
Call Waiting-Terminating	**$ **	--	--
Class of Service Restriction-Toll Restriction	**$ **	--	**$ **
Speed Calling-Personal	**$ **	--	**$ **
Dial Call Waiting	**$ **	--	**$ **
Distinctive Ringing & Call Waiting Tone	**$ **	--	**$ **
Directed Call Pickup-Non-Barge In	**$ **	--	**$ **
Directed Call Pickup-Barge In	**$ **	--	**$ **
Hunting-Basic	**$ **	--	--
Circular Hunting	**$ **	--	--
Voice Data Protection	**$ **	--	**$ **
Class of Service Restriction-Semi-Restricted	**$ **	--	**$ **
Class of Service Restriction-Fully Restricted	**$ **	--	**$ **
Consultation Hold	**$ **	--	--
Three-Way Calling	**$ **	--	--
Total Standard Feature Package	**$ **	--	**$ **
Standard Feature Package, per Line	--	**$ **	--

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UNBUNDLED LOCAL SWITCHING
CENTREX-LIKE FEATURES - ISDN
MISSOURI
1997-1999

OVERVIEW

PURPOSE

The purpose of this study is to identify the forward-looking long run incremental nonrecurring cost associated with providing standard Centrex-like features for ISDN Basic Rate Interface (BRI) ports to Local Service Providers (LSP's).

Listed below are the centrex-like components for ISDN BRI ports:

ISDN

System Charge
Network Sales Support Charge
Subsequent System Change Charge
Circuit Switched Voice /Circuit Switched Data, per BRI
Additional Call Offering for CSV
Automatic Callback Calling
Call Forwarding-Busy Line
Call Forwarding-Don't Answer
Call Forwarding-Variable
Call Hold
Call Pickup
Call Transfer-All Calls
Consultation Hold
Directed Call Pickup-Non-Barge In
Directed Call Pickup With Barge In
Distinctive Ringing
Hunting-Basic
Circular Hunting
Speed Calling Personal
Three-Way Calling
Class of Service Restriction-Fully Restricted
Class of Service Restriction-Toll Restricted
Class of Service Restriction-Semi-Restricted

METHODOLOGY

The nonrecurring costs include the labor costs to perform the switch and line translations required to activate the feature. Labor hours were only identified for the 5ESS switch for the ISDN features. These labor hours were multiplied by the appropriate labor rates. The total labor costs were then levelized using a CPI inflation factor to represent the planning period and the commission assessment factor was applied to all expenses. Labor rates and factors were obtained from standard, published tables.

UNBUNDLED LOCAL SWITCHING
CENTREX-LIKE FEATURES - ISDN
MISSOURI
1997-1999

	NONRECURRING COSTS			
	FEATURE	CHANNEL	DEVICE	SYSTEM
System Charge		--	--	**$ **
Network Sales Support Charge		--	--	**$ **
Subsequent System Change Charge		--	--	**$ **
Circuit Switched Voice/Circuit Switched Data, per BRI		**$ **	--	--
Standard Features				
Additional Call Offering for CSV	**$ **		--	--
Automatic Callback Calling	**$ **		--	--
Call Forwarding-Busy Line	**$ **		--	--
Call Forwarding-Don't Answer	**$ **		--	--
Call Forwarding-Variable	**$ **		--	--
Call Hold	**$ **		--	--
Call Pickup	**$ **		--	**$ **
Call Transfer-All Calls	**$ **		--	--
Class of Service Restriction-Fully Restricted	**$ **		--	--
Class of Service Restriction-Semi-Restricted	**$ **		--	--
Class of Service Restriction-Toll Restriction	**$ **		--	--
Consultation Hold	**$ **		--	--
Directed Call Pickup-Non-Barge In	**$ **		--	--
Directed Call Pickup-Barge In	**$ **		--	--
Distinctive Ringing	**$ **		--	**$ **
Hunting-Basic	**$ **		--	--
Circular Hunting	**$ **		--	--
Speed Dialing Personal	**$ **		--	**$ **
Three-Way Calling	**$ **		--	--
Total Standard Feature Package	**$ **		--	**$ **
Standard Feature Package, per Device	--		**$ **	--

MISSOURI

DIRECT INWARD DIALING
NONRECURRING COST STUDY

1997-1999

OVERVIEW

Study Purpose

This study identifies for forward looking long run incremental nonrecurring costs for Direct Inward Dialing (DID) service 10 and 100 Number Blocks.

Service Description

Direct Inward Dialing (DID) allows an incoming call (not FX or WATS) to reach a specific PBX station line without attendant assistance. With DID, the switch seizes a DID trunk and outpulses the station line number to the PBX. If the called station's line is idle and not restricted from receiving terminating calls, the PBX alerts the called station and returns audible ringing on the incoming connection. If the called station's line is busy, the PBX returns busy tone. If the called station is restricted from receiving terminating calls, the PBX routes the incoming call to an announcement, dial tone, or to the PBX attendant.

METHODOLOGY

The nonrecurring labor hours to perform the switch translations, trunk engineering, and line translations for 10 and 100 Number Blocks were obtained from Network for the 5ESS, DMS100, DMS10 and AXE-10 switches. These labor hours were multiplied by the appropriate labor rate and weighted based on the total number of access lines in service for each technology. A levelized expense inflation factor was applied to reflect the study planning period and the commission assessment factor was applied to all costs.

MISSOURI

DIRECT INWARD DIALING
NONRECURRING COST STUDY

1997-1999

RESULTS

	Volume Sensitive Nonrecurring Cost
Initial 100 Numbers	**$ ____**
Initial 10 Numbers	**$ ____**
Add/Remove 100 Numbers	**$ ____**
Add/Remove 10 Numbers	**$ 2.56**

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MISSOURI

1997 - 1999

LIDB SMS COST STUDY

OVERVIEW / METHODOLOGY

Purpose

This study identifies the forward looking long run incremental costs associated with the Service Management System (SMS) administrative functions that support the Line Information Data Base (LIDB). This includes the Line Verification Administration System (LVAS), the Data Base Administration Center (DBAC) and the Sleuth system.

Description

LIDB contains records of telephone numbers, their associated names and addresses, telephone credit card data, customer third-number call preference, and other line information. The database is used for Alternate Billing Service (ABS) validations such as Billed Number Screening (BNS) and Calling Card Service (CCS). It also is used to support other functions such as Calling Name identification. Queries to the database are made through the Common Channel Signaling network using Signaling System 7 (SS7) protocol. The SMS functions provide input and update access to LIDB to keep records current. Sleuth is a fraud system that provides detection and control of ABS related fraud. The DBAC is the manual control point for inputs and updates to records.

Methodology

The LVAS computer hardware investment was converted to cost by applying current capital cost and expense factors. The Sleuth computer hardware and data terminal equipment investment was converted in the same manner. Levelized inflation factors were applied to represent the planning period.

The total labor cost for DBAC and Sleuth functions was developed by multiplying the total number of personnel at each level in these organizations by the labor cost for each individual state to represent the provision of the service wholly within the state.

Total company queries were used to divide the cost to provide cost per query to match the use of total costs within each state. Queries of all types were used as a divisor in the SMS study because the SMS supports all LIDB data query types. Only the Alternate Billing Service (CCS and BNS) queries were used in the Sleuth calculations because Sleuth detects fraud in billing. Queries for other data such as CNAM do not involve fraud.

Costs for labor to run the DBAC updates were annualized and the annual cost for manual updates was removed because this cost is identified separately in the study. Sleuth alert labor cost and labor cost for tape loads to the LIDB were also annualized. Levelized inflation factors were applied to the results to represent the planning period.

MISSOURI

1997 - 1999

LIDB SMS COST STUDY

OVERVIEW / METHODOLOGY

A state commission assessment factor was applied to all expenses.

The total annual recurring cost of SMS without Sleuth was divided by the total company queries on the LIDB database to produce the cost per query for SMS. The annual recurring cost for Sleuth was divided by the total ABS related queries on the LIDB database to produce the cost per query for Sleuth.

The cost for manual updates to the database was determined by estimating the labor time to do each type of update. These hours were multiplied by the levelized labor cost to represent the planning period. A commission assessment factor was applied to the results.

MISSOURI
1997-1999

LIDB SMS COST STUDY

RESULTS

SMS FOR LIDB	
COST PER QUERY	**$____**
MANUAL UPDATE - INITIAL, PER RECORD UPDATED	**$____**
MANUAL UPDATE - ONGOING, PER RECORD UPDATED	**$____**
SLEUTH	
COST PER QUERY	**$____**

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MISSOURI

LINE INFORMATION DATA BASE (LIDB) VALIDATION QUERY

1997

JUNE 9, 1997

OVERVIEW/METHODOLOGY

PURPOSE

This study identifies the forward-looking incremental cost of the Service Control Point (SCP), the signaling network link connection to a Signal Transfer Point (STP), and the port on the STP. This complies with FCC Docket CC 96-98, Order 96-325.

OVERVIEW

A LIDB validation query routes from SWBT's STP to a Service Control Point (SCP). For credit card validation, the SCP uses the credit card number and Personal Identification Number (PIN) to return an authorization or denial indicator for the credit card. For third party or collect calls, the SCP returns the customer's state preference to accept billing.

The results of this study were calculated in accordance with the recommendation of the Missouri PSC staff and do not necessarily reflect the view of Southwestern Bell Telephone Company as to the appropriate cost of the service being studied.

METHODOLOGY

RECURRING COST

The busy hour investment per query was developed using Bellcore's Common Channel Signaling cost Information system (CCSCIS). This investment per query was converted to an investment per query at any time by multiplying by the busy hour to business day ratio and dividing by the number of equivalent business days in the year.

Annual cost factors were applied to develop annual capital costs of depreciation, cost of money and income tax, as well as the operating expenses for maintenance, administration, and ad valorem taxes. A levelized inflation factor was applied to this expense to calculate the cost per query for the 1997 - 199 planning period. commission assessment was added.

LIDB SERVICE ORDER

The time needed to receive and process a LIDB service order was multiplied by the appropriate labor rate. Commission assessment was added.

MISSOURI

LINE INFORMATION DATA BASE (LIDB) VALIDATION QUERY

1997

JUNE 9, 1997

RESULTS

	VOLUME SENSITIVE RECURRING COST
LIDB QUERY COST	**$_____**

	VOLUME SENSITIVE NONRECURRING COST
LIDB SERVICE ORDER	**$_____**

HIGHLY CONFIDENTIAL

(Smith) Schedule 10-2

MISSOURI

CALLING NAME DELIVERY QUERY

1997

JUNE 9, 1997

OVERVIEW/METHODOLOGY

PURPOSE

This study identifies the forward-looking incremental cost of the Service Control Point(SCP), the signaling netowrk link connecting to a Signal Transfer Point (STP), and the prot on the STP. this complies with FCC Docket CC 96-98, Order 96-325.

OVERVIEW

A Calling Name Delivery (CNAM) query routes from SWBT's STP to a Service Control Point (SCP). The SCP uses the originating telephone number to provide the originator's name, or subsitute phrase, which is returned to the STP. Though not reflected in this study, the terminating serving office ultimately forwards the calling name to the end user's CallerID equipment as the telephone is ringing.

The results of this study were calculated in accordance with the recommendation of the Missouri PSC staff and do not necessarily reflect the view of Southwestern Bell Telephone company as to the appropriate cost of the service being studied.

METHODOLOGY

The busy hour investment per query was developed using Bellcore's Common Channel Signaling Cost Information System (CCSCIS). This investment per query was converted to an investment per query at any time by multiplying by the busy hour to business day ratio and dividing by the number of equivalent business days in the year.

