Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
Federal-State Joint Board on
Universal Service

CC Docket No. 96-45
(Report to Congress)

REPORT TO CONGRESS

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issuing separate statements; Commissioner Furchtgott-Roth dissenting and issuing a
statement)

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APPENDIX A  Parties Filing Comments

APPENDIX B  Parties Filing Reply Comments
1. On November 26, 1997, in a recent Appropriations Act, Congress directed the Commission to report to Congress on the Commission's implementation of certain provisions of the Telecommunications Act of 1996 regarding the universal service system. In response to this mandate, we have undertaken a thorough review of the Commission’s interpretations of the relevant provisions of the 1996 Act with respect to each of the subjects identified in the Appropriations Act.

2. We are mindful of the fact that telecommunications is an industry characterized by extremely rapid changes, as technological advances lead to the introduction of new services and products. The Commission must therefore ensure that the definitions and rules it establishes are consistent with the plain language of the Communications Act of 1934 (47 U.S.C. 151 et seq.), as amended by the Telecommunications Act of 1996, and shall include a review of:

   a detailed description of the extent to which the Commission's interpretations [identified below] are consistent with the plain language of the Communications Act of 1934 (47 U.S.C. 151 et seq.), as amended by the Telecommunications Act of 1996, and shall include a review of --

   (1) the definitions of "information service", "local exchange carrier", "telecommunications", "telecommunications service", "telecommunications carrier", and "telephone exchange service" that were added to section 3 of the Communications Act of 1934 (47 U.S.C. 153) by the Telecommunications Act of 1996 and the impact of the Commission's interpretation of those definitions on the current and future provision of universal service to consumers in all areas of the Nation, including high cost and rural areas;

   (2) the application of those definitions to mixed or hybrid services and the impact of such application on universal service definitions and support, and the consistency of the Commission's application of those definitions, including with respect to Internet access under section 254(h) of the Communications Act of 1934 (47 U.S.C. 254(h));

   (3) who is required to contribute to universal service under section 254(d) of the Communications Act of 1934 (47 U.S.C. 254(d)) and related existing Federal universal service support mechanisms, and of any exemption of providers or exclusion of any service that includes telecommunications from such requirement or support mechanisms;

   (4) who is eligible under sections 254(e), 254(h)(1), and 254(h)(2) of the Communications Act of 1934 (47 U.S.C. 254(e), 254(h)(1), and 254(h)(2)) to receive specific Federal universal service support for the provision of universal service, and the consistency with which the Commission has interpreted each of those provisions of section 254; and

   (5) the Commission's decisions regarding the percentage of universal service support provided by Federal mechanisms and the revenue base from which such support is derived.

Id.

of revolutionary services. A few years ago, few consumers in this country were aware of the Internet and the notion that a packet-switched network could be used to complete a long distance call placed from a residential telephone probably would have been regarded as far-fetched. Today, millions of consumers, both in the United States and around the world, daily obtain access to the Internet for a wide variety of services. We can only speculate about the technologies and services that will be offered in the future. We must take care to preserve the vibrant growth of these new technologies and services. But we also must remain constant in our commitment to ensuring universal service.

3. In this Report, we find, under the framework of the 1996 Act, that universal service and the growth of new Internet-based information services are mutually reinforcing. The development and continued growth of information services depends upon the preservation and advancement of universal service. By connecting our nation’s telecommunications networks to all citizens, we expand the potential customer basis for information services. At the same time, the growth of Internet-based information services greatly stimulates our country’s use of telecommunications, and thereby the revenue base from which we now fund universal service. As we confirm below in our Report, the parties supplying the underlying interstate transmission services used by those information services contribute to universal service based on their telecommunications service revenues. Because Internet service providers are major users of telecommunications, they make substantial indirect contributions to universal service support in the charges they pay to their telecommunications suppliers. We also consider below the regulatory status of various forms of "phone-to-phone" IP telephony service mentioned generally in the record. The record currently before us suggests that certain of these services lack the characteristics that would render them “information services” within the meaning of the statute, and instead bear the characteristics of “telecommunications services,” but we do not believe it is appropriate to make any definitive pronouncements in the absence of a more complete record focused on individual service offerings. To the extent we conclude that the services should be characterized as "telecommunications services," the providers of those services would fall within the 1996 Act's mandatory requirement to contribute to universal service mechanisms. Thus, in general, continued growth in the information services industry will buttress, not hinder, universal service.

4. We recognize that we are in the midst of a transition from an outmoded system of universal service support that will be undermined by the emergence of local competition to one that is compatible with competitive local markets. We underscore that during and after this transition, it is our duty and intention to ensure that financial support for federal universal service support mechanisms is maintained. In carrying out those responsibilities, we must think ahead, so that our policies are right not just for the present but for the future as well. Our rules should not create anomalies and loopholes that can be exploited by those seeking to avoid universal service obligations.

5. In this Report, we also commit to a reexamination of the issues regarding the respective federal and state responsibilities for maintaining and advancing universal service goals, including a full consideration of the specific alternatives to the Commission’s decisions last May that parties have placed in the record before us. This will include a reevaluation of the decision regarding the federal share of high cost support (the "25-75"
decision) prior to January 1, 1999. Section 254(b)(3) of the Act establishes the principle that federal and state universal service mechanisms be “specific, predictable and sufficient.” We plan to redouble our efforts to work with state commissions to ensure that this statutory principle is fully realized. Therefore, in full recognition of the importance of the mission given to us by Congress in the Appropriations Act, we respectfully submit this Report to Congress on universal service.

I. INTRODUCTION

6. This Report to Congress focuses on the Commission's implementation of the 1996 Act's provisions regarding universal service. The universal service system is designed to ensure that low-income consumers can have access to local phone service at reasonable rates. Universal service also ensures that consumers in all parts of the country, even the most remote and sparsely populated areas, are not forced to pay prohibitively high rates for their phone service.

7. Before passage of the 1996 Act, universal service was promoted through a patchwork quilt of implicit and explicit subsidies at both the state and federal levels. Charges to long distance carriers and rates for certain intrastate services provided to carriers and to end users were priced above cost, which enabled local telephone companies to keep rates for basic local telephone service at affordable levels throughout the country. The effect of these subsidies was to increase subscribership levels nationwide by ensuring that residents in rural and high cost areas were not prevented from receiving phone service because of prohibitively high telephone rates.

8. Recognizing the vulnerability of these implicit subsidies to competition, Congress, in the 1996 Act, directed the Commission and the states to restructure their universal service support mechanisms to ensure the delivery of affordable telecommunications services to all Americans in an increasingly competitive marketplace. Congress specified that universal service support under the new federal system "should be explicit," and that "every telecommunications carrier that provides interstate telecommunications service shall contribute, on an equitable and non-discriminatory basis, to the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service." In addition, Congress specified that a telecommunications carrier meeting the statutory requirements in section 214(e) of the Act would be eligible to receive federal universal service support and required states to designate more than one eligible telecommunications carrier for service areas other than

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3 See 47 U.S.C. § 151. The Commission's specific programs pursuant to the 1934 Act's mandate include the high cost loop fund, the dial equipment minutes (DEM) weighting program, long term support, Lifeline, and Link-Up. In addition, the Commission's interstate access charge system provided implicit subsidies for universal service support.

those served by a rural telephone company.\textsuperscript{5} To sustain universal service in a competitive environment, Congress recognized that: (1) the appropriate amount of the universal subsidy must be identifiable; (2) all carriers (rather than only interexchange carriers) that provide telecommunications service should contribute to universal service, on an equitable basis; and (3) any carrier (rather than only the incumbent LEC) should receive the appropriate level of support for serving a customer in a high cost area.

9. In the 1996 Act, Congress codified the long-standing commitment to ensuring universal service first expressed in section 1 of the Act,\textsuperscript{6} and directed that "[c]onsumers . . . in rural, insular, and high cost areas should have access to 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 [those] in urban areas."\textsuperscript{7} Congress also expanded the concept of universal service by requiring, for the first time, universal service support for eligible schools, libraries and rural health care providers.\textsuperscript{8}

10. Consistent with the timetable established in the 1996 Act, the Commission issued the Universal Service Order in May 1997 implementing the new universal service provisions and setting forth a plan that fulfills the universal service goals established by Congress.\textsuperscript{9} In the Universal Service Order the Commission announced its plan for

\textsuperscript{5} 47 U.S.C. § 214(e); see also 47 U.S.C. § 153(37), which provides that:

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.

\textsuperscript{6} 47 U.S.C. § 151.

\textsuperscript{7} 47 U.S.C. § 254(b)(3).

\textsuperscript{8} 47 U.S.C. § 254(h).

establishing a system of universal service support for rural, insular, and high cost areas that will replace the existing high cost programs and the implicit federal subsidies with explicit, competitively-neutral federal universal service support mechanisms. The Commission made some modifications to the existing high cost support mechanisms that took effect on January 1, 1998. Those changes were the first steps in moving to a support system that is sustainable in a competitive environment, as Congress has directed. For example, the Commission modified the funding methods for the existing federal universal service support programs, beginning January 1, 1998, so that such support is not generated exclusively through charges imposed on long distance carriers. Instead, as the statute requires, the new universal service rules require equitable and non-discriminatory contributions from all telecommunications carriers and require other providers of interstate telecommunications service to contribute when the Commission finds that the public interest so requires. In addition, the Commission modified the existing high cost support programs so that implicit subsidies previously recovered through interstate access charges will be recovered through the new explicit federal universal service funding mechanism. The Commission also adopted rules to implement the new programs created by Congress in the 1996 Act to encourage and promote universal service for eligible schools, libraries and health care providers.

11. The Commission’s revised universal service rules seek to ensure that the Commission’s long-standing commitment to maintaining affordable rates throughout the country, codified in the 1996 Act, is maintained in a competitive environment. Although the Commission has many decisions still before it that will affect the ultimate amount of universal service support that will be provided by federal mechanisms, there is no indication that the revised universal service rules will result in a reduction in federal support from the current level. The Commission also intends to continue to consult with the


11 For example, the Commission must select a mechanism to determine non-rural carriers’ forward-looking cost to provide the supported services and determine the relevant benchmark against which to compare cost to determine support levels.
Universal Service Joint Board and other state regulators and take additional steps, if necessary, to ensure that rates remain affordable. At the same time, however, the Commission recognizes the 1996 Act's mandate that universal service reforms must accommodate and encourage competition. The Commission also is aware that affordable rates can best be maintained through support mechanisms that provide as much support as is necessary, but no more than is necessary.

12. We are mindful that the proper implementation of these provisions is critical to the success and survival of the nation's universal service system and, accordingly, have taken our obligations very seriously. In preparing this Report, we have sought and reviewed thousands of pages of public comments. We have considered more than 5,000 informal public comments filed via electronic mail. We have held two en banc hearings during which panels of experts -- including representatives of the Internet community, telecommunications companies, educators and state officials -- discussed their views with us concerning the interpretive issues surrounding the relevant provisions of the 1996 Act. Although many of the rules at issue have been in place for nearly a year, we have considered each rule and interpretation anew and without preconceptions, in light of both the plain language and overall purposes of the 1996 Act.

II. EXECUTIVE SUMMARY

A. Definitional Issues

13. Section 623(b)(1) of the Appropriations Act directs the Commission to review "the definitions of 'information service,' 'local exchange carrier,' 'telecommunications,' telecommunications service,' 'telecommunications carrier,' and 'telephone exchange service.'" In response to Congress's directive, we have revisited the Commission's findings with regard to the way the Commission interpreted these statutory terms when it implemented the universal service provisions of the 1996 Act. In particular, we have carefully evaluated the impact of those definitions on the treatment of Internet-based offerings under the universal service system. We conclude, as the Commission did in the Universal Service Order that the categories of "telecommunications service" and "information service" in the 1996 Act are mutually exclusive. Reading the statute closely, with attention to the legislative history, we conclude that Congress intended these new terms to build upon frameworks established prior to the passage of the 1996 Act. Specifically, we find that Congress intended the categories of "telecommunications service" and "information service" to be mutually exclusive, like the definitions of "basic service" and "enhanced service" developed in our Computer II proceeding, and the definitions of "telecommunications" and "information service" developed in the Modification of Final Judgment that divested the Bell Operating Companies from AT&T. We recognize that the 1996 Act's explicit endorsement of the goals of competition and deregulation represents a significant break from the prior statutory framework. We find generally, however, that Congress intended to maintain a regime in which information service providers are not
subject to regulation as common carriers merely because they provide their services "via telecommunications."\(^3\)

B. Application of Definitions

14. The Appropriations Act also requires the Commission to review "the application of those definitions [set forth in section 623(b)(1)] to mixed or hybrid services and the impact of such application on universal service definitions and support, and the consistency of the Commission's application of those definitions, including with respect to Internet access under section 254(h)." Pursuant to that directive, we have reviewed various mixed or hybrid services, including those services that are commonly described as Internet telephony services. The record currently before us suggests that certain forms of "phone-to-phone" IP telephony services lack the characteristics that would render them "information services" within the meaning of the statute, and instead bear the characteristics of "telecommunications services." We do not, however, believe it is appropriate to make any definitive pronouncements in the absence of a more complete record focused on individual service offerings. To the extent that we conclude that certain forms of "phone-to-phone" IP telephony services should be characterized as "telecommunications services," the providers of those services would fall within the 1996 Act's mandatory requirement to contribute to universal service mechanisms.

15. Moreover, we clarify that the provision of transmission capacity to Internet access providers and Internet backbone providers is appropriately viewed as "telecommunications service" or "telecommunications" rather than "information service," and that the provision of such transmission should also generate contribution to universal service support mechanisms. Thus, we find, in general, that continued growth in the information services industry will buttress, not hinder, universal service. In those cases where an Internet service provider owns transmission facilities, and engages in data transport over those facilities in order to provide an information service, we do not currently require it to contribute to universal service mechanisms. We believe it is appropriate to reexamine that result, as one could argue that in such a case that the Internet service provider is furnishing raw transmission capacity to itself. We recognize, however, that there are significant operational difficulties associated with determining the amount of such an Internet service provider's revenues to be assessed for universal service purposes and with enforcing such requirements. We intend to consider these issues in an upcoming proceeding. Finally, we find that Internet service providers generally do not provide telecommunications. Our analysis, we believe, reflects a consistent approach that will safeguard the current and future provision of universal service to all Americans, and will achieve the Congressionally-specified goals of a "pro-competitive, deregulatory communications policy."

C. Who Contributes to Universal Service Mechanisms

\(^3\) 47 U.S.C. § 153(20).
16. Section 623(b)(3) of the Appropriations Act requires the Commission to review "who is required to contribute to universal service under section 254(d) of the Communications Act . . . and related existing mechanisms, and of any exemption of providers or exclusion of any service that includes telecommunications from such requirement or support mechanisms." Accordingly, we have reviewed our decision regarding which entities must contribute to universal service support mechanisms, which entities should contribute, and which entities should be exempt from contributing. We affirm that the plain language of section 254(d), which mandates contributions from "every telecommunications carrier that provides interstate telecommunications services," requires the Commission to construe broadly the class of carriers that must contribute.\textsuperscript{14} In addition, we find that the Commission properly exercised the permissive authority granted by section 254(d) to include other providers of interstate telecommunications in the pool of universal service contributors. We have also re-examined the Commission's implementation of the limited authority set forth in section 254(d) to exempt de minimis contributors and affirm that the Commission has not exceeded the boundaries established by the statute. We conclude that the Commission appropriately exercised the flexibility that section 254(d) grants it to exempt those entities whose contributions would be de minimis and to include in the pool of contributors those providers of telecommunications whose contributions are required by the public interest.

D. Who Receives Universal Service Support

17. Section 623(b)(4) of the Appropriations Act requires the Commission to review who is eligible under sections 254(e), 254(h)(1), and 254(h)(2) of the Communications Act ". . . to receive specific federal universal service support for the provision of universal service, and the consistency with which the Commission has interpreted each of those provisions of section 254." We have carefully evaluated the general standards of eligibility for support set forth in section 254(e) of the 1996 Act, as well as the eligibility standards for providers of services to schools and libraries under section 254(h)(1)(B) and for providers of services to health care providers under section 254(h)(1)(A). Although we observe that certain of the provisions of the 1996 Act appear to render the statute susceptible to more than one interpretation with respect to eligibility for the receipt of universal service support, we conclude that the Commission properly implemented eligibility rules that are consistent with both the language and the spirit of the 1996 Act.

E. Revenue Base and Percentage of Federal Funding

18. Finally, as required by section 623(b)(5) the Appropriations Act, we reexamine "the Commission's decisions regarding the percentage of universal service support provided by federal mechanisms and the revenue base from which such support is derived." As explained in detail below, we find that the Commission's decisions with respect to the appropriate revenue base for universal service contributions are legally consistent with the 1996 Act and fulfill the intended goal of establishing an orderly

\textsuperscript{14} See Universal Service Order, 12 FCC Rcd at 9177, para. 783.
transition from federal implicit subsidies to federal explicit subsidies. After analyzing the Commission's conclusions regarding the jurisdictional parameters placed on the Commission and on states, we agree that the Commission has the authority to assess universal service contributions on both the interstate and intrastate revenues of telecommunications providers.

19. With respect to the percentage of federal universal service funding, as discussed below, we regard the Commission's earlier decision as a placeholder, an initial step in its plan for implementing section 254. States and other affected entities have raised serious concerns about the extent of federal support for high cost areas. In this Report, we commit to reconsidering those aspects of the Universal Service Order prior to fully implementing high cost universal service mechanisms. We conclude that a strict, across-the-board rule that provides 25 percent of unseparated high cost support to the larger LECs might provide some states with less total interstate universal service support than is currently provided. The Commission will work to ensure that states do not receive less funding as we implement the high cost mechanisms under the 1996 Act. We find that no state should receive less federal high cost assistance than it currently receives. The Commission decided to provide an evolving level of support and to revise funding mechanisms as necessary to maintain adequate support to ensure reasonable rates. Some of the larger LECs that have higher than average costs, however, currently recover more than 25 percent of their cost from the interstate jurisdiction. Beginning on January 1, 1999, this additional allocation above 25 percent is eliminated. At the same time, however, the basis for providing high cost support is fundamentally altered. We are mindful that the Commission's work in this regard is not yet complete. We are committed to issuing a reconsideration order in response to the petitions filed asking the Commission to reconsider the decision to fund 25 percent of the required support amount. In the course of that reconsideration, we will take all appropriate steps, including continued consultation with the states, to ensure that federal funding is adequate to achieve statutory goals. We also recognize that Congress assigned to the Commission, after consultation with the Joint Board, the ultimate responsibility for establishing policies that ensure that: 1) quality services are available at just, reasonable and affordable rates; 2) all consumers have "access to telecommunications and information services" at rates that are reasonably comparable to the rates charged for similar services in urban areas; and 3) there are "specific, predictable, and sufficient" federal and state mechanisms to preserve and advance universal service. We are committed to implementing section 254 consistent with these objectives.

20. We note that the discussion of the issue of federal support for high cost in this Report relates only to non-rural local exchange carriers. With respect to rural LECs, the Commission has determined that there shall be no change in the existing high cost support mechanisms until January 1, 2001 at the earliest. We do not revisit that determination in this
Report. Thus, the method of determining federal support for rural local exchange carriers will remain unchanged until at least January 1, 2001, meaning that the amount of universal service support for rural local exchange carriers will be maintained initially at existing levels and then should increase in accordance with specified factors, such as inflation, that have historically guided changes in such support. Any possible change in the support mechanism for rural local exchange carriers would require a separate rulemaking proceeding.

III. STATUTORY DEFINITIONS

A. Overview

21. All of the specific mandates of the 1996 Act depend on application of the statutory categories established in the definitions section. The 1996 Act added or modified several of the definitions found in the Communications Act of 1934, including those that apply to "telecommunications," "telecommunications service," "telecommunications carrier," "information service," "telephone exchange service," and "local exchange carrier." In section 623(b)(1) of the Appropriations Act, Congress directed us to review the Commission's interpretation of these definitions, and to explain how those interpretations are consistent with the plain language of the 1996 Act.\textsuperscript{15} Reading the statute closely, with attention to the legislative history, we conclude that Congress intended these new terms to build upon frameworks established prior to the passage of the 1996 Act. Specifically, we find that Congress intended the categories of "telecommunications service" and "information service" to parallel the definitions of "basic service" and "enhanced service" developed in our Computer II proceeding, and the definitions of "telecommunications" and "information service" developed in the Modification of Final Judgment breaking up the Bell system. We recognize that the 1996 Act's explicit endorsement of the goals of competition and deregulation represents a significant break from the prior statutory framework. We find generally, however, that Congress intended to maintain a regime in which information service providers are not subject to regulation as common carriers merely because they provide their services "via telecommunications."\textsuperscript{16}

B. Background

22. The Communications Act of 1934. The Communications Act of 1934, as amended, gives the Commission extensive authority over all "common carriers," defined as all persons "engaged as a common carrier for hire, in interstate and foreign

\textsuperscript{15} Appropriations Act, § 623(b)(1).

\textsuperscript{16} 47 U.S.C. § 153(20).
Title II of the Act, derived from the federal Interstate Commerce Act, includes (among other things) requirements that common carriers provide service at just and reasonable prices, and subject to just and reasonable practices, classifications, and regulations; that they make no unjust or unreasonable discrimination; that they file tariffs, subject to Commission scrutiny; and that they obtain Commission approval before acquiring or constructing new lines.

23. **Computer II.** More than three decades ago, the Commission recognized that "the growing convergence and interdependence of communication and data processing technologies" threatened to strain its existing interpretations of Title II. It began an inquiry into the regulatory and policy problems posed by that confluence. In 1980, it issued the Computer II decision, embodying its thinking on how it could best advance its regulatory goals of "minimiz[ing] the potential for improper cross-subsidization, safeguard[ing] against anticompetitive behavior, and [protecting] the quality and efficiency of telephone service" while "foster[ing] a regulatory environment conducive to . . . the provision of new and innovative communications-related offerings" and "enabl[ing] the communications user to [take] advantage of the ever increasing market applications of computer . . . technology."

24. In Computer II the Commission classified all services offered over a telecommunications network as either basic or enhanced. A basic service consisted of the offering, on a common carrier basis, of pure "transmission capacity for the movement of communication." Title II of the Act, derived from the federal Interstate Commerce Act, includes (among other things) requirements that common carriers provide service at just and reasonable prices, and subject to just and reasonable practices, classifications, and regulations; that they make no unjust or unreasonable discrimination; that they file tariffs, subject to Commission scrutiny; and that they obtain Commission approval before acquiring or constructing new lines.

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17 Id. § 153(10). Section 2(a) of the Act makes plain that the Commission has authority only over communication, and persons engaged in communication, "by wire or radio." Id. § 152(a).


20 Id. § 202(a).

21 Id. §§ 203-05.

22 Id. § 214.


25 See Computer II Tentative Decision, 72 FCC 2d at 389-90.
The Commission noted that it was increasingly inappropriate to speak of carriers offering discrete "services" such as voice telephone service. Rather, carriers offered communications paths that subscribers could use as they chose, by means of equipment located on subscribers' premises, for the analog or digital transmission of voice, data, video or other information. The Commission therefore defined basic transmission service to include the offering of "pure transmission capability over a communications path that is virtually transparent in terms of its interaction with customer supplied information."

25. An enhanced service, by contrast, was defined as "any offering over the telecommunications network which is more than a basic transmission service." Specifically, the Commission defined enhanced services to include services, offered over common carrier transmission facilities used in interstate communications, which employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information.

26. Enhanced service providers, the Commission found, were not "common carriers" within the meaning of the Communications Act of 1934, and hence were not subject to regulation under Title II of that Act. Enhanced services involve "communications and data processing technologies . . . intertwined so thoroughly as to produce a form different from any explicitly recognized in the Communications Act of 1934." Seeking to regulate enhanced services, the Commission concluded, would only restrict innovation in a fast-moving and competitive market.

27. The Commission stressed that the category of enhanced services covered a wide range of different services, each with communications and data processing components. Some might seem to be predominantly communications services; others might seem to be predominantly data processing services. The Commission declined, however, to carve out any subset of enhanced services as regulated communications services. It found that no regulatory scheme could "rationally distinguish and classify enhanced services as

26 Computer II Final Decision, 77 FCC 2d at 419, para. 93.
27 Id. at 419, para. 94.
28 Id. at 419-20, paras. 93, 96.
29 Id. at 420, para. 97.
30 47 C.F.R. § 64.702(a).
31 Computer II Final Decision, 77 FCC 2d at 430, para. 120.
32 See id. at 434, para. 129.
either communications or data processing, and any dividing line the Commission drew would at best "result in an unpredictable or inconsistent scheme of regulation" as technology moved forward. Such an attempt would lead to distortions, as enhanced service providers either artificially structured their offerings so as to avoid regulation, or found themselves subjected to unwarranted regulation. The Commission therefore determined that enhanced services, which are offered "over common carrier transmission facilities," were themselves not to be regulated under Title II of the Act, no matter how extensive their communications components. The Commission reaffirmed its definition of enhanced services in the Computer III proceeding.

28. **The Modification of Final Judgment.** On August 11, 1982, the District Court for the District of Columbia entered a consent decree, commonly known as the Modification of Final Judgment or MFJ, settling the United States Government's long-running antitrust lawsuit against AT&T. Under the MFJ, AT&T was required to divest itself of the Bell Operating Companies. The MFJ distinguished between "telecommunications" and "information" services: the Bell Operating Companies were to provide local exchange telecommunications service, but were forbidden to provide interexchange telecommunications service or information services.

29. **The Telecommunications Act of 1996.** On February 8, 1996, the 1996 Act became law. Whereas historically the communications field had been dominated by a few, heavily regulated providers, Congress sought to establish "a pro-competitive, deregulatory national policy framework," making "advanced telecommunications and information

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33 Id. at 428, para. 113.
34 Id. at 425, paras. 107-08.
35 See id. at 423-28, paras. 102-13.
36 See id. at 428, paras. 114.
technologies and services" available to all Americans, "by opening all telecommunications markets to competition."  

30. Although the 1996 Act left intact most of the existing provisions of Title II, it added new provisions referring to "telecommunications" and "information service." The 1996 Act defined "telecommunications" to mean "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent or received." It defined "telecommunications service" to mean "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available to the public, regardless of the facilities used." It defined "telecommunications carrier" to include "any provider of telecommunications services, except that such term does not include aggregators of telecommunications services." It defined "information service" to mean

the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and [such term] includes electronic publishing, but does not include any use of any such capability for the management, control or operation of a telecommunications system or the management of a telecommunications service.

31. The 1996 Act redefined "telephone exchange service" to include not only "service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers interconnecting service of the character ordinarily furnished by a single exchange," but also "comparable service provided through a system of switches, transmission equipment, or other facilities (or combination thereof) by which a subscriber can originate and terminate a telecommunications service." It defined "local exchange carrier" to include "any person that is engaged in the provision of telephone exchange service or exchange access." The definition excludes persons "engaged in the provision of a commercial mobile service . . .

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42 Id. § 153(46).

43 Id. § 153(44). An aggregator is an entity that, in the ordinary course of its operations, makes telephones available to the public or to transient users of its premises, for interstate telephone calls using operator services. Id. § 226(a)(2). Restaurant owners who make pay telephones available to their customers, for example, are aggregators.

44 Id. § 153(20).

except to the extent the Commission finds that such service should be included in the
definition of such term."\footnote{\textsuperscript{46}}

32. The 1996 Act imposes a wide variety of obligations on telecommunications carriers, including, among other things, obligations relating to interconnection\footnote{\textsuperscript{47}} and privacy of subscriber information.\footnote{\textsuperscript{48}} One such obligation relates to universal service: section 254(d) dictates that every telecommunications carrier that provides interstate telecommunications services must contribute to the mechanisms established by the Commission to preserve and advance universal service.\footnote{\textsuperscript{49}} The 1996 Act does not impose obligations on telecommunications providers who do not provide interstate "telecommunications services" (and therefore are not "telecommunications carriers"), except that the Commission may require any provider of interstate telecommunications to contribute to universal service mechanisms if the public interest requires.\footnote{\textsuperscript{50}} The Act imposes no regulatory obligations on information service providers as such.

C. Discussion


33. The proper interpretation of the terms "telecommunications" and "telecommunications service" in the 1996 Act raises difficult issues that are the subject of heated debate. The Commission previously concluded that the 1996 Act's definitions of telecommunications service and information service essentially correspond to the pre-existing categories of basic and enhanced services, in that they were intended to refer to separate categories of services. After finding in the Non-Accounting Safeguards Order\footnote{\textsuperscript{51}} that "the differently-worded definitions of 'information services' and 'enhanced services'... should be interpreted to extend to the same functions,"\footnote{\textsuperscript{61}} the Commission ruled in the

\footnote{\textsuperscript{46}} Id. § 153(26).

\footnote{\textsuperscript{47}} See id. §§ 251-52.

\footnote{\textsuperscript{48}} See id. § 222.

\footnote{\textsuperscript{49}} See id. § 254(d).

\footnote{\textsuperscript{50}} Id.; see also Universal Service Order, 12 FCC Rcd at 9182-9184, paras. 793-96.

\footnote{\textsuperscript{51}} Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended, CC Docket No. 96-149, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 21905, 21955-56, para. 102 (1996) (Non-Accounting Safeguards Order), Order on Reconsideration, 12 FCC Rcd 2297 (1997), further recon. pending, Second Report and Order, 12 FCC Rcd 15756 (1997), aff'd sub nom. Bell Atlantic Telephone Companies v. FCC, 131 F.3d 1044 (D.C. Cir. 1997). The Commission in the Non-Accounting Safeguards Order treated the category of information services as distinct from telecommunications. It reaffirmed its conclusion that protocol processing services were information services, rejecting the possibility of treating such services as telecommunications and thus
Universal Service Order that entities providing enhanced or information services are not thereby providing "telecommunications service." It found that the 1996 Act's definition of telecommunications, which "only includes transmissions that do not alter the form or content of the information sent," excludes Internet access services, which "alter the format of information through computer processing applications such as protocol conversion and interaction with stored data." In the Pole Attachments Telecommunications Rate Order we relied on the Commission's finding that Internet access service does not constitute a telecommunications service, and in Use of Customer Proprietary Network Information we summarized Commission precedent as indicating that telecommunications services and information services are "separate, non-overlapping categories, so that information services do not constitute 'telecommunications' within the meaning of the 1996 Act.

34. Senators Stevens and Burns, along with commenters including some incumbent local exchange carriers, urge in their comments that this approach is incorrect. The 1996 Act's definition of "telecommunications," they state, creates a new category unrelated to anything in the Commission's earlier regulatory approach. Senators Stevens and Burns state that Congress, in defining "telecommunications" and "information service" in the 1996 Act, intended to replace the Commission's existing regulatory structure. As potentially making them subject to Title II regulation. Id. at 21956-57, paras. 104-05.

52 Universal Service Order, 12 FCC Rcd at 9179-80, paras. 788-89.

53 Id. at 9180, para. 789. The Commission also noted that section 254(h)(2)(A) calls on it to enhance "access to advanced telecommunications and information services," and concluded that the phrase would be redundant if "information services were a subset of advanced telecommunications." Id.


55 Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information, Second Report and Order and Further Notice of Proposed Rulemaking CC Docket No. 96-115, FCC 98-27 (rel. Feb. 26, 1998), at para. 46. In both the Pole Attachments Order and Use of Customer Proprietary Network Information we noted the pendency of this Report, and we made clear that we did not intend to foreclose the Report's reexamination of the underlying issues:

We are currently seeking comment on whether

the 1996 Act's definition of "telecommunications service" should be interpreted to extend to the same functions [covered by the Commission's "basic services" category, and] whether there is any basis to conclude that, by using the term "telecommunications services," Congress intended a significant departure from the Commission's usage of "basic services."

Computer III Further Remand Proceedings, at para. 41. We have not yet received reply comments in that proceeding.

56 See, e.g., Senators Stevens and Burns comments at 1-6, TDS comments at 2. See also, e.g., Low Tech Designs comments at 1-3, RTC comments at 10-17, Reply Comments of Bell Atlantic at 7-9. But see GTE Comments at 17.
mentioned above, under the regulatory structure in place in 1996, a service could fall into either the "basic" or the "enhanced" category, but not both. An entity offering a service with both communications and computer-processing components was deemed to be providing an enhanced service, not a basic one. Senators Stevens and Burns state that Congress rejected that approach, intending instead that a service could fall simultaneously into both of the new categories created by the 1996 Act. Under this approach, an information service provider is deemed a telecommunications carrier to the extent it engages in "transmission" of the information it provides. In particular, Senators Stevens and Burns indicate, an information service provider transmitting information to its users over common carrier facilities such as the public switched telephone network is a "telecommunications carrier."

35. In support of their position, Senators Stevens and Burns note that the terms "basic" and "enhanced" do not appear in the 1996 Act; rather, Congress defined new categories. Their interpretation of the statute, they explain, flows naturally from the statute's definition of "telecommunications" as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information, as sent and received," its definition of "telecommunications service" as "the offering of telecommunications for a fee directly to the public . . . regardless of the facilities used," and its definition of telecommunications carrier as including "any provider of telecommunications services." These definitions taken together, they state, "make it plain that Congress intended [the term 'telecommunications carrier'] to include anyone engaged in the transmission of 'information of the user's choosing.'" Senators Stevens and Burns note that other language in the definition of "telecommunications carrier" makes clear that a given entity may simultaneously offer

57 See Computer II Final Decision, 77 FCC 2d at 419-22, paras. 93-97; supra Section II.B.

58 See Computer II Final Decision, 77 FCC Rcd at 420-21, 423-28, paras. 97, 102-13; see also id. at 432, para. 125 (notwithstanding that enhanced services providers are not "common carriers" subject to Title II, they are subject to the Commission's jurisdiction because they provide "the electronic transmission of writing, signs, signals, pictures, etc., over the interstate telecommunications network"); id. at 435, para. 132 (enhanced services have "a communications component"); supra Section II.B.

59 Senators Stevens and Burns comments at 3-6.

60 Id. at 4.

61 Id. at 5 & n. 19; see also, e.g., RTC comments at 12-13, TDS comments at 5.

62 Senators Stevens and Burns comments at 1-2; see also, e.g., TDS comments at 2.

63 47 U.S.C. § 153(43), (44), (46).

64 Senators Stevens and Burns comments at 4.
telecommunications and other services.\(^{65}\) They also point out that Congress failed to adopt language, included in the House version of the 1996 Act, providing that the term "telecommunications service' . . . does not include an information service."\(^{66}\) Somewhat similar language in the text of the Senate bill was deleted as well.\(^{67}\)

36. Finally, Senators Stevens and Burns assert that the Commission's current understanding of the statutory terms could "seriously undermine the universal service, competitive neutrality, and local competition goals that were at the heart" of the 1996 Act.\(^{68}\) The regulatory provisions of the 1996 Act are addressed to "telecommunications carriers" and "telecommunications services."\(^{69}\) They explain that, to the extent that the categories of telecommunications and information services are interpreted to be mutually exclusive, the scope of the "telecommunications carrier" and "telecommunications service" categories is accordingly narrowed, and the reach of the 1996 Act is correspondingly limited.

37. Other Senators and other interested parties, however, have filed comments in this proceeding expressing a contrary view. Senator McCain urges that "[n]othing in the 1996 Act or the legislative history supports the view that Congress intended to subject information services providers to the current regulatory scheme applicable to common carriers which is, if anything, too intrusive and burdensome."\(^{70}\) Rather, he explains, "[i]t certainly was not Congress's intent in enacting the supposedly pro-competitive, deregulatory 1996 Act to extend the burdens of current Title II regulation to Internet services, which historically have been excluded from regulation."\(^{71}\) Senator McCain states, in defining "telecommunications," "telecommunications service" and "information service," Congress "distinguished between information services and telecommunication services to reflect the distinction set forth on the Modification of Final Judgment and the Commission's Second Computer Inquiryproceeding between those services that offer pure transmission capacity and others that somehow enhance the transmission capacity."\(^{72}\) An information service, he continues, "is the offering of particular capabilities via telecommunications, but is itself not

\(^{65}\) Senators Stevens and Burns comments at 3-5; see 47 U.S.C. § 153(44): "A telecommunications carrier shall be treated as a common carrier under this Act only to the extent that it is engaged in providing telecommunications services . . . ."

\(^{66}\) See Senators Stevens and Burns comments at 5 ("Language that specifically stated that a telecommunications service did not include an information service was struck before the final definitions were adopted."); see also February 19, 1998 en banc transcript at 24 (testimony of Mr. Comstock).

\(^{67}\) We discuss the Senate language below.

\(^{68}\) Senators Stevens and Burns comments at 1.

\(^{69}\) See supra Section II.B.

\(^{70}\) Senator McCain letter at 1.

\(^{71}\) Id. at 2 (emphasis in original).

\(^{72}\) Id. at 3.
telecommunications or a telecommunications service.\textsuperscript{73} For the Commission to rule that some or all information service providers should simultaneously be deemed telecommunications carriers would ignore a "clear distinction" drawn by Congress, and would have "disastrous" results.\textsuperscript{74}

38. Senators Ashcroft, Ford, John F. Kerry, Abraham and Wyden emphasize that "[n]othing in the 1996 Act or its legislative history suggests that Congress intended to alter the current classification of Internet and other information services or to expand traditional telephone regulation to new and advanced services."\textsuperscript{75} Like Senator McCain, they state: "Rather than expand regulation to new service providers, a critical goal of the 1996 Act was to diminish regulatory burdens as competition grew."\textsuperscript{76}

39. In addressing the difficult interpretation issues posed by the conflicting positions, we start by observing that the 1996 Act effected landmark changes in a variety of areas of communications policy. We recognize that the interpretation presented by Senator Stevens would serve the goal of eliminating distinctions that result in different regulatory treatment for firms that arguably provide similar functionalities based on whether firms provide "telecommunications" or "information services." We find, however, that in defining "telecommunications" and "information services," Congress built upon the MFJ and the Commission's prior deregulatory actions in Computer II. After careful consideration of the statutory language and its legislative history, we affirm our prior findings that the categories of "telecommunications service" and "information service" in the 1996 Act are mutually exclusive.\textsuperscript{77} Under this interpretation, an entity offering a simple, transparent transmission path, without the capability of providing enhanced functionality, offers "telecommunications." By contrast, when an entity offers transmission incorporating the "capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information," it does not offer telecommunications. Rather, it offers an "information service" even though it uses telecommunications to do so. We believe that this reading of the statute is most consistent with the 1996 Act's text, its legislative history, and its procompetitive, deregulatory goals.

40. We begin our analysis with the statutory text. Senators Stevens and Burns contend that a service qualifies as a "telecommunications service" whenever the service provider transports information over transmission facilities, without regard to whether the service provider is using information-processing capabilities to manipulate that information.

\textsuperscript{73} Id.

\textsuperscript{74} Id. at 4.

\textsuperscript{75} Senator Ashcroft, et al., letter at 1.

\textsuperscript{76} Id. at 2.

\textsuperscript{77} As we explain infra Secion IV.B, we interpret the Act to contemplate that a single entity can be both a telecommunications provider and an information services provider, but only in connection with its offering of separate services; it cannot gain that dual status merely as a result of its offering of a single service.
or provide new information. That approach, however, seems inconsistent with the language Congress used to define "telecommunications." That language specifies that the transmission be "without change in the form or content of the information as sent and received." It appears that the purpose of these words is to ensure that an entity is not deemed to be providing "telecommunications," notwithstanding its transmission of user information, in cases in which the entity is altering the form or content of that information.

41. The statutory text suggests to us that an entity should be deemed to provide telecommunications, defined as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form and content of the information," only when the entity provides a transparent transmission path, and does not "change . . . the form and content" of the information. When an entity offers subscribers the "capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing or making available information via telecommunications," it does not provide telecommunications; it is using telecommunications.

42. We also find that the legislative history supports our initial conclusions drawn from the statutory text. The 1996 Act's definition of "telecommunications" was closely

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78 See Senators Stevens and Burns comments at 4-5. At one point, the comments of Senators Stevens and Burns suggest a second argument: that a firm provides both a "telecommunications service" and an "information service" when it provides information content via the public switched telephone network. In that context, the firm would be deemed to be providing transmission of its data, to the consumer, over the telephone company's facilities. See Senators Stevens and Burns comments at 5 & n. 18 (describing it as irrelevant whether the information service provider "make[s] the transmission" over "the ISP's own facilities, leased facilities, private lines, wireless facilities, cable facilities, broadcast facilities [or] common carrier facilities"). The statutory definition of "telecommunications service," however, requires that the provider be "offering . . . to the public" the "transmission . . . of information of the user's choosing." Where users rely on the public switched network to reach the information service provider, it is the telephone company, not the information service provider, that is offering to the public transmission over the public switched network. The information service provider, therefore, is not providing telecommunications service in those circumstances.

79 One might make the more limited argument that Congress, rejecting the Computer II approach, intended that a service qualify as both "telecommunications" and an "information service" if the service provider transported information of the user's choosing over facilities it owns or leases, and did so "without change in the form or content of the information as sent and received," but nonetheless offered a capability for "generating, acquiring, storing, transforming, processing, retrieving, utilizing or making available information." It is difficult to determine, though, what services would fall in this category. A service that generates, acquires, transforms, processes, retrieves, utilizes or makes available information is by definition not merely transmitting the user's information without change. Arguably, a service involving simple storage of user information could transmit it without change, and thus fall within both the "telecommunications service" and "information service" definitions. Our examination of the legislative history, however, convinces us that Congress intended the two categories to be mutually exclusive, and did not contemplate any such overlap. See infra paras. 39-42.

