

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

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

RECOMMENDED DECISION

Adopted: November 7, 1996

Released: November 8, 1996

By the Federal-State Joint Board (Chairman Hundt and Commissioners Johnson, Nelson, and Ness, and the Honorable Martha Hogerty issuing separate statements; Commissioners McClure, Schoenfelder, and Chong concurring in part and dissenting in part and issuing separate statements):

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I. INTRODUCTION

1. The Telecommunications Act of 1996 (1996 Act)¹ fundamentally changes telecommunications regulation. It replaces the paradigm of government-encouraged monopolies with one in which federal and state governments work in concert to promote efficient competition and to remove outdated entry barriers and regulations that protect monopolies.² At the same time, the statute directs the Commission and the states to work together to preserve and advance universal service, in ways consistent with the new, competitive paradigm. The statute directed the Commission to convene this Federal-State Joint Board to recommend changes to the Commission's existing universal service support mechanisms.³ In particular, Congress directed the Joint Board to recommend, and the Commission to adopt, a new set of universal service support mechanisms that are explicit and sufficient to advance the universal service principles enumerated in the statute and such other principles as the Joint Board and the Commission believe are necessary and appropriate for the protection of the public interest, convenience and necessity, and are consistent with the 1996 Act.

2. In this Recommended Decision, we propose rules and policies that will create such an effective universal service support system to "ensure that the goals of affordable service and access to advanced services are met by means that enhance, rather than distort, competition."⁴ We recommend replacing or modifying existing support mechanisms that are inconsistent with the pro-competitive, deregulatory spirit of the 1996 Act, substantially reshaping virtually all remaining mechanisms, and adopting certain new support mechanisms. Our recommendations are fashioned to ensure quality telecommunications services at

¹ 1996 Act, Pub. L. No. 104-104, 110 Stat. 56. The 1996 Act amends the Communications Act of 1934, 47 U.S.C. §§ 151 *et. seq.* Hereinafter, all citations to the 1996 Act will be to the relevant sections of the United States Code unless otherwise noted.

² *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, *Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, CC Docket No. 95-185, First Report and Order, FCC 96-235 (rel. Aug. 29, 1996) (*Local Competition Order*) at para. 5. On October 15, 1996, the 8th Circuit issued an order staying the pricing provisions and the "pick and choose" rule of the *Local Competition Order*. See *Iowa Utilities Board v. FCC*, 1996 WL 589204 (8th Cir. 1996). The FCC's initial appeal of the 8th Circuit's decision was denied. Acting on a motion filed by AirTouch, the 8th Circuit lifted a small portion of its stay on November 1, 1996. The 8th Circuit reinstated the FCC's "reciprocal compensation" requirements, which dictate how LECs and wireless carriers are compensated for transporting and terminating each other's traffic.

³ 47 U.S.C. § 254(a)(1). In the Joint Explanatory Statement, the Joint Board was directed to "thoroughly review the existing system of federal universal service support." S. Rep. No. 230, 104th Cong., 2d Sess. 131 (1996) (Joint Explanatory Statement).

⁴ *Local Competition Order* at para. 7.

affordable rates to consumers, including low-income consumers, in all regions of the nation, including rural, insular, and high cost areas. Rural health care providers should have access to telecommunications services at rates comparable to those in urban areas. Libraries and elementary and secondary schools will be able to purchase telecommunications services at discounted rates. As required by the 1996 Act, these universal service mechanisms will be explicit, specific, predictable and sufficient to preserve and advance universal service and will be supported by equitable and nondiscriminatory contributions by all telecommunications carriers that provide interstate telecommunications services.

II. EXECUTIVE SUMMARY

A. Principles

3. Section 254(b) sets forth the principles that are to guide this Joint Board and the Commission in establishing policies for the preservation of universal service. These principles include quality and rates, access to advanced services, access in rural and high cost areas, equitable and nondiscriminatory contributions, specific and predictable support mechanisms, and access to advanced telecommunications services for schools, health care, and libraries.⁵ In addition, the Joint Board and Commission may consider such "additional principles" as are necessary and appropriate for the protection of the public interest, convenience and necessity and are consistent with the 1996 Act.⁶ In addition to the principles specified in section 254(b), the Joint Board recommends that the Commission also be guided by the principle of "competitive neutrality" in that universal service support mechanisms and rules should be applied in a competitively neutral manner.

B. Definition of Universal Service

4. Section 254(c)(1) requires the Joint Board to recommend a definition of telecommunications services that will be supported by universal service support mechanisms. The Joint Board recommends that the definition of supportable services include: voice grade access to the public switched network, with the ability to place and receive calls; touch-tone or dual tone multi-frequency signalling (DTMF) or its functional equivalent; single-party service; access to emergency services; access to operator services; access to interexchange services; and access to directory assistance. In addition, the Joint Board recommends that eligible carriers receive support for the provision of toll blocking and limitation services for low income consumers and access to enhanced 911, to the extent carriers are capable of providing such access, and, with respect to enhanced 911, where local communities request such access. The Joint Board suggests that service to the initial primary residence connection

⁵ 47 U.S.C. § 254(b).

⁶ 47 U.S.C. § 254(b)(7).

should be fully supported by universal service support mechanisms and that service to single-connection businesses should be supported at a reduced rate. The Joint Board, pursuant to section 214(e)(1), also recommends that only carriers that provide all of the services within the definition of universal service be eligible to receive support, with a very limited and temporary exception for carriers that are not currently providing single-party service.

C. Affordability

5. The Joint Board recommends that states monitor rates and non-rate factors, such as subscribership levels, to ensure affordability. The Joint Board finds that there is a correlation between affordability and subscribership and recommends further joint examination by the Commission and the states of the factors that may contribute to low penetration rates in states where the subscribership levels are particularly low.