Annual cost factors were applied to develop annual capital costs of depreciation, cost of money and income tax, as well as the operating expenses for maintenance, administration, and ad valorem taxes. Commission assessment was added.

MISSOURI

CALLING NAME DELIVERY QUERY

1997

JUNE 9, 1997

RESULTS

	VOLUME SENSITIVE RECURRING YEARLY COST
CNAM QUERY COST	**$_____**

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MISSOURI
BRANDING FOR RESELLERS
1997-1999
OVERVIEW/METHODOLOGY

OVERVIEW

STUDY PURPOSE

The purpose of this study is to identify the recurring and nonrecurring forward looking long run incremental costs associated with providing Branding Service for Resellers. The cost study results will support Local Service Providers (LSPs) in Missouri. This study complies with FCC Docket CC 96-98, Order 96-325.

STUDY PARAMETERS

The incremental cost study develops a branding cost per call , a nonrecurring charge per load and a nonrecurring charge per subsequent loading. The planning period for this offering is 1997-1999. Also included is GHQ and State specific recurring and nonrecurring costs.

DESCRIPTION OF PRODUCT

Branding Service for Resellers is a new service offering by which the Southwestern Bell Telephone Company automated equipment will provide a digitized announcement that may contain both tones and a spoken phrase to identify a telecommunications company to a caller. The LSP will be able to provide a unique recording to identify itself to callers dialing 0-, 0+, and 411 when those calls are routed to a SWBT operator service system.

METHODOLOGY

DESCRIPTION OF COSTS

VOLUME SENSITIVE RECURRING COSTS

EQUIPMENT COST

Volume sensitive recurring costs per call type are developed for the items for which costs vary depending on the number or length of a call. The unit of cost developed for each network component is dependent upon the appropriate unit of cost measurement, cost per call or cost per second. For components requiring cost to be developed based on a cost per second, the cost per second is multiplied by the seconds required for each call type to develop the call type specific cost per call. Investments for switching, operator services equipment, and trunking are converted into annual capital costs of depreciation, cost of money and income taxes. Annual operating expenses, for example, maintenance and

ad valorem taxes are added to the annual capital costs. This summation yields total annual recurring costs. Annual capital cost and operating expenses are adjusted to reflect the study period using the appropriate inflation factors. Additional information regarding costs for equipment and trunking can be found in the Operator Services Cost Model (OSCM).

VOLUME SENSITIVE NONRECURRING

INITIAL/SUBSEQUENT LOAD

The time needed to prepare announcement, update and load information, test system , and create billing is multiplied by the appropriate hourly labor rate to determine the cost associated with these activities. A levelized inflation factor and commission assessment factor are applied.

VOLUME INSENSITIVE RECURRING AND NONRECURRING

GHQ COSTS

The time needed by Finance to prepare billing for this service is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. The time required for Information Services to update telephone line number and company number is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. The time needed by Product Management to assist in getting the service established and on going tracking of the service is multiplied by the appropriate hourly labor rate to determine the cost associated with these activities. The time required by Access Services to request appropriate USOC's and FIDS and document methods is multiplied by the appropriate hourly labor rate to determine the cost associated with these activities. The time needed by Operator Services to develop methods, training and attend meeting for this service is multiplied by the appropriate hourly labor rate to determine the cost associated with these activities. Levelized inflation is applied to recurring cost. Other taxes is applied to both recurring and nonrecurring cost.

MISSOURI
BRANDING FOR RESELLERS
1997-1999
OVERVIEW/METHODOLOGY

STATE COSTS

The time required by Operator Services to attend meetings for developing methods and training operators and service assistants is multiplied by the appropriate hourly labor rate to determine the cost associated with these activities. The time required by Operator Services to attend meetings with vendors, joint testing and coordinating efforts is multiplied by the appropriate hourly labor rate to determine the cost associated with these activities. Levelized inflation is applied to recurring cost. Other taxes is applied to both recurring and nonrecurring cost.

MISSOURI
BRANDING FOR RESELLERS
1997-1999

15-Oct-97

RESULTS

Volume Sensitive Recurring cost per Call	**$_____**
Volume Sensitive Nonrecurring Cost	
Initial Load -	**$_____**
Subsequent Load -	**$_____**
Volume Insensitive Recurring/Nonrecurring Costs	
GHQ Recurring Cost -	**$_____**
GHQ Nonrecurring Cost -	**$_____**
Missouri Recurring -	**$_____**
Missouri Nonrecurring -	**$_____**

HIGHLY CONFIDENTIAL

MISSOURI
BRANDING FOR FACILITY BASED PROVIDERS
1997-1999

OVERVIEW/METHODOLOGY

OVERVIEW

STUDY PURPOSE

The purpose of this study is to identify the nonrecurring forward looking long run incremental costs associated with providing Branding Service for Facility Based Providers. The cost study results will support Competitive Local Exchange Carrier's (CLECs) in Missouri. This study complies with FCC Docket CC 96-98, Order 96-325.

STUDY PARAMETERS

The incremental cost study develops a branding nonrecurring charge per load and a nonrecurring charge per subsequent loading. The planning period for this offering is 1997-1999. Also included is GHQ and State specific recurring and nonrecurring costs.

DESCRIPTION OF PRODUCT

Branding Service for Facility based Providers is a new service offering by which the Southwestern Bell Telephone Company automated equipment will provide a digitized announcement that may contain both tones and a spoken phrase to identify a telecommunications company to a caller. The LSP will be able to provide a unique recording to identify itself to callers dialing 0-, 0+, and 411 when those calls are routed to a SWBT operator service system.

METHODOLOGY

DESCRIPTION OF COSTS

VOLUME SENSITIVE NONRECURRING COSTS

The time needed to prepare announcement, update and load information and test system were multiplied by the appropriate hourly labor rate to determine the one time cost.

MISSOURI
BRANDING FOR FACILITY BASED PROVIDERS
1997-1999

OVERVIEW/METHODOLOGY

VOLUME INSENSITIVE RECURRING AND NONRECURRING COSTS

GHQ COSTS

The time required for Information Services to handle daily system backups is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. The time needed by Product Management to assist in getting the service established and on going tracking of the service is multiplied by the appropriate hourly labor rate to determine the cost associated with these activities. The time needed by Operator Services to develop methods, training and attend meeting for this service is multiplied by the appropriate hourly labor rate to determine the cost associated with these activities.

STATE COSTS

The time required by Operator Services to attend meetings, develop methods, training operators and service assistants is multiplied by the appropriate hourly labor rate to determine the cost associated with these activities. The time required by Operator Services to attend meetings with vendors, joint testing and coordinating efforts is multiplied by the appropriate hourly labor rate to determine the cost associated with these activities.

MISSOURI
BRANDING FOR FACILITY BASED PROVIDERS
FORWARD LOOKING LONG RUN INCREMENTAL COSTS

1997-1999

RESULTS

Volume Sensitive Nonrecurring Cost	
Initial Load	**$ **
Subsequent Load	**$ **
Missouri Recurring Cost	**$ **
Missouri Nonrecurring Cost	**$ **
GHQ Recurring Cost	**$ **
GHQ Nonrecurring cost	**$ **

HIGHLY CONFIDENTIAL

MISSOURI
EXTERNAL RATER/REFERENCE - FAC BASED PROVIDERS COST STUDY
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY
1997-1999
OVERVIEW/METHODOLOGY

OVERVIEW

STUDY PURPOSE

The study identifies the forward looking long run incremental recurring and nonrecurring costs associated with providing External Rater/Reference for Facility Based Providers. The cost study results will support the Independent Exchange Company (IEC) and the Local Service Providers (LSP) in Missouri. This study complies with FCC Docket CC 96-98, Order 96-325.

STUDY PARAMETERS

The incremental cost study was developed for an initial load and a subsequent load. The planning period for this offering is 1997 - 1999.

DESCRIPTION OF PRODUCT

External Rater/Reference is a new service offering which allows the Southwestern Bell Telephone Company operator to quote unique IEC/LSP rates by originating line number on a real time basis for Traffic Operator Position System (TOPS) calls as well as provide specific Business Office and Repair information for Independent Exchange Company (IEC) and Local Service Providers (LSP).

METHODOLOGY

DESCRIPTION OF COSTS

VOLUME SENSITIVE NONRECURRING COSTS

INITIAL LOAD
The time required by Operator Services facility personnel to load the IEC or LSP Rater/Reference data into the data base is multiplied by the appropriate hourly labor rates to determine the cost associated with this activity. The time needed by Exchange Carrier Relations (IBIS) to create a tab card for billing is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. Commission assessment is applied.

SUBSEQUENT LOAD
The time needed by Operator Services facility personnel for updating the data base with a rate change is multiplied by the appropriate hourly labor rate to determine the cost associated with

this activity. The time required by Exchange Carrier Relations (IBIS) to create a tab card for billing is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. Commission assessment is applied.

VOLUME INSENSITIVE NONRECURRING COSTS

SHARED

The time needed by Operator Services to coordinate meetings for this service is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. The time required for Information Services to load Bellcore V&H and LERG files for rater is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. The time needed for Marketing to bring the product on line is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. The time required by Cost Studies for developing a cost study for this service is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. Commission assessment is applied.

SHARED FACILITY BASED PROVIDER

The time needed by Exchange Carrier Relations for setting up account codes and to record class for IBIS billing for this service is multiplied by the appropriate hourly labor rate to determine the cost associated with these activities. The time required by Operator Services methods personnel to develop methods/training and review additions to the database for this service is multiplied by the appropriate hourly labor rate to determine the cost associated with these activities. Commission assessment is applied.

STATE

The time required by Operator Services methods/training personnel for training operators and service assistants on this service is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. Commission assessment is applied.

STATE FACILITY BASED PROVIDER

The time needed by Operator Services methods/training personnel for methods support and developing job aids for this service is multiplied by the appropriate hourly labor rate to determine the cost associated with these activities. Commission assessment is applied.

MISSOURI
EXTERNAL RATER/REFERENCE - FAC BASED PROVIDERS COST STUDY
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY
1997-1999

VOLUME SENSITIVE NONRECURRING COST-PER INITIAL LOAD	**$_____**
VOLUME SENSITIVE NONRECURRING COST-PER SUBSEQUENT LOAD	**$_____**
VOLUME INSENSITIVE NONRECURRING COST (SHARED)	**$_____**
VOLUME INSENSITIVE NONRECURRING COST (SHARED-FAC BASED)	**$_____**
VOLUME INSENSITIVE NONRECURRING COST (MISSOURI)	**$_____**
VOLUME INSENSITIVE NONRECURRING COST (MISSOURI-FAC BASED)	**$_____**

HIGHLY CONFIDENTIAL

MISSOURI
EXTERNAL RATER/REFERENCE - RESELLERS COST STUDY
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY
1997-1999
OVERVIEW/METHODOLOGY

OVERVIEW

STUDY PURPOSE

The study identifies the forward looking long run incremental recurring and nonrecurring costs associated with providing External Rater/Reference for Resellers. The cost study results will support the Independent Exchange Company (IEC) and the Local Service Providers (LSP) in Missouri. This study complies with FCC Docket CC 96-98, Order 96-325.

STUDY PARAMETERS

The incremental cost study was developed for an initial load and a subsequent load. The planning period for this offering is 1997 - 1999.

DESCRIPTION OF PRODUCT

External Rater/Reference is a new service offering which allows the Southwestern Bell Telephone Company operator to quote unique IEC/LSP rates by originating line number on a real time basis for Traffic Operator Position System (TOPS) calls as well as provide specific Business Office and Repair information for Independent Exchange Company (IEC) and Local Service Providers (LSP).

