

Universal Service and the Telecommunications Act

Myth Made Law

Milton Mueller

SIGNING THE TELECOMMUNICATIONS ACT OF 1996, President Clinton remarked, “Today, with the stroke of a pen, our laws will catch up with the future.” Press coverage of the event consistently echoed the theme of progress and reform. The bill was framed as a legislative overhaul that would usher in a new era

Despite losing most of the political, legal, and regulatory battles of the 1970s, AT&T managed to establish the idea that the 1934 Communications Act mandated “universal service.”

of competition and deregulation. In rewriting fundamental laws, however, legislators tend to codify the immediate past rather than pave the way for the future. Nowhere is this more evident than in the part of the bill devoted to “universal service,” Section 254. This section is a surprising addition to a bill that is supposed to prepare American telecommunications for a new era. In reality, it represents a throwback to the policies of regulated monopoly.

To understand what is wrong with the new law’s universal service

section requires some historical background. Contrary to popular opinion, a universal service policy was never part of the 1934 Communications Act. What we now think of as universal service subsidies began in the mid-1960s, when federal and state regulators began to manipulate the telephone system’s jurisdictional cost separations to keep local rates low. During the 1970s, long distance competition began to challenge the whole system of telephone monopoly and regulation. To defend themselves, telephone companies created a self-

That myth became a philosophical foundation of the Telecommunications Act of 1996, possibly undermining the march toward a competitive, deregulated telecommunications industry while re-politicizing industry pricing.

-serving myth that universal household telephone penetration would never have existed without monopoly and regulatory subsidies. They also invented a legislative mandate for their subsidies by grasping at a few words in the preamble of the Communications Act. “Universal service” became the basis of the regulated telephone monopoly’s claim for protection and legitimacy.

In passing the 1996 Act, Congress was unwittingly influenced by this mythology, and therefore concentrated on preserving (and extending) subsidies. Ironically, the new “pro-competitive” law provides precisely the sort of language the defenders of regulated monopoly wanted to be read into the Communications Act 20 years ago—and is a kind of posthumous political victory for the old Bell System.

IS THIS HISTORICAL IRONY relevant? The idea of universal service subsidies, one might object, should stand or fall on its own merits, regardless of where it came from. But any attempt to rip the universal service debate out of its long-term historical context leads to confusion and bad policy. Ideas about what are appropriate policies now are largely based on what was perceived as effective or ineffective in the past. If one thinks we have affordable, ubiquitous telephone service today because of 60 years of government-mandated subsidies and regulation, then it is perfectly logical to believe that the new legislation must find a way to preserve those subsidies in a competitive environment. If this historical view is false—if competition actually helped achieve universal telephone service and the Communications Act and cross-subsidies to local access had almost nothing to do with it—then the whole approach of Section 254 is wrong. Getting history right matters.

Historical Development of Universal Service Policy

The new universal service section represents the culmination of a policy debate that began in the 1970s. In order to fully understand the implications of the section and the debate surrounding it, it is essential to analyze the historical development of universal service policy. We begin with the observation that universal service policy has gone through two distinct generations:

FIRST GENERATION. AMERICA’S UNIVERSAL telephone network was constructed primarily by the competitive marketplace [6]. Unregulated competition between telephone exchange operating companies began in 1894, with the expiration of Alexander Graham Bell’s patents, and continued for 25 years. This early rivalry between the Bell and independent telephone interests led to a headlong race to wire the country. The result was an extremely rapid advance in household and business telephone penetration and the geographic coverage of the network.¹ It was competition and independent construction, not subsidies, that brought the telephone to rural America (see Figure 1).

The slogan “one system, one policy, universal service” was coined by AT&T president Theodore Vail in