D. Carriers Eligible for Universal Service Support

6. The Joint Board recommends that the statutory criteria set out in section 214(e) be used to determine which carriers are designated eligible telecommunications carriers. Pursuant to section 214(e), carriers must offer all the services supported by the federal universal service support mechanism throughout their service areas to be eligible for universal service support. Specifically, section 214(e) requires that, throughout its designated service area, an eligible carrier shall: (1) offer all of the services that are supported by the federal universal service mechanism; (2) offer such services using its own facilities or a combination of its own facilities and resale of another carrier's services; and (3) advertise the availability and charges for such services. In the case of areas served by rural telephone companies, we recommend that such a company's existing study area be used as the designated service area. With respect to areas served by non-rural carriers, the states have primary responsibility for designating the service area. We recommend, however, that the service areas chosen by the states should not be unreasonably large.

E. High Cost Support

7. The Joint Board recommends a bifurcated system for determining the level of universal service support for telecommunications carriers. For non-rural telecommunications carriers, the level of support will be based on a proxy cost model, which calculates the cost of providing the supported services in a particular geographic area. Support for "rural telephone companies," as defined in section 153(37),⁷ however, will initially be based on embedded costs. Rural telephone companies will be permitted to calculate support levels using embedded costs for three years after large companies begin to use proxy cost models. Rural companies serving Alaska and insular areas⁸ will be permitted to employ embedded costs until further review. The level of support for non-rural carriers will be based on the difference between a benchmark amount and the cost of service determined by the proxy model. For rural companies, high cost assistance, Dial Equipment Minute (DEM) weighting and Long Term Support (LTS) benefits will be frozen on historical per-line amounts. The payment to the carrier may vary if the number of lines in service changes, but the per-line support will remain constant during the transition. The rural companies will then have a three-year transition period to shift to proxy cost models. In addition, the Joint Board recommends that the Commission, with state commission participation, further analyze the proxy cost models, currently in the record, so that a model can be created or adopted to determine universal service support.

F. Support for Low-Income Consumers

8. The Joint Board recommends that the Commission modify the Lifeline and Link Up programs to further competitive and technological neutrality. To that end, the Lifeline program should be de-linked from the subscriber line charge (SLC),⁹ and both programs should be funded through a mechanism consistent with sections 254(d) and (e). We further recommend that the Commission extend the Lifeline and Link Up programs

⁷ The term "rural telephone company" means a local exchange carrier operating entity to the extent that such entity- (A) provides common carrier service to any local exchange carrier study area that does not include either - (i) any incorporated place of 10,000 inhabitants or more, or any part thereof, based on the most recently available population statistics of the Bureau of the Census; or (ii) any territory, incorporated or unincorporated, included in an urbanized area, as defined by the Bureau of the Census as of August 10, 1993; (B) provides telephone exchange service, including exchange access, to fewer than 50,000 access lines; (C) provides telephone exchange service to any local exchange carrier study area with fewer than 100,000 access lines; or (D) has less than 15 percent of its access lines in communities of more than 50,000 on the date of enactment of the Telecommunications Act of 1996. 47 U.S.C. § 153(37).

⁸ The 1996 Act does not specifically define "insular areas," but Congress stated that insular areas would include areas such as the Pacific Island territories. Joint Explanatory Statement at 131.

⁹ For a description of the SLC, see section XII *infra*.

nationwide, including insular areas, and modify the state matching requirement. The Joint Board also recommends that low-income consumers have access to all of the designated services supported by universal service. We recommend prohibiting the disconnection of local service for non-payment of charges incurred for toll calls and providing support for voluntary toll blocking and toll limitation for Lifeline consumers. We also recommend that carriers be prohibited from requiring service deposits from Lifeline customers who elect toll-blocking services. We recognize that, although section 254(j) states "[n]othing in this section shall affect the collection, distribution, or administration of the Lifeline Assistance Program," the recommended changes to the Lifeline and LinkUp programs are necessary to make the programs consistent with certain specific provisions and the overall goals of the 1996 Act.

G. Support for Schools and Libraries

9. The Joint Board recommends that, consistent with section 254(h), all eligible schools and libraries should receive discounts of between 20 and 90 percent on all telecommunications services, Internet access, and internal connections, subject to a \$2.25 billion annual cap. In addition, any funds that are not disbursed in a given year may be carried forward and may be disbursed in subsequent years without regard to the cap. We find that this recommendation provides schools and libraries with the maximum flexibility to purchase the package of services they believe will meet their communications needs most effectively. We also conclude that economically disadvantaged schools and libraries, as well as schools and libraries located in high cost areas, should receive greater discounts to ensure that they have affordable access to telecommunications and information services. Further, we recommend that schools and libraries be required to comply with several self-certification requirements, designed to ensure that only eligible entities receive universal support and that they have adopted plans for securing access to all of the necessary supporting technologies needed to use the services purchased under section 254(h).

H. Support for Health Care Providers

10. Sections 254(c) and 254(h) add health care providers serving rural areas to the list of entities that may benefit from universal service support. The Joint Board finds insufficient information on the record to make a recommendation on the exact scope of services that should be supported for the benefit of rural health care providers and accordingly recommends that the Commission seek additional information on this subject prior to issuing final rules. The Joint Board further recommends that the Commission seek additional information on the costs that would be incurred in including distance-based charges, toll-free Internet access and public switched network upgrades in the list of services eligible for support. We also recommend that non-profit and public health care providers located in rural areas be able to obtain the telecommunications services that the Commission ultimately designates as eligible. Carriers providing a telecommunications service to a health care provider at a reduced rate should be entitled to treat the amount that the rate falls short of the

average rates for identical or similar services in the same rural area as a part of their universal service obligation. Alternatively, if the service is not offered in the area, carriers should be able to submit a cost-based rate for the service to the state commission for approval.

