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Bundling Residential Telephone, Internet, and Video Services: Issues for Congress

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Summary

Technological advances and deregulatory actions now allow consumers to obtain their local and long distance telephone services, their high-speed Internet services, and their video services from competing technologies. The convergence of previously distinct markets has required companies to seek strategies for holding on to their traditional customers while seeking new ones. One of those strategies is for companies to offer bundles of "traditional" and "new" services at a single price that often represents a discount off the sum of the prices of the individual services. These bundled service offerings are favored by many consumers. They provide the convenience of "one stop shopping" and in some situations, by providing the full panoply of services at a fixed price, make it easier for consumers to comparison shop. They also are favored by many providers because they tend to reduce "churn" – the rate at which customers shift to competitors – and allow providers to exploit economies of scope in marketing.

But bundling also can create public policy issues for Congress. The bundled offerings typically provide some combination of interstate telecommunications services, intrastate telecommunications services, and non-telecommunications services (information services, video services, and even customer premises equipment) for a single price. The federal Universal Service Fund – the federal subsidy program that assures affordable telephone rates for high-cost (rural) and low-income telephone customers as well as for schools, libraries, and rural health facilities – is supported by an assessment on interstate telecommunications revenues only. But it is difficult to identify the portion of revenues generated by a bundled service offering attributable to the interstate telecommunications portion of that bundle. There is no unambiguous way for providers to assign a portion of the bundled price to interstate telecommunications services or for fund administrators to audit that assignment. In addition, some taxes are assessed upon one or more, but not all, of the services included in various bundled service offerings. This creates the same assessment and auditing problem for these taxes as exists for the federal Universal Service Fund. This has important policy implications at a time when many Members of Congress seek to shelter Internet services – which often are included in these bundles – from taxation without placing any group of providers at a competitive advantage or disadvantage.

Some observers have been concerned that bundled service offerings could have anticompetitive consequences if they foster industry consolidation or if a provider has market power for one of the services in its bundled offering and can use that offering to tie that service to a competitive service in a fashion that reduces competition for the competitive service.

Leaders in both the House and the Senate Commerce Committees have announced that in the 109th Congress they plan to review and reform the 1996 Telecommunications Act (P.L. 104-104) in light of the market convergence that underlies the trend toward bundling. This report will be updated as events warrant.

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Bundling Residential Telephone, Internet, and Video Services: Issues for Congress

Technological advances and deregulatory actions now allow consumers to obtain their local and long distance telephone services, their high-speed Internet services, and their video services from competing technologies. Companies that in the past sold a narrow suite of services in relative insulation from competition now are actively entering new service markets and also facing entry by others into their traditional markets. The convergence of previously distinct markets has required companies to seek strategies for holding on to their traditional customers while seeking new ones. One of those strategies is for companies to offer bundles of their "traditional" services and "new" services – typically at a single price that represents a discount off the sum of the prices of the individual services.

Today, most incumbent local exchange carriers ("ILECs"),[1] competitive local exchange carriers ("CLECs"),[2] wireless carriers, cable companies, and satellite television companies have bundled service offerings that compete, to varying degrees, with one another.

Leaders in both the House and the Senate Commerce Committees have announced that in the 109th Congress they plan to review and reform the 1996 Telecommunications Act (P.L. 104-104) in light of the market convergence that underlies the trend toward bundling.[3]

The Market Forces Driving Bundling

The trend toward bundled service offerings is driven by both demand and supply.

Bundled service offerings are favored by many consumers. They provide the convenience of "one stop shopping" and, to the extent that competitors' packages

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[1] ILECs are the carriers that were the monopoly providers of retail local telephone service before the 1996 Telecommunications Act opened up local markets to competition.

[2] CLECs are the companies – including the traditional long distance carriers – that began providing local telephone service after the 1996 Act removed statutory prohibitions on competitive provision of local service.

[3] See "Stevens Foresees Telecom Act II in 2005," *Communications Daily*, January 27, 2004, at pp. 1-2; "Barton Seeking to Lead House Commerce Committee," *Communications Daily*, February 5, 2004, at pp. 1-2; and "Analysts Tell House to Expect Dynamic VoIP Growth Soon," *Communications Daily*, February 5, 2004, at pp. 5-6.

include the same (or a very similar) bundle of services, can make it easier for consumers to comparison shop, calculate their total telecommunications and media expenditures, and switch from one provider to another by switching just a single account.[4]

According to J.D. Power and Associates,[5] the share of households that report bundling at least their local and long distance services with one carrier has increased from 26% in 2002 to 40% in 2003, an overall increase of more than 10 million households, and customers who bundle services report higher overall satisfaction than those who are not bundling services. The Yankee Group made a similar finding – even though bundles have only been available in many parts of the country within the past year, a third of Americans already receive long distance and local service from the same company.[6] According to Wayne Huyard, president of MCI's mass markets division, half of MCI's consumer-side revenues comes from the 3.5 million customers of its bundled service and that proportion is expected to increase to 75% by 2005.[7]

But the bundling phenomenon extends far beyond the simple packaging of local and long distance telephone services, and is driven by providers as much as by consumers. Although bundled offerings can make comparison shopping easier, they also tend to foster customer loyalty, thereby reducing "churn" – the rate at which customers discontinue service (in order to shift to competitors). They also allow providers to exploit marketing economies of scope. As providers enter new markets, they can market both their traditional services and their new services with a consolidated sales and marketing force and campaign.

Until recently, most households had no alternative to their local exchange carrier for local telephone service and no alternative to their local cable system for subscription video service. The ILECs and cable systems enjoyed relatively stable relationships with their customers. Customer churn was extremely low because in most situations there were government-imposed prohibitions on other providers offering competitive service, leaving customers with no alternative providers to turn to. But today, CLECs, wireless carriers, and cable systems offer local telephone service in competition with the ILECs, and satellite systems offer subscription video service in competition with cable systems. ILECs and cable systems now face rising

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[4] See Shawn Young, "Phone-Service Bundles Could Backfire as Customers Switch," *Wall Street Journal*, November 7, 2003, at p. B-1.

[5] J.D. Power and Associates 2003 Residential Long Distance Service Study press release, "Customer Satisfaction Increases as Stiff Rate Competition and Bundling Cause Steep Drop in Long Distance Spending," July 1, 2003, at p. 1, posted on [http://www.jdpower.com /news/releases/index.asp].

[6] Griff Witte, "An Evolutionary Edge: Local Phone Firms Pass Long-Distance Companies," *Washington Post*, December 3, 2003, at p. E1, citing Yankee Group senior analyst Kate Griffin.

[7] Ibid at p. E1.

levels of customer churn,[8] analogous to what AT&T and its long distance competitors have experienced with their customers since MCI, Sprint, and a host of smaller facilities-based carriers and resellers entered the long distance market in the 1980s, and what the wireless carriers have begun to experience as well.[9] Competitive entry and market convergence have increased the churn rate for all providers.

