Attachment 2

SBC Ameritech

Accessible

Date: **April 19, 2002**

Number: **CLECAM02-149**

Effective Date: **TBD**

Category: **DSL**

Subject: **(BUSINESS PROCESSES) Notification Of Limited Deployment of Broadband Offerin - IL**

Related Letters: **CLECIL01-003**

Attachment **NA**

States Impacted: **Illinois**

Response Deadline: **NA**

Contact: **Account Manager**

Conference Call/Meeting: **NA**

This Accessible letter is to announce SBC Ameritech Illinois' ("SBC") plans to commence deployment of its Project Pronto network architecture on a limited and measured basis in the state of Illinois. This letter serves as a follow-up to Accessible Letter **CLECIL01-003** in which SBC had advised it would not be deploying Project Pronto in Illinois at that time.

On March 28, 2002, the Illinois Commerce Commission ("ICC") issued its Order on Second Rehearing in its investigation concerning SBC's Line Sharing product offering ("Order"). The ICC's decisions on key points represent progress toward encouraging the deployment of broadband technologies in the State. However, some aspects of the Order continue to create uncertainty that likely will affect the speed and scope of SBC's broadband deployment, including pricing of the Broadband Offering and the manner, scope and timing of cost recovery for new features and functions. Additional uncertainty remains concerning the broader regulatory issues associated with the deployment of advanced services currently being addressed at both the state and federal levels. Therefore, in recognition of both the progress of the ICC and the remaining risks and uncertainties associated with the deployment of broadband technologies, SBC intends to initiate a measured and limited deployment of Project Pronto in Illinois, subject to the reservations below.

Information regarding SBC's Project Pronto deployment plan can be located on the DSL Network Information Page, located on CLEC Online. In connection with SBC's planned Project Pronto deployment in Illinois and, pursuant to the ICC's Order, SBC Ameritech Illinois will make available to CLECs access to its Broadband Offering (including its Broadband Service Agreement addressed below) in those areas where Project Pronto is ultimately deployed, subject to any rehearing, review, appeals or stay of such Order as further specified below. SBC's Broadband Offering, as ordered by the ICC, will be made available via a Broadband Tariff that will be filed by SBC on or around May 10, 2002. In addition, SBC will expand its current 12-state standalone Broadband Service Agreement ("BBS") to a 13-state offering to encompass Illinois for any interested CLECs. SBC's Broadband Offering and BBS will be available to CLECs in Illinois on or around May 21, 2002 where the Project Pronto network architecture is deployed, if no rehearings are granted by the ICC in Docket No. 00-0393 or in any other cause addressing related issues.

In the event that the ICC grants any Petition(s) for Rehearing in ICC Docket No. 00-0393 or any other cause addressing related issues before May 21, 2002, SBC reserves its right not to complete its deployment of its Project Pronto network architecture in Illinois until after any rehearing and a final, appealable order has been issued by the ICC.

In announcing the limited deployment of Project Pronto in Illinois and the availability of the Broadband Offering and BBS in those areas where Project Pronto facilities exist, SBC does not

waive any of its rights relative to its deployment of Project Pronto, its Broadband Offering or BBS, but instead fully reserves all of its rights, including but not limited to its right to modify its plans to deploy the Project Pronto network architecture on a limited basis in Illinois and/or to discontinue its deployment of Project Pronto in the state of Illinois for any reason, including any rehearing, reconsideration, order, appeal, court order or opinion, stay, injunction or other action by any state or federal regulatory body or court of competent jurisdiction that stays, modifies, or otherwise affects the deployment of Project Pronto, the Broadband Offering or the BBS in Illinois.

Broadband Service Stand-Alone ...

Broadband Service Stand-Alone ...

Attachment 3

Investor Briefing

October 18, 1999 *No. 211*

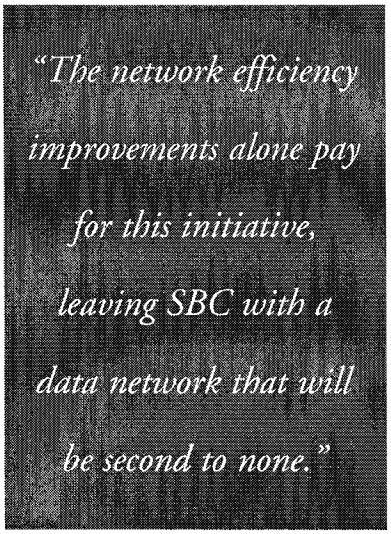
SBC Announces Sweeping Broadband Initiative

First major post-merger initiative involves planned $6 billion investment over three years

On October 18, 1999, SBC announced its first major initiative from the merger with Ameritech. The initiative, called Project Pronto, involves the company's entire 13 state in-region territory, and is designed to transform SBC into a broadband service provider capable of meeting all customers' needs for data, voice and video products. SBC plans to invest more than $6 billion over the next three years in fiber, electronics and ATM technology in order to create a robust, comprehensive, data-centric broadband network architecture. This initiative will dramatically improve SBC's cost structure, while greatly expanding the company's ability to deliver broadband services to all its customers.

SBC's broadband initiative is much more than a local loop or DSL strategy. These investments will make broadband the standard for SBC's network, fundamentally changing the way the company operates. In addition, the investments will position SBC to effectively and efficiently capitalize on changes in technology, as well as changes in customer demand.

The time is right to make these significant investments. The performance of broadband technologies has improved dramatically while the associated costs have declined. Customer demand for broadband services is real and growing rapidly. Cumulatively, these factors present SBC with a compelling business opportunity. The network efficiency improvements alone will pay for this initiative, leaving SBC with a data network that will be second to none in its ability to satisfy the exploding demand for broadband services. This new network structure, combined with SBC's partnership with Williams Communications — which is the nation's newest, most advanced long-distance network — enables the company to deliver end-to-end broadband services locally, throughout its markets and to the 30 out-region markets SBC plans to enter.



$6 Billion Network Investment

Of the $6 billion that SBC plans to invest over the next three years, 75 percent will be directed toward improvements to the basic local loop infrastructure (i.e., fiber feeder and next-generation remote terminals). The remaining 25 percent will fund other infrastructure improvements, especially in the tandem and interoffice network. Upon completion, SBC's next-generation network will be capable of meeting customers' voice, data and video needs with the right technology, at the right speeds and with the right reliability.

SBC's new network architecture is designed to be optimum from both a voice and data perspective. It will be scalable, with the capability to manage the ongoing shift in voice and data traffic volumes. Voice traffic today is predominantly circuit switched, but this network deployment will give SBC the flexibility to readily move to other voice protocols, including voice over ATM, voice over ADSL and, ultimately, voice over IP. Data traffic will be diverted from the circuit-switched network, packetized and adapted to Internet Protocol. This approach to voice and data traffic will allow SBC to fully utilize the capacity of the existing circuit-switched network, while focusing ongoing capital expenditures on data capabilities.

Project Pronto Highlights

- $6 billion capital investment
- Annual savings of $1.5 billion by 2004
- Capital and expense savings pay for initiative on NPV basis
- $3.5 billion in new revenue by 2004
- 100 basis-point improvement in annual revenue growth
- Significant value creation, well in excess of $10 billion NPV

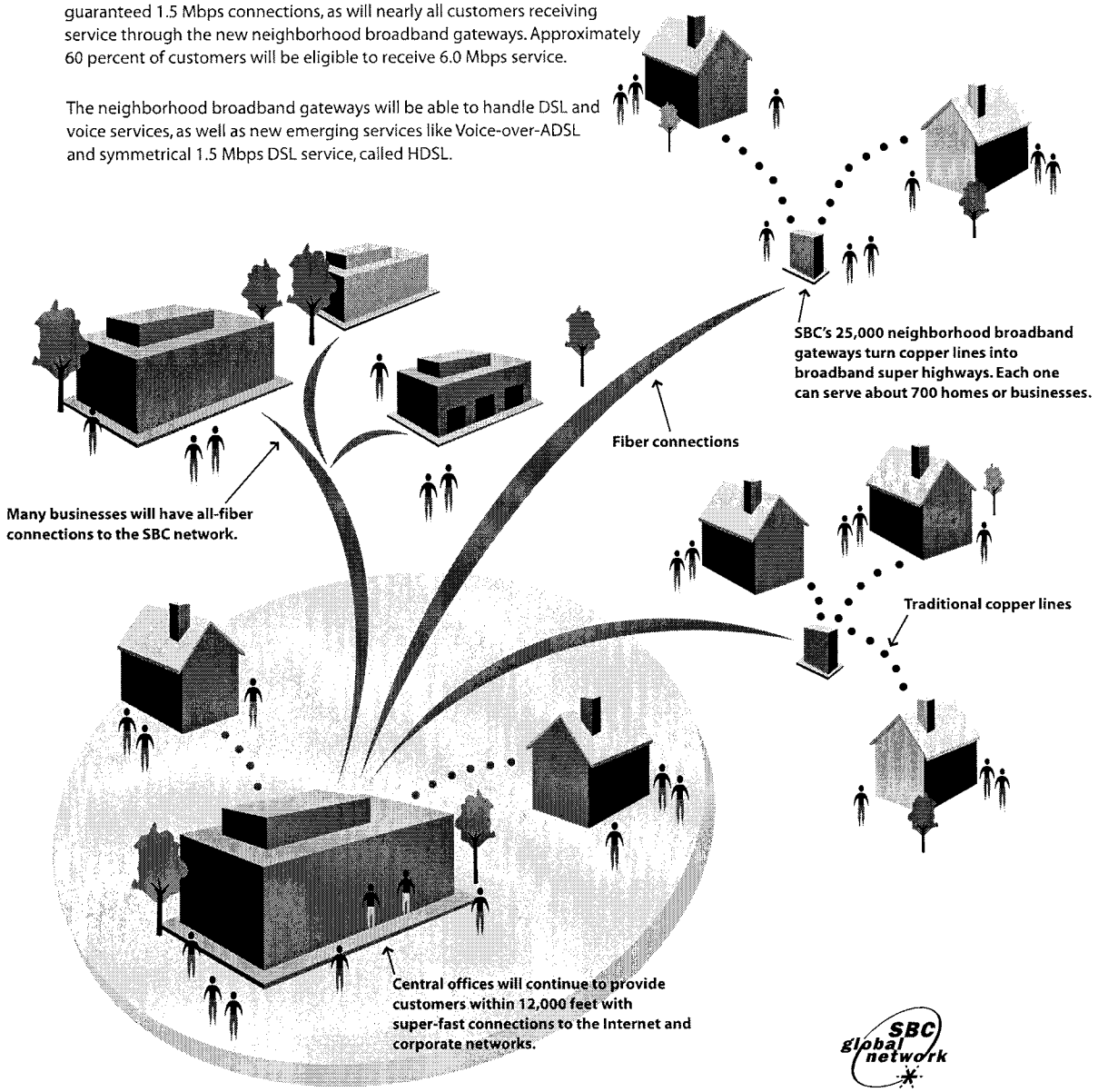
The higher speeds afforded by these network improvements will enable SBC to offer a myriad of Internet-based video products — including video streaming and video conferencing — on its landline networks. These network improvements also will allow SBC

