



## LESSONS FROM 1996 TELECOMMUNICATIONS ACT:

## DEREGULATION BEFORE MEANINGFUL COMPETITION SPELLS CONSUMER DISASTER

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## I. INTRODUCTION

It is evident that the Telecommunications Act of 1996 has failed to produce the consumer benefits policy makers promised because competition has failed to take hold across the communications industry. The Act's failure is not because, as some have suggested, the Federal Communications Commission (FCC) was overly regulatory in seeking to create conditions ripe for competition. The fundamental problem is that the huge companies that dominate the telephone and cable TV industries prefer mergers and acquisitions to competition. They have refused to open their markets by dragging their feet in allowing competitors to interconnect, refusing to negotiate in good faith, litigating every nook and cranny of the law, and avoiding head-to-head competition like the plague.

New cable TV competitors ("overbuilders") have been unable to dent the monopoly strongholds of the dominant cable companies, gaining only one percent of the market since the passage of the Act. The major cable companies, who have never competed with each other, continue to refuse to invade each others' service areas. Instead, they have merged and swapped wires creating huge dominant national players holding tightly controlled clusters with joint ventures permeating the industry. The unregulated cable TV monopoly has led the way in consumer abuse: 1) by pushing cable TV rates up at almost three times the rate of inflation; and 2) closing down the broadband Internet by refusing to provide nondiscriminatory access for independent Internet service providers to is its high-speed, two way telecommunications networks.

Competition in local telephone markets has failed to materialize because the local telephone monopolies have refused to open their networks to new entrants who must rely on parts of the monopoly network to provide local service. The major telephone companies have not sought to provide local telephone service outside of their home territories.<sup>1</sup> The Bell operating companies, instead of competing with each other for local customers, bought each other, creating a small number of dominant national firms with regional monopolies that are even more immune to competitive entry.

Because cellular telephones and satellite TV are higher cost technologies providing qualitatively distinct services, they are unable to compete with the dominant wireline technologies for basic services. While they have expanded by serving unique needs and niche markets, wireline services continue to expand.

Faced with this intransigence, the FCC lacked adequate authority and/or the backbone to force the companies to open their markets. The problem is not too much FCC action, but too little. The solution is not, as some have suggested to surrender to the monopolistic tendencies of the communications industry, or to reward companies who have refused to obey the spirit if not the letter of the law by rewriting it to allow them to maintain their current dominance and expand it in new markets.

• The answer is to insist on effective competition – demonopolization – before deregulation.

- Policymakers must recognize that the monopoly elements in the industry the wires require effective regulation to promote competition in content and services over those wires.
- If consumers are ever to see the promised benefits of competition in communications markets, policymakers in Washington and the states must begin to be genuinely procompetitive and worry less about being pro-business.

Ironically, the process of market opening that has worked in New York and Texas would be directly undercut by the policies of capitulation being discussed in Washington. New York, in particular, demonstrates that if federal and state regulators stick to their guns, they can open communications markets to effective competition. Where regulators forced the incumbents to set the price for using the monopoly piece parts of their networks at reasonable levels and forced the incumbents to develop systems that allow efficient transfer of customers between companies, the result has been vigorous competition in both local and long distance markets.

Since the 1996 Act relied on rewarding the Bell monopolies to open their markets in exchange for entry into long distance markets, the FCC has no means to compel the Bells to open their markets. Submitting to the demands of the other Baby Bells, without holding them to the requirement to open their local markets will eliminate any incentive the companies have to open their local markets to competition. Consumers in other states will be permanently deprived of the only substantial competitive benefits enjoyed by the captive customers of the incumbent wireline monopolies as a result of the Act.

• To promote meaningful competition, federal and state regulators must press the market opening principles of New York across the country.

Congress deregulated cable TV before competition emerged, and the result is a consumer disaster: prices rising 2-3 times the rate of inflation. The failure to require the cable companies to provide telecommunications services on a nondiscriminatory basis will ensure that their cable monopoly persists, even as high-speed Internet service displaces dial-up narrowband service. Moreover, allowing the cable companies to close their networks would undermine the policy that requires the telephone companies to open their networks.

- Policymakers must step in to stop abusive cable pricing practices, and open up new avenues for cable competition.
- Policymakers must define high-speed Internet access, whether provided by cable TV or telephone companies, as a telecommunications service and implement an obligation to provide nondiscriminatory access to these networks.

The industry has already become so dominated by huge firms that the prospects of effective competition are dim. The size and scope of the current dominant firms makes entry extremely difficult.

• Policymakers should enforce ownership limits that promote diversity and rivalry, and antitrust officials must block further consolidation that undermines potential competition.

## **II. CONSUMER PRICES**

Congress had great hopes for wire-to wire competition in both the telephone and cable TV industries. The only facilities-based competitor for local telephone service actually mentioned by the Act's Conference report was cable TV.<sup>2</sup> Similarly, Congress devoted a whole section to telephone competition for cable through open video systems.<sup>3</sup> Neither of these have developed into effective competition.

With the failure of wire-to-wire competition across industries, the FCC has drawn attention to wireless competition. Unfortunately, because of their cost characteristics, wireless technologies (cellular in telephone, DBS in cable) have not proved to be effective competitors for the incumbent wire monopolies. They are niche products that fail to price discipline dominant firms' basic services. As a result, consumers have paid a heavy price.

## A. POST-1996 PRICING OF COMMUNICATIONS SERVICES

Figures 1-4 presents the movement in consumer prices for cable TV service and telephone service since 1984 (the year of both AT&T's breakup and Congress's first cut at cable deregulation), compared to the underlying rate of inflation. There is a striking contrast between telephone rates, which remain subject to regulation, and cable TV rates, which were deregulated by Congress even when meaningful competition was lacking.

#### 1. Telephone Bills

Local telephone rates have increased at just the rate of inflation (see Exhibit 1). Moreover, basic service rates have not increased at all. To the extent that there has been any increase in local monthly charges, it has been caused by the FCC's adding new charges on the bottom of the bill or increasing its existing subscriber line charges.

Long distance rates for both InterLATA (Exhibit 2) and IntraLATA (Exhibit 3) service have declined slightly. In the case of InterLATA service, this decline was accomplished largely by raising monthly fixed charges. To the extent that there have been reductions in long distance bills net of the increase in bottom of the bill charges, these have been accomplished by regulatory reductions in access charges. These access charge reductions are largely the result of price cap regulation, which requires that productivity gains in excess of inflation must be passed through to consumers.

In other words, price reductions enjoyed by consumers in telephone markets, particularly for residential service and low volume users, have been entirely the result of regulation, not competition. There is one striking exception to this, New York State, which will be discussed below.