METHODOLOGY

DESCRIPTION OF COSTS

VOLUME SENSITIVE NONRECURRING COSTS

INITIAL LOAD
The time required by Operator Services facility personnel to load the IEC or LSP Rater/Reference data into the data base is multiplied by the appropriate hourly labor rates to determine the cost associated with this activity. The time needed by Customer Services to create billing is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. Commission assessment is applied.

SUBSEQUENT LOAD
The time needed by Operator Services facility personnel for updating the data base with a rate change is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. The time required by Customer Services to create billing is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. Commission assessment is applied.

VOLUME INSENSITIVE NONRECURRING COSTS

SHARED
The time needed by Operator Services to coordinate meetings for this service is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. The time required for Information Services to load Bellcore V&H and LERG files for rater is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. The time needed for Marketing to bring the product on line is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. The time required by Cost Studies for developing a cost study for this service is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. Commission assessment is applied.

SHARED RESELLER
The time required for Information Services to update programming of telephone line/company numbers for reference is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. The time needed for training Finance personnel on bill preparation for rater is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. The time needed by Customer Services for requests for USOCS/FIDS and to document methods/procedures for this service is multiplied by the appropriate hourly labor rate to determine the cost associated with these activities. The time required by Operator Services methods personnel to develop methods/training and review additions to the database for this service is multiplied by the appropriate hourly labor rate to determine the cost associated with these activities. Commission assessment is applied.

MISSOURI
EXTERNAL RATER/REFERENCE - RESELLERS COST STUDY
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY
1997-1999
OVERVIEW/METHODOLOGY

STATE
The time required by Operator Services methods/training personnel for training operators and service assistants on this service is multiplied by the appropriate hourly labor rate to determine the cost associated with this activity. Commission assessment is applied.

STATE RESELLER
The time needed by Operator Services methods/training personnel for methods support and developing job aids for this service is multiplied by the appropriate hourly labor rate to determine the cost associated with these activities. Commission assessment is applied.

MISSOURI
EXTERNAL RATER/REFERENCE - RESELLERS
FORWARD LOOKING LONG RUN INCREMENTAL COSTS
1997-1999
RESULTS

VOLUME SENSITIVE NONRECURRING COST-PER INITIAL LOAD	**$_____**
VOLUME SENSITIVE NONRECURRING COST-PER SUBSEQUENT LOAD	**$_____**
VOLUME INSENSITIVE NONRECURRING COST (SHARED)	**$_____**
VOLUME INSENSITIVE NONRECURRING COST (SHARED-RESELLER)	**$_____**
VOLUME INSENSITIVE NONRECURRING COST (MISSOURI)	**$_____**
VOLUME INSENSITIVE NONRECURRING COST (MISSOURI-FAC BASED)	**$_____**

HIGHLY CONFIDENTIAL

MISSOURI
1997-1999
OPERATIONAL SUPPORT SYSTEMS - INFORMATION SYSTEMS, STARTUP AND ONGOING OPERATIONAL, REMOTE ACCESS FACILITY, HELPDESK FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY

OVERVIEW/METHODOLOGY

OVERVIEW

STUDY PURPOSE

SWBT must provide the Local Service Providers (LSPs) nondiscriminatory access to the Operational Support Systems (OSSs) functions for pre-ordering, ordering, provisioning, maintenance/repair and billing. The purpose of study is to identify the recurring and nonrecurring costs associated with providing OSS access.

COST COMPONENTS

Costs were identified for the following components to determine the monthly recurring cost per port:

- REMOTE ACCESS FACILITY EQUIPMENT
- FACILITIES
- SECURITY
- SYSTEM ACCESS

Costs were identified for the following components to determine the start up costs, ongoing operational costs, helpdesk, and ongoing remote access facility costs associated with providing access to OSS:

- AIN SALES TOOLS
- ASKME
- BOSS
- BUSINESS EASE
- CONSUMER EASE
- CSDB
- CUSTOMER SUPPORT STAFF
- DATAGATE
- DIRECTORY ASSISTANCE
- E911
- EASE TANDEM SUPPORT
- E-BONDING
- ECRS
- EDI
- HELPDESK
- IWS SUPPORT
- LSS
- LVAS
- REMOTE ACCESS FACILITY
- SECURITY
- TAXI
- ULTRA
- VERIGATE
- VOICE RESPONSE UNIT
- VOICE SERVICES
- WFA

MISSOURI
1997-1999
OPERATIONAL SUPPORT SYSTEMS - INFORMATION SYSTEMS, STARTUP AND ONGOING OPERATIONAL, REMOTE ACCESS FACILITY, HELPDESK FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY

OVERVIEW/METHODOLOGY

This study has two year planning period.

METHODOLOGY

DESCRIPTION OF COSTS

REMOTE ACCESS FACILITY AND FACILITIES

Remote Access Facility costs are the monthly costs for the LSP to access our Operational Support Systems. The ongoing expense includes maintenance to support the LSP's Remote Access Facility.

Annual cost factors were applied to the weighted investments to develop the annual costs.

The levelized inflation factor was applied to calculate the annual costs for 1997-1999 planning period. The total annual costs were divided by 12 to derive the total monthly cost per remote access facility, per system access, etc. The sum of these monthly costs were divided by the number of ports to determine a per port charge.

START UP COSTS

Start up costs includes the initial programming and training required to provide support for the LSP to access our Operational Support Systems.

The labor hours were multiplied by the appropriate labor rate to determine annual start up costs. Start up costs were given in a lump sum for 1996 and 1997. The following applications and support functions were associated with start up costs:

- AIN SALES TOOLS
- ASKME
- BOSS
- BUSINESS EASE
- CONSUMER EASE
- CSDB
- CUSTOMER SUPPORT
- DATAGATE
- ECRS
- EDI
- HELPDESK
- LSS
- LVAS
- REMOTE ACCESS FACILITY
- SECURITY
- TAXI

MISSOURI
1997-1999
OPERATIONAL SUPPORT SYSTEMS - INFORMATION SYSTEMS, STARTUP AND ONGOING OPERATIONAL, REMOTE ACCESS FACILITY, HELPDESK FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY

OVERVIEW/METHODOLOGY

- DIRECTORY ASSISTANCE
- E911
- EASE TANDEM SUPPORT
- E-BONDING
- ULTRA
- VERIGATE
- VOICE SERVICES
- WFA

ONGOING OPERATIONAL COSTS

Ongoing operational costs includes staff support and security maintenance to provide ongoing support for the LSP to access our Operational Support Systems.

The labor hours were multiplied by the appropriate labor rate to determine a per month and per year operational cost. The levelized inflation factor was applied to calculate the annual costs for 1997-1999 planning period. The following support functions were associated with operational costs:

- CUSTOMER SUPPORT STAFF
- EASE TANDEM SUPPORT
- IWS SUPPORT
- SECURITY

HELPDESK COSTS

Helpdesk includes 7 days/24 hour-a-day coverage for the LSP.

The labor hours were multiplied by the appropriate labor rate to determine a per month helpdesk cost. The levelized inflation factor was applied to calculate the annual costs for 1997-1999 planning period.

DEFINITIONS

AIN SALES TOOLS - Advanced Intelligent Network provides a Graphic User Interface (GUI) to handle customer ordering of complex services (i.e, Disaster Routing Services, Intelligent Redirect, Area Wide Networking, etc.).

ASKME - Acquisition of Statistical Knowledge Made Easy provides a historical analysis system for users to access design and non-design installation and repair data.

MISSOURI
1997-1999
OPERATIONAL SUPPORT SYSTEMS - INFORMATION SYSTEMS, STARTUP AND ONGOING OPERATIONAL, REMOTE ACCESS FACILITY, HELPDESK FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY

OVERVIEW/METHODOLOGY

BOSS - Billing, Order and Sales Support System provides an on-line system for Business office to retrieve and update customer account information relative to billing and collection matters as well as assisting sales operations.

BUSINESS EASE - Business Easy Access Sales Environment supports a single platform for service order negotiations. Ease is a on-line, menu-driven system which provides the user with on-line rate quotes, automatic product availability lists, and on-line help.

CONSUMER EASE -.Consumer Easy Access Sales Environment supports a single platform for service order negotiations. EASE is a on-line, menu-driven system which provides the user with on-line rate quotes, automatic product availability lists, and on-line help.

CSDB - Customer Service Data Base provides customer information for a specific customer or for all customers within a geographical region from a wire center to the entire company. CSDB provides analysis capabilities for Network and Marketing departments to determine how well they are providing service to business customers.

DATAGATE - is a set of software components and libraries which allow computers to exchange information across a distributed environment. Datagate is utilized in the pre-ordering process.

DIRECTORY ASSISTANCE - Will allow the LSP access to Directory One which will enable them to provide directory information (address, phone number, etc.).

E-BONDING - Electronic Bonding references the establishment of a gateway that allows companies to "bond" their OSS applications to SWBell's OSS application using industry standard interfaces as defined by American National Standards Institute (ANSI) T1M1 or the Order Billing Forum (OBF).

E911 - Gives the LSP access to PS911 which is a database that the LSP can update and correct information.

MISSOURI
1997-1999
OPERATIONAL SUPPORT SYSTEMS - INFORMATION SYSTEMS, STARTUP AND ONGOING OPERATIONAL, REMOTE ACCESS FACILITY, HELPDESK FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY

OVERVIEW/METHODOLOGY

EASE TANDEM HARDWARE - The hardware associated with a LSP accessing Business and/or Residence EASE for on-line rate quotes, automatic product availability lists and on-line help.

ECRS - Enhanced Customer Reports System provides a Gateway for the Customer Network Administration (CNA) project. It streamlines the customer contact layers for Customer Service Bureau (CSB), and Major Account Center (MAC), etc. A single point of contact allows trouble reports across state boundaries, single screen for trouble reporting, easy access to other systems for trouble resolution.

EDI - Electronic Data Interchange provides a means of exchanging business documents, such as purchase orders, bills and invoices. These documents are sent to SWBT and SWBT translates the data into an acceptable format for SORD and returns data to them.

LSS - Listing Services System is a mainframe based system which accepts machine readable listing information and compiles listing data for output to printers and external entities.

LVAS - Line Validation Administration System is the administration system for Line Information Data Base (LIDB). LVAS has the capability to validate and store all billing data.

OPTIVIEW - Gives the LSP access to view OPTI records (i.e, drawings of CAD - includes telephony plants, repeaters, coils, conduit, etc.).

REMOTE ACCESS FACILITY - Gives the LSP access to Operational Support Systems via Data Communications Network (DCN).

SECURITY - Established firewalls to screen and monitor LSP activity.

TAXI - Terminal Access Exchange Information provides an on-line retrieval of a customer account information.

MISSOURI
1997-1999
OPERATIONAL SUPPORT SYSTEMS - INFORMATION SYSTEMS, STARTUP AND ONGOING OPERATIONAL, REMOTE ACCESS FACILITY, HELPDESK FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY

OVERVIEW/METHODOLOGY

ULTRA - Universal Technician Remote Access supports installation and maintenance work activities for POTS, Special Services and Public technicians.

VERIGATE - Allows the LSP to execute queries to internal SWBT systems. A Graphic User Interface (GUI) is used to request the verification of end user addresses or Connecting Facility Assignment (CFA) information prior to submitting an order.

VOICE RESPONSE UNIT - Is the actual equipment and system that processes voice calls.

VOICE SERVICES - Provides telephone customers the ability to interact with Marketing Department Service Centers through a touch-tone keypad. They can perform from simple to fairly complex functions in this manner or they can speak to a representative. Voice Services is a collection of these voice applications that will need to be modified.