SBC's New Broadband Neighborhood Network

SBC will deploy fiber deeper into neighborhoods and equip them with neighborhood broadband gateways, putting network capabilities closer to customers and making super-fast Internet access widely available.

Customers within 12,000 feet of a central office facility will receive guaranteed 1.5 Mbps connections, as will nearly all customers receiving service through the new neighborhood broadband gateways. Approximately 60 percent of customers will be eligible to receive 6.0 Mbps service.

The neighborhood broadband gateways will be able to handle DSL and voice services, as well as new emerging services like Voice-over-ADSL and symmetrical 1.5 Mbps DSL service, called HDSL.



to provide television entertainment as the technology evolves and becomes financially feasible to implement. SBC will also have the flexibility to continue to offer video and Internet services using satellite transmission through its strategic marketing and distribution agreement with DIRECTV™.

Loop Infrastructure

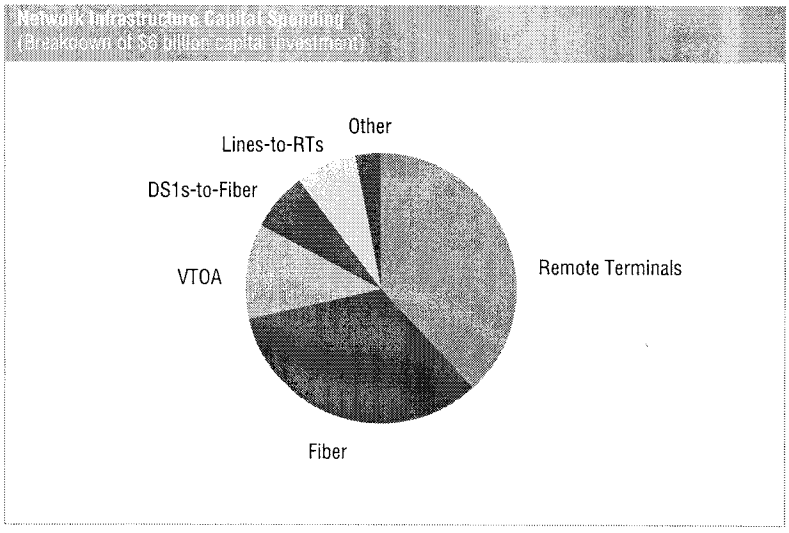
SBC plans to invest approximately $4.5 billion to initially extend the reach of broadband capability to more than 80 percent of its customer base. SBC estimates that this deployment will immediately enable at least 60 percent of its broadband customer base to have guaranteed download speeds of six megabits per second (Mbps), with the remainder having guaranteed speeds of 1.5 Mbps or more. Further improvements in these speeds are expected as technology advances.

To achieve this kind of broadband penetration, SBC will place or upgrade approximately 25,000 remote terminals at an average cost of approximately $86,000 each. These next-generation remote terminals are also referred to as "neighborhood broadband gateways." Fiber backbones will be deployed to connect these neighborhood broadband gateways to about 1,400 central offices throughout SBC's 13-state territory. Fiber, as well as costs for systems and other requirements, is estimated to average about $1.7 million per central office.

The deployment of fiber and next-generation remote terminals will enable SBC to overcome loop-length and line condition limitations in its network. While one immediate advantage of this deployment is the broader availability of ADSL, it also gives SBC the flexibility to react efficiently and effectively to continuing technological improvements and market developments. Planning includes deployment scenarios for VDSL or APON (ATM Passive Optical Network) technology to address customers' television entertainment needs, as these platforms become technically and financially feasible.

Other Network Infrastructure

SBC intends to spend an additional $1.8 billion to upgrade other portions of its network in order to improve efficiency. Forty percent of this investment is targeted for a technology that SBC is pioneering called Voice Trunking over ATM, or VTOA.



New Broadband Products

HDSL: A symmetrical 1.5 Mbps DSL service that is ideally suited for video conferencing or collaborative computing.

Access Advantage Plus: Provides a customer with DS1 or DS3 channelized service allowing the integration of voice and data on one single facility. The DS1 service provides up to 24 DS0 channels to which a menu of products can be connected. The DS3 service provides up to 28 DS1 channels to which a menu of products can also be connected.

Switched Virtual Circuit (SVC): A capability for ADSL subscribers that enables the user to accommodate multiple connections on the personal computer. Users can establish a connection to an Internet Service Provider as well as a connection to a corporate LAN without having to change the PC software configuration and reboot the PC.

Voice Over ADSL (VoDSL): Expands on existing DSL service capabilities by providing up to 4 derived voice channels over the ADSL line and primary POTS line. VoDSL will provide a solution for our customers' current and future integrated voice and data needs. VoDSL will offer simplicity, flexibility, convenience and cost savings. In addition to these customer realized service benefits, VoDSL will provide potential infrastructure benefits that should enable SBC to reduce operations costs and improve its ability to scale and manage network services.

Splitterless DSL: Provides a full rate DSL service where the customer would receive a drop shipment and self-install the equipment. The equipment would consist of a modem, NIC card and filters. The filters would be customer installed in-line, low-pass microfilters for each analog device. The purpose is to filter out high-frequency signals so that both the voice and data can share common inside wiring. Splitterless DSL would eliminate the need for a technician to install a splitter and the inside wire. It also eliminates the need for the customer to have the CPE installed by a technician.

G.Lite: A technology that utilizes a new international standard for use with DSL services. The use of G.Lite technology as part of SBC's ADSL offering may reduce the complexity of an on-site installation by eliminating the need for new wiring and a special signal "splitter" that separates voice and data at the user's home. G.Lite technology does, however, require the use of customer installed filters at each telephone and analog device, such as answering and fax machines. This is referred to as "plug and play" consumer installation.

VPOP Dial Access Service (VPOP-DAS): A cost-effective solution to modem pooling. VPOP-DAS provides for the termination of calls and interconnection to the SWBT network of Data Service Providers (DSPs). SWBT owns, maintains and monitors the modems and associated equipment. Dial Access Service allows SBC's Data Service Provider customers to receive multiple calls from end-users with analog and ISDN lines, transport data traffic to single location via SBC Frame Relay service, and avoid deployment of DSP-owned modems and related equipment.

Traffic Aggregation Services (TAS): Provides a complete transport solution to ISPs or businesses that are interested in purchasing volume DSL and VPOP-DAS. This service provides the customer increased flexibility to delineate groups of customers while making it easier to manage hundreds/thousands of incoming DSL/VPOP-DAS connections. Service components of TAS are:

- Aggregate DSL subscribers and delivers them over ATM using L2TP tunneling or Virtual Circuits to identify specific subscribers.
- Aggregate subscriber traffic (DSL, VPOP-DAS and FR) from multiple LATAs so that an ISP or business customer needs only one connection to SBC's nationwide network. This will be handled via a complementary carrier of the customer's choice.
- Customized solutions to customers' unique needs including specialized tunneling arrangements and CPE installation/maintenance for telecommuting applications.

