Datapro Communications Perspective

Technologies, Systems, Strategies

JUNE 1989

AT&T DEFINITY: Bridging the Gap5

Rate Watch 10

At the LATA Level 11



Novell and Excelan Join Forces

Novell's purchase of Excelan, which posted 1988 net revenues of \$66 million, up from 1987's \$39 million, represents the teaming up of two solid contenders whose strengths complement each other. Novell's NetWare operating system has become a standard for LANs, with more than 350,000 installed throughout the world. Excelan produces standards-based software and hardware products that unify computer resources across a vast array of dissimilar systems.

To the new enterprise, Excelan brings an armload of expertise in Transmission Control Protocol/Internet Protocol (TCP/IP) and a heavy-hitting line up of Macintosh connectivity products through its subsidiary, Kinetics. By placing these skills and products at Novell's disposal, Excelan has effectively advanced the cause of its new parent in its quest for multivendor communication capabilities and a larger bite out of Apple.

Novell NetWare users and potential users have good reasons to applaud the decision. The Excelan acquisition opens up a fast and efficient route to TCP/IP and to the AppleTalk Network via Kinetics. It could also accelerate the entrance of Novell's Portable NetWare into the marketplace—an arrival that would be cheered by NetWare users who need to access UNIX processors and other minis and mainframes.

It's no secret that Excelan has been actively inviting interest from buyers for quite some time. The company, realistically assessing its standing in the adapter board market where it specializes in producing backplane units that directly connect UNIX or VAX hosts to Ethernet LANs, did not like the prognosis. Although net revenue was up, the company's niche market was dwindling, and its growth strategy called for offsetting that decline by steering in the direction of software development. Datapro Communications Perspective

VICE PRESIDENT-EDITOR IN CHIEF J. Richard Peck

EDITORIAL STAFF

Product Manager Algis V. Salciunas

Group Managing Editor Lester P. Sitzes

Associate Editor/Analyst Diane P. Falten

CUSTOMER SERVICE Telephone (800) 328-2776

DATAPRO RESEARCH 1805 Underwood Blvd. Delran, NJ 08075 (609) 764-0100

6/89 2 Datapro F

Datapro Research 330 Progress Avenue, Scarborough, Ontario M1P 2Z5. Telephone (800) 668-9308.

UNITED KINGDOM:

Datapro Research McGraw-Hill House Shoppenhangers Road Maidenhead, Berkshire SL6 2QL England Telephone (44) 628 773 277 Telex 848484 MCHILL G

Datapro Communications Perspective is a regular feature of Datapro's communications services: Datapro Reports on Communications Alternatives, Datapro Reports on Data Communications, Datapro Reports on Telecommunications, Datapro Management of Telecommunications. Datapro Management of Data Communications, Datapro Reports on PC Communications, and Datapro Reports on Communications Software. Each service is published monthly by Datapro Research, 1805 Underwood Blvd., Delran, NJ 08075. Annual subscription rates are available on request. POST-MASTER: Send address changes to Datapro Management of Telecommunications, 1805 Underwood Blvd., Delran, NJ 08075.

Reprints of the articles in Datapro Communications Perspective may be purchased for distribution within your organization. To inquire or place a reprint order, please call 1-800-328-2776.

Copyright © 1989 by McGraw-Hill, Incorporated. All rights reserved. Printed in the United States of America. Except as permitted under the United States Copyright Act of 1976, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a data base retrieval system, without the prior written permission of the publisher.

Novell and Excelan Merger

(Continued from Page 1)

For the resources to carry out that plan, Excelan turned to the outside. Last year, the company came close to entering NET's fold, but shareholders blocked the merger. This year, Excelan's prospects look much better.

It was acquired by a company that values its products and expertise; furthermore, Novell is no stranger to Excelan. In 1977, Novell worked with Excelan to develop a TCP/IP link for NetWare which is currently comarketed by the companies. In addition, Novell recently formalized an agreement to resell Kinetics products with NetWare Version 2.15 for the Macintosh. At present, Kinetics ranks as the leading supplier of Ethernet adapters for the Macintosh and also markets FastPath, an AppleTalk-to-Ethernet gateway.

