

# MCI CARRIER CONFERENCING®

Let MCI Carrier Conferencing provide you with easy entry into the multi-billion dollar conference calling market without spending valuable company resources on developing your own infrastructure.

## A TURNKEY SOLUTION

With MCI Carrier Conferencing, you can provide your customers with all the features and services of a sophisticated conferencing product at minimum cost to you. Your customers' calls will be answered with a branded and customized greeting and service is available 24 hours a day, 365 days a year.

## SERVICE YOUR CUSTOMERS CAN RELY ON

MCI Carrier Conferencing allows you to bring your customers a highly dependable and feature-rich product, one that offers:

- ▶ **Easy Use:** reservations can be phoned or faxed in 24 hours a day. Conference operators handle participant notification and call set-up. Conference calls can be recorded or transcribed, while our fax service provides facsimile distribution of documents to conference call participants.
- ▶ **High Quality:** MCI Carrier Conferencing offers published quality standards, and conference operators monitor calls proactively to ensure line quality.
- ▶ **Reliability:** MCI Carrier Conferencing offers a guaranteed 10-minute call set-up time and an exact start time on domestic dial out calls. Our Conferencing service is backed by MCI's fiber optic network and its state-of-the-art bridging equipment.

## CHOOSE FROM A VARIETY OF CALL TYPES

- ▶ **800 Meet Me Calling:** Participants dial a pre-assigned toll free number to access the conference, and an operator places them in the call.
- ▶ **Dial Out Service:** Operators call each participant and place them in the call.
- ▶ **ASAP Calling:** In time-critical situations, conference calls can be set up and held on an "ASAP" basis — typically within 20 minutes.
- ▶ **Toll Meet Me:** Participants call the Conference Center using a Direct Distance Dial 10-digit number. The conference leader pays for the bridge charges and participants pay long distance charges for their call.

## increase your revenue with full conferencing services

- ▶ **Unattended Meet Me:** Participants call directly into a scheduled conference call without Operator assistance, and place themselves in the conference by entering a pre-assigned numeric passcode.

## FEATURE-RICH SERVICE

MCI Carrier Conferencing comes with a variety of standard features to make your offering more robust.

- ▶ **Participant Notification:** With 48 hours advance notice, call participants can be notified of the date and time of the call.
- ▶ **Music While on Hold:** Participants may hear music while on hold before a conference starts.
- ▶ **Roll Call:** Operators will conduct roll calls on request to let participants know who has joined the conference.
- ▶ **Conference Monitoring:** Conference Operators are available to stay on the line during the call to monitor and assist participants — and Operators can always be summoned to the line simply by pressing \*0.
- ▶ **Executive Subconferencing:** Designated participants may confer privately within the call and later return to the main conference.
- ▶ **Listen Only:** The conference leader can request that certain participants be placed in "listen only" mode for portions of the call in order to conduct a call more efficiently.
- ▶ **Master List:** A list of participants who regularly attend a call may be kept on file in the conference center for ease of use.
- ▶ **Standing Reservation:** A standing reservation may be made for any regularly scheduled conference call.

Use MCI Carrier Conferencing to increase your revenue and provide a key service to your customers, all for great low rates. Call your MCI representative today and ask for more information.



# MCI CARRIER TOLL FREE SERVICES

Now facilities-based carriers can expand their service offerings — and their revenues — with MCI Carrier Toll Free Services. Toll Free, with 24 X 7 network support, is one of the most feature-rich, reliable and comprehensive platforms in the industry. An essential offering for facilities-based carriers looking for new ways to generate added revenues, Toll Free lends itself to numerous applications, such as customer service departments for all size companies. That enables your customers to increase their sales areas without establishing multiple locations.

## SIMPLE CALL ROUTING

MCI Carrier Toll Free is a facility-based product that terminates to Dedicated Access Line (DALs) T-1s or T-3s in your switch. That makes routing calls simple and efficient. Callers dial the toll free number and the Local Exchange Carrier (LEC) routes the call to MCI. Our intelligent network retrieves routing and call treatment instructions, then passes the call and the routing information to your switch, which sends the call to its final destination.

## TAILOR OUR FEATURE-RICH SERVICE FOR YOUR CUSTOMERS

MCI Carrier Toll Free Services includes a host of advanced features that provide you with a variety of service capabilities:

- ▶ Calling coverage through the 48 contiguous states, Alaska, Hawaii, Puerto Rico and the U.S. Virgin Islands
- ▶ Same toll free number can be used for both interstate and intrastate calls at no extra charge
- ▶ Can terminate multiple toll free numbers to the same phone number
- ▶ Call origination from Canada is possible with Extended Call Coverage
- ▶ Can terminate toll free calls from more than 60 international countries on the same termination as domestic service
- ▶ Tailored Call Coverage® — customers can block toll free calls from specific origination areas

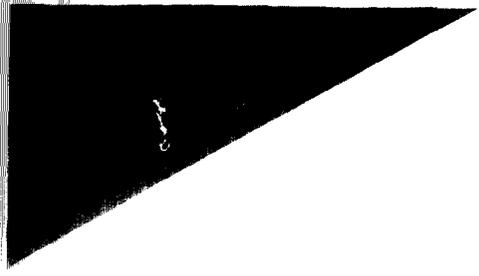
*more applications for  
more profit opportunities*

- ▶ Supplemental Codes — track and control toll free calls by assigning a specific number (up to 11 digits long) that must be entered after dialing the toll free number
- ▶ Dialed Number Identification Service (DNIS) — identifies toll free numbers terminating at the same location by the outpulsed digits received
- ▶ Toll Free ANI — the originating Automatic Number Identification (ANI) is sent along with the call to the terminating location, allowing the answering party to access information associated with that ANI in order to provide more efficient customer service
- ▶ Disconnect Message Referral (DMR) — your customers will be able to refer their toll free callers to another toll free, local, or long distance number
- ▶ Network Call Redirect (NCR) — your customers can define rules that will redirect toll free call overflow to multiple service locations

## ROUTING OPTIONS

- ▶ Point-of-Call Routing
- ▶ Time Interval Routing
- ▶ Day of Week Routing
- ▶ Percentage Allocation Routing
- ▶ Holiday Routing
- ▶ Alternate Routing





INTELLIGENT CALL ROUTING FEATURES YOUR  
CUSTOMERS WILL APPRECIATE

- ▶ **Call Manager** — Based on a rules-based routing platform, your customers can apply a set of rules to each call and then route on a per-call basis. These rules are policy-based rather than tactical and can be redefined using an on-site workstation, allowing for near real-time manipulation of the call flow. Call Manager also provides expanded reporting capabilities.
- ▶ **MCI Profile Routing®** — your customers can control their inbound call routing based on each caller's characteristics, improving customer service by targeted termination
- ▶ **MCI Quota Routing®** — your customers will be able to define a minimum, target and maximum number of calls that should be delivered to any of their locations during specified periods of time to match incoming call volumes to call center resources.
- ▶ **MCI Most Available Agent Routing®** — your customers can increase their call completion by automatically distributing calls to the location best available to answer it based on staffing schedules and average handling times.
- ▶ **MCI Rules Based Routing®** — your customers can route inbound calls based on predefined originating and terminating conditions, in order to improve answering efficiency and greater call control



ENHANCED CALL ROUTING FEATURES

- ▶ Menu Routing
- ▶ Message Announcement
- ▶ Database Routing
- ▶ Caller Takeback®
- ▶ Takeback and Transfer®
- ▶ Announced Connect®
- ▶ Busy/No Answer Rerouting
- ▶ Remote Audio Update
- ▶ Customized Message Announcement
- ▶ Custom Message Guardian®

REPORTING AND MANAGEMENT TOOLS

MCI Carrier Toll Free Services include a variety of sophisticated tools that can increase the effectiveness of your toll free customers.

