



Todd F. Silbergeld  
Director-  
Federal Regulatory

SBC Communications Inc.  
1401 I Street, N.W.  
Suite 1100  
Washington, D.C. 20005  
Phone 202 326-8888  
Fax 202 408-4806

January 31, 1997

EX PARTE OR LATE FILED

Ex Parte

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, N.W., Room 222  
Washington, D.C. 20554

RECEIVED

JAN 31 1997

FEDERAL COMMUNICATIONS COMMISSION

Re: Federal-State Joint Board on Universal Service  
CC Docket No. 96-45

Dear Mr. Caton:

Please find attached a letter and attachment to Jeanine Poltronieri, Acting Chief, Universal Service Branch, Accounting and Audits Division describing telecommunications services offered at discount rates for Texas schools, libraries and non-profit hospitals.

Please include these materials into the official record in this docket. Two copies of this letter and the supporting materials are provided for your use.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

Attachments

No. of Copies rec'd  
List ABCDE

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Director-  
Federal Regulatory

SBC Communications Inc.  
1401 I Street, N.W.  
Suite 1100  
Washington, D.C. 20005  
Phone 202 326-8888  
Fax 202 408-4806

January 30, 1997

Ms. Jeanine Poltronieri  
Acting Chief, Universal Service Branch  
Federal Communications Commission  
2100 M Street, N.W., Room 8924  
Washington, D.C. 20554

Dear Ms. Poltronieri:

Pursuant to your recent request, enclosed please find a document describing telecommunications services offered at discount rates for Texas schools, libraries and non-profit hospitals.

Should you have any questions concerning these materials or require any additional information, do not hesitate to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Todd F. Silbergeld".

Enclosure

cc: Mr. Caton  
Ms. Keeney  
Ms. Levitz  
Ms. Ginsburg  
Mr. Peterson (Missouri PSC)

*Telecommunications Services  
Offered at Discount Rates  
for Texas Schools, Libraries  
and Non-profit Hospitals*



**Southwestern Bell**

# House Bill 2128 and Discount Rates

*Passage of House Bill 2128 by the Texas Legislature has made it more affordable for Texas' schools, libraries and non-profit hospitals to take advantage of advanced telecommunications services.*

*In addition to creating a new source of funding for technology through the Telecommunications Infrastructure Fund, House Bill 2128 also creates some significant discounts on certain telecommunications services that schools, libraries and non-profit hospitals can use right now to connect to digital information sources and to each other in ways that will improve education, healthcare and information sharing.*

*Southwestern Bell is among a number of local telephone companies in Texas offering discount pricing for certain advanced services to schools, libraries and non-profit hospitals.*

*At Southwestern Bell, we are committed to providing the information needed to take advantage of House Bill 2128. This booklet will help outline who is eligible for rate discounts under House Bill 2128 and then provide some information about the types of services that are available at lower rates.*

## **Eligibility for Discount Rates Under House Bill 2128**

Under House Bill 2128 the eligible entities include:

**Educational institutions:** *(such as accredited primary and secondary schools owned or operated by the state or local government entities or private entities; institutions of higher education; private institutions of higher education accredited by a recognized accrediting agency; the Texas Education Agency; the regional Education Service Centers; the Texas Higher Education Coordinating Board).*

**Public Libraries**

**Public or not-for-profit hospitals**

**Non-profit telemedical centers** operated by academic health centers, public or not-for-profit hospitals or state-licensed health care practitioners.

*A listing of eligible entities is available in House Bill 2128. Portions of the bill can be reviewed on Southwestern Bell's World Wide Web site at: <http://www.sbc.com/swbell/txhb2128>.*

## Services Offered at Discount Rates by SWB

Under House Bill 2128, Southwestern Bell and several other local telephone companies are offering certain "broadband, digital, private line telecommunications services" at special discount rates to schools, libraries and non-profit hospitals. These services include high-capacity transmission lines enabling access to a variety of data bases including the Internet. These services are priced at Southwestern Bell's cost to provide the service plus five percent, which can mean significant savings for schools, libraries and non-profit hospitals.

Specifically, the services offered by Southwestern Bell at discount rates include the following:

***MegaLink III*** (often referred to as "a T-1 line") is a high-capacity telecommunications line that connects two locations and can be used to access the Internet, handle inventory management systems and provide electronic-mail. MegaLink III also can be used for video conferencing and "distance learning" between two or more sites. MegaLink III is a premium telecommunications service that would meet the needs of most schools, libraries and non-profit hospitals. Under HB 2128, the monthly rate for this service is discounted. (For discount pricing information, see page 4.)