## **EXHIBIT 1: Local Phone Rates v. CPI**

Since passage of the Telecom Act in 1996,<br/>local phone rates have increased 12.1%Telecommunications Act<br/>of 1996while CPI rose 12.5%



## **EXHIBIT 2: Interstate Long Distance Rates v. CPI**

Since passage of the Telecom Act in 1996, *Tele* Interstate rates have decreased 13.1%

while CPI rose 12.5%

Telecommunications Act of 1996



## **EXIHBIT 3: Intrastate Long Distance Rates v. CPI**



## EXHIBIT 4: Cable Rates v. CPI

#### 2. Cable TV Rates

The movement of unregulated Cable TV rates stands in stark contrast to the movement in regulated telephone rates (see Exhibit 4). Cable TV rates have increased at just under three times the rate of inflation. The only significant consumer commodity that has come close to this rate of increase since the passage of the Act--a period of low inflation and high productivity growth throughout the U.S. economy--is oil prices, driven by the monopolistic pricing practices of OPEC.

Basic and extended basic service rates are up even more. Price increases for basic/and extended cable service have higher than for other cable services and revenues from basic monthly subscriptions have grown about twice as fast as pay and pay-per-view revenues.<sup>4</sup> This is a classic monopolist pricing strategy, which raises prices the most for popular services that consumers have no other way of obtaining. Cable companies sustain this pricing policy by refusing to offer *a la carte* service. Consumers are forced to pay for an ever expanding and more expensive basic service package and denied the choice of choosing specific programs or channels.

## **B. LONG TERM TRENDS**

Placing the post-1996 pricing patterns in historical perspective adds depth to the analysis. Figures 1-4 include long term data on prices for these services back to 1984. In that year, the treatment of the cable and telephone industries was dramatically altered by the passage of the Cable TV Act of 1984 and the break-up of the Bell monopoly.

#### 1. Telephone Service

Immediately after the break-up of AT&T, regulators granted substantial local rate increases based on fears that the local companies would be weakened. In the mid-1980s, the FCC added the subscriber line charge to consumers' bills, which is treated as a local rate increase. State regulators realized that local service was a highly profitable business and granted few increases after the 1980s.

Since approximately 1991, basic local rates have been virtually unchanged. Any increase in rates in nominal terms has been the result of increases in federal subscriber line charges and taxes. Since the passage of the 1996 Act, federal regulators have increased fixed charges at the bottom of the bill, in spite of the fact that local companies have had billions of dollars of excess profits in the federal jurisdiction.

Long distance rates have declined over the period, although the decline in InterLATA rates has been predominantly funded by increases in subscriber line charges.

## 2. Cable TV Rates

Although the Cable Act of 1984 ended local regulation of cable rates, it held rate increases to the rate of inflation until 1986. Once rates were completely deregulated they sky rocketed. Between 1986 and 1993, cable rates increased by 71 percent, approximately 2.5 times the rate of inflation.

In 1993 the cable TV rate regulation mandated by the 1992 Cable Consumer Protection Act kicked in, which held cable rates constant for two years. Once it became evident that rate regulation was actually going to restrain rates, the cable industry went to Congress which effectively pressured the FCC to create a series of loopholes that re-ignited the price spiral.

Neither the growth of satellite TV (stimulated by the nondiscrimination provisions of the 1992 Act), nor the supposedly pro-competitive policies of the 1996 Act have been able to introduce sufficient competition to restrain cable TV rates. In real terms price increases since the 1996 Act have been greater than at any time in the history of the industry.

## C. THE IMPACT OF EFFECTIVE COMPETITION ON CONSUMER PRICES: TELEPHONE COMPETITION IN NEW YORK STATE

In contrast to the abusive behavior of unregulated cable TV companies, there are a few isolated examples of how effective competition can deliver benefits to consumers in communications markets. The most stunning example is the telecommunications market in New York State.

## 1. Telephone Rates

Although Verizon in New York (formerly NYNEX, formerly Bell Atlantic) resisted opening its local markets across its service territory, it desperately wanted into the lucrative long distance market in New York. When regulators in New York and at the Department of Justice insisted on genuine market opening, Verizon was forced to comply. The prices state regulators set for using the piece parts of the incumbent telephone network were at levels that would allow local competition and the operating systems necessary to switch customers was improved to allow rapid and seamless transfer of customers between local companies.

As a result, new entrants offered statewide local rates at a substantial discount. The price of MCI's competing local service was about 5 percent less than the incumbents. When bought in combination with long distance (any plan) an additional \$5 was taken off the bill. Given the rates in New York, this constituted an additional discount off of the typical local bill of 10 to 15 percent. Customers who want a bundled local and long distance company, could save between 15 and 20 percent off their local bill.<sup>5</sup>

In New York, the potential savings represent about three-quarters of the long-term potential gains from competition, as estimated by the FCC's own Synthesis Proxy Cost Model.<sup>6</sup> In New York, there would appear to be about \$10.50 of inefficiencies, misallocated costs, etc., embedded in local service costs that could be weeded out by vigorous competition. Of this, about \$7.85 is recoverable in the intrastate jurisdiction. The savings of \$6 per month described above would capture three-quarters of that for the residential ratepayer.

In the long distance market, Verizon entered with a range of competitive offerings, anchored by an anytime, anywhere rate of \$.10 per minute. Compared to the products in the market at the time, this was about a 50 percent savings for low volume customers. Other products offered by Verizon were attractive as well.<sup>7</sup>

As a result of genuinely open markets, consumers in New York have switched companies in droves (2 million local and 1.5 million long distance). Companies have engaged in "tit-fortat" competition, matching each other's offers. Prices for both local and long distance service have dropped substantially (approximately 20 percent for those who shop).

The key to this outcome is to ensure that the local market is effectively open to competition. If the local market is not open, long distance companies cannot compete to deliver bundles. The incumbents do not have to compete vigorously to win market share. They just bundle local and long distance and use their name recognition to gain market share. This is exactly what happened when companies like Southern New England Telephone and GTE were allowed to enter long distance before they opened their local markets to consumers. In those markets they offered uncompetitive long distance rates and consumers got virtually no benefits. There was no local competition whatsoever.

## 2. Cable TV Rates in New York

The contrast between telephone rates and cable TV charges observable at the national level is also evident in New York. In the past year, while local and long distance prices have experienced a dramatic drop due to competition, cable TV rates continued their upward spiral. Cablevision's most recent round of increases has caused a furor.

Not only did it push rates up by almost 6 percent on average, but basic and extended basic service rates increased almost 13 percent. A survey of other rates in the state shows similar increases.

## D. CONCLUSION

We draw four lessons from the consumer experience since the communications industry restructuring of 1984 and particularly since the passage of the Telecommunications Act of 1996.

- Unregulated monopolies, like cable, abuse consumers.
- Effective competition can produce substantial benefits, but competition has failed to provide consumer price reductions in most of the industry.
- Regulators must stick to their guns and force the incumbent monopolists to open their markets if consumers are ever to receive the benefits of competition.
- Regulators, particularly at the state level, continue to protect consumers from the abuse of market power where they have the authority to do so.

