

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

In the Matter of	)	
	)	
Deployment of Wireline Service Offering	)	CC Docket 98-147
Advanced Telecommunications Capability	)	
_____	)	

**Reply Comments of Universal Service Alliance**

Universal Service Alliance (USA)<sup>1</sup> joins other commenters in commending the Federal Communications Commission (Commission) for issuing its Notice of Proposed Rulemaking (NPRM) and proposing measures to promote the

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<sup>1</sup> The Universal Service Alliance is a project of the Alliance for Technology Access, located in San Rafael, California. It is an alliance consisting of diverse organizations and community leaders serving low income, disabled, elderly and rural consumers throughout California. USA includes the following organizations and individuals: Access to Software for All People, Advocates for Consumer Equity, Alliance for Technology Access, California Association of Nonprofits, California Latino Civil Rights Network, California Small Business Association, Center for Accessible Technology, Children's Collective, Inc., Computer Access Center, Consumers Coalition of California, Consumers First, Digital Queers, Electronic Frontier Foundation, FAME Renaissance, Korean Youth Center, Los Angeles Urban League, MAAC Project, Radio Bilingue San Diego Urban League, Support Center for Nonprofit Management, World Institute on Disability, Francois Bar (Professor, Department of Communications, Stanford University), Dr. W. Elliot Brownlee (Professor, Department of History, UC Santa Barbara), Cheri Bryant (ACLU, Northern California), Susan Estrada (Aldea Communications, Inc.), J Craig Fong (Attorney & Community Advocate), Clyde Hostetter (Faculty Emeritus, CA Polytechnic State University, San Luis Obispo), Dr. Marvalene Hughes (President, California State University, Stanislaus), Linda Hamilton Krieger (Professor, Boalt Law School, UC Berkeley), Ibrahim Naeem (Coalition for a Nonviolent City), Helen Nelson (Consumer Research Foundation), Barbara O'Connor (Professor, Communications Studies, CA State University, Sacramento), Jennifer C. Pizer (Lambda Legal Defense & Education Fund), Toby Rothschild (Legal Aid Foundation of Long Beach), Peggy Saika (Asian Pacific Environment Network) and Linda Wong (Rebuild LA). Please note that the institutions and organizations following each individual are for identification purposes only.

deployment of advanced telecommunications capability for all consumers as required by Section 706 of the Telecommunications Act of 1996. However, like other commenters, USA is concerned that requiring advanced services affiliates to follow strict structural separation requirements could discourage the deployment of advanced capability where such deployment is needed the most – in low income, rural and other traditionally underserved areas. In view of the growing “digital divide” in our society, we urge the Commission to employ regulatory tools that impose the least cost on providers who deploy advanced capabilities in underserved areas and allow those providers to realize the economies of scope in research, development and marketing of those advanced capabilities.

**I. The Commission Should Be Seeking to Close the Digital Divide.**

When Congress enacted the Telecommunications Act of 1996, it recognized that high speed, broadband communications is essential not just for global financial firms and high technology companies but for individuals, community based organizations, small businesses, schools, libraries and public services agencies in all areas of the country including low income neighborhoods and rural areas.

Since 1996, the explosion in Internet applications has made it even clearer that access to jobs, commerce, and education in our society increasingly depends upon access to advanced telecommunications capability. It also has become increasingly clear that there is a “digital divide” in our society where a substantial number of Americans are unconnected to the Information Age. A recent study by the National Telecommunications and Information Administration entitled *Falling Through the Net II* finds that while there has been a significant growth in computer ownership and usage overall,

[T]he growth has occurred to a greater extent within some income levels, demographic groups, and geographic areas than in others. In fact, ***the digital divide between certain groups of Americans has increased between 1994 and 1997 so that there is now an even greater disparity in penetration levels among some groups.*** There is a widening gap, for example, between those at the upper and lower income levels. Additionally, even though all racial groups now own more computers than they did in 1994, Blacks and Hispanics now lag even further behind Whites in their levels of PC-ownership and on-line access.<sup>2</sup>