With the Excelan acquisition, Novell no longer has to rely on third parties for help in implementing Macintosh connectivity. The company can also depend on Excelan for software that links multivendor systems such as Digital Equipment Corporation's VAXs, IBM's PCs, and UNIX systems. The acquisition removes a significant growth barrier from Novell, one of not being able to provide multivendor connectivity. The merger also puts Novell closer to implementing universal communications standards by tapping into Excelan's line of products based on Open Systems Interconnection (OSI) protocols.

Although the products of the two companies blend quite well, the major obstacle to many a

merger is the blending of the respective company cultures. In response to our question asking whether there were significant differences in the cultures of the two companies, Peter Troop, public relations manager for Excelan, commented, "Not really. We have paid attention to company cultures and it's seen as a positive. There is a complementary sense about the internal operations of the two companies. Both are very entrepreneurial and open, allowing people to define their best contributions."

After the merger, Raymond J. Noorda, president and CEO of Novell, will continue as president. Kanwal S. Rekhi, Excelan president and CEO, will be named an executive vice president of Novell and will remain responsible for Excelan operations. Rekhi will also be nominated for election as a director of Novell Inc.

Noorda commented, "Excelan's expertise in standards-based network computing is highly complementary to our NetWare Open Systems strategy. Adding their strength to our own is very positive for the industry in that it will greatly enhance our ability to provide protocol-independent networking solutions, including expanded Macintosh connectivity to our combined user bases."

Rekhi stated, "We are pleased to join forces with Novell, the recognized leader in network computing. Our combined talents in engineering, sales, and management, together with our highly complementary channels of distribution, will result in a company that is ideally positioned to lead the industry into its next phases of growth and development."

(Continued on Page 12)

Industry Trends

Carriers Eye International Voice Market

A long-distance telecommunications niche expected to burgeon in the next few years is international voice communications. This market is expected to grow by 15 to 25 percent annually over the next five years. As businesses become increasingly multinational, the need for cost-effective overseas communication increases. New fiber optic undersea cables will increase transmission capacity dramatically, causing usage costs to decrease. These conditions will help meet market demands.

Telecom managers are well advised to monitor the competition in this market segment. The nation's top three long-distance telecommunications companies—AT&T, MCI, and US Sprint—are poised for an intense contest. Since all three carriers offer access to the same number of outbound direct dial countries (currently 151), pricing and features are important marketing tools.

AT&T

AT&T offers World Connect Service for outbound international high-volume calling. There are a variety of ways for a customer to access World Connect. AT&T can provide T1 or analog private line access. Access can also be provided by a customer's Local Exchange Company (LEC), an independent access vendor, or the customer.

Bill Evans, product marketing manager, International Services Division at AT&T, said there are over 500 service nodes currently available for access to World Connect. Evans said AT&T is currently transitioning World Connect from an internationalbased service to an integrated service with both domestic and international components. He also said that World Connect will eventually be supplemented in the marketplace by AT&T MEGACOM, a domestic, high-volume calling service.

According to Evans, AT&T World Connect service, on the average, is about 15 to 20 percent less expensive than basic AT&T International Long Distance (ILD). In addition, AT&T recently filed for volume discounts on World Connect in conjunction with MEGACOM, which can give MEGACOM customers who request World Connect additional savings ranging anywhere from 5 to 15 percent.

AT&T is involved with several foreign PTTs and U.S. partners in fiber optic cable ventures. In addition, AT&T recently announced a service jointly developed with Japan's Kokusai Denshin Denwa (KDD) and British Telecom called Telecrediting. This service will permit U.S. AT&T Card customers traveling to Japan to make international calls from Japan to other countries and have those calls billed, in U.S. dollars, to their AT&T card accounts. Japanese users traveling to the United States can similarly have international calls billed to their KDD credit card accounts.

In addition, several AT&T services offer international dial capability, including Basic Long Distance Service, PRO WATS, and Software Defined Network (SDN). AT&T also offers International 800 service. This service provides toll-free 800 calling from customer-specified international locations to an access line in the U.S. Subscribers can currently receive calls from approximately 34 countries through this service.