80 See, e.g., CIX comments at 5-6; Compuserve comments at 3-4; Coalition comments at 4-9; ITI and ITAA comments at 3-6; Reuters comments at 3-4; Worldcom comments at 3-5. But see TDS comments at 2-3; RTC reply comments at 5-10 (characterizing the distinction as an “irrational, disparate, discriminatory, marketplace-distorting” fiction).
patterned on the corresponding definition in the MFJ. The MFJ defined "telecommunications" as

the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received, by means of electromagnetic transmission medium, including all instrumentalities, facilities, apparatus, and services (including the collection, storage, forwarding, switching, and delivery of such information) essential to such transmission.\textsuperscript{81}

The Senate and House bills echoed that language. The House bill defined telecommunications as

the transmission, between or among points specified by the subscriber, of information of the subscriber's choosing, without change in the form or content of the information as sent and received, by means of an electromagnetic transmission medium, including all instrumentalities, facilities, apparatus, and services (including the collection, storage, forwarding, switching, and delivery of such information) essential to such transmission,\textsuperscript{82}

and the Senate bill truncated the definition to include

the transmission, between or among points specified by the user, of information of the user's choosing, including voice, data, image, graphics, and video, without change in the form or content of the information, as sent and received, with or without benefit of any closed transmission medium.\textsuperscript{83}

By contrast, the two bills took different approaches in defining "information service." The House bill derived its definition of "information service" from the MFJ.\textsuperscript{84} The Senate, however, used the Commission's definition of enhanced services as its model.\textsuperscript{85}


\textsuperscript{84} See House Report at 125.

43. The language and legislative history of both the House and Senate bills indicate that the drafters of each bill regarded telecommunications services and information services as mutually exclusive categories.\textsuperscript{86} The House bill explicitly stated in the statutory text: "The term 'telecommunications service' . . . does not include an information service."\textsuperscript{87} The Senate Report stated in unambiguous terms that its definition of telecommunications "excludes those services . . . that are defined as information services."\textsuperscript{88} Information service providers, the Report explained, "do not 'provide' telecommunications services; they are users of telecommunications services."\textsuperscript{89} Accordingly, the Senate Report stated, the legislation "does not require providers of information services to contribute to universal service."\textsuperscript{90} We believe that these statements make explicit the intention of the drafters of both the House and Senate bills that the two categories be separate and distinct, and that information service providers not be subject to telecommunications regulation.

44. As noted above, however, proponents of the alternative interpretation find support in the legislative history for the position that Congress intended overlapping categories. In particular, they point out that the following sentence was deleted from the Senate bill's definition of telecommunications service: "'Telecommunications service' . . . includes the transmission, without change in the form or content, of information services and cable services, but does not include the offering of those services."\textsuperscript{91} At the February 19, 1998 en banc hearing, it was argued in support of the alternative interpretation that the sentence was deleted in conference so as to ensure that the "telecommunications" and "information service" definitions would not be viewed as mutually exclusive.\textsuperscript{92} The amendment on its face can be read to support that inference. Our review of the legislative history leads us to conclude, however, that the deletion of the language in question was not intended to expand the definition of telecommunications service so that it would overlap with information services. Rather, the sentence was deleted on the Senate floor by a manager's amendment "intended to clarify that carriers of broadcast or cable services are not intended to be classified as common carriers under the Communications Act to the extent they

\textsuperscript{86} Moreover, Judge Greene's opinion accompanying the MFJ appears to treat telecommunications and information services as mutually exclusive. See, e.g., 552 F. Supp. at 179-80 (differentiating between "information services" and "transmission facilities for those services").


\textsuperscript{88} Senate Report at 18.

\textsuperscript{89} Id. at 28.

\textsuperscript{90} Id.

\textsuperscript{91} Id. at 79 (text of the bill).

\textsuperscript{92} See Feb. 19, 1998 en banc transcript at 24 (testimony of Mr. Comstock).
provide broadcast services or cable services.\footnote{141 Cong. Rec. S7996 (June 8, 1995) (statement of Sen. Pressler).} That is, the managers appear to have been concerned that the original language might lead courts to interpret "telecommunications service" too broadly, and inappropriately classify cable systems and broadcasters as telecommunications carriers. As a result, we believe that this amendment to the definition of "telecommunications service" does not undercut the Senate Report's earlier declaration that the bill's definition of "telecommunications" "excludes . . . information services." Rather, it underlines the legislative determination that information service providers should not be classified as telecommunications carriers.\footnote{A colloquy between Senator Pressler and Senator Kerrey, at the time the amendment was adopted, states that the amendment was not intended to disturb the application of statutory provisions relating to "telecommunications service" to businesses engaged in the "transmission of information services." Id. That statement was part of the Senate bill as reported; the bill had stated, in the deleted language, that "telecommunications service" included "the transmission, without change in the form or content, of information services and cable services, but does not include the offering of those services." Thus, the colloquy presents no reason to believe that the amendment was intended to expand the scope of the "telecommunications" definition beyond that expounded in the Senate Report. As a result, we have no reason to question that various statements in that Report apply to the 1996 Act, as adopted by Congress: that the telecommunications definition "excludes . . . information services"; that information service providers "do not 'provide' telecommunications services"; and accordingly that the legislation "does not require providers of information services to contribute to universal service." See supra paragraph 40.} Moreover, given the explicit statements in the House and Senate bills and the Senate Report, we believe it is significant that the Joint Explanatory Statement (adopting the Senate version of "telecommunications" and "telecommunications service") does not appear to contain anything inconsistent with the view that "telecommunications" and "information service" are mutually exclusive categories.

45. In addition, in considering the statutory history of the 1996 Act, we note that at the time the statute was enacted, the Computer II framework had been in place for sixteen years. Under that framework, a broad variety of enhanced services were free from regulatory oversight, and enhanced services saw exponential growth.\footnote{Various commenters stress the efficacy of the Computer II regime. See, e.g., AOL comments at 6-8; Compuserve comments at 10-11; Coalition comments at 16; Internet Service Providers reply comments at 5.} Accordingly, a decision by Congress to overturn Computer II and subject those services to regulatory constraints by creating an expanded "telecommunications service" category incorporating enhanced services, would have effected a major change in the regulatory treatment of those services. While we would have implemented such a major change if Congress had required it, our review leads us to conclude that the legislative history does not demonstrate an intent by Congress to do so.\footnote{Feb. 19, 1998 en banc transcript at 93-94; see also Compuserve comments at 8-9, IAC comments at 17-18.} As a result, looking at the statute and the legislative history as a whole, we conclude that Congress intended the 1996 Act to maintain the Computer II framework.

46. We note that our interpretation of "telecommunications services" and "information services" as distinct categories is also supported by important policy
considerations. An approach in which a broad range of information service providers are simultaneously classed as telecommunications carriers, and thus presumptively subject to the broad range of Title II constraints, could seriously curtail the regulatory freedom that the Commission concluded in Computer II was important to the healthy and competitive development of the enhanced-services industry.

47. In response to this concern, Senators Stevens and Burns maintain that the Commission could rely on its forbearance authority under section 10 of the Act to resolve any such problems.\textsuperscript{97} Under that provision, the Commission is required to forbear from applying any regulation or provision of the Act to a telecommunications carrier or service, or class of carriers or services, if it determines that enforcement of that regulation or provision is not necessary to ensure that relevant charges, practices, classifications or regulations are just, reasonable and nondiscriminatory; enforcement of that regulation or provision is not necessary to protect consumers; and forbearance is consistent with the public interest.\textsuperscript{98} That forbearance authority is important, and the Commission has relied on it in the past.\textsuperscript{99} Notwithstanding the possibility of forbearance, we are concerned that including information service providers within the "telecommunications carrier" classification would effectively impose a presumption in favor of Title II regulation of such providers. Such a presumption would be inconsistent with the deregulatory and procompetitive goals of the 1996 Act. In addition, uncertainty about whether the Commission would forbear from applying specific provisions could chill innovation.\textsuperscript{100}

48. The classification of information service providers as telecommunications carriers, moreover, could encourage states to impose common-carrier regulation on such providers. Although section 10(e) of the Act precludes a state from applying or enforcing provisions of federal law where the Commission has determined to forbear, it does not preclude a state from imposing requirements derived from state law.\textsuperscript{101} State requirements for telecommunications carriers vary from jurisdiction to jurisdiction, but include

\textsuperscript{97} Senators Stevens and Burns comments at 3; see also TDS comments at 2.

\textsuperscript{98} 47 U.S.C. § 10(a).


\textsuperscript{100} See Senator McCain letter at 4: "[T]he state of permanent uncertainty that this approach would unavoidably cause would chill future development of Internet-based services and thereby disserve the public interest."

\textsuperscript{101} The Commission has preempted certain inconsistent state regulation of jurisdictionally mixed enhanced services provided by the BOCs. See Computer III Remand Proceedings: Bell Operating Company Safeguards and Tier I Local Exchange Company Safeguards, 6 FCC Red 7571, 7631 (1991) (BOC Safeguards Order), aff'd in relevant part, California v. FCC, 39 F.3d 919, 931-33 (9th Cir. 1994) (California III), cert. denied, 115 S.Ct. 1427 (1995). That preemption decision, however, does not address state regulation of telecommunications services.
certification, tariff filing, and various reporting requirements and fees.\textsuperscript{102} Furthermore, although the Commission has authority to forbear from unnecessary regulation, foreign regulators may not have comparable deregulatory authority to avoid imposing the full range of telecommunications regulation on information services. If these countries were to adopt an approach that classified information services as telecommunications, without the ability to craft an appropriate regulatory framework, that approach could subject information service providers to market access restrictions or above-cost accounting rates. Such a result would inhibit growth of these procompetitive services, to the detriment of consumers in the United States and abroad.

2. Protocol Processing

49. Senators Stevens and Burns urge that transmission services incorporating protocol processing should be treated as telecommunications services, and not information services. They note that, in enacting the 1996 Act, the conference committee declined to adopt the Senate version of the information services definition, derived from the Commission's definition of enhanced services, which explicitly referred to services that "employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscribers transmitted information."\textsuperscript{103} Rather, the conference committee adopted the House version, which made no explicit reference to protocol processing. As a result, the fact that a service involves protocol processing, those parties urge, should not lead to its classification as an information service.\textsuperscript{104}

50. The Commission reached a different result in the Non-Accounting Safeguards Order, in which it concluded that the category of information services was essentially identical to the pre-existing category of enhanced services. The Commission found that those protocol processing services that had qualified as "enhanced" should be treated as "information services," in part because they satisfy the statutory requirement of offering "a capability for . . . transforming [and] processing . . . information via telecommunications."\textsuperscript{105} It noted, however, that certain protocol processing services that result in no net protocol conversion to the end user are classified as basic services; those services are deemed telecommunications services.\textsuperscript{106}

\textsuperscript{102} See AOL comments at 12-13, 15-16. Cf. Computer III Phase II Order, 2 FCC Rcd 3072, 3078 (1987) (treating protocol processing as an adjunct-to-basic service would introduce regulatory uncertainty, since "even if we were to forbear from regulation on the federal level . . . a [provider] could be subject to state regulation").


\textsuperscript{104} See Senators Stevens and Burns comments at 4, 6.

\textsuperscript{105} 47 U.S.C. § 153(20); Non-Accounting Safeguards Order, 11 FCC Rcd at 21955-58, paras. 104-07.

\textsuperscript{106} In those services, while protocol conversion may take place internal to the call, there is no net conversion between or among end users. The services fall into three categories: (1) protocol processing in connection with communications between an end-user and the network itself (e.g., for initiation, routing, and
51. Senators Stevens and Burns raise a substantial point. The conference committee's decision not to adopt language explicitly classifying services employing protocol processing as information services supports the inference that the conferees did not intend that classification. We note, however, that the House language, adopted by the conference committee, was derived from the MFJ, and that services employing protocol processing were treated as information services under the MFJ. Furthermore, as noted above, services offering net protocol conversion appear to fall within the statutory language, because they offer a capability for "transforming [and] processing" information. In light of these considerations, we recognize that the issue of the regulatory treatment of protocol processing is a difficult one.

52. We find, however, little to no discussion of this issue in the record. Accordingly, we do not believe that we have an adequate basis for resolving this matter in this Report. Moreover, we believe that we need not resolve the issue in order to address the important issues raised by the Appropriations Act. The regulatory classification of protocol processing is significant to the provision of universal service only to the extent that it affects the appropriate classification of Internet access service and IP telephony. We find, however, for the reasons explained below, that Internet access services are appropriately classed as information services without regard to our treatment of protocol processing. Similarly, our discussion of the regulatory status of phone-to-phone IP telephony is not affected by our resolution of the protocol processing issue. The protocol processing that takes place incident to phone-to-phone IP telephony does not affect the service's classification, under the Commission's current approach, because it results in no net protocol conversion to the end user. Finally, when a facilities owner provides leased lines to an Internet access or backbone provider, it does not provide protocol processing.


\textsuperscript{108} See infra Section IV.D.2.

\textsuperscript{109} See infra Section IV.D.3.

\textsuperscript{110} See supra note 102.
3. "Telephone Exchange Service" and "Local Exchange Carrier" Definitions

53. The 1996 Act redefined "telephone exchange service" to include not only "service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers interconnecting service of the character ordinarily furnished by a single exchange," but also "comparable service provided through a system of switches, transmission equipment, or other facilities (or combination thereof) by which a subscriber can originate and terminate a telecommunications service."\(^{111}\) It defined "local exchange carrier" to include "any person that is engaged in the provision of telephone exchange service or exchange access." The definition excludes persons "engaged in the provision of a commercial mobile service . . . except to the extent the Commission finds that such service should be included in the definition of such term."\(^ {112}\)

54. Our review indicates that the legislative history does not provide guidance on the meaning of these provisions. It appears from the legislative text that Congress' redefinition of "telephone exchange service" was intended to include in that term not only the provision of traditional local exchange service (via facilities ownership or resale), but also the provision of alternative local loops for telecommunications services, separate from the public switched telephone network, in a manner "comparable" to the provision of local loops by a traditional local telephone exchange carrier. The record contains very little discussion of these definitions. We do not believe, however, that the 1996 Act's modification of the "telephone exchange service" definition, or its addition of the "local exchange carrier" definition, undercuts the analysis we present in this Report.

IV. APPLICATION OF DEFINITIONS

A. Overview

55. We have been directed by Congress to describe in detail the application of the definitions considered in the previous section to "mixed or hybrid services."\(^ {113}\) Congress has also directed that we explain "the impact of such application on universal service definitions and support, and the consistency of the Commission's application."\(^ {114}\) Under the statute, all "telecommunications carriers" that provide interstate telecommunications services must contribute to federal universal service mechanisms, and any company that otherwise provides interstate telecommunications may be required to contribute. Companies that use other providers' telecommunications networks to provide the communications path underlying their own information services do not contribute directly, but they support

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\(^{111}\) 47 U.S.C. § 3(47).

\(^{112}\) Id. § 3(26).

\(^{113}\) Appropriations Act, § 623(b)(2).

\(^{114}\) Id.
universal service indirectly through the telecommunications services they purchase. We conclude that entities providing pure transmission capacity to Internet access or backbone providers provide interstate "telecommunications." Internet service providers themselves generally do not provide telecommunications. In those cases where an Internet service provider owns transmission facilities, and engages in data transport over those facilities in order to provide an information service, we do not currently require it to contribute to universal service mechanisms. We believe it may be appropriate to reconsider that result, as it would appear in such a case that the Internet service provider is furnishing raw transmission capacity to itself. Finally, we consider the regulatory status of various forms of "phone-to-phone IP telephony" service mentioned generally in the record. The record currently before us suggests that certain of these services lack the characteristics that would render them "information services" within the meaning of the statute, and instead bear the characteristics of "telecommunications services." We do not believe, however, that it is appropriate to make any definitive pronouncements in the absence of a more complete record focused on individual service offerings. Our analysis, we believe, reflects a consistent approach that will safeguard the current and future provision of universal service to all Americans, and will achieve the Congressionally-specified goals of a "pro-competitive, deregulatory communications policy."

B. Mixed or Hybrid Services

56. We note that the phrase "mixed or hybrid services," as used in the Appropriations Act, does not appear in the text of the 1996 Act. We understand this term to refer to services in which a provider offers a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing or making available information via telecommunications, and as an inseparable part of that service transmits information supplied or requested by the user.

57. It follows from the statutory analysis set out in Part III.C of this Report that hybrid services are information services, and are not telecommunications services.115 Because information services are offered "via telecommunications," they necessarily require a transmission component in order for users to access information. Accordingly, if we interpreted the statute as breaking down the distinction between information services and telecommunications services, so that some information services were classed as telecommunications services, it would be difficult to devise a sustainable rationale under which all, or essentially all, information services did not fall into the telecommunications service category. As noted in the previous section, we find strong support in the text and legislative history of the 1996 Act for the view that Congress intended "telecommunications service" and "information service" to refer to separate categories of services.

115 See supra Section IV.C.
58. The Commission has considered the question of hybrid services since Computer I when it first sought to distinguish "communications" from "data processing." Computer II provided a framework for classifying such services, under which the offering of enhanced functionality led to a service being treated as "enhanced" rather than "basic." An offering that constitutes a single service from the end user's standpoint is not subject to carrier regulation simply by virtue of the fact that it involves telecommunications components. As we have explained above, we find that Congress intended to leave this general approach intact when it adopted the 1996 Act.

59. This functional approach is consistent with Congress's direction that the classification of a provider should not depend on the type of facilities used. A telecommunications service is a telecommunications service regardless of whether it is provided using wireline, wireless, cable, satellite, or some other infrastructure. Its classification depends rather on the nature of the service being offered to customers. Stated another way, if the user can receive nothing more than pure transmission, the service is a telecommunications service. If the user can receive enhanced functionality, such as manipulation of information and interaction with stored data, the service is an information service. A functional analysis would be required even were we to adopt an overlapping definition of "telecommunications service" and "information service." If we decided that any offering that "included telecommunications" was a telecommunications service, we would need some test to determine whether the transmission component was "included" as part of the service. Based on our analysis of the statutory definitions, we conclude that an approach in which "telecommunications" and "information service" are mutually exclusive categories is most faithful to both the 1996 Act and the policy goals of competition, deregulation, and universal service.

60. We recognize that the question may not always be straightforward whether, on the one hand, an entity is providing a single information service with communications and computing components, or, on the other hand, is providing two distinct services, one of which is a telecommunications service. It is plain, for example, that an incumbent local exchange carrier cannot escape Title II regulation of its residential local exchange service simply by packaging that service with voice mail. Since Computer II we have made it clear that offerings by non-facilities-based providers combining communications and

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117 See supra Section II.B.

118 See Computer II Final Decision, 77 FCC2d at 420-28, paras. 97-114.

119 See 47 U.S.C. § 3(46) (defining "telecommunications service" to include "the offering of telecommunications for a fee directly to the public . . . regardless of the facilities used").

120 See Frame Relay Order, 10 FCC Rcd at 13722-23, paras. 40-46.
computing components should always be deemed enhanced.\textsuperscript{121} But the matter is more complicated when it comes to offerings by facilities-based providers. We noted recently in the Universal Service Fourth Order on Reconsideration\textsuperscript{122} considering a related question, that "[t]he issue is whether, functionally, the consumer is receiving two separate and distinct services."\textsuperscript{122}

C. Background on Internet Services

61. Congress explicitly directed us to consider Internet access in connection with our implementation of section 254 of the Act.\textsuperscript{123} More generally, Internet-based offerings represent perhaps the most significant category of "mixed or hybrid services" discussed in the record. Therefore, we believe it appropriate to address in some detail the application of the statutory definitions considered in the previous section to the Internet. We begin with a brief description of the Internet as a backdrop for the analysis in this section.

62. The Internet is a a loose interconnection of networks belonging to many owners. It is comprised of tens of thousands of networks that communicate using the Internet protocol (IP).\textsuperscript{124} For purposes of this report, we find it useful to distinguish five types of entities: (1) end users; (2) access providers; (3) application providers; (4) content providers; and (5) backbone providers.

63. End users obtain access to and send information either through dial-up connections over the public switched telephone network, or through dedicated data circuits over wireline, wireless, cable, or satellite networks. Access providers more commonly known as Internet service providers, combine computer processing, information storage, protocol conversion, and routing with transmission to enable users to access Internet content and services.\textsuperscript{125} Major Internet access providers include America Online, AT&T WorldNet,
Netcom, Earthlink, and the Microsoft Network. Application providers offer users a discrete end-to-end service rather than open-ended Internet connectivity. Examples include IP telephony service providers such as IDT and Delta 3, and free electronic mail vendor Juno. Content providers make information available on "servers" connected to the Internet, where it can be accessed by end users. Major content providers include Yahoo, Netscape, ESPN Sportszone, and Time-Warner's Pathfinder service. Finally, backbone providers such as Worldcom, Sprint, AGIS, and PSINet, route traffic between Internet access providers, and interconnect with other backbone providers. Many companies fall into more than one of these categories. For example, America Online offers Internet access as well as content (which can be purchased separately for a lower fee), and until recently owned backbone provider ANS. In addition, many of the networks connected to the Internet are "intranets," or private data networks, that offer better performance or security to a limited set of users, but can still communicate with the Internet using IP.

64. The Internet is a distributed packet-switched network, which means that information is split up into small chunks or "packets" that are individually routed through the most efficient path to their destination. Even two packets from the same message may travel over different physical paths through the network. Packet switching also enables users to invoke multiple Internet services simultaneously, and to access information with no knowledge of the physical location of the server where that information resides.

65. Internet usage has grown steadily and rapidly, especially since the development of the World Wide Web in 1989. According to one survey, there are currently more than 4,000 Internet service providers and 40 national Internet backbones operating in the United States. According to data presented at our en banc hearing on February 19, 1998, Internet service provider market revenues are projected to grow from under four billion dollars in 1996 to eighteen billion dollars in the year 2000.

D. Discussion

1. Provision of Transmission Capacity to Internet Access and Backbone Providers

66. Internet service providers typically utilize a wide range of telecommunications inputs. Commenters have focused much attention on the fact that Internet service providers purchase analog and digital lines from local exchange carriers to connect to their dial-in subscribers, and pay rates incorporating those carriers' universal service obligations. What has received less attention is that Internet service providers utilize other, extensive

have caused some confusion. We emphasize that our intent was only to give examples of eligible services, not to somehow shift the legal classification of Internet access.


127 February 19, 1998 en banc transcript at 15 (testimony of Mr. Hyland).

128 See, e.g., USIPA comments at 4.
telecommunications inputs. While a large Internet service provider engages in extensive data transport, it may own no transmission facilities. To provide transport within its own network, it leases lines (T1s, T3s and OC-3s)\(^{129}\) from telecommunications carriers.\(^{130}\) To ensure transport beyond the edges of its network, it makes arrangements to interconnect with one or more Internet backbone providers.\(^{131}\) We explain below, in Part IV.D.2, that Internet service providers themselves provide information services, not telecommunications (and hence do not contribute to universal service mechanisms). But to the extent that any of their underlying inputs constitutes interstate telecommunications, we have authority under the 1996 Act to require that the providers of those inputs contribute to federal universal service mechanisms.

67. With regard to the lines leased by Internet service providers to provide their own internal networks, the analysis is straightforward. We explain below that the Internet service providers leasing the lines do not provide telecommunications to their subscribers, and thus do not directly contribute to universal service mechanisms. The provision of leased lines to Internet service providers, however, constitutes the provision of interstate telecommunications.\(^{132}\) Telecommunications carriers offering leased lines to Internet service providers must include the revenues derived from those lines in their universal service contribution base.\(^{133}\) The record reveals that at least some leased-line providers are

\(^{129}\) A T1 is a digital transmission link with a capacity of 1.544 million bits per second. A T3 has a capacity of 44.736 million bits per second. An OC-3 is a fiberoptic link with capacity of 155.52 million bits per second.

\(^{130}\) America Online reports that it expects to spend roughly $1.2 billion for telecommunications services in fiscal 1999. The prices it pays for those services incorporate universal service contributions. See AOL comments at 17 & n.65; AOL reply comments at Attachment 7-8 (Jeffrey K. Mackie-Mason, "Layering for Equity and Efficiency: A Principled Approach to Universal Service Policy"); see also, e.g., Coalition comments at 13-15; ITI and ITAA comments at 8; Worldcom comments at 8-9 & n.15.

\(^{131}\) One study indicates that transport costs, including incoming phone lines, leased lines and interconnection at a network access point, currently amount to roughly 25% of an Internet service provider's total costs. Lee W. McKnight & Brett A. Leida, "Internet Telephony: Costs, Pricing and Policy" (1997), at 14.


\(^{133}\) We base universal service contributions on "end-user telecommunications revenues." 47 C.F.R. § 54.703; Universal Service Order, 12 FCC Rcd at 9205-9212, paras. 842-57. Telecommunications revenues are treated as end-user revenues and are included in the funding base, unless the associated telecommunications offerings are provided to an entity that incorporates them into services that should generate their own universal service contributions. See Instructions for Completing the Worksheet for Filing Contributions to the Universal Service Support Mechanism, FCC Form 457, at 12. Because an Internet service provider is not such an entity, entities providing interstate telecommunications to Internet service providers must include the associated revenues in their universal service funding base.
complying with that requirement, and the prices paid by Internet service providers for their leased lines reflect that universal service obligation.134

68. Internet access, like all information services, is provided "via telecommunications." To the extent that the telecommunications inputs underlying Internet services are subject to the universal service contribution mechanism, that provides an answer to the concern, expressed by some commenters, that "[a]s more and more traffic is 'switched' to the Internet . . . there will no longer be enough money to support the infrastructure needed to make universal access to voice or Internet communications possible."135 To the extent that IP-based services grow, Internet service providers will have greater needs for transport to accommodate that level of usage. Those needs will lead to increased universal service contributions by providers of the leased lines that make up internal Internet service provider networks.136 More generally, the Internet backbone is currently growing at an exponential rate, as Internet-based services gain popularity and new Internet-based services are developed, leading to increased overall universal service support.137

69. In those cases where an Internet service provider owns transmission facilities, and engages in data transport over those facilities in order to provide an information service, we do not currently require it to contribute to universal service mechanisms. We believe it is appropriate to reexamine that result. One could argue that in such a case the Internet service provider is furnishing raw transmission capacity to itself.138 To the extent

134 See, e.g., Worldcom comments at 8 n. 15 ("when UUNET purchases network capacity, a basic telecommunications service, from Worldcom Technologies, Inc., Worldcom reports those revenues to the USAC as revenues earned from an end user").

135 Senators Stevens and Burns comments at 9; see also, e.g., Airtouch comments at 30-31.

136 McKnight & Leida indicate that movement from zero to moderate use of IP telephony will nearly triple Internet service provider costs associated with purchasing transport. McKnight & Leida, supra note 126, at 14 (for the modeled Internet service provider, projecting such costs at $7.37 million in the "baseline scenario" and $21.56 million in the "IP telephony scenario").


138 This is not inconsistent with our conclusion, above, that the 1996 Act built on the Commission's deregulatory actions in Computer II, so that "telecommunications" and "information service" are mutually exclusive categories. See supra Section II.C.1; see also Section II.B (describing Computer II). Computer II dealt with the relationship between an information service provider and its subscribers. Under Computer II, and under our understanding of the 1996 Act, we do not treat an information service provider as providing a telecommunications service to its subscribers. The service it provides to its subscribers is not subject to Title II, and is categorized as an information service. The information service provider, indeed, is itself a user of telecommunications; that is, telecommunications is an input in the provision of an information service. Our analysis here rests on the reasoning that under this framework, in every case, some entity must provide telecommunications to the information service provider. When the information service provider owns the underlying facilities, it appears that it should itself be treated as providing the underlying telecommunications.
this means the Internet service provider is providing telecommunications as a non-common carrier, it would not generally be subject to Title II, but it "may be required to contribute to the preservation and advancement of universal service if the public interest so requires." As a theoretical matter, it may be advisable to exercise our discretion under the statute to require such providers that use their own transmission facilities to contribute to universal service. This approach would treat provision of transmission facilities to Internet service providers similarly, for purposes of universal service, without regard to how the facilities are provided. We recognize, however, that there are significant operational difficulties associated with determining the amount of such an Internet service provider's revenues to be assessed for universal service purposes and with enforcing such requirements. There also are issues relating to the extent to which Internet service providers would uneconomically self-provide telecommunications because of a universal service assessment.

70. The Commission in the Universal Service Order expressly characterized entities that "provide telecommunications solely to meet their internal needs" as telecommunications providers subject to our permissive contribution authority. It found that those entities "should not be required to contribute to the support mechanisms at this time, because telecommunications do not comprise the core of their business." Further, "it would be administratively burdensome to assess a special non-revenues-based contribution on these providers." We intend to consider, in an upcoming proceeding, the status of entities that provide transmission to meet their internal needs. To the extent that we conclude that such entities provide telecommunications, we would consider, among other things, whether there are efficient, effective ways to require information service providers that provide telecommunications to meet their own internal needs to contribute to universal service support so that our regulations do not create an artificial incentive for information service providers to integrate vertically. We also would consider whether, and to what extent, our reasoning applies to entities other than information service providers that provide interstate telecommunications to meet their own internal needs.

That conclusion, however, speaks only to the relationship between the facilities owner and the information service provider (in some cases, the same entity); it does not affect the relationship between the information service provider and its subscribers.


140 We express no view in this Report on the applicability of this analysis to cable operators providing Internet access service. The Act distinguishes between Title II and Title VI facilities, and we have not yet established the regulatory classification of Internet services provided over cable television facilities. In the Pole Attachments Telecommunications Rate Order, we expressly declined to rule on that issue, finding that cable operators providing traditional cable services and Internet access services over the same facilities were entitled to the 47 U.S.C. § 224(d)(3) pole attachment rate without regard to the regulatory classification of their Internet-based services. See Pole Attachment Telecommunications Rate Order, at paras. 32-34.

141 Universal Service Order, 2 FCC Rcd at 9185, para. 799.

142 Id. See also April 8, 1998 letter from Representative White to Chairman Kennard, et al.
71. With respect to the facilities that make up the Internet backbone, the record does not reveal the extent to which firms providing telecommunications facilities as part of the Internet backbone are currently contributing to federal universal service mechanisms. Yet it seems clear that, in one manner or another, firms are offering telecommunications inputs in this context that underlie the ultimate provision of Internet services to the consumer. We believe we would need to consider these offerings in order to ensure that the goals of section 254 are fully realized.

72. Our thinking relating to the Internet backbone points up some of the limitations of our current approaches to implementing the universal service provisions of the 1996 Act. The technology and market conditions relating to the Internet backbone are unusually fluid and fast-moving, and we are reluctant to impose any regulatory mandate that relies on the persistence of a particular market model or market structure in this area. It may be that the most successful approach in this context, maintaining universal service revenues while avoiding the imposition of inefficient or innovation-discouraging obligations, would look to the actual facilities owners, requiring them to contribute to universal service mechanisms on the revenues they receive. It is facilities owners that, in a real sense, provide the crucial telecommunications inputs underlying Internet service. If universal service contribution obligations, in the context of the Internet backbone, were based on facilities ownership rather than end-user revenues, then firms purchasing capacity from the facilities owners would still contribute indirectly, through prices that recover the facilities owners' contributions. This matter deserves further consideration.

2. Internet Access Services

73. We find that Internet access services are appropriately classed as information, rather than telecommunications, services. Internet access providers do not offer a pure transmission path; they combine computer processing, information provision, and other computer-mediated offerings with data transport. Senators Stevens and Burns suggest that services provided by Internet access providers should be deemed to fall on the telecommunications side of the line. When an Internet service provider transmits an email message, they maintain, it transmits "information of the user's choosing, without change in the form or content of the information as sent or received." Changes such as the addition of message headers, they argue, are inconsequential: "If the information chosen by the user has the same form (e.g., typewritten English) and content (e.g., directions to Washington, D.C.) as sent and received, then a 'telecommunication' has occurred." Senator McCain, by contrast, urges that electronic mail, voice mail and Internet access are information services, because they furnish the capabilities to store, retrieve, or generate information.

74. In determining whether Internet access providers should be classed as providing information services rather than telecommunications services, the text of the 1996

\[^{143}\text{Senators Stevens and Burns comments at 4; see also, e.g., LTD comments at 1-2; RTC comments at 13-14.}\]

\[^{144}\text{Senator McCain letter at 3.}\]
Act requires us to determine whether Internet access providers merely offer transmission "between or among points selected by the user, of information of the user's choosing, without change in the form or content of the information as sent and received," or whether they go beyond the provision of a transparent transmission path to offer end users the "capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information." For the reasons that follow, we conclude that the latter more accurately describes Internet access service.

75. We note that the functions and services associated with Internet access were classed as "information services" under the MFJ. Under that decree, the provision of gateways (involving address translation, protocol conversion, billing management, and the provision of introductory information content) to information services fell squarely within the "information services" definition. Electronic mail, like other store-and-forward services, including voice mail, was similarly classed as an information service. Moreover, the Commission has consistently classed such services as "enhanced services" under Computer II. In this Report, we address the classification of Internet access service de novo, looking to the text of the 1996 Act. Various commenters have approached this question by inquiring whether specific applications, such as e-mail, available to users with Internet access, constitute "telecommunications." As we explain below, we believe that Internet access providers do not offer subscribers separate services -- electronic mail, Web browsing, and others -- that should be deemed to have separate legal status. It is useful to examine specific Internet applications, however, in order to understand the nature of the functionality that an Internet access provider offers.

76. Internet access providers typically provide their subscribers with the ability to run a variety of applications, including World Wide Web browsers, FTP clients, Usenet.

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146 Id. § 153(20).


148 See United States v. Western Electric Co., 714 F. Supp. 1, 11, 19 n. 73 (D.D.C. 1988), rev'd in part, 900 F.2d 283 (D.C. Cir. 1990); see also id. at 18-24 (amending the MFJ to allow the RBOCs to provide "voice storage and retrieval services, including voice messaging and electronic mail services," notwithstanding their classification as information services). The Telecommunications Resellers Association has filed a petition seeking a declaratory ruling that voice mail is a telecommunications service and thus is subject to resale under 47 U.S.C. § 251. That petition is pending.

149 See, e.g., Computer II Final Decision, 77 FCC 2d at 420-21, paras. 97-98.

150 See, e.g., Compuserve comments at 5 (e-mail); Senators Stevens and Burns comments at 4 (same); Letter from Donna N. Lampert, Mintz, Levin, to Magalie Roman Salas, FCC, dated Feb. 27, 1998 (summarizing AOL's views).

151 FTP, or File Transfer Protocol, is a tool for accessing file archives linked to the Internet.
newsreaders, electronic mail clients, Telnet applications, and others. When subscribers store files on Internet service provider computers to establish "home pages" on the World Wide Web, they are, without question, utilizing the provider's "capability for . . . storing . . . or making available information" to others. The service cannot accurately be characterized from this perspective as "transmission, between or among points specified by the user"; the proprietor of a Web page does not specify the points to which its files will be transmitted, because it does not know who will seek to download its files. Nor is it "without change in the form or content," since the appearance of the files on a recipient's screen depends in part on the software that the recipient chooses to employ. When subscribers utilize their Internet service provider's facilities to retrieve files from the World Wide Web, they are similarly interacting with stored data, typically maintained on the facilities of either their own Internet service provider (via a Web page "cache") or on those of another. Subscribers can retrieve files from the World Wide Web, and browse their contents, because their service provider offers the "capability for . . . acquiring, . . . retrieving [and] utilizing . . . information." Most of the data transport on the Internet relates to the World Wide Web and file transfer.

77. The same is true when Internet service providers offer their subscribers access to Usenet newsgroup articles. An Internet service provider receives and stores these articles (in 1996, about 1.2 gigabytes of new material each day) on its own computer facilities. Each Internet service provider must choose whether to carry a full newsgroup feed, or only a smaller subset of available newsgroups. Each Internet service provider must decide how long it will store articles in each newsgroup, and at what point it will delete them as outdated. A user can then select among the available articles, choosing those that the user will view or read; having read an article, the user may store or forward it; and the user can post articles of his or her own, which will in turn be stored on the facilities of his own Internet service provider and those of every other Internet service provider choosing to

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152 The Usenet is a gigantic computer bulletin board system that is operated mostly (although not entirely) over the Internet. There are more than 15,000 different Usenet "newsgroups," each devoted to a single topic such as Peruvian culture, molecular physics and the television show "The X-Files."

153 Telnet applications allow users to use other computers connected to the Internet as if they were using terminals physically connected to those machines.

154 Several commenters stress these points. See, e.g., CIX comments at 7-9, Compuserve comments at 6-7; see also Worldcom comments at 5.

155 As of April 1995 (the last period in which the National Science Foundation collected the relevant information), about half of all Internet data traffic, measured in bytes of traffic, related to the World Wide Web. That proportion was rising sharply, having doubled in just the previous year. The second largest category of traffic related to FTP file transfer. Electronic mail and Usenet news, combined, amounted to less than 15% of Internet data traffic, and that proportion was falling. See Merit, Inc. data files at <http://www.merit.edu/nsfnet/statistics/history.ports>.

156 See supra note 138.

carry that portion of the newsgroup feed. In providing this service, the Internet service provider offers "a capability for generating, acquiring, storing, . . . retrieving . . . and making available information through telecommunications." Its function seems indistinguishable from that of the database proprietor offering subscribers access to information it maintains on-site; such a proprietor offers the paradigmatic example of an information service.

78. As noted above, Senators Stevens and Burns state that electronic mail constitutes a telecommunications service. They note that the provision of a transmission path for the delivery of faxes constitutes telecommunications, and characterize electronic mail as "nothing more or less than a paperless fax." We have carefully considered this argument, but further analysis leads us to a different result. Like the World Wide Web and Usenet services described above, electronic mail utilizes data storage as a key feature of the service offering. The fact that an electronic mail message is stored on an Internet service provider's computers in digital form offers the subscriber extensive capabilities for manipulation of the underlying data. The process begins when a sender uses a software interface to generate an electronic mail message (potentially including files in text, graphics, video or audio formats). The sender's Internet service provider does not send that message directly to the recipient. Rather, it conveys it to a "mail server" computer owned by the recipient's Internet service provider, which stores the message until the recipient chooses to access it. The recipient may then use the Internet service provider's facilities to continue to store all or part of the original message, to rewrite it, to forward all or part of it to third parties, or otherwise to process its contents -- for example, by retrieving World Wide Web pages that were hyperlinked in the message. The service thus provides more than a simple transmission path; it offers users the "capability for . . . acquiring, storing, transforming, processing, retrieving, utilizing, or making available information through telecommunications."

79. More generally, though, it would be incorrect to conclude that Internet access providers offer subscribers separate services -- electronic mail, Web browsing, and others -- that should be deemed to have separate legal status, so that, for example, we might deem electronic mail to be a "telecommunications service," and Web hosting to be an "information service." The service that Internet access providers offer to members of the

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159 Senators Stevens and Burns comments at 4, 7.

160 Id. at 7.

161 Particular users may not exploit this feature of the service offering; indeed, two users with direct Internet connections can communicate via electronic mail in close to real-time. Nonetheless, it is central to the service offering that electronic mail is store-and-forward, and hence asynchronous; one can send a message to another person, via electronic mail, without any need for the other person to be available to receive it at that time.

162 See, e.g., CIX comments at 9, Compuserve comments at 5-6, NCTA comments at 5-7, AOL ex parte.
public is Internet access. That service gives users a variety of advanced capabilities. Users can exploit those capabilities through applications they install on their own computers. The Internet service provider often will not know which applications a user has installed or is using. Subscribers are able to run those applications, nonetheless, precisely because of the enhanced functionality that Internet access service gives them.

80. The provision of Internet access service involves data transport elements: an Internet access provider must enable the movement of information between customers' own computers and the distant computers with which those customers seek to interact. But the provision of Internet access service crucially involves information-processing elements as well; it offers end users information-service capabilities inextricably intertwined with data transport. As such, we conclude that it is appropriately classed as an "information service."

81. An Internet access provider, in that respect, is not a novel entity incompatible with the classic distinction between basic and enhanced services, or the newer distinction between telecommunications and information services. In essential aspect, Internet access providers look like other enhanced -- or information -- service providers. Internet access providers, typically, own no telecommunications facilities. Rather, in order to provide those components of Internet access services that involve information transport, they lease lines, and otherwise acquire telecommunications, from telecommunications providers -- interexchange carriers, incumbent local exchange carriers, competitive local exchange carriers, and others. In offering service to end users, however, they do more than resell those data transport services. They conjoin the data transport with data processing, information provision, and other computer-mediated offerings, thereby creating an information service. Since 1980, we have classed such entities as enhanced service providers. We conclude that, under the 1996 Act, they are appropriately classed as information service providers.

82. Our findings in this regard are reinforced by the negative policy consequences of a conclusion that Internet access services should be classed as "telecommunications."

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163 In this respect, we distinguish Internet access providers from application providers such as Juno; electronic mail is the only functionality Juno offers.

164 We note that large corporate users with internal computer networks and direct connections to their Internet access providers receive somewhat different functionality than do residential dial-up subscribers.

165 As GTE put it, “[t]he very core of the Internet and its associated services is the ability to ‘retrieve’ and ‘utilize’ information.” GTE comments at 18.

166 But see Bell Atlantic reply comments at 7-9 (Internet access providers should make universal service fund contributions to the extent of the telecommunications component of their services).

167 See supra Section IV.D.1.
service providers generally as telecommunications carriers.\textsuperscript{168} Turning specifically to the matter of Internet access, we note that classifying Internet access services as telecommunications services could have significant consequences for the global development of the Internet.\textsuperscript{169} We recognize the unique qualities of the Internet, and do not presume that legacy regulatory frameworks are appropriately applied to it.\textsuperscript{170}

3. IP Telephony

83. Having concluded that Internet access providers do not offer "telecommunications service" when they furnish Internet access to their customers, we next consider whether certain other Internet-based services might fall within the statutory definition of "telecommunications." We recognize that new Internet-based services are emerging, and that our application of statutory terms must take into account such technological developments. We therefore examine in this section Internet-based services, known as IP telephony, that most closely resemble traditional basic transmission offerings.\textsuperscript{171} The Commission to date has not formally considered the legal status of IP telephony.\textsuperscript{172} The record currently before us suggests that certain "phone-to-phone IP telephony" services lack the characteristics that would render them "information services" within the meaning of the statute, and instead bear the characteristics of "telecommunications services." We do not believe, however, that it is appropriate to make any definitive pronouncements in the absence of a more complete record focused on individual service offerings.