## **III. THE FAILURE OF COMPETITION**

## A. CABLE TV

#### 1. Wire-to-Wire Competition has Failed

The Telecommunications Act of 1996 has failed to establish wire-to-wire competition for cable TV service. Open video systems are virtually non-existent.<sup>8</sup> Head-to-head (cable v. cable) "overbuilding" has failed to seriously challenge the cable wire monopoly.<sup>9</sup> The incumbent cable TV companies virtually never compete with one another. There is an effective non-compete understanding between the members of the industry. To our knowledge, there is not one case of an incumbent cable company extending its network by seeking to overbuild a neighboring system.

The only telephone company that has pursued large-scale entry into the cable business as a plain overbuilder – Ameritech – has been bought out by another telephone company – SBC – that tried the cable business and did not like it. SBC entered and exited the cable business before it acquired PacBell. It subsequently took PacBell out of the cable business after it acquired the company. It cut back on Southern New England Telephone company's cable business. The FCC now recognizes that telephone companies are exiting this business.<sup>10</sup>

Other overbuilders have made little progress. Since the passage of the 1996 Act, it appears that fewer than 5 percent of television households have been passed by overbuilders and about one percent of households have subscribed to overbuilders.<sup>11</sup> In other words, incumbent cable companies have approximately 97 percent of the wireline multichannel video market. This is roughly equivalent to the incumbent telephone company share of the wireline voice market.

#### 2. Satellite Does Not Compete with Basic Service

Satellite has severe limitations in competing with cable TV service. DBS's large channel capacity and high front-end costs dictate the packaging of large numbers of high priced channels and/or long term contracts. DBS still costs substantially more than cable does. Even in the midst of the debate over delivery of local stations by satellite, the largest satellite provider eschews price competition for the basic package.<sup>12</sup> As a result, DBS is a small competitive fringe--about 16 percent of the market--that is not capable of disciplining cable TV pricing. Moreover, because of its limitation in delivering local broadcasting, a substantial number of DBS subscribers (approximately 25 percent) also subscribe to cable. Thus, only 12 percent of households have DBS and not cable ("multichannel video programming" is a category used by the FCC to describe the full range of video programming services, from cable to DBS). DBS fills a niche at the high end of the market. Many subscribers buy cable in order to get a full complement of local programming.

The repeated claims that satellite disciplines cable TV market power have been rejected by the FCC in its most recent analysis of pricing.<sup>13</sup> In that analysis, the effect of satellite penetration was not statistically significant. Furthermore, the analysis found that satellite continues to be successful in rural areas, where cable services are least available. Taking these factors into account, it is not surprising to find that the elasticity of demand for cable service estimated by the FCC is quite low – just 1.3. This means that the threat of abuse of market power is substantial.

The presence of DBS has done nothing to restrain cable price increases. They have been as rapid, in real terms, as at any time during the history of the industry. Cable makes much more money by increasing prices for basic cable than competing in the DBS niche, especially now that they can add cable modem service to the package. The revenue gained by increasing cable prices to existing subscribers since the Telecom Act of 1996 exceeds the revenue lost to all DBS-only subscribers by almost 3-to-1 and new DBS-only subscribers by almost 4-to-1.<sup>14</sup> Cable has continued to grow in penetration, even as satellite has expanded its base (see Exhibit 5).

The addition of high priced broadband Internet services will do nothing to change this picture. In fact, it will likely make matters worse.<sup>15</sup> By adding services at the high end, cable operators will be able to attack the high-end niche that satellite occupies, but satellite's high costs prevent it from attacking the cable base. While two-way broadband satellite services (Ka band) are on the horizon, they have not been deployed commercially and are not likely to be deployed in any significant numbers for the next 12-24 months.

## **B. LOCAL TELEPHONE SERVICE**

#### 1. Wire-to-Wire Competition has Failed

Five years after the passage of the 1996 Act, prospects for facilities-based, wire-to-wire competition--the promise that allowed legislators and regulators to sell the 1996 Act to the public—are dim at best.<sup>16</sup> The industrial organization and regulatory oversight of the communications industry are a shambles from the competition and consumer points of view. The situation on the ground in most local telephone markets reflects this grim reality.<sup>17</sup>

Across the nation, new entrants to the local phone have been unable to crack the local telephone monopoly to any significant extent. Competitive local exchange carriers (CLECs) have captured just under 7 percent of the total local lines in the country, but for residential and small business consumers the figure is about 3 percent.<sup>18</sup> Worse still, most of this competition is not with new wires. Wire-to-wire competition accounts for only about 1 percent of the total number of lines nationwide and in the residential and small business sector, it is less than one percent.<sup>19</sup> In other words, the incumbent monopolists still have a complete stranglehold on local telephone wires.

The failure of new entrants to break the monopoly of the incumbents is reinforced by the failure of incumbents to compete against one another, just as in cable. It was hoped that the large incumbent local monopoly companies might attack their neighbors' service areas, as they are the best situated to do so. But such competition has not happened.<sup>20</sup> The incumbent local exchange carriers (ILECs) have simply not tried to enter each other's service territories in any significant way. In fact, they have done quite the opposite. Rather than compete, they have merged. Before the 1996 Act was passed, the largest four ILECs owned less than half (48%) of all the lines in the country.<sup>21</sup> Today, the largest four local telephone companies own about 85% of all the lines in the country.<sup>22</sup>



Source: Federal Communications Commission, *In the Matter of Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming*, various years.

Wire-to-wire competition has been a bust in another very evident way. Throughout October 2000, AT&T conducted a flurry of board meetings, press conferences and conference calls with Wall Street analysts to explain its decision to break itself up into three companies.<sup>23</sup> The admission that its business strategy had failed was obviously bad news for AT&T stockholders, but it was even worse news for telephone consumers. It signaled the failure of the federal Telecommunications Act of 1996 to deliver local phone competition.

AT&T justified its purchases of cable TV companies to regulators and bankers by claiming that local telephone competition over cable wires could be provided only as part of an integrated package of voice, video and data services.<sup>24</sup> It promised to use the tens of millions of cable lines it was buying to compete for local telephone service.<sup>25</sup> Now AT&T is going in the opposite direction. The company is splitting the cable business from the telephone business from the wireless business, and creating a separate tracking stock for its consumer long distance business.

The difficulties of providing switched telephone service over cable networks render such activity uneconomic.<sup>26</sup> It appears that two separate networks, each optimized around very different functionalities, make perfect economic sense, for three legitimate reasons.<sup>27</sup>

- Functional specialization is a sound economic principle, especially when there are diseconomies of integration between switched and non-switched services. It costs too much to make one network do very different things.
- "One-stop-shopping" sounded like a good idea but it was not compelling when one-click shopping is available for almost anything. Consumers are not clamoring for one huge package of voice, video and data services.
- Goal planning, setting and achieving is much more difficult. It is much more challenging to sell three distinct services to very different kinds of customers.

