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THE SUBTLE POLITICS & ECONOMICS OF UNIFICATION, 1914-1921

THE PERIOD BETWEEN the Kingsbury commitment of December, 1913, and the 1934 Communications Act is something of an empty space in telephone historiography. Accounts of the Bell-independent competition tend to trail off after the Kingsbury commitment. Noting the rise of state regulatory commissions and the Kingsbury commitment's alleged interconnection of the competitors, those accounts tend to imply that the regulated monopoly system was basically in place from 1914 on. The Kingsbury commitment, however, was actually intended to preserve dual service competition, as noted in the previous chapter. In the aftermath of its agreement to stop Bell acquisitions, more than 1,800 cities still had unconnected, competing exchanges. Major, urban-based independent regionals still thrived in places like Buffalo, Minneapolis-St. Paul, Los Angeles, St. Louis, Indianapolis, Columbus, Cleveland, and Kansas City. Those systems had weathered the storm of acquisitions and interconnection from 1908 to 1913 and showed no signs of going out of business. Dual service was still an important factor in the American telephone industry.

Nevertheless, within three years of the Kingsbury commitment a series of great unifications of independent and Bell telephone systems in major cities began. Many were concluded by 1918, well before a 1921 federal law nullified the Kingsbury commitment. Clearly, an important change in attitudes toward telephone competition took place during those years. From a historical standpoint, it is important to examine the ideas which motivated that process. It is also important to examine the unification of service from an economic standpoint in order to evaluate the sources of efficiency in telephone monopoly. This chapter examines three of those unifications: in Los Angeles, California, Buffalo, New York, and the state of Kentucky.

The unification of telephone service could be accomplished in essentially two ways. One would be to interconnect the competing systems so that they could exchange traffic. Physical interconnection could take place with or without a merger of ownership. The other alternative was

for one system to buy out the other and gradually migrate all of its customers to the remaining system. At the time, that option was called “consolidation.” (A third, rarely selected option was a municipal takeover of the telephone system.) As we shall see, the process of unification ultimately took the form of consolidation rather than interconnection.

Consolidation in Buffalo, New York

The Buffalo-based Federal Telephone Co. was run by Burt G. Hubbell, a prominent national independent leader and one of the ablest and most sincere supporters of telephone competition. Hubbell’s company had an ownership interest in thirty-five independent exchanges in western New York, including the systems of Buffalo, Rochester, and Jamestown. The James-town independent exchange had more subscribers than its rival Bell exchange; the Rochester exchange was roughly equal to its competitor, while Bell’s subscriber list in Buffalo outnumbered the independent by nearly three to one.

In 1916 Hubbell observed a tendency among subscribers served by two exchanges to gravitate toward the larger of the two systems. His Buffalo exchange was having a harder and harder time attracting new subscribers, and the size of its list was decreasing. Thus, continued access competition in Buffalo was culminating in convergence as users gradually realized the benefits of joint consumption. But convergence at the local level was leading to greater fragmentation at the interexchange level. According to Hubbell, “the natural tendency of the public to patronize the company with the largest number of subscribers...has led to a segregation into telephone districts in each of which one of the two competitors has usually acquired a great predominance of subscribers.” As a result, large numbers of users in western New York were unable to communicate with each other by telephone.³²⁵

That this process of convergence was driven by demand-side economies of scope, rather than by the superiority of Bell’s service, is clear. In a memo to the U.S. Attorney General seeking his approval for a consolidation, Hubbell pointed out that the Federal Company had used every means at its disposal to reverse the downward trend in Buffalo. It had waged an advertising campaign touting competition, local control, and lower rates. It had financed, purchased, and installed an automatic switching system in Buffalo. Automation resulted in rapid and efficient service but failed to reverse the migration of subscribers to the Bell system. On the other hand, in Jamestown, where the Federal system had the most subscribers, the independent exchange was increasing its share. Hubbell concluded:

A careful and painstaking analysis of this situation has brought the company to the conclusion that through a change in sentiment (entirely beyond the control of this company to direct or influence) the public, in the territory occupied by the company, now feels that its best interests can be served through a unified telephone system under state Public Service Commission control, rather than through the support of two companies giving a divided service.³²⁶

³²⁵ B. G. Hubbell to U.S. Attorney General, Aug. 30, 1916. Box 25, AT&T-BLA.