\textsuperscript{168} See supra Section II.C.1.

\textsuperscript{169} On a related point, we note that the European Commission has determined that extant IP telephony services should not be regulated as "voice telephony." Status of Voice Communications on Internet Under Community Law and, in Particular, Under Directive 90/388/EEC, Official Journal of the European Community OJ No C 6 (January 10, 1998) at 4.

\textsuperscript{170} The United States emphasized in the WTO Negotiations on Basic Telecommunications that countries should not impose new regulatory burdens on Internet and online service providers that could stifle the development of new technologies and services. See The White House, A Framework for Global Electronic Commerce 24 (July 1, 1997). As a general matter, the participants in those negotiations characterized as "basic" those services that involve end-to-end transmission of user-supplied information, such as voice telephony, packet-switched and circuit-switched data transmission, telex, telegraph, fax, and leased lines. Services such as the provision of online databases, electronic mail, and voice mail, by contrast, were characterized as "value-added." As part of the WTO Basic Telecom Agreement, however, WTO Members enter their own schedule of commitments with regard to the extent of their liberalization efforts.

\textsuperscript{171} Several of the commenters discuss IP telephony as a service that, for legal and policy reasons, should be treated as a "telecommunications service" under the Act. See AT&T comments at 12-13; Alaska comments at 8-9; AirTouch comments at 30-31; Senators Stevens and Burns comments at 8; RTC comments at 13.

\textsuperscript{172} A petition for rulemaking by Americas Carriers Telecommunication Association (ACTA) asking that IP telephony software and hardware providers be classified as common carriers is still pending. See Common Carrier Bureau Clarifies and Extends Request for Comment on ACTA Petition Relating to "Internet Phone" Software and Hardware -- RM 8775, Report No. CC 96-10 (March 25, 1996). Although the analysis in this Report addresses many of the issues raised in the ACTA petition, we will be considering the petition in a separate order.
84. "IP telephony" services enable real-time voice transmission using Internet protocols. The services can be provided in two basic ways: through software and hardware at customer premises, or through "gateways" that enable applications originating and/or terminating on the PSTN. Gateways are computers that transform the circuit-switched voice signal into IP packets, and vice versa, and perform associated signalling, control, and address translation functions. The voice communications can be transmitted along with other data on the "public" Internet, or can be routed through intranets or other private data networks for improved performance. Several companies now offer commercial IP telephony products. For example, VocalTec sells software that end users can install on their personal computers to make calls to other users with similar equipment, and also makes software used in gateways. Companies such as IDT and Qwest employ gateways to offer users the ability to call from their computer to ordinary telephones connected to the public switched network, or from one telephone to another. To use the latter category of services, a user first picks up an ordinary telephone handset connected to the public switched network, then dials the phone number of a local gateway. Upon receiving a second dialtone, the user dials the phone number of the party he or she wishes to call. The call is routed from the gateway over an IP network, then terminated through another gateway to the ordinary telephone at the receiving end.

173 While these services are often referred to as "Internet telephony," the same technology is used both over the public Internet and over separate private IP networks. This class of services includes both voice and facsimile transmission using IP.

174 The two basic technical mechanisms described here can be used to create a broad range of IP telephony service offerings. For example, gateways can be deployed on either the originating or the terminating end of the call, or both. Wherever a gateway is not deployed, premises-based equipment must be available as an alternative.

175 To engage in a "computer-to-computer" call, a user must typically install IP telephony software on a personal computer equipped with a sound card and microphone, connect to the Internet through an ISP, locate another user who is running compatible IP telephony software and is also connected to the Internet at that moment, and then initiate a call to the other user. See Ashley Dunn, "More Phone, Less Computer, Behind New Generation of Internet Phones," New York Times CyberTimes, January 7, 1998; Deborah Branscum, "A Cheaper Way to Phone," Newsweek, March 16, 1998, at 80 (describing different forms of IP telephony).


177 More specifically, the customer places a call over the public switched telephone network to a gateway, which returns a second dial tone, and the signalling information necessary to complete the call is conveyed to the gateway using standard in-band (i.e., DMTF) signals on an overdial basis. The customer's voice or fax signal is sent to the gateway in unprocessed form (that is, not compressed and packetized). The service provider compresses and packetizes the signal at the gateway, transmits it via IP to a gateway in a different local exchange, reverses the processing at the terminating gateway, and sends the signal out over the public switched telephone network in analog, or uncompressed digital, unpacketized form.
85. Commenters that discuss IP telephony are split on the appropriate treatment of these services.\(^{178}\) Several parties, including Senators Rockefeller, Snowe, Stevens, and Burns, urge that IP telephony providers offer interstate telecommunications services and, consequently, should contribute to universal service support mechanisms.\(^{179}\) Other parties, including Senator McCain, Representative White and the National Telecommunications and Information Administration, oppose application of Title II regulation.\(^{180}\) Some commenters argue that IP telephony is a nascent technology that is unlikely to generate significant revenues in the foreseeable future.\(^{181}\) Regardless of the size of the market, we must still decide as a legal matter whether any IP telephony providers meet the statutory definitions of offering "telecommunications" or "telecommunications service" in section 3 of the 1996 Act.

86. As we have observed above in our general discussion of hybrid services, the classification of a service under the 1996 Act depends on the functional nature of the end-user offering.\(^{182}\) Applying this test to IP telephony, we consider whether any company offers a service that provides users with pure "telecommunications." We first note that "telecommunications" is defined as a form of “transmission.”\(^{183}\) Companies that only provide software and hardware installed at customer premises do not fall within this category, because they do not transmit information. These providers are analogous to PBX vendors, in that they offer customer premises equipment (CPE) that enables end users to engage in telecommunications by purchasing local exchange and interexchange service from carriers. These CPE providers do not, however, transport any traffic themselves.\(^{184}\)

87. In the case of "computer-to-computer" IP telephony, individuals use software and hardware at their premises to place calls between two computers connected to the Internet. The IP telephony software is an application that the subscriber runs, using Internet access provided by its Internet service provider. The Internet service providers over whose networks the information passes may not even be aware that particular customers are using

\(^{178}\) Compare AT&T comments at 12-13; Alaska comments at 8-9; Airtouch comments at 30-31; Senators Stevens and Burns comments at 8; RTC comments at 13 (arguing that IP telephony services are "telecommunications") with AOL reply comments at 8-9; Comcast reply at 4 (claiming IP telephony services should not be regulated under the Act at this time).

\(^{179}\) See, e.g., Senators Rockefeller and Snowe letter; Senators Stevens and Burns comments at 8.

\(^{180}\) See Senator McCain letter; Representative White letter; Assistant Secretary Irving letter.

\(^{181}\) See AOL reply comments at 8; Comcast reply comments at 4; Senator McCain letter at 4.

\(^{182}\) See supra Section III.D.1.

\(^{183}\) 47 U.S.C. § 153(43).

\(^{184}\) We note that this argument applies to IP telephony services provided through both dial-up residential connections to the public Internet, and to dedicated lines connected to corporate local area networks. The critical distinction is that packetizing and depacketizing takes place at the customer premises, rather than within the network.
IP telephony software, because IP packets carrying voice communications are indistinguishable from other types of packets. As a general matter, Title II requirements apply only to the "provi[sion]" or "offering" of telecommunications.\footnote{See 47 U.S.C. §§ 153(46), 254(d).} Without regard to whether "telecommunications" is taking place in the transmission of computer-to-computer IP telephony,\footnote{It may be argued that the poor sound quality of such services when offered over the public Internet effectively constitutes a "change in the form or content" of user information. Because of our conclusion that IP telephony software companies do not "provide telecommunications," we need not resolve this question.} the Internet service provider does not appear to be "provid[ing]" telecommunications to its subscribers.\footnote{As we note in Section IV.D.1, the provider of underlying transmission facilities is "providing telecommunications" to the Internet service provider. Further, if the customer uses a dial-up Internet connection, there is of course a LEC that "provides telecommunications" regardless of what information service that customer employs. This underlying telecommunications service is, however, distinguishable from the IP telephony functionality for the same reason it is distinguishable from the Internet access services offered by Internet service providers.}

88. "Phone-to-phone" IP telephony services appear to present a different case. In using the term "phone-to-phone" IP telephony, we tentatively intend to refer to services in which the provider meets the following conditions: (1) it holds itself out as providing voice telephony or facsimile transmission service; (2) it does not require the customer to use CPE different from that CPE necessary to place an ordinary touch-tone call (or facsimile transmission) over the public switched telephone network; (3) it allows the customer to call telephone numbers assigned in accordance with the North American Numbering Plan, and associated international agreements; and (4) it transmits customer information without net change in form or content.

89. Specifically, when an IP telephony service provider deploys a gateway within the network to enable phone-to-phone service, it creates a virtual transmission path between points on the public switched telephone network over a packet-switched IP network. These providers typically purchase dial-up or dedicated circuits from carriers and use those circuits to originate or terminate Internet-based calls. From a functional standpoint, users of these services obtain only voice transmission, rather than information services such as access to stored files.\footnote{Routing and protocol conversion within the network does not change this conclusion, because from the user's standpoint there is no net change in form or content.} The provider does not offer a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information. Thus, the record currently before us suggests that this type of IP telephony lacks the characteristics that would render them “information services” within the meaning of the statute, and instead bear the characteristics of “telecommunications services.”

90. We do not believe, however, that it is appropriate to make any definitive pronouncements in the absence of a more complete record focused on individual service offerings. As stated above, we use in this analysis a tentative definition of "phone-to-
phone" IP telephony. Because of the wide range of services that can be provided using packetized voice and innovative CPE, we will need, before making definitive pronouncements, to consider whether our tentative definition of phone-to-phone IP telephony accurately distinguishes between phone-to-phone and other forms of IP telephony, and is not likely to be quickly overcome by changes in technology. We defer a more definitive resolution of these issues pending the development of a more fully-developed record because we recognize the need, when dealing with emerging services and technologies in environments as dynamic as today's Internet and telecommunications markets, to have as complete information and input as possible.

91. In upcoming proceedings with the more focused records, we undoubtedly will be addressing the regulatory status of various specific forms of IP telephony, including the regulatory requirements to which phone-to-phone providers may be subject if we were to conclude that they are "telecommunications carriers." The Act and the Commission's rules impose various requirements on providers of telecommunications, including contributing to universal service mechanisms, paying interstate access charges, and filing interstate tariffs. We note that, to the extent we conclude that certain forms of phone-to-phone IP telephony service are "telecommunications services," and to the extent the providers of those services obtain the same circuit-switched access as obtained by other interexchange carriers, and therefore impose the same burdens on the local exchange as do other interexchange carriers, we may find it reasonable that they pay similar access charges. On the other hand, we likely will face difficult and contested issues relating to the assessment of access charges on these providers. For example, it may be difficult for the LECs to determine whether particular phone-to-phone IP telephony calls are interstate, and thus subject to the federal access charge scheme, or intrastate. We intend to examine these issues more closely based on the more complete records developed in future proceedings.

92. With regard to universal service contributions, to the extent we conclude that certain forms of phone-to-phone IP telephony are interstate "telecommunications," and to the extent that providers of such services are offering those services directly to the public for a fee, those providers would be "telecommunications carriers." Accordingly, those providers would fall within section 254(d)'s mandatory requirement to contribute to universal service mechanisms. Finally, under section 10 of the Act, we have authority to forbear from imposing any rule or requirement of the Act on telecommunications carriers. We will need to consider carefully whether, pursuant to our authority under section 10 of the Act, to forbear from imposing any of the rules that would apply to phone-to-phone IP telephony providers as "telecommunications carriers."

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189 Other requirements include, but are not limited to: customer proprietary network information (CPNI) rules; section 214 authorization requirements for international service; interconnection provisions of section 251(a); TRS obligations; CALEA assistance capability requirements; compliance with standards promulgated pursuant to sections 255 (access by persons with disabilities) and 256 (coordination for interconnectivity); and certain fees, reporting, and filing requirements.

93. We recognize that our treatment of phone-to-phone IP telephony may have implications for the international telephony market. In the international realm, the Commission has stated that IP telephony serves the public interest by placing significant downward pressure on international settlement rates and consumer prices. In some instances, moreover, IP telephony providers have introduced an alternative calling option in foreign markets that otherwise would face little or no competition. We continue to believe that alternative calling mechanisms are an important pro-competitive force in the international services market. We need to consider carefully the international regulatory requirements to which phone-to-phone providers would be subject. For example, it may not be appropriate to apply the international accounting rate regime to IP telephony.

4. Policy Implications

94. Congress directed us to explain in this Report "the impact of the Commission's interpretation . . . on the current and future provision of universal service," and "the consistency of the Commission's application" of statutory definitions. Therefore, we address in this section the policy consequences of the legal analysis described above. We conclude that our reading of the statutory definitions reflects a consistent approach that will safeguard the current and future provision of universal service to all Americans, and will achieve the 1996 Act's goals of a "pro-competitive, deregulatory communications policy." Further, we are committed to monitoring closely developments in the telecommunications industry to ensure that such changes do not undermine our obligation to ensure universal service.

a. Generally

95. The Internet and other enhanced services have been able to grow rapidly in part because the Commission concluded that enhanced service providers were not common carriers within the meaning of the Act. This policy of distinguishing competitive technologies from regulated services not yet subject to full competition remains viable. Communications networks function as overlapping layers, with multiple providers often leveraging a common infrastructure. As long as the underlying market for provision of transmission facilities is competitive or is subject to sufficient pro-competitive safeguards,

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192 Appropriations Act at §623(b)(1). We have also been directed to explain specifically how our application of the statutory definition to "mixed or hybrid services" impacts on "universal service definitions and support." Id. at § 623(b)(2).

193 Id. at § 623(b)(2).

194 AOL comments at 7-8; USIPA comments at 3; ITI and ITAA comments at 8; AOL reply comments at Attachment 14-16.

195 See AOL reply comments at Attachment 2-7.
we see no need to regulate the enhanced functionalities that can be built on top of those facilities. We believe that Congress, by distinguishing "telecommunications service" from "information service," and by stating a policy goal of preventing the Internet from being fettered by state or federal regulation, endorsed this general approach. Limiting carrier regulation to those companies that provide the underlying transport ensures that regulation is minimized and is targeted to markets where full competition has not emerged. As an empirical matter, the level of competition, innovation, investment, and growth in the enhanced services industry over the past two decades provides a strong endorsement for such an approach.

b. Impact on Universal Service

96. Congress has directed us to explain how our interpretation of the 1996 Act promotes "the current and future provision of universal service to consumers in all areas of the Nation, including high cost and rural areas." With regard to the current provision of universal service, we have established programs under section 254 to fund telecommunications services in high-cost areas and for low-income consumers, as well as access to advanced services for schools, libraries, and rural health care providers. We believe that these programs have been designed with a sufficiently broad contribution base to support current universal service needs.

97. As we have explained, our interpretation of the terms "telecommunications" and "information service" reflect continuity with pre-existing legal categories. Consequently, we do not believe that these interpretations would create significant shifts in contribution obligations based on the current configuration of the communications industry.

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196 Several commenters observe that the 1996 Act states that it is the policy of the United States "to promote the continued development of the Internet and other interactive computer services and interactive media . . . [and] to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation." 47 U.S.C. § 230(b)(1)-(2). See CIX comments at 5; ITI and ITAA comments at 8; NCTA comments at 10; CIX reply at 1-2. See also Senator McCain letter at 2 (claiming that imposition of new burdens on Internet services would be directly contrary to the will of Congress).

197 Appropriations Act, § 623(b)(1).

198 See Universal Service Order, 12 FCC Rcd at 8888-8951, paras. 199-325 (addressing high cost support); id. at 8952-8994, paras. 326-409 (addressing low-income support); id. at 9002-9092, paras. 424-607 (establishing mechanisms to support access to advanced services for schools and libraries).

199 Commenters that expressed concern about the sufficiency of the current mechanisms generally did so on the basis of the split between federal and state support. Arguments about the effects of Internet-based services generally focused on potential effects in the future. See, e.g., Senators Stevens and Burns comments at 9 ("Federal and state universal service mechanisms, including access charges, currently collect enough money to support the physical infrastructure today. However, if the current Commission exemptions from universal service contributions and access charges remain unchanged, that will not be the case tomorrow.")
Retail revenues of Internet service providers -- approximately five billion dollars in 1997\textsuperscript{200} -- are relatively small compared to the $100 billion in long-distance revenue reported in the latest telecommunications relay service fund worksheet report.\textsuperscript{201} The fact that Internet access is not considered a "telecommunications service" therefore does not have a significant impact on the current universal service funding base. More importantly, however, Internet access generates additional telecommunications revenue to support universal service in the form of the thousands of business lines (with their associated tariffed rates, subscriber line charges, and presubscribed interexchange carrier charges) that Internet service providers must purchase in order to provide connectivity to their users, and the high-capacity leased lines that they use to route data across their networks.\textsuperscript{202}

98. It is critical, however, to make sure that our interpretation of the statute, to the extent legally possible, will continue to sustain universal service in the future. Some parties argue that, as new communications services such as Internet access and IP telephony grow, traffic will shift away from conventional telecommunications services, thus draining the support base for universal service.\textsuperscript{203} We are mindful that, in order to promote equity and efficiency, we should avoid creating regulatory distinctions based purely on technology. Congress did not limit "telecommunications" to circuit-switched wireline transmission, but instead defined that term on the basis of the essential functionality provided to users.\textsuperscript{204}

\textsuperscript{200} Coopers & Lybrand's New Media Group, Internet Service Provider Overview (presented at FCC en banc hearing, Feb. 19, 1998) at 18.

\textsuperscript{201} Telecommunications Industry Revenue: TRS Fund Worksheet (FCC Common Carrier Bureau, Industry Analysis Division, November 1997) at Figure 1. See also MCI reply comments at 1-2 (observing that exclusion of Internet revenues has an insignificant effect on universal service funding). We note, however, data presented at our February 19, 1998 en banc hearing indicating that Internet service provider market revenues are projected to grow to eighteen billion dollars in the year 2000. See supra Section IV.C.

We use the disparity between long distance market revenues and Internet service provider market revenues to illustrate the relatively small size of the Internet service provision market. We note, however, that the total revenues subject to universal service mechanism substantially exceed the long distance revenues.

\textsuperscript{202} AOL comments at 17 n.65 (stating that AOL spent over $900 million on telecommunications services in its most recent fiscal year). See also CIX comments at 10-11; Compuserve comments at 11; Coalition comments at 13; ITI and ITAA comments at 8-9; USIPA comments at 4; Internet Service Providers reply comments at 4-5. But see AT&T reply comments at 12; RTC reply comments at 10 (asserting that indirect ISP contributions are insufficient to support universal service in an equitable manner); but see also GTE reply comments at 21-22 (arguing that current FCC interpretations favor self-provision of transmission by ISPs). We acknowledge that such indirect contributions are different from direct contributions by telecommunications carriers. The point is that Internet access does generate substantial support for universal service.

\textsuperscript{203} See AirTouch comments at 28-33; Alaska comments at 8-10; Ameritech comments at 2; AT&T comments at 12-13; GTE comments at 15-17; Senators Stevens and Burns comments at 8-9; RTC comments at 10-13; TDS comments at 3; WUTC comments at 5; AT&T reply comments at 11-12; Bell Atlantic reply comments at 14.

\textsuperscript{204} See 47 U.S.C. § 153(46) ("The term 'telecommunications service' means the offering of telecommunications for a fee directly to the public . . . regardless of the facilities used.") (emphasis added). The Commission has followed the same approach in implementing Computer II. See, e.g., American
Thus, for example, we have previously required paging providers to contribute to universal service funding, because they are providers of "telecommunications service."\(^{205}\) We have also required private carriers to contribute to federal universal service funding, even though they are not common carriers.\(^{206}\) In this Report, we have further addressed providers of pure transmission capacity used for Internet services, and have concluded that these entities provide services that meet the legal definition of "telecommunications." We also have considered the regulatory status of various forms of "phone-to-phone IP telephony" service mentioned generally in the record. The record currently before us suggests that certain of these services lack the characteristics that would render them "information services" within the meaning of the statute, and instead bear the characteristics of "telecommunications services." We do not believe, however, that it is appropriate to make any definitive pronouncements in the absence of a more complete record focused on individual service offerings. As noted, to the extent we conclude that certain forms of phone-to-phone IP telephony are "telecommunications," and to the extent that providers of such services are offering those services directly to the public for a fee, those providers would be "telecommunications carriers." Accordingly, those providers would fall within section 254(d)'s mandatory requirement to contribute to universal service mechanisms. If such providers are exempt from universal service contribution requirements, users and carriers will have an incentive to modify networks to shift traffic to Internet protocol and thereby avoid paying into the universal service fund or, in the near term, the universal service contributions embedded in interstate access charges. If that occurs, it could increase the burden on the more limited set of companies still required to contribute.\(^{207}\) Such a scenario, if allowed to manifest itself, could well undermine universal service. At this time, however, there is no evidence that there is an immediate threat to the sufficiency of universal service support.

99. Several commenters urge us to subject Internet access providers and other information service providers to universal service contribution requirements\(^{208}\). The potential future threat to universal service funding posed by use of the Internet derives from services that are functionally substitutable for telecommunications services at the same level of the network hierarchy. An end user that shifts its local exchange service from an incumbent local exchange carrier (LEC) to a competitive LEC, or to a wireless carrier, is

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\(^{205}\) Universal Service Order, 12 FCC Red. at 9179, para. 787.

\(^{206}\) Universal Service Order, 12 FCC Red. at 9182-9184, paras. 793-96.

\(^{207}\) We recognize that there are other factors that could influence a carrier in deciding to shift its traffic.

\(^{208}\) AirTouch comments at 30; Alaska comments at 9; AT&T comments at 12-13; SBC comments at 2; February 19, 1998 en banc transcript at 25 (testimony of Mr. Comstock); AT&T reply comments at 11, 14; Bell Atlantic reply comments at 2, 10-11; February 19, 1998 en banc transcript at 88-89 (testimony of Mr. Dix, LCI, Int'l).
purchasing a functionally identical service using different providers or technologies. We have designed the universal service regime so that shifting between such services does not eliminate the contribution requirement. Substitutability in a particular case, however, is not sufficient under the statute to require universal service contributions. Instead of making a telephone call or sending a fax, an end user could send an overnight letter. It is unlikely, however, that anyone would argue that the overnight delivery service should contribute to universal service funding. The key difference is that delivery service does not provide "telecommunications" as defined in the Act. Congress limited universal service contribution obligations to providers of "telecommunications," because only those services are truly substitutable in a functional sense.

100. Some parties argue that we should reclassify Internet service providers as telecommunications carriers in order to address congestion of local exchange networks caused by Internet usage\(^\text{209}\). We note that the Commission addressed this argument last year in the Access Reform proceeding, and decided to continue to treat Internet service providers as end users for purposes of access charges\(^\text{210}\). As the Commission stated in that Order, although concerns about network congestion deserve serious consideration, imposition of per-minute interstate access charges on Internet service providers is not an appropriate solution. Commenters in this proceeding have raised many of the same arguments that we considered in the Access Reform proceeding. We make no conclusions here as to whether some alternate rate structure for Internet service providers would be more efficient. That is an issue best addressed either on reconsideration of our Access Reform decision, or in connection with the Notice of Inquiry on Internet and Information Services that Use the Public Switched Telephone Network that we issued in the Access Reform proceeding\(^\text{211}\). For purposes of this Report, we believe that the central issue is whether our decision that Internet access is not a "telecommunications service" is likely to threaten universal service. In other words, will Internet usage place such a strain on network resources that incumbent LECs will be unable to provide adequate service? As we noted in the Access Reform Order, both ILECs and the Network Reliability and Interoperability Council agreed that Internet usage did not pose any threat to overall network reliability\(^\text{212}\). Incumbent LECs are investing in network upgrades to handle Internet traffic, and our Notice of Inquiry docket provides the appropriate forum to consider steps that we could take to ensure that incumbent LECs have incentives to choose the most efficient technology.

101. We realize that, as technology evolves, new means of providing telecommunications service may emerge. Although we conclude that Internet access is not

\(^{209}\) See, e.g., Bell Atlantic reply comments at 10-12.

\(^{210}\) First Report and Order in the Matter of Access Charge Reform, 12 FCC Rcd 15982, 16133-16135, paras. 344-48 ("Access Charge Reform Order").


\(^{212}\) Access Charge Reform Order, 12 FCC Rcd at 16134, para. 347. See also Comcast reply comments at 4 (claiming that cable-based ISPs actually reduce demand on the PSTN).
a "telecommunications service," we acknowledge that there may be telecommunications services that can be provisioned through the Internet. We have singled out IP telephony services for discussion in this Report.\textsuperscript{213} As discussed above, users of certain forms of phone-to-phone IP telephony appear to pay fees for the sole purpose of obtaining transmission of information without change in form or content. Indeed, from the end-user perspective, these types of phone-to-phone IP telephony service providers seem virtually identical to traditional circuit-switched carriers. The record currently before us suggests that these services lack the characteristics that would render them “information services” within the meaning of the statute, and instead bear the characteristics of “telecommunications services.”\textsuperscript{214} With respect to the provision of pure transmission capacity to Internet service providers or Internet backbone providers, we have concluded that such provision is telecommunications.

102. As some parties observe, our interpretation of the 1996 Act may mean that information services such as Internet access are not eligible for subsidies outside of the limited scope of schools and libraries under section 254(h).\textsuperscript{215} We believe Congress made a policy decision to limit support for information services to schools and libraries. "Telecommunications services" provide the basic transmission functionality that enables customers in rural and high-cost areas to connect to the rest of America. These services also enable users to reach Internet access providers, so reductions in the cost of basic telephone service in rural areas will effectively reduce the cost of Internet access in those areas. The information services delivered over telecommunications networks are not sensitive to distance and density to the same extent as the telecommunications facilities themselves. Therefore, the rationale for establishing a subsidy mechanism for these services is far more attenuated.

103. At this early stage of Internet development, we cannot know whether market and technological forces will result in Internet access being widely available in rural and high cost areas. Already, free electronic mail services such as Juno and low-cost Internet access devices such as WebTV have made Internet-based services far more affordable. A recent study found that at least 87% of the U.S. population has access to a commercial Internet service provider through a local call, and that three-fourth of Americans live in local calling areas with at least three Internet service provider points of presence.\textsuperscript{216}

\textsuperscript{213} See supra Section IV.D.3.

\textsuperscript{214} As discussed above, however, we do not believe that it is appropriate to make any definitive pronouncements in the absence of a more complete record focused on individual service offerings.

\textsuperscript{215} Senators Stevens and Burns comments at 9; TDS comments at 10-11. On section 254(h), see infra Section VI.B.2.

\textsuperscript{216} Shane Greenstein, Universal Service in the Digital Age: The Commercialization and Geography of US Internet Access (available at http://skew2.kellogg.nwu.edu/~greenstein/research/papers/ISPACCESS2.pdf) at table 1. The author of the study notes that these numbers likely underestimate the true level of access. Id. at 22-23.
America Online reports that seventeen percent of its local access nodes are in rural counties.\textsuperscript{217} Rural Internet service providers, especially smaller entrepreneurial companies, will be able to provide more affordable and widely-available service if they are not subject to unnecessary regulatory burdens.\textsuperscript{218} Finally, the support mechanism that will benefit schools and libraries established pursuant to section 254(h) of the 1996 Act will enable rural libraries to provide public access Internet terminals, and rural school districts to make Internet access available to their students.

104. Congress did recognize that "telecommunications services" would evolve over time, and that universal service should adapt to reflect those change. Thus, for example, universal service today includes functionalities such as touchtone service and access to 911 that simply did not exist in previous decades.\textsuperscript{219} Other such innovations, as well as improvements in voice transmission quality, will no doubt occur in the future, and we will update our definition of universal service to account for those changes. For example, it appears that universal service funds could be used to ensure rural and high-cost areas have affordable access to high-speed data transmission services, such as xDSL, when those services meet the criteria for support outlined in section 254(c).

c. Consistency of Commission Decisions

105. We believe that the framework described in this Report, and in the May 8th, 1997 Universal Service Order is entirely consistent, both internally and with the letter and spirit of the Act. Companies that are in the business of offering basic interstate telecommunications functionality to end users are "telecommunications carriers," and therefore are covered under the relevant provisions of sections 251 and 254 of the Act. These rules apply regardless of the underlying technology those service providers employ, and regardless of the applications that ride on top of their services. Therefore, although we will need to consider further the definition of "phone-to-phone" IP telephony, the record currently before us suggests that certain of these services lack the characteristics that would render them “information services” within the meaning of the statute, and instead bear the characteristics of “telecommunications services.” Further, we have found that providers of pure transmission capacity to support Internet services are providers of "telecommunications." Internet service providers and other information service providers also use telecommunications networks to reach their subscribers, but they are in a very different business from carriers. Internet service providers provide their customers with value-added functionality by means of computer processing and interaction with stored data. They leverage telecommunications connectivity to provide these services, but this makes them customers of telecommunications carriers rather than their competitors.

106. Under our framework, Internet service providers are not treated as carriers for purposes of interstate access charges, interconnection rights under section 251, and universal

\textsuperscript{217} AOL comments at 6 n.35.
\textsuperscript{218} Carolina Connection, Inc. comments at 1; CUIISP comments at 2; City of Norfolk comments at 1-2; CIX comments at 11; Compuserve comments at 11-12.
\textsuperscript{219} See Universal Service Order, 12 FCC Rcd at 8814-8817, paras. 71-74.
service contribution requirements. This treatment admittedly provides some benefits to such companies, but it also imposes limitations. Internet service providers are not entitled under section 251 to purchase unbundled network elements or discounted wholesale services from incumbent LECs, they are not entitled to federal universal service support for serving high-cost and rural areas, and they are not entitled to reciprocal compensation for terminating local telecommunications traffic.\footnote{220} As we discuss below, the one case in which Internet service providers and carriers enjoy similar treatment is in the provision of certain services to schools and libraries at discounted rates.\footnote{221} In that case, Congress expressly directed the Commission to create "competitively neutral rules" to facilitate "access to advanced telecommunications and information services."\footnote{222} There is no necessary connection between those who contribute to universal service funding and those entitled to receive support.\footnote{223} For example, contributions to the fund are primarily derived from interexchange carriers, but the companies that receive high-cost support are LECs. Paging providers are required to contribute to universal service, but have limited opportunity to receive support. We realize that Congress carefully balanced several competing concerns when it crafted the universal service provisions of the 1996 Act. After reviewing our implementation of those provisions, and considering novel issues such as the status of IP telephony, we believe that we are being faithful to the balance struck by Congress.

V. WHO CONTRIBUTES TO UNIVERSAL SERVICE MECHANISMS

A. Overview

\footnote{220} The Commission has solicited comment on whether it should use its general rulemaking authority to extend to Internet service providers and other information service providers some or all of the rights accorded by section 251 to requesting telecommunications carriers. See Computer III Further Remand Proceeding, at para. 96.

We make no determination here on the question of whether competitive LECs that serve Internet service providers (or Internet service providers that have voluntarily become competitive LECs) are entitled to reciprocal compensation for terminating Internet traffic. That issue, which is now before the Commission, does not turn on the status of the Internet service provider as a telecommunications carrier or information service provider. See Pleading Cycle Established for Comments on Request by ALTS for Clarification of the Commission's Rules Regarding Reciprocal Compensation for Information Service Provider Traffic, Public Notice, CCB/CPD 97-30 (released July 2, 1997).

\footnote{221} See infra Section V.B.2.

\footnote{222} 47 USC § 254(h)(2).

\footnote{223} We note that while providers under the schools and libraries program receive support from the Universal Service Fund, their suppliers do not receive a subsidy. The providers provide services to schools and libraries at a price bid down, through a competitive bidding process, from the market rate. See 47 C.F.R. § 54.504(a),(b) (competitive bidding process), (d) (the Commission, or state commissions, may intervene if a carrier offers a rate higher than the "lowest corresponding price," that is, the lowest price that it charges similarly situated non-residential customers, or if the lowest corresponding price is unfairly high). The federal contribution then covers a portion of the payment that would otherwise be made by the school or library.
107. In this section, we review our decision regarding which entities must contribute to universal service support mechanisms, which entities should contribute, and which entities should be exempt from contributing. We affirm that the plain language of section 254(d), which mandates contributions from "every telecommunications carrier that provides interstate telecommunications services," requires the Commission to construe broadly the class of carriers that must contribute.\(^{224}\) In addition, we find that the Commission properly exercised the permissive authority granted by section 254(d) to include other providers of interstate telecommunications in the pool of universal service contributors. We have also re-examined the Commission's implementation of the limited authority set forth in section 254(d) to exempt de minimis contributors and affirm that the Commission has not exceeded the boundaries established by the statute. We conclude that the Commission appropriately exercised the flexibility that section 254(d) grants it to exempt those entities whose contributions would be de minimis and to include in the pool of contributors those providers of telecommunications whose contributions are required by the public interest.

B. Background

108. The 1996 Act expands the class of entities that must contribute to federal universal service support mechanisms. Prior to the 1996 Act, only interstate interexchange carriers (IXCs) contributed to the universal service fund that subsidized the cost of local exchange service in high cost areas and for low-income consumers.\(^{225}\) Under this earlier approach, IXCs contributed through a tariffed interstate charge that was based on the number of subscriber lines presubscribed to the IXC.\(^{226}\) IXCs with fewer than 0.05 percent of the presubscribed lines nationwide were exempt from contributing.\(^{227}\)

109. The Commission's current rules governing universal service contributions stem from section 254(d) of the 1996 Act, which reads:

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\text{[E]very telecommunications carrier that provides interstate telecommunications services shall contribute, on an equitable and nondiscriminatory basis, to the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service. The Commission may exempt a carrier or class of carriers from this requirement if the carrier's telecommunications activities are limited to such an extent that the level of such carrier's contributions to the preservation and advancement of universal service would be de minimis. Any}
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\(^{224}\) See Universal Service Order, 12 FCC Rcd at 9177, para. 783.


\(^{226}\) 47 C.F.R. § 69.116(a).

\(^{227}\) Id.
other provider of interstate telecommunications may be required to contribute to the preservation and advancement of universal service if the public interest so requires.

Section 623(b)(3) of the Appropriations Act requires us to review "who is required to contribute to universal service under section 254(d) . . . and related existing federal universal service support mechanisms, and of any exemption of providers or exclusion of any service that includes telecommunications from such requirement or support mechanisms."

110. Based on the structure of section 254(d) of the 1996 Act, the Commission identified two categories of contributors to universal service mechanisms. First, the Commission identified a group of "mandatory" contributors based on section 254(d)'s mandate that "[e]very telecommunications carrier that provides interstate telecommunications services shall contribute . . . to the . . . mechanisms established by the Commission." Second, the Commission exercised its "permissive" authority under section 254(d) to require "other provider[s] of interstate telecommunications to contribute" based on a finding that the public interest requires these entities to contribute "to the preservation and advancement of universal service." In addition, consistent with section 254(d), the Commission exempted contributors whose contributions would be de minimis.

111. **Mandatory Contribution Requirement.** The Commission, concurring with the recommendation of the Joint Board, recognized that the first sentence of section 254(d) requires that all telecommunications carriers that provide interstate telecommunications must contribute to the support mechanisms. The Commission concluded that to be a mandatory contributor to universal service under section 254(d): (1) a telecommunications carrier must offer "interstate" "telecommunications"; (2) those interstate telecommunications must be offered "for a fee"; and (3) those interstate telecommunications must be offered "directly to the public, or to such classes of users as to be effectively available to the public." The Commission sought to construe the definition of "telecommunications" so as to include a broad class of mandatory contributors.

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229 Universal Service Order, 12 FCC Red at 9187, para. 802.


231 Universal Service Order, 12 FCC Red at 9173, para. 777 citing Recommended Decision, 12 FCC Red at 481, para. 484.

232 Id., 12 FCC Red at 9173, para. 777 citing 47 U.S.C. §§ 153(22), 153(43), and 153(46).

233 See Id., 12 FCC Red at 9173, 9177, paras. 779, 783.
112. The Commission concluded that telecommunications are "interstate" when the communication or transmission originates in any state, territory, possession of the United States, or the District of Columbia and terminates in another state, territory, possession, or the District of Columbia.\textsuperscript{234} Further, the Commission determined that interstate telecommunications include telecommunications services among U.S. territories and possessions.\textsuperscript{235} The Commission also found that private or WATS lines will be considered entirely interstate when more than ten percent of the traffic they carry is interstate.\textsuperscript{236}

113. In the Universal Service Order, the Commission further concluded that interstate telecommunications carriers that also provide international telecommunications services must contribute to universal service support mechanisms based on revenues from both their interstate and international services.\textsuperscript{237} The Commission found that the statute precludes it from assessing contributions on the revenues of purely international carriers providing service in the United States, but sought a legislative change that would allow it to reach the international revenues of all carriers providing service in the United States.\textsuperscript{238}

114. Based on the statutory definition of the term "telecommunications,"\textsuperscript{239} the Commission adopted the following list of services that satisfy the definition of "telecommunications" and are examples of interstate telecommunications:

- cellular telephone and paging services;
- mobile radio services;
- operator services;
- PCS;
- access to interexchange service;
- special access;
- wide area telephone service (WATS);
- toll-free services;
- 900 services;
- MTS;
- private line;
- telex;
- telegraph;
- video services;
- satellite services;
- and resale services.\textsuperscript{240}

The Commission also included among contributors those entities providing, on a common carrier basis, video conferencing services, channel service, or video distribution services to cable head-ends.\textsuperscript{241} It expressly excluded entities providing services via open video systems.

\textsuperscript{234} Id., 12 FCC Red at 9173, para. 778.

\textsuperscript{235} Id., 12 FCC Red at 9173, para. 778 citing 47 U.S.C. § 153(22) and Recommended Decision, 12 FCC Rcd at 481.

\textsuperscript{236} Id., 12 FCC Red at 9173, para. 778 citing 47 C.F.R. § 36.154(a).

\textsuperscript{237} Id., 12 FCC Red at 9173-9175, para. 779.

\textsuperscript{238} Id., 12 FCC Red at 9173-9175, para. 779.

\textsuperscript{239} See 47 U.S.C. § 153(43).

\textsuperscript{240} Universal Service Order, 12 FCC Red at 9175, para. 780.

\textsuperscript{241} Id., 12 FCC Red at 9176, para. 781.
(OVS), cable leased access, or direct broadcast satellite (DBS) from contributing on the
basis of revenues derived from those services.\footnote{242}

115. In interpreting the phrase "for a fee" in the definition of "telecommunications
service," the Commission concluded that the plain language of section 153(46) means
services rendered in exchange for something of value or a monetary payment.\footnote{243} The
Commission did not exempt from contribution any broad class of telecommunications
carriers that provides interstate telecommunications services in light of the 1996 Act's
mandate that "every telecommunications carrier that provides interstate telecommunications
services" contribute to the support mechanisms.\footnote{244} Further, the Commission found that,
because it contains the phrase "directly to the public," the statutory definition of
"telecommunications services" is intended to encompass only telecommunications provided
on a common carrier basis.\footnote{245} Therefore, the Commission concluded that only common
carriers should be considered statutorily mandated contributors to universal service support
mechanisms.\footnote{246} In addition, the Commission concluded that common carrier services
include services offered to other carriers, such as exchange access service, and not just
services provided to end users.\footnote{247}

116. Permissive Contribution Authority. The Commission observed that section
254(d) also confers "permissive authority" to require "other providers of interstate
telecommunications" to contribute if the public interest so requires.\footnote{248} The Commission,
citing the statutory definition, concluded that providers of interstate telecommunications,
unlike providers of interstate telecommunications services, do not offer telecommunications
on a common carrier basis.\footnote{249} In support of this conclusion, the Commission referred to the
legislative history in which Congress noted the distinction between providers of interstate
telecommunications and providers of interstate telecommunications services when it stated
that an entity can offer telecommunications on a private-service basis without incurring
obligations as a common carrier.\footnote{250}

\footnote{242} Id., 12 FCC Rcd at 9176, para. 781.  
\footnote{244} Id., 12 FCC Rcd at 9179, para. 787 citing 47 U.S.C. § 254(d). The Commission did, however, exempt Internet service providers and enhanced service providers from contributing. See supra II.C.1.  
\footnote{245} Id., 12 FCC Rcd at 9177-9178, para. 785.  
\footnote{246} Id., 12 FCC Rcd at 9178, para. 786.  
\footnote{247} Id., 12 FCC Rcd at 9178, para. 786.  
\footnote{248} Id., 12 FCC Rcd at 9182-9183, paras. 793-794.  
\footnote{250} Id., 12 FCC Rcd at 9182, para. 793 citing Joint Explanatory Statement at 115.  