- ▶ **TrafficView®** — this reporting tool provides your customers with real-time hourly, daily, weekly and/or monthly toll free calling statistics.
- ▶ **Toll Free Business Manager** — You may opt to let MCI carry all of your toll free traffic, managing the RESP ORG responsibilities and all products and services available with Toll Free Service.

MORE FEATURES AND BENEFITS FOR YOU  
AND YOUR CUSTOMERS

With MCI Carrier Toll Free Service, you can offer your customers a robust and feature-rich toll free product with sophisticated enhancements. MCI Carrier Toll Free enables your customers to tailor their toll free service in the ways that are most effective for their business — and that is better for your business!



# MCI PRIVATE NETWORK<sup>SM</sup> AND MCI VIRTUAL SIGNALING NETWORK<sup>SM</sup>

*For high speed SS7 connections you have two options, both with the advantages of rapid transmission and critical network reliability. Both MCI Private Network and MCI Virtual Signaling Network can provide you with important competitive advantages in your service offerings.*

## TWO OPTIONS FOR AFFORDABLE SS7 CONNECTIVITY

Now you can enjoy the benefits of SS7 signaling without the expense of establishing your own SS7 signaling network. With MCI Private Network, your switches can interface with our advanced SS7 Network using Dedicated Access Line (DAL) trunks to deliver MCI toll-free and Prism 1<sup>®</sup> service to the MCI network.

MCI Virtual Signaling Network (VS Net<sup>SM</sup>) enables you to use MCI's SS7 network to transport SS7 messages between your network and the LEC's. If you need to achieve a competitive Post Dial Delay (PDD), MCI Virtual Signaling Network delivers transmissions that are faster than in-band signaling — without the high cost associated with a direct connection to the LEC.

## MCI PRIVATE NETWORK FEATURES

- ▶ SS7 supports Prism 1 (outbound) from your switch, terminating in the MCI network, as well as LEC-originating toll-free terminating on your toll free DALs.
- ▶ Two 56K DDS links to any Signal Transfer Point (STP) pair provides your switch the capability for signaling to any MCI switch.

## MCI VIRTUAL SIGNALING NETWORK FEATURES

- ▶ Allows SS7 signaling between you and MCI and between you and the LEC.
- ▶ Supports all call types, including Dial 1, toll free from the LEC LATA, 900 and 0+.
- ▶ Minimizes call-setup time to 4 seconds.
- ▶ Requires links to the regional STP pair that serves the LEC or ITC where signaling capability is desired.

*the network connections  
you need*

## GET THE BENEFITS MCI CONNECTIVITY PROVIDES

- ▶ 5 STP pairs located throughout the country for customer use to ensure connectivity where you need it.
- ▶ MCI's network uses T-1 quad link connections between STPs.
- ▶ MCI offers over 99% SS7 LATA connectivity.
- ▶ Network redundancy.
- ▶ MCI maintains a Signaling Network Management System that provides 24 hour a day, 7 day a week automated and live monitoring to help prevent network trouble.

## ALL THIS PLUS COST SAVINGS

With MCI Private Network and MCI Virtual Signaling Network, your access costs should decrease due to shorter telco call setup time and fewer billable minutes. Plus, with MCI Virtual Signaling Network, you can realize greater cost savings by eliminating the LEC connection cost, capital investment cost and maintenance cost normally required for direct connections to the LEC.

## SIGN UP TODAY

To get more information on how MCI Private Network or MCI Virtual Signaling Network could help your business, contact your MCI representative today.



# MCI CARRIER NETWORK SERVICE®

*MCI Carrier Network Service provides advanced long distance carrier services with feature-rich products and a host of time- and cost-saving services for switchless carriers. For carriers and resellers looking for a transparent network solution, MCI Carrier Network Service offers the flexibility to tailor your service according to your customer base and product set. In addition, MCI Carrier Network Service supports both switched and dedicated, inbound and outbound traffic, via intralata/interlata and international connections.*

## **YOUR CUSTOMERS SEE AND HEAR YOUR NAME**

From customer invoicing to operator greetings, MCI Carrier Network Service is completely customized for your needs. MCI remains totally invisible to your customers, allowing you to grow customer loyalty and recognition as an independent provider. MCI Carrier Network Service uses sub-CIC (Carrier Identification Code) routing to deliver calls to the MCI network. As a complimentary bonus, MCI provides expert assistance to you in obtaining your own CIC through the LEC and in implementing the CIC in each of your markets. Sub-CIC routing provides you with the capability to bill directly under your company name as well as control your own management reports, provisioning and customer base.

## **MORE FEATURES, MORE BENEFITS**

### **Outbound Features:**

- ▶ Accounting Codes
- ▶ Verifiable ID Codes
- ▶ Global Control (Range Restrictions)

*the flexible  
solution*

### **Inbound Features:**

- ▶ Point-Of-Call Routing
- ▶ Day-of-Week Routing
- ▶ Time Interval Routing
- ▶ Percentage Allocation Routing
- ▶ MCI Quota Routing®
- ▶ MCI Profile Routing®
- ▶ MCI Most Available Agent Routing®
- ▶ MCI Rules Based Routing®
- ▶ Tailored Call Coverage
- ▶ Holiday Routing

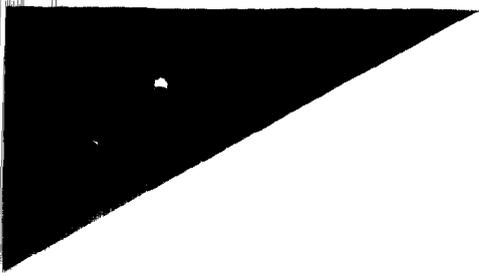
## **ALL THIS PLUS GREAT MCI CUSTOMER SERVICE**

As an MCI Carrier Network Service customer, you will receive all the features and benefits of our advanced long distance products and services, and benefit from our industry-leading customer service. The MCI Carrier Network Service Order Entry Service Center is dedicated exclusively to the support of switchless customers. This strong commitment to back-office management means you have timely access to information that is critical to the effective and profitable management of your business. Plus, MCI Carrier Network Service Order Entry reports can be customized based on your operating needs.