The costs associated with customer churn are substantial. Providers face up-front costs to capture and serve a customer. To serve that customer profitably, the provider must recover these costs before the customer changes provider. These costs include the acquisition (marketing and sales) costs associated with gaining new customers, retaining existing customers, and winning back customers who leave for another provider. They also include costs associated with connecting the customer to the provider's network and activating service – providing the wireline or wireless connection, incorporating customer data in the provider's operating support systems, sometimes placing equipment on customer premises, etc. If the provider faces high churn rates, absent a substantial initial customer charge (such as a connection charge), it may fail to fully recover these up-front costs. One industry analyst has estimated that wireless providers have per customer acquisition costs of $150 to $300 and payback cycles as long as 14 months.[10] Another industry analyst estimates residential wireless per customer acquisition costs of $300 to $425.[11] But the wireless industry has annual customer churn rates in the vicinity of 30%, which are expected to grow with the recent implementation of local number portability.[12] Thus,

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[8] According to the J.D. Power and Associates 2003 Residential Local Telephone Customer Satisfaction Study press release, "Household Switching of Local Service Carriers Increases as New Players Enter the Local Telephone Service Market," July 15, 2003, at p. 1, posted on [http://www.jdpower.com/news/releases/index.asp], "The number of households reporting they have switched local telephone service carriers in the last year has increased more than 60 percent in 2003, rising to 10 percent from 7 percent in 2002." Similarly, according to the J.D. Power and Associates 2003 Residential Cable/Satellite TV Customer Satisfaction Study press release, "Average Monthly Spending for Satellite Service Drops Below Cable Service for the First Time as Cable Market Share Continues to Decline," August 19, 2003, at p. 1, posted on [http://www.jdpower.com/news/releases/index.asp], "Currently, 60 percent of households surveyed subscribe to cable service, down from 68 percent five years ago, while satellite subscriptions have increased from 7 percent of households in 1998 to 17 percent in 2003."

[9] See footnote 12 below.

[10] Glenn Bischoff, "The Principal of Portability," *Wireless Review*, November 1, 2003, at p. 11.

[11] J.D. Power and Associates 2003 U.S. Wireless Regional CSI Study press release, "Customer Loyalty Becoming a More Critical Issue in the Wireless Industry as Phone Number Portability is Poised to Become a Reality in November," September 30, 2003, at p. 1, posted on [http://www.jdpower.com/news/releases/index.asp].

[12] *See*, for example, Glenn Bischoff, "The Principal of Portability," *Wireless Review*, November 1, 2003, at p. 11, Tim McElligott, "Churn plus portability equals Y2K-03," *Wireless Review*, September 1, 2003, at p. 35, and Aude Lagorce, "The Battle Over Cell Phone Business Accounts," Forbes.com, http://www.forbes.com/2003/11/13 /cx_al_1113phones.html, viewed on January 6, 2004. The J.D. Power and Associates 2003

(continued...)

analysts say wireless carriers currently are not able to fully recover their acquisition costs for a substantial portion of customers. The same is true for other telecom, Internet, and video service providers.[13] The higher the churn rate, the less likely providers will be able to fully recover their up-front costs from each customer – at the same time that pressure is placed on providers to increase their efforts (and costs) for acquiring and retaining customers.[14]

The high costs associated with churn have spawned an industry of market researchers to help firms identify customer purchasing patterns and construct strategies for minimizing churn.[15] According to these market researchers, increasing

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[12] (...continued)
U.S. Wireless Regional CSI Study press release, "Customer Loyalty Becoming a More Critical Issue in the Wireless Industry as Phone Number Portability is Poised to Become a Reality in November," September 30, 2003, at p. 1, posted on [http://www.jdpower.com/news/releases/index.asp], states that 26% of the subscribers in its survey stated they had switched wireless carriers at least once in the past 12 months. Since some of those subscribers may have switched carriers more than once, this suggests a churn rate in excess of 26%.

[13] According to Richard Wolniewicz, "Building a better business one customer at a time," [http://telephonyonline.com/ar/telecom_building_better_business/], November 12, 2003, (viewed 1/12/04), "Customer churn is one of the most pressing issues the telecommunications industry faces and it affects all types of carriers from cable operators to mobile service providers. According to a study by Bain & Co., companies can boost revenues by as much as 85% if they can retain only 5% more of their best customers."

[14] High churn-related costs may have been responsible for the ineffectiveness of one of the provisions in the 1996 Telecommunications Act intended to foster competitive entry. Section 252(d)(3) requires the ILECs to make their retail services available to new entrants at wholesale rates determined "on the basis of retail rates charged to subscribers for the telecommunications service requested, excluding the portion thereof attributable to any marketing, billing, collection, and other costs that will be avoided by the local exchange carrier." In implementing this requirement, the FCC adopted a rule instructing states to set wholesale rates by using a methodology that subtracted from retail rates the ILECs' embedded retail-related costs, which were in the range of 15%-20% of retail rates. This is sometimes called the wholesale "discount" off retail rates. With competitive entry, and the resultant customer churn, however, marketing and sales costs for both entrants and incumbents have risen significantly, and far exceed the 15%-20% discount off retail rates. New entrants therefore have not found it viable to enter the market by reselling retail ILEC services at the discounted wholesale rates. The ILECs, on the other hand, have argued successfully in court that the "discount" off the retail price should be reduced, not increased, because some retail costs are fixed, will not decline in proportion to the number of customers lost to the resellers, and therefore "will *not* be avoided." (Iowa Utilities II, 8th Federal Circuit Court of Appeals, 219 F3.d at 754). The 8th Circuit has remanded the FCC's wholesale pricing rule back to the Commission, which has opened up a proceeding to address that and other cost rules.

[15] Among the many firms that collect data and/or perform churn analysis for providers are Convergys' Knowledge Management Services, Yankee Group, In-Stat/MDR, Zelos Group, iGillottResearch Inc., Gartner Group, Solomon Wolff Associates, Athene Software, Convergence Consulting Group, Compete Inc., and Dietrich Lockhard Group.

the number of services included in the bundle tends to reduce churn.[16] Bundled service offerings therefore tend to provide an advantageous strategy for large companies that are able to offer a broad array of services.

Verizon has announced that the company plans to offer consumers as many services as possible in its bundled offerings, with traditional voice options supplemented by wireless, video services, and high-speed Internet; according to Jill Wagner, Verizon vice president of consumer marketing, "It's not just the [local companies] and the long distance providers. You have to throw in the six wireless providers, and you have to throw in the cable companies. That's the market."[17] BellSouth has the same perspective. Lisa Fox, BellSouth's director of consumer marketing, has stated: "Because we can sell them local, long distance, data, wireless and – soon – video all on one bill, that's really proved to be a good retention tool for us. Customers can't find that in our region with anyone else today."[18]

As these large bundled service offerings have grown in popularity, companies with narrower capabilities that have traditionally offered stand-alone services have had to partner with larger companies in order to participate in a market environment that favors bundling.[19]

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[16] *See*, for example, Keith Damsell, "Telecom bundling seen luring customers; Grouping services together for lower price builds loyalty, trims 'churn,' study says," *The Globe and Mail*, 29 September 2003, at p. B8, citing Convergence Consulting Group Ltd. study, *The Battle for the North American Couch Potato*, and referring to Cox Communications' extremely low churn rate with the "triple play" of digital television, high-speed Internet access, and local telephone service.

[17] See Griff Witte, "An Evolutionary Edge: Local Phone Firms Pass Long-Distance Companies," *Washington Post*, December 3, 2003, at p. E1.

[18] Vince Vittore and Glenn Bischoff, "Bundling Strategy Provides Soft Landing," *Telephony*, October 7, 2003, at pp. 6-9.

[19] For example, Covad Communications, which offers high-speed Internet access service using DSL technology, increasingly markets its services through the bundled service offerings of CLECs. *See*, for example, "AT&T, Covad Extend Consumer Bundle in Midwest States," at [http://www.phoneplusmag.com/hotnews/3ch11123256.html], viewed on 1/7/2004. Covad's marketing partnerships with many CLECs also have been motivated in part by the FCC's Triennial Review Order, 47 CFR Part 51, "Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Deployment of Wireline Services Offering Advanced Telecommunications Capability; Final Rule and Proposed Rule," *Federal Register*, Vol. 68, No. 169, September 2, 2003, at pp. 52276ff. That Order phases out the "line sharing" requirement, under which companies such as Covad could lease from the ILEC, at cost-based rates, the "data" portion of the local loop to a customer's premises to offer that customer high-speed Internet access service while that customer continued to receive voice service from the ILEC. At the same time, the Order imposed a "line splitting" requirement, under which an ILEC must make the local loop available in such a fashion that a CLEC, such as Covad, that specializes in offering high-speed Internet access (data) service, and another CLEC, such as AT&T or MCI, that specializes in offering voice services, could jointly use the loop to provide the customer both voice and Internet access services. Under line splitting, one of the CLECs leases the entire

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Since identical bundled offerings facilitate comparison shopping, providers have a strong incentive to differentiate or distinguish their bundled service offerings from their competitors' offerings. Otherwise, their primary way to hold on to customers is to keep cutting prices. The best way to differentiate a bundle is to include a service that competitors either cannot offer at all or cannot offer at the same quality, cost, or convenience.