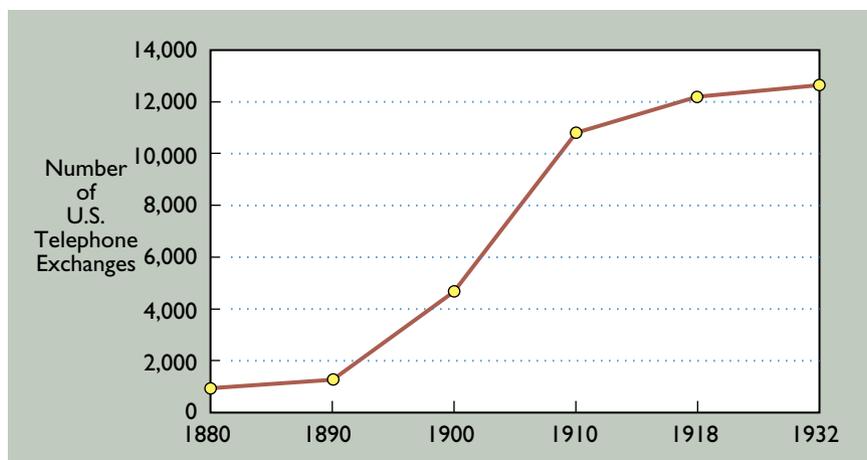


Figure 1. Telephone exchange growth

1907 in the middle of the early competitive period [6]. Telephone competition posed a “universal service” problem because the competing telephone exchanges refused to interconnect with each other. Subscribers in the same city could not call each other if they were customers of competing networks. They might also be unable to call users in other cities if the city was controlled by a network hostile to the one in their city. Interconnection of competing networks was not perceived as a viable option at that time [6]. The telephone companies, and most legislators and regulators, agreed that complete interconnection required a single franchised telephone system in each community. But if ending fragmentation meant eliminating competition as well, was it worth it?

From 1907 to 1920, there was vigorous debate in the U.S. about the merits of interconnection, compe-

¹More than 90% of the current central office locations of the U.S. telephone system were in place by 1915. In several states, telephone penetration in farm households exceeded 70% as early as 1920.

tition, and monopoly in telephone service [6, 12]. The issue was resolved in favor of monopoly with the passage of the Willis-Graham Act in 1921, exempting telephone companies from the antitrust laws to make it possible for them to “unify the service” by merging competing telephone exchanges.² In so doing, it provided the legal foundation for the first generation universal service policy.

Universal service at this time meant all telephone subscribers should be connected to each other. Its main concern was not the level of household telephone penetration, but the fragmentation created by competing systems. “Universal service” was the Bell system’s own brand name for the concept of total connectivity; city officials, state regulators, and users more commonly referred to “unified service” [3, 12].

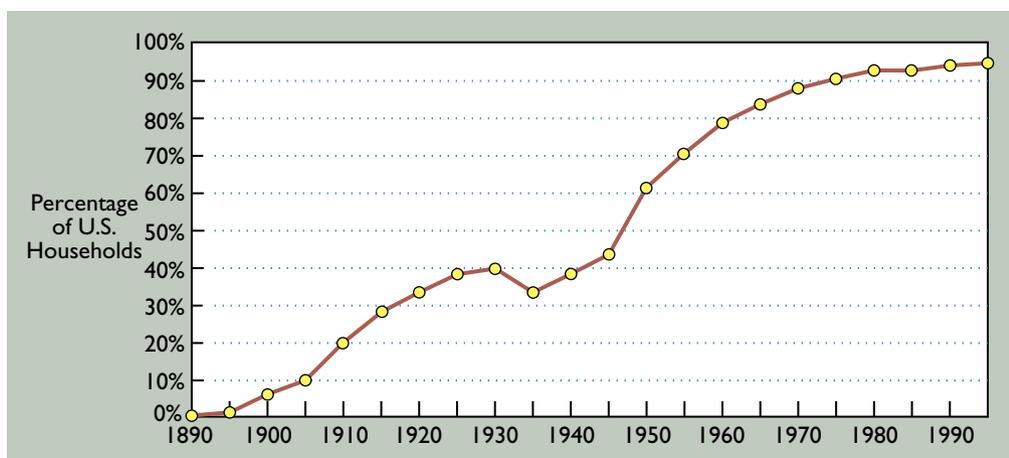


Figure 2. Household telephone penetration

But the idea was the same—eliminate the fragmentation created by competition. Competing local exchanges were merged into territorial monopolies and linked into a nationwide system. Regulation was used as a substitute for the price and service incentives of competition. At this stage, utility regulation was not linked to a policy of promoting household telephone penetration or rural-area subsidies.

S SECOND GENERATION. FROM THE 1920S ON, the number of telephone subscribers increased steadily. Growth was interrupted only by the Great Depression (see Figure 2). By the 1970s, the idea that telephone users

²“It is believed to be better policy to have one telephone system in a community that serves all the people, even though it be at an advanced rate, properly regulated by state boards or commissions, than it is to have two competing telephone systems. There is nothing more exasperating, nothing that annoys the ordinary . . . person more than to have two competing local telephone systems, so that he must have in his house and in his office two telephones.” Representative William J. Graham, *The Congressional Record*, June 1, 1921, 1,966.

should be divided up among competing networks was literally unthinkable. And the term “universal service” faded from memory.