Specialized networks that do not compete directly for their core businesses pose a problem for policymakers. Without wire-to-wire competition, the plain old problem of monopoly power in cable TV and local telephone networks fails to subside.<sup>28</sup>

#### 2. Wireless Does Not Compete with Basic Service

Wireless telephone service technologies have not solved the problem of lack of competition for local service and will not solve it any time soon. Cellular phones have become popular, but this service has not emerged as a substitute for basic telephone service for several reasons. Even though the price of wireless has come down, for the average consumer wireless costs about five times as much as local service.<sup>29</sup> The average flat rate telephone is in use for local calling about 1300 minutes per month.<sup>30</sup> The average monthly charge is about \$20 per month. The average cost per minute of use is \$.015. Assuming half the usage is outgoing, the cost per minute of a call made is \$.03. This is much less than average cost of cellular calling plans, which run in the range of \$.10 to \$.15 per minute. Cellular service is measured service; local exchange service is generally flat rate. Cellular service does not allow multiple phone

hookups on the same phone number, in contrast to wireline service. Cellular charges not only for outgoing calls, but also for incoming calls, which is never the case with wireline service.

The proof that wireless and basic wireline services occupy different product spaces can be seen in the numbers of consumers subscribing to each (see Exhibit 6). Both wireless and wireline have been growing at strong rates. In fact, since the 1996 Act was passed, the number of local access lines has grown faster than at any time since the 1984 break-up of the AT&T system. Local exchange revenues have been growing twice as fast as other wireline revenues, and faster than they had in the in the first half of the 1990s.<sup>31</sup> Thus, although cellular has achieved a high market penetration, it does not represent an economic substitute for wireline local telephone service. It is a different commodity that provides different functionality.

## C. HIGH-SPEED INTERNET ACCESS

High-speed Internet for residential customers is dominated by cable modem service. Cable companies have a market share of at least 75 percent in the residential market. The current availability of cable is about twice as high as that of the second technology, dedicated subscriber line service (DSL). Further, many telephone lines cannot deliver high-speed Internet because of long loops (the distance from the phone company's central office to the subscriber must be less than about 18,000 feet; this eliminates wide swaths of the U.S., especially in highincome suburban areas) or telephone equipment that renders the service inoperable. Wireless technologies are not widely available.

With its advantage in high-speed technology and exploiting indecision by the FCC, the cable industry has rolled out its high-speed Internet service using the same closed proprietary model that it uses for video services. The abusive practices that have afflicted cable TV consumers are being extended to the high-speed Internet. As a result, telephone companies, whose track record in opening their markets is far from stellar, insist that they be released from their obligation to provide nondiscriminatory access to their wires. In short, both the cable TV and telephone companies are now both pressing to apply the unregulated monopoly cable model to a wide range of telecommunications services. Past behavior should be stern warning to policymakers that deregulating these dominant firms which do not face effective competition will result in consumer exploitation.

The cable industry certainly has not changed its ways. Notwithstanding eleventh hour promises to negotiate access with unaffiliated Internet service providers (ISPs) at some point in the future, not one cable operator has voluntarily allowed commercial access to any unaffiliated ISP. In implementing its much ballyhooed memorandum of understanding, AOL Time Warner made it clear that they would write the rules of their competitors' business operations. First, they required ISPs to "prequalify" for interconnection, forcing them to divulge sensitive commercial information to Time Warner.<sup>32</sup> A Term Sheet offered by Time Warner to unaffiliated ISPs who had requested access to its network during the summer of 2000 gives a new and troubling specificity to the industry resistance to open access.



SOURCE: Industry Analysis Division, Trends in Telephone Service, various issues.

Only in response to public outcries during legitimate regulatory proceedings, such as merger reviews and franchise transfers, have cable operators agreed to allow some unaffiliated ISPs to obtain access to some cable modem platforms at some point in the future. While Time Warner will be closely watched by federal agencies as it opens its network, it remains to be seen what terms and conditions will be offered. For the rest of the industry, the terms and conditions being stipulated in voluntary negotiations remain discriminatory and anticompetitive.

AT&T's initial commitment to open access exerted a similar control over unaffiliated ISPs. <sup>33</sup> Recent statements by AT&T officials involved in its open access trials make it clear that they are relinquishing little control of the network and intend to set the conditions of access to serve its interests.<sup>34</sup> AT&T not only plans to maintain significant control over the home screen, it plans to link that to a preferred browser.<sup>35</sup>

Ironically, in an effort to defend the competitive advantage of having its prime competitor subject to an open access obligation, the cable industry devotes a great deal of attention to describing how the telephone companies could leverage their market power in the local telephone market into a competitive advantage in the complementary high-speed Internet access market. AT&T identifies four forms of anticompetitive leveraging -- bundling, price squeeze, service quality discrimination, and first mover advantage. It provides a road map to the anticompetitive behavior in which the cable industry has engaged in rolling out its high-speed Internet service. Each of the four avenues that cable companies assert could be used by telephone companies to leverage their market power in their core market has already been exercised by cable companies.

**Bundling**: The cable companies argue that local telephone companies would bundle local telephone service with high-speed data service to undermine competition.

If competitors lacked the ability to offer both voice and data over a single loop, they would be at severe competitive advantage [sic] in the vast majority of the nation where there is no other facility over which both services can be provisioned. Continued regulation is therefore necessary to prevent incumbent LECs from further entrenching their voice monopolies.<sup>36</sup>

It appears, however, that the link that that is most critical in the development of integrated multimedia services is the link between information services and video. A much better case can be made that if competitors lack the ability to offer information and video over a single wire, they would be at a severe competitive disadvantage in the vast majority of the nation where there is no facility over which both services can be provided.

This is especially true in light of the fact that the cable companies are aggressively bundling cable TV service with high-speed Internet access to accomplish exactly the same thing. Cable operators offer a \$10 discount for customers who take a bundle of cable TV and high-speed Internet access. This is a 20 percent discount off of the market price of high-speed Internet access.<sup>37</sup> They are leveraging their market power over cable video into the high-speed Internet market.

Price Squeeze: AT&T describes the potential for price squeeze as follows:

Retention of existing access regulation is also necessary to prevent incumbent LECs from leveraging their bottleneck monopolies into nascent advanced service 'offered over the same bottleneck facilities...' This strategy entails setting the unbundled price of the basic local service and the price of the incremental cost of supplying the DSL service alone. In this scenario, the direct effect of the conduct is to squeeze out the competing suppliers of the enhanced service that might otherwise serve as attractive complements to the basic services offered by the incumbent LEC.