ATM Circuit Emulation Service (CES): An enhancement to SBC's Cell Relay networking family of products that allows customers with existing, or planned, Primary Rate ISDN (PRI) or SuperTrunk circuits to emulate and aggregate those circuits with their ATM traffic. As ATM is essentially a packet rather than a circuit-oriented transmission technology, it must emulate circuit characteristics in order to provide good support for Constant Bit Rate (CBR) circuit traffic. ATM CES provides customers with the capability of directly connecting standard Time Division Multiplexing (TDM) circuit traffic over the ATM network. Customers also have increased flexibility, efficiency and cost savings resulting from aggregating voice and data traffic with their ATM traffic. And, ATM CES allows customers to maintain their TDM investment while migrating their dedicated circuits with TDM traffic onto the ATM network. They can introduce ATM technology gradually without isolating or stranding sites with substantial TDM investment.

Virtual Point Of Presence (VPOP) CES Service: Allows Internet Service Providers (ISPs) to establish virtual POP locations in any region for LATA-wide transport of dial-up Internet traffic. Traffic from multiple areas can be aggregated onto single ATM connections. Even Frame Relay traffic can be converted to ATM using the FRATM-Service Interworking (FRATM-SI) Enhancement.

Enterprise VPN: Enables large and medium business customers to establish a Virtual Private Network (VPN) via the SBC Internet Protocol (IP) network. EVPN is differentiated from traditional Internet access by enhanced security and performance guarantees. Standard features include:

- Dedicated or Dial Access Customers have the option of accessing the service through a Frame Relay, ADSL, or private line connection (56Kbps — 622Mbps) or via dial access using an analog modem or an ISDN connection.
- EVPN Service Backbone provided on a shared wide-area IP routed network backbone with a core that is based on SONET and ATM.
- Performance Level Guarantees are higher than those in the public Internet.
- Enhanced Security accomplished with firewalls, tunneling and encryption, delivering better security than available via today's Internet.
- Options available include network hosted applications, LAN support, and Desktop communications and applications support.

Online Office: Targets medium and small businesses with packages of:

- EVPN — The EVPN service as described above for customers with multiple sites.
- Network Hosted Applications — A suite of network hosted applications. Initially, network hosted applications in the package will include web hosting and e-mail. Subsequent applications will include E-commerce, calendar and scheduling, salesforce automation and other business software (e.g., accounting, human resources).
- LAN Support — LAN installation, maintenance and repair in support of an end-to-end service.
- Desktop Support — Support for the communications aspects of the desktop computer and for the Online Office applications.
- Options Available — Desktop applications support.

VTOA involves the scheduled and sequenced replacement of standard circuit-switch tandems with packet-based ATM switches within the core of the network. It's one of the first technologies being planned for wide deployment in order to make convergent voice and data networks practical. SBC intends to begin field trials in 2000 in Houston and Los Angeles. Once the trials prove successful, the ensuing deployment would be one of the largest of its type. The convergence of voice and data backbones will significantly increase network efficiency and scalability by allowing SBC to transport voice traffic the same way as data — via packets — and with the same level of call quality and reliability that SBC provides today.

TRI, the company's research-and-development arm, has been testing VTOA exhaustively under real-life conditions. Their extensive analysis of SBC's Houston network, for example, revealed that the transition to VTOA should reduce the number of tandem switches required from four to one, resulting in a 74-percent reduction in trunk groups.

The company expects to convert 34 of 109 existing tandems to ATM-distributed tandems. Implementing VTOA also would enable SBC to avoid the forecasted deployment of 21 additional tandems in the next seven to 10 years.

Other infrastructure investments are planned to improve network efficiency. One-fourth of the $1.8 billion targeted for network efficiency initiatives will be dedicated to upgrading a significant number of locations currently served via copper-based DS1s to new, lower cost fiber facilities. Another 25 percent will be targeted for moving existing

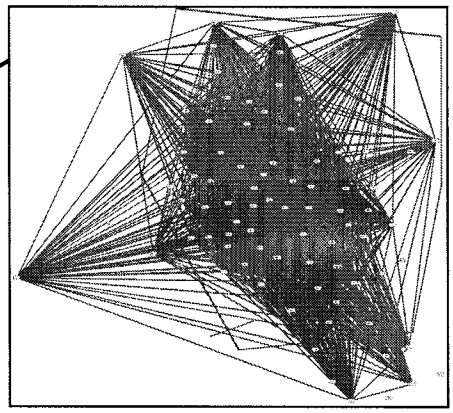
Houston Network
Present VTOA

4 tandems

Approximately 500K trunks

76 end offices

2,700 trunk groups



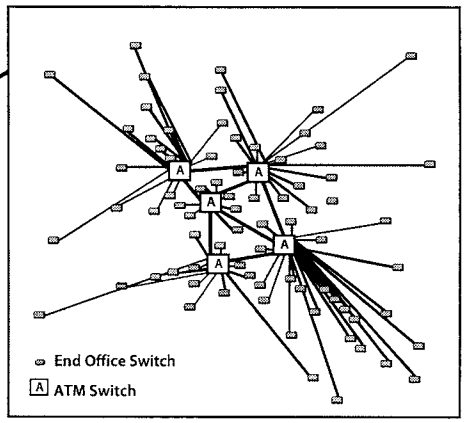
Houston Network
Future VTOA
2003

1 VTOA tandem

Approximately 464K trunks

76 end offices

700 trunk groups



voice lines to new fiber-fed remotes. The remaining 10 percent will be targeted for upgrading the overall condition of the network.

Cost Structure of Network

SBC's new network investments will have a profound impact on its cost structure; in fact, the efficiencies SBC expects to gain will pay for the cost of the deployment on an NPV basis. These efficiencies are conservatively targeted to yield annual savings of about $1.5 billion by 2004 ($850 million in cash operating expense and $600 million in capital expenditures).

Expense Savings

The new loop infrastructure, with the additional dedicated feeder capacity the fiber provides, will substantially reduce the need to rearrange outside plant facilities when installing new or additional services. By avoiding dispatches on many installations, SBC expects to realize efficiencies in its installation and maintenance operations. Other anticipated efficiencies will come from reduced activity required in the remaining copper plant because of improved reliability. A fiber-based distribution network is expected to be less vulnerable to weather conditions, thereby reducing trouble reports.

In some cases SBC is making investments in new technologies to dramatically reduce the cost of supporting future growth. A good example is the company's plan to move most of its copper-based DS1s to fiber at certain locations. With the fiber in place, the cost of providing additional bandwidth via electronics will be significantly less than adding more copper lines. Reducing the number of copper-based DS1s has the added benefit of eliminating a source of interference, which will make more the remaining copper-based facilities available for DSL service. In other cases, such as the plan to replace existing circuit-switched tandems with new fast packet technologies, costs associated with future growth as well as maintenance expenses will be reduced.

Capital Savings

Savings in capital expenditures for feeder, trunking and provisioning are targeted as a result of the network investments. Reduced spending on feeder facilities represents 70 percent of the targeted capital savings. The broad deployment of fiber and related electronics will substantially eliminate further deployment of copper facilities for feeder reinforcement. The balance of the capital savings comes from the reduced need for trunking capital, from lower provisioning costs for high-growth services, such as DS1s, and from other improvements in the distribution plant.

Revenue Opportunity

SBC expects its broadband initiative to dramatically improve its ability to deeply penetrate the growing market opportunity for broadband services, especially in the consumer and small and medium business markets. DSL services alone are targeted to add approximately $3 billion to annual revenue within the next five years,

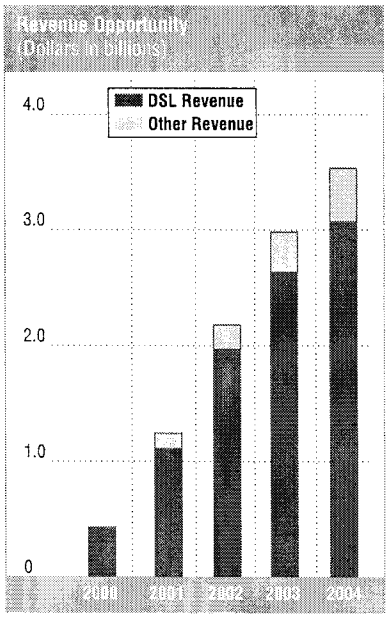
with another $500 million coming from other new or replacement products. This $3.5 billion revenue opportunity represents an additional 100 basis points in top-line growth by 2004.

The investments in fiber feeder and next-generation remote terminals are designed to eliminate loop length and network condition limitations, allowing SBC to meet the ultimate objective of bringing broadband capability to substantially all of its customers. In fact, SBC expects to reach more than 80 percent of its customer locations beginning in 2002. SBC expects to reach 35 million customer locations with broadband service in three years.

The ability to offer and promote broadband services to all customers has significant advantages. Network improvements will eliminate the need to "qualify" a customer for DSL services, making citywide promotions far more effective. Likewise, SBC expects that broadband services will be an integral part of its bundled telecom services. Marketing and promoting bundles that include broadband services will be far more successful in a network environment that is free of concerns regarding customer distance limitations or network disturbers.

SBC's goal is to achieve at least a 50-percent share of the total broadband market penetration. (The broadband market is defined as that portion of SBC customer locations that have the capability to receive landline-based broadband services from one or more providers.) By 2003, SBC expects market penetration to be approximately 30 percent; that is, slightly less that a third of the broadband capable customers will subscribe to some form of broadband access. SBC expects that the broadband market and market penetration will grow to at least half of the customer locations equipped with broadband capability within 10 years.