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117. The Commission found that private network operators that lease excess capacity on a non-common carrier basis for interstate transmissions should contribute to universal service support mechanisms because they are "other providers of interstate telecommunications."\(^{251}\) Similarly, the Commission concluded that payphone aggregators fall within the Commission's permissive authority and that the public interest requires that they contribute.\(^{252}\) The Commission sought to adopt an approach under which contribution obligations neither affect business decisions nor discourage carriers from offering services on a common carrier basis.\(^{253}\) Accordingly, the Commission found that the public interest requires both private service providers that offer interstate telecommunications to others for a fee and payphone aggregators to contribute to the preservation and advancement of universal service in the same manner as carriers that provide "interstate telecommunications services."\(^{254}\)

118. The Commission also found that "other providers of telecommunications" that furnish telecommunications solely to meet their internal needs, including governmental entities such as state networks, should not be required to contribute at this time.\(^{255}\) In addition, the Commission held that cost-sharing for the construction and operation of private networks would not render participants "other providers of telecommunications" that could be required to contribute, although the lead participant in such a venture would be required to contribute if it provided interstate telecommunications.\(^{256}\) The Commission also found that neither public safety and local governmental entities licensed under Subpart B of Part 90 of its rules nor entities that provide interstate telecommunications solely to public safety or government entities will be required to contribute.\(^{257}\)

119. In its Fourth Order on Reconsideration the Commission affirmed its conclusion that private service providers that provide interstate telecommunications on a non-common carrier basis must contribute to universal service pursuant to its permissive authority over "providers of interstate telecommunications."\(^{258}\) In that Order, the Commission concluded that it should not exercise its permissive authority to require systems integrators, broadcasters, and non-profit schools, universities, libraries, and rural

\(^{251}\) Id., 12 FCC Rcd at 9178, 9184, paras. 786, 796.

\(^{252}\) Id., 12 FCC Rcd at 9183, 9184-9185, paras. 794, 797-798.

\(^{253}\) Id., 12 FCC Rcd at 9183-9184, para. 795.

\(^{254}\) Id., 12 FCC Rcd at 9183-9184, para. 795.

\(^{255}\) Id., 12 FCC Rcd at 9185-9186, paras. 799-800.

\(^{256}\) Id., 12 FCC Rcd at 9185-9186, para. 800.

\(^{257}\) Id., 12 FCC Rcd at 9185-9186, para. 800.

\(^{258}\) Fourth Order on Reconsideration at para. 276.
health care providers to contribute to universal service.\textsuperscript{259} Specifically, the Commission found that systems integrators that do not provide services over their own facilities and are non-common carriers that obtain a de minimis amount of their revenues from the resale of telecommunications are not required to contribute to universal service.\textsuperscript{260} In addition, the Commission concluded that the public interest would not be served if it were to exercise its permissive authority to require broadcasters that engage in non-common carrier interstate telecommunications to contribute to universal service.\textsuperscript{261} The Commission also determined that it is not in the public interest for the Commission to exercise its permissive authority to require non-profit schools, colleges, universities, libraries and health care providers to contribute to universal service.\textsuperscript{262}

120. In the Fourth Order on Reconsideration the Commission also affirmed its finding that satellite providers that provide interstate telecommunications services or interstate telecommunications to others for a fee must contribute to universal service.\textsuperscript{263} The Commission explained that satellite providers that provide transmission services on a common carrier basis are mandatory contributors pursuant to section 254(d), while satellite providers that provide interstate telecommunications on a non-common carrier basis must contribute based on the Commission's permissive authority.\textsuperscript{264} The Commission concluded, however, that satellite providers are not required to contribute to universal service on the basis of revenues derived from the lease of bare transponder capacity because the lease of bare transponder capacity does not involve transmitting information and, therefore, it is not "telecommunications."\textsuperscript{265} The Commission rejected arguments that satellite providers that are ineligible to receive universal service support should not be required to contribute.\textsuperscript{266}

121. \textbf{De Minimis Exemption.} Section 254(d) provides that the Commission may exempt a carrier or class of carriers from contributing to universal service mechanisms "if the carrier's telecommunications activities are limited to such an extent that the level of such carrier's contribution to the preservation and advancement of universal service would be de minimis."\textsuperscript{267} The Commission, adopting the Joint Board's recommendation, initially concluded that contributors whose contributions would be less than the administrator's

\begin{itemize}
\item\textsuperscript{259} Id., at para. 277.
\item\textsuperscript{260} Id., at para. 278.
\item\textsuperscript{261} Id., at para. 283.
\item\textsuperscript{262} Id., at para. 284.
\item\textsuperscript{263} Id., at para. 288.
\item\textsuperscript{264} Id., at para. 288.
\item\textsuperscript{265} Id., at para. 290.
\item\textsuperscript{266} Id., at para. 289.
\item\textsuperscript{267} 47 U.S.C. § 254(d).
\end{itemize}
administrative costs of collection should be exempt from reporting and contribution requirements. As a result of its conclusion that the exemption should be based on the administrator's costs to bill and collect individual carrier contributions, the Commission, in the Universal Service Order adopted the $100.00 minimum contribution requirement used for TRS contribution purposes. In its Fourth Order on Reconsideration however, the Commission revised its approach to setting a threshold for the de minimis exemption and concluded that the de minimis threshold should be increased to $10,000.00.

122. In the Universal Service Order the Commission agreed with the Joint Board that the de minimis exemption was the only basis upon which to exempt contributors. The Commission explicitly rejected arguments that paging carriers should be exempted because it found that the statutory language unambiguously requires "every telecommunications carrier that provides interstate telecommunications services" to contribute. The Commission concluded that Congress required all telecommunications carriers to contribute to universal service support mechanisms but provided that in most instances only "eligible" carriers should receive support, and gave no direction to the Commission to establish preferential treatment for carriers that are ineligible for support. The Commission reaffirmed this conclusion in its Fourth Order on Reconsideration. Rejecting arguments from paging companies, the Commission reiterated that section 254(d) does not limit the class of carriers that must contribute to those that are eligible to receive universal service support.

C. Discussion

1. Mandatory and Permissive Authority

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268 Universal Service Order, 12 FCC Rcd at 9187, para. 802 citing Recommended Decision, 12 FCC Rcd at 489.

269 Id., 12 FCC Rcd at 9187, para. 802.

270 See 47 C.F.R. § 64.604(c)(4)(iii)(B).

271 Universal Service Order, 12 FCC Rcd at 9187-9188, para. 803.

272 Fourth Order on Reconsideration at paras. 295-297.

273 Universal Service Order, 12 FCC Rcd at 9188, para. 804 citing Recommended Decision, 12 FCC Rcd at 490.


275 Id., 12 FCC Rcd at 9188, para. 804.

276 Fourth Order on Reconsideration at para. 263.
123. The Commission's approach to determining who should contribute to universal service support mechanisms is guided by the plain language of section 254(d). The first clause in this section unequivocally requires that "[e]very telecommunications carrier that provides interstate telecommunications services shall contribute . . . to the . . . mechanisms established by the Commission" [emphasis added]. The third sentence gives the Commission the discretion to determine whether requiring "[a]ny other provider of telecommunication§ to contribute is consistent with the public interest [emphasis added]. An analysis of the statutory definitions of the terms "telecommunications services" and "telecommunications" identifies those entities that must contribute to universal service and those entities over which the Commission may exercise its permissive authority. The statutory language offers no exceptions to these rules, aside from the de minimis exemption that is also found in section 254(d). The Commission has adhered to the statutory mandate that "all" providers of interstate telecommunications services contribute to universal service mechanisms, and has ensured that a broad class of telecommunications providers contribute as well.

a. Mandatory Contribution Requirement.

124. Section 153(46) defines "telecommunications service" as "the offering of telecommunications for a fee directly to the public or to such classes of users as to be effectively available directly to the public, regardless of the facilities used." The Commission has determined that inclusion of the term "directly to the public" is intended to encompass only telecommunications provided on a common carrier basis: Common carriers can be distinguished from private network operators, which serve the internal telecommunications needs of, for example, a large corporation, rather than selling telecommunications to the general public. The Commission explained that federal precedent holds that a carrier may be a common carrier if it holds itself out "to service indifferently all potential users."

125. The 1996 Act does not use the term "common carrier." This term is defined in the 1934 Communications Act and encompasses the entities that are governed by that Act's Title II regulation. The statutory language in the 1996 Act refers to "telecommunications carriers." Specifically, section 153(44) states that "a telecommunications carrier shall be treated as common carrier only to the extent that it is engaged in providing telecommunications services . . . ."


278 Universal Service Order, 12 FCC Rcd at 9177-9178, para. 785.


126. There is some dispute as to whether the term "telecommunications carrier" means substantially the same as the pre-1996 Act term "common carrier." The Commission's conclusion that the phrase "directly to the public" means only telecommunications provided on a common carrier basis is based on the legislative history. The Joint Explanatory Statement explains that the term telecommunications service "is defined as those services and facilities offered on a 'common carrier' basis, recognizing the distinction between common carrier offerings that are provided to the public . . . and private services." Several commenters generally contend that the Commission's interpretation and implementation of the statutory terms were consistent with the letter and intent of the 1996 Act. Senator McCain states: "The provision of telecommunications on a common carrier basis -- that is, to all users indifferently or to such segments of the public as to be effectively available to the public indifferently -- is 'telecommunications service.'" Senators Stevens and Burns, however, argue that Congress intended the term "telecommunications carrier" to define a class broader than the pre-Telecommunications Act 'common carrier' regime.

127. We are aware of the concerns of Senators Stevens and Burns that providers of Internet service should be among the pool of universal service contributors. The concerns expressed by Senators Stevens and Burns go largely to the Commission's determination that telecommunications services and information services are distinct categories. Considering universal service contributions in more general terms, we note that the Commission has repeatedly stated, and several commenters agree, that section 254(d) should be construed broadly to encompass an expansive class of contributors. Because we endorse this approach, it is clear that we concur fully with Senators Stevens and Burns when they state: "The statutory language of section 254(d) is unambiguous and clear -- all telecommunications carriers must contribute."

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281 See section III.C, above.

282 Joint Explanatory Statement at 115.

283 See, e.g., TCG comments at 2; State Members comments at 3; Comcast comments at 8; Colorado PUC comments at 2; Texas PUC comments at 2.

284 Senator McCain letter at 3.

285 Senators Stevens and Burns comments at 3.

286 See section IV.D, above.

287 We discuss these terms in section III.C, above.

288 See Universal Service Order, 12 FCC Rcd at 9177, 9183, paras. 783, 795; Fourth Order on Reconsideration at para. 263.

289 See, e.g., PA PUC comments at 7; RTC comments at 9; GVNW reply comments at 4.

290 Senators Stevens and Burns comments at 10.
128. The Commission's implementation of the mandatory contribution clause of section 254(d) has adhered to the tenet that the class of entities required to contribute to universal service should be broad. For example, the Commission, agreeing with the conclusion of the Joint Board, found that the international revenues generated by carriers of interstate telecommunications should be included in the base of mandatory contributors to universal service.\textsuperscript{291} The Commission concluded that contributors that provide international telecommunications services benefit from universal service because they must either terminate or originate telecommunications on the domestic PSTN.\textsuperscript{292} This rationale demonstrates the Commission's agreement with Senators Stevens and Burns, who state: "Congress intended to cast this net widely in order to ensure that all of those who make use of the network, and in particular the physical infrastructure needed to provide universal service, contribute to its upkeep."\textsuperscript{293} In fact, the Commission sought a legislative change that would allow it to reach the international revenues of all carriers providing service in the United States who benefit from universal service.\textsuperscript{294} The Commission found that section 254(d) does not permit us to require carriers that provide only international telecommunications services to contribute because these carriers are not providing "interstate telecommunications services."\textsuperscript{295} Providers of purely international telecommunications compete against carriers that provide interstate as well as international telecommunications services, and, thus, benefit competitively by incurring no universal service contribution obligation. We would prefer to include these telecommunications carriers within the class of mandatory contributors in order to treat all providers of international telecommunications similarly and to further broaden the class of contributors.

129. Some parties have urged the Commission to exempt certain entities from contributing to universal service.\textsuperscript{296} The plain language of section 254(d), however, affords the Commission no discretionary authority to exempt any telecommunications carriers that provide interstate telecommunications services, and several commenters agree with this conclusion.\textsuperscript{297} Section 254(d) provides a limited exemption for mandatory contributors

\textsuperscript{291} Universal Service Order, 12 FCC Rcd at 9173-9174, para. 779 citing Recommended Decision at 12 FCC 481. Accord AT&T reply comments at 8.

\textsuperscript{292} Id., 12 FCC Rcd at 9173-9175, para. 779.

\textsuperscript{293} Senators Stevens and Burns comments at 10.

\textsuperscript{294} Universal Service Order, 12 FCC Rcd at 9173-9175, para. 779.

\textsuperscript{295} Id., 12 FCC Rcd at 9173-9175, para. 779.

\textsuperscript{296} See, e.g., TRA comments at 11 (non-facilities based resale carriers should be relieved of the obligation to contribute to universal service).

\textsuperscript{297} See USTA comments at 5-6 (the Commission lacks authority to exempt any provider that otherwise meets the section 3 definition of a telecommunications provider); Bell Atlantic comments at 12-13; Bell Atlantic reply comments at 2, 6 (the Commission properly rejected claims of exemptions from contribution requirements). See also AT&T comments at 8 (objects to all claims for exemption).
whose contributions would be de minimis\textsuperscript{298} The Commission has consistently rejected arguments that attempt to create a broader exemption\textsuperscript{299} For example, the Commission determined that paging carriers fall within the section 254(d) class of mandatory contributors and, thus, must contribute to universal service, regardless of their ability to receive universal service support\textsuperscript{300} Senators Stevens and Burns concur with the Commission's conclusion that CMRS and paging service providers are telecommunications carriers and, thus, are required to contribute\textsuperscript{301} We agree that paging companies have failed to advance arguments that overcome the Congressional requirement that the Commission create a broad base of support for universal service mechanisms\textsuperscript{302} Similarly, we find no basis for exempting non-facilities-based resale carriers, as advocated by TRA\textsuperscript{303} To the extent they are telecommunications carriers that provide interstate telecommunications services, resellers are mandatory contributors under section 254(d)\textsuperscript{304}

130. We view the mandatory contribution requirement set forth in section 254(d) as absolute and find that the Commission has consistently abided by this mandate. We agree with AT&T's statement that "if the Commission exempts a class of contributors, then the obligations of all remaining contributors increase."\textsuperscript{305} In instances where

\textsuperscript{298} See section V.C.2, infra for a discussion of the de minimis exemption.

\textsuperscript{299} See, e.g., Universal Service Order, 12 FCC Rcd at 9179, para. 787 (we "find no reason to exempt from contribution any of the broad classes of telecommunications carriers that provide interstate telecommunications services, including satellite operators, resellers, wholesalers, paging companies, utility companies, or carriers that serve rural or high cost areas. . . ").

\textsuperscript{300} Fourth Order on Reconsideration at paras. 262-254. As a general matter, several wireless carriers raise concerns that the mechanisms used for determining which revenues are derived from intrastate service and which are derived from interstate service are not appropriate for allocating the revenues of wireless carriers. See, e.g., CTIA comments at n.6; Vanguard comments at 4; AMTA reply comments at 5-6; Nextel reply comments at 5-6. We will address such issues in the petitions for reconsideration pertaining to this issue that are pending before the Commission.

\textsuperscript{301} Senators Stevens and Burns comments at 3 n.8.

\textsuperscript{302} Fourth Order on Reconsideration at para. 263. See also PA Agencies comments at 11; PA PUC comments at 7 (the Commission must ensure that all telecommunications carriers, especially CMRS providers, contribute to universal service).

\textsuperscript{303} TRA comments at 11. To the extent a resale carrier's contribution would not exceed the de minimis threshold, however, it would be exempted from the requirement to contribute. See the discussion of the de minimis exemption, Section V.C.2, infra.

\textsuperscript{304} Both the Joint Board and the Commission have found that resellers are mandatory contributors. See Recommended Decision at para. 787; Universal Service Order, 12 FCC Rcd at 9175, para. 780. To the extent that a resale carrier is not offering telecommunications on a common carrier basis or offering interstate telecommunications services and, thus, does not fall within section 254(d)'s mandatory contribution requirement, the Commission would determine whether, pursuant to its permissive authority, it would be in the public interest for the reseller to contribute. See the discussion of permissive contributors, below.

\textsuperscript{305} AT&T comments at 8.
telecommunications carriers derive revenues from certain activities that fall outside the definition of "telecommunications services," the Commission has not exempted these entities from their contribution requirements, but, instead, has simply excluded those revenues from the contribution base. For example, entities providing OVS, cable leased access, and DBS services, as well as satellite providers leasing bare transponder capacity are excluded from contributing on the basis of revenues derived from those services, but are not exempted to the extent they otherwise provide interstate telecommunications services.\textsuperscript{306} This approach recognizes that the statute does not permit any mandatory contributors to be exempted from the contribution requirement.

b. Permissive Contribution Authority.

131. The third sentence of section 254(d) conveys what the Commission refers to as its "permissive" contribution authority. In contrast to the mandate that "[e]very telecommunications carrier that provides interstate telecommunications services shall contribute," this sentence authorizes the Commission to determine whether the public interest requires that "other providers of interstate telecommunication\textsuperscript{8} should contribute [emphasis added].\textsuperscript{307} Section 153(43) defines "telecommunications" as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received.\textsuperscript{308} This definition is significantly broader than that of "telecommunications services," which are provided "for a fee directly to the public.\textsuperscript{309} As discussed above, this distinction represents the difference between carriers that offer their services on a common carrier basis (i.e., "for a fee directly to the public") and private network operators.\textsuperscript{310} Private network operators do not sell their services to the public. Traditionally, non-common carriers such as private network operators have not been the subject of regulation. Because these service providers do not serve the public, there is no need to ensure that they offer services based on just, reasonable and nondiscriminatory rates and conditions, as Title II regulations applicable to common carriers are designed to accomplish. The language of section 254(d), however, is unique among the other provisions of the 1996 Act because it permits the Commission to

\textsuperscript{306} See Universal Service Order, 12 FCC Red at 9176, para. 781; Fourth Order on Reconsideration at para. 290.

\textsuperscript{307} 47 U.S.C. § 254(d).

\textsuperscript{308} 47 U.S.C. § 153(43).


\textsuperscript{310} The Joint Explanatory Statement explains that the term telecommunications service "is defined as those services and facilities offered on a 'common carrier' basis, recognizing the distinction between common carrier offerings that are provided to the public . . . and private services." Joint Explanatory Statement at 115. See also UTC comments at 5-6 (in light of the plain language of the Act, as well as the Joint Explanatory Statement, "[t]he FCC correctly recognized that the inclusion of this requirement that the service be provided directly to the public evidenced clear Congressional intent that telecommunications services only encompass services provided on a 'common carrier' basis.").
require, if a public interest standard is met, that non-common carriers should contribute to universal service mechanisms along with common carriers.

132. We conclude that the Commission's decisions concerning which telecommunications providers should contribute to universal service mechanisms, and which ones should be spared from contributing, are consistent with the intent of Congress. Section 254(d) requires the Commission to consider the public interest when determining which providers of interstate telecommunications should contribute to universal service. We reaffirm the rationales the Commission has established for weighing public interest considerations. First, the public interest requires a broad contribution base so that the burden on each contributor will be lessened.\textsuperscript{311} As discussed above with respect to mandatory contributors, Congress intended that section 254(d) would be broadly construed. Requiring certain providers of interstate telecommunications to contribute broadens the funding base, which lessens the impact of the contribution obligation imposed on mandatory contributors. We also reaffirm the conclusion that the public interest requires private service providers and payphone aggregators to contribute in order to broaden the funding base.\textsuperscript{312}

133. Second, the public interest requires that, to the extent possible, carriers with universal service contribution obligations should not be at a competitive disadvantage in relation to providers on the basis that they do not have such obligations.\textsuperscript{313} This approach is consistent with the Commission's principle of competitive neutrality, which states in part: "universal service support mechanisms and rules [should] neither unfairly advantage nor disadvantage one provider over another . . . ."\textsuperscript{314} It may be appropriate to require certain providers of telecommunications to contribute in order to reduce the possibility that carriers with universal service obligations will compete directly with carriers without such obligations. For example, the Commission held that operators of interstate private networks that lease excess capacity on a non-common carrier basis should contribute to universal service.\textsuperscript{315} These private network operators compete against telecommunications carriers in the provision of interstate telecommunications. Similarly, the Commission determined that

\textsuperscript{311} See, e.g., Universal Service Order, 12 FCC Rcd at 9177, 9183, paras. 783, 795; Fourth Order on Reconsideration at para. 263.

\textsuperscript{312} Universal Service Order, 12 FCC Rcd at 9183, para. 795. See also Reuters comments at 7-8 (requiring private network operators that offer services to others for a fee on a non-common carrier basis is consistent with the law).

\textsuperscript{313} See, e.g., Fourth Order on Reconsideration at para. 276.

\textsuperscript{314} Universal Service Order, 12 FCC Rcd at 8801, para. 47. In addition to the principles set forth in the 1996 Act, section 254(b)(7) permits the Joint Board and the Commission to base policies for the preservation and advancement of universal service on "such other principles as the Joint Board and Commission determine are necessary and appropriate for the protection of the public interest, convenience and necessity and are consistent with this Act." 47 U.S.C. § 254(b)(7). See also Recommended Decision, 12 FCC Rcd at 101, paras. 22-23; Universal Service Order, 12 FCC Rcd at 8801-8803, paras. 46-51.

\textsuperscript{315} Id., 12 FCC Rcd at 9178, para. 786.
payphone aggregators should be contributors to universal service. This conclusion is also justified by competitive concerns because interstate telecommunications carriers that also provide payphone services would have an incentive to alter their business structures by divesting their payphone operations in order to reduce their universal service contribution if payphone aggregators that provide only payphone services were not required to contribute.

134. Third, in some cases, absent the exercise of the permissive contribution authority, a service provider might choose to offer service on a non-common carrier basis solely to circumvent the obligation to contribute that is imposed on all telecommunications carriers providing interstate telecommunications service. In our view, the public interest dictates that universal service contributions should not cause providers to offer services on a non-common carrier basis. We are convinced that the Commission's actions promote this important public interest concern.

135. Finally, the public interest suggests that certain telecommunications providers should contribute because they utilize the PSTN, which is supported by universal service mechanisms. The Commission concluded, in general, that telecommunications carriers that are mandatory contributors should not be the sole supporters of the PSTN from which other telecommunications providers benefit. Although there may be situations in which competing public interest reasons compel us to conclude that certain providers of interstate telecommunications that benefit from access to the PSTN should not contribute, we are persuaded that it is generally consistent with the public interest for those who benefit from the PSTN to contribute to support the network. We note that some parties argue that the public interest does not require contributions from telecommunications providers that are not interconnected with the public switched network. We find, however, that the statutory goal of a broad contribution base requires that these entities contribute to ensure the preservation and advancement of universal service mechanisms.

136. The Commission also determined that the public interest requires that several providers of interstate telecommunications should not contribute to universal service mechanisms. In some instances, the Commission determined that competitive neutrality

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316 Id., 12 FCC Red at 9183-9185, paras. 795-797.


318 See, e.g., Id., 12 FCC Red at 9184, para. 796.

319 See, e.g., Id., 12 FCC Red at 9184, para. 796 (private service providers that sell excess capacity should contribute because they benefit from access to the PSTN); id. at 9184-9185, para. 797 (payphone aggregators should contribute because they are connected to the PSTN).

320 Business Networks reply comments at 2 (providers of private line services generally are not connected to the public switched network and derive no benefit from it); US Satellite Companies reply comments at 1 (the public interest does not require contributions from telecommunications that are not interconnected with the public switched network); American Mobile Telecommunications Association reply comments at 3 (there is no public policy rationale for requiring commercial dispatch systems that have little nexus to the PSTN to contribute).
concerns warrant refraining from imposing contribution requirements on certain providers that fall within the permissive contribution authority set forth in section 254(d). For example, the Commission found that systems integrators that do not provide services over their own facilities, are not common carriers, and obtain a de minimis amount of their revenues from the resale of telecommunications are not required to contribute to universal service. We note that commenters are divided over this conclusion, but we agree that systems integrators that derive less than five percent of their revenues relative to systems integration from the resale of telecommunications do not significantly compete with common carriers that are required to contribute to universal service. The provision of interstate telecommunications is generally only one of a wide range of services that systems integrators provide for their customers. Requiring systems integrators that obtain less than five percent of systems integration revenues from the sale of interstate telecommunications to contribute to universal service mechanisms could dissuade these companies from offering interstate telecommunications and we do not want the Commission's decisions to distort business decisions. Accordingly, we find no compelling public interest reason for including this limited category of telecommunications providers in the pool of contributors.

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321 See, e.g., Fourth Order on Reconsideration at para. 283 (broadcasters that engage in non-common carrier interstate telecommunications should not contribute to universal service because broadcasters generally compete with cable, OVS and DBS providers, which are not required to contribute on the basis of the revenues derived from these services, rather than with common carriers).

322 Fourth Order on Reconsideration at para. 278. In this context, the term de minimis is used by the Commission to describe the small amount of revenue a systems integrator can derive from telecommunications without having to contribute to universal service mechanisms. This term is also used in the statutory language to refer to contributors whose contributions would be less than the administrative costs of collecting them. We discuss this provision separately in Section V.C.2.

323 Compare AT&T comments at 6-7 (systems integrators with resale telecommunication revenues below five percent of the firm's total revenues and non-common carrier transponders potentially compete with carriers that are required to contribute because they all sell telecommunications services and, thus, they should be required to contribute) with Ad Hoc comments at 3 (systems integrators who obtain only a de minimis amount of revenues from the resale of telecommunications services should be exempted from contributing).

324 Fourth Order on Reconsideration at para. 279. The Commission concluded that systems integrators' telecommunications revenues will be considered de minimis if they constitute less than five percent of revenues derived from providing systems integration services. Id. at 280.

325 See Fourth Order on Reconsideration at para. 278 ("systems integrators provide integrated telecommunications packages of services and products that may include, for example, the provision of computer capabilities, data processing, and telecommunications.").

326 In its comments, Amtrak analogizes its situation to those of both non-profit educational and health institutions and systems integrators and argues that it should not be required to contribute to universal service mechanisms because the small amount of excess capacity for interstate telecommunications that it sells on a private carrier basis is only incidental to its core transportation business. Amtrak contends that it does not significantly compete with common carriers and obtains a de minimis amount of its revenues from the resale of telecommunications. Moreover, Amtrak states that it must resell its excess capacity pursuant to Congress's mandate that it take measures to be self-supporting and non-reliant on federal operating support by the year.
137. We note that Bell South asserts that the Commission's approach results in disparate treatment for carriers, for which the de minimis threshold is $10,000 and non-carrier systems integrators, which can derive telecommunications revenues that would otherwise result in a universal service contribution in excess of $10,000 and still be exempt if their telecommunications revenues are less than five percent of their total systems integration revenues. Because we determine that these systems integrators do not compete significantly with common carriers, however, we find that it is appropriate to require systems integrators to contribute only to the extent their telecommunications revenues exceed five percent of their total revenues derived from systems integration, even if five percent exceeds the $10,000 threshold established for mandatory contributors. The Commission recognized that the primary business of such systems integrators is not providing interstate telecommunication, but rather performing services such as integrating their customers' computer and other informational systems. The Commission also recognized that customers chose systems integrators for their systems integration expertise, not for their competitive provision of telecommunications. Further, as the Commission has concluded, the limited nature of this exemption will ensure that systems integrators that are significantly engaged in the provision of telecommunications do not receive an unfair competitive advantage over common carriers or other carriers that are required to contribute to universal service. Finally, we are unpersuaded that this approach will significantly reduce the contribution base because the Commission has determined that revenues received by common carriers for the minimal amounts of telecommunications provided to systems integrators will be included in the contribution base of underlying common carriers.

138. In other cases, the public interest analysis requires a more expansive examination of the goals of universal service. For example, we have concluded that it would be contrary to the public interest to require colleges, universities, schools, libraries, and health care providers to contribute to universal service even though, in some instances, these institutions could be considered providers of interstate telecommunications. Unlike


327 See discussion of the de minimis exemption, Section V.C.2, infra.

328 BellSouth comments at 7-8.

329 Fourth Order on Reconsideration at paras. 278-279.

330 Id., at paras. 278-279.

331 Id., at para. 280.

332 Id., at para. 281. The record in the underlying universal service proceeding, CC Docket 96-45, indicates that including this small group of systems integrators in the contribution pool would reduce the per provider contribution percentage by less than 1/100th of one percent. See Ad Hoc reply comments at 3-4 citing comments of International Business Machines Corporation in Support of Petition for Reconsideration, at 12-13 (Aug. 18, 1997).

333 Fourth Order on Reconsideration at para. 284.
other recipients of universal service such as carriers serving high cost areas, schools, libraries, and health care providers that receive the benefits of universal service are prohibited from reselling the supported services they receive.\textsuperscript{334} Thus, they are effectively prohibited from competing with common carriers with respect to the connections they purchase at supported rates. Although the record demonstrates some opposition to this conclusion,\textsuperscript{335} we are convinced that this approach is in the public interest. Further, we are persuaded that it would be inconsistent with the educational goals of universal service support mechanisms to require colleges and universities to contribute to universal service.\textsuperscript{336} Nevertheless, in order to maintain the sufficiency of universal service mechanisms, we will treat non-profit schools, colleges, universities, libraries, and health care providers as telecommunications end users for contribution purposes.\textsuperscript{337}

139. Further, in the Universal Service Order the Commission found that entities that "provide telecommunications solely to meet their internal needs" as telecommunications providers are subject to our permissive contribution authority. The Commission concluded, however, that those entities "should not be required to contribute to the [universal service] support mechanisms at this time, because telecommunications do not comprise the core of their business."\textsuperscript{338} The Commission recognized that "it would be administratively burdensome to assess a special non-revenues-based contribution on these providers because they do not derive revenues from the provision of services to themselves."\textsuperscript{339} As discussed above,\textsuperscript{340} one could argue that an Internet service provider that owns transmission facilities and engages in data transport over those facilities in order to provide an information service is providing telecommunications to itself. As a theoretical matter, it may be advisable to exercise our discretion under the statute to require such providers to contribute to universal service. We recognize, however, that there are significant operational difficulties associated with determining the amount of such an Internet service provider's revenues to be assessed for universal service purposes and with enforcing such requirements. We intend to consider these issues in an upcoming proceeding.

2. The De Minimis Exemption

\textsuperscript{334} 47 U.S.C. § 254(h)(3).

\textsuperscript{335} See AT&T comments at 6-7 (educational institutions that are not K-12 schools are not recipients of support and are likely to resell telecommunications services to their students, thus competing with other providers of telecommunications; even educational institutions and health care providers potentially compete with carriers to the extent that they sell telecommunications services, and, thus, eligible schools and libraries, as recipients of support, should be not exempted from contributing).

\textsuperscript{336} See Fourth Order on Reconsideration at para. 284.

\textsuperscript{337} Id., at para. 284.

\textsuperscript{338} Universal Service Order, 12 FCC Rcd at 9185, para. 799.

\textsuperscript{339} Id.

\textsuperscript{340} See section IV.D.1, supra.
140. The second sentence of section 254(d) reads: "The Commission may exempt a carrier or class of carriers from this [contribution] requirement if the carrier's telecommunications activities are limited to such an extent that the level of such carrier's contribution to the preservation and advancement of universal service would be de minimis." This clause provides the only statutory authority for exempting a carrier or class of carriers that would otherwise be required to contribute to universal service mechanisms. The legislative history indicates that the de minimis exemption is extremely limited. Specifically, the Joint Explanatory Statement states that "this authority would only be used in cases where the administrative cost of collecting contributions from a carrier or carriers would exceed the contribution that carrier would otherwise have to make under the formula for contributions selected by the Commission.

141. We recently set a $10,000.00 threshold for the de minimis exemption. Initially, the Commission had established a $100.00 threshold, which was based on an estimate of the administrator's costs to collect the minimum contribution requirement used for the TRS program. It is appropriate, however, as we concluded, to consider the contributor's administrative costs, as well as the costs incurred by the administrator. In addition, exempting contributors whose annual contribution would be less than $10,000.00 will significantly reduce the administrator's collection costs. Therefore, we conclude that entities whose contributions would be less than $10,000.00 should be exempted from the contribution requirement. We recognize that some commenters object to the Commission's implementation of the de minimis exemption. Although we are mindful of the need to establish clear and competitively neutral rules, we nevertheless conclude that our

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341 47 U.S.C. § 254(d). Thus, AT&T's contention that "no carrier -- regardless of its size -- should be exempt" is inconsistent with the clear language of 254(d). See AT&T comments at 8.

342 See SBC comments at 2-3 (the Commission's authority to exempt contributors is limited to de minimis contributors).

343 Joint Explanatory Statement at 131.

344 Fourth Order on Reconsideration at para. 295.

345 Universal Service Order, 12 FCC Rcd at 9187-9188, para. 803.

346 Fourth Order on Reconsideration at para. 295.

347 Id., at para. 297.

348 See, e.g., PCIA comments at 7-11 (the decision to require underlying facilities-based carriers to consider resellers that qualify for the de minimis exemption as end users for contribution purposes places an untenable billing burden on facilities-based carriers); BellSouth comments at 7-8 (the reclassification of revenues is not competitively neutral because the Commission is shifting the reseller's universal service obligation to the underlying carrier). We note that the Commission has several petitions for reconsideration under consideration, many of which address the implementation of the de minimis threshold. Rather than prejudge those petitions in this Report, we will address the specific issues they raise in a future reconsideration order.
implementation of the de minimis exemption is consistent with Congressional intent and with the goals of universal service in general.

142. The statute and legislative history support the conclusion that the de minimis exemption may not be used to exempt any other class of contributors. In addition, we find no evidence that exempting contributors whose contributions would be less than $10,000.00 will result in a shortage of monies or otherwise strain the universal service support mechanisms. Further, we disagree with AT&T's contention that the $10,000.00 de minimis threshold creates a loophole for customers of small carriers and creates unfair marketing advantages for small, new entrants.\textsuperscript{349} We are persuaded that the Commission's conclusion does not extend beyond the very limited parameters of this statutory exemption.

3. Exclusions and Exemptions

143. Congress directed us to explain "any exemption of providers or exclusion of any service that includes telecommunications" from universal service contribution requirements under section 254, or from existing universal service support mechanisms.\textsuperscript{350}

144. Under section 254(d), only telecommunications carriers that provide "interstate telecommunications services" are required to contribute to federal universal service funding and other providers of interstate telecommunications may be required to contribute if the Commission finds that the public interest so requires.\textsuperscript{351} We have noted above in our discussion of "telecommunications" and "information service" that all information services by definition are provided "via telecommunications." As we interpret the statute, that fact that an information service such as Internet access rides on top of telecommunications networks does not mean that the Internet access itself is a "telecommunications service." All information services "include telecommunications" in some sense, but we have "excluded" them from universal service contribution requirements based on the plain language of section 254(d). We do not consider this determination to be an "exemption," because we find no requirement in the Act that all services that "include telecommunications" be required to contribute to universal service.

145. For example, Microsoft’s Expedia site allows customers to purchase airline tickets through the World Wide Web. Because access over telecommunications networks is necessary in order to reach the Expedia site, Microsoft can be said to offer a service that "includes telecommunications." We do not believe, however, that Congress intended Microsoft to contribute a portion of the revenues it receives for airline tickets to the universal service fund. End users do not access Expedia in order to obtain telecommunications service. Rather, those users obtain telecommunications service from local exchange carriers, and then use information services provided by their Internet service

\textsuperscript{349} AT&T comments at 8.

\textsuperscript{350} Appropriations Act, §623(b)(3).

\textsuperscript{351} 47 U.S.C 254(d).
provider and Microsoft in order to access Expedia. Phrased another way, Microsoft arguably offers a service that "includes telecommunications," but it does not "provide" telecommunications to customers.

146. We have also been asked to address exemptions or exclusions from existing universal service support mechanisms. Contributions to existing explicit mechanisms, such as long-term support and telecommunications relay service, have always been limited to carriers. Enhanced and information service providers have never been required to contribute to these mechanisms, and therefore no "exemption" or "exclusion" exists. Not all existing universal service support, however, is explicit. Interstate access charges, for instance, have traditionally been set above the economic cost of access, which has permitted ILECs to charge lower rates for local service in high-cost areas. At the state level, rates for business lines and vertical features also have often been set above cost in order to keep residential rates lower. When it established the interstate access charge regime in the early 1980s, the Commission determined that enhanced service providers, even though they used local exchange networks to originate and terminate interstate services, would not be subject to access charges. Instead, enhanced service providers pay local business rates to LECs for their connections to the LEC network. This exemption from interstate access charges thus might be construed as an "exemption" from an "existing federal universal service support mechanism."

147. We believe that permitting enhanced service providers to purchase these services from incumbent LECs under the same intrastate tariffs available to end users, rather than requiring them to pay interstate access charges, comports with the plain language of the 1996 Act and with the public interest. The 1996 Act makes a decisive break from the existing practice of implicit universal service subsidy structures. Rather than preserve the inefficient mechanisms designed for an industry characterized by local monopolies, the 1996 Act directs the Commission to make universal service funding explicit and competitively-neutral. We have implemented this Congressional requirement in our Universal Service and Access Reform proceedings. In particular, since January 1, 1998, high cost support has been collected through the new federal universal service support mechanism, funded by equitable and non-discriminatory contributions from all telecommunications providers. We have also restructured interstate access charges so that, after a transition, interstate non-traffic-sensitive local loop costs will no longer be recovered through per-minute long-distance rates. We increased caps on end-user subscriber line charges, and created presubscribed interexchange carrier charges, to recover these costs in a more efficient manner.

VI. WHO RECEIVES UNIVERSAL SERVICE SUPPORT

A. Background

148. Section 623(b)(4) of the Appropriations Act directs the Commission to review "who is eligible under sections 254(e), 254(h)(1), and 254(h)(2) . . . to receive specific federal universal service support for the provision of universal service, and the consistency

with which the Commission has interpreted each of those provisions of section 254." With respect to these particular provisions of the 1996 Act, the Commission, after seeking public comment, issued a series of rules concerning the eligibility of telecommunications carriers and other providers of services to receive support under universal service mechanisms. As discussed in greater detail below, we believe that the Commission's interpretations of sections 254(e), 254(h)(1) and 254(h)(2) are consistent with the plain language of these provisions and with Congress's stated goals in passing the 1996 Act.

149. General Eligibility Under 254(e). Section 254(e) of the 1996 Act imposed a new set of eligibility criteria for the receipt of universal service support. Section 254(e) states in part, that "[a]fter the date on which Commission regulations regarding implementing this section take effect, only an eligible telecommunications carrier designated under section 214(e) shall be eligible to receive specific Federal universal service support." Section 214(e)(1) provides that

[a] common carrier designated as an eligible telecommunications carrier . . . shall be eligible to receive universal service support in accordance with section 254 and shall, throughout the service area for which the designation is received - (A) offer the services that are supported by Federal universal service mechanisms under section 254(e), either using its own facilities or a combination of its own facilities and resale of another carrier's services . . . and (B) advertise the availability of such services and the charges therefor using media of general distribution.

150. The Commission adopted without expansion the criteria set forth in section 254(e) as the rules governing eligibility for universal service support in general. Those rules, the Commission concluded, allow only carriers designated as "eligible telecommunications carriers" under section 214(e) to be eligible for universal service support, and allow only common carriers to be designated as eligible telecommunications carriers for this purpose. The Commission also concluded that, under section 254(e), any telecommunications carrier using any technology is eligible to receive support as long as it meets the criteria set forth in section 214(e). The Commission also found that carriers that use unbundled network elements, in whole or in part, to provide supported services meet the "facilities" requirement of subsection 214(e)(1)(A) and, therefore, can be eligible for universal service support. The Commission concluded, however, that carriers that provide their services entirely through resale of another carrier's services are not eligible for

355 Universal Service Order, 12 FCC Rcd at 8850-8851, para. 134.
356 Id. at 8858-8859, paras. 145-146.
357 Id. at 8862-8870, paras. 154-168.
universal service support. The Commission's rules regarding general eligibility are codified
in Part 54, Subpart C of volume 47 of the Code of Federal Regulations.\footnote{358}

151. Providers of Services to Schools and Libraries. With section 254(h)(1)(B) of
the 1996 Act, Congress created a new universal service support mechanism specifically for
the benefit of schools and libraries. Section 254(h)(1)(B) states, in part, that a
telecommunications carrier providing supported services to schools and libraries "shall - (i)
have an amount equal to the amount of the discount treated as an offset to its obligation to
contribute to the mechanisms to preserve and advance universal service, or (ii)
notwithstanding the provisions of subsection (e) of this section, receive reimbursement
utilizing the support mechanisms to preserve and advance universal service.\footnote{359} Section
254(c)(3) of the Act provides that "[t]he Commission may designate additional services for
such support mechanisms for schools, libraries, and health care providers for the purposes
of subsection (h).\footnote{360} In addition, section 254(h)(2) states in part: "The Commission shall
establish competitively neutral rules (A) to enhance, to the extent technically feasible and
economically reasonable, access to advanced telecommunications and information services
for all public and non-profit elementary and secondary school classrooms, health care
providers, and libraries . . . .\footnote{361}

152. The Commission interpreted subsection 254(h)(1)(B) to allow any
telecommunications carrier, not just eligible telecommunications carriers, to receive
reimbursements from universal service mechanisms for providing telecommunications
service, Internet access and the installation and maintenance of internal connections to
eligible schools and libraries.\footnote{362} The Commission also found that firms other than
telecommunications carriers can receive support under sections 254(h)(2) and 4(i) for
providing Internet access and the installation and maintenance of internal connections.\footnote{363} In
its Fourth Order on Reconsideration the Commission added that, because state
telecommunications networks are not "telecommunications carriers," as defined by the
statute, they are not eligible to receive direct reimbursement from universal service support
mechanisms for providing telecommunications services to eligible schools and libraries.\footnote{364}
On the other hand, the Commission also found that, as firms other than telecommunications
carriers, they are still eligible to receive direct reimbursement for providing Internet access

\footnote{358} 47 C.F.R. §§ 54.201-54.207.
\footnote{360} 47 U.S.C. § 254(c)(3).
\footnote{361} 47 U.S.C. § 254(h)(2).
\footnote{362} Universal Service Order, 12 FCC Red at 9015, para. 449.
\footnote{363} See 47 C.F.R. §§ 54.503, 54.517(b).
\footnote{364} Fourth Order on Reconsideration at paras. 187-189.
and internal connections to eligible schools and libraries under section 254(h)(2)(A). The Commission's rules regarding the eligibility of providers of services to schools and libraries are codified in Part 54, Subpart F of volume 47 of the Code of Federal Regulations.