## **PRODUCTS THAT ADD REAL VALUE**

Designed to provide the single source solution for switchless carriers, the MCI Carrier Network Service product line also includes services that address your other business concerns, such as provisioning and management reporting.





**MCI CALL WINDOW<sup>SM</sup> — YOUR WINDOW TO  
ENHANCED SECURITY AND EFFICIENCY**

MCI Call Window is an innovative software-based service that helps you manage your traffic more effectively. Available through the MCI ServiceView<sup>TM</sup> Platform, MCI Call Window provides:

- ▶ Electronic delivery of daily call detail files for MCI Carrier Network Service outbound and toll-free traffic within 48 hours
- ▶ Compressed Call Detail Records, allowing for faster downloading times
- ▶ User-friendly Windows-based application
- ▶ Analog modem or ISDN access to retrieve data on demand
- ▶ Choice of scheduler to download data at pre-defined times
- ▶ Comma delimited format option for easy file conversion into other software packages
- ▶ On-demand traffic viewing for more efficient traffic management and more effective fraud protection



**MCI CARRIER DIRECT<sup>SM</sup> — STREAMLINE YOUR  
ORDER PROCESSING**

MCI Carrier Direct is MCI's front-end order processing and reporting system that gives MCI Carrier Network Service customers greater control and flexibility:

- ▶ Process orders from remote locations
- ▶ Real time processing
- ▶ Generate faster revenue flows
- ▶ Enhanced reporting
- ▶ Automated report delivery
- ▶ Constant access to ANI status information
- ▶ User-friendly graphical interface
- ▶ Same-day status information

MCI Carrier Network Service provides an efficient and effective tool for you to enhance and increase your business. And our value-added products can make managing your customer base and operations simpler than ever. To find out more about MCI Carrier Network Service, please contact your MCI representative.



*comprehensive,  
customized  
operator assistance*

*In today's increasingly competitive telecommunications market, offering more and better services is a critical advantage. MCI's Carrier Operator Services presents your company with the opportunity to tap into one of the most lucrative and fastest growing areas of the industry, with enhanced Carrier Operator Services designed for both switched and switchless carriers.*

## **COMPREHENSIVE COVERAGE AND NETWORK REDUNDANCY**

MCI's Carrier Operator Services is supported by twelve geographically dispersed operator centers backed by a fully digital nationwide network, to help provide greater redundancy and diversity. Seven of these centers are automated and five offer live operator services. Whether you choose automated or live service, your customers' calls will be answered 24 hours a day, seven days a week. This level of redundancy helps protect your business from lost revenue resulting from missed calls.

## **CHOOSE THE OPTION THAT WORKS BEST FOR YOU**

### **Dedicated to Dedicated**

Facilities-based carriers that originate and terminate operator services traffic over their own facilities can choose to deliver this traffic to MCI for automated or live operator service treatment. MCI will treat the call and return it to your switch for completion.

### **Dedicated to Switched**

Facilities-based carriers that originate operator services traffic can also opt to allow MCI to both treat the calls and terminate the traffic over our switched network.

Calls are routed from your switch to MCI's nearest Point of Presence (POP), minimizing access and back-haul costs.

### **Switched to Switched**

Switchless carriers can opt to allow MCI to originate and terminate their operator services traffic in addition to treating the calls, creating a turnkey solution for offering operator services to your customers.

## **ENJOY ROBUST FEATURES AND SERVICES**

MCI's Carrier Operator Services provides a variety of features and services from which you can select.

**Call Treatment Options** — Select the call treatment you prefer for different call types and billing methods, thus controlling call distribution and maximizing network efficiencies.

**Call Detail Records and Reports** — Manage your operator services traffic effectively using next-day detailed call records, available using a file transfer protocol (ftp) site. Daily, month-to-date and year-to-date call reports are also available, in addition to reports on total calls and breakdowns on live and automated calls and bill types.

**Multilingual Operators** — Operators proficient in 18 different languages are available, contributing to increased call completion percentages and allowing your business to pursue global applications.

**Fraud Control and Protection** — Calls are monitored for evidence of fraud. MCI will block calls and notify the carrier if fraud is suspected.

**Customized Branding** — Tailor call branding by trunk group, Pseudo-ANI or ANI to support niche market applications or resale of services.

**Traffic Rating** — Carriers can choose to have MCI rate their traffic prior to outclearing, minimizing administrative costs.

**Outclearing** — MCI's special agreement with a third party vendor provides volume discounts that are then passed on to the carrier.

Quite simply, MCI's Carrier Operator Services offers the right solution for any carrier entering the operator services market. From turnkey services to simple call treatment and return, choose Carrier Operator Services to help increase your revenue. For more information on Carrier Operator Services, please call your MCI representative today.



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Wholesale Long

# Partner with **GTE Intelligent Network Services** for competitive wholesale long distance services.

GTE Intelligent Network Services provides comprehensive wholesale long distance service in all 50 states. GTEINS can partner with your company to develop a competitive long distance program that meets the business needs of both you and your customers.

Flexible pricing options and a full array of GTEINS long distance products provide you access to the growing market for value-added services.



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**GTE**

## Pricing Structure

- No On-Net, Off-Net Pricing
- Flexible Pricing Options:
  - Flat Rate
  - LEC Pass-thru Plus Flat Rated Transport



## Benefits

- A Dedicated Account Team for Businesses of All Sizes
- Competitive Price Points
- Volume Pricing
- 6-Second Increment Forwarding Domestic Calls (6 sec. fwd)
- 6-Second Increment Forwarding International Calls (6 sec. fwd)
- 3-Second Increment Forwarding Domestic Calls (3 sec. fwd)
- 3-Second Increment Forwarding International Calls (3 sec. fwd)
- 3-Second Increment Forwarding Domestic Calls (3 sec. fwd)
- 3-Second Increment Forwarding International Calls (3 sec. fwd)

**GTE**

INTELLIGENT  
NETWORK SERVICES

## GTE Intelligent Network Services

GTE Intelligent Network Services provides competitive access to the exciting opportunities of the SS7 network. Signaling System 7 is a reliable open-architecture protocol that easily handles current communication requirements and accommodates future expansion of new applications. This layered protocol separates the signaling from voice transport to afford more efficient call processing and allows the delivery of AIN products and services. The GTEINS network is configured with mated pairs of Signal Transfer Points (STPs) and redundant links that assure maximum reliability.

The future growth of our industry is dependent on the SS7 network for the *delivery of tomorrow's intelligent products and services*. GTEINS is recognized as a leading supplier of SS7 hubbing and transport services to local exchange carriers, inter-exchange carriers, RBOCs, wireless providers and paging companies. GTE Intelligent Network Services can help you access a world of new opportunities.

# SS7

**GTE**

INTELLIGENT  
NETWORK SERVICES

**GTE**

INTELLIGENT  
NETWORK SERVICES

888/483-4677 (888/GTE-INS7) Fax 972/518-2455 [www.gteins.net](http://www.gteins.net)

## Create Your Own Intelligent Network

Rely on GTE Intelligent Network Services for competitive SS7 access to the exciting opportunities offered by intelligent products and services.