I. Interstate Subscriber Line Charges/Carrier Common Line Charges

11. Section 254(e) requires that universal service support be explicit. To further this objective, the Joint Board recommends removing LTS from Carrier Common Line (CCL) charges and making similar payments to current LTS recipients out of the new universal service support mechanism. We recommend that the current SLC cap not be increased. In the event that the Commission determines that the revenue base for assessing contributions to the new national universal service support mechanism by interstate telecommunications carriers should include all telecommunications revenue, including intrastate revenue, then we recommend that the Commission implement a downward adjustment in the SLC cap for primary residential and single-line business lines. If such a downward adjustment is made, we recommend that the reductions in CCL charges resulting from recovering LTS and pay telephone costs from other sources be apportioned equally between primary residential and single-line business subscribers, on the one hand, in lower SLCs, and interstate toll users, on the other, through lower CCL charges. The Joint Board makes no recommendation with respect to the CCL charge but recognizes that, whether or not the present usage-sensitive CCL charge represents universal service support, it is an inefficient mechanism for recovering incumbent local exchange carriers' (LECs') loop costs. One promising alternative would be to allow LECs to recover CCL charges from interexchange carriers (IXCs) on a non-traffic-sensitive, per-line basis from the presubscribed inter-LATA carrier (PIC). The charge could be billed directly to end users who choose not to select a PIC.

J. Administration

12. Section 254(d) states that all carriers that provide interstate telecommunications services must contribute to universal service support mechanisms. The Joint Board recommends that section 254(d) be codified into Commission rules and that the Commission issue a list of examples of interstate telecommunications services. The Joint Board recommends that contributions be based on carriers' gross telecommunications revenues net of payments to other carriers. The Joint Board recommends that support for schools, libraries and rural health care providers be based on both interstate and intrastate telecommunications revenues. We do not make a recommendation on the revenues base for support for high cost areas and low income consumers, but recommend that the Commission seek additional information and parties' comments regarding the funding base for these support programs. The Joint Board recommends that carriers whose contribution would be less than the cost of collecting the contribution be exempt from contribution under the *de minimis* exemption contained in section 254(d). The Joint Board also recommends that the Commission create a universal service advisory board to appoint and oversee a neutral, third party administrator of

the universal support mechanism.

III. PRINCIPLES

A. Overview

13. Section 254(b) of the 1996 Act requires that:

The Joint Board and the Commission shall base policies for the preservation and advancement of universal service on the following principles:

- (1) **QUALITY AND RATES.** -- Quality services should be available at just, reasonable and affordable rates.
- (2) **ACCESS TO ADVANCED SERVICES.** -- Access to advanced telecommunications and information services should be provided in all regions of the Nation.
- (3) **ACCESS IN RURAL AND HIGH COST AREAS.** -- Consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas.
- (4) **EQUITABLE AND NONDISCRIMINATORY CONTRIBUTIONS.** -- All providers of telecommunications services should make an equitable and nondiscriminatory contribution to the preservation and advancement of universal service.
- (5) **SPECIFIC AND PREDICTABLE SUPPORT MECHANISMS.** -- There should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service.
- (6) **ACCESS TO ADVANCED TELECOMMUNICATIONS**

SERVICES FOR SCHOOLS, HEALTH CARE, AND LIBRARIES. -- Elementary and secondary schools and classrooms, health care providers, and libraries should have access to advanced telecommunications services as described in subsection (h).

(7) ADDITIONAL PRINCIPLES. -- Such other principles as the Joint Board and the Commission determine are necessary and appropriate for the protection of the public interest, convenience, and necessity and are consistent with this Act.¹⁰

In light of section 254(b)(7), the Notice of Proposed Rulemaking and Order Establishing a Joint Board (NPRM) invited interested parties to propose additional principles relevant to the choice of services that receive universal service support.¹¹

B. Comments

14. 1996 Act Principles. Commenters generally support the seven guiding principles identified under the Act, with some commenters stating various preferences for prioritization of those goals.¹² New York DPS and others stress the goal of providing quality service at reasonable rates during the transition to a competitive market.¹³ MFS contends that support must be explicit, specific, predictable, sufficient, and competitively neutral.¹⁴ Others emphasize those goals related to access to services.¹⁵

15. In addition to the goals previously identified, numerous comments were filed regarding additional principles that should guide the Commission when addressing universal

¹⁰ 47 U.S.C. § 254(b).

¹¹ *In the Matter of Federal-State Joint Board on Universal Service*, Notice of Proposed Rulemaking and Order Establishing a Joint Board, CC Docket No. 96-45, FCC 96-93 (rel. March 8, 1996) (NPRM) at paras. 4, 8.

¹² Farmers Tel. comments at 1; Ft. Mojave Telecom. comments at 2; GVNW comments at 18; Montana PSC comments at 2. All references in this Recommended Decision to commenters' names are abbreviated. For a list of all commenters' full names, see Appendices A-E.

¹³ Farmers Tel. comments at 1; New York DPS comments at 1; OPC-DC comments at 10-11; Texas OPUC comments at 2-4.

¹⁴ See CompTel comments at 8 (discussing the need for explicit funding); MFS comments at 2.

¹⁵ CWA comments at 2; Farmers Tel. comments at 1; GVNW comments at 18 (discussing access to services in rural and high cost areas); Oklahoma CC comments at 4; People For comments at 2-3.

service issues.¹⁶

16. Competitive Neutrality. A large number of commenters addressing this issue advocate adopting competitively neutral distribution of universal service support as a principle.¹⁷ They cite congressional intent to promote competition in the advancement of telecommunications services.¹⁸ Many commenters also refer to the increased economic efficiency and decreased regulatory burden that stem from a competitive marketplace.¹⁹ Information Industry Ass'n argues that the 1996 Act mandates competitively neutral universal service support mechanisms that are more "competitive, explicit, and efficient" than those currently in place.²⁰ Several commenters advocate inclusion of technological neutrality as a concept related to the principle of competitive neutrality.²¹ They contend that the Commission should avoid defining any particular service or technology that must be available and supported by universal service support mechanisms and allow the marketplace to direct development of technology.²²

17. Those opposed to establishing a principle of competitive neutrality contend that Congress also recognized that competitive neutrality is not always in the public interest.²³ They assert that competition has not always benefited those segments of society that universal service is intended to support, particularly in rural areas where there may be only one carrier.²⁴ Telec Consulting expresses concern that, by encouraging new entry, competitive neutrality could create "competition for competition's sake" that would require local markets to support the infrastructure of competing companies when such investment may be

¹⁶ See 47 U.S.C. § 254(b)(7) regarding additional principles.