153. Providers of Services to Health Care Providers. With section 254(h)(1)(A), Congress also added a new universal service support mechanism for the benefit of health care providers. Section 254(h)(1)(A) provides, in part, that a telecommunications carrier providing supported services to health care providers in rural areas "shall be entitled to have an amount equal to the difference, if any, between the rates for services provided to health care providers for rural areas in a State and the rates for similar services provided to other customers in comparable rural areas in that State treated as a service obligation as a part of its obligation to participate in the mechanisms to preserve and advance universal service." As with the program for schools and libraries, however, section 254(c)(3) of the Act adds that "[t]he Commission may designate additional services for such support mechanisms for schools, libraries, and health care providers for the purposes of subsection (h). Also, section 254(h)(2) directs the Commission to "establish competitively neutral rules (A) to enhance, to the extent technically feasible and economically reasonable, access to advanced telecommunications and information services for all public and non-profit elementary and secondary school classrooms, health care providers, and libraries . . . ."

154. The Commission found that section 254(h)(1)(A) is explicitly limited to "telecommunications services." The Commission also determined that only carriers designated as "eligible telecommunications carriers" shall be eligible to receive support for providing services to health care providers under section 254(h)(1)(A). The Commission found further that these services include the telecommunications services that health care providers may purchase to gain access to an Internet service provider. The Commission thus concluded that any telecommunications carrier can receive limited support for providing any health care provider, whether rural or not, with toll-free access to an Internet service. The Commission's rules regarding eligibility of providers of services to health

365 Id. at paras. 190-191.
369 Universal Service Order, 12 FCC Rcd at 9009, 9010, paras. 437, 439.
370 Id. at 9105, para. 627.
371 Id. at 9106-9107, para. 630.
372 Id. at 9087-9088, paras. 596; id. at 9157-9159, paras. 742-745.
care providers are codified in Part 54, Subpart G of volume 47 of the Code of Federal Regulations.\textsuperscript{373}

B. Discussion

1. General Eligibility under section 254(e).

155. As noted above, section 254(e) provides that "only an eligible telecommunications carrier designated under section 214(e) shall be eligible to receive specific Federal universal service support."\textsuperscript{374} Section 214(e), in turn, provides that:

[a] common carrier designated as an eligible telecommunications carrier under [subsection 214(e)(2)] or [subsection 214(e)(3)] shall be eligible to receive universal service support in accordance with section 254 and shall, throughout the service area for which the designation is received --

(A) offer the services that are supported by Federal universal service support mechanisms under section 254(c), either using its own facilities or a combination of its own facilities and resale of another carrier's services (including the services offered by another eligible telecommunications carrier); and (B) advertise the availability of such services and the charges therefor using media of general distribution.\textsuperscript{375}

156. In the Universal Service Order the Commission, consistent with the recommendation of the Joint Board, found that these sections constitute the entirety of the rules governing eligibility for universal service support generally, and that the statute does not permit the Commission or states to adopt any additional criteria. We believe that the plain language of the statute fully supports the Commission's conclusion in this regard, and that the Commission properly construed the statute with respect to each of the rules set forth in sections 254(e) and 214(e).

a. The "Eligible Telecommunications Carrier" Requirement.

157. The Commission first concluded that, under section 254(e), only a carrier that is designated an "eligible telecommunications carrier" pursuant to section 214(e) can be eligible for the receipt of universal service support.\textsuperscript{376} The relevant language of the statute, which states that "only an eligible telecommunications carrier designated under section

\textsuperscript{373} 47 C.F.R. §§ 54.601-54.623.

\textsuperscript{374} 47 U.S.C. § 254(e).

\textsuperscript{375} 47 U.S.C. § 214(e)(1).

\textsuperscript{376} 47 C.F.R. § 54.201(a).
214(e) shall be eligible to receive specific Federal universal service support, is plain on its face and fully supports the Commission's conclusion.

158. The Commission also found that only a common carrier may be designated as an "eligible telecommunications carrier" for purposes of section 254(e). We find that this, too, is consistent with the language of the statute. For example, section 214(e)(2) directs state commissions to designate "common carrier[s]" as eligible telecommunications carriers for receipt of support. Similarly, section 214(e)(1) refers only to "[a] common carrier" as eligible for support in accordance with section 254. These provisions, we believe, clearly indicate Congress's intention that only a common carrier may be designated as an "eligible telecommunications carrier."

b. The "Facilities" Requirement.

159. Section 214(e)(1) requires each eligible carrier, throughout its service area: (1) to offer the services that are supported by federal universal service support mechanisms under section 254(c); (2) to offer such services using its own facilities or a combination of its own facilities and resale of another carrier's services, including the services offered by another eligible telecommunications carrier; and (3) to advertise the availability of and charges for such services using media of general distribution. The 1996 Act, however, does not define the term "facilities." Accordingly, the Commission, in an effort to effectuate the intent of Congress, established a definition of "facilities" for purposes of determining the eligibility requirements of section 214(e)(1).

160. The Commission interpreted the term "facilities" in section 214(e)(1) to mean any physical components of the telecommunications network that are used in the transmission or routing of the services designated for universal service support. This interpretation is mandated by the statutory language which requires that at least some portion of the supported services offered by a carrier be offered using the carrier's "own facilities." Although the Joint Board made no recommendation regarding the type of facilities that an eligible carrier must provide, it recommended that carriers who offer universal service exclusively through the resale of another carrier's service should not be eligible for universal service support. Because resold services are not physical components of the network, the Commission's interpretation of the term "facilities" excludes

380 See 47 U.S.C. § 214(e)(1); 47 C.F.R. § 54.201(d).
381 See 47 C.F.R. § 54.201(e).
pure resellers from eligibility for universal service support and therefore fulfills the aim of both Congress and the Joint Board.

161. We note, however, that the Commission's interpretation does not dictate the specific facilities that a carrier must provide and, therefore, does not impose entry barriers that would unduly restrict the class of carriers that may be designated as eligible for universal service support. In our view, therefore, the Commission's interpretation of "facilities" strikes an appropriate balance that gives the facilities requirement sufficient meaning to exclude pure resellers from eligibility, but remains competitively neutral insofar as it does not dictate the specific facilities or entry strategy that any other carrier must use.

384 Although the Commission defined "facilities" to require physical components of the network, it did not construe section 214(e) to require that those facilities be physically located in the service area at issue. We believe that this is an appropriate construction of the statute. First, nothing in the statute mandates that the facilities be located in the service area. See 47 U.S.C. § 214(e). Second, where a carrier can offer supported services in one area through the use of facilities in another area, it is most economically efficient to afford the carrier flexibility to offer its services in this manner. To hold otherwise would require the addition of redundant facilities within the service area for no purpose related to the effective provision of universal service. Moreover, the Commission's interpretation is competitively neutral, as it accommodates various technologies and entry strategies that carriers may employ to compete in high-cost areas.


386 47 C.F.R. § 54.201(f).

387 We note that, based on the text of section 271(c)(1)(A), the legislative history of that provision, and the overall statutory scheme of the 1996 Act, the Commission interpreted the phrase "own telephone exchange service facilities" in section 271(c)(1)(A) to include unbundled network elements that a competing provider has obtained from a Bell Operating Company. See Application of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as amended, to Provide In-Region, InterLATA Services in Michigan, Order, CC Docket No. 97-137, 12 FCC Rcd 20543, 20589-20598, paras. 86-101 (1997), petitions for recon. pending.
163. The principal purpose of the 1996 Act was to increase competition in the local telephone markets. To this end, Congress sought to allow potential competitors to enter local telephone markets by using the incumbent carriers' own networks in three ways: (1) interconnection of the competitor's network to that of an incumbent, (2) use of unbundled elements of the incumbent's network, and (3) resale of the incumbent's retail services. The use of unbundled network elements, as one of only three primary paths of entry into local markets, clearly lies at the heart of the 1996 Act. Given this central role assigned to the use of unbundled network elements in the 1996 Act as a whole, it seems highly unlikely that Congress intended, in section 214(e)(1)(A), to deny universal service support to a carrier that relies on unbundled network elements, whether in whole or in part, to provide supported services, when it excluded only those carriers relying entirely on "resale" -- a separate entry strategy.

164. Indeed, Congress has made clear that all three forms of local entry must be treated in a competitively neutral manner, notwithstanding section 214(e)(1)(A), which prevents pure resellers from becoming eligible telecommunications carriers. If the "own facilities" requirement were interpreted to preclude services provided through unbundled network elements from eligibility for universal service support, carriers using unbundled network elements would be at a competitive disadvantage to carriers using other entry strategies, as only those carriers employing other entry strategies would be eligible for support, even if the carriers were all providing the same services. Such a result would be at variance with the principles of competitive neutrality underlying the Act and would serve as a significant disincentive for entry into high-cost areas through the use of unbundled elements, thus defeating Congress's intent to bring the fullest range of telecommunications services "to all regions of the Nation."

165. Moreover, the use of unbundled network elements falls within the definition of a carrier's "own facilities," in the ordinary sense of the term. For example, when a carrier obtains an unbundled network element from an incumbent carrier, the requesting carrier obtains exclusive use of that element for a period of time and pays the full cost of its use to the incumbent. Because the ordinary meaning of the word "own" includes not

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388 See, e.g., Reno v. ACLU, 117 S. Ct. 2329, 2337-2338 (1997) (the 1996 Act is "an unusually important legislative enactment" whose "major components . . . were designed to promote competition in the local telephone service market.").


390 47 U.S.C. § 214(e)(1)(A) (An eligible telecommunications carrier must "offer the services that are supported by Federal universal service support mechanisms under section 254(c), either using its own facilities or a combination of its own facilities and resale of another carrier's services . . .").


only title holders, but those enjoying beneficial use of property, a user of unbundled network elements is fairly viewed under these circumstances to be using his "own facilities" to provide service. The Commission's decision to include unbundled network elements within the scope of a carrier's "own facilities," therefore, comports with this common understanding of the term. We note, however, that this issue is the subject of substantial disagreement and is currently before the Commission on petitions for reconsideration. Thus, while we report here that we believe the Commission's interpretation of the "own facilities" requirement to be reasonable, we do not wish to prejudge the pending petitions for reconsideration and remain open to the arguments of those who disagree.

d. Eligibility of All Technologies.

166. The Commission concluded that any telecommunications carrier using any technology, including wireless technology, is eligible to receive universal service support, provided that it meets the criteria set forth in section 214(e). We find that this conclusion, which the Joint Board recommended, is the proper reading of the statute. Neither section 254(e) nor 214(e) contains language that would favor one technology over another for purposes of eligibility for support. To the contrary, the statute mandates eligibility for any common carrier that meets the requirements of 214(e), without reference to the type of technology employed. Any wholesale exclusion of a class of carriers from eligibility for support, therefore, would be inconsistent with the plain language of the statute as well as the principle of competitive neutrality embodied in the Act. The Commission's decision to allow any technology as eligible for support is thus fully supported by the language and purpose of the statute.

e. Ineligibility of Resellers.

167. The Commission determined that a carrier that provides supported services exclusively through the resale of another carrier's services cannot be designated an eligible

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394 See, e.g., Walters v. Metropolitan Educational Enterprises, Inc., 117 S. Ct. 660, 664 (1997) ("In the absence of an indication to the contrary, words in a statute are assumed to bear their 'ordinary, contemporary, common meaning.'") (quoting Pioneer Investment Services Co. v. Brunswick Associates Ltd. Partnership, 507 U.S. 380, 388 (1993)).

395 See, e.g., RTC comments at 7-8, 24-25 (allowing unbundled network elements to satisfy "own facilities" test guts statutory safeguard against giving high cost support to a carrier that does not incur high costs or invest in infrastructure of the high cost area); NARUC comments at 6-7 (Commission had no authority to define "owned facilities" and service area considerations, as these roles are clearly assigned to states under section 214(e)(5)); TDS comments at 10 (allowing use of unbundled network elements where underlying carrier's facilities are not high cost or located in high cost area conflicts with section 254(e)); State Members comments at 7 (states, not Commission, have authority under section 214(e) to define "own facilities" and to establish geographic areas).

396 47 C.F.R. § 54.201(h).
telecommunications provider for purposes of section 214(e).\textsuperscript{397} This, too, in our view, is a reasonable reading of the statute. As noted above, both Congress and the Joint Board expressed an intention to exclude pure resellers from universal service support.\textsuperscript{398} In particular, section 214(e)(1)(A) requires an eligible carrier to provide supported services only "either using its own facilities or a combination of its own facilities and resale of another carrier's services . . . ."\textsuperscript{399} Because pure resale is not an option under this provision, the Commission's rule denying eligibility to pure resellers comports with the plain language of the statute.

168. Moreover, pure resellers already receive the benefit of universal service support when they purchase wholesale services at a price based on the retail price, a price that already includes the universal service support received by the incumbent provider. If pure resellers were eligible for additional support payments directly to themselves, they would effectively receive a "double recovery" of support.\textsuperscript{400} Such a result would not only be inefficient, but it would violate the principle of competitive neutrality by favoring resellers over other carriers. We believe, therefore, that the Commission's interpretation is a reasonable construction of the statute. We note, however, that this issue is also before the Commission on petitions for reconsideration.\textsuperscript{401} To avoid prejudging those petitions, we underscore that, based upon our review of the record in this proceeding, our opinion on this issue is simply that the Commission's decision to exclude pure resellers is a reasonable interpretation of the statute.


169. Section 214(e)(2) states that "[a] state commission shall . . . designate a common carrier that meets the [eligibility] requirements of [section 214(e)(1)] as an eligible telecommunications carrier . . . ." 47 U.S.C. § 214(e)(2) (emphasis added). Similarly, section 214(e)(1) provides that carriers designated as eligible telecommunications carriers pursuant to the statute "shall be eligible to receive universal service support . . . ." 47 U.S.C. § 214(e)(1) (emphasis added). These provisions clearly leave no room for discretion and require that carriers meeting the statutory eligibility requirements be provided with universal service support. We agree, therefore, that the statute does not permit the Commission to impose additional criteria for eligibility.

\textsuperscript{397} See 47 C.F.R. § 54.201(i).


\textsuperscript{399} 47 U.S.C. § 214(e)(1)(A).

\textsuperscript{400} AMSC contends that resellers should not be excluded from eligibility where their services were not obtained from carriers that are already receiving universal service support for the same facilities. See AMSC comments at 4. In such cases, AMSC contends, support for the reseller does not create a "double recovery." Id. Regardless, AMSC's point cannot overcome the statutory language of section 214(e)(1)(A), which does not allow universal service support for the pure resale of supported services.

\textsuperscript{401} See, e.g., BellSouth Petition for Reconsideration at 3-4 (filed); RTC Petition for Reconsideration at 5-6 (filed).
170. Furthermore, even if the statute permitted the imposition of additional conditions on eligibility, such conditions would be unnecessary. Although some commenters in the initial rulemaking proceeding argued that additional criteria are needed to prevent unreasonable practices by other carriers, the statutory rules are sufficient to protect against such practices.\textsuperscript{402} For example, by limiting eligibility to only common carriers, section 214(e) prevents eligible carriers from cherry-picking only the most desirable customers. The requirement that eligible carriers must serve their entire service area similarly protects against such practices. Moreover, the imposition of additional criteria for eligibility would raise potential market participants' costs of entry, thereby discouraging the competition intended by the 1996 Act. In addition to the plain language of the statute, therefore, these practical concerns justify the Commission's decision to adopt the statutory criteria for eligibility without additional criteria.\textsuperscript{403}

2. Eligibility for Support for Providing Service to Schools and Libraries under section 254(h)

171. The Commission concluded that, pursuant to section 254(h)(1)(B), all telecommunications carriers may receive support for providing eligible schools and libraries with any commercially available telecommunications service they need\textsuperscript{404} as well as for providing them with basic "conduit" Internet access and the installation and maintenance of internal connections.\textsuperscript{405} The Commission also determined that, pursuant to sections 4(i) and 254(h)(2)(A), firms other than telecommunications carriers can receive support for providing eligible schools and libraries with basic conduit Internet access and the installation and maintenance of internal connections.\textsuperscript{406}

a. Telecommunications Carriers

172. The Commission concluded that section 254(h)(1)(B)(ii) allows any telecommunications carrier, not just those designated as "eligible telecommunications carriers" under section 214(e), to receive universal service support for providing supported services to schools and libraries.\textsuperscript{407} This interpretation is, in our view, well-grounded in the plain language of the statute.

\textsuperscript{402} See Universal Service Order, 12 FCC Red at 8856, para. 143 n.347 (citing comments).

\textsuperscript{403} Although one commenter in the initial proceeding sought modification of section 214(e)(1)'s requirement that eligible carriers provide service to, and advertise throughout, their entire service areas, the terms of section 214(e) clearly do not allow us to alter these duties. We cannot, therefore, modify the requirements of section 214(e) to accomodate those carriers whose technology limits their ability to provide service throughout a state-wide service area. See Universal Service Order, 12 FCC Red at 8855, para. 141.

\textsuperscript{404} See 47 C.F.R. §§ 54.501(a), 54.502.

\textsuperscript{405} See 47 C.F.R. § 54.503.

\textsuperscript{406} See 47 C.F.R. §§ 54.503, 54.517(b); Universal Service Order, 12 FCC Red at 9013, para. 444.

\textsuperscript{407} See 47 C.F.R. § 54.501(a); Universal Service Order, 12 FCC Red at 9015, para. 449.
173. As noted above, section 254(e) provides that only a carrier designated as an "eligible telecommunications carrier" under section 214(e) may receive universal service support.\footnote{408} Section 254(h)(1)(B)(ii), however, contains an express exemption from this limitation, allowing telecommunications carriers to receive universal support for providing eligible services to schools and libraries, "notwithstanding the provisions of [section 254(e)] . . . ."\footnote{409} We find that, as Senators Stevens and Burns have observed, Congress intended section 254(h)(1)(B) to "waive the statutory limitation in section 254(e) so that any telecommunications carrier could receive support for universal service to schools and libraries."\footnote{410} We believe that the language of the statute thus fully supports the Commission's conclusion that any telecommunications carrier, whether or not designated as an "eligible telecommunications carrier," is eligible for support for providing telecommunications services to schools and libraries.\footnote{411}

174. Moreover, as the Commission explained in its Fourth Order on Reconsideration the term "telecommunications carrier" in section 254(h)(1)(B) includes only those carriers that provide telecommunications services on a common carrier basis.\footnote{412} In turn, this means that only those carriers who hold themselves out "to service indifferently all potential users" can be considered telecommunications carriers.\footnote{413} Therefore, notwithstanding the objections of some commenters,\footnote{414} the plain language of the statute appears to render state telecommunications networks ineligible to receive universal service support for providing telecommunications services to eligible schools and libraries.\footnote{415} Because the evidence in the record indicates that state telecommunications networks offer services to a specified class of users rather than directly to the public, these entities do not service all potential users indifferently and thus would not qualify as telecommunications carriers. Because, as noted above, section 254(h)(1)(B) provides that only telecommunications carriers may receive support for providing schools and libraries with

\footnote{408} 47 U.S.C. § 254(e).
\footnote{410} Senators Stevens and Burns comments at 10.
\footnote{411} See also NCTA comments at 14-15 (section 254(h)(1)(B) specifically authorizes support for non-common carriers).
\footnote{412} Fourth Order on Reconsideration at paras. 187-188.
\footnote{413} Universal Service Order, 12 FCC Rcd at 9177-78, paras. 784-786.
\footnote{414} See, e.g., Washington DIS reply comments at 1-3 (ineligibility of state networks providing services to public entities to receive discounts directly precludes schools and libraries from obtaining discounts on significant administrative costs included in state-provided services and creates disincentives to use state-aggregated telecommunications services); NASTD reply comments at 1-3 (state networks should be permitted to receive support for costs "not directly attributable to readily identifiable costs" of providing local and long distance voice telecommunications to schools and libraries). See also Washington State Department of Information Services, Petition for Reconsideration, CC Docket No. 96-45 (filed Feb. 12, 1998).
\footnote{415} Fourth Order on Reconsideration at paras. 187-189.
telecommunications services, we believe that the Commission correctly concluded that state telecommunications networks are not eligible for universal service support under section 254(h)(1)(B). We note, however, that the Iowa Telecommunications and Technology Commission filed with the Commission a request for determination that the Iowa Communications Network it operates is a provider of telecommunications services to schools, libraries and rural health care providers and, thus, should be eligible to receive universal service support for serving these entities.\footnote{Iowa Communications Network Eligibility for Universal Service Payments, CC Docket 96-45 (filed Feb. 4, 1998); Iowa Telecommunications and Technology Commission Seeks Determination that the Iowa Communications Network is a Provider of Telecommunications Services to Schools, Libraries, and Rural Health Care Providers, Public Notice, DA 98-294 (rel. Feb. 13, 1998).} We will consider this request in an upcoming proceeding.

b. Firms Other Than Telecommunications Carriers Providing Internet Access and Internal Connections

175. We have attempted to interpret sections 254(h)(2) and 254(e) in a manner most consistent with the context provided by other statutory language and the Congressional intent expressed in that language.\footnote{Bell Atlantic Telephone Companies v. FCC, 131 F.3d 1044 (D.C. Cir. 1997).} Under such analysis below, which is similar to the analysis provided by the Commission in the Universal Service Order we conclude that, despite some statutory ambiguity, the stronger position is that section 254 authorizes the Commission to provide support to firms other than telecommunications carriers under section 254(h)(2).\footnote{We note that this issue is the subject of a pending appeal. See Brief for Petitioners GTE Entities, Southwestern Bell Tel. Co. and BellSouth Corp., Texas Office of Pub. Util. Counsel v. FCC, No. 97-60421 (5th Cir.) at 85-88.} We recognize that some would find it incongruous that entities that do not contribute to universal service support mechanisms may draw funds from those mechanisms if those entities provide competitively priced Internet access or internal connections to eligible schools and libraries. We reach this interpretation of section 254(h)(2), however, because we find that the consequences of reading the statute to deny support to firms other than telecommunications carriers creates more apparent statutory inconsistencies than reading the statute to permit such support.

176. At the outset, we note that the Commission interpreted section 254(h)(2) to permit support not only for telecommunications services, but also for internal connections in schools and libraries, which are not telecommunications services. This conclusion was premised on the statute's specific requirement that "classrooms," as opposed to "schools," have access to advanced telecommunications and information services.\footnote{See 47 U.S.C. § 254(h)(2)(A).} If the Commission had found that the statute did not permit support for internal connections, only wireless telecommunications service providers would have been eligible to receive support
for the provision of telecommunications and information services to classrooms. Because limiting eligibility solely to wireless carriers would have been contrary to the Commission's obligations to "establish competitively neutral rules to enhance . . . access to advanced telecommunications and information services for all . . . classrooms," we concluded that Congress intended to permit support for internal connections in schools and libraries.

177. Further, at least three major inconsistencies arise from interpreting section 254(e) to limit our authority under section 254(h)(2). First, reading section 254(e) to limit section 254(h)(2), when it does not apply to section 254(h)(1)(B), appears inconsistent with the relative directives of those provisions. Congress explicitly chose to permit the Commission to provide support to all telecommunications carriers -- including those that were not designated under section 214(e) -- for services eligible for support under section 254(h)(1)(B). While 254(h)(1)(B) did not emphasize competitive neutrality, the exemption from section 254(e) implicitly provided competitive neutrality among all telecommunications carriers. Reading section 254(e) to limit section 254(h)(2), however, would imply that Congress intended section 254(h)(2) to be less competitively neutral than section 254(h)(1)(B), for Congress would be prohibiting competitive neutrality between all telecommunications carriers: those designated under section 214(e) would be preferred to those that were not. That is, that while Congress explicitly required "competitive neutrality" under section 254(h)(2), it intended to prohibit even the lesser form of competitive neutrality that it adopted implicitly in section 254(h)(1)(B). This does not appear to be a tenable conclusion.

178. Second, denying support to firms other than telecommunications carriers would be inconsistent with Congress's goal, stated in section 254(h)(2)(A), to "enhance . . . access to advanced telecommunications and information services" for schools and libraries. To allow support for Internet access and internal connections only when provided by a telecommunications carrier would reduce the sources from which schools and libraries could obtain these services at a discount which, in turn, would reduce competitive pressures on providers to lower their costs, potentially leaving schools and libraries to confront unduly high pre-discount prices. This would appear contrary to the statutory goal of providing schools and libraries with services in the most cost-effective manner possible, which would minimize the total cost and thus the total amount of universal service contributions that would need to be collected.

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422 See, e.g., Comcast reply comments at 5-7 (support for non-telecommunications carriers promotes competition and drives prices of Internet access down for schools and libraries); EDLINC comments at 4-5 (without competition from ISPs, ILECs will continue to charge schools and libraries high rates, thereby depleting universal service fund); NCTA comments at 13 (competitive neutrality requires support for all entities; cable is cost-effective choice for schools and libraries); CIX reply comments at 2-3 (schools and libraries should be permitted to select from a wide range of vendors); PA Agencies comments at 12-15 (support for non-telecommunications carriers promotes competition and technological neutrality).
179. Third, as the Universal Service Order recognized, limiting direct support to telecommunications carriers would not fully deny support to firms other than telecommunications carriers; it would only deny support to firms that did not affiliate with telecommunications carriers.\textsuperscript{423} As the Universal Service Order noted, to take advantage of the discounts provided by section 254(h)(1), firms other than telecommunications carriers would be able to bid with telecommunications carriers through joint ventures, partnerships, or other business arrangements, and receive support indirectly. They would also have the option of establishing telecommunications carrier subsidiaries or affiliates, even if the scope of their telecommunications service activities was fairly limited. Thus, the Order found that limiting direct support to telecommunications carriers would not prevent support from going indirectly to other firms, but that it would frustrate the Commission's effort to achieve its goal of competitive neutrality,\textsuperscript{424} because it would treat firms other than telecommunications carriers less favorably than telecommunications carriers.

180. Therefore, the Commission concluded that firms that are not telecommunications carriers are eligible to compete to receive support under 254(h)(2) for providing Internet access and internal connections to schools and libraries, a position that a number of commenters have challenged.\textsuperscript{425} It bears emphasis that such firms would only receive such support if they were able to offer the requested services on more favorable terms than those offered by telecommunications carriers. Upon reexamination of this issue we observe that certain statutory provisions render the Act susceptible to more than one reasonable interpretation. Specifically, we find that there is tension between section 254(e)'s requirement that we limit support to telecommunications carriers and section 254(h)(2)'s command that we establish competitively neutral rules. Section 254(e) states that "only an eligible telecommunications carrier designated under section 214(e) shall be eligible to receive specific federal universal service support." Therefore, if we treated it as controlling, we would conclude that section 254(h)(2) can only authorize support for section 214(e) eligible telecommunications carriers. On the other hand, section 254(h)(2) states that "the Commission shall establish competitively neutral rules," under 254(h), and so if we treated it as controlling, we would read it to prohibit the Commission from establishing rules that are not competitively neutral, and thus require that we find that section 254(e)'s exclusion of broad classes of potential competitors does not apply to rules established under 254(h)(2).

\textsuperscript{423} Universal Service Order, 12 FCC Rcd at 9085, para. 590.

\textsuperscript{424} Universal Service Order, 12 FCC Rcd at 9085, para. 590. See also, e.g., CIX comments at 14-16 (limiting support only to telecommunications carriers would disserve goal of competitive pricing and would favor a small number of Internet service providers that happen to be affiliated with telecommunications carriers); NCTA comments at 11-12 (cable companies can claim eligibility by virtue of ownership or affiliation with telecommunications carrier).

\textsuperscript{425} See e.g., BellSouth comments at 8; Senators Stevens and Burns comments at 10 (sections 254(c) and 254(e) limit support to telecommunications carriers); TCG comments at 3, 4-5, 7-8 (support for firms other than telecommunications carriers goes beyond plain language of statute); RTC reply comments at 12-14 (same).
181. As the Universal Service Order recognized, however, there is a reasonable statutory basis for concluding that section 254(e) does not apply to section 254(h)(2). Although sections 254(e) and 254(h)(1)(A) and (B) limit support only to eligible telecommunications carriers, the Commission's decision to allow support to firms other than telecommunications carriers was based on the broader provisions of section 254(h)(2)(A), in conjunction with section 4(i), and is therefore not subject to this same restriction. Indeed, the structure of the Act indicates that section 254(h)(2)(A) operates as a separate grant of authority that is independent of the narrower provisions of sections 254(e) and 254(h)(1)(A) and (B). For example, section 254(e) limits eligibility of universal service support only to those carriers designated as "eligible telecommunications carriers" under section 214(e). Section 214(e), in turn, requires such carriers to offer the services that are designated for support under section 254(c). With respect to schools and libraries, the only incorporation of section 254(c) (and thus sections 254(e) and 214(e) by reference) is made by section 254(h)(1)(B). Section 254(h)(2)(A), which grants additional authority to the Commission with regard to schools and libraries, makes no reference to the support mechanisms established through section 254(c) and thus operates independently of them. We conclude that because section 254(h)(2)(A) makes no reference to section 254(e)(3), which in turn incorporates section 214(e)'s eligible telecommunications carrier limitation, support under section 254(h)(2)(A) is not restricted to eligible telecommunications carriers. The independence of section 254(h)(2)(A) from these narrower provisions is further demonstrated by the difference between section 254(h)(1)(A), which applies only to health care providers that serve "persons who reside in rural areas," and section 254(h)(2)(A), which applies to "all . . . health care providers . . . ."

182. In contrast to the more limited provisions of sections 254(e) and 254(h)(1)(A) and (B), section 254(h)(2)(A) employs broader language that separately grants the Commission authority to establish rules to enhance access to advanced telecommunications and information services, constrained only by the principles of competitive neutrality, technical feasibility and economic reasonableness. Unlike the narrower provisions, section 254(h)(2)(A) does not refer to "telecommunications carriers" and, therefore, does not require us to exclude other firms from competing to provide eligible services. The Commission's reading of the statute, which permits firms that are not telecommunications carriers to compete to receive support under section 254(h)(2) for providing Internet access and internal connections, therefore, is, in our view, a reasonable interpretation of section 254(h)(2)(A), notwithstanding the objections of some commenters.


427 47 U.S.C. § 254(h)(2)(A) (emphasis added). See also, e.g., Comcast reply comments at 3 (restrictions of section 214 do not apply to section 254(h)(2)(A)'s mandate to promote access to advanced services).


430 See Senators Stevens and Burns comments at 12-13 (section 4(i) does not permit the Commission to waive explicit statutory restrictions of section 254(e)).
183. Furthermore, section 4(i) of the Act permits the Commission to "perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this Act, as may be necessary in the execution of its functions."\(^{431}\) Under this section, the Commission may take action that is not expressly permitted by the Communications Act, so long as the action is not expressly prohibited by the Act and is necessary to the Commission's effective performance of its statutorily specified functions.\(^{432}\) Here, a rule that allows both telecommunications carriers and other firms to compete to receive support for providing eligible services under section 254(h)(2) is necessary to fulfill the Commission's explicit statutory obligation under that statutory provision to promulgate "competitively neutral" rules, as it allows all carriers to compete effectively in the market for providing Internet access and internal connections to schools and libraries. The Commission's decision, therefore, is authorized by section 4(i), as it is "necessary in the execution of [the Commission's] functions" under section 254(h)(2).

184. Some commenters contend that providing support to firms other than telecommunications carriers violates the competitive neutrality requirement of section 254(h)(2)(A) because firms other than telecommunications carriers can benefit from support while only telecommunications carriers are required to contribute to that support.\(^{433}\) According to these commenters, telecommunications carriers that contribute to the universal service fund cannot fairly compete with firms that bear no such burden.\(^{434}\) There is no requirement, however, that contributors to universal service mechanisms must also be permitted to receive support. Moreover, under the Commission's rules, contribution obligations are to be based solely on revenues from telecommunications services.\(^{435}\) Because neither Internet access nor internal connections are telecommunications services, no provider of these services -- whether a telecommunications carrier or not -- will be required to contribute to federal universal service support based on revenues they earn from providing these services. Contributions made by telecommunications carriers based on the telecommunications services they provide, therefore, will not place those carriers at a competitive disadvantage vis-a-vis the supported non-telecommunications services.\(^{436}\)


\(^{432}\) See, e.g., Mobile Communications Corp. of America v. FCC, 77 F.3d 1399, 1404-07 (D.C. Cir.), cert. denied, 117 S. Ct. 81 (1996).

\(^{433}\) See, e.g., GTE comments at 9-10, 21, 23 (objecting to inconsistency between those who contribute and those eligible to receive); Bell Atlantic reply comments at 2, 10-11 (objecting to unfairness of allowing ISPs to receive support without contribution); AT&T reply comments at 10-11 (ISPs should be required to contribute to the extent that they are eligible for support); USTA comments at 6 (requiring telecommunications carriers to contribute for the benefit and support of non-contributors is not competitively neutral).

\(^{434}\) Id.

\(^{435}\) See 47 C.F.R. § 54.703.

\(^{436}\) See, e.g., AOL comments at 21 (contribution obligations are clearly distinct from the right to participate in the universal service program); EDLINC comments at 6 (no competitive disparity as to provision of Internet access); cf. Comcast comments at 8-9 (analogizing to property taxes funding public schools, where
the other hand, if firms other than telecommunications carriers did not receive funding for
Internet access and internal connections for schools and libraries, those service providers
would be competitively disadvantaged, even if their services would be more cost-efficient.
Contrary to the claim of these commenters, therefore, the principle of competitive neutrality
supports the Commission's decision to allow both telecommunications carriers and other
firms to compete to receive support for providing Internet access and internal connections.\footnote{Accord, e.g., State Members comments at 4 (competitively neutral rules mandated under 254(h)(2)(A)
are applicable to all service providers); AOL reply comments at 3, 20 (if telecommunications carriers receive
universal support for providing information services, so too must firms other than telecommunications
providers of the same services; support for ISPs fosters competitive neutrality and affords schools and libraries
broader choices); CIX reply comments at 14-16 (limiting support only to telecommunications carriers would
not be competitively neutral); USIPA comments at 4 (it would be illogical to assume that Congress did not
intend that the entities that constructed the Internet would not be permitted to participate in a program
designed to bring the Internet to schools and libraries).}

185. In summary, we are faced with statutory directives that apparently both
command and forbid us to provide support to firms other than telecommunications carriers
who seek to provide schools and libraries with support to provide Internet access and
installation and maintenance of internal connections. After a careful analysis of the
consequences of providing and denying such support, however, we find that providing such
support produces results more consistent with the statutory framework. In light of these
results, we conclude that we should affirm the decision of both the Commission and the
Federal-State Joint Board to provide support to firms other than telecommunications carriers
who offer schools and libraries more cost effective Internet access or installation and
maintenance of internal connections.

3. Eligibility for Support for Providing Service to Health Care
Providers under section 254(h)

186. The Commission concluded in its Universal Service Order\footnote{Universal Service Order, 12 FCC Rcd at 9093, para. 608.} that, under section
254(h)(1)(A) of the Act, all public and non-profit health care providers that are located in
rural areas and meet the statutory definition set forth in section 254(h)(5)(B) of the Act are
eligible for universal service support.\footnote{See Id., 12 FCC Rcd at 9101, para. 620 n.1605 (citing FCC Advisory Committee on
Telecommunications and Health Care, Finding and Recommendations at 1-2).} Based on the recommendation of health care
experts, the Commission also determined that any telecommunications service of a
bandwidth up to and including 1.544 Mbps that is necessary for the provision of health care
services is eligible for support.\footnote{Id.} Thus, where a carrier designated under section 214(e) as
an "eligible telecommunications carrier" provides such services to rural health care
providers at the comparable urban rate, the carrier may recover the difference, if any,
between the rate for similar services provided to other customers in comparable rural areas
of the state and the rate charged to the rural health care provider for such services. In

some pay taxes without benefit and others benefit without paying taxes).
addition to ensuring that rural health care providers benefit from universal service support, the Commission determined that, pursuant to section 254(h)(2)(A), all telecommunications carriers, whether or not designated as an "eligible telecommunications carrier" under section 214(e), that provide health care providers with toll-free access to an Internet service provider can receive a limited amount of universal service support.440

a. Eligible Providers of Telecommunications Services to Rural Health Care Providers

187. Eligible Telecommunications Carriers. The Commission concluded that only telecommunications services provided by "eligible telecommunications carriers," designated as such pursuant to section 254(e), should be eligible for universal service support under section 254(h)(1)(A). We recognize that this issue is the subject of substantial disagreement among commenters441 and, indeed, is currently before the Commission on petitions for reconsideration of the Universal Service Order442. We do not wish to prejudge those petitions in this Report and remain committed to taking a fresh look at this issue in the reconsideration proceedings. Without expressing any opinion on the merits of the pending petitions for reconsideration, we believe that the Commission's conclusion was a reasonable construction of the statute. As noted above, section 254(e) provides that "only an eligible telecommunications carrier designated under section 214(e)" may receive universal service support.443 Although section 254(h)(1)(B)(ii) provides an exception to this eligibility requirement for carriers serving schools and libraries, no such exception appears in section 254(h)(1)(A).444 It appears from the plain language of the statute, therefore, that only "eligible telecommunications carriers" as defined in section 254(e) are eligible to receive universal service support for providing eligible services to health care providers under section 254(h)(1)(A). We note, however, that this statutory constraint will limit the flexibility of rural health care providers because they are limited to purchasing supported services from designated "eligible telecommunications carriers." It also appears that this section of the Act reduces competition in rural areas because only eligible telecommunications carriers can receive support for serving eligible rural health care providers. We would prefer a more competitive result. We will be considering this issue

440 See Universal Service Order, 12 FCC Red at 9106, para. 628; 47 C.F.R. § 54.621(b).

441 See, e.g., GCI comments at 14-16 (all carriers, whether or not designated as "eligible telecommunications carriers," should be able to receive support under section 254(h)(1)(A)); Nebraska PSC comments at 1-2 (limiting support only to "eligible telecommunications carriers" will preclude support to rural health care providers that have already contracted with ineligible carriers); State Members comments at 8 (Congress should consider a "technical correction" to the statute to exempt health care providers from eligibility requirements of section 254(e)); Arizona CC reply comments at 4 (same); ALTS reply comments at 1-3 (same).

442 See Alaska Petition for Reconsideration at 9-12; Alaska PUC Petition for Reconsideration at 9-10; GE Americom Petition for Reconsideration at 1-2; GCI Petition for Reconsideration at 1-4.


further in ruling on the petition for reconsideration filed with the Commission in which parties allege that in Alaska only telecommunications carriers that will not be designated as eligible telecommunications carriers are able to provide the services that are needed by rural health care providers.\textsuperscript{445} We note that if the requirements of section 10 of the 1996 Act are met, the Commission could exercise forbearance authority in order to broaden the category of telecommunications carriers that may receive support for serving eligible rural health care providers as appropriate.

188. **Rural Health Care Providers Only.** Although section 254(h)(1)(A) authorizes support for the provision of telecommunications services to "any public or non-profit health care provider that serves persons who reside in rural areas of that state,"\textsuperscript{446} the statute does not specify whether the health care provider itself -- as opposed to the persons it serves -- must be physically located in a rural area to obtain the supported services. The Commission concluded, as did the Joint Board, that a health care provider must be located in a rural area in order for its service provider to be eligible for universal service support.\textsuperscript{447} We believe that this is a reasonable interpretation of the statute.

189. Although the statute is not explicit on this point, the discount provision in 254(h)(1)(A) provides strong evidence that Congress intended to limit the provision of supported services to rural health care providers only. Specifically, section 254(h)(1)(A) calculates the amount of support due a carrier as the difference between the "rates for services provided to health care providers for rural areas and the rates for similar services provided to other customers in comparable rural areas."\textsuperscript{448} If the health care provider were in an urban area, there would be no method of calculating the amount of support under this provision, as it contemplates a comparison only of the rates charged to customers in "rural areas." The Commission's decision to limit support only to providers of services to rural health care providers, therefore, follows logically from the language of the statute.

190. The legislative history also indicates that Congress, in enacting section 254(h)(1)(A), was concerned primarily with ensuring telecommunications access to health care providers located in rural areas. For example, in the Joint Explanatory Statement, Congress explained that section 254(h) was intended "to ensure that health care providers for rural areas...have affordable access to modern telecommunications services that will enable them to provide medical...services to all parts of the Nation."\textsuperscript{449} Similarly, Congress expressed particular concern for the ability of "rural health care providers...
obtain access to advanced telecommunications services\textsuperscript{450} and that "the rural health care provider receive an affordable rate for the services necessary for the purposes of telemedicine and instruction relating to such services."\textsuperscript{451} These statements further support the Commission's interpretation of section 254(h)(1)(A) to limit the provision of supported services only to health care providers located in rural areas.

b. Providers of Toll-Free Internet Access to Health Care Providers Regardless of Location

191. Consistent with its authority to enhance access to advanced telecommunications and information services for health care providers pursuant to section 254(h)(2)(A), the Commission authorized support for toll charges incurred by health care providers that cannot obtain toll-free access to an Internet service provider. The Commission also concluded that any telecommunications carrier, whether or not designated as "eligible" pursuant to section 254(e), may receive universal service support for providing this service to any health care provider, regardless of location.