MCI

MCI's subsidiary, called MCI International, is devoted exclusively to marketing international services. MCI offers Worldwide Direct Dialing, which gives users outbound voice service to 99 percent of the world's telephones, and to the same 151 countries currently served by AT&T. MCI is currently involved in several undersea fiber optic cable projects, including TAT-8, TAT-9, and HAW-4-TTC 3 (between Hawaii and the Far East). Jane Levine, manager of marketing communications at MCI International, says MCI's strategy is to provide an international voice service that offers enhanced features, such as departmentalized billing, in addition to high circuit quality. Levine points out that MCI is involved in just about every aspect of the international voice market, from outbound worldwide direct dialing to inbound services such as CALL USA and 800 service. MCI also offers an International Card Service.

MCI CALL USA is a toll-free, inward calling service "alternative" subscribers can use to call *any* number in the U.S., either by calling collect or by using an MCI Card. MCI International 800 is an inbound 800 service businesses can subscribe to that permits inward calling from international locations.

Levine says current MCI pricing on outbound calls permits its subscribers to save as much as 22 percent over AT&T rates, depending on country destination and time of day. MCI currently has about 12 percent of the international voice market, according to Levine. Levine quoted *Communications Business* as reporting the international voice market was worth approximately \$6.5 billion in 1988.

US Sprint

US Sprint, the nation's third-largest longdistance carrier, is also moving aggressively to capture its share of the international voice market. Sprint has been competing in this market for only about a year.

Bill Burgess, vice president and general manager of Sprint International, is very optimistic about the growth potential for international voice services over at least the next five years. Burgess says he expects sustained growth because costs and prices are coming down and new competitive forces are being introduced to create market diversity. Burgess believes international voice revenues will grow at double the rate of domestic voice revenues.

According to Burgess, Sprint's strategy is to first obtain enough international facilities capacity to support its growth plans and to own and operate those facilities. Secondly, Burgess says Sprint wants to become partners with other foreign companies with similar ideas, such as Cable & Wireless (C&W). This plan is already in evidence: Sprint recently purchased the U.S. end of the PTAT transatlantic fiber optic cable system, which is expected to become operational in the third quarter of this year. Cable & Wireless subsidiary Mercury Communications will operate the cable system on the U.K. end.

"Basically, that gives us all the capacity we could possibly use in the next few years at least, to the U.K. and through other cables into Europe," Burgess said. "They [Cable and Wireless] have exactly the same network architecture and network strategy in the U.K., with all fiber optic digital switching from Northern Telecom."

Burgess believes Sprint's compatibility with C&W's network will give Sprint an advantage over its competitors in developing common products and services with an international partner. One of the future products Sprint plans to introduce in cooperation with Cable & Wireless is International Virtual Private Network (IVPN). This service will extend international dial capabilities to current VPN customers in the U.S. Sprint plans to introduce IVPN in the first quarter of 1990, and service will initially be available among points in the U.S., the U.K., and Hong Kong.

In the international voice arena, Sprint currently offers only switched international voice service, which is packaged with its WATS product line. Once PTAT is up, however, Sprint plans to announce several international services (including international private lines) under an umbrella service called Global FON.

Burgess claims Sprint's international voice service pricing is about 5 to 15 percent below AT&T's, and about 1 percent below MCI's. Sprint claims to have about 4 percent of the international voice market. Burgess wants Sprint to have 5 percent by the end of this year, and double that by the end of 1990. —Larry Sankey **Industry Trends**

AT&T DEFINITY: Bridging the Gap

In response to the PBX community's long-standing request for a broad spectrum, flexible communications system, AT&T rolled out its DEFINITY 75/85 Communications System last February. The system bridges the gap between small and very large systems, offers upgrades to existing users at minimal cost and minimal initial investment loss, and provides common components between system versions.