GTEINS can provide your company with the resources and expertise to create your own intelligent network.



INTELLIGENT  
NETWORK SERVICES

**Local Number Portability:** Rely on GTE Intelligent Network Services for the infrastructure and expertise to meet FCC-required regulations regarding Local Number Portability and to position your company for new market growth. GTEINS can provide an efficient LNP solution, including Local Service Management System (LSMS), with access to all domestic National Ported Administration Centers. The GTEINS LNP solution features a National Ported Number Database and 10 Digit Global Title Translation for the most efficient routing of LIDB and CNAM information.

**Calling Name Service:** GTE Intelligent Network Services makes it easy to offer this popular value-added service. GTEINS provides efficient and reliable SS7 message transport to CNAM databases to enable delivery of calling name ID information to telcos, wireless carriers, and paging companies.

**Wholesale Long Distance:** GTE Intelligent Network Services provides comprehensive wholesale long distance service in all 50 states. GTEINS can partner with your company to develop a competitive long distance program that meets the business needs of both you and your customers. Flexible pricing options and a full array of GTEINS long distance products provide you access to the growing market for value-added LD service.

**Wireless Services:** GTE Intelligent Network Services has teamed with GTE Telecommunication Services Inc. to offer advanced SS7 capabilities to the wireless industry. Cellular and PCS carriers can use these capabilities to provide seamless roaming, as well as obtain call setup, calling name ID, short message services, and protocol conversions. GTEINS also provides SS7 conversion to allow the exchange of GSM messages internationally. GSM carriers have the added opportunity of worldwide roaming with GTEINS' network and message conversion capabilities.

**AINLink<sup>SM</sup>:** GTE Intelligent Network Services is your gateway to existing and future third party AIN information providers and developing AIN services. GTEINS provides reliable SS7 transport of queries to AIN databases and can be relied upon for continued economical access to this developing technology.

**Pre-LIDB Call Management System:** PCMS is a collect call fraud management system that actively scans up to thirty million customer-entered telephone numbers that can be blocked from outbound collect calling. These pre-screen queries prevent unnecessary database charges and also reduce uncollectibles due to fraudulent collect calls.

**800 Database Service:** GTEINS provides reliable access to customer selected 800 database providers for 800 look-ups and routing information.

**Query Response<sup>SM</sup> Service:** QRS<sup>SM</sup> provides economical access to Line Information Databases nationwide. A single connection to GTEINS offers access to available LIDB data for billing validation for collect, third number, and third party billed calls.

**LATALink<sup>SM</sup>:** Reach LATAs efficiently and economically with a single SS7 connection to GTE Intelligent Network Services. LATALink provides CLECs, IXCs and wireless carriers reliable ISUP signaling to IXCs and LEC end offices.

**Protocol Conversion:** GTE Intelligent Network Services can convert TCAP messages from SS7 to X.25, TNPP, or TCP/IP protocols. This single convenient link provides access to the full line of GTEINS intelligent products and services.

# ACCESS YOUR WORLD

# LNP Local Number Portability

## Partner with GTE Intelligent Network Services

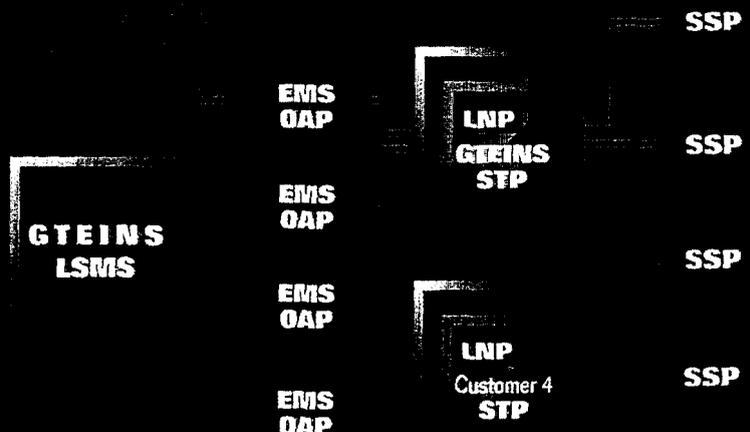
Rely on GTE Intelligent Network Services (GTEINS) for the infrastructure and expertise to satisfy FCC-required regulations regarding Local Number Portability (LNP) and to position your company for new market growth. Your best value for LNP is measured in cost reducing solutions that can help you successfully compete for business in today's new communications marketplace. GTEINS offers a nationwide LNP solution, including Local Service Management Systems (LSMS) with access to all domestic Number Portability Administration Centers (NPACs).

As the SS7 transport provider to many of the world's largest carriers, GTE Intelligent Network Services has a proven record for providing quality and reliability first. In addition to utilizing the resources of one of the most advanced operations centers to monitor our network of triverse links and mated pair STPs, GTE Intelligent Network Services continues to upgrade monitoring capabilities to better insure network reliability. Our commitment to quality also includes providing carriers with 24 hour availability to a staff of qualified in-house technicians.

GTE Intelligent Network Services is recognized as a leading supplier of SS7 hubbing and transport services to local exchange, inter-exchange, and wireless carriers; paging companies; and other telecommunications service providers. GTEINS can provide a full package of SS7 services including TCAP access to LIDB, 800 and CNAM databases, ISUP signaling to most LATAs, SS7 signaling for the wireless industry, and protocol conversion between SS7 and X-25, TNPP, and TCP/IP protocols.

GTE Intelligent Network Services can help you access a world of new opportunities.