This digital divide also extends to high speed data networks. In California, where the California Public Utilities Commission opened the local exchange market to competition well before the enactment of the Telecommunications Act of 1996, Competitive Local Exchange Carriers (CLECs) are ***not*** deploying advanced networks to serve all Californians. Of the 150 CLECs certificated to date, only a few are actually constructing new network facilities and those facilities are being ***selectively*** deployed to serve high-end customers in downtown financial districts and high tech centers like Silicon Valley. A recent article in the *San Francisco Examiner* describes the current situation as follows:

The acronym CLEC may be a bit of a misnomer since most of these companies aren't marketing traditional local phone service but rather focusing on selling data transmission capacity. Only about 250,000 of California's 22 million local phone lines are serviced by CLECs, said Jack Leutza, director of the state PUC's telecommunications division.

"The CLECs' networks are all in and around key business districts," said Ron Cowles, another Dataquest analyst. "Those are the big

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<sup>2</sup> See *Falling Through the Net II: New Data on the Digital Divide*, National Telecommunications and Information Administration, at <http://www.ntia.doc.gov/ntiahome/net2/falling.html> (*emphasis added*).

data users. ***They're going after the cream of the crop.*** If you look at San Francisco, the CLEC's probably have about 15 percent of the business market." That's because profit margins are much higher in the business market, analysts said.<sup>3</sup>

In this proceeding, the Commission should be trying to close this digital divide. Above all, it should avoid policies that would widen the divide.

## **II. The Commission's Rules Should Support Efforts at the State and Local Level to Encourage the Deployment of Advanced Telecommunications Capabilities to Underserved Communities.**

In view of the growing "digital divide" in our society, USA filed comments in CC Docket No. 98-146 urging the Commission to use its authority under the Telecommunications Act to accelerate the deployment of advanced capabilities in underserved communities. We described how local community based organizations, including USA and its member organizations, have been working to accelerate such deployment in California and how these efforts are beginning to bear fruit.

### **A. Community Partnership Agreement.**

In particular, one of the results of the 1997 merger between SBC Communications and Pacific Telesis Group is a broadbased Community Partnership Agreement (CPA) in which Pacific Telesis, SBC and nine groups and coalitions (including USA) representing 134 organizations and individuals entered into a partnership the aim of which is to "meet the needs of California's underserved communities for full and equal access to basic and advanced telecommunications services, and to meet underserved communities' needs for

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<sup>3</sup> Wendy Tanaka, Local Exchange Carriers Click, *San Francisco Examiner*, August 23, 1998 (*emphasis added*).

information carried by those services.”<sup>4</sup> Among other things, the CPA calls for an unprecedented goal of 98 percent telephone penetration rate in California and establishes a \$50 million Technology Fund which will “focus on advancing universal service in underserved communities and providing underserved communities with access to and education about emerging and advanced telecommunications.”<sup>5</sup> The California Public Utilities Commission gave preliminary approval to the CPA on March 31, 1998 and final approval on July 23, 1998.<sup>6</sup>

### **B. Widescale Deployment of ADSL Technology.**

In addition, at the urging of USA and other signatories to the CPA, Pacific Bell recently agreed to broadly deploy Asymmetric Digital Subscriber Line (ADSL) technology in more than 200 communities across California, including traditionally underserved communities such as East Palo Alto, South Central Los Angeles, Watts, Hunters Point, Oakland, Compton, and San Francisco’s Mission District.<sup>7</sup> Pacific Bell recently announced that it has deployed ADSL in 180 of these communities.

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<sup>4</sup> See Community Partnership Agreement Organizational Charter at p. 2.

<sup>5</sup> The CPA defines “underserved communities as “low-income, inner-city, minority, disabled, and limited-English-speaking communities and low-income seniors throughout the various geographic (urban and rural) regions of California.” CPA at p. 2.