WFA - Work and Force Administration coordinates and tracks the activities associated with installation and maintenance of special service, message, carrier, and non-designed circuits.

MISSOURI
1997-1999
OPERATIONAL SUPPORT SYSTEMS -
INFORMATION SYSTEMS, START UP AND ONGOING OPERATIONAL,
REMOTE ACCESS FACILITY, HELPDESK
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY

RESULTS

	ONGOING
REMOTE ACCESS FACILITY (FORM A)	
COST PER PORT PER MONTH	**$ ____ **
ONGOING COST PER PORT PER MONTH	**$ ____ **

	ONE-TIME
START UP COSTS (FORM B)	
1996	**$ ____ **
1997	**$ ____ **

	ONGOING
ONGOING OPERATIONAL COST PER MONTH (FORM C)	**$ ____ **

	ONGOING
HELPDESK COST PER MONTH (FORM D)	**$ ____ **

HIGHLY CONFIDENTIAL

WHITE PAGES FOR OTHERS BY GEOGRAPHIC GROUPS
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY
MISSOURI
1997

OVERVIEW / METHODOLOGY

OVERVIEW

STUDY PURPOSE

The purpose of this study is to identify the recurring costs associated not only with providing the customer with a line of information in the White Pages Directory, but cost associated with the printing and distributing directories, and costs associated with the insertion and deletion of listings in the White Pages. This study will support the offering to the Local Service Providers (LSP) as well as the Independent Exchange Carriers (IEC). This study identifies the forward looking long run incremental costs for White Pages for Others based on the order dated February 28, 1997 for Docket 96-395-U.

COST COMPONENTS

The following cost components were identified in determining the monthly recurring expense associated with providing this service:

PAPER - The paper used in the production of the White Pages Directory.
PRINTING - The printing of the White Pages Directory.
TRANSPORTATION - Cost involved in transporting the printed copies of the Directory from the printer location to the delivery distribution point.
MANAGEMENT FEE - The management administration fees paid to Southwestern Bell Yellow Pages to administer the White Pages Publishing Agreement.
DELIVERY - Cost to get the Directory to the customer's location.

The directories were divided among three geographic groups. Each geographic group represents the following:

Group 1 - Urban
Group 2 - Suburban
Group 3 - Rural

Costs, copies (initially and subsequently delivered) and listing counts were associated with a particular directory based upon the geographic groups. However, since the data came at different time intervals and from several sources some of the directories had been combined with other

directories. When this occurred, costs, copies and listing counts were combined with their current directory.

METHODOLOGY

DESCRIPTION OF COSTS

The unit of cost developed for each component is dependent upon the appropriate unit of cost measurement. (i.e., cost per listing, cost per page, or cost per copy) The annual expense data for each of the components listed above were obtained from Directory White Pages. These costs were totaled and then divided by the appropriate unit measurement to obtain the " per " cost. Commission Assessment was applied.

In one option, the cost associated with entering and deleting a listing from the database was developed as a one time cost and is to be spread over the life of a typical listing. The cost was shown separately for this purpose.

For other options, cost of listing updates, per copy was developed as an annual cost associated with the printing of each copy of a directory. This cost was developed by multiplying the hourly labor cost by the amount of time required to perform the specific activity. Annual processing costs were added and the grand total was divided by the annual number of copies. Commission Assessment was applied.

WHITE PAGES FOR OTHERS BY GEOGRAPHIC GROUPS
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY
MISSOURI
1997

RESULTS

	GROUP 1 URBAN	GROUP 2 SUBURBAN	GROUP 3 RURAL
1. Cost to Others for being in White Pages Directory, per listing:			
Per Listing, per Month	**$ **	**$ **	**$ **
Per Copy Delivery, per Month	**$ **	**$ **	**$ **
SUBTOTAL	**$ **	**$ **	**$ **
One Time Cost in Life of a Listing, to Enter & Delete Listing from database	**$ **	**$ **	**$ **
1. Cost to Others for being in a Directory, per book copy with initial delivery:			
Per Copy	**$ **	**$ **	**$ **
Initial Delivery Cost, per Copy	**$ **	**$ **	**$ **
Cost of Listing Updates, per Copy	**$ **	**$ **	**$ **
TOTAL	**$ **	**$ **	**$ **
1. Cost to Others for being in a Directory, per book copy with subsequent delivery:			
Per Copy	**$ **	**$ **	**$ **
Subsequent Delivery, per Copy	**$ **	**$ **	**$ **
Cost of Listing Updates, per Copy	**$ **	**$ **	**$ **
TOTAL	**$ **	**$ **	**$ **

ADDITIVE ELEMENTS TO THE OPTIONS LISTED ABOVE

Cost Per Page Per Year Any One Book	**$ **	**$ **	**$ **

HIGHLY CONFIDENTIAL

MISSOURI
NXX MIGRATION COST STUDY
1997-1999

OVERVIEW

PURPOSE

This study develops the forward looking nonrecurring cost to move (migrate) an NXX from a Southwestern Bell Telephone (SWBT) switch to a Competitive Local Exchange Carrier (CLEC) switch.

DESCRIPTION

The move of a NXX may be requested by a CLEC when a CLEC becomes the service provider for the end user only if the end user has more than half the numbers in an NXX working and all the other numbers in the NXX are vacant (e.g. a Centrex/Plexar or DID customer). With the migration of the NXX, the end users retain their old telephone numbers though service is then provided via the CLEC switch. The migration of a NXX may or may not require the reuse of SWBT distribution facilities depending on the CLEC choice for provisioning service. No costs associated with the distribution facilities are included herein since they are covered by other rate elements.

Each time a CLEC requests the migration of a NXX, certain activities are required to remove the NXX from SWBT network and to reroute the NXX to the CLEC switch. These activities include: project coordination, changing translations in end offices, tandems and Signal Transfer Points (STPs), and changes in several systems and service centers. These activities mostly require labor time, but there may also be some computer run time to delete the NXX from computer systems and in some cases there may be a vendor charge to remove the NXX from a SWBT switch.

METHODOLOGY

The labor costs for each NXX migration activity was developed by multiplying estimated hours for that activity by the appropriate labor rate for the group performing the activity. Vendor charges were included in the study with sales tax. All costs were then inflated and levelized to reflect the planning period and a commission assessment factor was added. In addition, two activities included in the results were cost results from other studies. The St. Louis area was used as representative of the area for these activities.

MISSOURI
NXX MIGRATION COST STUDY
1997-1998

RESULTS

		NONRECURRING COST
I.	Translations and Miscellaneous Activities	**$ **
II.	Local Exchange Routing Guide (LERG)	**$ **
III.	Computer Run Time	**$ **
	TOTAL = I – II – III =	**$ **

(Smith) Schedule 18-2

MISSOURI
1997-1999
UNBUNDLED SERVICE ORDER
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY

OVERVIEW

STUDY PURPOSE

The purpose of this study is to identify the Forward Looking Long Run Incremental nonrecurring service ordering costs associated with providing Unbundled Network Elements to Local Service Providers. (LSPS).

DESCRIPTION OF CHARGES

Southwestern Bell will charge a nonrecurring "Service Order Charge" for providing Unbundled Network Elements to LSPS. Service Order Charges for Unbundled Network Elements have been divided into two service order categories, Simple and Complex. A brief description of the Simple and Complex service order follows:

Simple

Includes unbundled local network elements such as analog Line Port, DS1 Loops, Sub Loops, and Cross Connect. Service Representatives with the Local Service Provider Service Center (LSPSC) do not have to coordinate with other departments in order to provide these Network Elements. Service Reps can process orders as received.

Complex

Includes unbundled local network elements such as Analog Line Port with Centrex-Like Application, Dedicated Transport, and DS1 Facility. Coordination between the LSPSC and other departments (Network Sales Support, Routing Managers, Circuit Provisioning Center, etc.) is required to provide these Network Elements.

Within the Simple and Complex service categories, a service charge has been established for the following order types.

New Service Order Charge - Applicable when the Network Element is ordered initially.
Change Order Charge - Applicable when adding or changing service on established Network Elements.
Record Order Charge - Applicable for change request which do not involve central office work.
Disconnect Order Charge - Applicable when the Network Element is disconnected.

MISSOURI
1997-1999
UNBUNDLED SERVICE ORDER
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY

COST CONSIDERATIONS

This study includes the nonrecurring service ordering costs associated with data processing and the labor effort necessary to provide Unbundled Network Elements to LSPS. Because of the difference in the labor effort, costs were developed separately for the New Service, Change, Record, and Disconnect order types in the Simple and Complex service order categories. Costs were developed using a three year planning period.

METHODOLOGY

This study identifies the nonrecurring service ordering costs for providing Unbundled Network Elements to LSPS. Costs were identified separately for the New Service, Change, Record, and Disconnect Order types in the Simple and Complex service order categories. Within each order type, costs for the "Local Service Request (LSR)" and "Typing" cost elements are also identified. These costs, stated on a "per order" basis include the labor and data processing expenses associated with providing service. The cost components listed below were identified in determining the costs:

Local Service Provider Service Center (LSPSC)

Nonrecurring cost in the LSPSC include the service representative's labor expense associated with receiving the LSR and typing (see note 1) the request for distribution.

The LSPSC labor cost was developed, separately for each of the Network Elements (see note 2), by multiplying the labor hours by the appropriate hourly labor rate and applying a levelized inflation factor to reflect planning period. The costs were then weighted using the estimated percent of time that the Element would be requested to arrive at a weighted average cost for the LSPSC.

Note 1: LSR - Includes activities such as receiving request from customers, making sure the request is correct, obtaining credit information, determining if coordination is needed to provide service, etc.

Typing - Includes activities such as translating LSR information into USCOS and FIDS, creating service order, distributing service order, etc.

MISSOURI
1997-1999
UNBUNDLED SERVICE ORDER
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY

Note 2: Unbundled Network Elements used in determining the LSPSC cost are listed below:

Simple	Complex
Ports	Ports
Loops	DS1 Facility
Network Interface Device	Dedicated Transport
Cross Connect	Sonet

Data Processing

Data processing cost identified include the Centralized Processing Unit (CPU) and Execute Channel Program (EXCP) costs associated with the mechanical processing of a service order through various systems.

A CPU cost was developed for each of the following systems:

PREMISE
FACS
WFA
TIRKS
SORD, EASE, EXACT
CABS

The CPU cost was determined by multiplying the average number of CPU seconds per transaction by the CPU cost per second and applying a levelized inflation factor to reflect planning period. The CPU cost for each system was then summed to produce total CPU cost per transaction.

The EXCP cost was developed for the systems listed below:

SORD, EASE, EXACT
CABS

The EXCP cost was determined by multiplying the average number of EXCPS per transaction by the cost per EXCP and applying a levelized inflation factor to reflect

planning period. The EXCP cost for each system was then summed to produce total EXCP cost per transaction.

Total Nonrecurring Costs

The LSPSC labor, CPU, and EXCP costs were summed to product a cost per order. A Commission Assessment Factor is then applied to arrive at total cost per order.