³²⁶ *Id.*

Bell's New York Telephone Company pursued the consolidation in the manner characteristic of the Bell companies at that time. During the consolidation, it worked closely with the Buffalo Chamber of Commerce to secure its approval of the rate changes it wanted to make. It insisted that the majority of telephone users express their approval of the consolidation by petition or a local referendum before the companies applied to the Attorney General for a waiver of the Kingsbury commitment.³²⁷ As in many other localities in that period, Bell skirted the prohibition of the Kingsbury commitment against the acquisition of competing independents by proposing to trade territories with its former competitor. In that case, Bell acquired control of the Buffalo area while the independents gained a monopoly over Rochester and Jamestown and vicinity.

The Buffalo Chamber of Commerce approved the consolidation after a special committee conducted a detailed investigation of telephone rates in the city. The first of the committee's conclusions:

No permanent and satisfactory telephone situation can be established which contemplates the division of our people into two separate groups. General inter-communication is the essential requirement for adequate and complete telephone service, especially for business men.³²⁸

Fragmentation of the subscriber universe was always a critical factor in driving consolidations forward. What is equally interesting, however, is how the unification process affected and reflected the interests of people located in different levels of the communications hierarchy. The issue was not merely whether the public wanted universal service or not, but also who would gain and who would lose because of the transition. That issue comes out most clearly by examining the way rates were adjusted following the consolidation.

The Chamber of Commerce report proposed to completely overhaul the telephone rate structure upon consolidation. The report claimed that neither telephone company was making an adequate return under present conditions and could, if they so requested, obtain approval for a rate increase from the Public Service Commission. That, it claimed, "would prove an added burden to the telephone users of this city, and particularly to those who use both services." As an alternative to rate increases under continued dual service, the report proposed a system of measured rates and a move away from party line service. Consolidation would result in reduced operating expenses, while the proposed rate changes, the committee asserted, would reduce rates for most subscriber groups while justly assigning a larger share of the costs to those who used the telephone the most. In its assessment of the impact of the rate change, the committee relied almost entirely on information provided by New York Telephone.

The structure of the proposed rates yields important clues about who wanted universal service and who was expected to pay for it. One effect of the new rates was to dramatically increase

³²⁷ Federal Tel. & Tel. Co., Rochester Tel. Co., Home Telephone Co. of James- town, New York Telephone Co., "An Analysis of the Present Unsatisfactory Telephone Conditions now Existing in Western New York and a Plan for Remedying Them." Oct. 5, 1917. Box 25, AT&T-BLA.

³²⁸ Buffalo Chamber of Commerce, Telephone Committee's Report, May 5, 1916, 10.

the charges of the 1,000 or so large business users at the top of the hierarchy. One such user, the Postal Telegraph-Cable Co., entered an emphatic protest with the city council, pointing out that its payments for telephone service would triple under the proposed rates.³²⁹ The Postal Company circulated its own petition for continued competition to counter the Bell-Chamber of Commerce petition favoring merger. The leaflet carried a list contrasting the rates of cities with and without competition.³³⁰

The Chamber of Commerce report tried hard to make it look as if residential and small user rates would be unaffected by the change. But it is fairly certain that the rates of users on the bottom of the hierarchy were also being subtly increased. All business party lines were to be eliminated, and half the business subscribers of both companies were served on a party line basis. The lowest of the new measured service rates allowed a business subscriber to make only about two calls a day without incurring extra charges. Four-party residential lines, formerly priced at \$24 per year, were to be put on a measured basis, while individual and two-party residential lines were to be offered on a flat-rate basis at much higher rates. Although the four-party residential line preserved the old monthly rate, it now came with a limit of 600 messages, beyond which there would be an additional charge of four cents per call. If each person on a four-party line made only one call a day, they would exceed that limit by 840 calls, leading to extra charges of \$33 per year.