¹⁷ GSA comments at 3; MCI comments at 9-10; Oregon PUC comments at 4; Alaska Tel. reply comments at 6; NCTA reply comments at 4-6.

¹⁸ Joint Explanatory Statement at 113.

¹⁹ CompuServe comments at 4-5; GSA comments at 3; Information Industry Ass'n comments at 2; Washington UTC comments at 5.

²⁰ Information Industry Ass'n comments at 5.

²¹ CWA comments at 2; ARC reply comments at 2; NPTN reply comments at 2, 7.

²² Ameritech comments at 15; Netscape comments at 22.

²³ RTC comments at 4-5.

²⁴ ITC comments at 2; RTC comments at 5; SDITC reply comments at 9-10.

duplicative and inefficient.²⁵ Fred Williamson states that regulators should respect the "social contract" whereby regulators and legislators encouraged or ordered network and infrastructure improvements under the promise of fair, equitable, stable and predictable recovery of investment and related costs. Those who invested in the public switched telephone network and infrastructure, they argue, did so in the expectation that they would recover a reasonable rate of return on that investment, and nothing in the 1996 Act revokes those regulatory or capital recovery principles.²⁶ They express concern that a principle establishing competitively neutral distribution would prevent carriers from recovering such investments.

18. Americans with Disabilities. Some commenters urge the Commission to address explicitly the issues faced by Americans with disabilities within the provisions of section 254(b)(7).²⁷ They contend that the 1996 Act intended the special needs of individuals with disabilities be addressed and the public interest be served by inclusion of a recognition of those with special needs within the principles of universal service.²⁸ Commenters contend that individuals with disabilities are often among the lowest income groups and require special equipment to gain access to telecommunications services at home and in classrooms, often at substantial additional expense.²⁹ NAD states that access to telecommunications equipment and services is often a necessity for Americans with disabilities in their employment and education activities.³⁰ NAD further contends that, while individuals with disabilities are covered by section 255, that in no way lessens the responsibility of the Joint Board and the Commission to ensure that individuals with disabilities benefit from universal service provisions.³¹ NAD cites a history of federal legislation, such as the Americans with Disabilities Act, as evidence of congressional intent to ensure that persons with disabilities receive access to telecommunications services.³²

19. Additional Protection for Specific Groups. West Virginia Consumer Advocate contends that concern for, and protection of, low-income consumers and those in rural,

²⁵ Telec Consulting comments at 11.

²⁶ Fred Williamson comments at 3, 5, 9-10, 23-24.

²⁷ Council of Organizational Representatives reply comments at 3-6; NAD reply comments at iv and 4-8.

²⁸ NAD reply comments at 4.

²⁹ Council for Organizational Representatives reply comments at 6-9; NAD reply comments at 8-9; United Cerebral Palsy Ass'n reply comments at 3.

³⁰ NAD reply comments at iv.

³¹ NAD reply comments at 4.

³² NAD reply comments at 4-8.

insular, and high cost areas should be explicitly set forth as a basic principle of universal service.³³ Catholic Conference contends that the homeless and migrant workers should be given special consideration because they have no access to residential telephones.³⁴ Some commenters, while supportive of universal service support to low-income consumers, contend that the universal service fund is a method of advancing public policy goals and disbursement should not be limited solely to economically disadvantaged individuals.³⁵ They argue the relevant underlying principle is that rates for all subscribers should be just, reasonable and affordable.³⁶ Benton suggests that, as an additional principle, the Joint Board and the Commission should "recognize the cost of not getting all citizens connected" with telecommunications services as they develop universal service policies.³⁷

20. Schools and Libraries. La Raza suggests that allowing community-based organizations providing educational, health, and literary services to receive the same full and equal access to advanced services as libraries and schools should be a principle that stems from either section 254(b)(6) or (b)(7).³⁸

21. Other Suggested Principles. Oregon PUC contends that "administrative simplicity" should be an additional principle.³⁹ PULP suggests recognition of an additional principle that permits users to subscribe to a bundle of basic "core" network services that cannot be tied to other services.⁴⁰ Bar of New York, arguing that the provision in the 1996 Act regarding access to advanced services is too general, advocates an additional principle that is expressly supportive of access to interactive services.⁴¹ CSE Foundation suggests that the Commission adopt principles stating that "all subsidies should be simple, direct and explicit" and "contributions should be clearly specified and apparent to consumers."⁴²

³³ West Virginia Consumer Advocate comments at 6.

³⁴ Catholic Conference comments at 21.

³⁵ Louisiana PSC comments at 6; United Church of Christ comments at 8.

³⁶ AARP comments at 14.

³⁷ Benton comments at 2.

³⁸ La Raza reply comments at 8-9.

³⁹ Oregon PUC comments at 5.

⁴⁰ PULP comments at 4.

⁴¹ Bar of New York comments at 2.

⁴² CSE Foundation reply comments at 2-3.

C. Discussion

22. We recommend that policy on universal service should be a fair and reasonable balance of all of those principles identified in section 254(b) and the additional principle we identify in this section. We recognize, however, that our primary responsibility on this matter is to ensure that consumers throughout the Nation are not harmed and are benefited under our recommendation. To this end, we agree with the New York DPS and others that promotion of any one goal or principle in this proceeding should be tempered by a commitment to ensure quality services at just, reasonable, and affordable rates in all areas of the Nation, for those services that meet the section 254(c)(1) criteria.

23. We recommend that the Commission also establish "competitive neutrality" as an additional principle upon which it shall base policies for the preservation and advancement of universal service, pursuant to section 254(b)(7). We ask that the Commission define the principle in the context of determining universal service support, as:

"COMPETITIVE NEUTRALITY -- Universal service support mechanisms and rules should be applied in a competitively neutral manner."