MISSOURI
1997-1999
UNBUNDLED SERVICE ORDER COST STUDY
RESULTS

DISCONNECT SERVICE - LSR

SIMPLE

NEGOTIATION COST PER ORDER	**$_____**
TYPING COST PER ORDER	**$_____**

COMPLEX

NEGOTIATION COST PER ORDER	**$_____**
TYPING COST PER ORDER	**$_____**

HIGHLY CONFIDENTIAL

MISSOURI
1997-1999
UNBUNDLED SERVICE ORDER COST STUDY
RESULTS

RECORD SERVICE - LSR

SIMPLE

NEGOTIATION COST PER ORDER	**$_____**
TYPING COST PER ORDER	**$_____**

COMPLEX

NEGOTIATION COST PER ORDER	**$_____**
TYPING COST PER ORDER	**$_____**

HIGHLY CONFIDENTIAL

MISSOURI
1997-1999
UNBUNDLED SERVICE ORDER COST STUDY
RESULTS

CHANGE SERVICE - LSR

SIMPLE

NEGOTIATION COST PER ORDER	**$_____**
TYPING COST PER ORDER	**$_____**

COMPLEX

NEGOTIATION COST PER ORDER	**$_____**
TYPING COST PER ORDER	**$_____**

HIGHLY CONFIDENTIAL

MISSOURI
1997-1999
UNBUNDLED SERVICE ORDER COST STUDY
RESULTS

NEW SERVICE - LSR

SIMPLE

NEGOTIATION COST PER ORDER	**$_____**
TYPING COST PER ORDER	**$_____**

COMPLEX

NEGOTIATION COST PER ORDER	**$_____**
TYPING COST PER ORDER	**$_____**

HIGHLY CONFIDENTIAL

MISSOURI
1997
DIRECTORY ASSISTANCE LISTING
LONG RUN INCREMENTAL COST STUDY

OVERVIEW

STUDY PURPOSE

The purpose of this study is to identify the Long Run Incremental Cost associated with providing subscriber listing information to Local Service Providers (LSPS).

SERVICE DESCRIPTION

Directory Assistant Listings (DAL) is a service whereby Southwestern Bell (SWBT) will offer LSPs subscriber listing information for the sole purpose of providing Directory Assistance (DA) services to its end users. The Initial Load (all subscriber listings in the database for a selected area provided one time) and the Daily Updates (listing change information provided on a daily basis) will be provided on a magnetic tape. The cost study was developed using a 1996-2000 planning period.

METHODOLOGY

This study identifies the nonrecurring and recurring costs for DAL. These costs, stated on a "per listing" basis includes the costs associated with the labor effort and the data processing needed to provide DAL to LSPs.

Nonrecurring Costs (Initial Load)

Nonrecurring costs include labor, data processing, tape and mailing costs associated with providing a subscriber listing to an LSP.

Labor Cost

The following activities were identified in determining the labor cost associated with sending the initial load of subscriber information to the LSP:

- Negotiate Directory Assistance Listing (DAL)
- Sign Agreement
- Implement Agreement: Establish Testing Schedule, Test File Requirements

MISSOURI
1997
DIRECTORY ASSISTANCE LISTING
LONG RUN INCREMENTAL COST STUDY

- Data Extract Test File Via DPG
- Test Review Coordination
- Implement Agreement: Establish Live File Schedule, Live File Requirements
- Data Extract Live File Via DPG
- Data Center: Run Programs, DPG, EH725, EH956
- Transmit F20 File to Vendor
- JCL Setup to Establish Customer File
- Product Management

The labor costs were developed (separately for each activity) by multiplying the labor hours for each activity by the appropriate hourly labor rate.

Data Processing Cost

Data processing costs identified include the Central Processing Unit (CPU) and Execute Channel Program (EXCP) costs associated with running the programs (listed below) necessary to provide the initial load of listing information to the LSPS.

- EH956
- DPG (Includes the ZD311, ZD312, ZD620 and the EH725)

The average number of CPU seconds was multiplied by the CPU "cost per second" to arrive at CPU cost per run. This cost was then divided by the average requested number of listings to produce a CPU cost per listing. The cost per listing was multiplied by the actual number of listings in the database to arrive at the total CPU cost for processing the initial load of subscriber information. The EXCP cost per run was developed by multiplying the "cost per EXCP" by the average number of EXCP. This cost was then divided by the average number of listings to produce the EXCP cost per listing. The cost per listing was multiplied by the average requested number of listings in the database to arrive at the total EXCP cost for processing the initial load of subscriber information.

Note: The EXCP equates to any data set that is read in or written out. Movement on the head on a disk pack. The cost per EXCP includes costs associated with the Direct Access Storage Device (DASD).

Tape and Mailing Cost

It was assumed that there would be one tape mailed per day to one location for each LSP.

MISSOURI
1997
DIRECTORY ASSISTANCE LISTING
LONG RUN INCREMENTAL COST STUDY

Total Nonrecurring Cost (Initial Load)

The labor , CPU, EXCP, tape and mailing costs were summed and divided by the average requested number of listings in the database to produce the cost per listing. A Commission Assessment Factor and a Levelized Inflation Factor (reflecting planning period) were then applied to arrive at total cost per listing.

Recurring Costs (Daily Updates)

Recurring costs include labor, data processing, tape, and mailing cost associated with providing a subscriber listing to an LSP on a daily basis.

Labor Cost

The following activities were identified in determining the labor cost associated with sending daily updates of subscriber information to the LSP:

- Daily Transmission Updates:
- Independent Billing System Information System (IBIS). This billing system is used specifically for LSPs. See Note.

The labor costs were developed (separately for each activity) by multiplying the labor hours for each activity by the appropriate hourly labor rate.

Note: Billing costs are done once a month so billing labor costs are divided by the typical number of days in a month.

Data Processing Cost

Data processing costs identified include the CPU and EXCP costs associated with running the program necessary to provide the daily updates of listing information to the LSPS.

The CPU and EXCP costs per listing were developed the same way that they were developed for the Initial load. However, to produce the total CPU and EXCP costs associated with the program run, the total CPU and EXCP costs were multiplied (separately) by the average number of daily update listings.

MISSOURI
1997
DIRECTORY ASSISTANCE LISTING
LONG RUN INCREMENTAL COST STUDY

Tape Cost and Mailing Cost

See "Tape and Mailing Cost" under "Nonrecurring Cost"

Total Recurring Cost (Daily Updates)

The labor , CPU, EXCP, tape and mailing costs were summed and divided by the average requested number of daily listings to produce the cost per listing. A Commission Assessment Factor and a Levelized Inflation Factor (reflecting planning period) were then applied to arrive at total cost per listing.

MISSOURI
1997
DIRECTORY ASSISTANCE LISTING
LONG RUN INCREMENTAL COST STUDY

RESULTS

TOTAL COST PER LISTING

- INITIAL	**$_____**
- DAILY UPDATE	**$_____**

HIGHLY CONFIDENTIAL

MISSOURI
1997-1999
MAINTENANCE OF SERVICE
COST STUDY

OVERVIEW

STUDY PURPOSE

The purpose of this study is to identify the Long Run Incremental Forward Looking nonrecurring costs associated with providing Maintenance of Service (MOS) to Local Service Providers (LSP).

MAINTENANCE OF SERVICE CHARGE DESCRIPTION

A Time and Material charge will apply when the LSP reports a suspected failure of a network element and Southwestern Bell (SWBT) dispatches a technician to the end user's premises or a SWBT central office and trouble was not caused by SWBT's facilities or equipment.

STUDY PARAMETERS

The nonrecurring costs associated with trouble reporting and a dispatched technician isolating the trouble at the end users premises were developed using a 1997-1999 planning period. Costs were developed for the first half hour of labor effort and each additional half hour. Costs were also developed separately for each work schedule described below:

Basic Time - Work related efforts of the Telephone Company performed during normally scheduled working hours.

Overtime - Work related efforts of the Telephone Company performed outside of a normally scheduled work day.

Premium Time - Work related efforts of the Telephone Company performed outside of a normal scheduled work week.

MISSOURI
1997-1999
MAINTENANCE OF SERVICE
COST STUDY

METHODOLOGY

This study identifies the nonrecurring costs for MOS. These costs, stated on a "First half Hour" and "Additional Half Hour" basis, include labor and applicable data processing expenses associated with providing MOS. The cost for the "First Half Hour" include the labor costs associated with the following activities:

- Customer Service Bureau Repair Ticket Processing
- Travel to Customer Premises
- Trouble Isolation
- Close Out Ticket

In addition to the labor cost, the "First Half Hour" also includes data processing expenses associated with the mechanical processing of transactions (e.g., repair tickets) through the following systems:

- Loop Maintenance Operations System (LMOS)
- Work and Force Administration/Dispatch Out (WFA/DO)

The "Additional Half Hour" includes only the labor cost associated with trouble isolation.

Labor Cost Development

Labor cost was developed (separately for Basic, Overtime and Premium Time) by multiplying the labor hours by the appropriate hourly labor rate and applying a levelized inflation factor to reflect planning period.

Data Processing Cost Development

Data processing costs identified include the Central Processing Unit (CPU) and Execute Channel Program (EXCP) expenses associated with processing transactions.

The CPU cost was determined by multiplying the average number of CPU seconds per transaction by the CPU cost per second and applying a levelized inflation factor to reflect planning period. The CPU cost for each system was then summed to produce total CPU cost per transaction.

The EXCP cost was determined by multiplying the average number of EXCPS per transaction by the cost per EXCP and applying a levelized inflation factor to reflect

planning period. The EXCP cost for each system was then summed to produce total EXCP cost per transaction.

Note: The EXCP equates to any data set that is read in or written out. Movement on the head of a disk pack. The cost per EXCP includes costs associated with the Direct Access Storage Device.

Total Cost

The labor (see activities listed above), CPU, and EXCP cost were summed to produce the cost of "First Half Hour". A Commission Assessment Factor was then applied to arrive at the total cost of the "First Half Hour". To arrive at the total cost of the "Additional Half Hour", the labor cost associated with trouble isolation is multiplied by the Commission Assessment Factor.

MISSOURI
1997-1999
MAINTENANCE OF SERVICE
COST STUDY

RESULTS

FIRST HALF-HOUR

BASIC TIME	**$_____**
OVERTIME	**$_____**
PREMIUM TIME	**$_____**

EACH ADDITIONAL HALF-HOUR

BASIC TIME	**$_____**
OVERTIME	**$_____**
PREMIUM TIME	**$_____**

HIGHLY CONFIDENTIAL

MISSOURI
1997-1999
TIME AND MATERIAL
COST STUDY

OVERVIEW

STUDY PURPOSE

The purpose of this study is to identify the forward looking long run incremental costs associated with providing personnel to repair equipment provided by Local Service Providers (LSPs) or end users.

TIME AND MATERIAL CHARGE DESCRIPTION

LSPs will pay Time and Material charges when Southwestern Bell (SWBT) dispatches personnel and the trouble is in the equipment or communications equipment provided by an entity other than SWBT or in detariffed CPE provided by SWBT. These charges will not apply if equipment is covered under a separate maintenance agreement.

STUDY PARAMETERS

The nonrecurring costs associated with dispatching a technician to repair equipment were developed using a 1997-1999 planning period. Costs were developed for the first half hour of labor effort and each additional half hour. The cost of the material is not included in this study because material costs are tracked and billed separately. Costs were also developed separately for each work schedule described below:

Basic Time - Work related efforts of the Telephone Company performed during normally scheduled working hours.

Overtime - Work related efforts of the Telephone Company performed outside of a normally scheduled work day.

Premium Time - Work related efforts of the Telephone Company performed outside of a normal scheduled work week.

METHODOLOGY

This study identifies the nonrecurring costs for supporting the Time and Material charge. These costs, stated on a "First half Hour" and "Additional Half Hour" basis, include labor and applicable data processing expenses associated with providing Time and

Material. The cost for the "First Half Hour" include the labor costs associated with the following activities:

- Customer Service Bureau Repair Ticket Processing
- Travel to Customer Premises
- Repair
- Close Out Ticket

In addition to the labor cost, "First Half Hour" also includes data processing expenses associated with the mechanical processing of transactions (e.g., repair tickets) through the following systems:

- Loop Maintenance Operations System (LMOS)
- Work and Force Administration/Dispatch Out (WFA/DO)

The "Additional Half Hour" includes only the labor cost associated with trouble isolation.