The discouragement of party lines was a predictable characteristic of a telephone system that no longer had to compete on the dimension of access. Party lines had flourished during the competitive period because each network wanted to get as many subscribers as possible onto its system at the lowest possible cost. As competition waned, the telephone companies took access for granted and concentrated on maximizing their revenues from usage.

If the consolidation increased rates for users at the top and bottom of the hierarchy, it probably saved money for business users located somewhere in the middle, assuming that they were single-line users before. Savings would be especially pronounced for businesses with a moderate level of calling who had paid for two subscriptions before. Consolidation gave them universal access at a price about the same (and possibly lower) than the price of a subscription to a single system before the change.

Consolidation in Southern California

The political response to dual service in Southern California was particularly revealing. By 1916 the Bell and independent systems had split the telephone business of the region almost exactly in half. Bell's Pacific Telephone and Telegraph Co. had eleven exchanges serving 67,000 stations in the area. Its toll lines offered connections to most of the Bell exchanges west of the Rockies and AT&T connections to the rest of the United States. The independent Home Telephone and Telegraph Co. operated fourteen local exchanges and one toll exchange using automatic switching

³²⁹ Postal Telegraph-Cable Co., *Telephone Merger*, Pamphlet dated Aug. 28, 1916 addressed to the City Council of Buffalo, New York.

³³⁰ The Postal Telegraph Company had been an opponent of AT&T ever since the latter's acquisition of Western Union in 1909. It opposed consolidations because it feared that the telephone giant would use its market power in the telephone arena to dominate the telegraph industry.

equipment. In 1916 the Home Co. had 60,300 subscribers and toll connections to many other independent exchanges in Southern California, although it offered no interstate connections. Despite the fact that the Los Angeles city council had imposed artificially low rates on both companies, forcing them to operate at a loss, both systems were financially sound and in good physical condition.³³¹ The unremunerative rates harmed the credit of the independent company and made it difficult for it to raise money for expansion, but its effect on the Bell company was equally severe; only its financial ties to AT&T and the rest of the Bell system kept it solvent. Assuming reasonable rates, then, dual service could have been maintained indefinitely in Southern California.

Yet as the telephone saturated the area, political agitation against dual service and for some form of unification took hold. Organized demands for change began around 1910, when the city created its own municipal Public Utilities Board. Three remedies were discussed: 1) compulsory interconnection of the competing exchanges, 2) municipal ownership of the telephone system, and 3) consolidation into a privately owned but publicly regulated monopoly. The first option, which appeared to leave both competition and the existing companies intact, was the most popular. In April 1910 the Municipal League of Los Angeles asked the Board of Public Utilities to investigate the feasibility of establishing a method of interconnecting the two rival telephone systems.

As the Board prepared its report, agitation against dual service by the business community grew. In 1912 the Southern California Hotel Men's Association created a committee to prepare a plan to eliminate the use of both telephones in hotels.³³² The Hotel Association's approach to the problem boiled down to an attempt to coordinate users to select one telephone system over the other as a bloc. The same year a group calling itself the Telephone Reform Association initiated a campaign against dual service and for consolidation.³³³ By 1914 the Association had changed its name to the "One Phone League" and claimed 1200 members. There was no doubt that the policy of interconnecting the two companies enjoyed wide-spread public support. A municipal referendum of June 1, 1915, saw 63,194 voters express their preference for compulsory interchange of service, while only 14,921 voted against it. Also in 1915, the Socialist Party put a referendum on the ballot authorizing the city to take over and operate the telephone system. The proposition was defeated with 20,000 votes in favor and 30,000 votes against.

If the opposition to dual service is broken down by subscriber group, a familiar pattern emerges. Earlier in chapter 6 the correlation between telephone users' duplication rate and their position in the calling hierarchy was demonstrated. Organizations at the top of the hierarchy-i.e., those whose usage was large both in volume and in geographic scope-had high duplication rates. Telephone users at the bottom of the hierarchy tended not to duplicate. In the political reaction to dual service the same hierarchy appears. A survey taken by an economics student at the University of Southern California in 1916 asked telephone users, "Are you ever troubled about not being able

³³¹ A letter from Henry Robinson to N.C. Kingsbury, July 27, 1915, notes the improved financial condition of the Home company and urges Kingsbury to consummate a merger before the market value of the independent company's shares improved and its stockholders began to oppose a merger. Box 18, AT&T-BLA.