192. No Eligibility Restriction. We believe that the Commission properly concluded that both eligible and non-eligible telecommunications carriers under section 254(e) may receive universal service support for the provision of toll-free access to an Internet service provider to eligible health care providers. As noted above, section 254(h)(1)(A) is subject to the requirement in section 254(e) that, to receive support, a carrier must be designated as an "eligible telecommunications carrier" under section 214(e).\textsuperscript{452} The Commission did not designate toll-free Internet access for support under section 254(h)(1)(A), however, but did so instead under section 254(h)(2)(A).\textsuperscript{453} As we explained above, section 254(h)(2)(A), unlike section 254(h)(1)(A), is an independent grant of authority and thus is not subject to section 254(e)'s eligibility requirement.\textsuperscript{454} In our view, therefore, the Commission's decision to allow both eligible and non-eligible telecommunications carriers to receive support for providing toll-free Internet access to eligible health care providers is consistent with the language of the statute and with the statutory requirement to develop competitively neutral rules to enhance access to advanced telecommunications and information services for health care providers.

193. Rural and Non-Rural Health Care Providers. We also find that the Commission's decision to allow support for providers of toll-free Internet access, regardless of whether the health care provider to which they provide this service is located in a rural or non-rural area, is a reasonable construction of the statute. As we discussed above,

\textsuperscript{450} Id. (emphasis added).
\textsuperscript{451} Id. (emphasis added).
\textsuperscript{452} See 47 U.S.C. §§ 254(e) and (h)(1)(A).
\textsuperscript{453} See Universal Service Order, 12 FCC Red at 9157-9160, paras. 742-748.
\textsuperscript{454} See supra at section VI.B.2.b.
section 254(h)(1)(A) requires that a health care provider must be located in a rural area in order for its provider of telecommunications services to be eligible for universal service support.\footnote{See supra at section VI.B.3.A.} Again, however, the Commission did not rely on section 254(h)(1)(A) to authorize support for toll-free Internet access; rather, it relied on section 254(h)(2)(A).\footnote{See \textit{Universal Service Order}, 12 FCC Rcd at 9157-9160, paras. 742-748; see note 434, supra.} Whereas section 254(h)(1)(A) is concerned with the provision of service to "persons who reside in rural areas,"\footnote{47 U.S.C. § 254(h)(1)(A).} section 254(h)(2)(A), in contrast, seeks to enhance access to advanced services for "all . . . health care providers . . . ."\footnote{47 U.S.C. § 254(h)(2)(A) (emphasis added).} Section 254(h)(2)(A) is thus independent of section 254(h)(1)(A) and its limitations and, further, provides the broader authority to promulgate rules for the benefit of "all health care providers," not just rural ones. In our view, the Commission's decision to extend support for the provision of toll-free Internet access to non-rural health care providers is entirely consistent with this language.

VII. REVENUE BASE AND PERCENTAGE OF FEDERAL FUNDING

194. In this section, we examine first certain Commission decisions regarding the revenue base on which contributors' universal service contributions are assessed. After analyzing the Commission's conclusions regarding the jurisdictional parameters placed on the Commission and on the states, we agree that the Commission has the authority to assess universal service contributions on both telecommunications providers' interstate and intrastate revenues.

195. We examine, second, the Commission's previous decisions regarding the level of interstate high cost support. At the onset, we believe it is important to make two observations to place this issue in context. First, the discussion of the issue in this Report relates only to non-rural local exchange carriers. With respect to rural local exchange carriers, the Commission has determined that there shall be no change in the existing high cost support mechanisms until January 1, 2001 at the earliest. We do not revisit that determination in this Report. Thus, the method of determining federal support for rural local exchange carriers will remain unchanged until at least January 1, 2001, meaning that the amount of universal service support for rural local exchange carriers will be maintained initially at existing levels and then should increase in accordance with specified factors, such as inflation, that have historically guided changes in such support. Any possible change in the support mechanism for rural local exchange carriers would require a separate rulemaking proceeding.

196. Second, we note that the pre-May 8, 1997 regulatory scheme created a de facto allocation of responsibility between the Commission and state commissions with respect to support for service to rural and high cost areas. That allocation of responsibility
was defined by the separations rules, which placed 25 percent of booked loop costs in the
interstate jurisdiction for most of the loop plant used by the non-rural LECs. In addition,
the aggregate amount of LEC network investment in the interstate jurisdiction is
approximately 25 percent. Through the operation of an explicit universal service support
mechanism, however, greater than 25 percent of booked loop costs were placed in the
interstate jurisdiction in those areas where loop costs were particularly high. As a result,
some of the non-rural LECs did have slightly more than 25 percent of their booked loop
costs in the interstate jurisdiction, and many rural LECs had substantially more than 25
percent in the federal jurisdiction.

197. As discussed below, we conclude that a strict, across-the-board rule that
provides 25 percent of unseparated high cost support to the larger LECs might provide
some states with less total interstate universal service support than is currently provided
through aggregate implicit and explicit federal subsidies. The Commission will work to
ensure that states do not receive less funding as we implement the high cost mechanisms
under the 1996 Act. We find that no state should receive less federal high cost assistance
than it currently receives. We are mindful that the Commission's work in this regard is not
yet complete. We are committed to issuing a reconsideration order in response to the
petitions filed asking the Commission to reconsider the decision to fund 25 percent of the
required support amount. In the course of that reconsideration, we will take all appropriate
steps, including continued consultation with the states, to ensure that federal funding is
adequate to achieve statutory goals. We also recognize that Congress assigned to the
Commission, after consultation with the Joint Board, the ultimate responsibility for
establishing policies that ensure that: 1) quality services are available at just, reasonable
and affordable rates; 2) all consumers have "access to telecommunications and information
services" at rates that are reasonably comparable to the rates charged for similar services in
urban areas; and 3) there are "specific, predictable, and sufficient" federal and state
mechanisms to preserve and advance universal service. We are committed to implementing
section 254 consistent with these objectives.

A. Revenue Base for Contributions

1. Background

198. Section 623(b)(5) of the Appropriations Act requires the Commission to
review its "decisions regarding the percentage of universal service support provided by
federal mechanisms and the revenue base from which such support is derived." This
requirement implicates several important determinations made by the Commission,
including what is referred to as the "25/75" approach to sharing responsibility for universal
service support between the state and federal jurisdictions. In addition, we must address
Commission decisions regarding: the scope of the Commission's jurisdiction in assessing
and recovering contributions; the scope of the revenue base for, and the method of recovery
of, contributions to the support mechanisms for high cost areas and low income consumers
and for eligible schools, libraries, and rural health care providers; and the methodology for
assessing contributions to the support mechanisms. We review each of these issues below.
199. In the Universal Service Order the Commission analyzed the scope of the Commission's jurisdiction with respect to the assessment and recovery of universal service support mechanisms.\textsuperscript{459} The Commission concluded that it has jurisdiction to assess contributions for the universal service support mechanisms from intrastate as well as interstate revenues and to require carriers to seek state (and not federal) authority to recover a portion of the contribution in intrastate rates.\textsuperscript{460} The Commission expressly declined to exercise the entirety of its jurisdiction with respect to the assessment and recovery of contributions to the universal service mechanisms for rural, insular, and high cost areas, and low income consumers.\textsuperscript{461} Instead, the Commission assessed contributions to those mechanisms based solely on interstate revenues.\textsuperscript{462} With respect to the recovery of those contributions, the Commission continued its historical approach to recovery of universal service support mechanisms, thereby permitting carriers to recover contributions to these universal service support mechanisms through rates for interstate services only.\textsuperscript{463}

200. With respect to the universal service support mechanisms for schools and libraries and rural health care providers, the Commission adopted the Joint Board's recommendation that these mechanisms be funded by contributions based on both the intrastate and interstate revenues of providers of interstate telecommunications services.\textsuperscript{464} The Commission concluded, however, that it will permit recovery of the entirety of these contributions solely via rates for interstate services for the present time.\textsuperscript{465}

201. In the Universal Service Order the Commission concluded that, beginning January 1, 1999, the federal universal service mechanism for large local exchange carriers serving rural, insular, and high cost areas will support 25 percent of the difference between the forward-looking economic cost of providing the supported service and the revenue benchmark.\textsuperscript{466} After considering various methodologies for calculating contributions to the universal service mechanism, the Commission determined that carriers should calculate contributions to the universal service mechanisms using end-user telecommunications revenues.\textsuperscript{467}

\textsuperscript{459} Universal Service Order, 12 FCC Red at 9192, paras. 813-823.

\textsuperscript{460} Id. at 9192, para. 813.

\textsuperscript{461} Id. at 9192, para. 813.

\textsuperscript{462} Id. at 9200, para. 831.

\textsuperscript{463} Id. at 9198, para. 825.

\textsuperscript{464} Id. at 9203, para. 837.

\textsuperscript{465} Id. at 9203, paras. 837-838.

\textsuperscript{466} Id. at 9201, para. 833.

\textsuperscript{467} Id. at 9205-06, para. 842-843.
2. Discussion
   a. Commission Authority With Respect to the Assessment and Recovery of Contributions to Universal Service Support Mechanisms

   202. In the Universal Service Order the Commission determined that Section 254 provides the Commission with the jurisdiction to assess contributions for universal service support mechanisms from both interstate and intrastate revenues, as well as to require carriers to seek authority from states to recover a portion of the contribution in intrastate rates. Some parties argue that the Commission's decisions overstep the traditional relationship between the federal and state jurisdictions. Other commenters argue that the Commission should exercise its full authority to assess contributions for high cost support mechanisms on both intrastate and interstate revenues. Our review of the issue for purposes of this Report, however, leads us to the conclusion that the Commission's jurisdictional analysis in the Universal Service Order is sound.

   203. As the Commission stated in the Universal Service Order the Commission's authority over universal service support mechanisms stems from the plain language of section 254. Specifically, although the statute contemplates the establishment of federal and state high cost support mechanisms that are consistent with the objectives of section 254, that section imposes on the Commission the ultimate responsibility to implement the universal service mandate of section 254. Section 254(c)(1) likewise authorizes the Commission to define the parameters of universal service. Moreover, section 254(b)(5) anticipates that the Commission will establish support mechanisms that are "specific, predictable and sufficient." These provisions indicate that the Commission has the primary responsibility and authority to ensure that universal service mechanisms are "specific, predictable, and sufficient" to meet the statutory principle of "just, reasonable, and affordable rates." This interpretation is complementary to the states' independent obligations to ensure that support mechanisms are "specific, predictable, and sufficient" and

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468 Id. at 9197, para. 823.
469 See, e.g., Iowa comments at 3; Nevada PUC comments at 3-8. This issue has also been raised on appeal. See Brief of Petitioner Cincinnati Bell Tel. Co., Texas Office of Pub. Util. Counsel v. FCC, No. 97-60421 (5th Cir.) at 11-25.
470 See, e.g., GTE comments at 29; JSI comments at 6; RTC comments at 5-6.
471 Universal Service Order, 12 FCC Rcd at 9192, para. 814.
472 Section 254(a) provides that rules "to implement" the section are to be recommended by the Joint Board and those recommendations are to be implemented by the Commission. 47 U.S.C. § 254(a).
473 Section 254(c)(1) directs that the concept of universal service is an "evolving level of telecommunications that the Commission shall establish periodically." 47 U.S.C. § 254(c)(1).
that rates are "just, reasonable, and affordable," because the statute provides that state universal service mechanisms must be consistent with, and may not conflict with, the federal mechanisms.\footnote{475}

204. The Commission's conclusion regarding the scope of its jurisdiction is also supported by several provisions of section 254 that indicate that Congress intended universal service support mechanisms to include both intrastate and interstate services. Specifically, section 254(b)(3) establishes that the Commission's rules and policies must ensure that "consumers in all regions of the Nation . . . have access to telecommunications and information services."\footnote{476} This language supports a finding that universal service should include more than access to interstate services, which previously has generally been the focus of federal telecommunications law. Moreover, because the traditional core goal of universal service is ensuring affordable basic residential telephone service, which is primarily an intrastate service, it is clear that section 254(b)'s goal of affordable basic service indicates that Congress intended that both intrastate and interstate services should be affordable. It is significant that the Joint Board agreed with this conclusion by recommending that the services eligible for universal service support pursuant to section 254(c) include intrastate services.\footnote{477}

205. As the Commission concluded in the Universal Service Order the ability of states to create separate support mechanisms covering intrastate carriers pursuant to section 254(f) does not suggest that the amount of a carrier's contributions to such a support mechanism should be based on the type of telecommunications service, intrastate or interstate, provided by the carrier.\footnote{478} We find no support for such an inference in the legislative history. Rather, the legislative history indicates that states continue to have jurisdiction over implementing universal service mechanisms for intrastate services supplemental to the federal mechanisms as long as "the level of universal service provided by each state meets the minimum definition of universal service established [under section 254] and a State does not take any action inconsistent with the obligation for all telecommunications carriers to contribute to the preservation and advancement of universal service" established under section 254.\footnote{479}

206. Similarly, section 2(b), which provides that nothing in the Act should be construed to give the Commission jurisdiction with respect to "charges, classifications, practices, services, facilities, or regulations for or in connection with intrastate communications services by wire or radio," does not preclude the Commission from

\footnote{475}{See 47 U.S.C. §§ 254(b)(5) & (f).}
\footnote{476}{47 U.S.C. § 254(b)(3).}
\footnote{477}{Recommended Decision, 12 FCC Rcd at 112, para. 46.}
\footnote{478}{Universal Service Order, 12 FCC Rcd at 9195, para. 819.}
\footnote{479}{Joint Explanatory Statement at 128.}
assessing contributions based on a percentage of a carrier's intrastate revenues.\textsuperscript{480} Determining such contributions for universal service support on intrastate, as well as interstate, revenues constitutes neither rate regulation of those services nor regulation of those services in violation of section 2(b). Rather, this method of assessment supports intrastate services, as expressly required by section 254 of the Act and as recommended by the Joint Board. Indeed, in assessing contributions in this way, the Commission is calculating a federal charge based on both interstate and intrastate revenues, but is in no way regulating the rates and conditions of intrastate service.

207. Further, section 254's express directive that universal service mechanisms be "sufficient" ameliorates any section 2(b) concerns. As a rule of statutory construction, section 2(b) only is implicated where the competing statutory provision is ambiguous.\textsuperscript{481} As discussed above, section 254 unambiguously establishes that the services to be supported have intrastate as well as interstate characteristics and permits the Commission to establish regulations implementing federal support mechanisms for the supported intrastate services.

208. Moreover, various provisions of section 254, some of which are discussed above, have blurred the traditional distinction between the interstate and intrastate jurisdictional spheres. For example, although section 254 establishes a federal-state partnership, it grants the Commission primary responsibility for defining the parameters of universal service, and for ensuring that universal service mechanisms are "specific, predictable, and sufficient" to meet the statutory goal of "just, reasonable, and affordable rates." Indeed, section 254 envisions that the Commission would not be bound by the prior system of universal service mechanisms, which was based on the traditional jurisdictional spheres.\textsuperscript{482}

209. For all of the foregoing reasons, we concur with the Commission's earlier conclusion that section 254 of the 1996 Act grants the Commission the authority to assess contributions to universal service support mechanisms from intrastate as well as interstate revenues and to refer carriers to seek state (and not federal) authorization to recover a portion of the contribution in intrastate rates, although the Commission has not exercised this authority. We note that this issue is the subject of pending petitions for reconsideration which we will address in a forthcoming order. Further, we have previously expressed willingness to work with states and we affirm that commitment.\textsuperscript{483}

\textsuperscript{480} 47 U.S.C. § 152(b).


\textsuperscript{482} See Joint Explanatory Statement at 131 (indicating against reliance on current methodologies by stating that support mechanisms should be "explicit, rather than implicit as many support mechanisms are today."); Senate Report on S. 652 (stating that "the bill does not presume that any particular existing mechanism for universal service support must be maintained or discontinued").

\textsuperscript{483} See, eg. Universal Service Order, 12 FCC Red at 9191, para. 809.
210. Initially, we note that few parties commented on the issues of the assessment and recovery of contributions to the support mechanism for eligible schools, libraries and rural health care providers.\textsuperscript{484} After consideration of these important issues, we conclude that the Commission's decisions are consistent with the letter and spirit of the 1996 Act.

211. **Assessment.** With respect to the assessment of contributions, we conclude it was reasonable for the Commission to adopt the Joint Board's recommendation that "universal support mechanisms for schools and libraries and rural health care providers be funded by contributions based on both the intrastate and interstate revenues of providers of interstate telecommunications services."\textsuperscript{485} As the Commission concluded in the Universal Service Order, this approach is reasonable in light of the fact that the schools, libraries, and rural health care mechanisms are "new, unique support mechanisms that have not historically been supported through a universal service funding mechanism."\textsuperscript{486}

212. **Recovery.** Similarly, we reaffirm the Commission's decision to permit carriers to recover contributions for the support mechanisms for eligible schools, libraries, and rural health care providers solely via rates for interstate services.\textsuperscript{487} Limiting recovery to the interstate jurisdiction for the support mechanism for the schools, libraries and rural health care providers will ameliorate the concern that carriers would recover the portion of their intrastate contributions attributable to intrastate services through increases in rates for basic residential dialtone service. The Commission's approach is consistent with the affordability principle contained in section 254(b)(1).\textsuperscript{488} Additionally, we are persuaded that the Commission's approach minimizes any perceived jurisdictional difficulties under section 2(b) because carriers are not required to seek state authorizations to recover contributions attributable to intrastate revenues.\textsuperscript{489} Therefore, we find that permitting recovery of contributions for the support mechanisms for eligible schools, libraries, and rural health care providers solely via rates for interstate services is consistent with section 254.\textsuperscript{490}

\textsuperscript{484} TDS comments at 10 (supporting the decision to use total, unseparated interstate and intrastate end user revenues as the basis for support contributions designed to benefit schools, libraries and rural health care providers).

\textsuperscript{485} Universal Service Order, 12 FCC Rcd at 9203, para. 837 citing Recommended Decision, 12 FCC Rcd at 499, para. 817.

\textsuperscript{486} Id. at 9203, para. 837.

\textsuperscript{487} Id. at 9203, para. 838.

\textsuperscript{488} Id. at 9203, para. 838.

\textsuperscript{489} Id. at 9204, para. 839.

\textsuperscript{490} Id. at 9203-9204, paras. 838-840.
c. Revenue Base For, and Recovery of, Contributions to Support Mechanisms for High Cost Areas and Low Income Consumers

213. **Assessment.** As stated above, the Commission declined to exercise its authority to assess contributions to the high cost and low income support mechanisms on both intrastate and interstate revenues. Instead, the Commission elected to base those contributions solely on interstate revenues.\(^{491}\) We find that the Commission's decision was reasonable and appropriate in light of the statutory goals.

214. In its Recommended Decision the Joint Board concluded that the "decision as to whether intrastate revenues should be used to support the high cost and low income assistance programs should be coordinated with the establishment of the scope and magnitude of the proxy-based fund, as well as with state universal service support mechanisms."\(^{492}\) Thus, the Joint Board did not submit a recommendation as to whether intrastate revenues should be used to support the high cost and low income mechanisms.\(^{493}\) Rather, as the Commission noted in the Universal Service Order the Joint Board's analysis essentially concluded that the determination of whether contributions should be based on intrastate as well as interstate revenues should be coordinated with the implementation of an appropriate forward-looking economic cost mechanism and revenue benchmark.\(^{494}\) Because the mechanism and benchmark were not established, and therefore, the total amount of support requirement was unknown, it would have been premature for the Commission to assess contributions on intrastate as well as interstate revenues.

215. In addition, shortly before the Universal Service Order was issued, the state members of the Joint Board filed a report in which the majority recommended that the Commission assess contributions for all support mechanisms on intrastate and interstate revenues.\(^{495}\) The majority report also supported the Commission's approach to assessing only interstate revenues for the high cost and low income support mechanisms on an interim basis until a forward-looking economic cost methodology is developed.\(^{496}\) Accordingly, the Commission's decision to base contributions to the high cost and low-income support mechanisms solely on interstate revenues was consistent with the Majority State Members' report.

\(^{491}\) Id. at 9200, para. 831.

\(^{492}\) Recommended Decision, 12 FCC Rcd at 499, para. 817.

\(^{493}\) Universal Service Order, 12 FCC Rcd at 9198, para 824.

\(^{494}\) Id. at 9200, para. 832 citing Recommended Decision, 12 FCC Rcd at 501, para. 821.

\(^{495}\) Majority Opinion of the State Members of the Joint Board on the Funding of Universal Service, filed April 23, 1997 ("Majority State Members' Report").

\(^{496}\) Majority State Members' Report.
216. Indeed, by declining to base those contributions on intrastate revenues, the Commission promoted comity between the federal and state regulators, and allowed the state commissions to continue to work together to reach consensus on this issue. Because we are still in the process of adopting a forward-looking economic cost mechanism and a revenue benchmark, we conclude that assessing contributions on interstate revenues alone, at least until a unified federal-state approach is developed for the high cost and low-income support mechanisms, is consistent with the public interest.

217. We note that some commenters raise related issues on which the Commission continues to deliberate. For example, members of the wireless industry are concerned about the difficulty of distinguishing their interstate revenues from their intrastate revenues, given the mobile nature of wireless technologies, the inability to determine precisely the point of origin of calls, and the difficulty of matching phone numbers with points of origin.\textsuperscript{497} Wireless carriers have also raised issues regarding revenue reporting requirements,\textsuperscript{498} including issues perceived to be particular to their industry concerning itemizing roaming revenues, special resale issues, bundled offerings, and fraud-related uncollectibles.\textsuperscript{499} We also note that wireless providers have challenged state decisions that they should be subject to state universal service mechanisms.\textsuperscript{500} These are difficult issues, and we are committed to working with the wireless industry and the state commissions to resolve these issues.\textsuperscript{501}

218. Recovery. For similar reasons, we conclude that it is appropriate to allow carriers to recover contributions to the support mechanisms for high cost areas and low-income consumers through rates for interstate services only. The Joint Board concluded that the "role of complementary state and federal universal service mechanisms require[d] further reflection," but did not address the issue of the recovery of these contributions. Accordingly, we reaffirm the conclusion that this approach to recovery promotes comity between the federal and state governments because it allows the Commission and the states to develop compatible universal service mechanisms. This approach also promotes the statutory goal of affordable basic residential service because it avoids a blanket increase in charges for basic residential dialtone service. We find that it is reasonable and in the public interest to maintain, for the present time, the historical approach to recovering universal service support contributions for high cost areas and low-income consumers. We note,\textsuperscript{497} See, e.g., Comcast comments at 10-11; CTIA comments at 2-3; PCIA comments at 14; Vanguard comments at 6; Nextel reply comments at 5.

\textsuperscript{498} Some wireless providers are concerned that the Commission's "good faith" estimation process will result in competitive inequities. See, e.g., Comcast comments at 11-15; CTIA comments at 3; Comcast reply comments at 7. See also Order on Reconsideration, Second Report and Order, and Further Notice of Proposed Rulemaking, CC Docket No. 97-21 and No. 96-45 at para. 21 (rel. August 15, 1997).

\textsuperscript{499} See, e.g., CTIA comments at 2; Comcast comments at 11-12; PCIA comments at 13-16.

\textsuperscript{500} See Cellular Telecommunications Industry Association v. FCC, et al., Case No. 97-160 and consolidated cases.

\textsuperscript{501} We note that these issues are before the Commission on reconsideration and we do not wish to prejudge those petitions.
however, that the Commission concluded in its Fourth Order on Reconsideration that CMRS providers may recover their universal service contributions through rates charged for all services. The Commission concluded that the reasons that generally warrant permitting contributors to recover contributions to the federal universal service mechanisms through rates on interstate services, such as ensuring the continued affordability of residential dialtone services and promoting comity between the federal and state governments, do not apply to CMRS providers.

B. Percentage of Federal Funding

219. As noted above, the Commission is responsible for ensuring that there are specific, predictable, and sufficient federal and state mechanisms to preserve and advance universal service. Upon further review, we conclude that a strict, across-the-board rule that provides 25 percent of unseparated high cost support to the larger LECs may have the result of withdrawing some federal explicit universal service support from some areas. The Commission will work to ensure that states do not receive less funding as we implement the high cost support mechanisms under the 1996 Act. We find that no state should receive less federal high cost assistance than it currently receives. We emphasize again that the following discussion concerns only non-rural local exchange carriers. High cost support for rural carriers will continue to be provided in accordance with the plan adopted in the Universal Service Order which contemplates no changes earlier than January 1, 2001.

1. Background

220. Section 254(b)(5) establishes the principle that "[t]here should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service." Additionally, section 254(i) provides that "the Commission and the States should ensure that universal service is available at rates that are just, reasonable and affordable." The Commission has stated that section 254 continues the historical partnership between the federal and state jurisdictions in advancing and preserving universal service mechanisms. Similarly, the Joint Board stated in its Recommended Decision that

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502 Fourth Order on Reconsideration at para. 309.

503 Fourth Order on Reconsideration at para. 309 ("Because section 332(c)(3) of the Act alters the 'traditional' federal-state relationship with respect to CMRS by prohibiting states from regulating rates for intrastate commercial mobile services, allowing recovery through rates on intrastate as well as interstate CMRS services would not encroach on state prerogatives. Further, allowing recovery of universal service contributions through rates on all CMRS services will avoid conferring a competitive advantage on CMRS providers that offer more interstate than intrastate services.").


506 Universal Service Order, 12 FCC Red at 9194, para. 818.
the 1996 Act "reflects the continued partnership among the states and the Commission in preserving and advancing universal service."\textsuperscript{507}

221. The Commission, in its Universal Service Order decided initially to fund 25 percent of the difference between a carrier's forward-looking economic cost of providing supported services and a revenue benchmark in order to approximate the portion of the cost of providing the supported network facilities that historically have been recovered by local telephone companies from their charges for interstate services.\textsuperscript{508} The current separations rules, which were developed through a Federal-State Joint Board process and have been in place since 1984, allocate 25 percent of loop costs to the federal jurisdiction and 75 percent to the states.\textsuperscript{509} Because local loop costs are likely to be the predominant cost that varies between high cost and non-high cost areas, the Commission determined, on a preliminary basis, that this factor approximated the interstate portion of universal service costs.\textsuperscript{510} Consistent with the decisions to fund 25 percent of total universal service high cost support from the assessment and recovery from interstate revenue alone and to eliminate the special jurisdictional separations rules implementing the pre-1996 Act universal service mechanisms, the Commission also directed incumbent LECs in the companion Access Reform Order to use federal universal service support received under the new mechanisms to reduce interstate access charges. In that way, the Commission rendered explicit the universal service support formerly implicit in interstate access charges that has traditionally helped keep local rates affordable. In addition, the Commission decided to delay the transition to a universal service mechanism based on forward looking economic costs for rural LECs until no sooner than January 1, 2001.\textsuperscript{511} Until that time, eligible rural LECs will continue to receive support based on existing mechanisms.

222. This issue has generated extensive attention including a significant number of comments in this proceeding. Some commenters argue that the high cost universal service program should be 100 percent federally funded.\textsuperscript{512} In general, these parties contend that section 254(e) refers only to the federal responsibility for ensuring sufficient mechanisms, without imposing parallel state funding obligations.\textsuperscript{513} Several parties argue that the discretionary language in section 254(f) permits, but does not compel, the states to choose

\begin{itemize}
  \item \textsuperscript{507} Id. at 9189, para. 806 citing Recommended Decision, 12 FCC Rcd at 500, para. 819.
  \item \textsuperscript{508} Universal Service Order, 12 FCC Rcd at 8925, para. 269.
  \item \textsuperscript{509} Id. at 8925, para. 270.
  \item \textsuperscript{510} Id. at 8926, para. 271.
  \item \textsuperscript{511} Id. at 8889, paras. 203-204.
  \item \textsuperscript{512} Alabama, Alaska, et. al comments at 4; Alaska comments at 11-15; Colorado PUC comments at 1-4; Local and State Gov't Advisory Committee comments at 2-3; USWEST comments at 6.
  \item \textsuperscript{513} 47 U.S.C. § 254(e).
\end{itemize}
whether or not to establish their own universal service funds. Many commenters express concern that the proposed 25-75 split between federal and state funding will not be sufficient to ensure that rural rates are affordable or reasonably comparable with urban rates. Most of these concerns are based on the assumption that the 25 percent funding level will reduce the amount of existing support.

223. In addition to the comments, the Commission heard a broad range of viewpoints from presenters at an en banc meeting on this issue held on March 6, 1998. In particular, the Commission heard presentations from proponents of alternatives to the 25-75 approach. The state of Maine has proposed, and the states of Vermont and New York have expressed support for, an approach under which federal support would only be provided to states that have average costs that exceed a national average. In addition, US West has proposed a plan that would retain the Commission's 25-75 split for providing support needed between a basic benchmark and a "super-benchmark," but would require all costs above this higher benchmark to be assigned to the federal jurisdiction. These and other proposals are on record before the Commission and are under active review. These two proposals are the product of significant effort on the part of many state commissions.

514 47 U.S.C Section 254(f) ("a State may adopt . . ." a universal service program.).

515 See, e.g., Alabama, Alaska, et. al. comments at 3; Alaska comments at 5-6; Colorado PUC comments at 2; Iowa comments at 4-5; Kansas CC comments at 1; Mississippi comments at 2; Nebraska PSC comments at 3; New Mexico AG comments at 1, 2-4; North Dakota PSC comments at 1-2; North Dakota RRRC comments at 1; Oregon PUC comments at 1; Richland Economic Development comments at 1; South Dakota PUC comments at 2; Texas PUC comments at 3; Transportation Committee of the Nebraska Legislature comments at 1; US West comments at 4-6; Utah comments at 1-2; Washington UTC comments at 7, 11-13; Western Governors' Association at 1; Wyoming PSC comments at 2-3; Arizona CC reply comments at 5; Iowa Telecom Ass'n. reply comments at 4; Wyoming PSC reply comments at 1-4. See also Letter from Secretary Larry Irving, NTIA to Chairman Kennard (April 9, 1998) ("We are simply not convinced that this approach will provide funding sufficient to achieve the desired result.").

516 See, e.g., Alaska comments at 11-13; Colorado PUC comments at 3; Local State and Gov't Advisory Committee at 2-3; New Mexico AG comments at 2; North Dakota RRRC comments at 1; Oregon PUC at 1; Richland Economic Development comments at 1; RTC comments at 3-5 (25 percent ignores the existing implicit support from averaging access costs and high cost fund, Long Term Support, and DEM Weighting); SBC comments at 5-6 (existing mechanisms often assist rural telephone companies with a larger share of universal service cost recovery).

517 The first panel of government officials consisted of North Dakota Public Service Commissioner Bruce Hagen, District of Columbia Public Service Chairperson Marlene Johnson, Maine Public Utilities Commission Chairman Thomas L. Welch, and Christopher McLean, deputy administrator of the Rural Utilities Service. The second panel of industry representatives consisted of: Thomas Tauke, Senior VP-government relations at Bell Atlantic, Joan Mandeville, assistant manager at Blackfoot Telephone Cooperative in Missoula, Montana, Joel Lubin, Regulatory VP-AT&T Corp. Law and Public Policy, Jim Smiley, Regional VP-US West Communications, Inc., and Haynes Griffin, chairman of Vanguard Cellular Systems, Inc.


519 US West submission at March 6, 1998 en banc Commission meeting.
and the industry to develop a modified approach to high cost funding. It is also possible that, in the coming weeks, the Commission will be presented with variations on these proposals or other possible methods of funding high cost areas. Because we will conduct a reconsideration of the high cost funding mechanism prior to its implementation, scheduled to go into effect on January 1, 1999, we do not evaluate here the merits of possible alternative high cost funding proposals. Nonetheless, we wish to commend the spirit of cooperation and compromise that has characterized the development of these proposals. Those efforts encourage us to redouble our efforts to work with states and others toward a solution to the high cost funding problem that serves the interests of all affected parties. We are committed to building on the ideas and proposals expressed in the comments and at the en banc hearing to work toward a consensus on this issue. We believe that additional dialogue among the Commission, the states, and the affected industries will lead to an approach that both fulfills the mandates of section 254 and is acceptable to the various interested parties.

224. Specifically, we are in the process of taking several important steps to further review the suitability of the 25-75 approach. First, we are committed to issuing a reconsideration order in response to the petitions filed asking the Commission to reconsider the decision to fund 25 percent of the required support amount. This reconsideration order will be issued prior to the date that the Commission begins providing high cost support to non-rural carriers based on forward-looking economic costs. In addition, we will consult with the Joint Board to address the viability of the 25-75 approach as well as the alternatives that are on record with the Commission, including the holding of an en banc hearing with participation by the Federal-State Joint Board commissioners. The Commission has anticipated that the Joint Board would play a continuing role in assessing the mechanisms established to ensure the preservation and advancement of universal service.520

2. Discussion

225. Although there appears to be no consensus among the states as to an alternative to the Commission's so-called 25-75 approach,521 there is substantial opposition in this record to this approach.522 This issue is currently pending before the Commission on


521 See, e.g., Alaska comments at 11-15 (federal fund should at least provide support sufficient to maintain current rates and should preferably provide 100 percent funding); Colorado PUC comments at 3-5 (100 percent federal funding would be the simplest solution, 75 percent would be acceptable, but other options could be viable to address varying circumstances among states); North Dakota PSC comments at 1 (joint federal and state fund to cover at least 75 percent); PSC of Wisconsin comments at 1-4 (any level of federal support can be justified, proper amount should be based on impact).

522 See, e.g., Iowa Utilities Board comments at 4; Kansas CC comments at 1-2; Mississippi PSC comments at 1-2; Nebraska PSC comments at 3; New Mexico AG comments at 2-4; PRTC comments at 8-11; RTC comments at 3-6; Senator Burns and Stevens comments at 12; State Members comments at 9; Texas PUC comments at 3-4; USTA comments at 7-9; Utah Governor's office comments at 1-2; Western
reconsideration and has been appealed. Further, this issue, along with the related issues of the use of explicit federal universal service support to reduce implicit federal support and of the formulation and distribution of universal service support among the states, is raised in a recent petition filed by the state members of the Joint Board requesting that these issues be referred to the Joint Board for further recommendations. Without prejudging these ongoing proceedings, we here examine, as required by section 623(b)(5) of the Appropriations Act, the Commission's initial decision to provide 25 percent of the required support amount through federal support mechanisms. Since the May 8, 1997 Universal Service Order was released, the Commission has repeatedly articulated its intent to continue to work with the states to ensure that support amounts are sufficient. We believe that this Commission decision is aptly characterized as a "place holder" to which we must return.

226. One of the overriding goals of section 254 is to make universal service support explicit. Section 254(b)(5) provides that: "There should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service." The Commission has attempted to make explicit the collection and distribution of existing federal universal service support provided through the interstate high cost loop fund, dial equipment minutes weighting, Long-Term Support, and Lifeline and Link Up programs. The Commission also proposed a mechanism to identify implicit universal service support currently in interstate access charges and to make that support explicit and portable among competing eligible carriers. Similarly, states should take actions to make intrastate mechanisms compatible with competitive local markets by making those support mechanisms explicit and portable.

227. A state may require greater assistance than it presently receives from interstate explicit and implicit mechanisms in order to maintain affordable rates. As states develop plans to make existing intrastate implicit mechanisms explicit, additional federal support may be required to ensure that quality services remain "available at just, reasonable, and affordable rates." For example, where a state proposes to reform its own universal service mechanisms and would collect as much of what is currently implicit intrastate universal service support as is possible consistent with maintaining affordable rates, additional federal universal service support should be provided to any high cost areas where state mechanisms, in combination with baseline federal support, are not sufficient to maintain rates at affordable levels. In the pending reconsideration proceeding, the

Governors' Association comments at 1-3; Wyoming PSC comments 1-7; Arizona CC reply comments at 5; Wyoming PSC reply comments at 1-5.


524 Formal Request for Referral of Designated Items by the State Members of the section 254 Federal-State Joint Board on Universal Service, filed March 11, 1998 (by Commissioners Johnson, Schoenfelder, and Baker and consumer advocate Hogerty).

525 For example, in its sua sponte reconsideration order, the Commission noted that the issue of shared responsibility for ensuring the sufficiency of universal service support is critical to the preservation and advancement of universal service and will be an important subject in future consultations between the Commission and the Joint Board. July 10 Reconsideration Order at para. 28.
Commission will consider any other circumstances under which additional federal support would be appropriate. This approach will permit the Commission to fulfill its responsibility to ensure support is sufficient.

228. Further, we expect to consult with the Joint Board regarding the sufficiency of universal service support mechanisms. We are confident that the state commissions will work with us to ensure that "specific, predictable and sufficient" universal service support mechanisms are established, consistent with Congressional intent.\(^{526}\) We recognize that the state commissions themselves are not aligned on one side of this issue. For example, the State Joint Board Members indicated that all Joint Board members "have concerns with either the inclusion of intrastate revenues in the proposed funding sources or the 75-25% split proposed" by the Commission.\(^ {527}\) In addition, NARUC is involved in an ongoing effort to develop a plan for high cost and rural areas that differs from the 25-75 proposal.\(^{528}\) NARUC has not endorsed any specific proposal, but has identified six principles as a basis of future action.\(^ {529}\) We encourage NARUC members in their efforts in this regard and welcome the submission of an alternative that is supported by so-called "high-cost" states and "low-cost" states alike. We remain committed to working with proponents of every viewpoint.

229. In our efforts to reform universal service, we and the state commissions must be mindful that only the minimum amount of support necessary to achieve statutory goals should be collected. Just as collecting insufficient support would threaten the availability of universal service, collecting more support than is necessary would increase rates for all subscribers, creating a similar threat to universal service principles. In addition, in order to enhance competition, both federal and state support mechanisms should collect contributions in a competitively neutral manner. Moreover, federal and state universal service support mechanisms should encourage efficient investment in new plant and technologies by all eligible telecommunications carriers and should promote service to historically underserved areas. We are convinced that following these principles will guide this Commission and the states to achieve the goals Congress has set out in the 1996 Act.

230. We note that there appears to be some confusion about the Commission's decision in the Access Reform Order to require incumbent local exchange carriers to reduce the revenues they receive from interstate access charges by an amount equal to the support they receive from federal high cost universal service support. As noted above, the plan adopted by the Commission in the Universal Service Order is designed to remove federal high cost support from implicit interstate mechanisms and recover that support from an explicit support mechanism. In that event, a carrier would no longer need to recover that support from implicit mechanisms. Since implicit interstate high cost assistance has been

\(^{526}\) Universal Service Order, 12 FCC Rcd at 9198, para. 824.

\(^{527}\) State Joint Board Members comments at 9.

\(^{528}\) NARUC comments at 8-9.

\(^{529}\) NARUC comments at 8-9.
provided by incumbent local exchange carriers through interstate access charges, the Commission directed those carriers to remove from those charges the support received from the new universal service support mechanism. Otherwise, carriers would recover high cost assistance twice: from both implicit mechanisms, as well as the new explicit mechanisms. Thus, it is not the case that the explicit support is being used to lower access charges. Rather, the support is still being used to support high cost lines, but now the support is coming from explicit high-cost mechanisms and, accordingly, no longer needs to be obtained from implicit access charge subsidies. To the extent that, upon reexamination, we decide upon a new or different allocation of universal service funding responsibilities between the two jurisdictions, we would plan to modify that directive accordingly.

231. The Commission's initial decision to fund 25 percent of the total requirement was tied to the shift of universal service support for high cost areas from the access charge regime to the new section 254 support mechanisms. The total support requirement will be determined by a revenue benchmark and a forward-looking economic cost methodology that have not yet been established. As we and the state commissions evaluate these new mechanisms, we will be able to determine the amount of support needed to maintain affordable rates. We emphasize that the Commission's implementation of section 254 is progressing and we pledge to continue to work with the states to address this important issue.

C. Methodology for Assessing Contributions

232. Section 254(d) states that "[e]very telecommunications carrier that provides interstate telecommunications service shall contribute on an equal and non-discriminatory basis, to the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service." The Joint Board recommended that contributions be based on gross revenues derived from telecommunications services net of payments to other carriers for telecommunications services. In recommending this approach, the Joint Board sought to resolve three concerns: (1) avoiding double-payment problems; (2) assessing contributions on a value-added basis, and; (3) finding a method that is familiar to the Commission and the industry. In the Universal Service Order the Commission deviated from the Joint Board's recommendation and concluded that contributions should be based on end-user telecommunications revenues. Nevertheless,

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531 See, e.g., Ameritech comments at 4-5; BellAtlantic comments at 1, 7-8; BellAtlantic reply comments at 1-3; Vanguard reply comments at 1-3.