Until it was revived in the mid-1970s. The catalyst was new competition. The 1960s and early ‘70s brought a number of shocks to telephone monopolies and their regulators: terminal equipment was deregulated, new long distance carriers were authorized, and private microwave networks were legalized [1]. The new, second-generation universal service policy was part of a broader attempt to salvage the fortunes of the regulated monopoly system in the face of these challenges. The new definition brought with it a sweeping revision of the history of the telephone system, fabricating the legislative origins of universal service policy and exaggerating the role of regulation in making telephone service affordable

and available to most U.S. citizens.

The second-generation concept defined universal service as a “telephone in every home.” Universal service policy became synonymous with regulatory manipulation of rates to make telephone service more “affordable” to residential and rural consumers.

The mechanism for this manipulation was the separation of the telephone companies’ rate bases into state and interstate jurisdictions. Beginning in the late 1960s, regulatory control of telephone company cost allocations allowed the growing profit margins generated by improved long distance technology to be shifted to the support of local telephone service. This re-allocation of hundreds of millions of dollars took place gradually and without any explicit legislative authorization [6]. Politicians and regulators were simply using the latitude given them by the process of rate regulation to pursue what they perceived as desirable results. The process began in the mid-1960s and was institutionalized with the adoption of the “Ozark plan” of 1970.³

The Communications Act of 1934

The reader is warned that this is an accurate but

³The Ozark plan was adopted at a conference of state and federal regulators in 1970 and put into practice in 1971. Its formulas for jurisdictional separations led to a continuous and automatic increase in the amount of local plant costs to be recovered from long distance revenues.

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highly controversial view of history. The origins of universal service policy are usually traced to the 1934 Communications Act, specifically to the wording of the Act's preamble:

“. . . to make available, so far as possible, to all the people of the United States, a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges.”

But in the 1930s, '40s, '50s, and '60s, no one interpreted the preamble this way.⁴ A look at the legislative history of the 1934 Act makes it clear that this reading is something imposed on it retroactively.

The Communications Act of 1934 was not the starting point of a new policy or a new approach to regulation, but the beginning of real regulation at the federal level. The purpose of the Act was to create a new federal regulatory agency. The New Deal Congress believed a new regulatory agency was needed because the Interstate Commerce Commission (ICC) was preoccupied with railroad regulation and lacked the resources to oversee the large and growing communications field at the same time. The bill consolidated existing federal legislation regulating communications and transferred jurisdiction over telecommunications to a new, specialized commission—the Federal Communications Commission (FCC) [9]. The bill's House sponsor, Sam Rayburn (Dem., Texas), explicitly stated that the bill did not change existing law.⁵

The Act was passed after a House committee spent more than a year investigating the communications industry. In the thousands of pages of reports it generated, the subject of universal service, in either its first- or second-generation sense, did not appear at all [9].

⁴It is impossible to find any claim that the Communications Act of 1934 mandated universal service until the mid-1970s, either in legal citations, regulatory proceedings, or business and academic journals.

⁵“. . . the bill as a whole does not change existing law, not only with reference to radio, but also with reference to telegraph, telephone, and cable, except in the transfer of jurisdiction [from the ICC to the FCC] and such minor amendments as to make that transfer effective.” The Congressional Record, 73rd Congress, 2nd Session, (1934), 10,313.

The records contain no mention of telephone penetration levels. There are no data purporting to show an unacceptable number of people were unreachable by the telephone network or unable to afford service. There is also no mention of a need to subsidize access lines or of extending service to rural areas. There is not even a discussion of the problem of jurisdictional separations.