Labor Cost Development

Labor cost was developed (separately for Basic, Overtime and Premium Time) by multiplying the labor hours by the appropriate hourly labor rate and applying a levelized inflation factor to reflect the planning period.

Data Processing Cost Development

Data processing costs identified include the Central Processing Unit (CPU) and Channel Program (EXCP) expenses associated with processing transactions.

The CPU cost was determined by multiplying the average number of CPU seconds per transaction by the CPU cost per second and applying a levelized inflation factor to reflect the planning period. The CPU cost for each system was then summed to produce total CPU cost per transaction.

The EXCP cost was determined by multiplying the average number of EXCPs per transaction by the cost per EXCP and applying a levelized inflation factor to reflect the planning period. The EXCP cost for each system was then summed to produce total EXCP cost per transaction.

MISSOURI
1997-1999
TIME AND MATERIAL
COST STUDY

Note: The EXCP equates to any data set that is read in or written out. Movement on the head of a disk pack. The cost per EXCP includes costs associated with the Direct Access Storage Device.

Total Cost

The labor (see activities listed above), CPU, and EXCP cost were summed to produce the cost of
"First Half Hour". A Commission Assessment Factor was applied to arrive at the total cost of the "First Half Hour". To arrive at the total cost of the "Additional Half Hour", the labor cost associated with trouble repair is multiplied by the Commission Assessment Factor.

MISSOURI
1997-1999
LSP EMERGENCY CONTACT FOR NON-PUBLISHED SERVICE
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY

OVERVIEW

STUDY PURPOSE

The purpose of this study is to identify the recurring costs associated with handling a Local Service Provider's (LSP's) request for non-published service in emergency situations.

DESCRIPTION

Non-published service allows a customer's telephone number to be omitted from the White Pages Directory and Directory Assistance (DA) records. When a LSP customer requests a SWBT subscriber non-published number in an emergency situation and the LSP determines Non-Published service is warranted, the LSP calls DA and SWBT queries the Non-Published Data Base to obtain the customer's name and callback number. SWBT will attempt to call the Non-Published customer and relay the calling customer's name and phone number (SWBT will make one additional attempt if the line is busy or no one answers). The customer's number is only available to designated SWBT employees.

METHODOLOGY

The following cost components were identified in determining the monthly recurring cost associated with providing this service:

Operator Services
Exchange Carrier Relations

This study reflects a 1997-1999 planning period.

OPERATOR SERVICES

The recurring cost identified for Operator Services includes only labor cost associated with the average time spent handling a LSP's request for non-published service in emergency situations. The labor cost was developed by multiplying the labor minutes by the appropriate labor cost and applying an levelized inflation factor and commission assessment factor to determine a total labor cost.

MISSOURI
1997-1999
LSP EMERGENCY CONTACT FOR NON-PUBLISHED SERVICE
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY

EXCHANGE CARRIER RELATIONS

The recurring cost identified for Exchange Carrier Relations includes only labor cost associated with consolidating reports to obtain a total by LSP, state and sending the report to billing. The labor costs was developed by multiplying the labor minutes, for one month, by the appropriate labor cost and applying a levelized inflation factor and commission assessment factor.

MISSOURI
1997-1999
LSP EMERGENCY CONTACT FOR NON-PUBLISHED SERVICE
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY

RESULTS

COST PER CALL	**$____**

HIGHLY CONFIDENTIAL

MISSOURI
E911 LSP SERVICE STUDY
1997 - 1999

OVERVIEW/METHODOLOGY

PURPOSE

This study develops the cost of Automatic Number Identification (ANI), Selective Routing (SR), and Automatic Location Identification (ALI) to support the E911 rate structure applicable to Local Service Providers (LSPs). This study complies with FCC Docket CC96-98, Order 96-325.

DESCRIPTION

Enhanced 911 (E911) is a telephone exchange communication service that uses Control Offices (tandem switches) to direct 911 dialed calls to Public Safety Answering Points (PSAPs). The Control Offices along with the facilities that connect them to the PSAPs and LSPs, provide the ANI and SR functions of E911. A separate overlay network is used to provide the ALI function.

The Control Offices route 911 calls using the Automatic Number Identification (ANI) telephone number of the calling party. The ANI number is forwarded to the control office from the LSP. The ANI number is then forwarded by the Control Office to the PSAP. ANI is inherent to E911 service. Selective Routing (SR) may be needed to insure that the proper PSAP receives a 911 call. SR is provided using SR tables in Control Offices.

With the ALI feature, the PSAP sends a query to the ALI computers which converts the ANI information to the corresponding ALI information. The ALI information is then sent back and displayed on PSAP premise equipment. The ALI computers which are located in two Data Centers provide redundancy. The Database Management System (DBMS) computer, also located in a Data Center, works in conjunction with the ALI computers to maintain current ANI to ALI tables

METHODOLOGY

Separate Control Office Studies and Automatic Location Identification (ALI) studies were completed to provide inputs to the LSP Service Study. In addition, facility costs were developed using leased facility rates for interLATA facilities and SWBT costs for intraLATA facilities. The results of these studies were summarized to provide the total state costs for the ANI, SR and ALI features. The total state costs are then divided by the associated count of lines equipped with these features.

MISSOURI
E911 LSP SERVICE STUDY
1997 - 1999

SUMMARY

FEATURE PACKAGE		MONTHLY COST PER 1000 ACCESS LINES
I.	ANI	**$ **
II.	ANI/SR	**$ **
III.	ANI/ALI	**$ **
IV.	ANI/ALI/SR	**$ **

		MONTHLY COST
V.	LSP to Control Office	** **

NONRECURRING COST
** **

HIGHLY CONFIDENTIAL

MISSOURI
E911 AUTOMATIC LOCATION IDENTIFICATION
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY
1997 - 1999

OVERVIEW/METHODOLOGY

PURPOSE

This study develops the cost of the Automatic Location Identification function used in providing E911 service, to Local Service Providers. This study complies with FCC Docket CC96-98, Order 96-325.

DESCRIPTION

A critical function of the E911 service is the ability to present Automatic Location Identification (ALI) information to E911 Public Safety Answering Points (PSAPs). ALI information provides the address of locations corresponding to the Automatic Number Identification (ANI) information forwarded to a PSAP from the calling party.

With the ALI feature, the PSAP sends a query to the ALI computers which converts the ANI information to the corresponding ALI information. The ALI information is then sent back and displayed on PSAP premise equipment. The ALI computers which are located in two Data Centers provide redundancy and serve four states (Missouri, Oklahoma, Kansas and Arkansas) (MOKA). The Database Management System (DBMS) computer, also located in a Data Center, works in conjunction with the ALI computers to maintain current ANI to ALI tables. Attachment A provides an overview drawing of the MOKA E911 network layout.

METHODOLOGY

The recurring monthly cost for the ALI feature is based on investments for the ALI and DBMS computer equipment and a joint use DATAKIT transport network.

The DATAKIT network is used to carry the ALI query from a PSAP to the ALI computers and the ALI response back to the PSAP equipment. The DATAKIT transport network consists of dedicated links from PSAPs to central offices where dedicated Synchronous/Asynchronous Multiplexers (SAMs) provide an interface between a PSAP and the joint use DATAKIT network. The joint use DATAKIT network is used for E911 traffic and various other Southwestern Bell Official Company Services (OCS). The joint use DATAKIT network consists of DATAKIT nodes (packet switches) and links between the nodes. Only that portion of the joint use DATAKIT network relevant to E911 was included in this study.

The DBMS and ALI computers also interface with the DATAKIT network. This DBMS/ALI equipment is used exclusively for E911 but is shared by all MOKA states, hence only a portion was assigned to Missoui's study. Attachment B provides a detailed drawing of a typical a DATAKIT/SAM layout. Attachment C provides detailed drawing

of the DBMS/ALI equipment layout. Attachment D provides a Glossary of terms related to E911 equipment.

All investments were converted to current prices by applying a Telephone Price Index (TPI) to vendor prices. The vendor prices reflect all vendor costs (i.e., Engineered, Furnished & Installed). Additional telephone company investments were added for telephone plant and engineering labor, sundry and miscellaneous, power, and buildings using factors. Investments are then converted to capital costs by calculating depreciation, cost of money, and income tax. Finally, operating expense factors are applied for maintenance, other operating expenses and commission assessment. The total is divided by twelve to derive a monthly cost.

MISSOURI
1997-1999
TIME AND MATERIAL
COST STUDY

RESULTS

FIRST HALF-HOUR

BASIC TIME	**$_____**
OVERTIME	**$_____**
PREMIUM TIME	**$_____**

EACH ADDITIONAL HALF-HOUR

BASIC TIME	**$_____**
OVERTIME	**$_____**
PREMIUM TIME	**$_____**

HIGHLY CONFIDENTIAL

MISSOURI 1997 1999
E911 AUTOMATIC LOCATION IDENTIFICATION (ALI) LRIC

RESULTS

	VOLUME SENSITIVE RECURRING MONTHLY COST
96-MO-CON-6550 V2.1	
ALI EQUIPMENT COST	**$ **
ALI MODEM COST	**$ **
DATAKIT EQUIPMENT COST	**$ **
ALI LINK TERMINAL EQUIPMENT COST	**$ **

	VOLUME SENSITIVE RECURRING COST
DATAKIT INTERNODE LINK COST	**$ **

HIGHLY CONFIDENTIAL

MISSOURI
E911 CONTROL OFFICE
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY
1997 - 1999

OVERVIEW/METHODOLOGY

PURPOSE

This study develops the cost of the Control Office functions used in providing E911 service to Local Service Providers (LSPs). This study complies with FCC Docket CC96-98, Order 96-325.

DESCRIPTION

Enhanced 911 (E911) is a telephone exchange communication service that uses Control Offices (tandem switches) to direct 911 dialed calls to Public Safety Answering Points (PSAPs). These Control Offices may route 911 calls received from SWBT end offices, Independent Company end offices or LSPs.

The Control Office routes 911 calls using the Automatic Number Identification (ANI) telephone number of the calling party. The ANI number is forwarded to the control office from the end office or LSP. The ANI number is then forwarded by the Control Office to the PSAP. ANI is inherent to E911 service. In areas where the PSAP serving area aligns with the telephone company exchange serving areas, the ANI feature may satisfy the PSAP's requirements. If however, the PSAP's service area does not align with the telephone companies exchange areas, Selective Routing (SR) may be needed to insure that the proper PSAP receives a 911 call. SR is provided using SR tables in Control Offices.

METHODOLOGY

Control Office EF&I investments were developed using the Bellcore developed Switching Cost Information System (SCIS). The SCIS algorithms used are specific to the E911 Control Office function. Costs are based on the current prices of a forward looking Control Office technology.
Additional telephone company investments were added for telephone company plant and engineering labor, sundry and miscellaneous, power and buildings using factors. Investments are then converted to capital costs by calculating depreciation, cost of money and income tax. Finally, operating expense factors are applied for maintenance, other operating expenses and commission assessment. The total is divided by twelve to derive a monthly cost.

MISSOURI
E911 CONTROL OFFICE
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY
1997 - 1999

Nonrecurring costs per trunk were developed for the translation activity per trunk and for the service order activity. These nonrecurring costs were developed by multiplying the time associated with the labor activities by the appropriate labor rates and using a levelized inflation factor to account for the planning period. The translation activity assumed two trunks per order. The commission assessment factor is applied to these costs.