The size of the broadband market and SBC's objective to



achieve 50 percent of this market penetration implies a DSL subscriber base of more than 6 million by 2004, and more than 10 million before 2009.

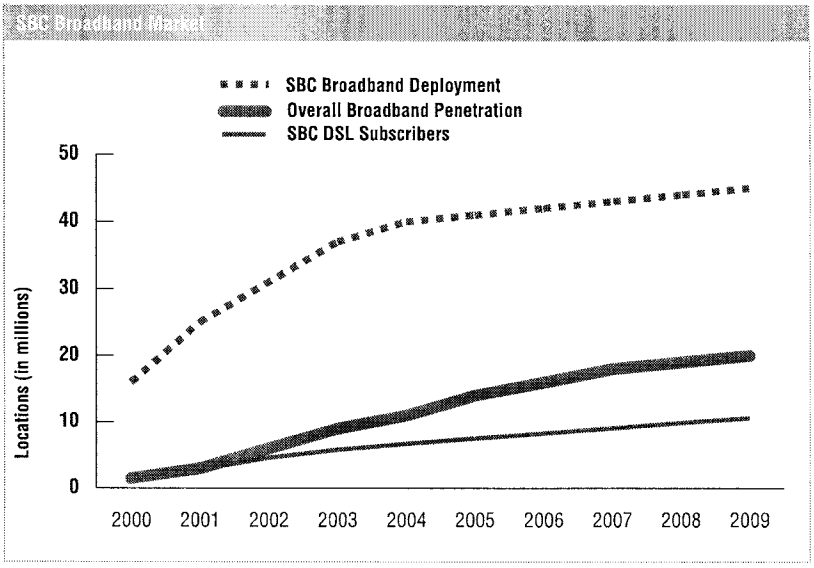
With this new architecture, asymmetrical 6 Mbps service will be initially available to 60 percent of the broadband market. And, HDSL (a 1.5 Mbps symmetrical product) will be available to all customers reached with this new architecture. These two new services are estimated to account for about 10 percent of the total projected DSL demand and 25 percent of the revenue opportunity. Other products such as distance learning, video confer-

encing, remote management, web hosting and server hosting represent additional revenue opportunity.

SBC is also targeting at least an additional $500 million net revenue opportunity by 2004 from other new or replacement products. These products include switched virtual circuit, voice over DSL, and VPOP-DAS (see page 5 for details on these and other products). SBC's new network architecture and its broadband capabilities also position the company to seize additional revenue from new Internet and data-related products that will continue to evolve over the coming months and years.

Several of the products enabled by network improvements may be substitutable for existing products, particularly in the business market. For example, voice over ADSL could reduce demand for business lines and 1.5 Mbps symmetrical service could be a substitute for T1s in certain instances.

Dynamic, data-oriented growth in the business market has fostered a migration toward higher bandwidth services — services that are often aggregated on bigger and bigger "pipes." In the second quarter of 1999, for example, VGEs grew 16.6 percent, driven by strong demand for DS1s and DS3s.



SBC's planning is based on the expectation that business VGEs will continue to grow strongly, fueled by the movement to higher, more efficient broadband capabilities and the integration of voice and data on a single facility. The broadband deployment initiatives will expand the availability of attractive, high-speed services to customers, and improve SBC's competitive position. By having the capability in its network to efficiently offer services such as symmetrical 1.5 Mbps DSL to a much broader market, SBC is positioned to grow business revenues with attractively priced, high bandwidth, competitive products. Additionally, cost structure improvements will give SBC the flexibility to economically respond to continued changes in the marketplace.

Financial Implications

As previously described, the fixed capital required to implement these initiatives is expected to be $6 billion. SBC plans to deploy

this capital during the next three years, with almost 75 percent targeted for spending in 2000 and 2001. With current operating cash flows in excess of $15 billion, the company has plenty of capacity to fund this investment within its existing capital structure. SBC is evaluating whether the network initiatives will result in a write-down to the carrying value of portions of its copper network, especially the local loop. This evaluation, including quantification of any write-down, will be completed in December 1999.

Given the nature of the network deployment, related cash operating expenses should be modest, and within the parameters for merger synergy investments projected at the time of the original Ameritech acquisition announcement. These expenses include developing or modifying operational support systems; staffing, equipping and training field forces for the project; and, rolling circuits from the old network to the new. They should be about 10 percent of the capital spent per year.

The annual cost structure improvements associated with the new network architecture are targeted to reach $1.5 billion by 2004 ($850 million in cash operating expense and $600 million in capital). With the network improvements paying for themselves on an NPV basis, SBC has an outstanding opportunity to create shareowner value through new revenue opportunities. SBC conservatively targets new annual revenue opportunities to exceed $3.5 billion by 2004, most of which relates to DSL service

Asynchronous Transfer Mode (ATM)

Asynchronous Transfer Mode (ATM) is a cell-relay service that provides high-speed information transfer capability and near-real-time multimedia communications among multiple locations. ATM service can be deployed both on a local level, as a private local area network (LAN), and over a wide area, as a backbone network or bridge connecting LANs to wide area networks (WANs). ATM access speeds range from 45 Mbps to 155 Mbps, with plans in the works for speeds up to 622 Mbps. ATM is suitable for many applications, including local transport, wide-area transport, voice, data, video, textual images, CAD/CAM, collaborative computing and distance learning.

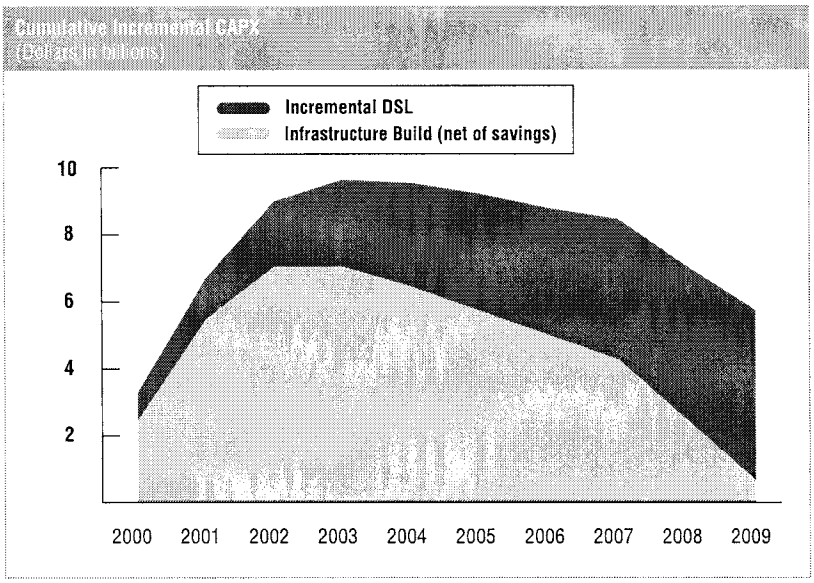
ATM provides users with both scalability and flexibility. It provides scalability by allowing for various rates of access speed, and by allocating bandwidth on an as-needed basis for "bursty" transmissions that require large amounts of bandwidth over short periods of time. ATM provides flexibility because it can support multiple services over a wide area, including frame relay. Considering these attributes, as well as its current availability, ATM is viewed as the logical "next step" as users migrate toward higher-capacity broadband transmission services.

The most significant benefit of ATM is its uniform handling of services, allowing one network to meet the needs of many broadband services. ATM accomplishes this because its cell-switching technology combines the best advantages of both circuit switching (for constant bit-rate services such as voice and image) and packet switching (for variable bit-rate services such as data and full-motion video) technologies. The result is the bandwidth guarantee of circuit switching combined with the high efficiency of packet switching.

offerings. Revenue growth is targeted to improve 100 basis points by 2004 as a result of the expanded broadband opportunity.

SBC's planning guidelines assume a two-year payback period per DSL customer by 2004. On a per-subscriber basis, DSL products are expected to require incremental capital — for the DSLAM and equipment at the customer premise — of just under $500. Customer acquisition costs are targeted at $350 per subscriber. Recurring EBITDA per month is targeted at $35. These per-subscriber metrics assume cost improvements over the next five years, as well as price reductions.

The overall earnings impact associated with DSL and other revenue opportunities from Project Pronto is about 6 to 8 cents dilution in 2000; less than half that amount in 2001; and net-income positive by 2002.



In summary, SBC's new broadband platform and greatly expanded broadband revenue potential give SBC the opportunity to create significant shareowner value — well in excess of $10 billion NPV. The underlying strategic and financial rationale for these initiatives is compelling. These initiatives provide SBC with superior positioning to address exploding customer demand for high bandwidth services from every perspective — time-to-market, products, capability, technology and cost structure.

Cautionary Language Concerning Forward-Looking Statements

Information set forth in this *Investor Briefing* contains financial and consumer demand estimates, technology assessments and other forward-looking statements that are subject to risks and uncertainties. A discussion of factors that may affect future results is contained in SBC's filings with the Securities and Exchange Commission. SBC disclaims any obligation to update or revise statements contained in this *Investor Briefing* based on new information or otherwise.