### GTEINS LNP Network



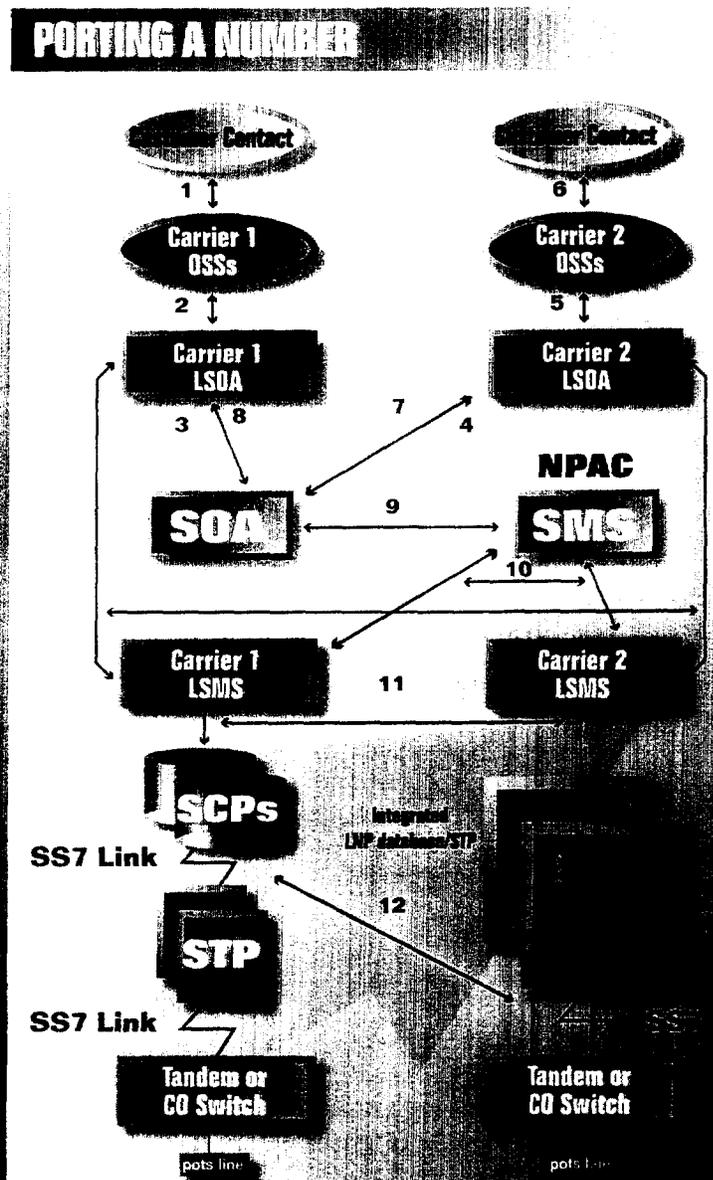
A single connection to the GTE Intelligent Network Services hub network will provide carriers with ported number service in any market where they operate, eliminating the costs of establishing in-house LNP systems, or default routing from the incumbent LEC. GTEINS LNP provides ample number storage capacity for a nationwide data base and 10 digit global title translation on network database queries between carriers.

GTE Intelligent Network Services has employed the most efficient and economical solution for LNP to insure that our customers will remain competitive and flexible as they plan their future network. GTEINS saves you money by spreading the costs of LNP hardware, software, NPAC licensing fees and administrative and operational expenses among all GTEINS customers. Carriers considering their own LNP systems may also realize substantial cost savings by using the GTE Intelligent Network Services LSMS and NPAC interfaces.

### Porting a Number

There is one NPAC. It is administered by Lockheed Martin and is partitioned to serve carriers in seven regions. NPACs help carriers synchronize the porting process. They are the ultimate source of porting data for those carriers.

1. Carrier 1 wins business of Carrier 2's customer. Carrier 1 enters porting information into its operations support systems (OSSs).
2. Carrier 1's provisioning system feeds porting info to Carrier 1's local service order administration (LSOA) system.
3. Carrier 1's LSOA forwards a porting request to the NPAC SOA, specifying the date and time porting should occur.
4. NPAC SOA notifies Carrier 2's LSOA of porting request.
5. Carrier 2's LSOA informs Carrier 2's OSSs of porting request.
6. Carrier 2 notifies customer of porting request to verify its legitimacy (Not required under consideration by some carriers).
7. Carrier 2's LSOA tells NPAC it has received porting request and confirms date and time of change.
8. NPAC SOA tells Carrier 1's LSOA that carrier 2 has been notified, agrees, and confirmed date and time.
9. NPAC SOA transmits porting and state information to NPAC service management system (SMS).
10. Carrier 1's LSOA transmits porting information to NPAC SMS.
11. NPAC SMS transmits porting information to Carrier 1's LSMS.
12. NPAC SMS transmits porting information to Carrier 2's LSMS.



GTE Intelligent Network Services -- POPS

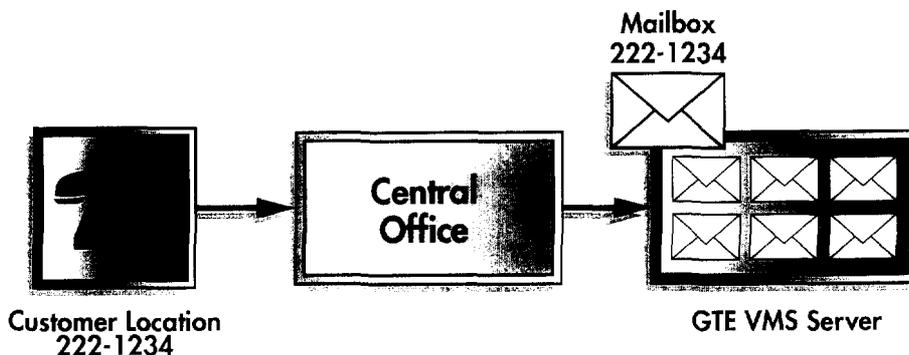
AL Birmingham	IN Evansville	OH Columbus
AL Huntsville	IN Ft. Wayne	OH Dayton
AL Mobile	IN Indianapolis	OH Toledo
AL Montgomery	IN South Bend	OH Youngstown
AR Fayetteville	KS Topeka	OK Oklahoma City
AR Little Rock	KS Wichita	OK Tulsa
AZ Phoenix	KY Lexington	OR Portland
AZ Tuscon	KY Louisville	PA Erie
CA Anaheim	LA Baton Rouge	PA Harrisburg
CA Bakersfield	LA Lafayette	PA Philadelphia?
CA Fresno	LA Lake Charles	PA Pittsburg
CA Los Angeles	LA New Orleans	PA Scranton
CA Rialto	LA Shreveport	PA Unknown
CA Sacramento	MA Boston	RI Providence
CA Salinas	MA Springfield	SC Charleston
CA San Deigo	MD Baltimore	SC Columbia
CA San Francisco	ME Portland	SC Florence
CA Santa Barbara	MI Detroit	SC Greenville
CA Santa Clara	MI Grand Rapids	SC Myrtle Beach
CA Sherman Oaks	MN Duluth	SD Souix Falls
CA Stockton	MN Minneapolis	TN Chattanooga
CO Colorado Springs	MN Rochester	TN Knoxville
CO Denver	MO Joplin	TN Memphis
CT Bridgeport	MO Kansas City?	TN Nashville
CT Hartford	MO Springfield	TX Abilene
CT Stamford	MO St. Louis	TX Amarillo
DC Washington	MS Jackson	TX Austin
DE Wilmington	MT Billings	TX Beaumont
FL Daytona Beach	MT Helena	TX Corpus Christi
FL Ft. Lauderdale	NC Charlotte	TX Dallas
FL Jacksonville	NC Durham	TX El Paso
FL Melbourne	NC Greensboro	TX Ft. Worth
FL Miami	NC Raliegh	TX Houston
FL Orlando	ND Bismark	TX Longview
FL Pensacola	ND Fargo	TX Lubbock
FL Tallahassee	NE Lincoln	TX Midland
FL Tampa	NE Omaha	TX San Antonio
FL West Palm Beach	NH Nashus	TX Waco
GA Albany	NJ Newark	UT Salt Lake City
GA Atlanta	NJ Trenton	VA Norfolk
GA Augusta	NM Albuquerque	VA Richmond
GA Macon	NV Las Vegas	VA Roanoke
GA Savannah	NV Reno	VT Montpelier
IA Cedar Rapids	NY Albany	WA Seattle
IA Davenport	NY Buffalo	WA Spokane
IA Des Moines	NY New York	WI Eau Claire
IA Iowa City	NY Poughkeepsie	WI Green Bay
IA Souix City	NY Rochester	WI La Crosse
ID Boise	NY Syracuse	WI Madison
IL Chicago	NY White Plains	WI Milwaukee
IL Rockford	OH Akron	WV Charleston
IL Springfield	OH Cincinnati	WY Cheyenne
	OH Cleveland	

WHOLESALE SERVICES

VOICE MAIL

IT NOT ONLY GIVES YOU A COMPETITIVE EDGE AND GENERATES INCREMENTAL REVENUE, IT ALSO BONDS YOUR SUBSCRIBERS TO YOU.