MISSOURI 1997 1999
E911 CONTROL OFFICE LRIC STUDY

RESULTS

	VOLUME SENSITIVE RECURRING MONTHLY COST
96-MO-COF-6634 V2.1	
ANI ONLY CONTROL OFFICE COST, PER STATE	**$_____**
SELECTIVE ROUTING CONTROL OFFICE COST, PER STATE	**$_____**
DIGITAL INC CONTROL OFFCIE TRUNK UNIT, EACH	**$____**

	VOLUME SENSITIVE NONRECURRING COST
TRUNK TRANSLATION COST, PER TRUNK	**$_____**
! SP TRUNK SERVICE ORDER COST	**$_____**

HIGHLY CONFIDENTIAL

MISSOURI
FORWARD LOOKING COMMON COSTS STUDY

	Forward--Looking Common Cost		1995 Missouri Total
1	Retail Marketing and Service Expense	6610 & 6620	** _____ **
2	Wholesale Marketing and Service Expense	6610 & 6620	** _____ **
	Portion of wholesale to total Mktg and Svc		** ___% **
3	Total Expense		** _____ **
4	Ratio of Retail Exp. to Total	Line1 / Line3	** ____ **
5	Executive and Planning -		
6	Executive	6711	** _____ **
7	Planning	6712	** _____ **
8	General & Administrative		
9	Accounting & Finance	6721	** _____ **
10	External Relations	6722	** _____ **
11	Human Resources	6723	** _____ **
12	Information Management	6724	** _____ **
13	Legal	6725	** _____ **
14	Procurement	6726	** _____ **
15	Research & Development	6727	** _____ **
16	Other General & Admin.	6728	** _____ **
17	Support Asset Cost		
18	Associated with above salaries		** _____ **
19	Total Exec., Plng., Gen., & Admin.	Line6 thru Line18	** _____ **
20	Less retail portion of Common	Line19 * Line4	** _____ **
21	Sum of Exec.,Plng.,Gen., & Admin. less Retail portion	Line19 - Line20	** _____ **
22	Network Operations - General Supervision	6534.2	** _____ **
23	Wholesale Marketing and Service Expense	Line2	** _____ **
24	Common Cost	Line21 thru Line23	** _____ **

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MISSOURI
FORWARD LOOKING COMMON COSTS STUDY

25	Commission Assessment		** **
26	Commission Assessment on Common Cost	Line24 * Line25	** **
27	Total Adj. Common costs	Line24 + Line26	** **
28	Apply Levelized Inflation factor		** **
29	**Forward -Looking Common Cost**	Line27 * Line28	** **
30	Total Expense		** **
31	less		
32	Retail Marketing and Service Expense		** **
33	Wholesale Marketing and Service Expense		** **
34	Total Exec., Plng., Gen., & Admin.		** **
35	Network Operations - General Supervision		** **
36			
37	Total Element Expenses	Line30 thru Line35	** **
38	Apply Levelized Inflation factor		** **
39	**Total Forward-Looking Element Expenses**	Line37 * Line38	** **
40	**Forward -Looking Common Cost**		** **
41	**Total Forward-Looking Element Expenses**		** **
42	**Common Cost Allocator**	Line 40/Line 42	** **

HIGHLY CONFIDENTIAL

LSP COMPLEX SERVICE CONVERSION
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY
MISSOURI
1997-1999

OVERVIEW / METHODOLOGY

OVERVIEW

STUDY PURPOSE

The purpose of this forward looking study is to identify the directly assigned nonrecurring service ordering costs when converting a Southwestern Bell customer to a Local Service Provider (LSP), converting between LSPs, etc.

DESCRIPTION

When a LSP converts an end user currently receiving complex service from the SWBT network, the LSP will be charged a per-order conversion charge. A complex service has specific engineering requirements and uses a different platform than current technology (i.e., SS7 based AIN services). This assumes that the customer has no change in service other than the carrier providing it.

METHODOLOGY

Service Conversion - This cost element includes the service order related expenses incurred to process a Southwestern Bell Telephone customer to a LSP.

The following is a brief description of each of the cost components identified in the study:

1. **Local Service Provider Service Center**

   This cost component consists of the service representatives' labor expense while negotiating Southwestern Bell Telephone customer requirements to convert to a LSP. This includes typing, reviewing and performing clerical functions to process the service order at the Local Service Provider Service Center (LSPSC) located in Dallas.

2. **Finance**

   Service order related costs in the Finance Department include the salary and data processing expenses associated with the operation of the computer system that

OVERVIEW / METHODOLOGY

distributes service orders to the appropriate departments and maintains customer records. Data processing costs were calculated per order.

Costs were derived by multiplying the labor rates by the time required to accomplish an activity. The levelized inflation factor and the commission assessment factor were applied.

MISSOURI

1997-1999

LSP COMPLEX SERVICE CONVERSION
FORWARD LOOKING LONG RUN INCREMENTAL COST STUDY

RESULTS

COST ELEMENT	
SERVICE CONVERSION	
LOCAL SERVICE PROVIDER	**$ **
FINANCE	**$ **
COST PER CONVERSION ORDER	**$ **

HIGHLY CONFIDENTIAL

NONPROPRIETARY COST STUDY SCHEDULE

OF

BARRY MOORE

MISSOURI

UNBUNDLED CROSSCONNECTS
TO DCS AND SWITCH PORTS
1997- 1999
OCTOBER 1997

OVERVIEW / METHODOLOGY

STUDY PURPOSE

The purpose of this cost study is to identify forward looking long run incremental recurring and nonrecurring costs for the unbundled crossconnects to Digital Crossconnect System (DCS) and Switch Ports.

SERVICE DESCRIPTION

This study consists of the transmission equipment required to crossconnect the Southwestern Bell Telephone Company main distribution frame (MDF) to interconnector designated equipment.

METHODOLOGY

Recurring Costs

The cost element represents the cost of equipment required to meet the technical parameters of the crossconnect element. The designs consist of transmission equipment configurations for connection of Analog Loop 2-wire and 4-wire to DCS, Digital Loop BRI and PRI to DCS, Analog Loop 2-wire to Switch Port and Digital Loop BRI and PRI to Switch Port with and without test equipment. The equipment investments for each design are loaded into Southwestern Bell Telephone Company's ACES cost model where they are converted into costs by applying capital cost and expense factors and levelizing the costs to represent the planning period.

Nonrecurring Costs

Purpose

This study develops the nonrecurring costs associated with providing crossconnect arrangements to and from designated equipment. The term nonrecurring refers to the expensed labor efforts required to provide service to a customer, and includes both installation and disconnect activity. This study does not include costs associated with maintaining or repairing the service.

Nonrecurring Study Procedures

The following steps were taken to identify the nonrecurring costs associated with the above services:

1. Identify workgroups involved in the installation and disconnect process for each cost element and service category.

2. Identify the job functions required to perform the installation and disconnect activity by workgroup.

3. Identify labor times associated with each job function by workgroup and workgrade.

4. Apply appropriate labor rates to arrive at the installation and disconnect cost.

Nonrecurring Workgroup Identification

Meetings were conducted between cost studies personnel and general headquarters subject matter experts (SMEs) from each work group to determine what work groups were involved in each of the services.

Nonrecurring Job Function Identification

From the workgroups identified, subject matter experts are requested to provide:

1. An outline identifying the work activity sequence and responsibilities.

2. The workgrade of the personnel performing specific tasks (i.e., clerical, group 1 craft, etc.)

Nonrecurring Labor Time / Rate Identification

The same SMEs were requested to identify the salary level of the personnel who typically perform the work functions, i.e., clerical, supervision, craft etc. Current labor rates were obtained for each salary level on a state specific basis. The labor times for each work function by service category were then multiplied by the appropriate state specific labor cost for that function. The cost for each work function was then summed for each service category to arrive at a total cost for that service. The rate planning period used in this study is 1997 through 1999.

MISSOURI

UNBUNDLED CROSSCONNECTS TO
DCS AND SWITCH PORTS
1997 - 1999
OCTOBER 1997

RESULTS

	MONTHLY RECURRING COST	NONCURRING COST INITIAL	NONCURRING COST ADD'L
Analog Loop to DCS - 2-Wire	** **	** **	** **
Analog Loop to DCS - 4 Wire	** **	** **	** **
Digital Loop to DCS - BRI	** **	** **	** **
Digital Loop to DCS - PRI	** **	** **	** **
Analog Loop to Switch Port - 2 Wire		** **	** **
Digital Loop to Switch Port - BRI		** **	** **
Digital Loop to Switch Port - PRI with Test Equipment	** **	** **	** **
Digital Loop to Switch Port - PRI without Test Equipment	** **	** **	** **

NOTE:
All elements do not include any adjunct testing equipment except for the Digital Loop to Switch Port - PRI with Test Equipment

MISSOURI

UNBUNDLED 4-WIRE DS1 LOOP CROSSCONNECT TO MULTIPLEXER 1997- 1999 OCTOBER 1997

OVERVIEW / METHODOLOGY

STUDY PURPOSE

The purpose of this cost study is to identify forward looking long run incremental recurring and nonrecurring costs for the unbundled 4-wire DS1 Loop Crossconnect to Multiplexor.

SERVICE DESCRIPTION

This study consists of the transmission equipment required to crossconnect the Southwestern Bell Telephone Company main distribution frame (MDF) to interconnector designated equipment.

METHODOLOGY

Recurring Costs

The cost element represents the cost of equipment required to meet the technical parameters of *the crossconnect element. The designs consist of transmission equipment configurations for* connection of 4-wire DS1 Loop to Multiplexor. The equipment investments for each design are loaded into Southwestern Bell Telephone Company's ACES cost model where they are converted into costs by applying capital cost and expense factors and levelizing the costs to represent the planning period.

Nonrecurring Costs

Purpose

This study develops the nonrecurring costs associated with providing crossconnect arrangements to and from designated equipment. The term nonrecurring refers to the expensed labor efforts required to provide service to a customer, and includes both installation and disconnect activity. This study does not include costs associated with maintaining or repairing the service.

Nonrecurring Study Procedures

The following steps were taken to identify the nonrecurring costs associated with the above services:

1. Identify workgroups involved in the installation and disconnect process for each cost element and service category.

2. Identify the job functions required to perform the installation and disconnect activity by workgroup.

3. Identify labor times associated with each job function by workgroup and workgrade.

4. Apply appropriate labor rates to arrive at the installation and disconnect cost.

Nonrecurring Workgroup Identification

Meetings were conducted between cost studies personnel and general headquarters subject matter experts (SMEs) from each work group to determine what work groups were involved in each of the services.

Nonrecurring Job Function Identification

From the workgroups identified, subject matter experts are requested to provide:

1. An outline identifying the work activity sequence and responsibilities.

2. The workgrade of the personnel performing specific tasks (i.e., clerical, group 1 craft, etc.)

Nonrecurring Labor Time / Rate Identification

The same SMEs were requested to identify the salary level of the personnel who typically perform the work functions, i.e., clerical, supervision, craft etc. Current labor rates were obtained for each salary level on a state specific basis. The labor times for each work function by service category were then multiplied by the appropriate state specific labor cost for that function. The cost for each work function was then summed for each service category to arrive at a total cost for that service. The rate planning period used in this study is 1997 through 1999.

MISSOURI

UNBUNDLED 4-WIRE DS1 LOOP
CROSSCONNECT TO
MULTIPLEXER
1997 - 1999
OCTOBER 1997

RESULTS

	MONTHLY RECURRING COST	NONCURRING COST	
		INITIAL	ADD'L
4-Wire DS1 Loop to Multiplexor	** **	** **	** **

MISSOURI
UNBUNDLED DARK FIBER
CROSSCONNECT STUDY
1997 – 1999

OCTOBER 1997

OVERVIEW/METHODOLOGY

OVERVIEW

Study Purpose

This study identifies the Forward Looking Long Run Incremental recurring and nonrecurring cost for the unbundled crossconnects.