We believe this recommendation is consistent with the concept of competitive neutral contribution embodied in section 254(b)(4) and the explicit requirement of equitable and nondiscriminatory contributions in section 254(d), where Congress clearly articulated that all providers of interstate telecommunications shall contribute on an "equitable and nondiscriminatory" basis to universal service support mechanisms. We also note that section 254(h)(2) requires the Commission to establish competitively neutral rules relating to access to advanced telecommunications and information services for schools, health care providers and libraries. Competitive neutrality is also embodied in section 254(e)'s requirement that universal service support be explicit, section 254(f)'s requirement that state universal service contributions be equitable and nondiscriminatory and section 214(e)'s requirement that any carrier can be an eligible telecommunications carrier provided that it meets certain statutory criteria. We also believe that the principle of competitive neutrality encompasses the concept of technological neutrality by allowing the marketplace to direct the development and growth of technology and avoiding endorsement of potentially obsolete services. In recognizing the concept of technological neutrality, we are not guaranteeing the success of any technology for all purposes supported through universal service support mechanisms but merely stating that universal service support should not be biased toward any particular technologies. We further believe that the principle of competitive neutrality should be applied to each and every recipient and contributor to the universal service support mechanisms, regardless of size, status or geographic location. We find that the competitively neutral collection and distribution of funds and determination of eligibility in the universal service support mechanism is consistent with congressional intent "to provide for a pro-competitive, de-

regulatory national policy framework."⁴³

24. Given the provisions elsewhere in the law that require access to telecommunications equipment and services by people with disabilities, we recommend that the Commission not adopt specific principles related to telecommunications users with disabilities in this universal service proceeding.⁴⁴ We note that persons with disabilities who qualify under the low-income provisions of section 254(b)(3) will benefit from universal service support to low-income consumers. We recognize that access to health care and education is vital for this population, and we believe that individuals with disabilities will be among those who will benefit from the provisions of section 254 regarding these services. We agree with NAD that it is evident that Congress intended to ensure that individuals with disabilities have access to telecommunications services. We note that Congress specifically adopted section 255, which requires all providers of telecommunications services and manufacturers of telecommunications equipment and customer premises equipment (CPE) to ensure that their equipment and services are accessible to individuals with disabilities, if readily achievable.⁴⁵ We also note that interstate telecommunications relay service (TRS),⁴⁶ which allows persons with hearing or speech disabilities to communicate with persons who do not have such impairments through the use of a text telephone (TTY), is funded separately from universal service mechanisms. We conclude that there is no need to recommend additional universal service principles for this population at this time.

25. With respect to the requests for additional principles designed to promote the welfare of other specific groups such as subscribers in rural areas and customers with low incomes, we do not recommend the establishment of any additional principles. Section 254(b)(3) explicitly provides that customers in rural, insular and high cost areas should have access to telecommunications services that are reasonably comparable to those services provided in urban areas and at similar rates to those charge in urban areas.⁴⁷ There is no evidence that Congress intended this Joint Board and the Commission to take additional steps to segment consumers into additional categories. We agree with those commenters that point to the underlying principle requiring "just, reasonable and affordable rates" is applicable to all consumers.

26. We do not agree with La Raza that community-oriented organizations that

⁴³ Joint Explanatory Statement at 113.

⁴⁴ 47 U.S.C. §§ 225, 255.

⁴⁵ 47 U.S.C. § 255(b) - (c).

⁴⁶ 47 U.S.C. § 225.

⁴⁷ 47 U.S.C. § 254(b)(3).

provide services similar to those provided by schools and libraries should receive the discounts and benefits statutorily accorded to schools and libraries. The 1996 Act specifically defines the categories of institutions that are eligible for discounted telecommunications and information services, and we find no evidence that Congress intended this Joint Board or the Commission to supplement the 1996 Act's definition.⁴⁸

27. Finally, although this Joint Board supports the concept of administrative simplicity, we do not recommend that the Commission formally adopt this concept as a principle. Section 254(b)(5) provides that support mechanisms should be "[s]pecific and *predictable*."⁴⁹ We find that this principle encompasses administrative simplicity. In addition, we decline to recommend that access to the select services commenters have proposed become guiding principles for the Commission's universal service policies. Instead, we consider whether these services, consistent with the principles of the 1996 Act, should be included in the definition of universal service.⁵⁰ In particular, we disagree with the Bar of New York's proposal that universal service definition be altered to include access to interactive services as a principle. We recommend that this concept should not become a principle. Section 254(c)(1)(A)-(D) set forth the specific principles that Congress intends this Joint Board and the Commission to take into consideration when defining universal service and we believe the definition we recommend herein is consistent with these standards. Accordingly, we decline to recommend the additional principles suggested by these commenters.

IV. DEFINITION OF UNIVERSAL SERVICE: WHAT SERVICES TO SUPPORT

A. Overview

28. Section 254(c) requires the Commission and the Joint Board to define the set of services that should be supported by federal universal service support mechanisms. In this section, taking into consideration all of the goals and principles embodied in section 254 and the 1996 Act, we recommend the services that should be included in the general definition of universal service, and also recommend certain services to be supported for low-income consumers. We also consider the funding implications for carriers who are unable to provide one or more of the designated services. In addition, this section contains our recommendation regarding whether universal service support should be limited to designated services provided to identified classes of customers in high cost areas or whether it should cover designated services provided to all residential and business customers in high cost areas. Because the 1996 Act specifies that "quality services" must be available, we examine the ways to ensure

⁴⁸ See 47 U.S.C. § 254(h)(5)(C).

⁴⁹ 47 U.S.C. 254(b)(5) (emphasis added).

⁵⁰ See *infra* section IV.

the quality of services provided by eligible carriers, and provide our recommendation on how the Commission should undertake this responsibility. Finally, in this section, we provide our recommendation regarding the frequency with which the Commission should revisit the definition of universal service in order to keep pace with advances in technology.