***MegaLink Custom*** (often referred to as "a DS-3 line") is a high-capacity telecommunications line that connects two or more locations. MegaLink Custom can be used to allow multiple users simultaneous access to the Internet and to transfer large volumes of data rapidly with little or no downtime. MegaLink Custom also provides "near broadcast quality" full motion video (which is comparable to commercial television) for use in video conferencing and distance learning. Under HB 2128, the monthly rate for this service for a particular customer is Southwestern Bell's cost plus five percent. (For discount pricing information, see page 5.)

***Network Reconfiguration Service*** allows customers to "rearrange" the use of MegaLink III and MegaLink Custom services to make the most of their network during periods of heavy or light usage. (For discount pricing information, see page 6.)

***Native LAN Interconnection Services*** allow schools, libraries and non-profit hospitals to link two or more LANs at distant locations—providing them with the capability to operate as one system. (For discount pricing information, see page 7.)

***Broadband Educational Video Service*** is a two-way, full motion interactive video service which allows schools, for example, to connect campuses together to share interactive distance learning at "near broadcast" quality (comparable to television) in point-to point and multi-point options. (For discount pricing information, see page 8.)

# Important Considerations

## Other Ways to Save on Distance Learning and Information Sharing Programs

Southwestern Bell offers a 25 percent discount on any telecommunications service that is predominantly (at least 51 percent of the time) used for distance learning activities or information sharing programs. The discount is available to educational institutions and libraries, but cannot be used in addition to any other discount rate for services outlined in this brochure. To get more information on this type of discount, contact Southwestern Bell.

## Additional Savings on Installation and Special Construction Charges

All of the services listed on the previous page are available to schools, libraries and non-profit hospitals without the normal installation charges. The normal \$1290 installation charge for MegaLink III is waived under House Bill 2128.

"Special construction" charges also are waived under House Bill 2128. These special construction charges are associated with placing fiber-optic cable in the street and to the customer's building in order to use MegaLink Custom. For example, customers ordering MegaLink Custom would normally incur special construction charges that could amount to thousands of dollars. Under House Bill 2128, however, most of the special construction charge is waived and the remainder is included in the monthly discount rate charged for the service. This makes MegaLink Custom more affordable.

## Converting Existing Services to House Bill 2128 Rates

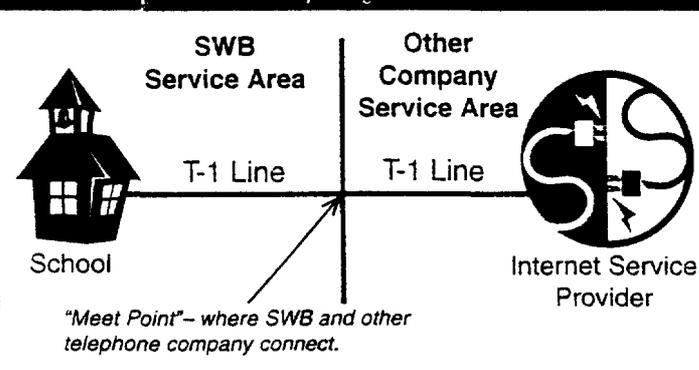
Some schools, libraries and non-profit hospitals already may have been using some of the services discussed on the previous page. Those schools, libraries and non-profit hospitals that are eligible for discount rates under House Bill 2128 may be able to convert those services to House Bill 2128 pricing immediately. In addition, customers who are eligible for discount rates and who are currently paying for similar services under an interstate tariff may also be eligible to switch to House Bill 2128 pricing immediately.

## Pricing When More than One Telephone Company is Involved

Prices quoted in this booklet reflect situations when both points connected by a line are located within Southwestern Bell's service area. Sometimes a customer's request means a line needs to cross through Southwestern Bell's service area and into another telephone company's service area. When this occurs, the rates for service may be different from

those quoted here. For example, a school in Southwestern Bell's service area could purchase T-1 service to connect to an Internet Service Provider that is located in another telephone company's service area. Generally, the portion of the line that falls within Southwestern Bell's service area up to the "meet point" will be priced at the rates quoted in this booklet. The "meet point" is where the line crosses telephone company service boundaries, causing companies to connect T-1 lines. The remainder of the line will be priced by the other telephone company.

### How Pricing is Determined When More than One Telephone Company is Involved.



# MegaLink III Service ("T-1 lines").

## Other Ways to Use MegaLink III Service

MegaLink III can also be used by schools for video conferencing and distance learning. With the purchase of certain equipment, MegaLink III can deliver video between two or more schools. MegaLink III can even be configured to allow schools to provide high-speed Internet access while simultaneously delivering distance learning sessions. For more information contact Southwestern Bell.

## What is this service?

MegaLink III is a high-capacity telecommunications line that connects two locations. Often referred to as "a T-1 line," MegaLink III uses fiber-optic or copper cable to move data at speeds up to 1.544 Megabits per second (Mbps). This service can link together people and locations, allowing transmission of graphics-rich communications (Internet) as well as voice communications and data. MegaLink III can be used to access centralized data bases such as the Internet, inventory management systems and electronic-mail applications.

MegaLink III is a premium telecommunications service that would meet the needs of most schools, libraries and hospitals.

## How can MegaLink III be used by schools, libraries and hospitals?

In education, MegaLink III is of particular relevance. MegaLink III can connect a school with an Internet service provider, for example. Many schools have used MegaLink III to connect entire computer labs to the Internet, reducing downloading times and allowing more students on-line at the same time. In addition, MegaLink III has been used effectively for a number of administrative functions such as attendance reporting, e-mail, intra-campus bulletin boards and intra-campus messaging.

In the healthcare arena, MegaLink III service has linked doctors to hospital information systems allowing them to pre-admit patients, check on patient status, review patient records, and schedule lab tests.

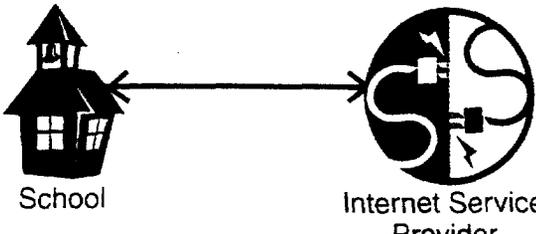
## What does it cost?

Under House Bill 2128, regardless of the distance between the two points connected by MegaLink III service, the rate is \$260 a month so long as both points are within Southwestern Bell's regional service area, also known as a LATA. An optional "clear channel" feature, which increases the available

bandwidth (capacity) of MegaLink III, is priced at \$60 per month. Normally, a MegaLink III line (T-1) is priced based on the length of connection. A school needing a 20-mile line would pay more than a school needing a 10-mile line. However, under House Bill 2128, there is a standard \$260 per month rate for this service, regardless of the length of the line needed, as long as both points connected by the line are located within Southwestern Bell's service area.

## MegaLink III Service at a Glance

<u>Technology</u>	<u>Transmission</u>	<u>Speed</u>	<u>Uses</u>
Dedicated, point-to-point private line	Digital	1.544 Mbps	-Data -Voice

The diagram illustrates a connection between a school and an Internet Service Provider. On the left is a simple icon of a schoolhouse with a bell tower. On the right is a circular icon representing an Internet Service Provider, with a stylized 'S' and 'B' inside. A horizontal line with arrows at both ends connects the two icons, indicating a bidirectional communication link.

# MegaLink Custom ("DS-3 lines")

## What is this service?

MegaLink Custom is a high-capacity telecommunications service that connects two or more locations. Often referred to as "a DS-3 line," MegaLink Custom uses fiber-optic technology to simultaneously move voice, data and video at speeds up to 45 megabits per second. You can think of MegaLink Custom as a huge "information pipe" offering multiple channels. Schools, hospitals and libraries could use MegaLink Custom's channels individually to deliver voice, data or video, or combine them to deliver more advanced functions such as video conferencing.

## How can MegaLink Custom be used by schools, libraries and hospitals?

One of the primary advantages of MegaLink Custom is that it allows more users to use a network at one time. For example, MegaLink Custom has been used in schools to link several computer labs together, allowing simultaneous access to the Internet and the transfer of large volumes of information rapidly with little or no down time.

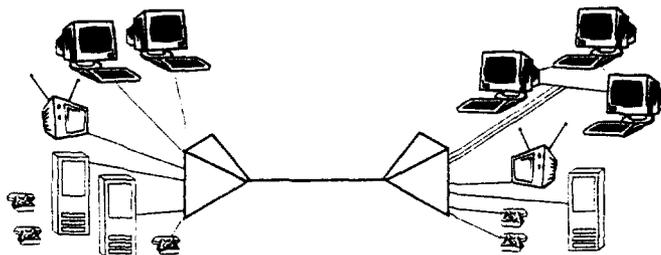
MegaLink Custom also has been used to allow a large number of doctors and staff on-line at one time, pre-admitting patients, checking patient status, reviewing patient records and scheduling lab tests.

MegaLink Custom is also capable of providing "near broadcast quality" full-motion video (which is comparable to commercial television) for use in video conferencing and distance learning applications. Its "near broadcast quality" has also impacted telemedicine, providing video conferencing opportunities for consultation between rural physicians and urban specialists.

## MegaLink Custom at a Glance

<u>Description</u>	<u>Transmission</u>	<u>Speed</u>	<u>Uses</u>
Dedicated, point-to-point private line	Digital	45 Mbps	-Data -Voice -Video

MegaLink Custom combines voice, video and data channels between two locations.



## What does it cost?

Under House Bill 2128, MegaLink Custom is priced on an individual customer basis at Southwestern Bell's cost plus five percent and is partly distance insensitive. The charge for the connection from Southwestern Bell central switching offices to the customer's premises remains distance insensitive. The charge for mileage between the Southwestern Bell central switching offices providing MegaLink Custom service is the same regardless of the distance between central offices. To obtain a price quote for your specific needs, contact Southwestern Bell.

# Network Reconfiguration Service

## *What is this service?*

Network Reconfiguration Service (NRS) allows customers to “rearrange” the use of MegaLink III (often referred to as “a T-1 line”) and MegaLink Custom (often referred to as “a DS-3 line”) services to make the most of the network during periods of heavy or light usage.

NRS makes it possible to dedicate the number of telephone lines or “network capacity” needed for everyday telephone use as well as network-intensive uses such as video conferencing and Internet access.

## *How can NRS be used by schools, libraries and hospitals?*

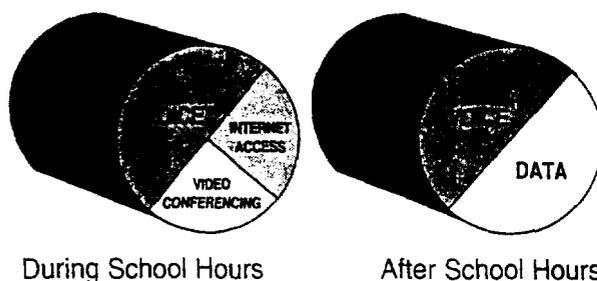
With NRS, the network can be reconfigured as needs change — hourly, daily or weekly. Beginning a normal day, a hospital might dedicate a large part of its network’s capacity to handle normal telephone needs and transfer of data, such as patient information. As the day progresses, network capacity could be reallocated to accommodate impromptu video conferencing for on-line telemedicine consultations with distant patients. Overnight, this same capacity could be reconfigured to handle accounting functions. This flexibility means customers do not have to permanently dedicate capacity to applications that are not required full time, making network operations more economical and efficient.

Educators also could make use of NRS’ flexibility by allocating network capacity to increase response times for students retrieving text and graphics from the Internet at the end of a class period. Once that class period is over, teachers and administrators could make use of the same capacity to schedule video conferences to discuss schedule changes or other important events.

## *Network Reconfiguration Service at a Glance*

NRS allows customers to rearrange network capacity. A school could dedicate telephone lines from its MegaLink III (T-1) network to accommodate Internet access and another part for a principal’s video conference while continuing to serve everyday telephone use, such as voice communications. At night the same capacity could be reallocated for data transfer, such as attendance and financial records.

MegaLink III (T-1) Network



## *What does it cost?*

Each T-1 or DS-3 line a customer wishes to reconfigure needs an NRS “port connection,” which allows a school, for example, control over a T-1 line to dedicate the amount of “network capacity” needed for certain applications, such as video conferencing or Internet access, as the school day progresses. The price for each T-1 port connection is \$45 per month. The monthly charge for a DS-3 port connection for a particular customer is Southwestern Bell’s cost to provide that port connection for that customer, plus five percent.

Each time a customer reconfigures a T-1 or DS-3 line there is a charge of \$1.25 per occurrence. Southwestern Bell can perform the reconfiguration at a charge of \$8.00 per occurrence. Also, a one-time charge of \$1,770 is required for initial database setup.

# Native LAN Interconnection Service

## What is this service?

Native LAN Interconnection Services (NLIS) are high-speed, fiber based, dedicated transport services designed to provide "transparent" interconnection of Local Area Networks (LANs) at the "native speed" of the LAN's backbone. NLIS will allow schools, libraries and hospitals to link two or more LANs at various locations—providing them the capability to operate as one system.