To the extent that any cable operators have voluntarily negotiated with unaffiliated ISPs, they have insisted on extremely high charges for access that render it impossible for competitors to effectively enter the market. Time Warner continues to insist on a high price floor under sales of Internet service to cable TV customers. The Time Warner Term Sheet demanded 75 percent of subscriber revenues and 25 percent of ancillary revenues, its initial deal with Earthlink took 65 and 15. This squeezes the margin on such customers and renders potential video stream competitors vulnerable to price squeeze.<sup>38</sup>

**Quality Discrimination:** AT&T argues that local telephone companies can offer lower quality service to unaffiliated ISPs, thereby gaining an advantage for their affiliated ISP.

Allowing incumbent LECs to bundle basic services with enhanced service provided [sic] over bottleneck facilities could also better enable them to squeeze out efficient potential competitors through non-price means – e.g. by offering lower quality monopoly bottleneck service to customers of their competitors, and by provider quicker or more complete disclosure of their network interface specifications and protocols to favored venders. That is so because bundling potentially 'covers up' discrimination.

Cable operators have continued to insist on restrictions on the quality of service offerings that unaffiliated ISPs could make that place them at a competitive disadvantage. Video streaming functionality is still up in the air throughout the industry. Quality of Service–critical to video streaming—will not be guaranteed by Time Warner, but rather is subject to "further negotiations."<sup>39</sup> New functionalities must be approved by Time Warner, whether or not they place any demands on the network.<sup>40</sup>

AT&T's control of the architecture is just as explicit. It will pick and choose which service providers will get the fastest speeds. The favored service provider will be those affiliated with AT&T.<sup>41</sup>

**First Mover:** AT&T describes the first mover advantage that LECs might seek to gain as follows,

Finally, if the incumbents were exempt from regulation merely because they are using their bottleneck facilities to provide advanced service, they could simply migrate captive local telephony customers to DSL before cable telephony or any other alternative to these monopoly services is available. Then the LECs could exploit their telephony monopoly over local customers without regulation, by means of pricing of local service to end-users as well as pricing of access to long distance providers, all under the rubric of "advanced services" offerings.

Cable operator exclusive contracts will certainly give them a leg up on the first 5 to 10 million plus subscribers before any ISPs have access to their networks.

## CONCLUSION

We draw the following conclusions from this analysis of the failure of competition in the communications industry.

- The industry is organized around two, non-competing, specialize networks, telephone focused on voice and data; cable focused on video and interactive video services.
- Wire-to-wire competition has failed in the core communication markets. Fewer than three percent of each of these cable TV markets are served by competing wireline companies. Major incumbent service providers have failed to attack markets within their industry. Rather, they have expanded and consolidated their monopoly control over their core markets. Major incumbent service providers have failed to use their facilities to attack across markets. Telephone companies do not provide cable, cable companies have failed miserably to provide telephone service.
- Wireless technologies are incapable of competing for core communications services (voice and video).
- High speed Internet is dominated by cable networks who are extending their closed proprietary model into a new, telecommunications product space.

## IV. COMMUNICATIONS MARKETS ARE HIGHLY CONCENTRATED AND THERE IS NO RELIEF IN SIGHT FOR CONSUMERS

## A. GOALS FOR COMPETITION IN COMMUNICATIONS MARKETS

The push to impose a closed, proprietary model on high-speed Internet access, which could easily be extended to a much broader range of telecommunications services under the approach advocated by cable and telephone companies, is based on a faulty premise. The standard repeatedly invoked by the industry to end public interest and common carrier obligations is the existence of an alternative means of communications. As long as there is one actual, or potential alternative service provider, no matter how meager its market share or inadequate its ability to provide service, these arguments declare the absence of a bottleneck, essential facility. If there is no bottleneck or essential facility, they claim that there is no basis for regulation, and no obligation of nondiscrimination and interconnection.

These arguments ignore the difference between communications and other commodities. Because of the importance of the free flow of information to democracy, it can be argued that communications networks should not be allowed to function on a discriminatory basis under any circumstances. Economic incentives, even in effectively competitive markets, are not adequate to protect the free speech rights of minorities or unpopular points of view.

Even within the purely economic realm, the essential facility argument is the wrong standard. Eliminating bottlenecks does not ensure effective competition. The essential facilities doctrine is a relevant antitrust concept, but it is not the only antitrust concept and it does not govern Communications Act policy. For example, merger policy is not governed by the essential facilities doctrine. A merger that would result in an essential facility/bottleneck situation would certainly be challenged, but many mergers that fall far short of creating that dire situation are also challenged. In other words, the essential facilities doctrine creates a floor, not a ceiling for challenging a merger. The essential facilities doctrine falls far short of Communications Act standards for competition.<sup>42</sup>

- The absence of an essential facility tells us nothing about the state of competition in the market. The absence of a monopoly is not synonymous with the presence of a workably competitive market.
- The absence of exclusive deals does not mean there is no discrimination.
- Only effective competition could be offered as a bulwark against unjust rates or discrimination.

Thus, the analysis of competition in communications markets must be based on a standard of actual, effective competition. This is the minimum standard that must be imposed if the purpose is to prevent the abuse of market power and to ensure, as the Communications Act still requires, that the charges, practices, and classifications are just and reasonable, are not unjustly or unreasonably discriminatory, and that consumers are protected.

In our view, merely eliminating the bottleneck comes nowhere near achieving the level of competition necessary for markets to ensure those goals. The duopoly that results from the mere elimination of a bottleneck remains a highly concentrated market, in which the abuse of market power is likely. This is especially true when the entities that dominate the highly concentrated market that is about to be deregulated have market power in neighboring markets and are using it to leverage the new market.

# B. MARKET STRUCTURE ANALYSIS: DEFINING WORKABLY COMPETITIVE MARKETS

Market structure analysis is used to identify situations where a small number of firms control a sufficiently large part of the market as to make coordinated or reinforcing activities feasible. Through various implicit and explicit mechanisms a small number of firms can reinforce each other's behavior, rather than compete. Generally, however, when the number of significant firms falls into the single digits, there is cause for concern, as the following suggests.

Where is the line to be drawn between oligopoly and competition? At what number do we draw the line between few and many? In principle, competition applies when the number of competing firms is infinite; at the same time, the textbooks usually say that a market is competitive if the cross effects between firms are negligible. Up to six firms one has oligopoly, and with fifty firms or more of roughly equal size one has competition; however, for sizes in between it may be difficult to say. The answer is not a matter of principle but rather an empirical matter.<sup>43</sup>

The clear danger of a market with a structure equivalent to only six equal sized firms was recognized by the Department of Justice in its Merger Guidelines,<sup>44</sup> first issued in 1984 by the Reagan administration. These guidelines were defined in terms of the Herfindahl-Hirschman Index (HHI). This measure takes the market share of each firm squares it, sums the result and multiplies by 10,000.<sup>45</sup>

A market with six equal sized firms would have a HHI of 1667. The Department declared any market with an HHI above 1800 to be highly concentrated. Thus, the key threshold is at about the equivalent of six or fewer firms.