This could be the perfect add-on service. Once your subscribers experience the convenience, reliability and flexibility of your Voice Mail Service, they'll be far less willing to jump to a competitor. Plus, the service generates additional cash flow.



### VOICE MAIL PROCESS

As far as your subscribers are concerned, you provide the voice mail service that meets so many of their needs. Unbranded recorded greetings and instructions mean GTE's involvement is transparent to your subscribers.

### FEATURES YOU AND YOUR SUBSCRIBERS WILL APPRECIATE.

You can offer your subscribers a full set of robust Voice Mail features including a stutter dial tone that tells subscribers a message has been received. GTE Voice Mail features also are easy to use, eliminating a major source of subscriber frustration.

You will appreciate our flexible pricing including term and volume discounts - making it even more profitable for you to offer GTE Voice Mail service.

In addition, GTE seamlessly transfers existing Voice Mail Service when business and residential subscribers transition to your company. You'll have pre-sold subscribers.



To make serving your subscribers even easier, we'll provide the software you'll need to print User Guides.

GTE offers yet another enormous advantage - a proven, reliable Voice Mail infrastructure that's already in place.

The service is available now for you to include in your service offerings.

*N O C A P I T A L C O S T S F O R Y O U .*

You can offer your business and residential subscribers basic and advanced voice mail features without incurring the capital and maintenance costs associated with building a quality voice mail infrastructure.

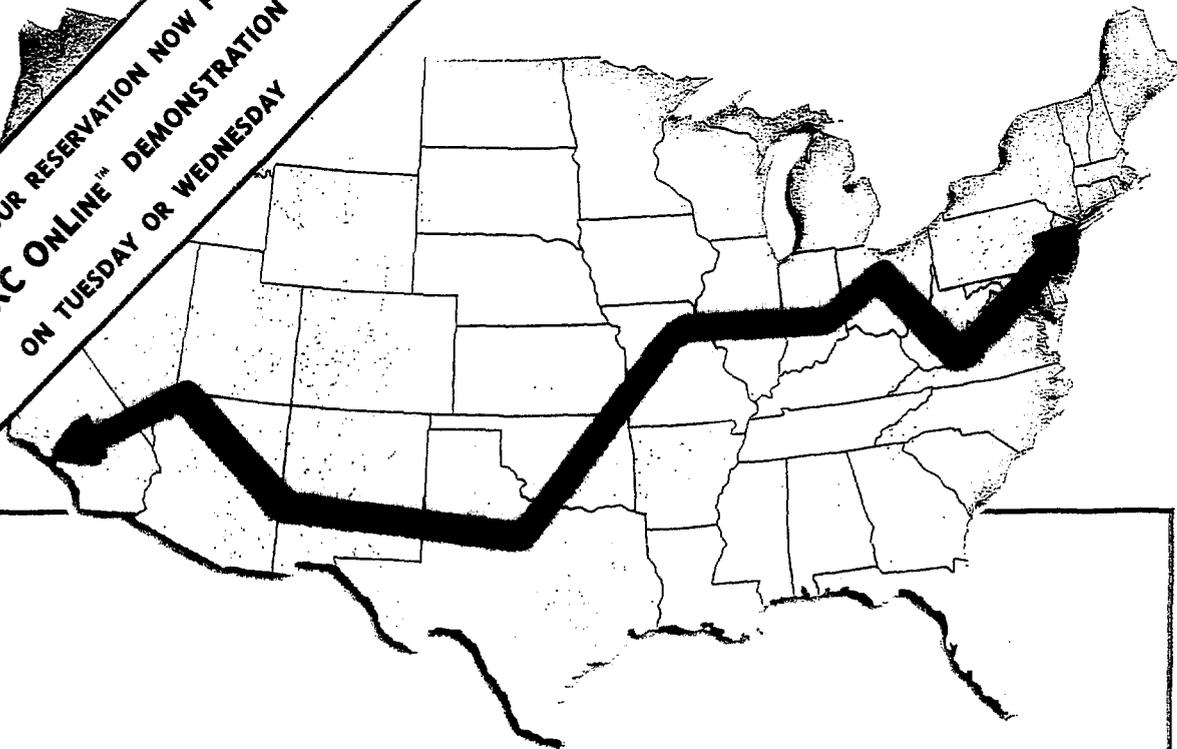
*A G R E A T D E A L .*

With GTE Voice Mail Service, you get a proven revenue generator that bonds your subscribers to you. Just as important, you get those benefits without adding capital, management, and maintenance costs.

For complete information on giving yourself the competitive edge of GTE Voice Mail, contact your GTE Account Manager. Or, visit our Web site: <http://www.gte.com/Wmkts/Resale>