<sup>6</sup> Re Pacific Telesis Group, Joint applicant: SBC Communications, Inc., Decision No. 97-03-067, Application No. 96-04-038, 1997 Cal. PUC LEXIS 629; 177 P.U.R.4th 462, March 31, 1997 *rehearing denied* 1997 Cal. PUC LEXIS 1023, November 5, 1997 and Resolution T-16172, Public Advocates, On Behalf of the Pacific Telesis/SBC Merger Signatory Coalitions, Submits an Organizational Charter Implementing the Community Partnership Commitment, July 23, 1998.

<sup>7</sup> See Pacific Bell, News Release, SBC Communications Announces Broad ADSL Deployment Across California, May 27, 1998 and Pacific Bell News Release, Pacific Bell’s ADSL-Internet Access Packages Now Available in 180 California Communities, September 1, 1998.

The CPA and broad deployment of ADSL technology are important steps in promoting access for underserved communities in California. The CPA provides an organizational structure and financial resources to begin to promote the development of applications and demand in underserved communities. The broad deployment of ADSL complements the CPA by providing the infrastructure necessary for these applications. By enabling customers to access and transport information at high speed over ordinary copper lines, ADSL can help to create new jobs, enhance education, improve health care and strengthen civic and nonprofit organizations in traditionally underserved communities.

**III. The Commission Should Avoid Imposing Higher Costs and Inefficiencies on Any Provider that is Deploying Advanced Capabilities to Traditionally Underserved Communities.**

Local Exchange Carriers (LECs) are deploying ADSL technology based on their current assessment that ADSL will be competitive with other high-speed data products. A recent analysis by Prudential Securities notes that

The most formidable competitors [to large LECs] are cable companies, who already have an estimated 250,000 high speed Internet access subscribers in the U.S. In comparison, we believe the large LECs currently have less than 10,000 ADSL subscribers.

...

AT&T's planned acquisition of TCI intensifies the cable modem threat to the RBOCs since AT&T intends to accelerate TCI's timetable for upgrading its network to provide high-speed Internet access. TCI's prior network upgrade plan called for completion by the end of 2000, but AT&T hopes to complete the upgrade by as much as six months earlier. TCI and its affiliates account for about 30% of the homes in the U.S., but AT&T doesn't plan to stop there. AT&T plans to find a way to address the remaining 70% of homes on a facilities basis, and further deals or alliances with cable companies are a possibility. AT&T is targeting 30% penetration of

TCI's customers with high-speed Internet access within 5 years, which would be over 3 million subscribers.<sup>8</sup>

Regarding the relative costs of ADSL and cable modem deployment, the Prudential Securities Report states “[W]e believe the deployment costs of **ADSL and cable modems will be comparable and that neither side will have a significant cost advantage.**” In particular, the Report estimates that a cable company's total high speed data infrastructure cost will be \$629 per subscriber and a LEC's total ADSL infrastructure costs will be \$700 per subscriber.<sup>9</sup>

The Report notes that to be successful LECs will have to work with hardware and software providers to ensure that that ADSL equipment is interoperable, affordable and available on a “plug and play” basis. The LECs will also have to put into place processes that will handle wide-scale demand. This includes training their staff to quickly determine whether a customer's loop is qualified for ADSL service and to quickly diagnose and correct problems in ADSL service. The Report states “It is not a trivial matter for the large LECs to quickly diagnose the condition of their lines because they haven't had to monitor their lines this closely before. Voice services are much more tolerant of

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<sup>8</sup> Prudential Securities, *ADSL Has the Potential to Solve the Bandwidth Bottleneck and Add to Large LEC Net Income Growth*, Telecommunications Services Industry Report, August 27, 1998, pp. 6-7. The Prudential Securities Report states “We believe the performance characteristics of ADSL and cable modems will be comparable. Cable companies boast very high potential speeds (up to 10 mbps), but the bandwidth is shared among subscribers and speeds may be much slower depending upon the number of subscribers using the service at one time. Telcos pitch ADSL as being superior since it offers dedicated, unshared bandwidth.” *Id.* at p. 8.