B. Services Proposed in the NPRM

1. Background

29. Section 254(c)(1) describes "[u]niversal service [as] an evolving level of telecommunications services that the Commission shall establish periodically under this section, taking into account advances in telecommunications and information technologies and services".⁵¹ In addition, section 254(c)(2) states that "[t]he Joint Board may, from time to time, recommend to the Commission modifications in the definition of the services that are supported by Federal universal service support mechanisms."⁵² Moreover, the 1996 Act's legislative history provides: "[t]he Commission is given specific authority to alter the definition from time to time" in order to "take into account advances in telecommunications and information technology."⁵³ Accordingly, the NPRM recognized that the definition of services adopted in this proceeding will be reviewed periodically.⁵⁴

30. Section 254(c)(1)(A)-(D) requires the Joint Board and Commission to "consider the extent to which . . . telecommunications services" included in the definition of universal service:

- (1) are essential to education, public health, or public safety;
- (2) have, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers;
- (3) are being deployed in public telecommunications networks by telecommunications carriers; and
- (4) are consistent with the public interest, convenience and necessity.⁵⁵

⁵¹ 47 U.S.C. § 254(c)(1).

⁵² 47 U.S.C. § 254(c)(2).

⁵³ Joint Explanatory Statement at 131.

⁵⁴ NPRM at para. 2.

⁵⁵ 47 U.S.C. § 254(c)(1)(A)-(D).

The legislative history of this section instructs that "[t]he definition . . . should be based on a consideration of the four criteria set forth in the subsection."⁵⁶ Thus, in the NPRM, the Commission interpreted the language of section 254(c)(1)(A)-(D) as manifesting congressional intent that the Joint Board and the Commission consider all four criteria when deciding what services to support. Moreover, in the NPRM, the Commission also interpreted this language - particularly the use of the word "consider" -- to allow the Joint Board and the Commission to include services that do not necessarily meet all four criteria.⁵⁷ The Commission asked for comment and the Joint Board's recommendation on these interpretations.⁵⁸

31. Section 254(b) establishes the principle that "consumers in all regions of the Nation . . . should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas. . . ."⁵⁹ In the NPRM, the Commission sought comment on whether the following services should be designated for universal service support: voice grade access to the public switched network, with the ability to place and receive calls; touch-tone; single-party service; access to emergency services; and access to operator services.⁶⁰ The NPRM also asked whether providing universal service support for these services will promote competitive and technological neutrality and further the principles set forth in sections 254(b) and 254(c)(1).⁶¹

2. Comments

32. General Comments. As a preliminary matter, we note that several commenters agree that a service need not meet all four criteria in order to be supported through universal service support mechanisms.⁶² For instance, Florida PSC strongly endorses the FCC's interpretation that the use of the verb "consider" allows selection of services for support that

⁵⁶ Joint Explanatory Statement at 131.

⁵⁷ NPRM at para. 9.

⁵⁸ *Id.*

⁵⁹ 47 U.S.C. § 254(b).

⁶⁰ NPRM at paras. 16, 18-22.

⁶¹ *Id.* at paras. 15, 17.

⁶² *See, e.g.*, Florida PSC comments at 4; LINCT Coalition comments at 2 (stating "all four goals need not be met"); Oregon PUC comments at 5 (urging the FCC and the Joint Board to interpret the four criteria in a way that does not require that every criterion be met before a service can be included in the definition of universal service); RTC comments at 7-8.

do not meet all four criteria.⁶³ In addition, RTC argues that "a service need not satisfy all four criteria" for inclusion in the federal universal service definition.⁶⁴ Some parties, however, disagree.⁶⁵ Georgia PSC argues that all four principles must be met before designating a service for support, and that a failure to do so could be "an abuse of discretion by the Commission, arbitrary and capricious, and a violation of the intent of Congress."⁶⁶ NCTA, USTA and Florida Cable maintain that the use of the conjunction "and," rather than the disjunctive word "or," indicates a service must meet each and all of the statutory criteria to be included within the definition of universal service.⁶⁷ Florida Cable argues that, at a minimum, all of the criteria must be considered when determining whether access to a service should be guaranteed.⁶⁸

33. On another matter of statutory interpretation, a few commenters argue that the 1996 Act's statutory language and legislative history indicate that section 254(c)(1) does not permit universal service support for information services, but expressly limits support to telecommunications services.⁶⁹ Specifically, these parties construe the 1996 Act's definition of "telecommunications" as excluding those services that "change . . . the form or content of the information as sent and received."⁷⁰ Further, these parties cite legislative history to bolster their arguments that universal service support must be limited to telecommunications services.⁷¹

34. Defining Universal Service. Some commenters disagree with the NPRM's

⁶³ Florida PSC comments at 4.

⁶⁴ RTC comments at 7-8.

⁶⁵ See Florida Cable comments at 5; Georgia PSC comments at 6; NCTA comments at 4; USTA comments at 5.

⁶⁶ Georgia PSC comments at 6.

⁶⁷ Florida Cable comments at 5; NCTA comments at 4; USTA comments at 5.

⁶⁸ Florida Cable comments at 5.

⁶⁹ ITA/EMA comments at 5-10; TCI comments at 5-6.

⁷⁰ ITA/EMA comments at 6 (citing 47 U.S.C. § 153(43)). See also TCI comments at 5-6 (citing 47 U.S.C. § 153(43)).