DEFINITY unites the previously separate System 75 and System 85 architectures, while adding new features. AT&T wisely combined the best features of both PBXs, including modularity, networking, and user-friendly system management, while allowing a smooth upgrade transition for existing System 75/85 users. DEFINITY is available in two versions, or "Generics": Generic 1, which parallels the System 75, supports up to 1,600 lines; and Generic 2, evolved from the System 85, which supports up to 30,000 lines.

The system provides a smooth yet efficient upgrade from System 75 or System 85 to the Generics. Existing System 75/85 users protect 80 to 90 percent of their original system in an upgrade. Consistent architecture and hardware design provide more interchangeability between Generics. Generic 1 and 2 use the same memory, application interfaces, port cards, circuit packs, and cabinets.

DEFINITY also emerges as the first PBX offering end-to-end ISDN compatibility by way of its Primary Rate Interface (PRI) option on both Generics and Basic Rate Interface (BRI) on Generic 2. Three new ISDN voice terminals round out DEFINITY's ISDN picture.

In addition to Systems 75/85's upgradability to a DEFINITY Generic 1/2, a System 75 can be integrated as a module of a Generic 2. If a System 75 reaches its capacity and growth is anticipated beyond the Generic 1 capacity, integration into a Generic 2 is possible. The original System 75 converts to a Universal Module by replacing its processor (the 8086) with the Universal Module Processor and configuring it as a remote module to the Generic 2 common control/time multiplex architecture.

A System 85 upgrade to Generic 2 protects nearly all original investments by upgrading only four common control circuit packs and replacing the High Capacity Mini-Recorder (HCMR) with a Disk/Tape Drive. The Generic 2 outshines the System 85 through its new double-density circuit packs which offer a smaller footprint and require half the number of cabinets; a disk/tape storage system for faster reloading time; a system call processing increase of 20 percent; and user-friendly administration and management through PC or S/38 processorbased terminals.

The PBX market's Big Three—AT&T, Rolm, and Northern Telecom—have been jockeying for first place in the highly competitive PBX market for years. Lest we forget who was the original matriarch of telecommunications, AT&T poignantly jogged our memories of its technological innovation and commitment to protection of investment with the DE-FINITY 75/85's introduction, and its timing couldn't have been better.

In the wake of confusion over the IBM/Rolm/Siemens deal, previous customers who ventured to the Rolm side of the fence may now return to the fold. While Northern Telecom retains a solid foothold in the market and even somewhat parallels AT&T's migration strategy with its SL-1 product line, the SL-100 models still require complete cabinet replacement for system upgrade and offer no migration from the SL-1 to the SL-100. Northern is expected to announce a new PBX migration strategy sometime this year, tightening its position as a market front-runner. Nevertheless, in light of DEFINITY's migration ease, ISDN offerings, and cost-effective upgradability, AT&T's competitors will have a tough run for their money.

6/89

5

Technology Year

Voice Messaging Systems—A Market Update

6/89 6

Designed to increase communications efficiency and improve business performance, voice messaging systems are having a dramatic impact on the business world. The modern voice messaging system operates with most major PBX, hybrid, or key telephone systems. These systems, which send, receive, and redirect voice mail through office telephone systems and computers, vastly improve office efficiency and increase productivity. This is especially true when equipped with an automated attendant feature that offers the additional benefit of primary answering.

As a result of Judge Greene lifting the Modified Final Judgement restrictions on voice mail and electronic mail services from the nation's seven Regional Bell Holding Companies (RBHCs) and their subsidiaries, the 1988 voice messaging systems market experienced some exciting new changes. This decision opened the door to numerous revenue-producing possibilities for the BOCs, as well as the leading voice mail manufacturers.

These recent trends are quite different from earlier market forecasts. After a rather shaky start, annual revenue sales of voice messaging systems amounted to \$75 million in 1983. By 1984,

sales volumes had doubled, and in 1985, numerous Centrex users began adding voice messaging features to their systems, bringing the total sales that year to \$130 million. Other key developments in 1985 included the introduction of customized applications, such as audiotext, and the increasing acceptance of voice messaging technology by smaller companies. Another enhancement was in networking, which provides large system users with the ability to send batch messages during off-peak hours, and sophisticated integration methods. 1989 sales have already reached the \$200 million mark, with industry forecasts projecting annual sales revenue at between \$1 and \$1.5 billion by 1990.