Another way that economists look at a market at this level of concentration is to consider the market share of the largest four firms (called the 4-Firm concentration ratio). In a market with six equal sized firms, the 4-Firm concentration would be 67 percent. The reason that this is considered an oligopoly is that with a small a number of firms controlling that large a market share, their ability to avoid competing with each other is clear.

Shepherd describes this threshold as follows:<sup>46</sup>

Tight Oligopoly: The leading four firms combined have 60-100 percent of the market; collusion among them is relatively easy.

While six is a clear danger sign, theoretical and empirical evidence indicates that many more than six firms are necessary for competition – perhaps as many as fifty firms are necessary. Reflecting this basic observation, the Department of Justice established a second threshold to identify a moderately concentrated market. This market was defined by an HHI of 1000, which is equivalent to a market made up of 10 equal sized firms. In this market, the 4-Firm concentration ratio would be 40 percent.

Shepherd describes this threshold as follows:

Loose Oligopoly: The leading four firms, combined, have 40 percent or less of the market; collusion among them to fix prices is virtually impossible.<sup>47</sup>

Shepherd also notes that a dominant firm - "one firm has 50-100 percent of the market and no close rival"<sup>48</sup> - is even more of a concern.<sup>49</sup>

Even the moderately concentrated threshold of the Merger Guidelines barely begins to move down the danger zone of concentration from 6 to 50 equal sized firms. For a "commodity" with the importance of communications, certainly this moderately concentrated standard is a more appropriate place to focus in assessing the structure of the market. In other words, in simple economic markets that are more concentrated than the equivalent of 10 equal sized firms are sufficiently concentrated to raise questions about the competitive behaviors of the firms in the market. Given the nature of the telecommunications industry and the special concern about the free flow of ideas, this is a conservative level of concentration about which to be concerned.

## C. EVALUATING COMMUNICATIONS MARKETS

Even measured on a national basis, the cable TV, local telephone and high speed Internet access markets are all highly concentrated. To the extent that entry requires large national scale, companies in these industries have argued, the prospects for competition are troubling. However, most communications markets are local market are local in nature. Those who control the last mile facilities and hook the customer up to the network in a local area define the market.

The FCC has recently begun reporting a statistic that indicates just how far local markets are from being effectively competitive. It has begun reporting the number of available service providers within zip codes. This may or may not be the best way to define the local market, but it gives an indication of what is going on at the local level. In one sense, it vastly overstates the competitiveness of the market, since it treats and incumbent cable company or Baby Bell, which are likely to have a 90+ percent market share of the wireline market, equally with a wire-to-wire competitor, who is likely to have a one or two percent market share.

Nevertheless, the picture of competition at the local level is quite bleak (see Exhibit 7).

## EXHIBIT 7 CONCENTRATION OF LOCAL COMMUNICATIONS MARKETS

	TELEPHONE	CABLE	HIGH-SPEED INTERNET
WIRE-TO-WIRE			
Unconcentrated (10 or more competitors present)	3	0	0
Moderately Concentrated (6 to 9 competitors present) Highly concentrated (fewer than 6 competitors)	6	0	3
	91	100	97
Tight Oligopoly (3 to 5 Competitors Duopoly Monopoly No Service Available	5) 21 20 46 0	0 3 93 3	20 19 28 30
INCLUDING WIRELESS			
Unconcentrated (10 or more competitors present) Moderately Concentrated (6 to 9 competitors present) Highly concentrated (fewer than 6 competitors)	4	0	Same as above
	9	0	
	87	100	
Tight Oligopoly (3 to 5 Competitors Duopoly Monopoly No Service Available	5) 41 40 0	3 93 4	
NU SEIVICE AVAIIADIE	U	U	

SOURCES: Industry Analysis Division, *High-Speed Services for Internet Access: Subscribership as of June 30, 2000*, Federal Communications Commission, October
2000. Broadband Intelligence, *High-Speed Internet Competition*, December 2000.
Local telephone wires, Industry Analysis Division, *Local Telephone Competition: Status as of June 30, 2000*, Federal Communications Commission, December 2000.
Cable: In the Matter of Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming: Seventh Annual Report, CS Docket No. 00-132, January 8, 2001) Looking first at wire-to-wire competition, we find the following.

- Virtually all markets are highly concentrated.
- Monopoly is predominant, except for high-speed Internet where monopoly and lack of service are close (28 and 30 percent).
- Duopoly is the second most frequent market structure.

The FCC does not include wireless in these calculations, although it does include satellite in its discussion of cable TV service. The picture brightens somewhat, but is still far brighter if wireless is included for cable and telephone service (it plays little role in high-speed Internet at present). Even under this approach, which we have shown mischaracterizes wireless as an effective competitor. Telephone markets are evenly split between duopoly (46 percent) and tight oligopoly (41 percent), with only 4 percent being unconcentrated. Multichannel video is overwhelmingly a duopoly (93 percent), with markets being unconcentrated.

We draw the following conclusions from this analysis.

- Given this market structure, the obvious conclusion is that Congress and the FCC have correctly concluded that telecommunications services must continue to be subject to the full force of common carrier regulation and requirements for market opening.
- The Act incorrectly deregulated cable TV service. Congress must revisit this issue, and in the interim the FCC should use every opportunity available under the statute to promote competition in this industry. The Commission should promote greater use of spectrum and other technologies to compete with cable and promote access to streaming video over broadband Internet telecommunications facilities under the Commission's authority to regulate telecommunications service.
- High speed Internet access services, which are clearly telecommunications services delivered in markets that are far from effectively competitive, must be subject to similar obligations of nondiscrimination and interconnection.

#### END NOTES

<sup>1</sup> SBC, in compliance with the conditions of its merger with Ameritech, offers competitive local service in four cities, is slated to provide competitive local service in 15 cities by April 8, 2001 and eventually 30 cities for full compliance. However, SBC's extension of service into those cities is unlikely to be more than window dressing—they have not yet and are not likely in the future to capture a substantial customer base.

<sup>2</sup> Pub. L. 104-104, Conference Report, p. 148.

<sup>3</sup> Title II, part 5.

<sup>4</sup> This trend was analyzed in detail in Cooper, Mark and Gene Kimmelman, *The Digital Divide Confronts the Telecommunications Act of 1996: Business Reality vs. Public Policy* (Consumer Federation of America and Consumers Union, February 1999), pp. 7-12. More recent data indicates that the trend has continued (see *The Kagan Media Index*, October 31, 2000, p. 15.

<sup>5</sup> Comments Of The Consumer Federation Of America, In the Matter of Application of New York Telephone Company (d/b/a/ Bell Atlantic – New York) Bell Atlantic Communications, Inc. NYNEX Long Distance Company and Bell Atlantic Global Networks, Inc., for Authorization To Provide In-Region, InterLATA Services in New York, Before the Federal Communications Commission CC Docket No. 99-295, November 8, 1999.

<sup>6</sup> Ibid.

<sup>7</sup> The Telecommunications Research and Action Center, *A Study of Telephone Competition in New York*, September 6, 2000.