**NATIONAL. GLOBAL. XCEPTIONAL.**

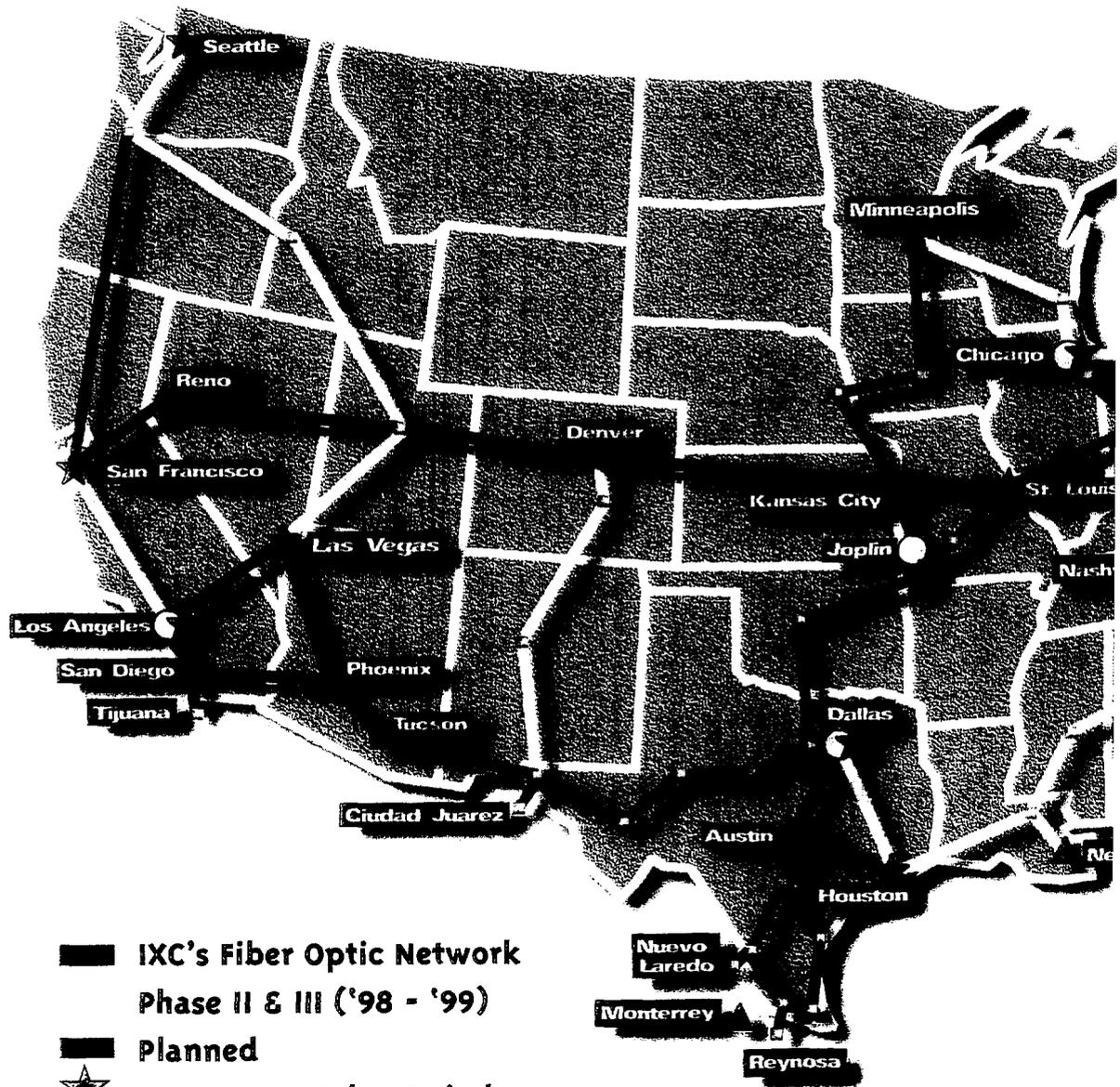
**MAKE YOUR RESERVATION NOW FOR  
AN IXC ONLINE™ DEMONSTRATION  
ON TUESDAY OR WEDNESDAY**



**IXC'S COAST-TO-COAST FIBER OPTIC NETWORK.  
FIRST IN A DECADE, MOST ADVANCED IN THE WORLD.**

- Non-zero, dispersion-shifted fiber allows more capacity at less cost
- Wave-division multiplexing technology enhances performance
- Next generation, high speed, high capacity services
- SONET architecture helps ensure maximum reliability
- 24-hour Network Operations Center enables constant proactive monitoring

**IXC**  
COMMUNICATIONS, INC.



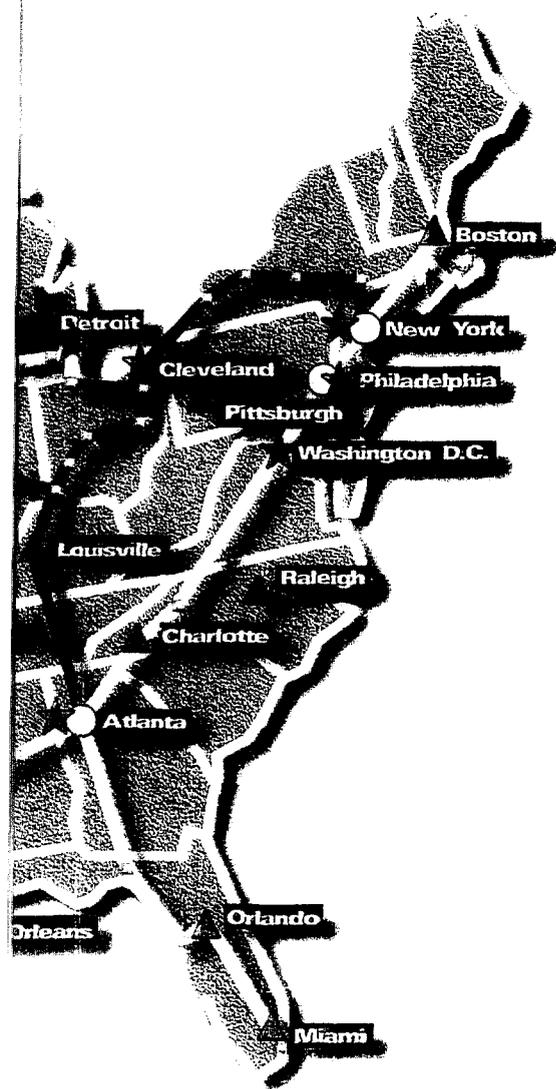
**IXC's Fiber Optic Network  
Phase II & III ('98 - '99)**

**Planned**

**★ ATM/Frame Relay Switches**

**▲ Planned ATM/Frame Relay Switches**

**○ Long Distance Switches**



## **IXC'S TOTALLY SELF-OWNED, EQUIPPED, AND MANAGED NATIONWIDE NETWORK MAKES YOUR BUSINESS A SUCCESS.**

### **A WORLD-CLASS NETWORK:**

- Coast-to-coast fiber optic network
- 24-hour network management
- 7 geographically dispersed voice switches (4 more in 1998)
- 18 ATM/Frame Relay data switches (5 more in 1998)

### **CUSTOMER-FOCUSED SUPPORT SERVICES:**

- IXC OnLine™ order entry platform - industry standard, user-friendly, Windows and Internet-based
- One 800 number for customer questions
- 24-hour customer support

### **INNOVATIVE SWITCHED AND PRIVATE LINE PRODUCTS AND SERVICES TO BRAND AS YOUR OWN:**

- Switched and dedicated 1+
- Switched and dedicated 8XX
- Calling card and debit card
- 8XX service from Mexico
- 8XX with PIN
- Private line: DS-1/DS-3/E-1
- OC-X
- ATM and frame relay
- Collocation

# ON THE FAST TRACK WITH IXC

IXC Communications, Inc. is one of the largest and fastest-growing U.S. suppliers of network-based information delivery solutions for the global communications market. Our coast-to-coast fiber optic network incorporates the latest technology to provide you with the most advanced nationwide coverage available.

Having recently completed the U.S.'s first new coast-to-coast fiber

optic network in a decade, IXC is the forefront of the industry's new class of emerging carriers. With superior network management and engineering expertise, and the latest in fiber and optical transmission technologies, we support all packetized applications. IXC's offerings include long distance switched and dedicated services, private line, broadband and Internet applications.