Voice Messaging Systems Development

Both IBM and AT&T began developing voice messaging products in the mid-1970s. In 1980, IBM introduced its Audio Distribution System (ADS), based on a Series/1 minicomputer. AT&T intended to implement its Voice Storage System (VSS) as a centraloffice-based service; however, federal courts prohibited AT&T from selling VSS service, classifying it as an "enhanced" product outlawed by Computer Inquiry II.

In late 1980, a Texas start-up company, ECS Inc., produced the Voice Message Exchange (VMX), a large-capacity system providing up to 64 ports and costing \$500,000. Soon afterward, several companies (BBL Industries, Commterm, and Voicetek) introduced voice store-and-forward systems for the telephone-answeringservice bureaus and radio-paging markets. These companies have since upgraded their products to handle the more sophisticated voice messaging functions needed for general business use.

In January 1988, Octel Communications Corporation filed a registration statement with the Securities and Exchange Commission for the public offering of 2.1 million shares of common stock at between \$6 and \$7 per share. Within a few months, Octel's stock jumped from \$7 per share to \$12. In February 1988, voice messagingX Incorporated and Opcom announced a merger which placed the newly organized company in direct competition with IBM/Rolm for the largest share of the voice messaging systems market. Opcom was a privately held company prior to its merger with voice messagingX. Formed in 1982, Opcom manufactured the Direct Access Link (D.I.A.L.) call

processing system which is based on a new form of voice messaging and PBX integration technology using Adaptive Integration. It is now part of the VMX product line.

IBM/Rolm is the voice messaging system market leader with a 23 percent market share, followed by VMX, Inc. with 20 percent. Octel and Centigram each have 10 percent, while Wang Laboratories and dozens of smaller voice mail system manufacturers make up the rest of the market.

Benefits of Customer Premises Voice Mail Systems

One of the most significant developments in voice messaging technology is the ability to integrate voice messaging systems into a PBX or Centrex. When the systems are integrated, each voice messaging system is given an access number-the pilot number of a hunt or distribution group within the switch. When voice messaging subscribers want to access their mailboxes, they call this access number. Subscribers can also forward their phone calls to the access number when they want the PBX or Centrex to automatically direct incoming calls to their mailboxes.

Because voice messaging systems integrated into a PBX can usually accept information from the host regarding the nature of a call in progress (e.g., that the call is being forwarded from a particular extension or that it is an outside call from a DID line), the caller being forwarded into the voice messaging system does not have to redial the extension number of the called party; the voice messaging system connection is automatic. An additional integration benefit is the voice messaging system's ability to send messagewaiting commands to the PBX, which in turn signals the user that there is a message in his or her mailbox. The indicator can be a broken dial tone, a messagewaiting lamp on the user's phone, or a callback from the voice messaging system.

In Centrex applications, the user must subscribe to a message service feature. The telco assigns a multiline hunt group (MLHG) and a dedicated data link in the Centrex system. The user's responsibility is to determine the traffic load on an ongoing basis and to inform the telco of the required number of lines to be maintained in the MLHG. With the message service feature, the voice messaging system equipment is either located at the customer site or is available as a remote service offered by the telco or service bureau.

Remote access allows users into the system from outside the associated telephone system. This requires a special number dedicated exclusively to the voice messaging equipment. Some PBXs have a Direct Inward Service Access (DISA) feature that supports entry into the PBX for access to the system's features, which ties in nicely with a voice messaging system. If the PBX does not have this feature, an alternate method involves setting up a direct-in trunk line that bypasses the PBX operator and goes directly to the voice messaging system.

The system's voice traffic support capability depends on many factors, including the number of tie lines into the system from the PBX, the amount of disk storage, the length and number of messages per subscriber, the total number of system users, and the classes of service assigned to individual subscribers. Companies planning to purchase a system should conduct a detailed traffic analysis-initially to evaluate the communications requirements of various levels of employees and then periodically to detect changes in traffic patterns. This ensures an adequate service-level capacity.