<sup>8</sup>In the Matter of Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming: Seventh Annual Report, CS Docket No. 00-132, January 8, 2001 (hereafter, Seventh Annual Report), Table C-1 shows OVS at a constant, 60,000 subscribers.

<sup>9</sup> Seventh Annual Report, pp. 20-22.

<sup>10</sup> Seventh Annual Report, pp. 55-58.

<sup>11</sup> The Seventh Annual report presents data on overbuilders that account for about one-third of the national total added since the passage of the 1996 Act. The ratio of homes passed and subscribers to households in the franchise area is used to project national totals. This may be too optimistic, since the identified companies are among the more aggressive and the remainder of overbuilders may not perform as well.

<sup>12</sup> Mundy, Alicia, "The Price of Freedom," *MediaWeek*, March 29, 1999., p. 32

<sup>13</sup> In the Matter of Implementation of Section 3 of the Cable Television Consumer Protection Act of 1992: Statistical Report on Average Rates for Basic Service, Cable Programming Services, and Equipment, MM Docket No. 92-266, June 15, 2000, p. 5.

<sup>14</sup> The pricing strategy was apparent to some industry observers, as a Cisco publication noted (Abe, George, *Residential Broadband* (Cisco Press, Macmillan Technical Publishing, 1997), p. 217).

Cable MSO management apparently agrees it is necessary to get more from each subscriber. Since the passage of the Telecom Act of 96, cable operators have taken the opportunity to raise subscription rates more than twice as fast as the consumer price index, clearly not a strategy for getting new households.

<sup>15</sup> "Petition to Deny of Consumers Union, Consumer Federation of America, Media Access Project and Center for Media Education," *In the Matter of Applications of America Online Inc. and Time Warner, Inc. for Transfer of Control,* before the Federal Communications Commission, Docket No. CS 00-30, April 26, 2000.

<sup>16</sup> The only facility mentioned in the Conference report on the Telecom Act was cable (see p. 148).

<sup>17</sup> The Consumer Federation of America has charted the unfolding failure of local competition at the national level and in a series of state-specific studies. See, Cooper, Mark N., *Last Chance for Local Competition: Policies to Open Markets Before Baby Bells Begin to Sell In-Region Long Distance Service* (June 17, 1997); *Affidavit of Mark N. Cooper on Behalf of the Consumer Federation of America*, before the Public Utility Commission of California R.93-04003, I.93-04-002, R.95-04043, R.85-04044, June 1998; Consumer Federation of America and Consumers Union, "Reply Comments," before the Federal Communications Commission, *In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability, Etc.*, CC Docket Nos. 98-147, 98-11, 98-26, 98-32, 98-78, 98-91, CCB/CPD Docket No. 98-15, RM 9244, October 18, 1998; The Consumer Stake in Vigorous Competition in the Illinois Local Telephone Market, March 1999). See also, Cooper, Mark, *Situation Report on Local Competition in New Jersey*, November 1998.

<sup>18</sup> Industry Analysis Division, Common Carrier Bureau, *Local Telephone Competition at the New Millennium* (Federal Communications Commission, December 2000) (hereafter, *Local Competition 2000*, p. 1.

<sup>19</sup> Based on ratios in Industry Analysis Division, Common Carrier Bureau, *Local Competition: August 1999* (Federal Communications Commission, August 1999) (hereafter *Local Competition 1999*), which gives the most recent available data on residential versus business wire-to-wire competition.

<sup>20</sup> Reply Comments Of The Consumer Federation Of America, Consumers Union, And AARP, before The Federal Communications Commission, <u>Proposed Transfer Of Control SBC And Ameritech</u>, CC Docket No. 98-141, November 16, 1998); Citizen Action of Indiana, et al., *The Consumer Case Against the SBC-Ameritech Merger* (January 20, 1999).

<sup>21</sup> FCC, Statistics of Common Carriers, 1995/1996, Tables 1 and 2.5.

<sup>22</sup> FCC, *Statistics of Common Carriers*, 1998.1999, *Tables 1 and 2.5*, adjusted for Bell Atlantic/GTE merger and CLEC line count.

<sup>23</sup> Cooper, Mark, "Picking Up the Public Policy Pieces of Failed Business and Regulatory Models," presented at *Setting The Telecommunications Agenda*, Columbia Institute For Tele-Information, (November 3, 2000).

<sup>24</sup> Application for Consent to Transfer of Control of Licenses and Section 214 Authorization from Telecommunications, Inc., Transferor, to AT&T Corp., Transferee, Public Interest Statement, Federal Communications Commission, CS Docket No. 98-178; Application for Consent to Transfer of Control of Licenses and Section 214 Authorization from MediaOne Group, Inc., Transferor, to AT&T Corp., Transferee, Public Interest Statement, Federal Communications Commission, CS Docket No. 99-251.

<sup>25</sup> This was always a dubious proposition, see Consumers Union, Consumer Federation of America and Media Access Project, *Breaking the Rules: AT&T's Attempt to Buy a National Monopoly in Cable TV and Broadband Internet Services* (August 17, 1999).

<sup>26</sup> The local exchange companies recognized the difficulty that cable companies would have in providing telephone service. Bell Atlantic described the problems in detail in its aborted attempt to purchase TCI. (See <u>Bell Atlantic's</u> <u>Request for an Expedited Waiver Relating to Out-of-Region Interexchange Services and Satellite Programming Transport</u>, *United States of America v. Western Electric Company, Inc., and American Telephone and Telegraph Company*, Civil No. 82-0192 (HHG) January 20, 1994. The request consists of six parts, the request itself and five affidavits (<u>Affidavits in Support of Bell Atlantic's Request for an Expedited Waiver Relating to Out-of-Region Interexchange Services and Satellite Programming Transport</u>, January 20, 1994. The request consists of six parts, the request itself and five affidavits (<u>Affidavits in Support of Bell Atlantic's Request for an Expedited Waiver Relating to Out-of-Region Interexchange Services and Satellite Programming Transport</u>, January 20, 1994. Individual affidavits include Alfred E. Kahn and William E. Taylor; Gary S. Becker; Robert W. Crandall; Robert G. Harris; and Brian D. Oliver. Ironically, prior AT&T management apparently reached the same conclusion. However, current AT&T management confesses to being unaware of these analyses (Cauley, Leslie, "Armstrong's Vision of AT&T Cable Empire Unravels on the Ground," *Wall Street Journal*, October 18, 2000). At least one cable company has publicly admitted that it cannot pursue a typical telephone service (circuit switched telephony) and will have to try to provide Internet telephony, although there are no guarantees when, or whether, this approach will be viable for basic telephone service (Comments of Joe Waz at Setting The Telecommunications Agenda, Columbia Institute For Tele-Information, November 3, 2000).