SBC InvestorBriefing

SBC Investor Briefing is published by the Investor Relations staff of SBC Communications Inc. Requests for further information may be directed to one of the Investor Relations managers by phone (210-351-3327) or fax (210-351-2071).

Written correspondence should be sent to:
Investor Relations
SBC Communications Inc.
175 East Houston, Room 8-A-60
San Antonio, Texas 78205

Internet address: http://www.sbc.com

Managing Director of Investor Relations
Sandy Wagner
Executive Director of Investor Relations
Gerry Chicoine
Investor Relations Staff
Melba Garcia
Blake Steward
Anne Wolfe

Attachment 4

The New World Access Network and the role of the New World Digital Loop Carrier™

ALCATEL USA WIRELINE ACCESS DIVISION

The advent of the Internet age finds carriers and service providers in a quandary. On one hand, carriers are endowed with high volumes of traffic that are generated in increasing measure by the on-line sensation of the Internet. On the other hand, they are burdened with finding financially feasible ways to accommodate the demand for innovative services with widening traffic loads at ever-quickening numbers and transmission rates. While significant core network transport upgrades have been accomplished recently, the last remaining challenge is the access network –or "the first mile" for subscribers accessing the New-World. This White Paper will address the access challenge and discuss how Alcatel is providing these migration strategies with its Litespan® multi-service access platform.

INTRODUCTION

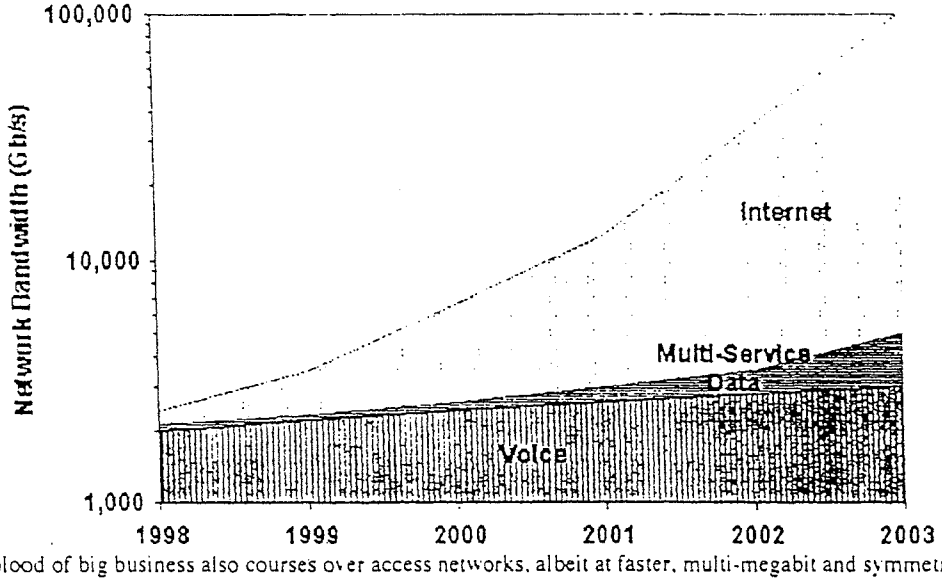
Narrowband voice still constitutes the majority of revenue and network traffic today, but the gap is closing and projections indicate that data traffic will soon surpass that of basic voice. The industry is embracing broadband access mainly because it gives carriers the breadth and speed to grow into the New World with new and creative services. The push toward broadband comes from virtually every market sector. Residential subscribers and the

ICC 00-0393
A08-000040

09-7

EXHIBIT
17

small office/home office sector clamor for high-speed access to the Web and remote LAN connectivity. This is a trend that boosts consumption of second lines and xDSL and is stressing the existing copper infrastructure. Optimized for Voice

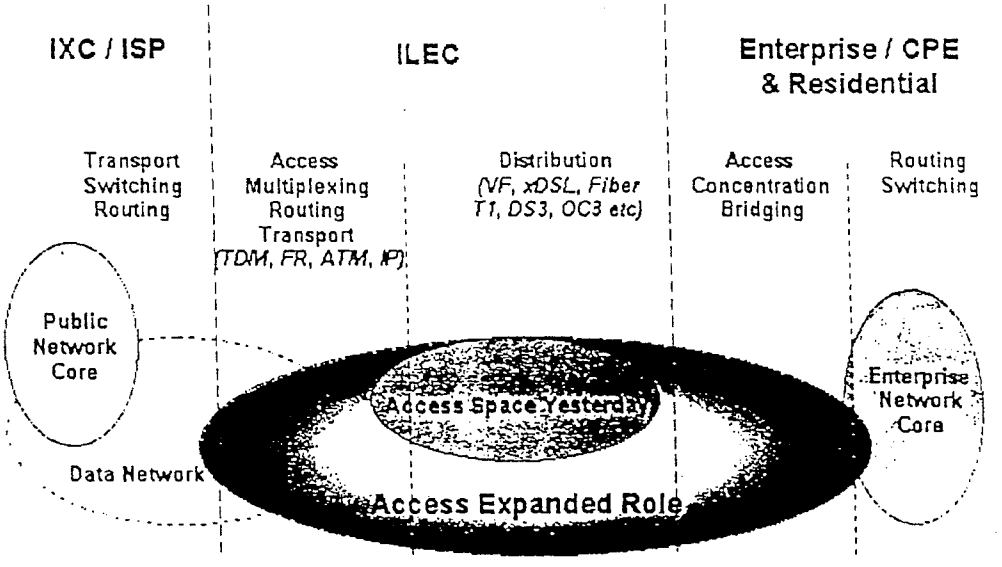


The lifeblood of big business also courses over access networks, albeit at faster, multi-megabit and symmetrical data rates. Residential users may not yet demand the bandwidth of corporations, but their fondness for the Internet puts a stranglehold on the public switched telephone network (PSTN), sending carriers and Internet service providers scrambling to establish more capacity. The incredible growth and mass acceptance of the Internet has created a momentum that now seems unstoppable. One of its by-products has been the unleashing of creativity in the application space that today is ahead of the physical infrastructure, thus further driving the need for bandwidth.

All these forces are converging simultaneously and are being irritated by the arrival of the new local service providers. End users who don't find the services, speed, and flexibility they yearn for with incumbent providers can now shop the local market for their carrier of choice. The traditional carrier who is aligned vertically is now faced with a number of stripped-down competitive operators who target niche services in a horizontal fashion —often with deep discounts for the end user. While the ILEC provides all services to all people, the CLEC has a targeted "fast to market" entry strategy based on a limited service set.

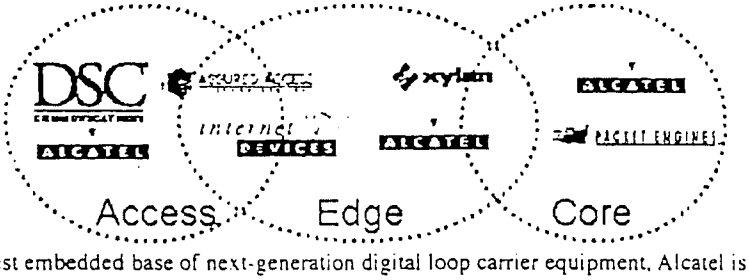
This new world of communications has redefined the role of the access network, necessitating a new way of thinking and a new breed of equipment to support the burgeoning bouquet of services —the range of which is only limited by the imagination of the service provider. The access network must have the depth and breadth to support

not only legacy services, which provide the fundamental annuity revenue stream, but also the enhanced service suite that will be the basis of future business and customer retention.



ALCATEL RESPONDS TO THE ACCESS CHALLENGE

With the merging of the former DSC Communications capabilities with those of Alcatel's and its recent acquisitions, the available product portfolio has now greatly expanded to cover services ranging from simple DS0-based narrowband circuits to switched ATM, IP, and optical speeds of up to 40 gigabits. The benefit of combining the powers from the individual elements and technologies under a single common umbrella results in an end-to-end solution with an overall value that is greater than the sum of the individual units.