Service Description

This study consists of the transmission equipment required to crossconnect the Southwestern Bell Telephone Company equipment to interconnector designated equipment.

METHODOLOGY

Recurring Costs

This cost element represented the cost of equipment required to meet the technical parameters of the service. The design consists of the transmission equipment configuration for the Dark Fiber crossconnect scenario. The equipment investments are loaded into Southwestern Bell Telephone Company's ACES cost model where they are converted into costs by applying capital cost and expense factors.

Purpose

This study develops the nonrecurring costs associated with providing crossconnect arrangements to and from designated equipment. The term nonrecurring refers to the expensed labor efforts required to provide service to a customer, and includes both installation and disconnect activity. This study does not include costs associated with maintaining or repairing the service.

Nonrecurring Study Procedures

The following steps were taken to identify the nonrecurring costs associated with the above services:

1. Identify workgroups involved in the installation and disconnect process for each cost element and service category.

2. Identify the job functions required to perform the installation and disconnect activity by workgroup.

3. Identify labor times associated with each job function by workgroup and workgrade.

4. Apply appropriate labor rates to arrive at the installation and disconnect cost.

Nonrecurring Workgroup Identification

Meetings were conducted between cost studies personnel and general headquarters subject matter experts (SMEs) from each work group to determine what work groups were involved in each of the services.

Nonrecurring Job Function Identification

From the workgroups identified, subject matter experts are requested to provide:

1. An outline identifying the work activity sequence and responsibilities.

2. The workgrade of the personnel performing specific tasks (i.e., clerical, group 1 craft, etc.)

Nonrecurring Labor Time / Rate Identification

The same SMEs were requested to identify the salary level of the personnel who typically perform the work functions, i.e., clerical, supervision, craft etc. Current labor rates were obtained for each salary level on a state specific basis. The labor times for each work function by service category were then multiplied by the appropriate state specific labor cost for that function. The cost for each work function was then summed for each service category to arrive at a total cost for that service. The rate planning period used in this study is 1997 through 1999.

MISSOURI
UNBUNDLED DARK FIBER
CROSSCONNECT STUDY
1997 - 1999
OCTOBER 1997

RESULTS

	MONTHLY RECURRING COST	NONRECURRING INITIAL	NONRECURRING ADDITIONAL
Dark Fiber Crossconnect	** **	** **	** **

MISSOURI

UNBUNDLED CLEC TO SS7 STP COST STUDY

1997 - 1999

NOVEMBER, 1997

OVERVIEW / METHODOLOGY

OVERVIEW

STUDY PURPOSE

This study identifies the Forward Looking Long Run Incremental recurring and nonrecurring cost for unbundled CLEC Links.

SERVICE DESCRIPTION

CLEC Links provide full time dedicated signaling channel for digital transmission speed of 56 kilobits per second (Kbps). A signal path that connects an CLEC to a Local STP.

METHODOLOGY

Recurring Costs

Recurring costs are based upon Service Area Function (SAF) investments. SAF investments represent the equipment required to meet the technical parameters of the service.

SAF design cases represent standard transmission equipment configurations, and are developed by the Network Circuit Provisioning Organization.

Investments for the equipment in each design case are identified and converted to a per channel value. This value is adjusted for utilization.

The SAF program sums the unit investment of each equipment item within each kilofoot band. These investments are multiplied by the probability of that kilofoot band and are summed to determine the weighted investment by design case.

SAF equipment requires support from building and power plant. Factors are developed and applied to the SAF investments to determine the supporting investment values.

Finally, investments by account code are multiplied by annual cost to determine the annual cost of each investment category and summed by location. The rate elements are supported by these costs.

Nonrecurring Costs

Nonrecurring costs represent the time required to install and disconnect a service. Work groups involved in the provisioning and disconnecting of each LSP Link service are identified. The time required to perform each work function is determined, and the labor rate associated with the employee performing the function is applied. Individual work functions are grouped by cost element and totaled to arrive at the nonrecurring cost per rate element.

MISSOURI

UNBUNDLED CLEC TO SS7 STP COST STUDY

1997 - 1999

NOVEMBER, 1997

RESULTS

	Monthly Recurring Cost	Non Recurring Costs 1st	Non Recurring Costs Addl.
STP to Collocators Cage DS0	** **	** **	** **
STP to Collocators Cage DS1	** **	** **	** **
STP to SWB Trunk Distributing Frame	** **	** **	** **
STP to SWB DSX Frame	** **	** **	** **

MISSOURI

UNBUNDLED NETWORK ELEMENTS
(Dark Fiber)
Nonrecurring Cost Study

September, 1997
1997 - 1999

OVERVIEW / METHODOLOGY

SERVICE DESCRIPTION

Dark Fiber refers to Fiber Optic Cable with no electronics (e.g. Fiber Optic Terminal) on either end. This service is provided as an Unbundled Network Element under conditions ordered in the Missouri Arbitration Award.

PURPOSE

This study identifies the nonrecurring costs associated with processing requests for Dark Fiber (in the Loop and Interoffice) from a CLEC.

METHODOLOGY

NONRECURRING COSTS

Nonrecurring costs represent the time required to install and disconnect a service. Work groups involved in the provisioning and disconnecting of a service are identified. The time required to perform each function is identified and the labor rate associated with the employee performing the function is determined. The labor rate is multiplied by the labor time to arrive at the cost for performing the function. Work functions are then grouped by cost element and totaled to arrive at the nonrecurring cost per cost element.

MISSOURI

UNBUNDLED NETWORK ELEMENTS
DARK FIBER NONRECURRING COST STUDY
1997 - 1999
SEPTEMBER 1997

RESULTS

	NONRECURRING COSTS	
	INITIAL	ADDITIONAL
INTEROFFICE	** **	** **

MISSOURI

UNBUNDLED DEDICATED TRANSPORT ENTRANCE FACILITIES, DIGITAL CROSS-CONNECT SYSTEM (DCS), MULTIPLEXING AND DS1 CROSSCONNECT COST STUDY 1997- 1999 OCTOBER 1997

OVERVIEW / METHODOLOGY

STUDY PURPOSE

The purpose of this cost study is to calculate the recurring and nonrecurring costs for DS1 and DS3-unbunded dedicated transport entrance facilities, Digital Cross-Connect System (DCS), multiplexing, and DS1 crossconnect.

DESCRIPTION

Entrance Facilities

The DS-1 entrance facilities is a transmission path between the customer premises and the service central office that is equipped to provide a 1.544 megabits per second digital capability. The DS-1 investments are capacity derived and based on an OC3 multiplexing system.

The DS-3 entrance facility is a transmission path between the customer premises and the serving central office that is equipped to provide a 45 megabits per second digital capability. The DS-3 investments are capacity derived and based on an OC3 multiplexing system.

Digital Cross-Connect System (DCS)

The costs associated with the DCS are derived from designs associated with a 3/1 system.

Multiplexing

DS1 to VG is accomplished through the use of a D4 channel bank. The D4 is equipped with the necessary common plugs, DS1 entrance plug and VG plugs to multiplex a single DS1 transmission signal to 24 VG signals.

DS3 to DS1 is accomplished through the use of a single 45 mb/s multiplexer capable of multiplexing a single DS3 transmission single to 28 DS1 signals. The multiplexer is equipped with common plugs, single DS3 high side plug and 28 DS1 low side plugs.

DS1 Crossconnect

The DS1 Crossconnect results include the recurring and nonrecurring costs associated with providing a DS1 crossconnect arrangement to and from interconnector designated equipment.

METHODOLOGY

Recurring Costs

Entrance Facilities

The costs for each element is based on forward looking fiber based network designs obtained from the Long Range Planning Network Organization. The entrance facilities are based on a sample which consists of all types of loops provided by SWBT. The sample is segregated into three groups, Group 1 (Rural), Group 2 (Suburban) and Group 3 (Urban) and are based on the central offices by rate group from the current Local Exchange Tariff.

The investments for each element are based on 1996 cable broadgauge costs and multiplexing equipment investments provided by the Procurement Organization.

Forward looking long run incremental annual cost factors are used in calculating the monthly recurring costs.

Digital Cross-Connect System (DCS)

The DCS cost includes charges for establishment, database modification, arrangement, reconfiguration (customer performed), plus the DS-1 and DS-3 channel port.

Multiplexing

The monthly recurring costs are derived from calculations that apply an annual cost factor (ACF) to the appropriate investment for each multiplexer type. The results are divided by twelve to determine a monthly recurring cost.

DS1 Crossconnect

This cost element represents the cost of equipment required to meet the technical parameters of the crossconnect element. The designs consist of transmission equipment configurations for a DS1 crossconnect. The equipment investment is loaded into Southwestern Bell Telephone Company's ACES cost model where it is converted into a cost by applying capital cost and expense factors and levelizing costs to represent the planning period.

Nonrecurring Costs

Purpose

This study develops the nonrecurring costs associated with providing crossconnect arrangements to and from designated equipment. The term nonrecurring refers to the expensed labor efforts required to provide service to a customer, and includes both installation and disconnect activity. This study does not include costs associated with maintaining or repairing the service.

Nonrecurring Study Procedures

The following steps were taken to identify the nonrecurring costs associated with the above services:

1. Identify workgroups involved in the installation and disconnect process for each cost element and service category.
2. Identify the job functions required to perform the installation and disconnect activity by workgroup.
3. Identify labor times associated with each job function by workgroup and workgrade.
4. Apply appropriate labor rates to arrive at the installation and disconnect cost.

Nonrecurring Workgroup Identification

Meetings were conducted between cost studies personnel and general headquarters subject matter experts (SMEs) from each work group to determine what work groups were involved in each of the services.

Nonrecurring Job Function Identification

From the workgroups identified, subject matter experts are requested to provide:

1. An outline identifying the work activity sequence and responsibilities.

2. The workgrade of the personnel performing specific tasks (i.e., clerical, group 1 craft, etc.)

Nonrecurring Labor Time / Rate Identification

The same SMEs were requested to identify the salary level of the personnel who typically perform the work functions, i.e., clerical, supervision, craft etc. Current labor rates were obtained for each salary level on a state specific basis. The labor times for each work function by service category were then multiplied by the appropriate state specific labor cost for that function. The cost for each work function was then summed for each service category to arrive at a total cost for that service. The rate planning period used in this study is 1997 through 1999.

MISSOURI
UNBUNDLED DEDICATED TRANSPORT
ENTRANCE FACILITIES, DCS, MULTIPLEXING
AND DS1 TRANSPORT CROSSCONNECT
1997 - 1999
OCTOBER 1997
RESULTS

COST ELEMENT	MONTHLY RECURRING	NONRECURRING FIRST	NONRECURRING ADDITIONAL
Entrance Facility			
DS-1			
Urban	** **	** **	** **
Suburban	** **	** **	** **
Rural	** **	** **	** **
DS-3			
Urban	** **	** **	** **
Suburban	** **	** **	** **
Rural	** **	** **	** **
Digital Cross Connect System		NONRECURRING	
DCS Establishment Charge		** **	
Database Mod. Charge		** **	
DCS Arrangement			
Channel Port	** **	** **	
DS1	** **	** **	
DS3	** **	** **	
Reconfiguration Charge		** **	
		NONRECURRING FIRST	NONRECURRING ADDITIONAL
Multiplexing			
DS-1 / VG	** **	** **	** **
DS3 / DS1	** **	** **	** **
Cross Connects			
DS1	** **	** **	** **