Wireline-Only Bundling Strategies

Most wireline providers – ILECs and CLECs – offer bundled local and long distance telephone services. Unadorned by special features, long distance service and (increasingly now) local service have become commodities, subject to fierce price competition and high churn levels.[20] Although many CLECs initially attempted to enter the residential market by using their own network facilities or by reselling the ILECs' retail products, in almost all cases CLECs have abandoned those approaches as not competitively viable. Instead, most CLECs provide residential local service by leasing network facilities from the ILECs, in particular by leasing the unbundled network element ("UNE") known as UNE-platform or UNE-P,[21] under terms set out in the 1996 Telecommunications Act, as implemented by the FCC and state public service commissions.[22] One group of CLECs has estimated that in the second quarter of 2003 80% of all residential local service offered by CLECs as part of bundled service offerings was provided using UNE-P leased from the Regional Bell Operating Companies ("RBOCs").[23] Some ILECs have attempted to differentiate their bundled

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[19] (...continued)
loop from the ILEC at cost-based rates. The two CLECs then work out between themselves the charges for use of the two (voice and data) portions. The ILEC is merely obligated to make it physically possible for the two CLECs to split the loop, for example, by allowing the CLECs to collocate their equipment with one another within the ILEC's central office.

[20] See, for example, Shawn Young, "Phone-Service Bundles Could Backfire as Customers Switch," *Wall Street Journal*, November 7, 2003, at p. B1, quoting Wayne Huyard, president of mass markets for MCI: "Churn has increased. We are entering an era of commoditization for local and long distance."

[21] UNE-platform consists of the combination of the local loop from the customer premise to the ILEC's central office and the switch port at the central office.

[22] The 1996 Telecommunications Act attempted to foster competitive provision of local telephone service by requiring the ILECs to make available to new entrants those elements of the ILEC networks to which the new entrants needed access in order not to be "impaired" in their ability to offer local service. This requirement that the ILECs *unbundle* the elements of their networks and make them available to CLECs should not be confused with the current strategy of many providers to *bundle* retail services into offerings intended to reduce customer churn.

[23] See "Measuring RBOC Dominance of Bundled-Services: The Progress of Competition Under the New Social Contract," an undated report of the PACE Coalition (a coalition of small CLECs) prepared in late 2003, at p. 3, posted on [www.pacecoalition.com], viewed on 2/10/2004. The FCC's semi-annual report, *Local Telephone Competition: Status as of June 30, 2003*, which was released in December 2003 and is available at (continued...)

offerings from CLECs by including vertical features such as voice mail and privacy management (to block telemarketers) that are not part of the UNE-P they are required to provide to CLECs but that CLECs are unlikely to be able to offer at equal quality or cost on their own.[24]

Another way that ILECs attempt to differentiate their bundled service offerings from CLEC offerings is to offer high-speed Internet access service by using DSL technology to provide both voice and data services over the existing copper telephone

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[23] (...continued)
[http://www.fcc.gov/wcb/stats], presents data collected from both ILECs and CLECs for the same period of time. Although it is not possible to directly compare the PACE and FCC data, they appear to describe a consistent scenario. According to the CLEC-provided data presented in Table 3 of the FCC report, in June 2003 58.5% of all CLEC end-user switched access lines were provided using UNEs, 18.2% were provided by reselling ILEC retail services, and 23.3% were CLEC-owned (i.e., self-provisioned). According to the CLEC-provided data presented in Table 2 of the report, 62% of CLEC end-user switched access lines served residential and small business customers and 38% served large business customers. According to the ILEC-provided data presented in Table 4 of the report, 13,026,000 of the 17,231,000 (75.6%) end-user switched access lines that ILECs have provided to CLECs as UNEs were provided as part of UNE-P (as UNEs with switching). Virtually none of the access lines self-provisioned by CLECs serve residential or small business customers (the exception being the unusual case of a residential or small business customer being located on the same site as a large business customer) and virtually none of the CLECs' large business customers are served by resold ILEC retail service (ILEC retail service would rarely meet the needs of a large business customer). Also, those CLEC large business customers not served by CLEC-provisioned loops are far more likely than residential and small business customers to have been served by unbundled loops rather than UNE-P, since it is these large business customers that CLECs can serve most efficiently with their own switching. The FCC data suggest that approximately 14.7% of CLEC switched access lines used UNEs and served large business customers [38% minus 23.3%]. 44.2% of CLEC switched lines were served by UNE-P [(58.5%)(75.6%)] and 14.3% by UNE-loop [58.5 minus 44.2]. It is likely that virtually all of the 14.3% of CLEC UNE-loop switched access lines served large business customers, since it is far more efficient to serve these customers than residential and small business customers with UNE-loop. Thus, only about 0.4% of CLEC switched access lines used UNE-platform and served large business customers [14.7% minus 14.3%]. This suggests that 43.8% of CLEC switched access lines served residential and small business customers using UNE-P, which would be 70% of the 62% of CLEC switched access lines serving residential and small business customers. While this number may be slightly overstated because it implicitly assumes no residential and small business customers are served by UNE-loops, it is not out of line with the 80% PACE findings. The FCC data cover all CLEC lines; the PACE data cover only those lines sold as part of a bundled local-long distance service offering. While virtually all CLECs that use UNEs are offering such bundles, some of the cable companies, which do not use UNEs, offer local telephone service but not bundled with long distance service. Thus one would expect the figure constructed from the various FCC tables (70%) to be lower than the PACE figure (80%).

[24] ILECs are not required to offer voice mail because it is an information service, not a telecommunications service, and thus not subject to the 1996 Act's unbundling requirements. Similarly, privacy management services are provided through the ILECs' Advanced Intelligent Networks (AIN), which are proprietary and which the ILECs are not required to make available to CLECs.

lines. Although in many geographic locations it is not feasible for CLECs to deploy their own DSL equipment to serve residential customers,[25] the DSL equipment is not available as a UNE, nor as part of the UNE-P. As a result, in many geographic areas, CLECs do not, themselves, offer bundled voice and DSL service. Even Covad, which specializes as a provider of high-speed Internet access and continues to expand its footprint, will have collocated DSL equipment in only 2,000 (out of more than 10,000) ILEC central offices by mid-2004, and will be able to reach somewhat less than half (under 50 million) of U.S. households.[26] Most residential customers seeking to receive both voice service and high-speed Internet access service over their telephone lines have the following choices: to receive both voice and Internet access service from their ILEC; to receive voice service from their ILEC and high-speed Internet service from a provider such as Covad, with that Internet service provider collocating its own DSL equipment in the ILEC's network and leasing the data portion of the ILEC line serving that customer at negotiated prices that need not reflect costs;[27] or to receive the two services through a "line splitting" arrangement[28] under which a CLEC that specializes in offering high-speed Internet access (data) service, and another CLEC that specializes in offering voice services, could jointly use the unbundled loop to provide the customer both voice and Internet access services. This last option has allowed some CLECs, including AT&T and MCI, to respond to the ILECs' bundled local/long distance/high-speed Internet access offerings by entering into contractual marketing relationships with Covad, to offer a similar bundled service. But it is more complex – and more expensive – to coordinate line splitting than for an ILEC to offer the two services using its own facilities.