<sup>9</sup> *Id.* at p. 7 (*emphasis added*).

imperfect lines than ADSL service.”<sup>10</sup> Cable companies deploying cable modem technology face similar challenges.

With neither technology having a decided advantage in cost or performance, the Report advises investors that LECs should be competitive with cable companies in the market for high-speed Internet access. The Report states “In areas in which both telcos and cable companies compete, we expect market share to be close to evenly split.”<sup>11</sup> Based on this assessment, the Report concludes that ADSL will generate a sufficient rate of return for LECs to deploy the technology aggressively.<sup>12</sup> In California, aggressive deployment of ADSL has meant that traditionally underserved areas such as East Palo Alto, South Central Los Angeles, Oakland and the Mission District now have access to high speed Internet access.

USA strongly believes that ***all providers including LECs*** should have a strong economic incentive to deploy ADSL and other advanced capabilities to serve all customers, not just high-end business customers. Consequently, we are concerned that, as proposed in the NPRM, the requirements for the advanced services affiliate could alter the economics of ADSL deployment so that there is little or no incentive for LECs to deploy this technology in low income, rural and other underserved areas.

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<sup>10</sup> *Id.* at p. 13.

<sup>11</sup> *Id.* at p. 8.

<sup>12</sup> *Id.* at p. 17.

Given the current competitive parity of ADSL and cable modem technology, the Commission should be especially careful not to favor the deployment of one technology over the other. Nor should it favor one type of provider over another.<sup>13</sup> As Chairman Kennard recently stated to regulators at the ITU Conference,

As I travel throughout the United States, incumbents tell me they want to make investment decisions based on the rules of market risk and reward, rather than regulatory advantage. ***They deserve that opportunity.***<sup>14</sup>

Currently, cable companies, including the combined AT&T/TCI, are not required to interconnect, unbundle or resell their high speed data services or provide them through a separate subsidiary to avoid such requirements. Under these circumstances, the Commission should not impose requirements that would compel LECs to either incur additional costs or forego efficiencies that could render ADSL service non-competitive relative to cable modem service.

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<sup>13</sup> This Commission has adhered to the principle of competitive neutrality in adopting rules to implement the Telecommunications Act of 1996. For example, in implementing Section 254, the Commission adopted the principle that “Universal service mechanisms and rules should be competitively neutral. In this context, competitive neutrality means that universal service support mechanisms and rules neither unfairly advantage nor disadvantage one provider over another, and neither unfairly favor nor disfavor one technology over another.” *Report and Order*, In the Matter of Federal State Joint Board on Universal Service, May 7, 1998, at para. 48.

<sup>14</sup> “Universal Access: Carpe Diem: Seizing Opportunities in the Global Marketplace,” Remakes of William E. Kennard, Chairman, Federal Communications Commission, at the Regulators’ Breakfast ITU Plenipotentiary Conference, Minneapolis Minnesota, October 13, 1998, at <http://www/fcc/gov/Speeches/Kennard/spwek931.html>, p. 4 (*emphasis added*).

Imposing even small costs and inefficiencies could have a large effect on the deployment of ADSL service especially in underserved communities. The Prudential Securities Report indicates that ADSL and cable modem technology are extremely close in terms of the cost of deploying these technologies. Indeed, the Report indicates that cable modems have a slight advantage.<sup>15</sup> Under these circumstances, imposing additional costs and inefficiencies could make the deployment of ADSL non-competitive. This would be true not just in California but in all states where LECs are considering deploying ADSL technology.<sup>16</sup> While the Commission should be interested in preventing unfair discrimination and cross-subsidization in the deployment of high-speed data services, the Commission should not adopt rules that would render one type of provider or technology non-competitive.