533 Recommended Decision, 12 FCC Red at 495, para. 807.

534 Universal Service Order, 12 FCC Red at 9206, para. 842 citing Recommended Decision, 12 FCC Red at 495, para. 807.

535 Universal Service Order, 12 FCC Red at 9206, para. 843.
the Commission found that its decision addressed each of the Joint Board concerns, was based on information that had not been available to the Joint Board, and was more administratively efficient than the Joint Board's recommendation.\footnote{Universal Service Order, 12 FCC Rcd at 9206, para. 843.}

233. Basing universal service contributions on end-user telecommunications revenues is competitively neutral because it eliminates the problem of counting revenues derived the same services twice.\footnote{Double counting occurs when resellers buy and sell service. Assuming a 10 percent contribution rate, if X sells $200.00 worth of telecommunications services directly to a customer its contribution would be $20.00. If reseller buys $180.00 of wholesale service from A, adds value, and sells the same service for $200.00 in competition with A, then B would have to contribute $20.00 for selling $200.00 of service and would probably also be required to recover a portion of the $18.00 contribution that A would most likely pass on. See Order, 12 FCC Rcd at 9207, para. 845.} This approach also eliminates the double-counting problem and the market distortions created by assessing based on gross revenues because transactions are counted only once at the end user level. Moreover, the Commission's method is easy to implement. Carriers already keep track of their revenues, and, although they would have to distinguish between sales to end-users and sales to resellers, doing so shall not be complicated because resellers have an incentive -- reduced rates -- to identify themselves.\footnote{Universal Service Order, 12 FCC Rcd at 9208, para. 848.}

234. Some commenters argue in general that universal service support should be assessed as a flat charge on all end users.\footnote{See, e.g., Airtouch comments at 23-24; Sprint comments at 3; AT&T reply comments at 3.} This argument, however, does not consider the problem articulated by the State Joint Board members that "state commissions should have the discretion to determine if the imposition of an end-use surcharge would render local rates unaffordable." The Commission correctly concluded that a federally prescribed end-user surcharge would impermissibly dictate how carriers recover their contributions and would violate Congress' mandate and the wish of the state members of the Joint Board.\footnote{Universal Service Order, 12 FCC Rcd at 9210, para. 853 (citing State Members of the Federal-State Joint Board on Universal Service Comments on Recovery Mechanism for Universal Service Contributions, dated April 8, 1997, at 1).} Carriers are not precluded from attempting to recover their contributions from end users, but may not make false, inaccurate, or misleading statements regarding their contribution obligations. Further, because carriers will know exactly how much they are contributing to the support mechanism, basing contributions on end-user telecommunications revenues satisfies the requirement in Section 254 that support mechanisms be "explicit."\footnote{Id. at 9210, para. 853.}
VIII. CONCLUSION

235. At the direction of Congress, we have reviewed many of the major decisions related to the implementation of the universal service provisions of the 1996 Act. We appreciate the enormous importance of our decisions; no less than the preservation and advancement of the nation's universal service system is at stake. We have attempted to balance competing concerns, predict how new and emerging technologies will affect universal service in the near and distant futures, and forecast universal service support requirements, while at all times adhering strictly to the statutory language. We have delved into the complex technological structure of the Internet and the Internet industry. This examination leads us to conclude that excluding from the universal service contribution pool revenues derived from the provision of pure transmission capacity to Internet service providers does not comport with the language and goals of the 1996 Act. Similarly, should we conclude that specific "phone-to-phone" IP telephony services qualify as "telecommunications services," providers of such services would fall within section 254(d)'s requirement to contribute to universal service mechanisms.

236. This Report represents the result of deliberate consideration of the issues and extensive public feedback in the form of thousands of pages of comments and two Commission en banc meetings. We recognize, however, that additional outreach, especially consultation with state commissions, is essential. We and the states must ensure that jurisdictional issues, including the 25-75 issue, are resolved in a manner that guarantees that universal service mechanisms are specific, predictable, and sufficient. We view the issuance of this Report as a turning point in our efforts to engage states in a sustained and meaningful dialogue.
### Appendix A

**PARTIES FILING COMMENTS**  
**ON REPORT TO CONGRESS**  
**CC: 96-45**

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### Appendix B

**PARTIES FILING REPLY**  
**COMMENTS ON REPORT TO CONGRESS**  
**CC DKT. 96-45**

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<th>Commenter</th>
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<td>Ad Hoc Telecommunications Users Committee</td>
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April 10, 1998

Separate Statement of Chairman William E. Kennard

Universal service is an American success story. For the better part of this century, our commitment to universal service has made telephone service affordable for Americans living in all corners of the Nation. And indeed about 95% of American households have basic local telephone service. While it is easy to take this level of penetration for granted, it is, by world standards, a remarkable achievement. Our responsibility is to sustain and improve upon this record, especially in areas and for portions of our communities that do not have or cannot afford service.

To be sure, the notion of universal service must continue to change, to keep pace with the technology that it supports. In the Telecommunications Act of 1996, Congress described universal service as "an evolving level of telecommunications that the Commission shall establish . . ., taking into account advances in telecommunications and information technologies and services." In the 1996 Act, Congress also included within the concept of universal service discounted services to schools, libraries, and rural health care providers. The evolving nature of universal service is essential to keeping our Nation connected as technology, innovation, and investment produce ever greater, faster, and more efficient media of communications.

As we enter the twenty-first century, our duty is to maintain and improve upon the successes of universal service in an environment that differs markedly, in any number of ways, from the communications world of the past. The new communications world is different not only because of stunning advances in technology, but also because of a shift in the competitive and regulatory paradigms, as foretold by the 1996 Act. These changes present us with some formidable challenges.

First and foremost, this Commission and our colleagues at the various state commissions must reform universal service mechanisms that were designed to work in an environment of regulated monopolies, but that must now be adapted if we are to pave the way for robust competition while continuing to safeguard and advance universal service. In the world of the regulated monopolist, it was easy enough to keep basic residential phone service affordable, even if it meant pricing that service below the carrier's cost of providing it, since the monopolist could be permitted to make up the difference in other ways, such as through higher rates for long distance and business services. In this way, phone companies could earn a reasonable overall return, while basic residential phone service was kept affordable even in high cost, hard-to-serve areas.

Such implicit forms of universal service support must be reformed at the federal and state levels if competition is to succeed without sacrificing universal service. The first

impact of competition will be to put downward pressure on the above-cost rates that now subsidize residential local phone service. This Commission has set into motion a process for removing universal service support that is implicit in the interstate access charges that long distance carriers pay to local exchange carriers, and replacing that form of support with an explicit universal service support recovery mechanism. I am encouraged by those States that have begun the same process within their jurisdictions, and I pledge my full support and cooperation.

We have the ultimate responsibility to assure affordable rates throughout the country. When this Commission first undertook to reform universal service last year, we observed that, through the process of separations, approximately 25% of universal service support historically had been funded through federal support mechanisms. What was not expressly recognized, however, was that some areas of our country currently receive much more than 25% federal universal service support. In these areas, it makes little sense to limit federal support to 25%. Even beyond these baseline levels, I believe we all recognize that in some instances the proportion of federal support will have to increase. It is my intention to see to it that such additional support is forthcoming. The hard question this Commission must step up to in the coming months, in close cooperation with the States, is what is the best manner in which to proceed to ensure that these are "specific, predicable and sufficient Federal and State mechanisms to preserve and advance universal service."²

I believe that we will all be better off if both we and the States act expeditiously to preserve existing sources of universal service support by converting existing implicit sources of support into explicit sources of support. Rates today are affordable and universal service today is supported. States and the FCC together ought to be able to restructure today's support to continue to ensure affordable rates. But doing this will mean that States determine the extent to which existing, implicit intrastate subsidies can be converted to explicit subsidies. This process of reform by the States should not increase the amount of universal service support that the States raise within their own jurisdictions. When a state cannot restructure existing universal service support and maintain affordable rates, we should further help maintain affordability. I do not envision that States complete their reform efforts before additional federal support is provided. Nor do I mean to imply that States must raise local phone rates in order for additional federal support to be available. Indeed, I seek only to follow the principle articulated by Congress that "[t]here should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service."³ And where a State can demonstrate that, despite reasonable efforts, it will be unable to convert its existing intrastate support system into a specific and predictable universal support mechanism that will maintain affordable rates, the difference must and will be made up from the federal support mechanism.

As we pursue this reform, it is also our responsibility to ensure that all telecommunications carriers contribute to the universal service support in the manner

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contemplated by the Communications Act.\textsuperscript{4} As our Report to Congress shows, application of the statutory terms "telecommunications carrier"\textsuperscript{5} and "telecommunications service,"\textsuperscript{6} which we must undertake if we are to identify those whom the statute directs to make universal service contributions, will not always be an easy task. And as our Report further shows, there are those who believe it is in this regard that our maintenance of a robust universal support mechanisms poses a threat to another American success story, the Internet. I disagree. For I believe that the continuing success of universal service can not only co-exist with the maintenance of a "hands off" regulatory approach to the Internet, I believe that universal service support can and will benefit from such an approach.

We already have witnessed the symbiotic relationship between universal service and the Internet. Universal service has given millions of Americans affordable access to the public switched telephone network and, through that network, access to all of the wonders and knowledge of the Internet. In this way the Internet benefits from the maintenance of universal service. By the same token, the growth of the Internet leads to increased support of universal service. This is because an enormous amount of pure telecommunications is purchased by the businesses that make the Internet available to the 40 million American homes with personal computers. While Internet service providers, for example, do not incur, or pass on to their subscribers, direct universal service obligations, their purchase of telecommunications does lead to an increase in universal service support from the providers from whom they purchase telecommunications services. Thus, as we refrain from treating Internet service providers as telecommunications providers, we promote the growth of Internet services; this growth in turn sparks demand for telecommunications, which then increases the amount of universal support.

In sum, I view the relationship between universal service and the Internet like a couple at the beginning of a long-lasting marriage -- inevitably there will be occasional signs of tension, but in the end they will always need each other.

I believe our Report to Congress exemplifies this approach. I have yet to see an Internet service that appears to fall within the definition of a telecommunications service. As the Report indicates, however, there are other services that seem to do so. In the Report, we discuss IP telephony, a service that seems virtually indistinguishable from traditional long distance telephone services. While a more definitive determination demands that we have a better factual record, I note that even in this regard we are not proposing the possibility of "regulating the Internet" or imposing universal service contribution obligations on Internet service providers. We are simply identifying a very narrow category of service -- IP telephony -- that shares many of the characteristics of a telecommunications service.

\textsuperscript{4}47 U.S.C. § 254(d).
\textsuperscript{5}47 U.S.C. § 153(44).
\textsuperscript{6}47 U.S.C. § 153(46).
I do not seek to understate the concern of some that the migration of traffic from the public switched network to other networks could threaten the viability of universal service. I am committed to ensuring that no such threat materializes, whatever its source. Simply put, this Commission can have no higher priority than the preservation and enhancement of universal service. As I have outlined above, I believe that services provided by the Internet and IP telephony have provided, and will continue to provide, support for universal service, even as we avoid regulation of the former and begin to examine the telecommunication-like characteristics of the latter. But this Report is in some respects simply a snapshot. Our federally-mandated commitment to preserve and protect universal service did not begin with the 1996 Act and it does not end with this Report. It is ongoing. I look forward to continuing to work with the state commissions and with Congress to honor this commitment.

The very first sentence of our organic law states that the fundamental mission of this Commission is "to make available, so far as possible, to the all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges." 47 U.S.C. § 151. The Commission has fulfilled this mission for the last seven decades of the twentieth century, and will continue to do so as it enters the twenty-first century.
Re: Report to Congress on Universal Service

Today's Report to Congress reaffirms the institutional commitment of the Commission to the statutory goals of universal service. For me, this is a matter of personal commitment as well.

Americans are a heterogeneous people, but we comprise one nation. Rich or poor, black or white, rural or urban, each of us benefits from the availability of affordable telephone service -- not just for ourselves but for everyone else. That's why Congress made universal service a cornerstone of the Telecommunications Act of 1996, and that's why the Commission has worked so diligently with the state commissions, our partners, to promote telecommunications access for low-income consumers and consumers in remote, insular, and high-cost areas, as well as for eligible schools, libraries, and rural health care providers.

Universal telephone service has long been a national goal, and it is a goal we have generally achieved. Today, having the opportunity to use the telephone network is more essential than ever before for participation in our nation's society, culture, and economy. That's why Congress has so clearly stated its intention that telephone service be ubiquitously available and affordable. To achieve this goal in a marketplace in which additional competition is developing, and desirable, Congress called for universal service support that is "specific," "predictable," "sufficient," "explicit," and collected in an "equitable and nondiscriminatory" manner.

This Report is far from a final answer to all of the questions surrounding universal service. The Commission has devoted a great deal of time to universal service over the past two years, and it will continue to do so in the future. Major issues remain to be worked through, but our work on this Report to Congress has moved us forward.

I have appreciated the opportunity to take a fresh look at these critical issues. Preparation of this Report has afforded all of us an opportunity to concentrate intensively on the vital importance of universal service -- enabling a new group of Commissioners to evaluate, on a fresh record, the decisions of the former Commission members, to assess present circumstances, and to lay the groundwork for the decisions that will be necessary in the future. And, of course, this Report will assist Congress in its oversight of the Commission, and facilitate informed judgments about whether to provide
additional legislative guidance on any of the myriad issues that have arisen in the implementation of the Telecommunications Act of 1996.

High-Cost Support

On universal service support for consumers in high-cost areas, the most important message we are sending today is one of reassurance. Contrary to the impression that may have been created by elements of the decision last May, the Commission does not contemplate diminishing the support that currently is provided from the interstate jurisdiction to maintain affordable telephone service. Although the statute calls for "Federal and State mechanisms to preserve and advance universal service," we don't yet have the answer to all the questions about how best to coordinate the respective roles of the state and federal commissions. But we can and do make clear that this Commission is not contemplating any precipitous action to reduce the high-cost support that is currently supplied by the interstate jurisdiction.

Rural telephone companies will operate essentially under the existing support system for years to come. The large telephone companies will continue to receive many billions of dollars of intrastate and interstate support, though implicit mechanisms will be converted to explicit ones. The specifics need to be worked through in partnership with the states, including universal service "contributor" states and "recipient" states, to forge a mutually agreeable solution that will be enduring. I will redouble my efforts to bring to a successful conclusion the long-pending efforts to forge a workable consensus. In doing so, it is my firm intention to continue to deliberate, and strive for consensus, with state commissioners and staff, through the Joint Board, the NARUC Communications Committee, and all other available channels.

Telecommunications Services and Information Services

This Report has given us an opportunity to review the legal analysis, and the practical consequences, of our prior determinations regarding the statutory definitions of "telecommunications," "information services," and related terms. As a legal matter, the Commission is renewing its determination that the Telecommunications Act should be read to affirm the unregulated status of information services, including Internet access services. I firmly believe that this decision is supported by the statute and the legislative history, and that it has stimulated and will continue to promote desirable investment and innovation. As a practical matter, the Commission has learned that the relationship between information services and telecommunications is symbiotic. The explosion in information services in general, and Internet usage in particular, is stimulating demand for underlying telecommunications services, thereby ensuring the sufficiency of sources for universal service support.

The relationship between telecommunications and information services is a topic that will require further rulemakings or adjudications, for example, to examine such matters as IP-based telephone services (as distinguished from Internet access services which we have not regulated and do not intend to regulate). We need to make sure we have all the facts, and have considered all of the potential ramifications, before we make any particularized
determinations. We will also need to consider issues relating to "bundled" offerings that include both telecommunications services and other services. Definitive answers on these topics are not at hand. But, because of the continuing growth of the telecommunications market and the success of the policy of non-regulation of information services, I am confident that it will in fact be possible to (1) safeguard universal service support, including that needed for high-cost areas, and simultaneously (2) avoid stifling the development or deployment of innovative new information services.

Schools, Libraries, and Rural Health Care Providers

This Report does not address the low-income support mechanism, but it is important to note that this mechanism -- like pre-existing high-cost support -- is continuing; in fact, federal support has been increased. Meanwhile, the Commission has launched the new support mechanisms called for by the Snowe-Rockefeller-Kerrey-Exon provisions (Sec. 254(h)) of the statute, for schools, libraries, and rural health care providers. As a result, all phases of universal service support -- high-cost, low-income, and Snowe-Rockefeller -- are now operational.

I remain convinced that implementation of Section 254(h) will bring extraordinary benefits to children, to rural health care patients, and to library patrons across the nation. I know there have been criticisms of certain decisions that have been made in the course of implementing this visionary, but in some respects ambiguous, provision of the law. I stand ready to work with Congress to explain our past decisions, or to assist in assessing alternatives. If new legislative guidance is to be provided, I hope that it can be effectuated without unduly disrupting the plans of thousands of schools, libraries, and rural health care providers across the nation who are eager to seize the opportunities the legislation created.

I look forward to an active and constructive dialogue with Congress, as well as with the state commissions, as we continue our efforts to implement the universal service provisions of the Telecommunications Act of 1996 for the benefit of all.
SEPARATE STATEMENT OF
COMMISSIONER MICHAEL K. POWELL, CONCURRING

Re: Report to Congress, Federal-State Joint Board on Universal Service (CC Docket No. 96-45).

I welcome the opportunity provided by this Report to Congress, both to underscore my strong support for the goals of the universal service provisions of the 1996 Act and to share my current views regarding some of the principles I believe should guide the Commission's implementation of these provisions. I write separately (1) to highlight the challenges the Commission and Congress face as technological convergence erodes the foundations of our balkanized regulatory framework, and (2) to express my growing concern that we need to modify our universal service programs, particularly the Schools and Libraries (S&L) program, in order to more accurately meet demand and to limit their distorting effect on competition and consumer prices.

I. Internet Protocols and the Strain on Our Statutory and Regulatory Framework.

A. The Problem of Convergence

Congress has asked that we re-examine our interpretation of the critical terms "telecommunications," "telecommunications carriers," and "information service providers" contained within the universal service section of the 1996 Act. At bottom, the question is whether these terms are mutually exclusive. That is, can a single service provider offer both "telecommunications services" and "information services"? Or, as the Commission has previously held with respect to its treatment of "basic" and "enhanced" services, is a provider either one or the other.

I believe the Report rightly concludes that Congress intended to maintain the dichotomy between telecommunications services and information services that originated in the Commission's Computer decisions and was utilized in large measure by the court in the context of the divestiture of AT&T. Though I concede that there is merit in the views advocated by some that Congress intended to redefine telecommunications so as to capture information service providers within the snare of Title II and other regulation, I believe the express language of the Act and its legislative history prove otherwise, as the Report demonstrates.

Clearly, how the Commission chooses to categorize a provider under the statute significantly affects its regulatory treatment. A telecommunications carrier is subject to the full panoply of common carrier regulation and must contribute to universal service. A provider of telecommunications (one not offering telecommunications on a common carrier

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basis) may have to contribute to universal service if the Commission finds that it is in the public interest to do so. And, finally, an information service provider is neither subject to regulation nor, in my current view, should it be required to contribute to universal service.

Even though we are convinced that Congress in fact adopted a categorical "either/or" scheme in 1996, we are left with the difficult task of categorizing service offerings that do not fit neatly in either category, unless and until Congress makes a change in this scheme. This difficulty arises because the definitional dichotomy does not fully account for the explosion in innovation brought about by the Internet and its underlying network architecture. That dichotomy is premised on a network in which the nature of the service and the underlying infrastructure are highly integrated. Basic voice service was (and largely still is) distributed on networks constructed and optimized for that service, and the brains of that network resides within the central switches, signalling systems, and databases of the intelligent network owned by the operator, usually a Bell Operating Company (BOC). The Internet and the Internet protocol (IP) represent a dramatic paradigm shift in network architecture. A variety of services can be overlaid on an IP network and the intelligence of those services rests not centrally, but at the edges of the network -- in the case of the Internet, in the computers owned by the millions of users and information service providers throughout the world. Anyone with the right computer and software can offer and distribute new and innovative goods and services.

The advent of IP networks has placed great strain on the categorical definitions first set out by the Commission and adopted by Congress. Previously, we assumed that one could categorize a service by the degree to which the transmission was "processed" or altered by computers on the network. Basic service (assumed to be voice) traveled without manipulation or change in form to its destination. Thus, it was said to flow on a "transparent transmission path." This definition is being strained today even for voice networks. For example, in modern digital voice networks, such as the new cellular and PCS networks, advanced digital signal processing means the voice signal is being processed and manipulated between origin and destination. More importantly, information service (assumed to be data) involved the additional manipulation by computer of the transmitted information.

The infinite flexibility of IP switched-packet networks, has blurred these distinctions, making them difficult, if not impossible, to maintain. As we are seeing, one now can transmit voice, in addition to data, using a protocol that allows for a significant degree of computer processing and other advanced capabilities. Yet, from the perspective of a user who does not use those capabilities, the service may look nearly identical to traditional basic service. Were such a service to be classified permanently as an information service it should not, in my current view, be required to contribute to universal service. If innovative new IP services were all thrown into the bucket of telecommunications carriers, we would drop a mountain of regulations, and their attendant costs, on these services and perhaps stifle innovation and competition in direct contravention of the Act.

Therefore, the challenge we face is how to categorize the growing number of hybrid services, in light of the Act's twin objectives of promoting competition and advancing universal service. Hybrid services are those that have components of both a basic service
and an information service (as traditionally defined). On one end of the spectrum, for example, may be some forms of IP telephony that resemble traditional basic service in nearly every way, except that they have at their core a network and protocol that makes it possible to substantially enhance the basic voice service (for example, speak French and have it come out in English or have some users choose higher fidelity sound than others). On the other end of the spectrum are service providers whose fundamental function is to offer access to information to its customers using computer intelligence, but whose service rests on a transmission network fully capable of providing a clear path for basic transmission (same thing in, same thing out). Sorting hybrid services into their appropriate regulatory bin is difficult, yet something we will be forced to do more and more as new and innovative services explode from the fuel of IP networks. This reflects the growing challenge of adapting a balkanized regulatory structure to a world of technological convergence.

Congress is right to be both buoyed and fearful of this development. On the up-side, the arrival of digital technology and IP networks mean infinite possibilities for new and innovative services. The arrival of broadband digital networks promise to connect the world to an endless sea of information, significantly advancing how we buy and sell, communicate, create, and educate. Moreover, this technology will produce more competitive choice for consumers by eroding the traditional barriers between services and lowering the costs of entry. This hopeful state of affairs was born and has flourished in a deregulated and competitive atmosphere, the very type we are striving to achieve in communications services generally. On the down-side, these alternative network systems may present a threat to our universal service goals. Carriers that presently pay to support universal service may migrate more of their traffic to IP networks in a rational effort to avoid the cost of government regulation. Congress, will have to watch these developments vigilantly and take action if it becomes necessary, but until that day, what is an agency to do?

B. A Call for Case-By-Case Evaluation

As long as our universal service obligations require us to consider whether difficult-to-classify entities are "telecommunications carriers," provide "telecommunications," or are "information service providers" I think we should resolve those questions on a case-by-case basis. If the Commission is to preserve the dichotomy between information services and telecommunications, as the statute and legislative history appear to require, we will need to make highly fact-specific inquiries about whether particular entities provide transmission of information "without a change in the form or content" or whether the entities offer the capability of manipulating that information.

Attempts by this agency to set down its own prophylactic rules for categorizing classes of IP-based service will be, in my current view, futile if not dangerous for a number of reasons: First, the English language is no match for the infinite flexibility and innovation potential of an IP network. I am confident that any attempt to craft a rule to cover a class of IP-based service will be almost immediately frustrated by innovative changes to the service and technology that these advanced networks allow. I fear we would find ourselves in a never-ending chase for regulatory clarity. Second, adopting a rule that
invades on a broad front the Internet field and its underlying technology is likely to chill, if not freeze, innovation in broadband digital services, and constrain the flow of capital investment in these growth industries, out of fear that the regulator and the tax-man cometh. Third, any rule will likely be over-inclusive and mire the Commission in waiver proceedings. What will undoubtedly result is a perforated rule -- one besieged by exceptions. Fourth, if we adopt broad rules, we wrong-headedly move in the direction of expanding the onerous body of regulations, rather than staying on the path of deregulation the Act commands us to take. Fifth, we risk serious loss of credibility internationally, having fought hard to win world trade concessions (e.g., international settlements, classifying the Internet as an information service).

These considerations favor resolving these matters (which I believe encompass the classification of Internet and IP telephony) on a case-by-case basis, rather than through rulemaking. It is for these reasons, I question the wisdom of even suggesting conclusions in the Report. Such conclusions, no matter how gingerly or narrowly drawn, signal a move toward developing a body of rules for classifying Internet-based services. I urge the Commission to seek comment on the appropriate method of designating new contributors to universal funds in the context of a future proceeding.

C. The Pitfalls of Competitive Neutrality Analysis

Some will argue that it is competitively unfair to subject competing communications services to regulation and not Internet companies. I constantly hear the mantra that we must "level the playing field," because exempting Internet service providers constitutes a massive subsidy. While this argument has some superficial appeal, I strongly caution against extending regulations solely on this basis.

I simply disagree with those who argue we are massively subsidizing the Internet by letting it operate in a free market while other companies labor under the yolk of government regulation. That seems to be an ironic characterization in light of the Act's stated goal of fostering a pro-competitive, deregulatory environment. The way to level this disparity, if at all necessary, is not to extend government imposed costs and regulations to the Internet, it is to take further actions to liberate those subject to regulation.

Moreover, competition is not a game of equally matched players. Competitors have different mixes of competitive advantages and burdens. It is too simple to focus on a single competitive inequity and then declare the game unfair, without examining the totality of advantages and disadvantages among competitors. Let me be clear: I believe it is entirely appropriate for the Commission to consider the extent to which its decisions will have a distorting effect on the market. We should not lose sight, however, of the fact that we can never avoid all such distortions so long as we regulate the market.

Further, we should recognize that competitive advantages are not limited to whether or not companies must contribute to universal service support. For example, while telecommunications carriers must contribute to universal service, they also enjoy significant benefits under sections 251 and 252 of the Act. Likewise, incumbents often have significant advantages over new entrants, such as capital, business and marketing savvy and
technical expertise, such that declining to require new entrants to contribute to universal service may not give the new entrants an appreciable advantage over the incumbent. Leveling the playing field, when the players do not start from the same place, only institutionalizes the advantage of the stronger, better equipped, experienced players. We and the Congress regularly and consciously provide incentives for innovation and market entry.

Again, we should recognize that competitive advantage is not always an evil to be stamped out; the market is designed to reward companies for finding and exploiting their competitive advantages over other companies. Our goal should be to ensure that our policies do not have a significant impact on the overall competition between entities.

For these reasons, I am troubled by the discussions in which the Report suggests that new types of entities (e.g., ISPs that use their own transmission facilities, phone-to-phone Internet telephony providers) should be required to contribute to universal service based, at least in part, on "competitive neutrality." I am concerned that these discussions, among other things, may overstate the potential effect of declining to designate new contributors to universal service support and, in any event, oversimplify the competitive context. The danger here is that, as new technological and marketing innovations bring new entrants to the market, we will continue to expand the pool of contributors, whether or not we need additional contributors to keep the fund sufficient. Even worse, by continuously expanding the pool of contributors to encompass new entrants, we may discourage such entry.

I want to emphasize that we do have a duty to maintain a sufficient base of funds to support universal service. We can and will do so. As I explain below, however, we also must not throw our net out farther than is necessary, because unnecessarily expanding the scope or size of the contribution base for universal service would distort and inhibit competition and would put significant pressure on consumer prices for services subject to the government levy. In short, we should address these issues with a surgeon's scalpel and not a butcher's cleaver.

II. **Tailoring Universal Service Programs to Sufficiency**

One of the hallmarks of the Commission's implementation of the Act's universal service mandate should be that the funds must become and remain "sufficient" within the meaning of section 254(e). Section 254(b) requires that the Commission preserve and advance universal service and the Commission must establish mechanisms to meet that goal. At the same time, it would defy common sense, as well as the pro-competitive, deregulatory thrust of the Act, for the Commission to expand either the size or the scope of universal service programs unless necessary to fully-fund these programs or to otherwise satisfy the requirements of the Act. Thus, "sufficiency" under the statute is in essence a question of balance: our universal service funds must be sufficient to preserve and advance universal service, but these funds must not become larger than is necessary to achieve those goals. If we do not balance these contending objectives, we will unduly distort competition and add to the cost of service, which will likely result in higher rates to consumers.
I am concerned that the Report does not focus directly enough on the importance of maintaining the sufficiency of universal service funding. As the Report indicates, the Commission does not yet know how much any of the programs will cost; we will not know the demand for the Schools and Libraries program until the window for filing applications closes later this month, and we will not even decide the method for determining high cost support until later this year. With respect to Schools and Libraries, in particular, I am troubled that we continue to operate and collect based on initial assumptions about the demand and scope of the program. I fear the eagerness to keep this program moving, which I fully understand, may lead us inadvertently to overcollect or unnecessarily expand the program.

I am concerned that, by not squarely re-evaluating the question of sufficiency, we exacerbate a perception among many critics of our universal service implementation that somehow these programs are out of balance. This perception, paradoxically, is perhaps the most significant threat to the sufficiency of universal service funding. If we cannot find a way to make critics in Congress and elsewhere believe that we are working to preserve and advance universal service in a prudent and responsible manner -- that the funds will be sufficient but not too large -- I fear that support for these beneficial programs will erode in the minds of both legislators and consumers.

With respect to the Report's review of Commission actions taken in and subsequent to the Universal Service Order questions of sufficiency and, conversely, overcollection are central. Congress has expressed its concern regarding the sufficiency of universal service programs in the Appropriations Amendment, which required the Commission to review its determinations regarding who is required to contribute to universal service, as well as the revenue base from which universal service support is derived. More generally, concern for sufficiency and overcollection are evidenced in several critiques of current universal service programs.

Specifically, in my current view, much of the concern regarding the size and scope of the S&L program centers around the perception that, intentionally or not, the Commission has cast its net broadly to capture substantial funding and taken more and quicker steps to ensure that that program will be sufficient than it has taken with respect to the high cost and other programs. Indeed, one could argue that the S&L program may be poised to overcollect: First, the Commission concluded that, despite the fact that States may establish their own S&L programs, the federal S&L program would be funded out of both interstate and intrastate revenues, whereas high cost and low income support would be based only on the former. Second, the Commission set the cap for the S&L program at $2.25 billion, even though projected first-year demand for the program is substantially less.

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3 See Universal Service Order¶ 823; compare id., ¶ 831.
than that amount.  

Third, the Commission directed the establishment of a separate corporation to administer aspects of the S&L program, rather than allowing the fund administrator to run the entire program, as is the case for the high cost and low income funds.  

Fourth, as a general matter, critics point out that the S&L program is already collecting funds, whereas the high cost program will not be fully fleshed out until later this year and will not begin collecting money until next January. Indeed, many states clamor, and the Report concedes, that the percentage of federal funding adopted by the Commission in the Universal Service Order, if not modified on reconsideration, would ensure that some high cost states will receive substantially less federal support than they do currently.

While these decisions, taken individually, constitute a reasonable exercise of the Commission's discretion, the overall picture sketched by these decisions suggests to some critics that the Commission has taken more pains to ensure that the S&L program is sufficient than it has taken with respect to the high cost and low income programs. It is not lost on these critics that section 254 provides no basis for the Commission to favor certain classes of recipients over others with respect to the level or timing of universal service support flows.  

Thus, I have become increasingly concerned that, from the standpoint of sufficiency, the S&L program is, or at least appears to be, out of balance.

I support a vigilant approach to ensuring that the sufficiency of universal service be kept in balance, as a general matter and with respect to particular programs, such as the S&L program. As general matter, the Commission should establish an "early warning system," whereby we regularly assess whether the funds and the pool of available contributors are sufficient to satisfy statutory requirements. These efforts could build on the work already begun by the Common Carrier Bureau pursuant to the monitoring authority delegated to it in the Universal Service Order. In establishing such a monitoring system, we could request comment on whether specific new technologies or types of providers are contributing indirectly to the funds by, for example, generating new revenues for carriers that are required to pay into the funds.

With respect to Schools and Libraries, I believe that the Commission must quickly commit itself to a modest modification of the program if it wishes to maintain crucial political support for it. To be blunt, I fear that if we do not move quickly to modify our approach to implementation of this and other programs, we will fail to carry out adequately our universal service duties, endanger the pro-competitive and deregulatory goals of the Act and make it necessary for Congress to step in to show us what the public interest requires.

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4 See id., ¶ 425.
5 See NECA Report & Order ¶ 57.
6 See Universal Service Order ¶ 269.
8 See Universal Service Order ¶ 869.
With respect to the S&L program, some have raised substantial questions regarding whether the Commission has jurisdiction to assess contributions based on intrastate revenues, as well as important policy concerns. On this basis, and in light of the perception that the Commission has somehow favored the S&L program, I would support limiting that program to assessment of contributions based on interstate revenues only. Likewise, I would favor reducing the cap on the S&L program so as to bring it down to current demand levels. Further, I would support moving the functions performed by the S&L Corporation to the fund administrator, both to remove the appearance that the Commission is favoring the S&L program and to resolve serious questions raised by the General Accounting Office regarding whether the Commission was authorized to direct the establishment of the S&L Corporation.9

III. Conclusion

In closing, I remind my colleagues that the Commission is not alone in the effort to promote universal service. I, for one, believe that if we reach a point where there is a potential shortfall in universal service funds, Congress could craft additional legislation narrowly tailored to assess universal service contributions without the accompanying risk of heavy regulation (perhaps to include express preemption of State efforts to regulate the Internet). In the meantime, I urge the Commission to be mindful of the threats to competition and innovation if we do not keep the sufficiency of universal service funds "in balance" both as to their size and scope. By following some of the approaches I have described here, I believe we would greatly benefit the development of competition and innovation by refraining from imposing contribution obligations on entities that do not fit neatly into the traditional categories. Just as importantly, by taking swift action to ensure that the funds are sufficient to preserve and advance universal service, but are no larger than is necessary, we will do much to quell the criticisms that threaten to undermine support for these beneficial programs.

9 See Feb. 10, 1998 Letter from Robert P. Murphy, General Counsel, General Accounting Office to Senator Ted Stevens.
Separate Statement of Commissioner Gloria Tristani

Re: Federal-State Joint Board on Universal Service, Report to Congress

Today's Report to Congress makes a number of important observations regarding the preservation and enhancement of universal service. I write separately to identify several areas of particular interest to me.

While I support this Report, I have not yet concluded whether last year's decision concerning the share of federal high cost funding (the 25/75 issue) is the best approach. Many people, especially a number of state commissioners, have worked diligently since adoption of last year's Universal Service Order to consider how the FCC and state commissions could achieve our shared goals in ways that may vary the current approach. The participants in those efforts have actively sought to build consensus among those with different viewpoints on the 25/75 issue. I strongly support those efforts and encourage all interested parties, especially state commissions, to participate in this dialogue over the next few months. The thinking on this issue continues to advance, and all parties would be well-served by re-engaging the Commission and each other in this dialogue. Disagreement over policy is expected, but I would hope that criticism of the current approach will be accompanied by alternative solutions.

I also support the manner in which the Report addresses phone-to-phone IP telephony and the issue of self-provisioned telecommunications. The Commission has historically favored policies aimed at fostering the growth of enhanced services, including Internet access. The Commission's decisions affecting the Internet -- most notably the ESP exemption and the Computer Inquiry line of decisions -- have to be considered among the agency's greatest contributions to the public interest. As we continue our evaluation of this issue in the near future, I will keep firmly in mind the enormous benefits that have resulted from the philosophy underlying those decisions. I am confident that the Commission can continue that philosophy while being faithful to the letter and spirit of the universal service provisions of the Act.

I believe this proceeding has been a valuable undertaking by the Commission. I believe the Commission's understanding of IP telephony as it relates to the framework of the Telecommunications Act of 1996 has been greatly enhanced by our work on this Report. And as a result of this Report, the Commission expects to take additional action in the near future that would address whether specific types of IP telephony fall within the Act's definition of "telecommunications service." In addition, as a result of this Report, we have opened an important discussion that will consider whether entities that self-provide telecommunications should be required to impute the value of that telecommunications and contribute to universal service based on those revenues. These are important steps in fulfilling the goals of section 254.

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DISSENTING STATEMENT OF COMMISSIONER
HAROLD FURCHTGOTT-ROTH

Re: Federal-State Joint Board on Universal Service, Report to Congress, CC Docket 96-45

Introduction

The majority has worked hard to make this report a success. Comments have been received from the public. En banc hearings have been held. Many staff members have invested countless hours in preparing this report. Everyone involved has had the best of intentions.

I wish that there were a way that I could vote with the majority on this report. Efforts and intentions are commendable. They were also commendable in the May 1997 order on universal service. But efforts and intentions alone are not sufficient to lead to a good order or a good report on universal service.

Priorities matter. Rural, high-cost universal service is not just one of many objectives of Section 254; it is the highest priority. Rural, high-cost universal service issues should not be resolved and implemented in some dim and distant future after all other universal service issues have been resolved; rural, high-cost universal service issues should be resolved and implemented first. Rural, high-cost universal service should not be viewed as the residual after enormous amounts for other federal universal service obligations have been promised; rural, high-cost universal service should receive the lion's share of any increase in the federal universal service fund.

New federal universal service policy should not discard prior programs through a revolutionary process; new federal universal service programs should develop through a careful evolutionary process. Federal universal service programs should not be funded by unlimited, hidden taxes and fees, negotiated behind closed doors, that harm all consumers of telecommunications services through ever increasing prices; federal universal service programs must be funded by prudent mechanisms that allow for lower, and consequently more affordable telecommunications rates for all Americans. Federal universal service programs should not stifle innovation and competition; they must encourage them. Federal universal service programs should not be based on creative and expansive readings of the law; they should be based on narrow readings of the law. Federal universal service programs should not ignore Congressional intent; they must reflect it.

For these and other reasons explained below, I must reluctantly and respectfully dissent from the majority opinion today.
Congressional Intent Regarding Federal Universal Service Programs

For many years, a universal service funding mechanism, based on federal collection of fees from interstate service revenues, has defrayed the costs of service in rural, high-cost areas. It has been a system of subsidies with neither great efficiencies nor great excesses. It has evolved with little fanfare or controversy.

The Telecommunications Act of 1996 placed in statute what had largely evolved by regulation. Section 254 is an evolution of preexisting programs, not a revolution that endangers those programs to create entirely new ones. The clear emphasis of Section 254 is to preserve and enhance universal service in rural, high-cost areas of the country. There are other goals of Section 254, but it is difficult to read Section 254 in its entirety and understand how a federal universal service fund program could have as its primary emphasis anything other than rural, high-cost support; and it is even more difficult to understand how any portion of this section could proceed piecemeal before the rural, high-costs issues are resolved and in a fashion that jeopardizes support for rural, high-cost areas. And it is still further difficult to read Section 254 to lead to funding mechanisms that make telecommunications services less affordable to all Americans on the pretext of supporting non-telecommunications plant, equipment, and peripheral services. Even a few conversations with Members and staff reveal that Congress intended primarily to make telecommunications services more -- not less -- affordable through support of rural, high-cost areas under Section 254; many conversations make the point more forcefully.

Somewhere between Capitol Hill and 1919 M Street, N.W., the intention of Congress seems to have been lost. Last May, the Commission issued an order on universal service that was more revolutionary than evolutionary. Much thought and care went into this revolutionary order; it was intellectually sophisticated and established novel interpretations of the law and Commission authority; but, in the process, it seems to have inadvertently lost sight of both the intent and the letter of the law.

The failure of the Commission on universal service was not lost on Congress; it decided to give the FCC a second chance to redeem itself. Congress requested a report from the FCC not because Congress was pleased with the earlier universal decision; Congress requested the report precisely because it was displeased.

The report that the Commission submits to Congress is a missed opportunity. We could correct past mistakes, but we do not. We could affirm a commitment to Congressional intent, but we do not. Senator Dorgan eloquently suggested that, if the FCC has made a mistake, it should now make a "U-turn." Instead, we largely reaffirm past decisions.

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Untenable Taxes

The federal government has had universal service programs for rural, high-cost areas and for low-income Americans for many years. These programs have been quietly met with a tax of approximately 3 percent on interstate telecommunications services.

Section 254 sets forth goals that emphasize rural, high-cost support as well as low-income support and other objectives. The Commission must be nimble and energetic to meet all of those goals. Instead, we have made costly promises for some services without making promises for increases in rural, high-cost programs. How much will all of these promises cost? No one can say with certainty.

Commission orders last year set caps of $2.25 billion annually for schools and libraries. For the second quarter of 1997, we have imposed a 0.71 percent tax on all telecomm services, both interstate and intrastate, to support schools and libraries programs for an amount of $1.3 billion annual rate. The $2.25 billion annual rate would require a 1.22 percent tax on all telecommunications. Moreover, as I explain below, I have substantial doubts about our authority to tax intrastate services directly or even to use them as a basis for taxes. To support fully the promised schools and libraries program with just interstate telecommunications service revenue would require a tax rate of 3.2 percent.

The Commission has thus set about to promise a schools and libraries program that can only be funded with a 3.2 percent tax. New programs for rural health care providers and for low-income programs add another 1 billion, or a tax rate of 1.4 percent on interstate services for a cumulative incremental tax rate of 4.6 percent on interstate telecommunications services. These promises have been made before any incremental expansion of the federal high-cost program is decided. It is difficult for me to imagine how Congress intended the FCC to spend less on any incremental new rural, high-cost support than on the other universal service programs. It is thus possible that, to meet Congressional intent without reducing the promises already made for other universal service programs will require an incremental federal tax rate of 10 percent on interstate telecommunications services on top of the preexisting 3 percent tax.

The specific parameters in the preceding paragraph are only illustrative. They may be higher or lower than actual values, but any incremental rate close to 5 percent, much less 10 percent, would be punitive as it would lead to substantial price increases in interstate telecommunications services and would harm the very consumers that universal service is intended to help. The interstate telecommunications service market would shrink in response to over-taxation. Fewer firms would invest in the industry; fewer firms would innovate; American leadership in world markets would erode. The greater the taxes on interstate telecommunications services, the greater the economic pressures for both consumers and businesses to seek to avoid these taxes through unregulated technologies.

Congress did not envision substantial new taxes on interstate or other telecommunications services as a result of the Telecommunications Act of 1996, nor did it envision price increases -- much less substantial price increases -- in any
telecommunications market.\(^2\) The harm to consumers from increases in universal service taxes is not just the direct expense of the taxes themselves. Prof. J. Hausman of MIT has estimated that consumers lose a total of more than $2 in consumer benefits for every dollar paid in taxes on long-distance services.\(^3\) Do American households really want to lose approximately $14 billion annually in consumer benefits -- or approximately $140 annually per household -- to support Section 254?\(^4\)

Preserving Universal Service

The proper path for the FCC to interpret Section 254 is not an easy one. But we should begin with the old adage: Do no harm. We should seek to do no harm to the consumers who currently benefit from federal universal service programs, and we should build on that program in a prudent manner that does not overtax and harm telecommunications consumers.

The Commission has compounded untenable policy and taxes with untenable promises. Some potential universal service beneficiaries have been "promised" enormous and unending benefits, long before there are actual revenues for these programs and long before other potential universal service beneficiaries have voiced their concerns. What has ensued is an unfortunate confrontation among various potential beneficiaries from universal service. Simply stated, the potential pot of revenue that the FCC can collect for universal service from fees on interstate services is limited. And the potential beneficiaries are locked in a struggle to see who will receive the lion's share of the benefits. Yet some parties have been promised in advance large and unsustainable amounts of money to the exclusion of other parties.