³³² LOS ANGELES TIMES, June 22, 1912.

³³³ For a complete chronology of the political opposition to dual service in Los Angeles, see *Summary of Information Furnished to the Department of Justice in Connection with Los Angeles Telephone Consolidation Case*, Mar. 23, 1917, Box 18, AT&T Bell Labs archives.

to get people by telephone because they have the other service?" The survey interviewed fifty "business men," fifty "professional men," and fifty "housewives." The answers are shown below.³³⁴

	Yes %	No %	N =
Business Men	100	0	50
Professional Men	96	4	50
Housewives	66	34	50

The data as reported here contain a measure of ambiguity. The surveyed population is small,-we do not know how the samples were selected, nor do we know what the economic status of the housewives was. Still, the unanimity with which business users opposed dual service is striking. It is reasonable to assume that most of the businessmen were "troubled" not because they were unable to get people by telephone – many of them would have been duplicate subscribers, after all – but because they objected to the additional expense of subscribing to both systems. As noted before, telephone rates had been a volatile political issue in the city since 1907, with the voting public demanding (and politicians supplying) rates that could not recover the companies' costs. Business and professional users of the telephone provided the political constituency for those actions.

The corresponding lack of unanimity among housewives is equally striking. Although a large majority of them answered "Yes" to the question, one in every three of them was willing to say that she was not troubled at all by an inability to reach half the telephone subscribers in the region. That is even more remarkable when we keep in mind that very few residential users were duplicate subscribers, so that they, unlike the business and professional users, really were unable to reach subscribers on the other system. The demand for homogenization was widespread, but the most vigorous calls for it came from the upper and middle levels of the communications hierarchy.

The Los Angeles Board of Public Utilities issued its report on the subject of interconnection on April 28, 1914.³³⁵ The report had been conducted by the Utility Department's Chief Engineer, James Barker, and was viewed by all concerned as an objective and impartial study. The Barker report effectively destroyed compulsory interconnection as an option by showing how expensive it would be to build and operate the facilities required to transmit, switch, and record calls between the two systems.

Although Barker concluded that interconnection was "physically possible," the expense of joint service was increased by the technical incompatibility of the two systems. Bell relied on manual and the Home Co. on machine switching, and both operated at different voltages. The main problem, however, was the sheer size of the two systems. Compulsory interconnection had never been carried out on a scale involving more than 100,000 telephone subscribers before. The places

³³⁴ Lloyd Heck Marvin, *The Telephone Situation in Los Angeles*, Master's Thesis, Department of Economics, University of Southern California, Jan. 7, 1916, Plate II.

³³⁵ The text of the Barker Report, Apr. 1914. is printed in the 1914 ANNUAL REPORT OF THE CALIFORNIA RAILROAD COMMISSION 62. AT&T-L&R.

in which it had been tried, such as Janesville and La Crosse in Wisconsin, or Pasadena in California, had only a few thousand subscribers and one central office for each company.

To connect the two large regional systems in Southern California, Barker observed, required one of two methods. One could, first, build direct trunk lines between all of the Home Co.'s central offices and all of the Pacific Co.'s central offices. While that was the most technically desirable method, Barker concluded that:

The expense in connection with this plan is so great as to preclude its adoption. The initial investment and fixed charges on the necessary equipment are prohibitive. Under this plan it would be necessary to practically duplicate the present trunking equipment of the companies and make extensive changes in the switchboards. In order to carry out this plan it would be necessary in some instances to enlarge the quarters in which the switchboards themselves are contained. In view of these difficulties, and the enormous expense involved, this plan presents so many obstacles that it appears commercially impracticable.³³⁶