According to a December 5, 2003 SBC press release,[29]

Long distance and DSL help [SBC] reduce [its] churn:

- Adding long distance to an access line reduces the company's churn rate by 9 percent.

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[25] To offer its own high-speed Internet service to a customer over ILEC lines, a CLEC must collocate its own DSL equipment (DSLAMs) at a particular point in the ILEC's network. It is only viable to deploy such equipment in places where the CLEC can expect to capture enough customers for the DSL service to justify the investment *and* where there is space at the ILEC location to place that equipment.

[26] *Communications Daily*, January 8, 2004, at p. 6.

[27] In its September 2003 Triennial Review Order, the FCC ended the "line sharing" requirement that ILECs make the data portion of their local loops available to data CLECs at cost-based rates. However, the FCC has grandfathered cost-based prices for the data portion of the customer line for those customers who were served by the high-speed Internet access service provider prior to that Order.

[28] See footnote 19 above.

[29] "SBC Communications Provides Progress Report on Major Growth Strategies, Outlines Broad Service and Cost Initiatives," SBC-Press Room, November 13, 2003, [http://www.sbc.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=20721], viewed on 12/05/2003. This statement also appears at "SBC Provides 2004 Outlook, Updates Major Trends," [http://convergedigest.com/Bandwidth/sample_category_article.asp?ID=9406], viewed on 1/9/2004.

- Churn drops by 61 percent when a DSL line is added to an SBC bundle.
- Together, long distance and DSL reduce churn by 73 percent.

Wireline, Wireless, Video Bundling Strategies

Today, bundled offerings have expanded far beyond the telephone and high-speed Internet access services traditionally offered by ILECs and CLECs, to include video and wireless services as well. Initially, each provider's bundles tended to be limited to the combination of services that could readily be provided by the firm's underlying network technology, and thus each provider tended to offer different combinations of services. Traditional circuit-switched public telephone networks, coaxial cable television networks, wireless networks, Internet protocol networks, and satellite systems each have their advantages and limitations with respect to services offered. To minimize market fallout from the limitations of their chosen technologies, however, providers increasingly are teaming with companies that have different underlying network technologies in order to provide complete bundled offerings.

For example, the incumbent local telephone companies have been able to quickly enter the long distance market as soon as they received government approval to do so.[30] Verizon already serves 15.9 million long distance customers, SBC 11.5 million, and BellSouth 3.4 million.[31] But to date it has not proved viable for local telephone companies to use their circuit-switched telephone networks to offer video services. Instead, in order to compete with the bundled offerings of cable operators, many ILECs are entering into partnership arrangements with satellite companies to market satellite television services as part of a telephone company bundled offering. Both Verizon and BellSouth have entered into marketing agreements with DirecTV to begin offering subscription video services as part of their bundled service offerings in 2004.[32] Similarly, SBC has entered into a co-branding deal with Echostar, also beginning in 2004, to offer "SBC Dish Network."[33]

Similarly, local cable television systems' fiber optic platforms have helped cable companies become the largest providers of high-speed Internet access (through the

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[30] Under the terms of the 1996 Telecommunications Act, the Regional Bell Operating Companies (the old Bell System portions of Verizon, SBC, BellSouth, and Qwest) were required to pass a 14 point checklist demonstrating that their markets have been opened to competitive provision of local telephone service before they were allowed to enter the long haul long distance market in their respective service areas. They have now been approved to offer long distance service in all states.

[31] Griff Witte, "An Evolutionary Edge: Local Phone Firms Pass Long-Distance Companies," *Washington Post*, December 3, 2003, at p. E1.

[32] Mike Farrell, "DBS Pitches: MSOs Swine, Telcos Divine," *Multichannel News*, November 24, 2003, at p. 1, and "BellSouth announces new options," *Alexandria Daily Town Talk*, December 15, 2003, at p. 8B.

[33] Mike Farrell, "DBS Pitches: MSOs Swine, Telcos Divine," *Multichannel News*, November 24, 2003, at p. 1.

use of cable modems). As of September 30, 2003, 15 million cable customers received cable modem service.[34] But many cable systems have not yet made the network upgrades needed to offer telephone services; as of September 30, 2003, there were 2.5 million residential cable telephony customers in the United States.[35] Recently, however, a number of cable systems have announced that rather than undertake the expensive investment needed to upgrade their coaxial cable networks to provide telephone service – and have to continue to pay high access charges to the ILECs to terminate calls – they plan to use Internet Protocol technology to offer voice services, in some cases jointly with long distance carriers.[36] Cable companies have undertaken this bundling strategy at least in part as a customer retention strategy against the satellite companies.[37] Similarly, some cable companies are deploying video-on-demand service to capture and maintain customers.[38]

According to Jeffrey Halpern, an analyst at Sanford C. Bernstein & Co.,[39] wireless is the key to distinguishing phone companies from their cable television rivals, many of which have phone and Internet access packages but don't have wireless offerings. The ILECs that have wireless joint ventures (SBC and BellSouth jointly own Cingular Wireless; Verizon has a joint venture with Vodafone Group that offers Verizon wireless service in the U.S.) have expanded their bundled service offerings to include wireless options that neither the cable companies nor the CLECs can so readily offer. There appears to be strong market pressure on these cable companies and CLECs to establish relationships with wireless carriers not affiliated with the ILECs to offer a bundled service that includes wireless service. AT&T is testing a bundled package that includes wireless service from its former wireless unit, AT&T Wireless Services.[40] But there are a limited – and apparently shrinking – number of unaffiliated wireless carriers. Indeed, the announcement on February 17,

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[34] National Cable and Telecommunications Association, [http://www.ncta.com/Docs/PageContent.cfm?pageID=93], viewed on 1/12/04.

[35] National Cable and Telecommunications Association, [http://www.ncta.com/Docs/PageContent.cfm?pageID=32], viewed on 1/12/04.

[36] See Matt Richtel, "Time Warner Deal Raises Ante in Cable's Bid for Phone Market," *New York Times*, December 9, 2003.

[37] According to the J.D. Power and Associates 2003 Residential Cable/Satellite TV Customer Satisfaction Study press release, "Average Monthly Spending for Satellite TV Service Drops Below Cable Service for the First Time as Cable Market Share Continues to Decline," August 19, 2003, at p. 2, posted on [http://www.jdpower.com /news/releases/index.asp], "One area where cable providers may have an opportunity to stem this migration to satellite is in bundling telephony and Internet access with cable TV service. With growing consumer desire to combine multiple services in a single bill for convenience and simplicity, the study finds that 34 percent of cable subscribers want to combine their cable service with some other telecommunications product or service."

[38] See Matt Stump, "Cable Ops Touting VOD As Anti-Churn Weapon," *Broadband Week*, March 4, 2003, viewed on [http://www.broadbandweek.com /news/020304/020304_cable_cableops.htm] on 1/12/04.

[39] See Shawn Young, "Phone-Service Bundles Could Backfire as Customers Switch," *Wall Street Journal*, November 7, 2003, at p. B1.

[40] Ibid at p. B1.

2004 that AT&T Wireless has accepted an acquisition bid made by Cingular[41] could remove AT&T Wireless as an independent source of wireless service for AT&T if the acquisition is completed.[42]

Similarly, wireless carriers now are offering bundled packages that include local, long distance, and Internet access services, and satellite providers are offering various video packages and experimenting with non-video services. These companies seek bundle components that will reduce churn.

Table 1 presents a sample of bundled service offerings of major providers prepared by one industry observer. It is presented with the caveat that some of the specific bundles, prices, and geographic reaches listed are already out of date because virtually every week some provider is either expanding its bundle, extending the geographic area in which it is offering its bundle, or changing its prices.