⁷¹ ITA/EMA comments at 6-7 (noting that Congress adopted the Senate's definition of "telecommunications" which excludes information services and citing H.R. Conf. Rep. No. 458, 104th Cong., 2d Sess. 116 (1996)); TCI comments at 6-7 (noting that Congress rejected an earlier version of a Senate bill which included information services within the description of universal service and citing S. 1822, 103d Cong. 2d Sess. § 102(a) (1994)).

approach to defining universal service.⁷² Washington UTC, for example, argues that listing specific services to support "freeze[s] universal service policy in the technology and services of 1996."⁷³ Washington UTC proposes instead that a description of functionalities and access, rather than services, be used to define universal service.⁷⁴ Alliance for Public Technology also asserts that defining universal service in terms of specific services is unworkable.⁷⁵ Instead, Alliance for Public Technology recommends that carriers choose the amount of bandwidth they will offer.⁷⁶ Carriers would then earn 100 percent of the maximum support available for maximum bandwidth and lesser percentages for lesser bandwidth offerings.⁷⁷ Other parties argue that access to services, but not any service itself, should be eligible for support.⁷⁸

35. A cross-section of commenters -- and most of the commenters that addressed this issue -- including LECs, IXCs, consumer groups and state PUCs, favor designating all five services for federal universal service support for purposes of section 254(c)(1).⁷⁹ Alaska PUC, for example, argues that a substantial majority of customers subscribe to each of these and they are commonly deployed in the public telecommunications network.⁸⁰ Washington UTC, however, advises the Joint Board to allow the market to determine the definition of universal service in order to avoid creating barriers to entry by requiring the provision of certain services.⁸¹ Similarly, Western opposes requiring dialtone, which, it states, effectively

⁷² See, e.g., Georgia PSC comments at 5; Washington UTC comments at 7; Alliance for Public Technology further comments at 4.

⁷³ Washington UTC comments at 7.

⁷⁴ *Id.*

⁷⁵ Alliance for Public Technology further comments at 4.

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ See, e.g., Georgia PSC comments at 5; CompTel further comments at 8-9.

⁷⁹ See, e.g., 360 comments at 3; Ameritech comments at 6; Florida PSC comments at 6; GTE comments at 2; ITA/EMA comments at 4; Michigan Consumer Federation comments at 20; NCTA comments at 5; PULP comments at 9; SBA comments at 5; SWBT comments at 8; Sprint comments at 6; Time Warner comments at 4; U S West comments at 5; Western comments at 7.

⁸⁰ Alaska PUC comments at 2.

⁸¹ Washington UTC comments at 9.

discriminates against wireless carriers.⁸² In contrast, some commenters submit that each of these services can be offered by cellular providers and, thus, they do not provide a barrier to entry for cellular carriers.⁸³

36. Voice Grade Access to the Public Switched Network. Parties that address this issue overwhelmingly favor supporting voice grade access to the public switched network with the ability to place and receive calls.⁸⁴ Georgia PSC, however, argues that voice grade access is a group of services rather than one service, and that some of these services will qualify for support while others will not.⁸⁵

37. Several commenters argue that usage of, and not merely access to, the local network should be supported.⁸⁶ For example, Time Warner states that a basic level of local usage should be included within the definition of universal service because, it argues, the ability to place calls is equally, if not more, important than the ability to receive calls.⁸⁷ Pennsylvania PUC interprets the "single-party service" component of the NPRM's proposed core services to include local service usage.⁸⁸ Illinois CC, in contrast, opposes universal service support for local usage.⁸⁹

38. In addition, Florida PSC proposes supporting flat-rate service and unlimited calling within a subscriber's local calling area.⁹⁰ Some parties note that a large number of

⁸² Western comments at 8 (describing dial tone as "a frequency tone audible to a caller").

⁸³ See, e.g., Commnet Cellular reply comments at 8. See also 360 comments at 4.

⁸⁴ See, e.g., Bell South comments at 5; Florida PSC comments at 6; MCI comments at 3; Michigan Consumer Federation comments at 20; North Dakota PSC comments at 1; Rural Iowa Indep. Tel. Ass'n comments at 2; SWBT comments at 8; AT&T reply comments at 17; NTIA reply comments at 7.

⁸⁵ Georgia PSC comments at 7 (arguing that single party wireline service qualifies for universal service support, but the Commission is prohibited from providing universal service support for cellular service).

⁸⁶ AARP comments at 9; Edgemont comments at 12; Florida PSC comments at 6; LINCT Coalition comments at 3-4; MCI comments at 3; People For comments at 11; Texas PSC comments at 8; Time Warner comments at 4; CPI reply comments at 5 n.10; NTIA reply comments at 7 n.14; Ohio Consumers' Council reply comments at 12-13; Pennsylvania PUC reply comments at 6; Citizens Utilities further comments at 5.

⁸⁷ Time Warner further comments at 12.

⁸⁸ Pennsylvania PUC reply comments at 3-4.

⁸⁹ Illinois CC comments at 4. See also CSE Foundation reply comments at 4; AirTouch further comments at 5.

⁹⁰ Florida PSC comments at 6. See also Texas OPUC comments at 16.

consumers consistently choose flat-rate service over measured-rate service.⁹¹ California PUC advocates a support mechanism that would allow consumers to choose between flat- or measured-rate service.⁹² CSE Foundation, in contrast, states that mandating flat-rate service for all subscribers restricts their options, because, it argues, some consumers may desire more limited service at a price lower than that of flat-rate service.⁹³

39. Some parties favor using universal service funding to ensure that consumers may access their "community of interest" or area in which essential public services are located, by placing local calls.⁹⁴ Various commenters note that subscribers in rural areas must often place toll calls in order to access essential services such as schools, health care providers and local government offices.⁹⁵

40. Touch-Tone.⁹⁶ Parties express widespread support for providing universal service support for touch tone service.⁹⁷ SBA, for example, maintains that touch-tone service plays an important role in allowing customers to connect to a variety of voice mail systems, information services, and product-ordering services.⁹⁸ In addition, Citizens Utilities contends that touch-tone service meets the statutory criteria of section 254(c)(1)(B), (C) and (D).⁹⁹ Bell Atlantic, however, argues that the decision to provide support for touch-tone service is a

⁹¹ AARP comments at 9; Georgia PSC comments at 8-9; Ohio Consumers' Council comments at 13.

⁹² California PUC comments at 6.

⁹³ CSE Foundation reply comments at 4.

⁹⁴ See, e.g., Colorado PUC comments at 3; Louisiana PSC comments at 3; Michigan Consumer Federation comments at 20; Montana PSC comments at 4; New Jersey Advocate comments at 8; OITA-WITA comments at 3-5.