Voice messaging system technology is available to a wider range of users than ever before. Small businesses subscribing to a voice messaging service realize the benefits, while larger organizations benefit from an integrated on-site system. For additional details on voice messaging system technology and major manufacturers, see Report TC10-002-101, "Voice Messaging Systems" in *Datapro Reports on Telecommunications*.

According to several Datapro user surveys and industry projections, voice messaging's future appears bright. If the BOCs continue making large, system purchases for service offerings, the industry will continue heating up, but a shakeout of small voice messaging system manufacturers could occur.

-Rose A. Valenta

Industry Trends

The BOCs and Voice Messaging— One Year Later

March 7, 1989, the one-year anniversary of Judge Harold Greene's decision allowing the Regional Holding Companies (RHCs) to provide voice messaging through the development of transmission and storage systems, passed quietly. In compliance with the Consent Decree, the RHCs can not generate or manipulate the information content. They can, however, provide the storage capability and the transmission media for voice messaging operation.

Initially, there were mixed reactions from industry members about the ruling. The strongest objections came from the Association of Telemessaging Services International (ATSI), whose members compete directly with voice mail. They argued that the Bell Operating Companies (BOCs) hadn't provided the necessary connections for enhanced services before the ruling, thereby limiting the industry's growth. Now that the BOCs are allowed to compete, industry members fear that they will continue to inhibit rather than stimulate competition. Others regard the BOCs' entry into the market as promising, because it will open new avenues for selling their services and equipment.

Reflecting on this decision offers an opportunity to compare anticipated results with actual results. The ruling projected that voice information services would become more affordable if the regional companies provide storage capability. This aspect should become more prevalent over time. Currently, the option allowing customers to buy only the amount of service needed, instead of purchasing the hardware to provide the service, provides cost benefits.

The gateway, to be fully useful, must communicate readily with all (computer) terminals, according to the ruling. All the BOCs are required to submit a Comparably Efficient Interconnection (CEI) plan with each enhanced service offering. A Computer III requirement, CEI permits outside vendors access to the basic network services supporting voice messaging on the same terms and prices as the BOC's affiliate. Waivers have been granted to Southwestern Bell, Ameritech, and Bell Atlantic to provide the CEI plan. This was done because of trials each region wanted to conduct. Presumably, CEI parameters will have to be in place before the services are offered on a commercial basis.

The revenue-sharing arrangements between the BOCs and Enhanced Service Providers (ESPs) will benefit everyone because administrative costs will be lower and billing will be uniform. The BOCs have the flexibility of setting up billing as they deem acceptable, providing it is not discriminatory in any way.

The verdict is still out on this aspect of the ruling. Not enough information is available to draw a clear conclusion for or against the assumption.

BOCs' Service Offerings

The BOCs are balancing their desire to offer more service options against the risks of opening up their networks to outside providers. NYNEX, for example, wants to encourage growth in the voice mail industry by using its network without getting involved in the billing or servicing of the operation.

Bell Atlantic offers a voice message storage service that allows ESPs to provide the content of the service while it provides the transmission. It also offers a voice messaging service to traditional phone subscribers and their cellular counterparts. Trials for voice messaging from public pay telephones also won FCC approval.

Pacific Telesis has filed its voice messaging services under its Pacific and Nevada Bell operating companies. The filing offers a broader range of service capabilities between end users and the enhanced service providers. Voice store-and-forward service permits users to access information stored on the PacTel system, as well as retrieve information from an enhanced service providers' database.

Southwestern Bell originally contemplated using a single-vendor approach for its voice messaging equipment purchases. It is now waiting until the results of its seven trials are in before considering the viability of using multiple vendors in the voice messaging service application.

Ameritech has conducted trials in Milwaukee as well as other areas to provide messaging services to small business and residential customers. Three service options are available, ranging from simple storing features for residential users to more advanced features for businesses. A CEI plan was not filed, since Ameritech is providing access only to the services, not storage capabilities.