Moreover, even if higher costs and reduced efficiencies from the Commission's NPRM are not sufficient to discourage LECs from deploying ADSL service altogether, higher costs and inefficiencies could discourage LECs from deploying ADSL service in low income, rural and other underserved communities where demand is less certain, costs may be higher and profit margins are likely to be lower than in the high-end business market. The result of higher costs and inefficiencies would be to focus ADSL deployment in the high-end market where

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<sup>15</sup> The Report states that Total ADSL Infrastructure Cost is \$700 per subscriber and Total Cable Modem Infrastructure Cost Subscriber is \$629 per subscriber. (Prudential Securities Report at p. 7.)

<sup>16</sup> Jon Van, High Speed Data on Hold, *Chicago Tribune*, October 6, 1998, (stating that Ameritech is delaying its rollout of ADSL in Chicago pending the Commission's final rules regarding the advanced services affiliate and ADSL resale requirements.).

advanced capabilities are already being deployed, instead of the residential market where such deployment is needed. This result would be directly contrary to the intent of Section 706, which requires that the Commission take steps to promote the deployment of advanced capabilities to *all* consumers.

**IV. This Commission Has Found That Strict Structural Separation Requirements Can Impose Higher Costs and Greater Inefficiency to the Detriment of Providers and Consumers.**

This is not the first time this Commission has been faced with this issue. In its *Computer III Inquiry*, the Commission reexamined its structural separation requirement for enhanced services. There, the Commission found that requiring structural separation results in higher costs and greater inefficiencies, as providers are unable to organize their operations in the manner best suited to the markets and the customers they serve. The Commission stated

We further recognize that structural separation imposes direct costs on the BOCs from the duplication of facilities and personnel, the limitations on joint marketing, and the inability to take advantage of scope economies similar to those we noted for AT&T. These are indications of the more fundamental costs of structural separation – namely, that the BOCs are unable to organize their operations in the manner best suited to the markets and customers they serve. The net result of these costs in delayed services and innovation, in direct duplicative costs, and in organizational inflexibility, is that structural separation prevents consumers from obtaining services and service combinations that they desire.<sup>17</sup>

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<sup>17</sup> 104 FCC2d at 1008 (*fn. omitted*).

Finding that structural separation had few advantages, if any, over non-structural safeguards, the Commission turned to less restrictive, non-structural safeguards to prevent unfair discrimination and cross subsidization.<sup>18</sup>

In the *Computer III Order*, the Commission noted that “[S]tructural separation is not an end in itself, but a regulatory tool for protecting the public interest, to be altered as experience and changed circumstances warrant.”<sup>19</sup>

Section 706 requires that this Commission “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans by using in a manner consistent with the public interest, convenience and necessity ... regulating methods that remove barriers to infrastructure development.” In view of the growing “digital divide” in our society, this

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<sup>18</sup> The decisions leading to the *Computer III Order* illustrates why this Commission should not casually err on the side of requiring strict structural safeguards for advanced services affiliates. The structural safeguards for enhanced services were required in the *Computer I Inquiry* in 1967. *Computer I, Final Decision and Order*, 28 FCC2d 267, 270 (1967). In the *Computer II Inquiry*, the Commission continued the structural safeguards over arguments that the strict separation requirements were unnecessary and imposed substantial costs and inefficiencies on providers. At that time, Commissioner Fogarty dissented, criticizing the Commission for adopting “***an approach in which all assumptions pertaining to the benefits of separation are treated as givens whereas all countervailing arguments pertaining to the benefits of vertical integration are treated as unproven hypotheses subject to considerable doubt. ... This calculus presents no rational cost/benefit balancing at all; instead it indulges in wholly presumptive preference.***” *Computer II, Final Decision*, 77 FCC2d 384, 508 (1980)(*emphasis added*). Six years later, on further examination in *Computer III*, the Commission stated “The relative costs and benefits of the structural separation requirements now imposed on the enhanced services operations of AT&T and the BOCs, compared with the costs and benefits of non-structural safeguards designed to serve the same regulatory goals, lead us to conclude that the structural requirements should be eliminated.” 104 FCC2d at 1011-1012. It would be another six years before the Commission finally approved BOC applications for removal of the structural separation requirements.