The other method of interconnecting the two exchanges was to establish what would now be called a tandem switching center, an exchange office where calls between the two systems would converge to be switched. Barker estimated that such a switching center would have to be able to handle a peak load of 20,000 calls an hour and calculated that building and operating it would require about \$400,000 in capital investment and another \$500,000 to \$600,000 per year in expenses. The latter figure represented about one-third of the total annual operating revenues of both companies combined. Barker concluded by saying:

By far the best plan for obtaining the desired results is, in my opinion, through a consolidation of the two systems. By this means all duplication and unnecessary investments are avoided and operating and overhead costs are reduced to a minimum, and in the end the patrons will be given a better service and at the lowest rates commensurate with the necessary investment.³³⁷

After the Barker report, consolidation became the most popular strategy for unification, as municipal acquisition had been repudiated by the voters. The Bell Company's franchise expired in November 1916, and the city seized on that opportunity to require a consolidation by refusing to grant its request for a renewal. The product of the merger, the Southern California Telephone Company, was Bell-owned. It began operation on the first of May, 1917. The three-sided struggle over rates between the city's telephone users, the regulators, and telephone companies continued, but the question of dual vs. universal service had been settled.

The Los Angeles case indicates that, as in Buffalo, the economies to be realized from unification came from the demand side rather than the supply side. Here again, dual service seemed more efficient from the standpoint of a smaller user than for business users. However, the Barker

³³⁶ *Id.*

³³⁷ *Id.*

report showed that supply-side considerations played a significant role in the choice of consolidation, rather than interconnection, as the method of providing a unified service. The cost of establishing complete interconnection between competing, large-scope telephone systems was prohibitive.

Consolidation in the State of Kentucky

Bell's principal competitor in Kentucky was the Central Home Telephone Company. Central Home owned nineteen exchanges in the state in 1910, as well as its own long-distance company. After a financial failure in 1907, the system was successfully rehabilitated by the committee of bankers who assumed control of it. As they were not interested in remaining in the telephone business, the bankers approached Bell about selling out near the end of 1910. When Central Home initiated its negotiations, its facilities were generally in better shape than Bell's and its exchanges had more subscribers.³³⁸ In Louisville and its suburbs, for example, the independent had gained over 3,000 subscribers while Bell had lost 1,200 since 1907. The company claimed that this growth had been achieved without any extraordinary promotional measures but suggested that they would become more aggressive if Bell did not buy them out.

Bell, however, was only mildly interested in acquiring Central Home in 1911. There were two serious obstacles to a merger from its point of view. Already embroiled in controversy and litigation in Kentucky, Bell was not interested in acquiring a major telephone property unless it could be done openly and legally, and the Kentucky constitution contained a flat prohibition of mergers of competing common carriers.³³⁹ The other problem was a city ordinance in Louisville fixing the rates for telephone service. Bell was already involved in litigation against rate controls in two Kentucky cities. The president of Bell's Cumberland Company advised Kingsbury that the rates imposed by the city would preclude any possibility of making a profit on a consolidated investment. He went on to say:

I am of the opinion that the two companies will be compelled to operate for several years, until the people there get tired of two systems and join with us in formulating a plan by which the two companies can be consolidated and fair rates charged.³⁴⁰

That comment illuminates both the nature of Bell's commitment to universal service and its antipathy toward physical interconnection in that period. Bell was confident of the ultimate victory of the universal service idea and expected it to come about through a process of public negotiation in which reasonable regulators balanced the interests of the telephone users and the telephone companies. Until that happened, the benefits of a unified service were to be withheld, and used as leverage for bringing the interested parties around to a merger that would allow the surviving telephone company to increase its rates. There would be no universal service without a rate

³³⁸ Thomas Tracy to UN Bethell, AT&T, Feb. 3, 1913. Box 39, AT&T-BLA.

³³⁹ Section 201 of the Constitution of Kentucky read: "No...telegraph, telephone...company shall consolidate its capital stock, franchises, or property, or pool its earnings, in whole or in part, with any other...telegraph, telephone...company, owning a parallel or competing line...or acquire by purchase, lease or otherwise, any parallel or competing line or structure, or operate the same."

³⁴⁰ W. T. Gentry, Cumberland Co. to Kingsbury, Oct. 8, 1912. Box 39, AT&T-BLA.

increase. