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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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In the Matter of	)	
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Federal-State Joint Board on	)	CC Docket No. 96-45
Universal Service	)	

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COMMENTS

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Date: April 12, 1996

No. of Copies rec'd 0+11
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COMMENTS

BellSouth Corporation and BellSouth Telecommunications, Inc. (BellSouth) hereby submit their comments on the Notice of Proposed Rulemaking and Order Establishing Joint Board released March 8, 1996

I. INTRODUCTION AND SUMMARY

The Telecommunications Act of 1996 (Act) requires the Commission, in conjunction with a Federal-State Joint Board, to define universal services to be supported by explicit Federal support mechanisms and to define the Federal support mechanisms.[1] Unlike the Communications Act of 1934, the Telecommunications Act precisely defines the Commission's responsibility for universal service and evidences Congressional intent to displace the implicit support mechanisms that are in place today with predictable and sufficient (i.e., explicit) mechanisms.

The task at hand goes beyond a relook of the high cost assistance mechanisms of the universal service fund and the DEM weighting factor or the lifeline assistance component. While these mechanisms should be incorporated in the universal service

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[1] See Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56, Title I, Subtitle A, Sec. 101(a), Universal Service, to be codified at 47 U.S.C. §254.

solution adopted here, the key focus must be to replace the implicit mechanisms which currently form the primary means of support for universal service with a specific, predictable and sufficient funding mechanism.

Under the Telecommunications Act of 1996, there are two elements of universal service that require consideration: 1) the availability to all consumers of quality services at just, reasonable and affordable rates; and 2) support to be provided for services provided to schools, libraries and health care providers. The Act contemplates specific, predictable and sufficient Federal and state mechanisms that will preserve and advance these universal service elements.

As is evident by the questions contained in the Notice, meeting the universal service goals of the Act will necessitate consideration and resolution of numerous complex issues. The truncated period for public comment coupled with the page limitation abbreviate by necessity the scope and depth of analysis that can be provided in these comments. Nevertheless, BellSouth sets forth a universal service framework that will meet the mandate of the Act. Within the context of this framework, BellSouth identifies immediate steps to be taken by the Commission in fulfillment of its statutory obligation, thereby further facilitating the development of a competitive marketplace.

The core element of universal service pertains to the availability of affordable telephone service to all consumers. Under BellSouth's proposed framework, the implicit support reflected in interstate access charges as represented by Carrier Common Line and the Interconnection Charge will be replaced by an explicit and specific federal mechanism. This could be accomplished by gradually increasing residence and small business

subscriber line charges, with the remaining interstate implicit support to be recovered by an explicit federal mechanism. To address rural, insular, low income and high cost areas, the federal mechanism will include additional components comparable to lifeline assistance, high cost assistance and long term support. The Act authorizes state commissions to enact intrastate universal service support mechanisms for the purpose of eliminating implicit support.[2] Such mechanisms should be encouraged by the Joint Board and Commission in order for the universal service promise of the new legislation to be realized.

A second element of the federal universal service mechanism will address services provided to educational institutions, libraries and healthcare providers. BellSouth proposes that initially the federal support mechanism should at least fund the interstate discounts that are established pursuant to the Act. The Joint Board should also consider whether state designated education and library discounts for intrastate services should be funded through the federal support mechanism.

The framework presented in these comments is consistent with the principles enumerated in the Act. It establishes a federal mechanism that will contribute to keeping universal service affordable which in turn creates the means by which consumers can access capabilities such as the Internet and information services.[3] Further, the mechanism BellSouth proposes includes components for high cost and lifeline assistance which will

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2 Id.

3 See Id., to be codified at 47 U.S.C. § 254(b)(1)-(2).

serve to address specifically issues regarding access in insular and high cost areas as well as access by low income individuals.[4]

BellSouth's proposal departs from the implicit support universal service receives through charges BellSouth assesses for services provided to interstate access customers and replaces such support with a precise and specific mechanism funded through equitable and nondiscriminatory contributions based on retail revenues by all providers of interstate telecommunications services, including BellSouth. This fundamental change in sources of support for universal service is a key principle of the Act.[5]

Moreover, the specific education and healthcare provider elements in BellSouth's proposal take into account the special position that these classes of users occupy within the new Act. This special position calls for a non-traditional construct which is reflected in BellSouth's universal service framework. BellSouth suggests means by which to maximize the impact that universal service can have on these users but is nonetheless tempered by the reality that the telecommunications industry, alone, has a finite capacity to support this element of universal service.

II. AFFORDABLE, BASIC TELEPHONE SERVICE--THE CORE ELEMENT OF UNIVERSAL SERVICE

A. The Definition of Universal Service

The analytical starting point of the universal service inquiry is defining the service(s) to which the universal service mandate attaches. Without first establishing a

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4 See Id., to be codified at 47 U.S.C. § 254(b)(3).

5 See Id., to be codified at 47 U.S.C. § 254(b)(4)-(5).

common understanding of what is meant by universal service, any discussion of support or funding mechanisms would have no context from which to determine the size and scope of the fund or the fairness of the contribution and distribution mechanism.

The Act recognizes that the definition of universal service is evolutionary and, therefore, requires the Commission to engage in a periodic review of the definition to take into account changed circumstances.[6] Thus, the responsibility here is not to divine the future, but instead to focus on the present environment. The Act compels the Joint Board to consider four criteria in arriving at its initial recommendation of the services to be supported by the federal universal service fund: the extent to which the service 1) is essential to education, public health or public safety; 2) through the operation of market choices by customers, has been subscribed to by a substantial majority of residential customers; 3) is deployed by telecommunications carriers in the public telecommunications networks; and 4) is consistent with the public interest, convenience and necessity.[7]

Based on these criteria, BellSouth agrees with the Commission's proposal that the features that should comprise the core service to be supported by the federal universal service fund are: 1) Voice grade access to the public switched network; 2) Touch-tone capability; 3) Single Party service (including white pages listing); 4) Access to emergency services (911); and 5) Access to operator services. This package of technical and service

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[6] Id., to be codified at 47 U.S.C. § 254(c)(1). The Act also authorizes the Joint Board to recommend to the Commission modifications in the definition of the services that are supported by federal universal support service mechanisms. Id., to be codified at 47 U.S.C. § 254(c)(2)

[7] Id.

capabilities provided to residential customers constitute the service that should be supported by the federal universal service support mechanism. This basic residential exchange service satisfies the criteria by which the definition of universal service is to be determined. It reflects the service that is subscribed to by a substantial majority of residential customers and has been and continues to be deployed within the public networks by telecommunications carriers. The service represents core capabilities that incumbent LECs currently provide and that new entrants are likely to provide through their own facilities or through resale.[8] Finally, basic residential service enables customers to reach providers of fire, police and medical emergency services. Accordingly, the service is important to the health and safety of the public.

As measured against the criteria set forth in the Act, no other service or features approach the fit that basic residential exchange service achieves. In these circumstances, the initial definition of universal service should identify basic residential service (with the features enumerated above) as the service eligible for support from the federal universal service support mechanism.

B. Universal Service Support

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[8] Under the new Section 214(e) of the Communications Act, a telecommunications common carrier can be designated as an eligible telecommunications carrier and therefore receive federal universal service support if the eligible carrier offers the services supported by the federal universal service fund. The Act makes clear that the obligation to offer service can be fulfilled by a carrier by using its own facilities or a combination of its own facilities and resale of another carrier's services, including the services of another eligible telecommunications carrier. See, Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56, Title I, Subtitle A, Sec. 102(a), to be codified at 47 U.S.C. § 214(e). BellSouth proposes, however, that if any exchange service is provided through resale, the underlying facilities carrier will receive the support from the universal service fund.

Having defined universal service, the next step is to assess the degree of support that the defined universal service currently receives through both explicit and implicit support mechanisms. The measure of support received can be estimated by looking at the difference between the revenues received from providing basic residential exchange service and the cost of providing such service. As a surrogate for the cost of providing basic residential service, BellSouth principally used its nontraffic sensitive loop costs derived from ARMIS data for the loops associated with providing universal services.[9] This estimate of cost is conservative in that it does not consider switching and trunking associated with providing universal service. Nevertheless, the full loop costs obtained from ARMIS data provide an adequate estimate of costs from which the level of support for universal service that is being received can be calculated.

BellSouth estimates that its annual cost of universal service (state and interstate) is $4,816 million. The revenues BellSouth receives in association with providing basic residential service, including interstate residential subscriber line charges, equal $2,817 million. The difference between the two represents support to universal service. Of the total $1,999 million in support, the interstate contribution is $1,036 million.[10]

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[9] The combined interstate and intrastate data presented in these comments include single line business lines in Georgia and Florida because both of these jurisdictions include single line business lines as part of their intrastate definition of universal service. The interstate support, however, pertains only to primary residence lines.

[10] Approximately ten percent of the amount is associated with underdepreciated investment and will have to be recovered through the fund over the average remaining life of the plant, which for BellSouth is about 8 years.

Interstate support for universal service currently flows from three identifiable sources: carrier common line charges, interconnection charges and high cost universal service fund amounts.[11] Carrier common line charges ($712 million) are an implicit support mechanism for universal service. They represent, in part, a carry-over to the post-divestiture environment of the support that historically had been derived from interstate toll charges.

The interconnection charge ($282 million) likewise represents an implicit support to universal service. The interconnection charge came about from the restructure of local transport access charges from wholly usage-based charges to distinct charges for common transport (usage-based) and dedicated transport (flat rate). The restructured charges did not generate the same level of revenue as the wholly usage-based charges, resulting in the interconnection charge. A cause of the interconnection charge can be related to the allocation process (jurisdictional separations) that determined the level of charges under the purely usage-based structure. The allocation system, which is usage based, failed to distinguish between dedicated and common transport. Interstate switched access

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[11] These represent the sources of support that BellSouth currently receives for its obligation to provide universal service support. There are other sources of support that primarily benefit small telephone companies such as carrier common line long term support, an implicit mechanism that keeps the carrier common line charges for small telephone companies that participate in the NECA common line pool at the average rate that would have applied if all local exchange carriers participated in the common line pool. Another small company support mechanism is the dial equipment weighting factor used by small companies. BellSouth's proposal for universal service funding will accommodate the full range of mechanisms that currently support universal service. Each local exchange carrier will calculate its support components, e.g., CCL, interconnection charges, high cost support, DEM weighting, in the same manner as it does today for recovery through the federal support mechanism.

transport is predominately dedicated transport, the costs of which are not usage sensitive. Nevertheless, the interstate assignment of costs increased as interstate access minutes increased. If the allocation system had recognized the difference between dedicated and common transport, the interstate jurisdiction would have been responsible for a smaller allocation of costs, with local intrastate charges having to make up for the shift in cost responsibility. Hence, the interconnection charge reflects the support that dedicated transport has provided to the local trunking component of universal service.

The remaining interstate universal service support received by BellSouth is through the high cost universal service fund. This fund, which is an explicit form of support, enables local exchange carriers with loop costs that exceed 115 percent of the national average to allocate to and recover from the interstate jurisdiction additional loop costs. This interstate support mechanism contributes $42 million of the $1,036 million in interstate support that BellSouth receives in fulfilling its universal service obligations. Thus, the impact of the high cost fund is to reduce the charges for local intrastate services.

The new federal universal service fund should address all of the current interstate support mechanisms that contribute to the support of universal service. BellSouth presents a framework that assures that the new mechanism will initially provide the same level of interstate support as the existing support mechanisms. Key to the efforts here should be a federal mechanism that does not shift current federal support back on to the states.[12]

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[12] At the outset, BellSouth believes that an additional principle for universal service is that nothing done by the Joint Board or the Commission should have a jurisdictional impact. The correct starting point for implementing § 254 of the Act is the current (Footnote Continued.....)

C. The Federal Universal Service Support Mechanism

The clear intent of the Act is to make universal service support explicit to the maximum extent possible and, as a result, encourage a more competitive marketplace.[13] Before, however, the explicit mechanism can be defined, it is necessary to consider whether the current federal support can be reduced in an economically efficient means. If there were no support mechanisms whatsoever, then consumers of the currently supported services would have to pay higher charges. This, however, needs to be balanced with the universal service principle that quality services be available at just, reasonable and affordable rates. The affordability criteria limits the amount that charges to end users might be increased, but it does not preclude such an increase in its entirety.

As a first step, BellSouth recommends that residential and single-business subscriber line charges be increased. As Drs. Gordon and Taylor point out in their paper, economic efficiency can be improved by recovering as much of the support as possible directly from the end user.[14] Moreover, BellSouth's recommendation would be consistent

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division of responsibility between the state and federal jurisdictions for universal service. In accepting this division of responsibility, the focus of the Joint Board and the Commission in this proceeding can be on determining the appropriate support mechanisms. After successful implementation of the new federal mechanisms, the Joint Board, as part of its ongoing consideration of universal service issues, can consider whether reapportioning universal service responsibility between the state and federal jurisdictions is appropriate.

[13] The Joint Conference Report states that "[t]o the extent possible, the conferees intend that any support mechanisms continued or created under new section 254 should be explicit, rather than implicit as many support mechanisms are today. H. R. Conf. Rep. No. 458, 104th Cong. 2d Sess. 131 (1996).

[14] See page 4 of the paper prepared by Dr. Kenneth Gordon and Dr. William E. Taylor, Senior Vice Presidents of National Economic Research Associates (NERA), which is set forth as Attachment 1 to these comments. (hereinafter "NERA")

with Chairman Hundt's objective "to find ways to let the subscriber line charge caps approximate economically rational pricing for consumers and single line businesses."[15]

Increasing the subscriber line charges as part of the renovation of the federal universal service mechanisms would be a positive public policy that is consistent with the Act's universal service objectives and goals. Such an increase would not adversely affect telephone subscribership. When subscriber line charges were first considered and implemented in 1985, opponents argued that such charges would result in substantial reductions in telephone subscribership. To the contrary, as Drs. Gordon and Taylor show, telephone penetration increased between November 1983 and November 1989.[16] This same time period saw a 19% reduction in the number of households without telephones.[17] As Drs. Gordon and Taylor explain, a number of factors blunted the increases in the end user charges.[18] Among these factors is that the real increases (i.e., inflation adjusted) in flat-rate charges (i.e., local and subscriber line charges) were very small. Further, rate rebalancing occurred, that is increases in flat-rate charges such as the subscriber line charge were offset somewhat by decreases in toll charges.

These same type of mitigating factors would come into play if subscriber line charges were increased now. BellSouth recommends that the residential and single-line business subscriber line charge be increased gradually over a multi-year period. BellSouth

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15 Speech delivered by Chairman Reed Hundt at the Fall Business Conference of the Competitive Telecommunications Association, October 10, 1995.

16 NERA at 16-17.

17 Id. at 17.

18 Id. at 18-26.

believes that a modest increase can be implemented in such a way so as to avoid any negative effect on subscribership or the affordability of telephone service.[19]

Furthermore, any increase in the subscriber line charge has the effect of reducing access costs of interexchange carriers. Interexchange carriers should, therefore, have a commensurate obligation to flow through the entire reduction in access costs to their customers in the form of lower toll rates.[20] Any real increase in subscriber line charges coupled with the reduction in prices of toll services that would accompany the increase, should assuage any concern that a subscriber line charge increase would be detrimental to universal service objectives.[21]

There are other steps, however, that can be taken to assure that the federal universal service fund provides targeted support to those users for whom the increase in subscriber line charges would render telephone service unaffordable.[22] One of the

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[19] In the Common Carrier Bureau's Preparation For Addressing Universal Service: A Review of Current Interstate Support Mechanisms (p. 93), the Bureau noted that the original proposal of $6 per line is the equivalent of more than $10 per line in 1995 dollars.

[20] The increase in interstate interLATA competition due to BOC entry into the interLATA market that will result from implementation of the Telecommunications Act of 1996 will provide an additional means by which to assure that toll users will continue to benefit from access charge reductions.

[21] NERA at 18-26.

[22] The Notice inquires whether toll limitation services should be included in the definition of universal service. BellSouth currently offers a variety of services, at nominal fees, that enable consumers to block or screen their toll usage. Indeed, BellSouth discussed its toll blocking and screening services in its comments filed September 27, 1995 in CC Docket No. 95-115, which are incorporated by reference. While BellSouth is committed to continuing to evaluate market and customer needs with regard to controlling their telephone usage, toll blocking and screening services fall short of the compelling public interest test that would justify their inclusion as universal services. Nor are such services widely subscribed to by residential customers or essential to education, public
(Footnote Continued.....)

principles of universal service enumerated in the Act is that low-income consumers have access to telephone service. This principle is best served through continuation of the Lifeline and Link-Up programs that are currently in place. In addition, these programs could be expanded to include an offset, in whole or part, of the increase in residential subscriber line charges. As in the case of the current Lifeline program, a key would be a means test that would qualify an end user for a subscriber line credit. Indeed, the eligibility requirements for participation in the current Lifeline program would suffice as the basis for participation in a subscriber line credit mechanism.

The federal universal service fund, for the core basic residential service, would have several components. The first component would be the recovery of any carrier common line and interconnection charge amounts not offset by the increases in subscriber line charges. Because all carrier common line charges would be eliminated and replaced by the universal service fund, the existing Long Term Support mechanism would likewise be handled by the universal service fund. Amounts currently received from the high cost (present USF) and DEM weighting mechanisms would also be transferred to the core fund.[23] Finally, the interstate portion of the Lifeline and link-up programs would be funded through the federal universal service fund.

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health or public safety, the other statutory criteria for evaluating whether a service should be deemed universal and subject to universal service support.

[23] BellSouth believes that the method for calculating the amount associated with this component of the universal service fund should not change. First, any change in method would likely change jurisdictional allocations which would be inappropriate at this time. In addition, the alternative that has been suggested in CC Docket 80-286, the proxy cost model, has numerous flaws and simply would not be an adequate basis. See BellSouth's Comments submitted October 10, 1995, in response to the Notice of Proposed Rulemaking and Notice of Inquiry in Amendment of Part 36 of the Commission's Rules (Footnote Continued.....)

Each incumbent local exchange carrier would calculate (by study area) its respective amounts for each of the core components of the fund. The total of these amounts would be divided by the total number of residence lines of the incumbent resulting in the amount of interstate support per residence line.[24] This amount per line would be fully portable.[25] Any other carrier that is designated by a state commission as an eligible carrier would be entitled to the same per line support for any universal service that it provides.[26]

BellSouth believes that support should not be based on statewide averages. Smaller areas would be in the public interest. While a wire center could be used for the purpose of determining support, BellSouth recommends that wire center groupings be used. For example, one approach would be to establish five wire center groups based on access line density. The support an eligible carrier would receive would be based on the wire center grouping of that line. Accordingly, subscriber line charges should be permitted to vary among wire center groupings.

D. Contributions To The Universal Service Fund

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and Establishment of a Joint Board, CC Docket 80-286 (incorporated by reference by the Commission in this proceeding). See NERA at 35-39.

[24] The interstate amount of support per line would change only if residence subscriber line charges change.

[25] The amount per line would exclude the existing support for recovery of underdepreciated plant. Such amounts would be fixed upon the establishment of the federal fund and would flow directly to the affected carrier.

[26] To be designated as an eligible carrier the carrier would have to meet the requirements of § 214(e)(1), should be subject to the same provisioning intervals and requirements that the state commission requires of the incumbent and serve the area designated by the state commission. For the purposes of becoming an eligible carrier, BellSouth recommends that the serving area be no larger than a wire center.

The Act provides that "every telecommunications carrier that provides interstate telecommunications services shall contribute, on an equitable and nondiscriminatory basis," to the universal service fund.[27] The Act defines the term telecommunications carrier as a provider of telecommunications services.[28] Further, the Act specifies that a telecommunications carrier shall be treated as a common carrier to the extent that it provides telecommunications services.[29] A telecommunications service means "the offering of telecommunications for a fee directly to the public, or such classes of users as to be effectively available directly to the public, regardless of facilities used."[30] Thus, under the Act, common carriers who provide interstate services directly to the public would be contributors to the fund.

Each carrier's contribution to the interstate fund should be based on the revenues received from the provision of telecommunications services. In other words, a carrier's interstate retail revenues would be used to calculate the amount of universal service support it must contribute to the interstate fund. Because contributions to the fund would be required of interstate telecommunications carriers, local exchange carriers also would have an obligation to contribute based on their interstate retail revenues from non-universal service services. These revenues would include interstate toll revenues, revenues

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27 See, supra note 1, to be codified at 47 U.S.C. § 254(d).

28 See, Telecommunications Act of 1996, Pub. L. No. 104-104, Sec. 3(a)(2)(49), to be codified at 47 U.S.C. § 153(44).

29 Id.

30 Id., to be codified at 47 U.S.C. § 153(46).

associated with special access provided directly to end users, Feature Group A provided directly to end users and subscriber line charges assessed on non-universal service lines.[31]

Under this methodology, each carrier would be responsible for contributing the same percentage of its retail revenue to the federal fund as every other contributing carrier, an approach that meets the statutory requirement for equitable and non-discriminatory contributions by carriers. The percentage would be calculated by determining the percent the total federal fund amount is of total interstate retail revenues (for all contributing carriers).

III. SUPPORT FOR SERVICES PROVIDED TO PUBLIC INSTITUTIONAL TELECOMMUNICATIONS USERS

A. Schools and Libraries

Section 254(h) of the Telecommunications Act provides a welcome vehicle by which the telecommunications industry can increase its participation in efforts to improve the ability and wherewithal of schools and libraries to utilize modern telecommunications technologies. BellSouth is committed to supporting education in a variety of ways, as is evidenced by its significant contributions to education and its commitment to continue its support of education in the coming years.[32]

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[31] In addition to establishing a local exchange carrier's obligation to contribute to the interstate fund, any rules adopted here should make clear that local exchange carriers have the right to recover their interstate contributions through the charges for their interstate services (e.g., exogenous cost treatment).

[32] BellSouth's contributions have consisted of foundation grants for education, discounts for both wireline and wireless telecommunications services and equipment, and the healthy volunteerism of its employees.

Of course, as FCC Chairman Reed Hundt and others have recognized, in addition to telecommunications connectivity, there are numerous other elements which must be in place in order for students, teachers and educational institutions to be able to reap the full benefits of modern technology for the advancement of education.[33] As the McKinsey Report notes, the cost of the "connectivity" component, while quite sizable in and of itself, constitutes only a small proportion of the overall cost associated with implementing technology for educational purposes.[34] Thus, the discounts contemplated by Section 254(h)(1)(B) will not alone be sufficient to accomplish the goals sought to be achieved by Congress, the Commission, and others who recognize the importance of education to our society.

While the discounts made available under Section 254(h)(1)(B) can only be utilized for funding telecommunications connectivity portions of these components, BellSouth nevertheless urges the Commission to find ways to encourage other entities, e.g.,

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[33] Chairman Hundt has listed the various elements as: 1. schools connected to a network to link the computers, video equipment, and other hardware; 2. high-quality educational courseware, video programs, and on-line services; 3. curriculum development that uses communications technology; 4. training programs for teachers so they can learn to use the new technology; 5. ongoing technical support; 6. security for equipment; and 7. parental involvement in what their children are doing and learning.

See, FCC News Release, "Reed Hundt Announces New FCC Education Task Force to Ensure That Children's Needs Are Met in Telecom Act Implementation," March 18, 1996. See also U.S. Advisory Council on the National Information Infrastructure, "KickStart Initiative, Connecting America's Communities to the Information Superhighway".

[34] McKinsey & Company, Inc., "Connecting K-12 Schools to the Information Superhighway," (report prepared for the National Information Infrastructure Advisory Council, ("McKinsey Report"). For example, in the McKinsey Report's classroom model, at p.28, providing connections to school's would comprise only 4% of the initial total costs of $47 billion and only 7% of the total on-going costs of $14 billion.

computer industry, to contribute toward achievement of the other various components so that meaningful use of the contributions made by the telecommunications industry can be assured. BellSouth also urges the Commission, in any regulations or guidelines it adopts, to allow for a matching of the specific needs of individual schools and libraries with their ability to use, in a timely fashion, the technologies and services made available as a part of the Commission's Universal Service program, on a fair and equitable basis. The multitudes of schools and libraries across the nation are necessarily at different points in their abilities to meaningfully utilize additional telecommunications services and technologies. Of course, the range of services and the amount of the discounts provided in order to assure that such services are "affordable" will need to be evaluated in the context of the ability of the telecommunications industry (and ultimately their customers) to pay the cost of the support. It is in this light that BellSouth makes the following initial recommendations:

Services vs. Functionalities. In considering the services to be eligible for Section 254(h)(1)(B) discounts, the Commission should consider defining those in terms of functionalities rather than specific services. This would accommodate the fact that service providers may offer functionalities which could meet the needs of a school under a wide variety of service names. BellSouth has worked with the educational community over the years to address a variety of issues. Continuing dialogue between members of the telecommunications industry and representatives of schools and libraries at the national, regional and local level may help to further define these, and such a dialogue is consistent

with the Act's concept of "universal service" as an evolving concept.[35] However, it is BellSouth's preliminary view that at the outset the functionalities which should be eligible for universal service support should consist of the following:

a) connectivity at the voice grade level into the public switched network for educational purposes. This would provide the basic connection into the public switched network and is sufficient for basic access to the Internet at up to 28.8 kbps.

b) transport of communications of up to 1.544 Mbps (i.e., DS1) for voice, data, video and imaging services for distance learning and other educational purposes. Although some schools and libraries may immediately be ready to utilize even more sophisticated technologies and higher bit rates of speed, BellSouth's preliminary view is that such functionalities more aptly fall within those which should be considered in the Commission's later proceeding under Section 706 of the Act.[36]

Service-specific discounts vs. flexible discounts. One obvious discount mechanism would be a fixed discount off of the tariff charges for a service. If the Commission adopts this mechanism, then each carrier should be required to offer the same discount percentage for the same or similar service.

As an alternative, the Commission should consider a flexible discount program. Under such a program, each school and library could be allocated a specific dollar amount

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[35] The Commission may wish to further this dialogue by encouraging, or even sponsoring, forums for this purpose.

[36] For instance, a carrier may not have deployed throughout its entire service region the fiber and broadband technologies which would be associated with such more advanced services and functionalities, and construction of such facilities could involve extraordinary costs (such as special construction) over and above the tariffed rate for such services.

of support each year to apply to the payment of the tariffed charges for telecommunications services included within the definition of universal service. Thus, each institution would realize a discount equal to the support received. Such a mechanism could allow a school or library to apply its allotted dollars to those functionalities or services which it most needs at that point in time, in much the same way as cafeteria-style health plans which are offered today by many private employers.[37] Moreover, this could encourage carriers to work with schools and libraries on a local or state basis to provide individualized solutions designed to make the most efficient use of such support and could encourage competition among service providers in offering innovative solutions. Finally, such an approach would allow for some certainty as to the amount of dollars which the industry would be expected to support in any given year. Although the operational details of such a plan would need to be developed, such an approach has potential for meeting various important public policy goals.

Bona Fide Service Request. The way a discount program is administered can be even more important than the amount of the discount, especially given the fact that the discount will address only one of the essential components for a given school's program.

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[37] Under such a plan, a school (or library) could apply the flat dollar amount of support received to a single service or spread it across multiple services in order to effectively obtain discounts for those services for which it most needs the support. This could provide the school (or library) with much greater flexibility to tailor the use of the available support to its needs and could perhaps allow a school (or library) which might otherwise not be able to benefit from the available universal service support to actually utilize that support. For instance, a poorer school or library might not obtain any benefit from a fixed percentage discount on voice grade local exchange service due to the fact that its budget does not provide for the remainder of the charges. However, that school would more likely be able to obtain such service if it were provided with a flat dollar amount of support which it could choose to apply to the entire charge for the service.

The Commission could establish guidelines for a state-administered certification program, which may recognize different needs for support, under which requested telecommunications services available for universal service support could be used to encourage advancement of all elements essential to meaningful use by schools and libraries.[38] Such a program could also provide for coordination between universal service support and state and local education technology plans. As such, the certification mechanism could enable the universal service support to operate as seed money to encourage other potential participants (such as foundations, equipment providers, school administrators, teachers, parents and local communities) to work together to provide other essential components as a part of a total coordinated technology use plan to achieve the maximum benefit from the services and functionalities funded by universal service support dollars.[39]

Funding. The Act specifies that the discounts provided pursuant to Section 254(h)(1) shall be determined by the Commission with respect to interstate services and by each state with respect to intrastate services.[40] All telecommunications carriers serving the relevant geographic area must provide the specified universal services at the designated

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[38] For instance, a school or library could show, as a part of its request for universal service support, that it has (or will have) available to it the appropriate hardware, software, customer premises equipment, teacher training, curriculum and financial resources in order to be able to meaningfully utilize a requested service or functionality.

[39] If, on the other hand, the universal service support discounts are expended for services and functionalities which lie unused due to the fact that other essential components are not in place, then the universal support mechanism will have been used in a manner which promotes uneconomic investments which would clearly be contrary to the public interest.

[40] See, Supra, note 1, to be codified at Section 254(h)(1)(B).

discounts to schools and libraries for which a bona fide request is made, receiving in return an offset against its obligation to contribute to the universal service mechanisms or a reimbursement from the universal service mechanisms.[41] A state "may adopt regulations not inconsistent with the Commission's rules to preserve and advance universal service," and where a state adopts "additional definitions and standards to preserve and advance universal services" it must also adopt "additional specific, predictable, and sufficient mechanisms to support such definitions or standards that do not rely on or burden Federal universal service support mechanisms."[42]

The Joint Board must consider how best to assure that federal and state funding mechanisms are coordinated. While the portion of the federal universal service fund attributable to universal support for schools and libraries under Section 254(h)(1) should be at least sufficient to cover the amount of the interstate discounts provided, the Joint Board should consider whether the purposes of the Act and the public interest would best be served if the federal universal service support mechanisms should also be sufficient to cover state-designated discounts for intrastate services where the state has not adopted "additional definitions and standards" within the meaning of Section 254(f) or appropriate funding mechanisms. Moreover, the Joint Board should consider whether carriers which contribute to universal service funding mechanisms should be required to impose specific and explicit charges on the customers of their telecommunications services for the purpose of funding their universal service obligation, such as additional end user charges. Such

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41 Id.

42 Id., to be codified at Section 254(f).

explicit charges would appear to be consistent with the Act's intent that universal service funding mechanisms be explicit.

B. Rural Health Care Providers

As an initial matter, BellSouth would propose that the services and functionalities which must be made available to rural health care providers at rates reasonably comparable to urban rates should be transport of data, video and imaging at speeds of up to 1.544 mbps for telemedicine purposes. Such services can be utilized to provide rural health care services as well as instruction related to such services. Funding issues similar to those enumerated above for schools and libraries should be considered by the Joint Board to assure coordination of federal and state support programs as well as appropriate and sufficient funding mechanisms.

C. Advanced Services

The functionalities which BellSouth suggests should be included within the definition of universal service under Section 254(h)(1) are sufficient to provide for access to the Internet as well as distance learning networks and many telemedicine services. Deployment of additional advanced services should not be mandated given the fact that substantial new investments could be involved, issues of potentially uneconomic investment would arise, and, in any event, basic connectivity can be provided by the functionalities which BellSouth recommends be included as eligible for universal support under Section 254(h)(1). In some cases, the marketplace may be able to meet additional service needs for more advanced services without intervention of the Commission. However, in order to enhance the development of more advanced services on a faster