Table 1. A Sample of Bundled Service Offerings of Major Providers

Package	Components	Price	Availability
AT&T DSL Service with One Rate USA	Unlimited local, local toll, and long distance phone service, and DSL	$89.90 to $94.90*	NJ, NY, MD, MA, VA
BellSouth Ultimate Answers	Unlimited local, local toll, and long distance phone service, DSL, and 500 Cingular wireless minutes and 5,000 minutes nights and weekends	$124.98 in GA (prices vary in other states)	Nine states in BellSouth territory
Comcast Corp.'s bundle	High-speed Internet, cable TV	$15 discount on Internet: $42.95 down from $57.95**	35 states plus DC
The Cox Value Bundle	Cable TV, unlimited local and long distance phone service with feature package and high-speed Internet	$120.89	New England

[41] "Cingular to Acquire AT&T Wireless, Create Nation's Premier Carrier," February 17, 2004, at [http://www.attwireless.com/press/releases/2004_releases/021704.jhtml], viewed on 2/17/04.

[42] Cingular succeeded in an informal auction process created when AT&T Wireless announced in January 2004 that its board of directors had authorized the company to entertain acquisition offers after receiving overtures from nearly half a dozen suitors, including Cingular, Nextel Communications, Vodafone, NIT DoCoMo, and AT&T. See Matt Richtel and Andrew Ross Sorkin, "AT&T Wireless for Sale as a Shakeout Starts," *New York Times*, January 21, 2004, at p. C1. According to the article, the "move by AT&T Wireless and its potential buyers indicates that one of the nation's most fiercely competitive industries is heading toward a long-awaited consolidation that may be the tip of a multilayered and complex merger process around the world."

Package	Components	Price	Availability
MCI's Neighborhood HiSpeed	Unlimited local, local toll, and long distance phone service, and DSL	$84.99 to $109.99	29 states plus DC
Qwest's Simply Phone Service	Unlimited local and domestic long distance and various premium calling features	$49.99 [add unlimited local wireless for $49.99 or add DSL for $29.99]	Most areas of CO, ID, IA, MN, NE, ND, NM, OR, SD, UT, WA, and WY
SBC Total Connections	Unlimited local, local toll, and long distance phone service, DSL, and 300 anytime wireless minutes [Cingular Wireless] and 5,000 minutes nights and weekends	$90 to $95	AK, CA, CT, IL, KS, MI, MO, NV, OH, OK, TX, WI
Sprint Complete Sense Unlimited with PCS	Unlimited local, local toll, and long distance phone service and unlimited wireless	$179.99 to $189.99	36 states plus DC
Verizon Freedom All	Unlimited local, local toll, and long distance phone service, DSL, and 400 anytime wireless minutes, unlimited nights and weekends and 1,000 mobile-to-mobile minutes	$114.89 to $124.89	MA, NJ, NY, PA, VA
Vonage Premium Unlimited Plan	Unlimited local, local toll, and long distance phone service	$34.99***	50 states

Source: Josh Long, "Unwrapping the Bundle: Telcos Tout Retention Factor, But Packages Reduce Profit Margins," [http://www.xchangemag.com/articles/3c1coverstory1.html], viewed on 1/6/2004. * excludes $20 discount first three months on DSL; ** excludes the charge for cable television service available at various levels depending on the specific service chosen; *** excludes charges for a telephone line and DSL service or for cable modem service that are needed in order to use Vonage's service.

The Pricing of Bundled Service Offerings

The pricing structure of bundled offerings tends to follow a few patterns.

Bundled telephone service typically includes unlimited local, local toll, and long distance services at a single flat rate. It sometimes is difficult for consumers to compare that single rate to the sum of the rates of the components because the components (especially long distance and local toll service), when sold as stand-alone services, usually are sold on a usage (rather than flat rate) basis. Typically, the flat rate bundle is the cheaper option for consumers who are heavy telephone users, but the more expensive choice for consumers who are light users. According to a

Wall Street Journal article,[43] "Some people who don't make a lot of calls and don't want services like call waiting soon discover that most unlimited packages, which are geared to high-end customers, aren't economical for them." This partially explains why MCI's Neighborhood product, "which costs $50 to $60 a month in most areas, loses about half its new customers within the first six months, though turnover drops after that."[44]

ILECs and CLECs that supplement their wireline telephone bundles with non-wireline telephone services, such as high-speed Internet access or wireless service or even video service, typically offer a bundle of their "traditional" services at a fixed price and then allow customers to add to that bundle by paying flat prices for additional services, with the prices for those additional services typically being lower when purchased as part of the bundle than the stand-alone prices for those additional services. Similarly, cable companies typically will supplement their subscription television offerings with high-speed Internet access and telephone services that have a separate add-on price that is lower than the stand-alone price for those services.

According to a *New York Times* article,[45] "Cable companies, which face little competition from rival cable companies in many markets, have a great deal of leverage in pricing and are eager to expand their universe of high-speed Internet customers because the business has a higher margin than the video business. Cable customers who buy both the video package and high-speed Internet access pay somewhat less than customers who buy only Internet service." A perhaps more nuanced explanation for this pricing behavior is that cable companies' only competitors for subscription television are the satellite companies, which in most circumstances cannot offer their customers competitive high-speed Internet access service. Cable companies thus can reduce competitive churn by offering high-speed Internet service at a discount that is available only when the customer also takes cable service. For example, cable customers who switch to DirecTV to get their sports package likely will pay $49 for high-speed Internet access from their cable company, but would only have to pay $39 for that service if they bought it along with cable service.[46]

The price for the bundle, or for add-ons to the bundle, sometimes will vary by customer class, with discounts offered only to new customers or only to customers that the provider is trying to "win back" from another provider or only to some other

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[43] Shawn Young, "Phone-Service Bundles Could Backfire as Customers Switch," *Wall Street Journal*, November 7, 2003, at p. B1.

[44] Ibid at p. B1. The high churn rates that MCI and other CLECs are experiencing with their bundled services (Adam Quinton, a telecommunications analyst at Merrill Lynch, estimates that turnover in bundled plans offered by rivals to the Bell Operating Companies is as high as 8% a month – or nearly 100% in a year – in some highly competitive areas) also is the result of aggressive ILEC campaigns to "win-back" customers lost to the CLECs and to the "sticker shock" customers experience because advertised rates typically exclude fees and taxes that can add as much as 15% to the customer bill.

[45] Geraldine Fabrikant, "In Fight Between Cable and Satellite, Customers Gain an Edge," *New York Times*, December 1, 2003, at p. C22.

[46] Ibid at p. C22.

targeted group of customers. For example, the ILECs are making aggressive efforts to woo back customers with extra incentives, including Visa gift cards and special discounts or credits available only to returning customers.[47] Similarly, cable companies are making aggressive efforts to win back subscription video customers from satellite video providers and high-speed Internet access customers from ILECs. As discussed below in the section on Bundling and Competition, sometimes these efforts can lead to claims that the incumbent is engaging in a price war or even predatory or other anticompetitive pricing behavior.

Bundling, while an effective strategy for reducing churn among high-end customers, also will result in previously full-price customers switching to discount plans, according to Jeffrey Halpern of Sanford C. Bernstein & Co.[48] According to a research report prepared by Roger Sachs, of Cathay Financial, sales of bundled packages have had a mixed impact on the balance sheet: "While churn rates have been reduced, [Bell] profit margins are falling under pressure. In an effort to reduce local churn, SBC has aggressively provided high-speed data and long-distance service at the expense of profitability."[49]

Bundling appears to be primarily a strategy for deterring churn among high-usage customers, at the expense of profit margins. One possible consequence of bundling is that providers will feel the need to buttress their overall profit margins by raising the rates for their stand-alone services, which are the services most frequently purchased by low-usage customers. These customers tend to be less price sensitive than larger users and thus tend to be loyal to their traditional providers. Similarly, low-income and elderly customers are less likely than more affluent and younger customers to seek high-speed Internet access and wireless services, and thus more likely to purchase stand-alone telephone services rather than bundled service offerings.