NLIS provides point-to-point and multi-point configurations for the following LANs: 10 megabits per second (Mbps) Ethernet-to-Ethernet; 4 or 16 Mbps Token Ring-to-Token Ring; and 100 Mbps FDDI-to-FDDI.

## How can NLIS be used by schools, libraries and hospitals?

Uses of NLIS can be as simple as sharing files and databases between LANs or as complex as conducting live interactive video training or education sessions. These functions can be conducted simultaneously or managed to meet a predetermined schedule.

The immediate impact of NLIS can be expanded basic communications capabilities between locations in the form of high-speed fax, voice mail, electronic mail and the sharing of computer files.

The high level of reliability of NLIS makes it useful for the transfer of critical information between locations.

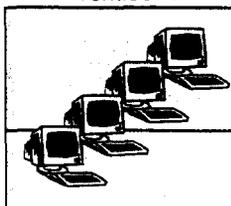
## What does it cost?

NLIS is priced on an individual customer basis at Southwestern Bell's cost plus five percent. To obtain a price quote for your specific needs contact Southwestern Bell.

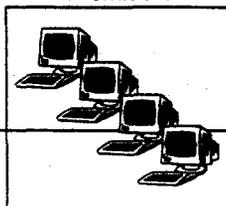
### Native LAN Interconnection Services at a Glance

<u>Description</u>	<u>Transmission</u>	<u>Speed</u>	<u>Uses</u>
Dedicated, point-to-point or multi-point, private transport services	Fiber-optic Based	LANS of 10 Mbps, 4 or 16 Mbps, & 100 Mbps	-Voice -Video -Data

LAN Customer  
Premise A



LAN Customer  
Premise B



# Broadband Educational Video Service

## What is this service?

Broadband Educational Service (BEVS) is a two-way, full-motion interactive video service. BEVS allows a school district, for example, to connect campus locations together to share interactive distance learning at "near broadcast" quality (comparable to television) in point-to-point and multi-point options.

Point-to-point is two-way interactive video between two sites. Multi-point is two-way interactive video between three or four sites. BEVS includes a fiber optic line from a Southwestern Bell central office to a school, library or non-profit hospital, as well as a 10 Mbps Ethernet feature for high-speed data transmission.

## How can BEVS be used by schools, libraries and hospitals?

At each site a room is equipped with video cameras, television monitors and microphones that can be linked electronically over BEVS' fiber-optic line for interactive video and audio with up to three other similarly equipped sites. With BEVS, a teacher and students can see and communicate with all remote sites, as well as the originating site, simultaneously.

At any time a teacher can display on monitors at all locations a single image—such as a student or the teacher—or material from another source such as text, graphics, videotape, CD-ROM, personal computer, or laser disk.

Teachers and students using BEVS benefit from high quality video and audio. BEVS' use of fiber optics ensures video pictures are free of distracting "smeared or jerky" images. In addition, audio and visual images are synchronized. BEVS also allows detailed graphics to be viewed clearly by all sites.

In education, two-way interactive video services such as BEVS have been used to bridge gaps in curriculum and share resources. For example, schools have been able to offer advanced mathematics and foreign language courses by extending the reach of a single teacher to more students

across a district or a region through interactive distance learning.

In health care, two-way interactive video is important for remote consultations. Two-way interactive video services such as BEVS allow physicians and patients to see and hear each other and to transfer important patient information between sites.

## What does it cost?

This service is available in many configurations. Please call Southwestern Bell for pricing information.

## Broadband Educational Video at a Glance

<u>Description</u>	<u>Transmission</u>	<u>Speed</u>	<u>Uses</u>
Dedicated, point-to-point or multi-point	Fiber-optic	45 Mbps	-Voice -Video -Data

BEVS provides "near broadcast" quality two-way interactive video in point-to-point or multi-point options.



## *How to Reach Us*

Let us help you evaluate your needs. Southwestern Bell can provide planning assistance, including design and installation of Local Area Networks connecting students and teachers to the Internet. For more information on advanced telecommunications services available from Southwestern Bell at discount rates, please call: 1-800-571-7811.

Our web site is: <http://www.sbc.com/swbell/txhb2128>.

Our e-mail address is: [GV9721@ausmail1.sbc.com](mailto:GV9721@ausmail1.sbc.com).