With the world's largest embedded base of next-generation digital loop carrier equipment, Alcatel is positioned to help carriers easily and cost-effectively migrate to the New-World access network with Alcatel's New-World Digital Loop Carrier™. The NWDLC seamlessly builds on Alcatel's Litespan® Next-Generation Digital Loop Carrier

ICC 00-0393
A08-000042

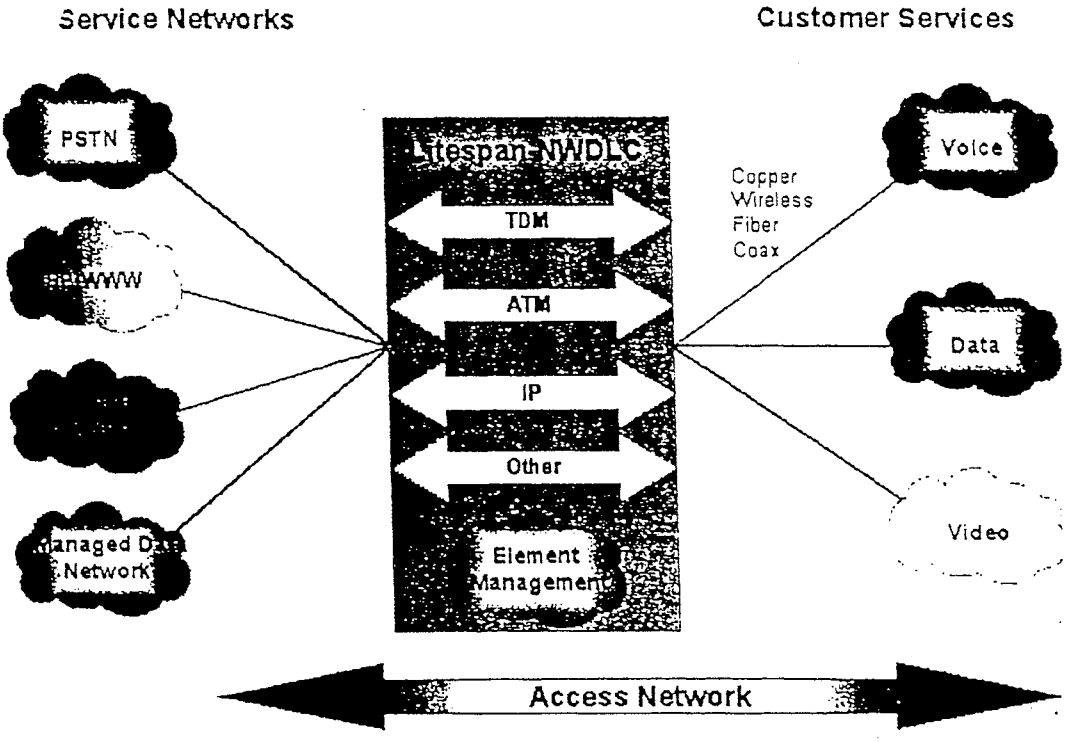
(NGDLC) to give carriers the gateway function to connect the lucrative PSTN to the new packet-based meshed network for future growth opportunities.

FOUR EASY PIECES

Alcatel has achieved a large embedded base with its Litespan® platform —with an access footprint for serving more than 20 million subscribers and growing. This embedded base serves as the foundation to add functional building blocks for the graceful migration to the New-World access network. Our joint success with customers in defining and creating the NGDLC market in the 90's, and the introduction of commercial ADSL offer. Litespan the unparalleled opportunity to continue to lead the industry in defining the access gateway to the New World. Alcatel's Litespan NGDLC easily migrates to a NWDLC with no stranded investment. Its versatility in simultaneously supporting TDM and packet-based service enables customers to deploy systems as required and corresponding variable bit rate services well into the new millennium.

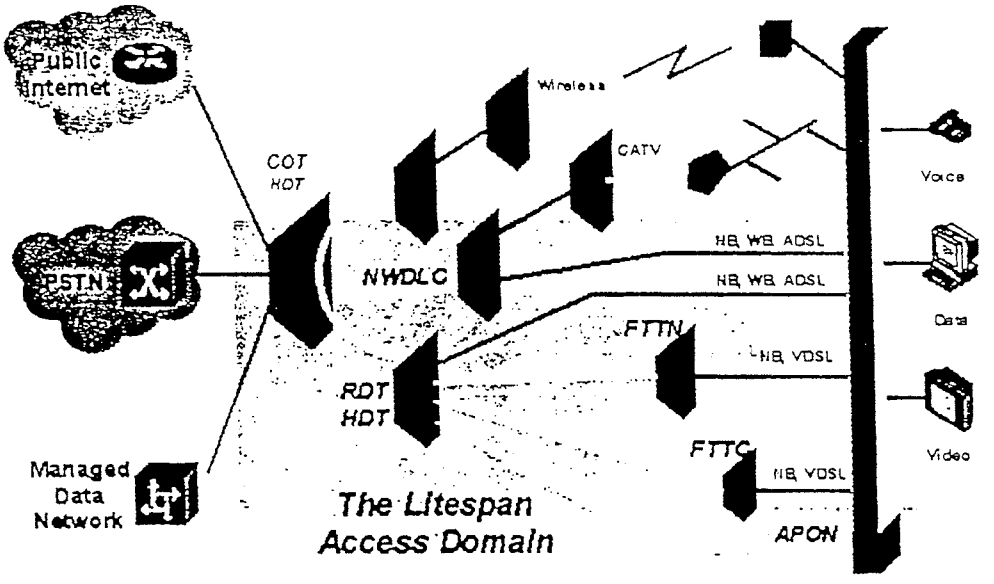
- Litespan has already added ATM and xDSL capabilities to the NGDLC. This was the first phase of the NWDLC development, and it initiated the larger product capability roadmap that will evolve into an extensive and powerful set of voice and data features.
- Following xDSL, Litespan will offer more than twice the capacity for voice and DSL in the same footprint with the high-capacity channel bank.
- Litespan will provide packetized multi-line derived voice services in addition to traditional narrowband voice and high-speed DSL services.
- The NWDLC will also offer access gateway functionality, with native IP interfaces to work seamlessly with packet services.

ICC 00-0393
A08-000043



Supporting the enhanced service capability that Litespan facilitates is a comprehensive suite of distribution topologies allowing the network operator to customize the loop plant to match service availability and demand with current and future economics. A Litespan node simultaneously provides access via basic home-run copper pairs, fiber-fed remote terminals (RDT), ONUs fed by point-to-point fiber (FTTN/FTTC), and now an ATM passive optical network (APON) for point-to-multipoint fiber-to-the-home/business. By enabling complete flexibility, the service definition across Litespan is independent of the distribution physical layer to the customer. With a "digital loop" now directly connected to the subscriber, almost any mix of services can be accommodated using packet-based technologies. This translates to a ubiquitous service offering to the end users no matter where they reside.

ICC 00-0393
A08-000044



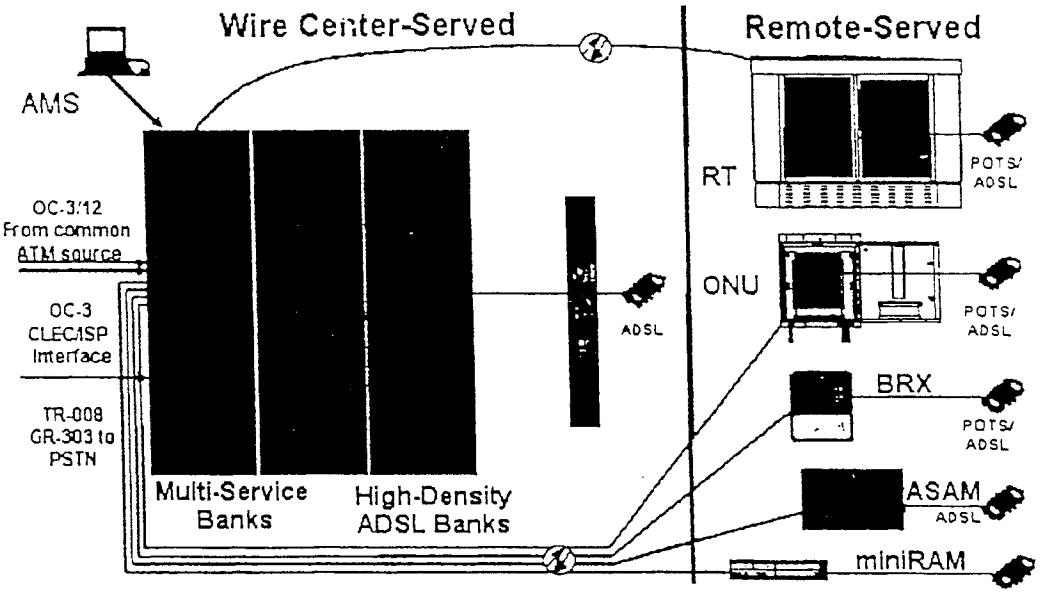
This vision of the New World is currently being realized with the initiation of our four simple Litespan migration steps:

STEP 1. INTEGRATION OF DSL INTO LITESPAN

Step one is complete with Litespan now providing integrated ATM and DSL from its channel banks. A key difference between Litespan and conventional DSLAMs is that in addition to traditional voice services provided as an NGDLC, Litespan also provides DSL services from both the central office and remote terminals. Litespan's DSL solution supports full-rate DMT RADSL, G.Lite, and integrated POTS/DSL capability for high-speed data applications through standard linecards. The ADSL technology chosen is the same as the successful Alcatel ASAM-1000 and is in full compliance with ANSI and ITU standards; this promotes the largest choice of compatible and interoperable CPE on the market today.

Because Litespan is a fiber-based access system, it is ideally suited for remote applications where the reach of a traditional DSLAM is not adequate for long loops or where small multi-service nodes are required. While the capacity of a DSLAM such as Alcatel's ASAM-1000 fits very well within the central office environment, the Litespan remote terminal with the inherent capability for multiple services from a single unit provides complementary functionality to an operator deploying xDSL across a wide and varied serving area. This mix of service platforms allows a LEC to offer ubiquitous service area wide.