<sup>19</sup> *Id.* at 999 n. 140 (quoting *Computer II, Final Decision*, 77 FCC2d at 463).

Commission should employ the regulatory tool that imposes the least cost on LECs who deploy advanced capabilities in underserved areas and allow those LECs to realize the economies of scope in the research, development, and marketing of those capabilities.

**V. The Commission Should Give Added Flexibility to LECs that Deploy ADSL Service in Low Income and Rural Communities.**

If the Commission adopts the approach outlined in the NPRM, the Commission should give advanced services affiliates that deploy ADSL service in low income and rural areas additional flexibility to reduce their costs and operate in an efficient manner. For example, where there is broad deployment of ADSL service to underserved communities, the Commission should:

1. Allow joint marketing and customer service (e.g., common branding, bundling of products, discounting on mixed services, joint and aggregate billing, single point of customer contact for sales and service, joint customer care, etc.),
2. Permit LECs to transfer customers, employees, equipment, and other assets to the advanced services affiliate,
3. Grandfather equipment that has been deployed instead of requiring that they be removed and

4. Allow joint ownership of switches and other facilities in low income, rural and other underserved areas where the cost of duplicate facilities would result in higher costs and discourage the deployment of ADSL service.

We also support the NPRM's proposals for limited inter-LATA Relief which would allow Regional Bell Operating Companies (RBOCs) to provide advanced capabilities to elementary and secondary schools and packet switched traffic to Network Access Points across LATA boundaries.<sup>20</sup> The Commission should grant additional inter-LATA relief (e.g., to serve universities, health care facilities, corporate intranets, consortia of schools and libraries, etc.) where the RBOCs deploy ADSL throughout their service areas including underserved communities. The Commission should grant even more flexibility to LECs that have entered into Community Partnership Agreements or established other mechanisms to promote education, applications development and customer demand in underserved communities. We further support Alliance for Public Technology's request that the Commission closely monitor providers and permit LECs to offer advanced services on an integrated basis where necessary to promote deployment to low income, rural and other high cost areas.

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<sup>20</sup> NPRM at para. 191-196.

## Conclusion

Many commenters have invoked the importance of “leveling the playing field” in supporting and opposing the measures proposed in the NPRM. In 1996, Joseph Farrell, then-Chief Economist for the Commission, explained that we should not lose sight of *how* the playing field is leveled. He said, “***It is important that the playing field should be leveled upwards, not downwards.*** Like most economists, I am uncomfortable with rules that forbid a firm from exploiting efficiencies just because its rivals cannot do likewise. Such handicapping, or leveling without regard for up or down, may make for a good game, but the game is only a metaphor. ***When firms are hamstrung, even in order to equalize them, consumers are liable to lose out.***”<sup>21</sup>

We urge the Commission to level the playing field upwards by allowing ***all providers*** (LECs, cable companies and CLECs) to exploit their respective efficiencies, granting them equal flexibility, and preserving incentives to deploy advanced capabilities in all communities. We also urge the Commission to create incentives for all providers to work in partnership with community based organizations to provide organizational structures and financial resources to begin to educate consumers and promote the development of applications and demand in underserved communities. By taking these and the other actions set forth above, this Commission can begin to close the digital divide in our society.

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<sup>21</sup> “Creating Local Competition,” Speech by Joseph Farrell, Chief Economist, Federal Communications Commission, presented before an open audience at the FCC, May 15,

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Respectfully submitted,

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