Authority To Establish The Size And Funding Mechanisms For Universal Service

The May 1997 universal service order promises the Schools and Libraries Corporation, an entity of questionable legal status,\(^5\) $2.25 billion annually. This target is not written in statute nor is it an amount that was demonstrably contemplated by Congress. Moreover, it is an arbitrary target, one that the FCC could equally well, and with equal


\(^4\) These figures are based on an incremental tax rate of 10 percent applied to a $70 billion dollar base for interstate services, and a $2 loss in consumer welfare for each dollar of tax.

\(^5\) Letter from Robert P. Murphey, General Counsel, United States General Accounting Office (GAO), to The Honorable Ted Stevens, United States Senate, February 10, 1998.
legal authority, have set at $22.5 million, or $225 million, or $22.5 billion, or $225 billion. Does the FCC acting alone have the legal authority to set arbitrary targets for SLC spending and then establish tax schemes to fund those targets? Sadly, despite the enormous political, economic, and technological consequences of these decisions, the answer appears to be "yes."

These decisions would be large ones even for Congress, much more for the FCC, to make. The FCC must be prudent in making these decisions, and extraordinarily cautious about making promises. Our only legal means of fulfilling large promises is to impose devastating "fees" on the interstate telecommunications markets. Congress, in contrast, has other means of financing programs and fulfilling large promises. In many ways, perhaps it would be better for Congress rather than the FCC to make many of the large decisions about the contours of universal service. Current law, however, appears to place these decisions with the FCC. We should work within the law of Section 254, prudently, and with the close advise of Congress. Only in that way can Section 254 work.

The FCC has enormous power under Section 254. The wisest exercise of power, whether in this section, or in other areas of law, is self-restraint rather than profligacy. We must have a plan to implement Section 254 that makes sense. It must preserve universal service without imposing devastating taxes. It must focus on high-cost, rural issues. It must have clearly more benefits than harm. All of this the FCC can and should do on its own. To the extent that more ambitious and costly programs are required, the FCC should work with Congress to find appropriate funding mechanisms rather than developing them on our own.

Specific Legal Concerns

Before elaborating on my legal concerns with the majority's universal service plan, I would like to make one point clear. I am committed to the full and proper implementation of all sections of the Communications Act, including Section 254. I understand the great interest of Congress and the American people in universal service. I am not persuaded, however, that the steps the Commission has taken to date meet all of the requirements of Section 254.

Below I describe in more detail a few of my specific concerns about how the Commission has not fully met the requirements of Section 254. The discussion below is not intended to be exhaustive of all of the shortcomings of past Commission interpretations of Section 254. The discussion, however, is a sample of issues that should be -- but are not

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addressed in the report to Congress. The specific topics below answer, in part, one or more of the questions the Commission is required to answer in its report to Congress.

I. THE DEFINITION OF TELECOMMUNICATIONS -- FLOATING "UNSINKABLE" PROPOSALS

In the current report, the majority introduces vague proposals to increase the number of entities that would be required to contribute to universal service. Not only are these suggestions -- each of which involves the Internet -- not based on a thorough record, they are inherently premature given the FCC's inadequate treatment of broad universal service policies and the nascent state of IP telephony. Further, each suggestion is problematic in its own right; they have been floated, and now they will sink.

There is merit, of course, to the concern that the Internet could affect universal service and our general regulatory policies. The FCC must, however, first develop a viable plan for universal service and, then, work closely with Congress to implement long-term public policy solutions that take the Internet into account.

Specifically, the FCC suggests that contributions could be collected from some providers of so-called "phone-to-phone" IP telephony service and self-providers of Internet backbone transmission capacity. These proposed "solutions," however, are mere band-aids for a dying patient. I am concerned that such rules, could be technically infeasible, could discourage further facilities build-out, and could seriously undermine our international telecommunications policies.

Under one suggestion, the Commission implies that it would classify providers of phone-to-phone IP telephony as telecommunications carriers. Such a regulatory framework is not only artificial and fragile, but also exposes the futility of assessing fees on specific Internet content. Because this framework would be inconsistent with current treatment of similar services, consumers and industry quickly would develop methods to avoid any new fees.

In the first place, the Commission's definitions of "phone-to-phone" IP telephony (which would be subject to the tax) and "computer-to-computer" IP telephony (which would go tax-free) beg the question: what is a phone and what is a computer? On one hand, the FCC suggests that the key criterion would be transparency to the consumer: if a consumer believes he is using a phone and making a phone call, then it's a phone and he's making a phone call. This analysis ignores, however, the fact that devices that look and function like telephones already are capable of converting voice to IP packets; a conversion that, under the FCC's proposed framework, would make these devices "computers." In essence, these new "phones" are computers on the inside. But it is absurd to impute to consumers knowledge of the technology inside CPE. Consumers buy for function, not internal technology.

At base, the Commission's analysis hinges on where the conversion to IP packets takes place. Neither can this construct withstand close scrutiny. A "conversion" already
occurs in ordinary phones: sound energy is converted into electrical energy. In most phones, the signal exiting the phone varies analogously to variations in the input sound. In ISDN phones, the signal is further converted from an analog electrical signal into a PCM encoded digital bit stream before being sent to the network. As noted above, it would be a trivial technical matter for a new breed of phones to convert the analog signals to IP packets, instead of a PCM encoded digital bit stream. Such phones could look like and, for the consumer, behave exactly like ordinary ISDN telephones. Under the FCC's definition, however, these new IP packet devices would be "computers."

Thus, if it emits a PCM encoded digital bit stream, it's a phone and it's taxed; if it emits a stream of IP digital packets, it's a computer and it's not taxed.

The results of rules based on this framework are easy to predict. A new market for IP phones will spring up and replace today's phone-to-phone IP telephony service, which relies on remote "gateways" to make the voice-to-IP conversion. The proposed rules simply would force the conversion to IP packets further out in the network, from a limited number of gateways to all CPE.

Are these results inherently bad? Perhaps not, if they had been reached through consumer choice in the market. Consumers simply would have spoken in favor of distributed IP protocol conversion in much the same way they spoke in favor of distributed computing a decade ago. But in this case, arbitrary FCC policy and regulatory fiat, not consumer choice, would control.

The majority also suggests that the FCC might require universal service contributions from ISPs that build their own backbone facilities. The Commission, however, has questionable statutory authority to reach this result. The Act says that only "telecommunications carriers" or "other providers of interstate telecommunications" may be required to contribute, but ISPs -- which are not carriers -- are not in the business of selling telecommunications capabilities to third parties and, thus, it is difficult to understand how they could be required to contribute.

From an international telecommunications perspective, assessing specific telecommunications service fees on IP telephony would have severe consequences for our international policy and market goals. Not only would we invite burdensome Internet regulation from all over the world, we would destroy our most powerful weapon against excessive settlement rates.

For over a year now, the United States has made it a matter of national policy to encourage other nations to eschew Internet regulation and taxation. Ira Magaziner, on behalf of President Clinton, won broad bipartisan support for the report in which he concluded that the Internet should remain free of such burdens. To introduce our own form of Internet regulation and fees at this point would be the height of hypocrisy and would set a terrible precedent for other countries to follow.

Almost immediately, IP telephony would be eliminated as a competitor to foreign telecommunications monopolies that hold international settlement rates so high in so many
countries. Like international call-back, IP telephony could have drive down costs much faster than inter-government negotiations and would have been perhaps the best lever to bring rates down to benchmark levels. The United States sends billions of dollars abroad as a result of unfavorable international settlement rates. IP telephony could save American rate-payers billions of dollars, possibly a significant portion of the size of a federal universal service fund.

In sum, serious issues have been raised regarding the impact that Internet applications have on public policy regulation that should be explored more fully. But the majority's plans for IP telephony regulation would not be technically feasible, and would have a serious detrimental effect on our international telecommunications agenda. Similarly unfounded, the majority's plan to assess fees on the self-provisioning of capacity would discourage transmission capacity build-out and would cause administrative burdens. I am concerned that what motivates the majority to these conclusions is a desire to prevent industries from "escaping their obligations" to be regulated. Majority Report, at 4. As I have indicated elsewhere, concerns of competitive neutrality should urge us to further deregulate the burdened industries already before us. This report is not a call for this agency to slap its old regulations on new technologies but, rather -- as a matter of utmost urgency -- to reevaluate seriously its universal service policies to meet all legal, policy, and technical requirements.

II. IN ESTABLISHING THE CURRENT UNIVERSAL SERVICE STRUCTURE, THE COMMISSION HAS FAILED TO MEET ITS STATUTORY MANDATE AND HAS EXCEEDED ITS LEGAL AUTHORITY.

Under the 1996 Act, the Commission's primary universal service responsibility was to establish an explicit and sufficient universal service fund for rural America. The Commission's failure to establish such a fund while creating a complex administrative structure for the schools and libraries and rural health care programs violated the Act's clear focus and intent. Moreover, the Commission exceeded its legal authority by creating the Schools and Libraries and Rural Health Care Corporations.

A. In their zeal to implement a new universal service program for schools and libraries, the Commission failed to meet its statutory mandate of developing an explicit and sufficient support system for rural and high cost telephone users in a timely manner.

Under the 1996 Act, the Commission's primary universal service responsibility was to develop an "explicit and sufficient" support system that would ensure support for local telephone users in high cost and rural areas to replace the complex system of implicit subsidies that could exist in a world without local competition. The expeditious creation of a new subsidy system was not only critical for preserving the goals of universal service, but

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7 See 47 USC 254(e) (establishing that universal service support devised by the Commission "should be explicit and sufficient to achieve the purposes of this section.")
also necessary to provide for a fair transition to competition in the local markets. As such, Congress set a strict time-frame for developing this plan -- the Joint Board was required to make a recommendation within 9 months of enactment, and the Commission was then required to complete its "proceeding to implement the recommendations" within 15 months after enactment.8

Despite this strict timetable, the Commission decided it needed further time to address this aspect of universal service. The Commission needed more time to develop complex models and complicated plans to provide federal support, postponing until January 1, 1999, the start of any new subsidy system. In so doing, the Commission also failed to make explicit all implicit support. Indeed, in this proceeding, the majority now refer to the Commission's somewhat arbitrary decision to provide federal support for only 25% of costs as merely a "placeholder" and announce their intention to initiate a new proceeding, seeking additional proposals and comments on alternatives to the 25/75 high cost regime. I support the Commission's acknowledgement that this placeholder, and the accompanying complex modeling process in which we have been engaged, is not tenable. I also support reexamining these issues. But I fault the majority for failing to acknowledge that the prior Commission's adoption of this mere "placeholder" and the ensuing commitment of this Commission to continue to work with the states to develop a plan and our openness to new options more than two years after the passage of the Act was not what Congress envisioned or required. Rather, Congress intended -- and the 1996 Act required -- the Commission to focus their efforts on resolving this problem first, as opposed to finding sufficient support for new programs.

Indeed, this problem has only been made worse by the Commission's emphasis on other pieces of the universal service puzzle. It would be bad enough if the FCC had simply failed to address all universal service issues in the time frame required by Congress. But instead, the Commission has addressed some universal service issues but not others, and certainly not the pieces of universal service that were of primary concern to Congress. For example, the Commission has earmarked $2.25 billion for the new schools and libraries program and has ensured that that program start at the "earliest feasible date."9 In contrast, the FCC has yet to finalize new rules addressing the larger and more complicated universal service program for all high-cost areas.

By implementing these entirely new programs before establishing the explicit support mechanisms, the Commission has increased the pressure on the current implicit subsidy system without justification. I believe that the Commission's desire to establish the schools and libraries program, but not the other aspects of universal service, as quickly as possible was at best arbitrary. While having certain political benefits, it was certainly not what the 1996 Act required or what Congress intended.

8 47 USC section 254(a)(2).
9 Chairman Kennard's response to Chairman Bliley, December 3, 1997.
In effect, I believe that the Commission may have "put the cart before the horse" by failing to address the rural, high cost issues in a timely manner. The failure of the Commission to address these high cost issues may also have adverse market effects. By failing to make all subsidies explicit, the Commission continues to hinder the development of local competition. Moreover, to the extent that competition in the local markets erodes the implicit state subsidies prior to the Commission implementing a final universal service fund, it will place unintended additional pressure on some local rates.

In that vein, I also remain concerned that some of the actions that the Commission has taken have not only failed to address the rural, high cost issues, but may have may have threatened the integrity of the high cost fund. In responding to the first two quarters contribution rates, I objected to the Commission's continued failure to take into account the reality of uncollectibles. Since the first of the year, the Universal Service Administrative Company ("USAC") has had difficulty collecting all of its billed amounts for universal service. In a memorandum to the USAC Board of Directors dated February 24, 1998, Ed English, USAC Secretary and Treasurer estimated that, based on collections received through February 23, 1998, there was a shortfall for the high cost fund distribution to be made on Friday, February 27, 1998, in excess of $10,000,000. This shortfall was primarily due to some instances of nonpayment and the Common Carrier Bureau's decision last December to reduce the estimate of uncollectibles to zero. USAC originally recommended, and the contribution factors initially set forth in the Common Carrier Bureau's November 13 Public Notice included, an adjustment for possible uncollectible contributions. Such a minor adjustment was reasonable for these new programs. The final Order released December 16, 1997, however, included no adjustments for uncollectibles. Despite the fact that the First Quarter has had total uncollectibles in excess of $12 million, the Bureau's Second Quarter recommendations followed the December First Quarter Order that expressly "includ[ed] no adjustments for uncollectibles."

Why would the Commission continue with this fallacy of 0% uncollectibles? Because the reduction of uncollectibles to zero was part of a larger scheme by the Commission to "reduce the [universal service] charges after the carriers said the fee could lead to higher rates and after AT&T and MCI threatened to specify the charge on the bills they send to customers." I am concerned that, in the Commission's zeal to implement the schools and libraries program on January 1, 1998, despite specific Congressional requests that we delay commencement until the impact of our actions could be more fully assessed, the Commission has taken actions that have adversely impacted the high cost fund.

In conclusion, I would agree with one recent commentator who observed, that, the Commission "should set a majority of the universal service funds aside for furnishing basic telephone service to areas of high cost and poverty. It is more important for all Americans

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10 Later estimates placed the shortfall for the high cost fund at closer to $5 million.

to have access to basic telephone services than for a student to have limited Internet capabilities.\textsuperscript{12}

B. The Commission exceeded its legal authority and the intent of Congress by creating the Schools and Libraries and Rural Health Care Corporations.

On February 10th, 1997 in response to a request from Senator Stevens, the General Accounting Office ("GAO") released an analysis of the Commission's actions in establishing the Schools and Libraries and Rural Health Care Corporations.\textsuperscript{13} GAO concluded that the Commission lacked the statutory authority to create these corporations and that, by requiring NECA to establish these corporations without specific statutory authority, the Commission violated the procedural requirements of the Government Corporation Control Act.

The Government Corporation Control Act requires that agencies have specific legislative authority in order to "establish or acquire" a corporation to act as an agent. The purpose of this requirement was to restrict the creation of all government-controlled, policy-implementing corporations.\textsuperscript{14} According to GAO, the legislative history indicates that Congress was attempting to make all such corporations more accountable.\textsuperscript{15}

There can be little doubt that the schools and libraries and rural health care entities act as agents for and at the direction of the Commission. The Commission ordered that these entities be created and established their specific purpose; the Chairman of the Commission selects or approves the entities' boards of directors; the size and composition of the board and the terms of office for its members are set by the Commission; the FCC Chairman must approve the removal of any director as well as a resolution to dissolve the corporations; the CEO must be approved by the Chairman; and the authority to enter into contracts must be in compliance with Commission rules.

The Commission unsuccessfully attempted to persuade GAO that it did not actually create these corporations, but merely directed another entity to do so pursuant to its general authority under section 4(i) of the Act. As GAO concluded, however, "the Control Act's requirements cannot be avoided by directing another entity to act as incorporator."\textsuperscript{16}

Moreover, I would point out that it is this type of expansive reading of section 4(i) that seems to lead this Commission astray from its clear statutory duties and limitations. If


\textsuperscript{13} Letter from Robert P. Murphey, General Counsel, United States General Accounting Office, to The Honorable Ted Stevens, United States Senate, February 10, 1998. ("GAO Report")


\textsuperscript{15} GAO Report at 6-7.

\textsuperscript{16} Statement of Robert Murphey, General Counsel of GAO, Before the Subcommittee on Telecommunications, Trade and consumer Protection, Committee on Commerce, House of Representatives, March 31, 1998.
section 4(i) provided such a general exemption from the Control Act, then what limitations on the Commission's authority would the Control Act provide -- or could the Commission merely delegate any of its functions to a separate corporation without explicit Congressional approval?

Finally, GAO also noted that, as private corporations, these entities are not subject to the types of federal obligations imposed on other entities in such areas as employment practices, procurement and contracting, lobbying and political activities, ethics, and the disclosure of public information. If these entities had been authorized by statute, Congress would have had the opportunity to specify which federal laws should apply. But, without such an opportunity, Congress has no direct oversight over these corporations.\textsuperscript{17} It was just this type of lack of accountability that lead Congress to enact the Control Act. Recently, the House Judiciary Committee also expressed its concerns about whether the corporations were established legally, and whether the administration of these programs "raises questions of accountability."\textsuperscript{18}

In addition, a revised administrative structure would be administratively more efficient. In the most recent Public Notice announcing the Second Quarter contribution factors, the Commission also released the administrative expenses proposed by the USAC, the Schools and Libraries Corporation ("SLC") and the Rural Health Care Corporation ("RHCC"). In objecting to the December Contribution Order, I noted that in the first quarter SLC and RHCC "were each allocated more than twice as much money to administer certain aspects of those support mechanisms than is allocated to administer the substantially larger high cost fund." In the current Notice, this disparity continues to grow, with the SLC being allocated almost four times as much money for administrative expenses. Indeed, the SLC's administrative budget increases from $2.7 million to $4.4 million or by 65\% in just one quarter. This change is the equivalent of an additional $18,000 every day for the next 90 days. I cannot endorse this disparity, or this magnitude, while knowing that many members of Congress are equally concerned with high cost areas as with schools and libraries and rural health care.

In conclusion, I believe that the Commission should have acknowledged already these problems with its current administrative structure and moved to restructure the administration of universal service to comply with the law.

C. To the extent that the universal service program is requiring contributions based on telecommunications service revenues but using the funds raised to provide support for non-telecommunications services (i.e. inside wiring and internet services),

\textsuperscript{17} It is also unclear to what extent the Commission even has direct oversight over these corporations. For example, in response to questions before the House Telecommunications Subcommittee, it was unclear whether or not the Commission had authority to approve -- and also disapprove -- of these entities budgets including the salaries of specific positions. See Transcript of Hearing before the Telecommunications, Trade, and Consumer Protection Subcommittee of the House Committee on Commerce, March 31, 1998.

\textsuperscript{18} Letter from Members of the Judiciary Committee's Subcommittee on Commercial and Administrative Law to Chairman Bliley, March 31, 1998.
the Commission has established a fee to promote the general welfare (i.e. a "tax") and in so doing has exceeded its legal authority.

I am concerned that the universal service contributions, at least to the extent they are providing support for non-telecommunications services, may not even be fairly characterized as mere "fees." In general, taxes can be distinguished from administrative fees by the determining who is the recipient of the ultimate benefit. Taxes are levied in disregard of the benefits they may bestow on the taxpayer. As the Supreme Court has held, and the D.C. Circuit has further explained, a "fee" is a payment "incident to a voluntary act, e.g., a request that a public agency permit an applicant to practice law or medicine or construct a house or run a broadcast station. The public agency performing those services normally may exact a fee for a grant which, presumably, bestows a benefit on the applicant, not shared by other members of society." 19

To the extent that the telephone network can be considered a single telecommunications system, all users benefit from that system being capable of serving others. What good is it to be able to make calls if no one can receive them? There are no such direct benefits to telephone customers, however, from the provision of Internet services to and inside wiring of schools and libraries. With respect to the schools and libraries program, the funds raised may be used to support general services that are not classified as telecommunications. Given the lack of a quid pro quo between the service providers and the Government in the context of universal service, there may not be a "sufficient nexus between the agency service for which the fee is charged and the individuals who are assessed." 20 In addition, these contributions do not meet the traditional definition of a fee because they are premised not on the use of some identifiable government service but rather purely on ability to pay. According to the Supreme Court, taxation is marked by the calculation of liability "solely on ability to pay, based on property or income." 21 Here, of course, the contribution amounts are based entirely on revenues. In addition, because they are not related to any benefits conferred, they carry the Commission "far from its customary orbit and puts it in search of revenue in the manner of an Appropriations Committee of the House." 22

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19 National Cable TV Ass'n v. United States, 415 U.S. 336, 340-41 (1974)(construing Independent Offices Appropriations Act); see also National Cable TV Ass'n v. FCC, 554 F.2d 1094, 1106 & n.42 (D.C. Cir. 1976) ("A 'fee' is a payment for a special privilege or service rendered, and not a revenue measure.") (citing cases).

20 National Cable TV Ass'n v. FCC, 554 F.2d at 1104.

21 National Cable TV Ass'n v. United States, 415 U.S. at 340; see also National Cable TV Ass'n v. FCC, 554 F.2d at 1107 ("[A] fee, in order not to be a tax, cannot be justified by the revenues received. . .").

22 National Cable TV Ass'n v. United States, 415 U.S. at 341.
The Supreme Court has stated that only Congress may levy taxes. I agree with the concerns recently expressed by several members of the House Judiciary Committee that Congress retain "direct authority over and responsibility for any tax burden on the public."

III. THE COMMISSION ERRED BY ALLOWING UNIVERSAL SERVICE SUPPORT TO BE PROVIDED FOR NON-TELECOMMUNICATIONS SERVICES AND TO NON-TELECOMMUNICATIONS CARRIERS.

The majority's opinion affirms the prior Commission's finding that, under the Act, direct financial support can be provided for non-telecommunications services, such as inside wiring and Internet service. Such an interpretation is at odds with the clear reading of the statute. The 1996 Act defines universal service in general as "an evolving level of telecommunication services." Although subsection c(3) does allow the Commission to designate additional special services for support to schools and libraries, that provision is still limited by the overriding definition of c(1). Moreover, subsection c(3) expressly limits these additional designations as only applicable "for the purposes of subsection (h)." As subsection (h) is itself entitled "Telecommunications Services For Certain Providers," the Act's intention to limit universal service discounts to some form of telecommunications service seems self-evident. In addition, one of the fundamental principles that Congress identified as necessary for the preservation of universal service was "Access to Advanced Telecommunications Services for Schools, Health Care, and Libraries." Thus the clearest reading of the statute is that Congress intended that the subsequent reference to "services" in section 254(c)(3) refers to the general reference to "telecommunications service" in b(6), c(1) and (h).

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23 See National Cable TV v. United States, 415 U.S. at 340 ("Taxation is a legislative function, and Congress . . . is the sole organ for levying taxes."); see also Air Transport Ass'n of America v. Civil Aeronautics Board, 732 F.2d 219, 220 (D.C. Cir. 1984)("[T]axes . . . generally may be levied only by Congress.").

24 Letter from Members of the Judiciary Committee's Subcommittee on Commercial and Administrative Law to Chairman Bliley, March 31, 1998.

25 47 USC 254(c)(1) (emphasis added).

26 47 USC section 254(c)(3).

27 47 USC section 254(h).

28 See, United States v. Wallington, 889 F.2d 573, 577 (5th Cir. 1989) ("section heading enacted by Congress in conjunction with statutory text is considered to "come up with the statute's clear and total meaning.") (citations omitted).

29 47 USC section 254(b)(6).

30 See also, 47 USC 254(c)(1) ("The Joint Board in recommending, and the Commission in establishing, the definition of the services that are supported by Federal universal service support mechanisms shall consider the extent to which such telecommunications services . . .")
I acknowledge that the definition of universal service for schools and libraries is broader pursuant to section c(3) than for other aspects of universal service. But even this broader definition must still come within the rubric of telecommunications services. Thus, for example, the Commission could designate ISDN lines or other types of advanced telecommunications facilities that include expanded bandwidth as a telecommunications service that would not qualify for general universal service support, but might come within the special telecommunications services contemplated by Congress for schools and libraries under section (c)(3).

In addition, limiting the Commission’s discount program to telecommunications services is consistent with Commission regulatory precedent. Internal connections are owned and maintained by the customer -- the telecommunications carrier is not responsible for them. The Commission has previously indicated that such internal connections are not telecommunications services and deregulated these facilities -- including their purchase, installation, and maintenance. Similarly, as I discussed earlier, Internet access has been traditionally treated as an information service by the Commission.

Similarly, the Commission erred by allowing non-telecommunications carrier to receive support payments from the discount program established under sections 254(h)(1)(B) and 254(h)(2). The Commission’s decision violates the plain language of the statute. Section 254(h)(1)(B) unambiguously states that "a telecommunications carrier providing service under this paragraph shall . . ." offset the discount from their universal service contribution obligation or receive reimbursement. Thus, Congress expressly specified that only telecommunications carriers could receive support for providing discounted services to schools and libraries. Some have argued that not allowing other entities who can provide a similar service to receive support is inequitable. Congress explicitly adopted this distinction, however, and for good reason -- because Congress only obligated telecommunications providers to contribute to the discounted service program in the first place.

The majority also argues that the competitive neutrality demands of 254(h)(2), along with section 4(i), require that the Commission allow non-telecommunications carriers to receive support. There are several problems with this argument. First, typical statutory construction requires that specific directions in a statute trump any general admonitions. Section 254(h)(1)(B) expressly limits recipients of the schools and libraries fund to telecommunications carriers, and as it is more specific than 254(h)(2) it direction should take precedence. In addition, the provisions of section 254(e) -- which require that only eligible telecommunications carriers be able to receive federal universal service support -- apply fully to section 254(h)(2). Thus, the requirements for being able to receive funds in

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32 47 USC section 254(h)(1)(B).
conjunction with section 254(h)(2) are actually stricter -- a recipient would have to be designated an eligible telecommunications carrier.

In addition, the majority argues that reading section 254(e) to limit section 254(h)(2), when it does not apply to section 254(h)(1)(B), appears inconsistent with the relative directives of those provisions. The majority further argues that to "allow support for Internet access and internal connections only when provided by a telecommunications carrier would reduce the sources from which schools and libraries could obtain these services at a discount." However, the majority's entire competitive neutrality argument is built upon a misreading of section 254(h)(2)(a)'s mandate. That provision permits the Commission to establish competitively neutral rules "to enhance, to the extent technically feasible and economically reasonable, access to advanced telecommunications and information services." It does not provide for an explicit discount program like the one envisioned in section 254(h)(1)(B). Indeed, if both provisions were meant to establish a single discount program for both telecommunications and non-telecommunications providers for telecommunications and non-telecommunications services, Congress would not have differentiated between the two. Instead, Congress specifically provided for something less than a discount program -- competitively neutral rules for enhanced access -- in section 254(h)(2)(A).

IV. IN ESTABLISHING THE REVENUE BASE FOR CONTRIBUTIONS TO THE UNIVERSAL SERVICE FUND AND DICTATING THE DISCOUNT RATE, THE COMMISSION IMPERMISSIBLY ENCROACHED ON STATES' RIGHTS AND OBLIGATIONS.

Section 2(b) of the Communications Act creates a system of dual federal-state regulation for telecommunications. In essence, the Act establishes federal authority over interstate communications services while protecting state jurisdiction over intrastate services. I believe that the Commission's decision to look to intrastate revenues to determine federal universal service support and to establish a minimum discount for intrastate telecommunications services for schools and libraries impermissibly encroaches on state's rights and violates the Act's federal-state dichotomy.

A. The Commission erred in assessing contributions to the schools and libraries and rural health care programs based on intrastate revenues because any federal assessment on intrastate revenues is beyond the Commission's authority.

I object to the majority's decision to endorse the disparate funding of schools and libraries over the high cost fund. I cannot support the fact that the contributions for the schools, libraries, and rural health care support mechanisms are based not only on interstate but also on intrastate revenues. The legality of this approach to calculating contributions is highly questionable. As I read the Communications Act, it does not permit the Commission to assess contributions for universal service support mechanisms based on intrastate revenues.

33 47 USC section 254(h)(2)(A).
revenues. Rather, the Act makes clear that charges based on such revenues are within the exclusive province of the States.

In the Communications Act, Congress explicitly set forth a jurisdictional principle to govern its application. Section 2(b) of the Act provides that "nothing in this Act shall be construed to apply or to give the Commission jurisdiction with respect to . . . charges, classifications, practices, services, facilities, or regulations for or in connection with intrastate communication service by wire or radio of any carrier."\(^{34}\) The Supreme Court has explained that by this section the Act "not only imposes jurisdictional limits on the power of a federal agency, but also . . . provides its own rule of statutory construction."\(^{35}\)

By "fenc[ing] off from FCC reach or regulation intrastate matters,"\(^{36}\) section 2(b) works, together with other provisions, to establish the Act's system of dual federal-state regulation for telecommunications. In essence, the Act creates federal authority over interstate communications services while protecting state jurisdiction over intrastate services.\(^{37}\) To be sure, there are exceptions to section 2(b)'s jurisdictional limitation.\(^{38}\) These exceptions are explicit. Section 254, however, is not included in that group and nothing else in the Act exempts section 254 from the operations of 2(b).\(^{39}\) The statutory prohibition against federal jurisdiction over intrastate communications thus fully applies to section 254.

The Supreme Court has squarely held that the specific limit on the Commission's jurisdiction contained in section 2(b) trumps other parts of the Act that confer undifferentiated grants of substantive authority to the Commission. In Louisiana PSC v. FCC, the Commission argued that, notwithstanding section 2(b), it could require states to follow federal depreciation rules for purposes of intrastate ratemaking because section 220 authorized the Commission to set depreciation rates and did not expressly prohibit the application of such rates to intrastate pricing.

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34 47 U.S.C. section 152(b)(emphasis added).


36 Id. at 370.

37 See id., at 359 (internal citations omitted) ("[T]he Act grants to the FCC the authority to regulate 'interstate and foreign commerce in wire and radio communication' while expressly denying that agency 'jurisdiction with respect to . . . intrastate communications service.").

38 See 47 U.S.C. section 152(b) ("Except as provided in sections 223 through 227, inclusive, and section 332, and subject to the provisions of section 301 and title VI . . .").

39 In fact, as the dissenting state members of the Joint Board explained, Congress considered and rejected language that would have added section 254 and neighboring provisions to the list of exceptions to 2(b). See Dissenting Statement of Commissioners Kenneth McClure, Missouri Public Service Commission and Laska Schoenfelder, South Dakota Public Utilities Commission, April 21, 1997, at 2.
The Court disagreed. It ruled that the Commission was powerless to extend its rules into the intrastate context: "While it is, no doubt, possible to find some support in the broad language of the [depreciation provision] for [the Commission's] position, we do not find the meaning of the section so unambiguous or straightforward as to override the command of section 152(b) that 'nothing in this chapter shall be construed to apply to or give the Commission jurisdiction' over intrastate service."  

The analogy to this situation is clear. Just as section 220's general grant of authority over depreciation rates did not empower the Commission to regulate intrastate aspects of depreciation, neither does section 254's authorization to establish a universal service fund allow the Commission to assert jurisdiction over intrastate revenues in implementing that fund. In short, it is irrelevant, under Louisiana PSC that section 254 does not itself forbid the Commission from reaching into matters relating to intrastate service. That is why Congress included section 2(b) in the Act.

Nothing in section 254 of the Act, the provision that deals with the substance of universal service, trumps the express limitation on the Commission's authority in section 2(b). Quite the contrary, section 254 replicates the general scheme of dual federal-state power that characterizes the Act as a whole.

Section 254(d) speaks to federal authority over universal service, authorizing the Commission to establish a federal universal service fund subsidized by interstate carriers: "Every telecommunications carrier that provides interstate telecommunications services shall contribute on an equitable and nondiscriminatory basis, to the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service."  

Section 254(f), in turn, addresses the role of the states in universal service. It carefully preserves state authority to create support mechanisms not inconsistent with any federal program and leaves to the states the regulation of intrastate carriers: "Every telecommunications carrier that provides intrastate telecommunications services shall contribute, on an equitable and nondiscriminatory basis, in a manner determined by the State to the preservation and advancement of universal service in that State."  Both the language and the structure of sections 254(d) and 254(f) clearly indicate that Congress intended that both federal and state governments have complementary, but separate, roles in providing universal service.

This view of dual federal and state roles is further supported by section 254(h). That provision expressly provides states with the responsibility of determining the rates schools and libraries would pay for discounted intrastate services: "The discount shall be an amount that the Commission, with respect to interstate services, and the States, with respect to intrastate services, determine is appropriate and necessary to ensure affordable access to and...

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40 Louisiana PSC v. FCC, 476 U.S. at 377.
41 47 U.S.C. section 254(d).
42 Id. section 254(f).
use of such services by such entities.\textsuperscript{43} Section 254(h) provides no specific authority to overturn section 2(b)'s general federal-state division; nor does it contemplate a separate federal fund that draws on intrastate revenue. Rather, 254(h) indicates that Congress envisioned a separate state fund, which must draw on intrastate revenues, to provide the discounted rates for intrastate telecommunications services to schools and libraries.\textsuperscript{44}

Nowhere in section 254 did Congress require carriers providing intrastate services to contribute to any federal support mechanism. Thus, section 254, read in light of the express directive of section 2(b), precludes the Commission from asserting jurisdiction over revenues based on intrastate activities. Although section 254 does not explicitly prohibit the Commission from calculating the contributions of interstate service providers based on intrastate revenues, such a practice would undermine the dual scheme established in section 254 and, in any event, violate section 2(b).

The assertion of federal authority over intrastate revenues impinges upon the states' ability to establish their own universal service funds, which Congress expressly provided for in section 254(f) and envisioned in Section 254(h). If the federal government has first rights to intrastate revenues, there will be a smaller pool of resources for the states to draw upon in establishing their own universal service programs. Although in theory federal and state regulatory bodies could tax away all intrastate revenues in order to support universal service, the reality is that the amount of intrastate revenue that can be allocated for this purpose is limited. When Congress went to the trouble to authorize state universal service plans, it clearly meant for those plans to be fiscally viable and, therefore, to have an independent funding base.

Conversely, as long as the federal program applies to intrastate revenues, any state plan that relies on that source of funding would violate section 254(f). That section requires that state plans cannot "rely on or burden federal universal service mechanisms." Surely Congress did not mean to prohibit states from drawing on intrastate revenue; indeed, they expressly authorized it in Section 254(f). But as long as there is overlap between funding sources for federal and state service plans, any state plan interferes with one of the federal sources of revenue, thus "burdening" the federal mechanisms. Limiting the Commission to interstate revenues and eliminating the overlap, however, solves this problem.

Apart from undermining the purpose of section 254 to allow for viable state plans that complement federal universal service efforts, as described above, the Commission's exercise of jurisdiction over intrastate revenues contravenes the plain language of section 2(b).

\textsuperscript{43} 47 U.S.C. section 254(h).

\textsuperscript{44}Section 254(k) similarly provides an express division of authority between "the Commission, with respect to interstate services, and the States, with respect to intrastate services" regarding cost allocation rules and accounting safeguards. 47 U.S.C. section 254(k).
B. The Commission's decision to assess contributions to the schools and libraries and rural health care programs based on intrastate revenues, but allow recovery only on interstate services, is also in error as it fails to meet the Commission's mandate of equity and nondiscrimination.

In addition, I believe that the manner in which the FCC has implemented these provisions violates the statutory requirement that the funding mechanisms for universal service be equitable and nondiscriminatory. Section 254(b)(4) embodies the general principle that contributions to universal service must be equitable and nondiscriminatory. But the federal assessment of intrastate revenues creates a competitive disadvantage for interstate telecommunications carriers that provide intrastate services. It does so in two ways.

First, these carriers also compete, in local markets, against purely intrastate carriers. The interstate carriers, however, are forced to pay more in universal service fees because they have federal obligations that their intrastate competitors do not. As the dissenting state members of the Joint Board explained, "a carrier with intrastate revenues of a billion dollars a year would be subject to no federal USF assessment at all, while a carrier with $999,999,999.00 of intrastate revenue and one dollar of interstate revenue would be subject to assessment for the whole billion dollars of its revenue."\(^45\)

In addition, the carriers that have both interstate and intrastate revenues are also at a competitive disadvantage vis-a-vis their purely interstate competitors. While the Commission bases the universal service contribution on both interstate and intrastate revenues, it limits a carrier to recovering the entire contribution through interstate revenues. As it has no jurisdiction over intrastate rates, the Commission cannot ensure that carriers would be able to recover the intrastate portion of the contribution in their intrastate rates. Thus, a carrier is required to recover assessments on its intrastate revenues in its prices for interstate services. This recovery mechanism discriminates against carriers who derive a significant amount of their revenues from intrastate activities, as their recovery rates for interstate services would be higher than their purely interstate counterparts.

Thus, the scheme that the FCC has established adversely effects the ability of interstate providers of intrastate services to compete with purely intrastate providers and with purely interstate providers. Such disparities cannot meet the section 254 requirements that contributions to universal service be equitable and nondiscriminatory.

In conclusion, I reiterate my support for the need to find funding sufficient to support the federal universal service fund. I recognize that respecting State authority over intrastate revenues may make this responsibility more difficult; the ends, however, cannot justify the means.

C. The Commission impermissibly encroached on the rights of states to set discounts for intrastate telecommunications services.

Section 251(h)(1)(B) unambiguously places the role of establishing discounts for eligible intrastate telecommunications services in the hands of the states:

The discount shall be an amount that . . . the States, with respect to intrastate services, determine is appropriate and necessary to ensure affordable access to and use of such services by such entities.46

Congress plainly envisioned the continued federal-state jurisdictional divide embodied in section 2(b) to be followed in establishing discount rates for telecommunications services to schools and libraries. Nevertheless, the Commission has mandated a particular discount that states are required to adopt.

In the May 7, 1997, Order, the previous Commission required "states to establish intrastate discounts at least equal to the discounts on interstate services as a condition of federal universal service support for schools and libraries in that state."47 Section 254 does not provide this Commission with such express authority. Indeed, the explicit language of the statute reserves this authority to the states. Moreover, such a reservation of state authority to establish intrastate discounts is the best policy, for it is the states, not Washington bureaucrats, who are in the best position to determine what discounts are needed to address each state's educational needs and goals.

I believe the previous Commission acted illegally in coercing states into adopting a federal discount schedule and would have redressed that issue here. I would favor allowing states to exercise the authority Congress clearly provided to them.

V. THE COMMISSION ERRED IN ESTABLISHING A PROCESS THAT INEVITABLY LED TO THE ISSUE OF A 25/75 SPLIT FOR THE PERCENTAGE OF FEDERAL FUNDING.

Neither Section 254 nor Section 214 requires the Commission to establish a national cost model for high-cost support. Such a model inescapably invites the question of who should cover those costs: local customers, state universal service mechanisms, or federal universal service mechanisms. As long as a national cost model remains the central analytical tool for high-cost support under Section 254, disputes will arise about responsibilities for covering those costs. Any allocation of those costs to the federal government not covered by local consumers is inherently arbitrary, whether 25 percent, 100 percent, or 0 percent.


47 Universal Service Order at Para. 550.
These allocation disputes are in addition to the unending debate about whether and what form of forward-looking cost assumptions to use. Costs models are simply estimates and approximations of actual costs. Cost models are useful tools for many purposes, but I am deeply concerned about relying on such models as the primary, if not only, basis to allocate federal universal service funds. Models may approximate accurately the costs of service for the vast majority of Americans, but approximate poorly for Americans living in unusual, low-density, geographic areas. Yet it is precisely the unusual circumstances -- the tundra of Alaska, the bayous of Louisiana, the remote reaches of Montana and North Dakota, -- that may most likely require universal service support.

A better starting basis for federal high-cost, universal support may well be past specific federal universal support. Past support may not have been perfect or efficient; indeed, it may well have been arbitrary. But past support has, in its own way, worked quietly and well. The current Commission order starts with past support as a safety net, but only for a few years after which all carriers are to be placed on a national model with all of the associated allocation disputes. Past support need not and should not last into perpetuity independent of changed circumstances of technology, markets, and competition. But carriers may reasonably seek greater certainty than is currently offered by an impending end of current support to be replaced by cost models and allocation schemes shrouded in mystery, legal risks, and financial uncertainty.

I am also concerned that the prior Commission's decision to limit federal support to 25% is insufficiently supported. As I have stated earlier, one of the guiding principles in any universal service reform is that all states should be held harmless -- i.e., no state should receive less from the new universal service plan than it currently receives in support from the High Cost Fund and implicit subsidies in access charges. At least in some circumstances, however, there may be states that receive significantly higher than the 25% of federal support the Commission has committed to providing. Thus, by arbitrarily limiting the federal funding mechanism without relating it on a state-by-state basis to the amount of funds currently received, the Commission has failed to meet its statutory mandate that universal service funds be sufficient.

I believe the majority's opinion should have more fully addressed this issue. In addition, we should have made sure that states understand that this Commission does not -- and indeed in my opinion it cannot -- require them to rebalance or alter their local rates in any way prior to receiving additional federal universal service support.

Conclusion

The issuance of this report to Congress today is not the final chapter in the development of universal service. It is but an early chapter in a long book. It will take some time to correct many of the anomalies that I have addressed here. In addition, the Commission will need to work more closely with Congress and the States. Perhaps the Joint Universal Service Board needs to be reconvened to consider these issues in a timely fashion; I support the request by the state members of the Joint Board to refer at least
certain designated issues back to that body for consideration. But, in whatever forum, I look forward to working with my colleagues to preserve and to advance universal service in the months and years ahead.