Public Policy Issues Created by Bundling

Bundling potentially creates several public policy issues for Congress, including the on-going viability of the current funding mechanism for the federal Universal Service Fund, proper treatment of taxes that are assessed on only a subset of services included in a bundled offering, and maintaining competitive markets.

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[47] Shawn Young, "Phone-Service Bundles Could Backfire as Customers Switch," "*Wall Street Journal*, November 7, 2003, at p. B1.

[48] Ibid at p. B1.

[49] See Josh Long, "Unwrapping the Bundle: Telcos Tout Retention Factor, But Packages Reduce Profit Margins," [http://www.xchangemag.com/articles/3c1coverstory1.html], viewed on 1/6/2004.

Bundling and the Federal Universal Service Fund

Bundled offerings typically include some combination of interstate telecommunications services, international telecommunications services, intrastate telecommunications services, and non-telecommunications services (information services, such as Internet access, video services, and even customer premises equipment) for a single price. The federal Universal Service Fund – the federal subsidy program that assures affordable telephone rates for high-cost (rural) and low-income telephone customers as well as for schools, libraries, and rural health facilities – is supported by an assessment on interstate and international telecommunications revenues *only*.[50] But it is difficult to identify the portion of revenues generated by a bundled service offering attributable to the interstate and international telecommunications portion of that bundle. Providers must assign a portion of the bundled price to interstate and international telecommunications services and the fund administrators must be able to audit the attribution to protect against companies gaming the system by understating the interstate and international telecommunications portion. There often is no way, however, to unambiguously assign a portion of the revenues to interstate and international telecommunications, and thus there is uncertainty for both providers and administrators.

This is not a trivial problem. With more than 40% of residential customers now purchasing bundled services (and many business customers obtaining complex bundles of services or bandwidth),[51] it is no longer a simple task to identify interstate and international telecommunications revenues. The federal Universal Service assessment on interstate and international revenues for the first quarter of 2004 is 8.7%.[52] Providers usually choose to recover this cost directly from their customers, who would prefer to avoid the assessment. Providers therefore have the incentive to offer their bundled service offerings in a fashion that allows them to minimize the portion of the bundled price attributable to interstate and international telecommunications. Reporting and auditing the interstate and international telecommunications portion of provider revenues is a difficult task.

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[50] The Communications Act, as amended, in Section 254(d) requires "Every telecommunications carrier that provides interstate telecommunications services shall contribute, on an equitable and nondiscriminatory basis, to the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service." 47 U.S.C. § 254(d). In *Texas Office of Public Utility Counsel v. FCC*, 183 F.3d 393 (5th Cir. 1999), the Fifth Circuit overturned an FCC order assessing intrastate as well as interstate telecommunications to fund the schools and libraries portion of the federal Universal Service Fund, but upheld assessing international telecommunications revenues.

[51] According to the J.D. Power and Associates 2003 Major Provider Business Telecommunications Services Study press release, "More Business Data Customers Willing to Switch Telecommunications Providers in Favor of Cost-Saving Bundles," October 2, 2003, at p. 1, posted on [http://www.jdpower.com/news/releases/index.asp], "The study finds that the intention to switch providers to bundle multiple telecommunications services is up 14 percentage points among broadband business customers to 43 percent overall."

[52] "Proposed First Quarter 2004 Universal Service Contribution Factor," FCC Public Notice, released December 4, 2003, at p. 1.

At the same time, as shown in Table 2, the Universal Service assessment base – total interstate and international telecommunications end-user revenues less certain exempt international revenues – has been declining as e-mail and instant messaging increasingly substitute for long distance calling and as long distance rates continue to fall.[53] Although data are not yet available for 2003, it is likely that the assessment base continued to decline in 2003 and continues to decline today as far more customers that are high users of interstate and international service have shifted to bundled service offerings with unlimited usage or high usage levels at flat rates that have continued to fall.

Table 2. Universal Service Assessment Base: Total Interstate and International End-User Revenues Less Certain Exempt Revenues

(in billions)

Year	Total Interstate and International End-User Revenues Less Certain Exempt Revenues
2002	$76.285
2001	$78.461
2000	$78.977

Source: 2002: Federal-State Joint Board Monitoring Report, released December 2003, Table 1.9, Preliminary 2002 data, at p. 1-32; 2001: Federal-State Joint Board Monitoring Report, released December 2003, Table 1.4, at p. 1-17; 2000: Federal-State Joint Board Monitoring Report, released October 2002, Table 1.4, at p. 1-16.

As interstate and international telecommunications revenues have begun to fall, and as bundling makes it increasingly difficult to identify and assess those dwindling revenues, many observers are concerned that interstate and international telecommunications revenues no longer provide a sufficient – and sustainable – universal service funding assessment base, as required by the Communications Act.[54] The FCC first issued a Notice of Proposed Rulemaking to address this concern in May 2001,[55] and has subsequently issued additional notices and orders, but to date has taken action only on a few narrow issues. In one action, as mobile wireless telephone service, which typically is offered for a flat rate, has come to be used

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[53] The universal service assessment base is total interstate and international end-user revenues less three exempt categories: revenues for international-to-international service, international revenues where interstate toll represents less than 8% of the company's combined interstate and international revenues, and interstate and international revenues for 2,570 filers who are *de minimis* and thus not required to contribute. These three categories of exemptions represent approximately 3% of total interstate and international end-user telecommunications revenues.

[54] Section 254(b)(5) of the Communications Act, as amended, lists as a principle that "There should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service." 47 U.S.C. § 254(b)(5).

[55] *In the Matter of Federal-State Joint Board on Universal Service,* Notice of Proposed Rulemaking, CC Docket No. 96-45, released May 8, 2001.

increasingly for long distance calls, the Commission has increased the "safe harbor" portion of revenues that mobile wireless carriers can attribute to interstate and international calls from 15% to 28.5%.[56] The FCC has been partially constrained in its ability to address the issues relating to bundling and the sufficiency of the Universal Service funding mechanism by the language in the Act and by the Fifth Circuit decision.[57] Some parties have claimed that alternative funding mechanisms would not meet the statutory requirements as interpreted by the court, and that Congressional action would be needed to implement these options.[58]

Three options have been proposed to address the issues of bundling and the sufficiency of the Universal Service funding mechanism: expanding the assessment base to include intrastate as well as interstate and international telecommunications services, replacing the current mechanism with a capacity-based assessment on all interstate connections to the public network, and replacing the current mechanism with an assessment on all telephone numbers.

The option to expand the assessment base to include intrastate as well as interstate and international telecommunications services would significantly expand the assessment base,[59] but would only address the reporting and auditing problems created by those bundled service offerings that consist entirely of telecommunications services. It would not address how to attribute the revenues from the interstate, international, and intrastate telecommunications portion of a bundle sold at a flat rate that also includes information services, such as high-speed Internet access, video services, or equipment. Many business customers purchase a fixed amount of bandwidth that they use to provide a wide variety of services – voice, data, Internet access, video conferencing, etc. Currently, many bundled residential offerings that include both telephone service and other services have separate prices for the non-telephone services. But providers will have the incentive to reduce the portion of the bundle subject to the Universal Service assessment on telecommunications services. One way to do this is to simultaneously lower the rate for the telecommunications portion of the bundle and raise the rate for the non-telecommunications portion, but tie the former to the latter so that customers who do not purchase the non-telecommunications services cannot take advantage of the lower telecom rate. Another way to do this is simply to set a single rate for the bundled telecommunications and non-telecommunications services, with the provider

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[56] *"In the Matter of Federal-State Joint Board on Universal Service,* Report and Order and Second Further Notice of Proposed Rulemaking, CC Docket No. 96-45, released December 13, 2002, at p. 14.