BellSouth and U S WEST are running trials of a voice messaging service to determine its marketability.

Judge Greene's decision created an opportunity for the BOCs to explore the viability of competing in the voice messaging market. They spent the past year gearing up to address that market. The technology and the capability were already present, but without any hope of marketing it, the BOCs had no reason to pursue it. Now the question is how viable an investment will it turn out to be for the BOCs? —Becky Duncan

New Communications Service from Datapro Covers Network Management

Datapro always strives to supply your information needs. To do so, we continue to introduce new services that address computer and communications technologies as they evolve. In June, we are adding a unique new product: *Datapro Network Management*.

In *Datapro Network Management*, you'll find practical, results-oriented reports for managing communications networks. It explores the strategies of the leading network management vendors, shows you how to use your network as a strategic competitive weapon, and examines network security issues.

Datapro Network Management comes in a single, loose-leaf volume. Subscribers get bimonthly updates and a monthly, fact-filled newsletter that covers the latest events affecting the communications industry.

To subscribe or for more information, please call Datapro, toll free, at (800) 328-2776.

6/89 9

Regulatory Issues

Rate Watch

6/89 10

This month's Rate Watch focuses on the interstate/ interLATA market. In the toll segment of the market, AT&T reduced its rates an average of 3 percent. MCI and US Sprint showed no changes for the quarter ending April 1.

In the WATS segment, AT&T reduced its rates an average of 9 percent. MCI and US Sprint showed no changes. AT&T rates increased an average 4.5 percent for analog private line service. MCI and US Sprint showed no changes.

In the DDS segment, AT&T and MCI reduced rates for 2400 bps service by 11 percent and 7 percent, respectively. For 4800 bps service, AT&T lowered its rates 4.1 percent and MCI increased its rates 7.1 percent. For 9600 bps service, AT&T and MCI increased their rates by 2.9 percent and 4.4 percent, respectively, and decreased rates for 56K bps service by 4 percent and 2.5 percent, respectively.

In the T1 segment, MCI reduced its rates an average of 26.6 percent. AT&T showed no changes.

Interstate Special Access

This month's Rate Watch reports on interstate special access in California, Georgia, Illinois, New York, and Texas. All increases/decreases shown are based on the five-state average.

Special access analog rates increased 0.9 percent this quarter due to a decrease of 3.5 percent in California, 1.8 percent in Georgia, and 0.6 percent in Illinois. New York and Texas showed increases of 3.8 percent and 1.2 percent, respectively.

DDS 2400 bps service rates increased 3.4 percent due to an increase of 17.8 percent in Georgia, 8.1 percent in New York, and 11.3 percent in Texas. California decreased its rates by 6.7 percent.

DDS 4800 bps service rates increased 2.0 percent due to an increase of 15.2 percent in Georgia and 1.2 percent in Texas. California and New York lowered their rates by 9.3 percent and 28.0 percent, respectively.

DDS 9600 bps service rates increased 0.1 percent due to an increase of 6.2 percent in Georgia and 1.2 percent in Texas. California and New York lowered their rates by 11.4 percent and 35.2 percent, respectively.

DDS 56K bps service rates increased 2.0 percent. Georgia showed an increase of 9.6 percent; Texas, an increase of 1.2 percent; and California and New York, decreases of 0.9 percent and 9.6 percent, respectively.

T1 rates decreased 11 percent. California lowered its rates by 17.8 percent; Georgia, by 33.4 percent; and Illinois, by 5.3 percent. New York and Texas showed increases of 0.3 percent and 1.2 percent, respectively.

-Colleen Spiegel

At the LATA Level

Ameritech

Indiana-Ameritech and Indiana Bell are going to great lengths to disassociate themselves from a private company that is soliciting advertising for plastic phone book covers. Apparently, there is some confusion as to whether the company is associated with the telco or Ameritech. "We want to caution our customers. Ameritech PagesPlus yellow pages advertisers, about this misrepresentation," Mike Earley, Ameritech Publishing's general manager, said. "In order to avoid confusion, and worse, fraud, we are stressing that the plastic covers are in no way affiliated with Ameritech Publishing or Indiana Bell."