⁹⁵ See, e.g., AARP comments at 18; Century comments at 4-6; Keystone comments at 8; Montana PSC comments at 4; Rural Iowa Indep. Tel. Coalition comments at 3; Telec Consulting comments at 5; Minnesota Indep. Coalition reply comments at 3-4; Alaska Tel. further comments at 5; CFA further comments at 2-3; Western Alliance further comments at 2.

⁹⁶ Florida PSC suggests the Joint Board refer to this function as "dual tone multi-frequency" (DTMF) 116 rather than touch-tone. Florida PSC comments at 6.

⁹⁷ See, e.g., Bell Atlantic comments at 7; Farmers Tel. comments at 2; Michigan Consumer Federation comments at 20; Missouri PSC comments at 4; TCA comments at 5; NENA reply comments at 1; NTIA reply comments at 7.

⁹⁸ SBA comments at 5-6.

⁹⁹ Citizens Utilities comments at 6 (citing 47 U.S.C. § 254(c)(1)(B)-(D)).

matter that should be left to the states.¹⁰⁰

41. Single-Party Service. Many parties support including single-party service in the definition of universal service.¹⁰¹ Bell Atlantic, for example, argues that single-party service meets all four of the criteria of section 254(c)(1).¹⁰² Bar of New York argues that single-party service is essential because it is recognized to be a prerequisite for Internet access.¹⁰³ SWBT contends that a transition period is required to permit upgrades that transform multi-party service to single-party service.¹⁰⁴ Washington UTC, however, states that in some cases, converting to single-party service might be cost-prohibitive.¹⁰⁵

42. Access to Emergency Service. Several commenters favor providing universal service support for access to emergency services, where the actual service, i.e., Public Safety Answering Point (PSAP), is provided by local authorities.¹⁰⁶ Wisconsin PSC recommends that the Joint Board and Commission carefully define "access to emergency services" to indicate whether this term means the ability to place calls to these numbers or whether it includes the specialized call routing network that delivers calls to the designated government-chosen PSAP.¹⁰⁷ Michigan Consumer Federation argues that emergency services, and not merely access to emergency services such as 911, should be offered at no cost.¹⁰⁸ Some parties assert that carriers should not receive universal service support for 911 service if existing state funding mechanisms already provide support.¹⁰⁹ Texas Emergency suggests that carriers

¹⁰⁰ Bell Atlantic comments at 8.

¹⁰¹ See, e.g., Bell Atlantic comments at 7; Florida PSC comments at 6; Frontier comments at 2; Georgia PSC comments at 7; NASUCA comments at 17-18; CPI reply comments at 6.

¹⁰² Bell Atlantic comments at 7 (citing 47 U.S.C. § 254(c)(1)).

¹⁰³ Bar of New York comments at 14.

¹⁰⁴ SWBT comments at 8.

¹⁰⁵ Washington UTC comments at 8.

¹⁰⁶ Oregon PUC comments at 5; SWBT comments at 8; Texas Emergency reply comments at 1-2.

¹⁰⁷ Wisconsin PSC comments at 8.

¹⁰⁸ Michigan Consumer Federation comments at 20.

¹⁰⁹ See Ameritech comments at 7 (stating that support should be provided for the transmission facility that connects a subscriber to the location manned by public safety personnel, but not for the equipment used by those personnel or their training, as these costs are generally supported by tax revenues); Missouri PSC comments at 4-5 (noting that the Commission must distinguish between the cost of the switch necessary for E-911 and the cost of the service itself because Missourians already pay taxes to cover the cost of the service).

seeking support should certify that 911 service is being provided by the local government in geographic areas they serve and that network costs are not already being recovered by the rates paid by local government authorities for 911 service.¹¹⁰ Georgia PSC believes that access to emergency services should be delegated to the states.¹¹¹

43. Some commenters recommend supporting enhanced 911 (E911) service.¹¹² Alabama-Mississippi Tel. Ass'n, however, contends that most states have their own separate funding mechanisms for E911 and, therefore, E911 should not be supported by the universal service fund at this time.¹¹³ Comnet Cellular asserts that consideration of support for E911 should wait until the Commission concludes its existing public safety proceeding to determine whether to impose E911 requirements on wireless carriers.¹¹⁴

44. Access to Operator Service. Various parties favor supporting access to operator services.¹¹⁵ Bell Atlantic, for example, contends that access to operator service meets each of the criteria set forth in section 254(c)(1), and therefore, it argues, should be supported through universal service mechanisms.¹¹⁶ Georgia PSC, in contrast, submits that access to operator services is competitive in Georgia and does not require federal universal service support.¹¹⁷

3. Discussion

45. As previously mentioned, the 1996 Act defines "telecommunications services"

¹¹⁰ Texas Emergency reply comments at 3.

¹¹¹ Georgia PSC comments at 7.

¹¹² Michigan Consumer Federation comments at 20; NENA comments at 2. E911 is a system wherein, when a wireline 911 call is placed in a region with E911 capability, the telephone number of the telephone from which the 911 call is made is passed to the LEC central office at which a database, usually maintained by the LEC, is then used to route the call to the most appropriate PSAP. The caller's telephone number and other information are transmitted to the PSAP along with the location of the telephone, as determined from LEC records. *See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, Report and Order and Further Notice of Proposed Rulemaking, FCC 96-264 (rel. July 26, 1996).

¹¹³ Alabama-Mississippi Tel. Ass'n comments at 3.

¹¹⁴ Comnet Cellular reply comments at 8 (*citing* Commission Docket No. 94-102).

¹¹⁵ *See, e.g.*, AT&T comments at 12; BellSouth comments at 5; Florida PSC comments at 6; Michigan Consumer Federation comments at 20; Cincinnati Bell reply comments at 3; LDDS reply comments at 7.

¹¹⁶ Bell Atlantic comments at 7 (*citing* 47 U.S.C. § 254(c)(1)(A)-(D)).

¹¹⁷ Georgia PSC comments at 7.