[57] See footnote 50 above.

[58] *See,* for example, the Comments filed on June 25, 2001 by Verizon and by the United States Telephone Association, responding to the FCC's May 8, 2001 Notice of Proposed Rulemaking in *In the Matter of Federal-State Joint Board on Universal Service*, CC Docket No. 96-45.

[59] Total End-User Revenues from local service, wireless service, and toll service in 2001, the latest year for which data are available, were $235.5 billion, $155.3 billion of which were intrastate, according to the FCC's Annual *Trends in Telephone Service*, Table 15.1, "Telecommunications Industry Revenues: 2001," (released in August 2003) at p. 15-3. This report is available at [www.fcc.gov/wcb/stats].

determining the portion to be attributed to telecommunications services and thus subject to assessment. Given the Fifth Circuit decision, a statutory change would be required to allow the FCC to impose a Universal Service assessment on intrastate as well as interstate and international telecommunications revenues.

The option to implement a capacity-based assessment on all interstate connections to the public network would avoid the reporting and auditing problem that currently exists for bundled service offerings because it would be based solely on the capacity of each end-user customer connection to the public network. The FCC, with guidance from Congress, could set assessment rates by weighing various public policy considerations to determine, for example, whether, in order to foster broadband deployment, the assessment on high-speed connections (at least for residential customers) should not be set higher than that on standard voice connections, or whether, for equity reasons, there should be a lower assessment for voice grade connections than for high-speed connections. Also, since all end users ultimately must connect to some network to communicate – no matter what technology they use – the assessment base will be sustained over time. A capacity-based assessment on all connections would be simple to implement and administer for residential customers, but far more difficult for business customers, who use many different connection configurations. Some parties have argued that a connection-based approach would require a statutory change because some interstate carriers do not offer connections and thus such a charge would not meet the statutory requirement that all interstate carriers contribute to the fund on an equitable and nondiscriminatory basis.

The option to implement an assessment on all telephone numbers also would avoid the reporting and auditing problem that currently exists for bundled service offerings because the assessment would be based solely on the number of telephone numbers provided to customers. With each telephone number given the same weight, this approach would treat more intensive and less intensive users of the public network exactly the same. But there are so many telephone numbers that the assessment per telephone number is likely to be relatively small. It is possible that a massive move to Internet protocol technology could result in many parties using "addresses" other than the traditional telephone number, but presumably in that case there would be a way to assess the new address; some sort of address will always be needed in order to direct communications from a sender to a receiver. Since some interstate telecommunications carriers do not provide telephone numbers, some parties have argued that a statutory change would be required to implement a telephone number-based universal service assessment mechanism, unless a hybrid assessment mechanism were created that assessed on the basis of revenues those providers of interstate services that do not use numbers. Such a hybrid solution might not eliminate the need for a statutory change, however, if the interstate services provided by those carriers are bundled in a fashion that makes it difficult to identify unambiguously the interstate and international revenues generated.

Currently, no bills have been introduced in Congress that directly address the issue of the federal Universal Service assessment base. Both Section 3 of S. 1380, the Rural Universal Service Equity Act of 2003, and Section 4 of H.R. 1582, the Universal Service Fairness Act of 2003, would require the Comptroller General to submit a report to Congress on "the need to reform the high-cost support mechanism

for rural, insular, and high cost areas," including a discussion of whether "amendments to section 254 of the Communications Act of 1934 (47 U.S.C. 254) are necessary to preserve and advance universal service." Section 4 of S. 150, the "Internet Tax Non-discrimination Act of 2003, states that "Nothing in the Internet Tax Freedom Act shall prevent the imposition or collection of any fees or charges used to preserve and advance Federal universal service or similar State programs authorized by section 254 of the Communications Act of 1934."

Bundling and Taxes

In addition to the federal Universal Service Fund, there are a number of taxes that are assessed on one or more, but not all, of the services included in various bundled service offerings. This creates the same assessment and auditing problem for these taxes as exists for the federal Universal Service Fund.

In particular, many state and local jurisdictions assess taxes on telephone and/or video services. How should those taxes be assessed on bundled services offered at a flat-rate that include telephone service and high-speed Internet access service or cable service and high-speed Internet access service? How can providers identify and report, and state and local tax collectors audit, the taxable portion of such bundles? The Internet Tax Freedom Act moratorium on taxing Internet access (P.L. 107-75) has expired. S. 150, S. 52, and H.R. 49 would make the moratorium permanent; H.R. 1481 would extend the moratorium until 2008. Since it is likely that Internet access services increasingly will be bundled with other services that are subject to local or state taxes, if the Internet tax moratorium is extended the challenge of appropriately assessing and auditing these taxes will grow.

Bundling and Competition

Some observers have been concerned that bundled service offerings could have anticompetitive consequences if they foster industry consolidation or if a provider has market power for one of the services in its bundled offering and can use that offering to tie that service to a competitive service in a fashion that reduces competition for the competitive service.

Although it is too early to determine which providers ultimately will benefit most by the trend toward bundled service offerings, the early market results suggest that the ILECs have been more successful at capturing long distance customers than the long distance companies have been at capturing local customers. Despite the fact that the long distance carriers had been able to offer bundles of local and long distance services for months or even years before some of the Regional Bell Operating Companies ("RBOCs") received FCC permission to offer long distance service within their services areas, the RBOCs have captured four long distance customers for every local customer captured by the long distance carriers, as shown in Table 3.

Table 3. "Non-traditional" Customers Captured by Local and Long Distance Carriers

Traditional Local Carrier	Long Distance Customers Captured	Traditional Long Distance Carrier	Local Customers Captured
Verizon	15.9 million	AT&T	3.5 million
SBC	11.5 million	MCI	3.5 million
BellSouth	3.4 million	Sprint	0.2 million*

Source: Griff Witte, "An Evolutionary Edge: Local Phone Firms Pass Long-Distance Companies," *Washington Post*, December 3, 2003, at p. E1. All data provided by the companies. Numbers for traditionally local companies include a limited number of business customers. *Sprint also has 5.3 million local customers in the various territories where it also is the incumbent local exchange carrier.

According to a J.D. Power and Associates consumer survey, 40% of the respondents stated they would most likely choose their local telephone company to provide bundled services, 21% would most likely choose their long distance company, and 16% their cable company.[60] According to company officials, Verizon now has signed up more than 50% of its local residential customers in some states for long distance service; by contrast, AT&T has signed up at most 15% of its customers to local as well as long distance service.[61] According to Kate Griffin, a senior analyst with the Yankee Group, "The local providers have an edge. The local relationship is worth more. Customers are more likely to look to the local provider for that bundled offering."[62]

It may be too soon to conclude how this competition will play out, however. The RBOCs' success may be explained in part by the fact that for more than 20 years residential customers have been choosing among competitive long distance carriers and thus they are not reluctant to switch to their ILEC when that ILEC begins to offer long distance service. On the other hand, residential customers for the first time can choose their local provider and perhaps many simply are not yet ready to change their behavior. As explained earlier, bundles appeal primarily to heavy telecommunications users. Heavy long distance users already are used to choosing among – and changing – carriers. Heavy local users, however, are just becoming accustomed to choice in local service. Also, local service provides the "lifeline" to the outside and thus customers may tend to be more cautious about leaving their traditional local provider. This pattern may change as customers become used to

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[60] J.D. Power and Associates 2003 Residential Long Distance Service Study press release, "Customer Satisfaction Increases as Stiff Rate Competition and Bundling Cause Steep Drop in Long Distance Spending," July 1, 2003, at pp. 1-2, posted on [http://www.jdpower.com/news/releases/index.asp].

[61] Griff Witte, "An Evolutionary Edge: Local Phone Firms Pass Long-Distance Companies," *Washington Post*, December 3, 2003, at p. E1.