Michigan—Callers in seven suburban Detroit communities can now receive new touch-tone and Custom Calling features within 15 minutes on a trial basis. Called "Instant Service," the automated system is reached via a special 800 number. Among the services available through Instant Service are Call Forwarding, Call Waiting, Speed Calling, and Three-Way Calling. The trial is scheduled to last until the end of the year.

Pacific Telesis

California—Pacific Bell will debut a new type of telephone service that it claims will turn a touch-type telephone into a fullfledged answering service, without additional equipment. Available initially to customers in the California communities of Milpitas and San Pedro, Pacific Bell's Message Center will be at the disposal of subscribing customers who wish to send, receive, save, and forward telephone messages. In recognition of its customer base, the service is bilingual—Hispanic customers, for example, may use either English or Spanish.

Two applications, available separately, are featured through the Message Center: Call Answering and Local Messaging. Via Call Answering, the Message Center answers customers' phones when they are away from the phone or even when they are using it, a capability that separates the service from an answering machine. Callers hear a brief greeting in the subscriber's own voice and can leave a message of up to three minutes.

The Local Messaging feature lets subscribers send and leave messages for other subscribers, leaving them in message boxes for pickup when it's convenient.

In other news from PacBell, the California Public Utilities Commission recently gave the telco permission to offer a new information service providing a wealth of consumer information. The new service provides businesses with various entertainment and information offerings via a 10digit telephone number starting with 900. Among the information offerings envisioned are financial, medical, investment, and legal information and consumer buying tips.

Also, a California cable industry spokesperson charged that the telco's plan to modify state regulation of the telephone industry was dangerous and would usher in a new era of anticompetitive practices. PacBell's proposal includes replacing its copper telephone network with fiber optic cable. The cable industry is concerned that the fiber optic network would enable PacBell to breeze into competitive markets such as cable television. In addition, the industry charged that the cost of the fiber optic network would be borne by the telco's customers instead of its shareholders.

Southwestern Bell

Missouri—Southwestern Bell Telephone (SWBT) will provide billing and collection for MCI's residential and selected business customers in SWBT's five-state area as a result of a new agreement it reached with MCI. Customers in Arkansas, Kansas, Missouri, Oklahoma, and Texas 6/89 11 will now receive one monthly bill for local and long-distance services.

Texas—Houston residents can now let their fingers do the shopping at an "electronic shopping mall" thanks to Southwestern Bell's recently introduced gateway service. The service's voice segment, dubbed QuickSource, describes the available services; the customer selects one by pushing the appropriate keys on the keypad. The video segment, called SourceLine, is accessible via personal computer or Videotel terminal and delivers the videotex portion. Together they offer more than 100 information services including news, sports, weather, shopping, entertainment, travel data, and communications. Available on a 12-month trial basis, the voice segment is aimed at 900,000 residential customers with touchtone phones; the video portion is targeted to the 60,000 customers with either PCs and modems or Videotel terminals.

USWEST

Washington-Pacific Northwest Bell's request to disclose nonpublished information to information providers was rejected by the Washington Utilities and Transportation Commission (WUTC). The telco had requested permission to provide this information to the information providers, as a last resort, when all other attempts to secure money due them had failed. The information providers typically offer services via 976 numbers. The Commission did rule, however, that nonpublished information can be released to law enforcement personnel with court orders or search warrants, and to public safety agencies who receive emergency calls. The Commission also ruled that following disclosure of unpublished information, the telco must change the subscriber's number and refund all charges for the period the nonpublished information was disclosed.

-Brad Schepp

Novell and Excelan Merger

(Continued from Page 2)

All that remains for the merger to take place is approval from Excelan's stockholders. The suspense, though hardly Hitchcockian, will be over by the end of this month. Since unanimity about the positive effects of the merger exists throughout the industry, and since some Excelan stockholders, including each of its directors, have signed agreements to vote their shares in favor of the merger, the outcome seems certain.

—Barbara Callahan