**For more information about putting  
our solutions to work for you,  
contact your local IXC representative  
at 800-984-9253, or check our  
web site at [www.ixc-comm.com](http://www.ixc-comm.com).**



1122 Capital of Texas Highway South • Austin, Texas 78746  
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*Increase your capacity  
for profit.*

*Partner for success with the first coast-to-coast,  
ATM network and discover your most  
cost-effective voice, data and video solution.*

TeleHub   
Pass it on.™

# *TeleHub is the first to deliver the ATM Advantage to your business.*

Only TeleHub can provide you with the single source, universal ATM backbone you need to deliver voice, data and video services more cost-effectively to your customers. Our postalized pricing and *to-the-second* billing not only lowers your costs, but also gives you the flexibility to better manage your margins. Developed from a clean slate, the reliable and fully redundant TeleHub ATM network achieves increased capacity and operates more efficiently than traditional technology. So we're able to pass the savings on to you...now and in the future.

## *The Underlying Facts*

- Most cost-effective, nationwide, domestic ATM network offering both switched and dedicated access
- Simpler, flat per-minute domestic rates, 24 hours a day, 7 days a week, regardless of distance
- Easier term and volume discounts with no "take or pay" contracts
- No wholesale surcharge on calling card or debit card calls
- *To-the-second* rounding and customized billing
- Separate retail and wholesale Call Detail Record
- Complete integration of voice, data and video

*TeleHub gives you  
the products and support  
you need to keep  
your customers satisfied.*

The ATM Advantage is just the beginning. With TeleHub, you also benefit from a full range of premium services and back office support. Whether you're a switch-based or "virtual" reseller, TeleHub enables you to offer customers all the long distance and other communications services available today. And no other carrier provides more advanced billing services for easier cost control.

## *Voice and Data Products*

- Switched and dedicated 1+ service
- Switched and dedicated 800/888 service
- Calling card and debit card
- Operator services
- Directory assistance
- Internet access
- International termination
- International call back
- Voicemail
- 10xxx dialing
- Private line
- Provisioned bandwidth on demand (usage sensitive, distance insensitive billing)\*

\* Available Fall 1997

## *Support Services*

- Single-source solution
- To-the-second billing increments\*\*
- Customized CDRs
- 24-hour network monitoring
- Flexible interface options (paper, magnetic tape, EDI)
- Batch order entry
- ANI status supervision
- Dedicated and knowledgeable support teams

## Resale Market

### *Service Portfolio*

TeleHub takes the cost-saving advantages of the first coast-to-coast ATM network and passes them on to you. Our leading-edge network offers both switch-based and switchless resellers access to simpler, flexible and more cost-effective telecommunications solutions in the wholesale environment.

#### *One-stop shopping*

The TeleHub ATM backbone network increases your capacity for delivering fully integrated voice, data and video services to your customers.

#### *Maximum cost-efficiency*

Developed from a "clean slate" and unburdened by traditional technology and legacy systems, TeleHub's proprietary ATM network operates more efficiently than any other in the industry.

#### *Simple flat rate pricing*

Voice services are charged at a flat per minute rate, 24 hours a day, 7 days a week, regardless of distance and rounded to the second (jurisdictional differences apply, please see the enclosed schedules). There are no wholesale surcharges on calling card or debit card calls.

#### *Term and volume discounts*

TeleHub's already low rates can be further discounted by achieving simple term and volume thresholds, tailored to your business.

#### *No "take or pay" contracts*

Reseller contracts with TeleHub feature easy terms and no minimum commitments.

#### *Flexible "to-the-second" customized billing*

Only TeleHub provides advanced *to-the-second* wholesale billing increments and separate retail Call Detail Records for greater control and incremental billing flexibility of your pricing.



# Voice Services

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TeleHub meets the growing needs of your customers with a dynamic range of voice services for the resale market. The TeleHub product line includes all the long distance services you expect as well as the enhanced features your customers demand.

## Outbound

### *1+ Switched.*

TeleHub originates and terminates calls for direct dial service. Available in all FGD (equal access) locations coast-to-coast.

### *1+ Dedicated.*

Direct dial service over TeleHub's network via DS-1 (or greater) connections between customer premises equipment and TeleHub's POP. Can also assist with local loop orders.

## Toll-Free

### *800/888 Switched.*

Provides toll-free service originating from the U.S. and Canada and terminating to local switched access facilities. Carrier may offer customers number-based or PIN-based toll-free numbers.

### *800/888 Dedicated.*

Terminates toll-free calls from the U.S. and Canada over DS-1 (or greater) connections to the end user's facilities. Full featured service including quick installation, fraud protection, real-time DNIS and ANI delivery, and more.

## Cards

### *Calling Card.*

Calls may originate anywhere in the North American Numbering Plan Area and terminate worldwide. Platform allows 6-second billing for calls within the U.S., variable card surcharge rates and flexible billing alternatives. Credit limits and calling restrictions are available. Includes advanced anti-fraud safety features. Access is via 800/888 numbers using TeleHub authorization codes.

### *Debit Card.*

Prepaid card is rechargeable by minutes or dollar value. TeleHub can also provide talk and discard debit cards. Access is via 800/888 numbers.

## Support Services

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TeleHub gives resellers the edge in customer support with completely customized billing and reporting. Your business also receives the expert support of a knowledgeable TeleHub account team. These experienced and dedicated professionals are available to meet your technical or customer service needs at any time.

### *Separate Call Detail Records.*

TeleHub provides you with both a retail CDR and an advanced wholesale CDR for the most accurate retail reseller flexible billing in the industry.

### *24-Hour Network Monitoring.*

### *Flexible Interface Options.*

For your added convenience, TeleHub offers various invoicing and reporting options: paper, magnetic tape, Electronic Data Interchange (EDI) and Internet.

### *Batch Order Entry.*

### *ANI Status Supervision.*

TeleHub will accept the ANIs for your customers and route only those calls which originate from current ANIs. TeleHub will also provide access to an ANI status system that notifies the wholesaler as to the current ANI status.

## Codes

### *Authorization Codes.*

A ten digit code with a four digit PIN# is assigned to all calling cards. The authorization code can be your customer's local telephone number and a unique four digit PIN#, or it can be a randomly generated 14 digit number that the caller would dial after dialing your 1-800 or 888 number into the TeleHub calling card platform.

### *Account Codes.*

Customers may enter any four digits at the end of the dialing sequence. These numbers will appear on the wholesale and retail Call Detail Records. No restrictions based on non-verified account codes. For higher security and tracking TeleHub can provide four digit verified codes.

## More

### *Operator Services.*

Greets callers with custom messages. System attempts to complete all operator assistance requirements with automated voice and reverts to live operator on default.

### *Directory Assistance.*

Routes callers to the carrier's contracted directory assistance provider.

### *International Services.*

TeleHub provides termination services to over 290 countries. The carrier's customers can place calls by either direct-dialing or by using the TeleHub operator-assisted services to these international locations.

### *Private Line.*

TeleHub offers this service for sending large volumes of voice, data and video traffic between two locations worldwide. Transmission speeds vary from DS-0 to DS-3.

### **TeleHub Network Services Corporation**

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Gurnee, IL 60031

Phone: (800) 835-3482

Fax: (847) 623-1717

TeleHub Network Services Corp.

*Increase Your Capacity For Profit*