[62] Ibid at p. E1.

having local as well as long distance options. Moreover, as local and long distance telephone services become elements of larger bundled offerings that include wireless, video, high-speed Internet access, and other services, the competitive options available to consumers increasingly will come from non-wireline providers.

If there still are impediments to the competitive provision of one of the services included in a bundled offering, however, bundling could allow those providers that are not constrained by those impediments to extend their market advantage beyond the market for that particular service into the markets for the other services included in the bundled offering. According to a study performed by a coalition of small CLECs,[63] the RBOCs have a 61% share of the customers currently using bundled service offerings that include both local and long distance service, and 80% of the remaining customers for bundles that include local and long distance service are served by the unbundled network element known as the platform ("UNE-P") leased from the RBOCs.[64] Under current conditions, if CLECs were to be denied access to UNE-P to offer local residential service, many would not be able to compete with the RBOCs for the provision of bundled local-long distance service. Given the popularity of such bundled services, this likely would allow the RBOCs to extend their advantage in the local market (by dint of their historical position as the monopoly providers with ubiquitous local networks) into the long distance market. Any harm to consumers from lack of competitive choice might be ameliorated, however, by the extent to which other providers could enter to offer bundled local and long distance service. For example, cable companies or other potential competitors could use voice over Internet protocol (VoIP) to offer competitive bundled local-long distance service. Such service may require a customer to have high-speed Internet access, but the high-usage customers most attracted to bundled services often are the consumers most likely to have high-speed Internet access.

A number of CLECs and CLEC customers have brought antitrust suits against RBOCs, alleging that the RBOCs violated the antitrust laws by not making their unbundled network elements available in a timely and viable fashion.[65] The U.S. Supreme Court, however, ruled on January 13, 2004, in *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*,[66] that failure to meet the unbundling

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[63] "Measuring RBOC Dominance of Bundled-Services: The Progress of Competition Under the New Social Contract," an undated report of the PACE Coalition (a coalition of small CLECs) prepared in late 2003, at p. 3, posted on [www.pacecoalition.com], viewed on 2/10/2004.

[64] The PACE report claims that only 1% of these customers are served by wireless providers. This suggests that the PACE Coalition only included those wireless customers who have abandoned wireline service entirely and use wireless service as their exclusive provider of local and long distance service.

[65] For example, Trinko and Cavalier brought cases against Verizon, Covad brought a case against BellSouth, and Metronet brought a case against Qwest.

[66] *Verizon Communications Inc., Petitioner v. Law Offices of Curtis V. Trinko, LLP*, Supreme Court of the United States, 540 U.S. _____ (2004), January 13, 2004, Slip opinion at 6-7 (2004 WL 51011). For a more complete discussion of the *Trinko* decision, see CRS Report RS21723, *Verizon Communications, Inc. v. Trinko: Telecommunications Consumers*

(continued...)

requirements in the 1996 Telecommunications Act, which were intended to foster competition by aiding competitors, does not meet the pre-existing antitrust standards, which relate only to acts that would lessen competition, and thus does not represent an antitrust violation. To the extent that access to UNEs are needed for the competitive provision of bundled service offerings, then, oversight can only be performed by federal and state regulatory agencies, not by the antitrust authorities.

Bundling also could affect the competitive environment if it provides a vehicle for a provider with some market power in the market for one of the bundled service elements to price in a fashion that undermines competition in the market for other services in the bundle. Dominant firms typically are constrained in their ability to practice predatory pricing or other potentially anticompetitive types of strategic pricing against new entrants because it is very difficult to introduce selective price cuts for those customers they want to keep away from competitors without giving the same price discount to a large portion of their customer base. This could so dilute revenues and profits in the short term that such losses could not be recouped in the long term even if competitive entry were retarded or entirely eliminated. To the extent a dominant provider attempting to fend off competitive entry could limit the price cuts to those customers most likely to shift providers and to a limited period of time, the potential for anticompetitive predatory or strategic pricing increases. Bundling might be a tool that could facilitate this.

For example, observers have speculated that cable companies, which are the largest providers of high-speed Internet service, might be able to impede ILEC entry into that market by selectively reducing prices for their cable modem services when ILEC entry is imminent. Such concern was kindled recently when Comcast made a targeted e-mail offer to certain customers in California, Maryland, and Illinois, for cable modem service at $19.95 per month for a year.[67] After the promotional period, the price goes back to $42.95. Comcast executive vice president for marketing Dave Watson stated that "This highly targeted e-mail offer is a test campaign aimed directly at DSL customers. It is similar to other win-back-type programs we've conducted in the past. This particular campaign is a limited offer and we anticipate it to be a one-time event as other offers of shorter duration such as 6 months have proven successful." But if Comcast (or any other provider of high-speed Internet access service or any other service that is part of a bundled service offering) has the ability to selectively restrict price cuts to those customers most likely to shift to a competitor and to the time period when a competitor is entering the market, some observers say, then there is at least some potential for that dominant firm to strategically restrict competition in the market even if it is not practicing predatory pricing. The lower prices benefit the selected customers in the short run but can be harmful to the public if they successfully forestall competitive entry. Consumers would then be denied the competition-driven benefits of lower prices and more innovation in the long run.

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[66] (...continued)
Cannot Use Antitrust Laws to Remedy Access Violations of Telecommunications Act.

[67] *Communications Daily*, November 17, 2003, at p. 7.

Another potential competitive consequence of the trend toward bundled service offerings is the incentive created for firms to consolidate in order to more efficiently provide broad bundled offerings or to deny competitors access to independent providers of services needed to offer a complete bundle of services. As explained earlier, consumer preference for larger bundled offerings tends to favor large companies able to offer all or most of the services in the bundle on their own, without reliance on independent entities. But no provider today has the capability of providing all these services. This has fostered marketing agreements and other relationships, which could be a precursor for more formal ownership consolidation. Such consolidation potentially reduces administrative and coordination expenses. But such consolidation also potentially locks up suppliers.

For example, consider the strategy of bundling wireline and wireless service discussed in the section on Wireline, Wireless, and Video Bundling Strategies. The three largest ILECs, Verizon, SBC, and BellSouth, each have large equity interests in wireless carriers, and each have bundled offerings that combine wireless and wireline service. Other wireline carriers face strong market pressure to offer bundles of wireline and wireless services as well. AT&T has a pilot program to offer bundled service in conjunction with AT&T Wireless, which had been part of AT&T but now is independent. AT&T Wireless, however, has announced that it is accepting Cingular's bid to acquire AT&T Wireless. For Cingular, and its parents, SBC and BellSouth, acquisition of AT&T Wireless would provide economies of scale and needed spectrum in large markets such as New York where Cingular has limited spectrum. In addition, such a purchase would take away from AT&T an independent source of wireless service and perhaps make it more difficult for AT&T to offer a bundle that includes wireless service.

Conclusion

The bundling of residential telephone, Internet, and video services has been warmly welcomed by consumers. It allows providers to reduce costly customer churn and exploit marketing efficiencies that they have passed through to consumers by lowering rates. But bundling represents a strategic response to the convergence of previously distinct markets and that convergence is creating the need to review current telecommunications law and rules. Leaders in both the House and the Senate Commerce Committees have indicated that review and reform of the 1996 Telecommunications Act will be on the agenda in the 109th Congress. Major issues that are likely to be addressed include creation of a sufficient and sustainable funding mechanism for the federal Universal Service Fund as interstate telecommunications revenues continue to decline (and become increasingly difficult to identify as bundling proliferates), the proper regulatory treatment of services that are provided by different underlying technologies but compete with one another, and the best regulatory framework for fostering innovation and investment while safeguarding consumers and competition. All three of these issues are likely to be affected by the deployment of Voice over Internet Protocol (VoIP) technology, which already has begun to occur.