AT&T's Revisionism

CURRENT POLICY DISCOURSE ABOUT universal service originated not with the Communications Act of 1934, but with the debate about rate restructuring in the 10 years preceding the AT&T divestiture (1973-1983). The real issue was long distance competition, not universality. Challenged by MCI and other new common carriers, AT&T attempted to defend its monopoly privileges by creating what turned out to be two very powerful and persistent myths. One was that universal service support had a statutory basis in the 1934 Communications Act; the other was that widespread household telephone penetration depended on maintaining the cross-subsidies to local access rates. These myths became widely accepted, even by those who favored competition and the breakup of AT&T. Three milestones in this reconstruction are clearly identified. One was a speech before the National Association of Regulatory Utility Commissions in late 1973 by AT&T CEO John DeButts [11]. The second was a report submitted to Congress by Eugene V. Rostow on behalf of AT&T in 1975, which first aired the specious claim that a monopoly system devoted to universal service was part of the mandate of the 1934 Communications Act [6]. The third was the Bell system's proposal in 1976 to amend the 1934 Communications Act to preserve regulated monopoly. The official title of the bill was the “Consumer Communications Reform Act of 1976.” To everyone outside AT&T it was “the Bell bill.” According to historians Peter Temin and Louis Galambos:

“The bill . . . reaffirmed [sic] the nation's commit-

ment to universal service and went beyond existing law to state that a unified telephone network had been and continued to be essential for the achievement of that goal. The bill bluntly stated that the existing rate structure, by which it meant primarily [jurisdictional] separations, had promoted universal service [11].”

During the battle over the Bell bill and the ensuing years of antitrust proceedings, “universal service” became one of the key rallying cries of AT&T and the other defenders of regulated monopoly.

The second-generation universal service concept was cemented in place between 1982 and 1984, when the FCC attempted to devise a scheme of interexchange carrier access charges to replace the predivestiture system of separations and settlements. The FCC plan attempted to eliminate cross-subsidies from long distance by increasing monthly charges on consumers of telephone lines. The proposal would have phased in, over a five-year period, charges of \$8 per month on basic telephone access. The proposal provoked a storm of opposition in Congress and among state regulators, rural telephone companies, and consumer groups. Congress reacted by passing the so-called “Universal Telephone Service Preservation Act of 1984,” which reduced the increase to \$3.50 a month and preserved many of the old subsidy mechanisms.

The Influence of Subsidies

DESPITE ALL THE HYSTERIA GENERATED by telephone monopolies, state regulators, and Congress about changing telephone rates, hard evidence indicates that regulatory cross-subsidies had a marginal effect on telephone penetration. Jurisdictional separations did not begin to have a real influence on local telephone rates until 1965 [6]. Household telephone penetration was already approximately 80% at the time and was growing by several percentage points each year. In 1970, when the Ozark plan institutionalized the subsidies, telephone penetration was already between 85% and 90% [10]. With or without the subsidies, household telephone penetration was already approaching universal levels. Indeed, household penetration continued to grow despite the significant increases in state and federal charges following the 1984 AT&T divestiture [2].

Universal Service and the Telecommunications Act of 1996

The old AT&T lost almost all of the political, legal, and regulatory battles of the 1970s. Nevertheless, it

inadvertently scored a lasting ideological victory. The idea that the 1934 Communications Act mandated universal service became an established part of telephone industry folklore. Politicians who opposed AT&T’s legislative proposals could not resist taking advantage of the political capital to be made by invoking “universal service” in defense of low residential and rural rates. Virtually everyone accepted without question the idea that widespread household telephone penetration had been created by regulated monopolies using cross-subsidies. This victory exerted a profound influence over the 1996 reform legislation.

The 1996 law created an entirely new section of the Communications Act devoted to universal service—Section 254. According to a committee report accompanying the draft bill, the goal of the new universal service section is:

“... to clearly articulate the policy of Congress that universal service is a cornerstone of the Nation’s communications system. This new section is intended to make explicit the current implicit authority of the FCC and the States to require common carriers to provide universal service [8].”

In this respect, the drafters’ motives closely parallel those of the “Bell bill” of 1976. (The full text of the law is available on various Web sites.)

Subsection (b) of Section 254 requires the FCC to define “universal service” based on recommendations from the public, Congress, and a Joint Board of state and federal regulators. Universal service obligations need no longer be confined to traditional telephone service. Universal service is defined as an “evolving level of telecommunications services,” and the definition must take into account advances in telecommunications and information technology. The FCC must include, at a minimum, any telecommunications service subscribed to by a substantial majority of residential customers. And the definition must be revised and updated by the FCC periodically. Once a service or capability has been declared part of “universal service,” it becomes eligible for subsidy supports. The law states that financial contributions to the preservation and advancement of universal service will be provided by “all telecommunications carriers providing interstate telecommunications services.”

The law specifically provides that “quality services should be available at just, reasonable, and affordable rates.” Here again are echoes of the second-generation universal service mythology. “Affordability” became a post-hoc rationale for the rate regulations and cross-subsidies of the AT&T monopoly during the 1970s.