ICC 00-0393
A08-000045

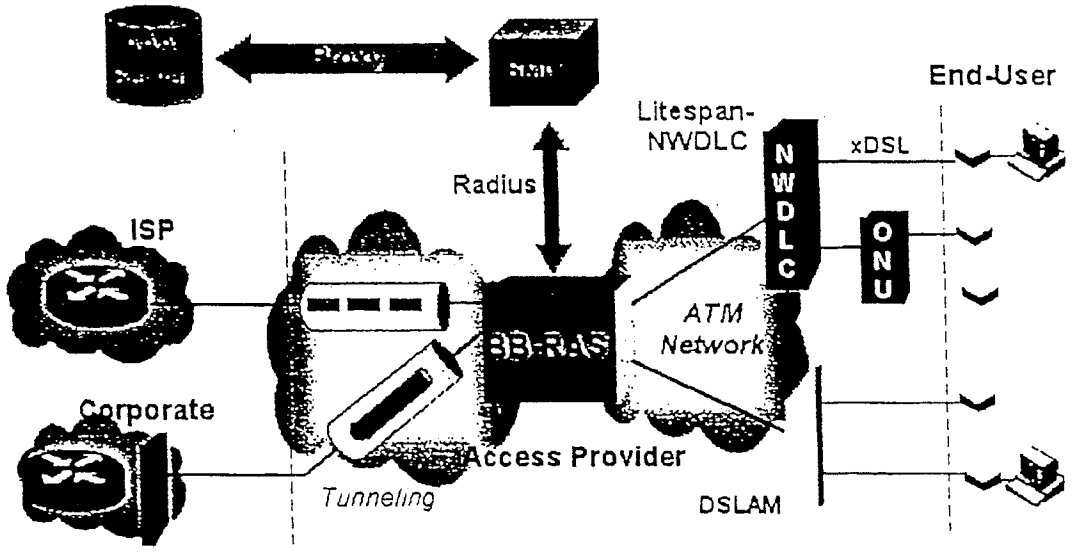


With the numerous xDSL service nodes (ASAM, Litespan, and others) potentially within an operator's domain, an elegant method of aggregation is required that funnels together the relatively lightly filled pipes from the individual nodes to a series of highly optimized links to regional service points. Introduced last year, Litespan-Broadband provides this function through the Broadband Fiber Bank (BFB). The BFB is an edge ATM switch that has up to 128 optical interface ports. Typically 4 to 6 of these will be assigned to the service side of the network with the remainder assigned as collection ports from xDSL nodes (DSLAMs etc). When both Litespan xDSL and ASAM are within a single area, the Litespan management system –AMS– can be employed for service and operations control of both platforms.

Mass-market DSL is the foundation for the all-digital network of tomorrow. By using packet technologies, the digital-loop allows an almost unlimited range of services with the limitation only being the imagination of the provider. Today, Litespan is the most flexible and feature rich engine in a single platform for voice and dada. With mass-market DSL now available, value added services such as virtual lines or voice over DSL can be offered in addition to basic high-speed Internet access, VPN, streaming audio and video, interactive broadband, e-commerce and yet to be defined applications.

A key element of the service creation and management plane is the Broadband Remote Access Server (BB-RAS). The BB-RAS resides in the access network and interfaces with DSLAM's, Litespan-NWDLC, and other access equipment where its function is to operate as a service portal between the service provider and customer. The BB-

RAS (supplied by Assured Access Technologies, an Alcatel Company) in conjunction with Litespan-NWDLC facilitates access to multiple ISPs, service providers including remote LAN for SOHO via the high-speed DSL link.

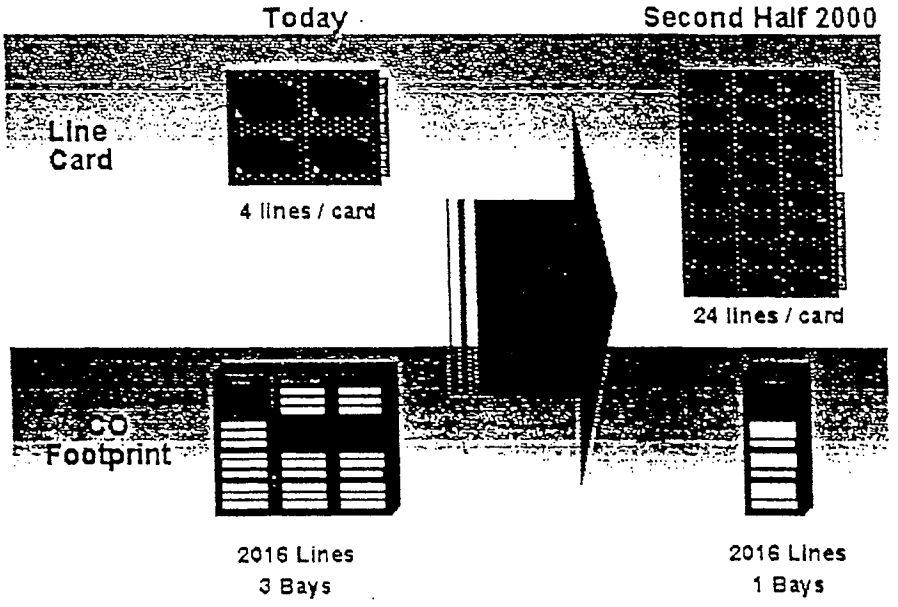


STEP 2. HIGHER CAPACITY FOR VOICE AND DSL

Alcatel will be releasing a high-capacity channel bank shelf as part of the standard Litespan platform. It will enable customers of Litespan to deploy more than twice the voice circuits and DSL lines in the current Litespan footprint. This also will continue Litespan's product leadership as the industry's highest density multi-service NGDLC and DSL access platform. These additions to the Litespan product family will cost-effectively address the growing demand for DSL and voice services as well as the issues of scarce central office and remote cabinet space. Therefore, the new higher density capability of Litespan translates directly to an overall lower cost of ownership with

- Less CO space,
- Smaller RT cabinets,
- Greater service mix,
- Lower power consumption,
- And lower overall operations cost.

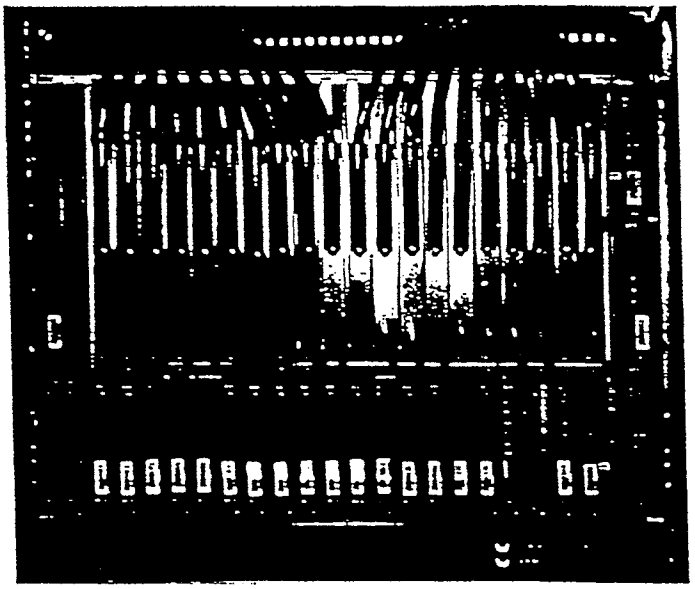
ICC 00-0393
A08-000047



At the CO and RT, the high-capacity channel bank more than doubles the density of basic POTS with 20 linecard slots of 24 POTS terminations and 16 additional slots for xDSL and specials. The channel bank capacity grows from 224 lines to 544 and permits a full GR-303 concentrated switch interface group to be hosted in a single 7' bay of equipment. With the high-density linecards also comes the introduction of an innovative power management system to insure that Litespan fully complies with the stringent NEBS requirements. For very large systems, the Litespan can support up to 9 collocated channel banks for a total narrowband system capacity of 4,896 POTS lines with four GR-303 switch interface groups.

The Starspan-BRX ONU will have increased capacity and flexibility with the introduction of an 8-line POTS card. This will provide additional capacity at the curbside for up to 64 lines and also allow a greater mix of linecards for added service flexibility when capacity is not an issue.