<sup>27</sup> It was always a dubious proposition. See Cooper Mark, *Expanding the Information Age in the 1990s: A Pragmatic Consumer Analysis* (Consumer Federation of America and American Association of Retired Persons, January 1999); *Developing the Information Age in the 1990s: A Pragmatic Consumer View* (Consumer Federation of America, June 8, 1992)

<sup>28</sup> Consumer Federation of America and Consumer Action, *Transforming the Information Superhighway into a Private Toll Road* (, September 1999), looks at problems in both the cable TV and the telephone industries from the point of view of advanced services.

<sup>29</sup> Comments of the Consumer Federation of America.

<sup>30</sup> Industry Analysis Division, *Trends in Telephone Service*, December 2000.

<sup>31</sup> Federal Communications Commission, *Trends in Telephone Service, 2000* (March 2000); Federal Communications Commission, *Statistics of Common Carriers* (various issues).

<sup>32</sup> "Letter to Steve Heins from Bonnie Blecha, Time Warner Cable," August 2, 2000.

<sup>33</sup> The commitment included the declaration that

Any such opportunities will be subject to terms and conditions to be agreed upon by the parties which will address, as appropriate, but not be limited to issues such as pricing, billing customer relationship, design of state page, degree of customization, speed, system usage, caching services, co-branding ancillary services, advertising and e-commerce revenues, and infrastructure costs.

<sup>34</sup> Goodman, Peter S., "AT&T Puts Open Access to a Test," *Washington Post*, November 23, 2000 (hereafter Goodman).

<sup>35</sup> Goodman,

But as a demonstration of the software last week made clear, AT&T's logo will remain an immutable part of every screen, flanked by menus that beckon customers with links to web sites for local news and shopping – AT&T's commercial partners, who will share revenues.

"We are not going to become invisible," said Susan K. Marshall, senior vice president of data services at AT&T Broadband, who is overseeing the Boulder trial. "To get to the Internet, you have to do something with that globe. It puts the brand in the customer's mind... so that I have the ability to drive some additional revenues.

But some ISPs say AT&T's digitally engraved logo and unwillingness to fully relinquish the customer's first screen undermines its commitment to open access.

"This whole test in not about interoperability," said Douglas H. Hanson, chief executive of RMI.net Inc., a Denver-based ISP that is participating in the trial. "It's about, 'How can we put up a smoke screen to satisfy the regulators to prevent regulation of cable access. 'This is subterfuge...

AT&T has also designed its own Web browser that will pop up when customers click on the "Internet" window. Those savvy enough to navigate the system without instructions will be able to use familiar browsers such as Microsoft's Internet Explorer or Netscape. But AT&T's software will encourage customers to use its browser.

The reason for this subtle positioning is the value of owning the first screen...

Thus, if AT&T's flashing logo and its browser become – as the company hopes – vehicles to lure customers to sites run by its partners, the dollars it collects will come at the expense of ISPs that otherwise would have claimed the revenue.

<sup>36</sup> AT&T, pp. 93-94.

<sup>37</sup> In the Matter of Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming, CS Docket No. 99-230, January 14, 2000, Table B-10 shows the bundling discount for the vast majority of cable operators. In the instant proceedings, the comments of Earthlink provide an example of an Excite@Home\_advertisement that declares that non-cable subscribers may be charged more than cable subscribers.

<sup>38</sup> Time Warner Term Sheet

Subscriber Revenue Splits. TWC shall retain seventy-five percent (75%) of gross Service subscription revenues and ISP shall receive twenty-five percent (25%) thereof. Notwithstanding the foregoing, for subscriptions to the lower tier Service: (a) TWC shall receive a minimum monthly payment of \$30 for each subscription sold by ISP to existing TWC cable television service subscribers; and (b) ISP shall receive a minimum monthly payment of \$10 for each subscription sold by TWC. TWC shall be entitled to higher minimum monthly payments, specified in the Definitive Agreement, with respect to subscriptions sold by ISP to customers who are not TWC cable television service customers.

<sup>39</sup> Time Warner Term Sheet,

Video Streaming: Telephony. Video streaming and telephony will be permitted as part of the Service, subject to the following provisions:

TWC will not be required to provide QoS support for telephony or video streaming for the Service QoS may be provided upon request and at an additional cost.

<sup>40</sup> Time Warner Term Sheet,

To the extent ISP wishes to offer any functionality as part of the Service which: (a) is outside the scope of the Network Architecture; (b) requires an Operator acquire equipment or software or implement a change in the way the Operator processes, TWC shall have the right to approve such new functionality, provided however that in the event TWC approves such functionality, ISP will be obligated to reimburse for TWC its direct, out-of-pocket costs in implementing such new functionality.

<sup>41</sup> Goodman,

Founder Joe Pezzillo worries that the competitive gap could widen as broadband brings new business models.

He envisions AT&T making deals with major music labels to deliver its own Internet radio, with AT&T providing the fastest connections to its partners and slower connections to sites like his. "Someone is not going to wait for our page to load when they can get a competitor's page instantly," Pezzillo said.

AT&T says it has yet to formulate business models with partners, but the software the company has designed for the Boulder trial – demonstrated at its headquarters in Englewood, Colo. Last week – clearly includes a menu that will allow customers to link directly to its partners. Company officials acknowledge that AT&T's network already has the ability to prioritize the flow of traffic just as Pezzillo fears.

"We could turn the switches in a matter of days to be able to accommodate that kind of environment," said Patrick McGrew, an AT&T manager working on the technical details of the Boulder trial.

Though the Boulder trial is focused on technical issues alone, AT&T will study the way customers navigate the system as it negotiates with ISPs seeking to use its network...

<sup>42</sup> Recently, as the Commission is well aware, the Department of Justice objected to the merger of the number two and number three long distance companies (MCI and Sprint), even though no bottleneck facility would result. Indeed, the post-merger firm would have remained far smaller than the largest firm in the industry. The loss of competition and the potential for abuse of market power was deemed too great under the antitrust laws.

<sup>43</sup> J. W. Friedman, <u>Oligopoly Theory</u> (Cambridge: Cambridge University Press, 1983), pp. 8-9.

<sup>44</sup>U.S. Department of Justice, <u>Merger Guideline</u>, revised, 1992.

<sup>45</sup> Shepherd, p. 389, gives the following formulas for the Herfindahl-Hirschman Index (HHI) and the Concentration Ratio (CR):

 $H = E \frac{p_i^2}{p_i^2}$   $H = E \frac{p_i}{i=1}$   $CR_m = E \frac{p_i}{i=1}$ where n = the number of firms m = the number of firms (4 for the 4 firm concentration ratio) p = the share of the ith firm. i

<sup>46</sup> Shepherd, p. 4.

<sup>47</sup>Shepherd, p. 4.

<sup>48</sup> Shepherd, p. 4.

<sup>49</sup> The Department of Justice Guidelines of 1984 had a dominant firm proviso, which identified a 65 percent market share, which was dropped in the 1992 update.