But neither the word nor the concept was ever part of the Communications Act of 1934. The original system of utility regulation was intended to ensure that rates were “just and reasonable,” meaning rates should be based on demonstrated costs plus a fair return to

ple in rural areas must be provided service at rates comparable to those in urban areas. Elementary and secondary school classrooms, health care providers, and libraries are supposed to be given access to advanced telecommunication and information services. The FCC

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capital. Whether the rates resulting from this procedure were “affordable” to specific groups or not was not considered a legitimate part of the ratemaking process. Addition of the word “affordable” to the new law is therefore a mandate to depart from cost standards in rate setting.

The 1996 law also mandates geographic equality in the provision of advanced services. All consumers, including those with low incomes and those in rural, insular, and high-cost areas, should have access to telecommunications and information services “reasonably comparable” to those available in urban areas, at rates “reasonably comparable to rates charged for similar services in urban areas.” These aspects of the law will have a major effect on new service introduction by common carriers. If services must be simultaneously available in all markets regardless of their size or the character of demand, suppliers may be unwilling to introduce them at all.

Section 254(g) codifies the policies of geographic rate averaging and rate integration of interexchange services to ensure subscribers in rural and high-cost areas continue to receive long distance telecommunications at rates no higher than those paid by urban subscribers. Rate averaging is the practice of charging for long distance telephone calls based on distance rather than route density. Actual costs have more to do with route density than distance, but rural interests fear that in a competitive and deregulated market they could end up paying more.

Section 254(h) subsidizes telecommunications access and usage by schools, health care facilities, and libraries. Schools and libraries will receive whatever is designated “universal service” at discounted rates. Here the concept of *affordability* returns with a vengeance, being designated as the standard for determining how much discount is required.⁶ Health care facilities serving peo-

ple in rural areas must be provided service at rates comparable to those in urban areas. Elementary and secondary school classrooms, health care providers, and libraries are supposed to be given access to advanced telecommunication and information services. The FCC has not yet determined what “advanced services” are, but the specification that access should be provided in each classroom (as opposed to one or more points in the school building) reflects the more expansive vision of the Clinton administration’s National Information Infrastructure (NII) proposals and the demands of the education lobby.

Why Section 254 Is Legal Atavism

Most policy debate about the universal service section of the 1996 law concerns technicalities, such as what shall be included under the definition of universal service and the specific mechanisms to be used to fund it. While these issues are important, they are peripheral to the basic policy assumptions on which Section 254 is based. The law assumes:

- It is inappropriate to rely exclusively on market mechanisms to promote the diffusion of basic and advanced telecommunications services.
- Local telecommunications access should be subsidized if it is to become universally affordable.
- It is meaningful and desirable to designate a particular type of service as the “universal” service.
- The goal of a competitive, deregulated telecommunications marketplace can be reconciled with universal service subsidies.

These assumptions went virtually unquestioned during the drafting of the legislation, yet all are open to serious challenge. Unfortunately, public perceptions of these issues continue to be distorted by the myths left over from the regulated monopoly era.

⁶“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 use of such services by [school and libraries].” Section 254, subsection(g)(1)(B).

The Facts About Phonelessness

Let's begin with the issue of affordability. A key assumption of the second-generation universal policy was that the price of local telephone access was the key to widespread affordability. Regulators taxed long distance usage to subsidize the monthly line rental. The 1996 legislation adheres to the same philosophy, proposing to designate a core set of services as "essential" and use intra-industry subsidies to make sure the monthly rate for these services is set at "affordable" levels.

HOWEVER, RECENT RESEARCH ON DISconnection and phoneless households completely destroyed the rationale for this approach to universal service policy. Between 1993 and 1995, four different studies of households without telephone service [4, 7] found the price of basic local service was not the most important factor affecting service retention. Marginal users are driven off or prevented from joining the network by a combination of unpaid toll bills, deposits, installation fees, and call control issues. The studies estimate that from 67% to 75% of all U.S. households without telephone service have had service in the past but were unable to keep it. Low-income families are usually disconnected because they run up large bills for long distance tolls, collect calls, and credit card calls and fail to pay them. In the California study, 35% of all phoneless households reported they made the decision to stay off the network as a way of controlling usage-related costs, fearing they would make too many calls, that others would use the phone and not pay their share of expenses, or that it was too convenient to buy things by telephone. In addition to usage-related disconnections, the initial deposits and installation fees required to get on the network are burdensome for many young or immigrant households.