ICC 00-0393
A08-000048

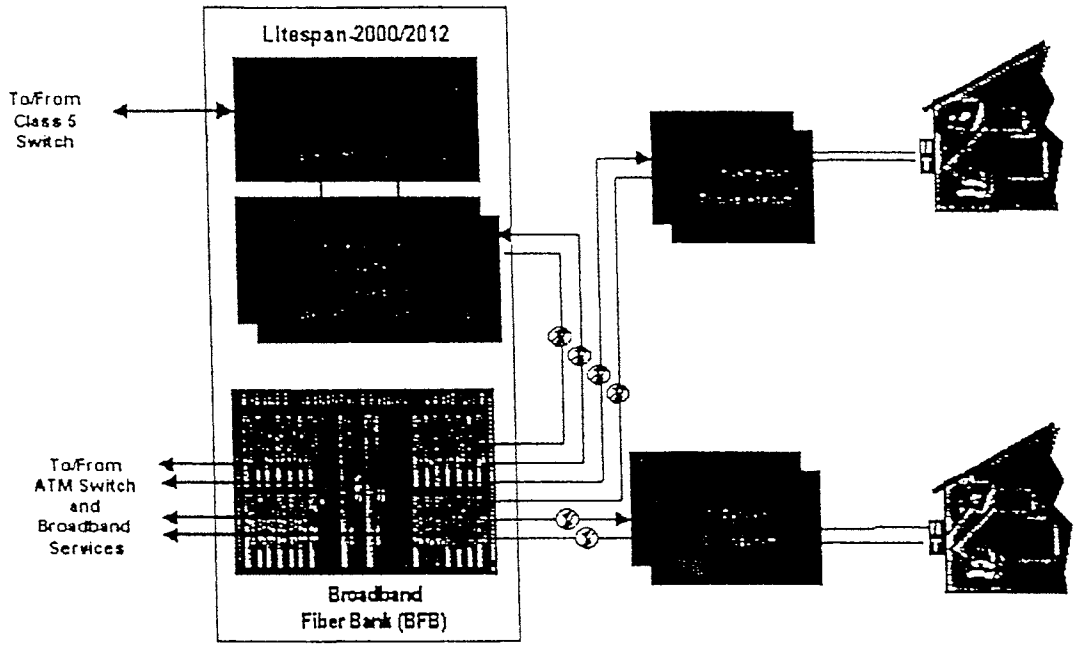


STEP 3. DERIVED VOICE OVER DSL

Derived voice lines provisioned over DSL and hosted by Litespan-NWDLC is a very cost-effective method of providing multiple lines to small businesses and for SOHO applications. This could well be the service that fits the niche of the 112 million small businesses that now demand multiple lines but cannot justify T-1 type service for their voice needs. In residential markets, voice over DSL maintains lifeline basic service while offering high-speed data access and derived second, third, and Nth voice lines —all over a single copper pair. This is a powerful feature for the local operator who is facing the dilemma of either adding more copper to the access network or upgrading with fiber to a distribution node. Even for new builds, the operator has to lay only the minimum number of copper drops knowing that future services will be supported through packets on the "digital loop."

Alcatel will integrate the voice over DSL functionality into the Litespan access platform with standard TR-008 and GR-303 switch interfaces (today this is provided with an external gateway device through the Alcatel Access Partnering Program). The Litespan packet voice gateway may then be configured to act as a local gateway and to terminate the call on the local switch, or the packet voice may be directed into the data cloud for hand-off to a remote or regional switch. Keeping with Alcatel's Litespan's leadership in supporting standard interfaces, the local loop packet voice signaling and encapsulation methods are planned to use ATM AAL-2 and standard voice profiles with compression, echo cancellation, and silence detection/removal. This pioneering work is intended to accelerate the deployment of this application and stimulate the industry for low-cost customer premises devices.

ICC 00-0393
A08-000049



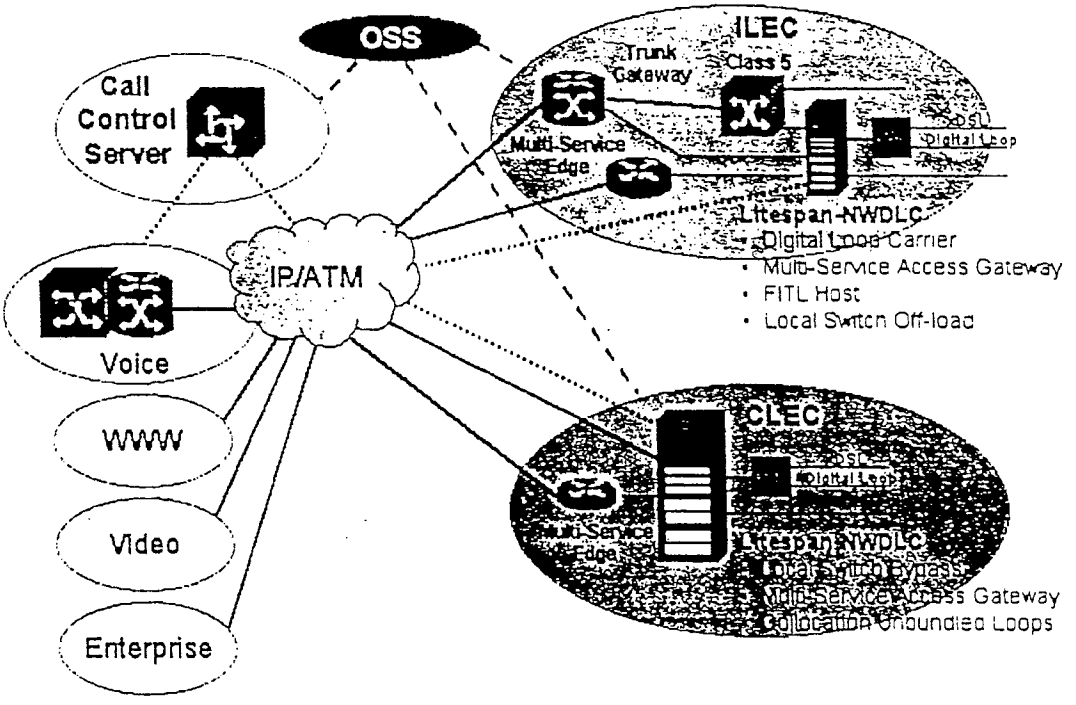
STEP 4. NGDLC TO NWDLC

After the introduction of the digital loop by integrating DSL on Litespan and the implementation of packet voice, Litespan has the inherent capability to function as a service-savvy access gateway. This is partially facilitated by ported technology and functions from Alcatel's recent acquisitions Xylan, Assured Access, Packet Engines, and Internet Devices (under Alcatel Internet Services division, AIS), and the development of the Call Server by Alcatel's Switching Division. Carriers will then have the ability to make the full paradigm shift from the circuit-switched network with functional overlays of today to an integrated, meshed packet network. Alcatel recognizes that this will not happen overnight, so Litespan-NWDLC has been designed to act as the service gateway to the New World during the transition. This will be accomplished by providing gateway functionality extending into layers three and above with native IP interfaces directly on the Litespan platform.

The gateway function operates both from the digital loop to PSTN and from legacy services (POTS) to the new packet network. This positions Litespan to allow the packet network to accommodate the "basic-black" phone without forcing the operator or subscriber to upgrade to a more expensive feature-rich service when all that is required is the basic POTS tier. With the increased load on the local and toll switch, Litespan-NWDLC in conjunction with the Call Server provides methods to off-load services such as calls to the Internet/ISP and local toll calls directly into the new packet network. For out-of-region or competitive presence, this combination mitigates the need for a local switch.

ICC 00-0393
A08-000050

Business subscribers benefit, too. Native LAN interfaces at CLE and CPE will streamline the local configuration and connection to the network. Once the data is on board, Litespan can intelligently ship packets from portal to portal for virtual private networking and IP CENTREX type services.



NEW-WORLD DLC AND BEYOND

While this white paper has addressed the burgeoning broadband data and voice market, there still remains the entertainment video segment. Alcatel has been a long time player in interactive video. However, it is now recognized that DAVIC-based switched digital video is not where the future lies. Instead, the Internet protocol has facilitated alternative and more cost-effective means of signaling, controlling, and delivering content. From the Litespan platform video support is provided in a number of ways.

- With fiber-to-the-curb, WDM techniques are used across the point-to-point fiber that feeds the ONU. Here, the ONU converts the fiber-based video feed to a coax for final delivery to the home much the same as traditional HFC networks operate today. This is an attractive alternative for the ILEC, who can reallocate the investment of FTTC systems over several revenue streams.

ICC 00-0393
A08-000051

- A hybrid DBS/ADSL method can be used. Here the broadcast and NVoD video is carried by the direct broadcast satellite and interactive; local, and VoD programming provided via copper-based ADSL. This option is attractive where fiber has not been deployed and where a competitive or a fast-to-market video/voice service bundle is required.

- With the added IP intelligence planned for the Litespan-NGDLC, such as IP QoS and multicasting, high-bandwidth streaming video can be provided. When this is coupled with an imbedded browser at the subscribers set-top, a rich set of interactive features can be offered.

Alcatel's vision of the access network does not stop with the Litespan-NWDLC outlined above in the four-step program, but extends into new technology realms pioneered by Alcatel's Corporate Research Center (CRC) exploratory work "back in the lab." The CRC is active in IP research and IETF standards work, in addition to ongoing efforts within the ATM Forum and ADSL Forum. As we bring our current portfolios and new technologies together, we are also positioning the next generation of access platform and network architectures to be the New-World Digital Loop Carrier.

IN CONCLUSION

Clearly, the access network will undergo a radical transformation over the course of the next few years. The Alcatel Litespan-NWDLC presented above has the unique ability to support today's need and migrate the network operator elegantly on a solid path to the future. While this is an exciting proposition, the real excitement will occur with the delivery of integrated end-to-end services from the service provider to the subscriber over narrowband or broadband. As the three-way debate continues for access protocol (frames, cells, or packets), Alcatel is positioning itself to be neutral to both delivery media and protocols. Litespan-NWDLC will endure through this transition, due to the embedded core functions supporting TDM, Cell, and Packet traffic, along with its service configuration flexibility and distribution diversity.

ICC 00-0393
A08-000052

Alcatel USA, Inc
Wireline Access Division
1420 N. McDowell Blvd., Petaluma, CA 94954
(707) 792-7000
www.usa.alcatel.com

ICC 00-0383
A08-000053