These studies also suggest that artificially holding down the price of local subscription rates through subsidies has a minimal effect on overall telephone access. If the subsidies are paid for by increasing usage-related charges, they are as likely to hurt as to help.

Another problem inherent in the second-generation universal service policy is that "affordability" varies with income. Universal service subsidies, like all intra-industry methods of delivering subsidies, lacks a means test. Many consumers in high-cost areas are perfectly able to pay higher rates. The ski cottages in Aspen, Colorado, for example, cater to an upscale market segment with no need for a subsidy, yet under the existing and proposed system of universal service support, inner city users in Newark and Camden, New Jersey, pay more for telephone

service in order to keep Aspen's rural rates lower.

Heterogeneous Access

Access has become heterogeneous. The old universal service policy was based on wireline voice telephone networks. Voice service was simple, homogeneous, and uniform. Access was a binary variable: either you had a residential telephone line or you did not.

The 1996 legislation apparently assumes that the kind of telecommunications access made possible by the competitive marketplace is homogeneous and uniform. This assumption is evident in the law's requirement that anything subscribed to by a substantial majority of Americans must incur universal obligations. Much has been written about how to define the "new" universal service. But how much bandwidth and what features and functions will it involve? Will it include Internet and other data communications, cable as well as telephony, wireless as well as wireline? The whole dialogue is a futile attempt to pour the old wine of regulated monopoly telecommunications into the new bottles of a digital marketplace. It assumes that a digital broadband network will, like the telephone system of the past, reach into every home with a uniform grade of service, allowing the population to be neatly categorized into those who can afford this level of service (the "information haves") and those who cannot (the "information have-nots").

One of the few safe predictions we can make about the future of information technology is that this simple dichotomous outcome will not happen. The new telecommunications infrastructure will not be a digitized, broadband version of the old one. Communications access is taking an ever-wider variety of forms, and there is a broad range of information transmitting and processing capabilities. Access can be provided by a two-way pager, a debit card, a traditional fixed voice telephone, a fixed or mobile computer in the home, a shared terminal in a public space, and more. Functions can be precisely tailored to specific market segments. Customization, not uniformity, is the rule. This is most evident in wireless communications, where the market generates a bewildering variety of terminals, interfaces, access methods, and service grades. Competition and innovation in new wireless markets has just begun.

In its rush to codify the second-generation concept of universal service, the law overlooked the most promising feature of the new competitive marketplace: the enhanced ability to tailor the price and capability of service to specific user needs and socioeconomic constraints. The optimal form of telecommunications access for inner city poor people who own few assets and move frequently is qualita-

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tively different from the optimum for elderly people with stable places of residence but limited means. If the FCC attempts to define and subsidize a single “universal” service, it will simply waste a vast amount of resources on suboptimal solutions. Further, it may discourage the market from discovering and supplying the solutions that are optimal for various groups.

Transparency, Portability, Competitive Neutrality

Two key objectives of the new universal service section are to make subsidies “explicit” rather than “implicit” and to ensure that universal service support payments are competitively neutral. That is, subsidies should be readily quantifiable and their distribution clearly accounted for, while the collection and distribution of subsidies should not favor one competitor or one type of technology.

The pre-1996 system of universal service subsidies was neither explicit nor competitively neutral. One study estimated that implicit subsidies, combining urban-to-rural transfers, business-to-residential transfers, and long-distance-to-local transfers, totaled \$15.3 billion annually, whereas the explicit subsidies of the Universal Service Fund and other sources totaled only \$2.5 billion [5]. The old system favored incumbent local exchange carriers’ (LECs) wireline networks. By keeping their rates artificially low, regulations made it unattractive for long distance carriers or new technologies to compete in local access markets.

On this issue, the law’s stated intentions are good. A complete overhaul of universal service support—successfully making all subsidies transparent, portable, and competitively neutral—would benefit everyone. But the politics of “universal service” will make realization of these goals elusive.

To begin with, the law requires the FCC to include some services within the definition of universal service and exclude others. By itself, this requirement is an important breach of competitive neutrality. An enormous range of telecommunication and information services, providing more or less attractive substitutes for traditional telephone service, is not eligible for

subsidies. The new universal service mechanisms keep the FCC in the business of applying different rules to different technologies and markets. As services based on new technologies start to undercut the market share of older firms, we can expect to see rancorous debates about which companies are eligible to pay out and receive universal service subsidies. If these debates result in a “competitively neutral” outcome, it will be nothing short of a miracle. If the FCC is really interested in competitive neutrality, it would simply step out of the way and let market choices determine the diffusion of services.

The 1996 law’s requirement that long distance rates be averaged and that “advanced services” be made available irrespective of geography or market size are mandates for massive new implicit subsidies. Furthermore, the law allows state regulators to exempt small rural telephone companies from forms of competition that might make universal service subsidies portable.⁷ However, a large portion of the high-cost telephone lines are served by small rural telephone companies, so this aspect of the law seriously undermines competitive neutrality.

The idea of subsidizing costs whenever they exceed an affordable base rate sounds simple. However, in an environment of rapid technological change and service innovation, it could become a regulatory nightmare. Defining and identifying the costs of telecommunications services is no simple matter. Incumbents have a powerful incentive to claim their universal service obligations are very costly. Their competitors can be expected to argue that the costs are low or nonexistent. Charges that the incumbents use their universal service subsidies to gain an unfair competitive advantage begin to fly. In these debates over costs, the ultimate trump card is the level of local telephone rates. If basic service rates go up, the FCC looks bad and the new law appears to the public to be a failure. Thus, the FCC’s temptation to maintain implicit universal service subsidies or to structure the subsidy program in a way that prevents a cost-based rebalanc-

⁷Under Section 251(f), rural telephone companies can be protected from interconnecting with competitors.

ing of telephone rates is probably irresistible.

The subsidies for schools, hospitals, and libraries seem especially at odds with the ideal of explicitness. Nothing in the legislative or regulatory record indicates that schools, hospitals, and libraries cannot afford either basic or advanced telecommunications services. In fact, all schools, hospitals, and libraries already have telephone service, while Internet access, computers, and broadband computer networks are spreading rapidly in the educational domain. What the evidence indicates, rather, is that many public schools, libraries, and hospitals want larger budgets to spend on these things. Why can't these institutions just ask for larger budgets? The question is rhetorical. Bigger budgets would require explicit authorizations from Congress, the States, and local school boards. Such requests could be clearly linked to the level of taxation. It is easier for regulators to manipulate the prices of telecommunications services than to deliver increases in taxation and spending. The idea of "universal service" is simply a fig leaf for hidden subsidies—a way to deliver off-budget benefits to mother-and-apple-pie constituencies.

Conclusions

Telecommunications reform has always been plagued by a kind of schizophrenia. Politicians and regulators like to permit new entry against incumbent monopolies. Competition delivers benefits to new entrants and to users. But competition also creates powerful tendencies to flush out subsidies and drive rates toward costs. A competitively driven revision of telecommunication prices undermines the political bargains embedded in the rate structure of regulated monopolies. Although the ideal of regulated telephone monopoly is waning, the political appeal of the second-generation universal service concept is not. Taxing business telecommunications users to subsidize households, or delivering concentrated benefits to rural areas at the (diffused) expense of urban and suburban majorities, is as politically attractive as ever. Indeed, the tremendous hype surrounding the NII—suggesting that information technology will solve the nation's educational and health care problems and bring economic development to depressed rural regions—has increased the political capital to be made by manipulating the rates for telecommunications services. Thus, considerations of political economy dictate two incompatible goals: politicians want to be both "pro-competition" and "pro-universal service." The Telecommunications Act of 1996 embodies this contradiction in the starkest terms.

The best that can be hoped for from the new uni-

versal service legislation is that the FCC interprets and implements it in a way that does the least damage. If "universal service" is defined in as limited a way as possible, and the subsidies are made as explicit, portable, and competitively neutral as possible, it is likely that Section 254 will soon fade into obscurity—as universal service subsidies are no longer needed. Competition and market forces are transforming the industry. Such issues as interconnection pricing, the entry of new wireless carriers, the spread of the Internet, and the convergence of cable television and telephone networks have far more to do with the universality of telecommunications than Section 254. An expansive, activist interpretation of Section 254, on the other hand, could derail the march toward a competitive, deregulated telecommunications industry, re-politicizing industry pricing in a way that would make the old AT&T look like a model of economic rationality. ■

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MILTON MUELLER (milton@scils.rutgers.edu) is an assistant professor in Rutgers University's School of Communication, Information and Library Studies, New Brunswick, N.J.

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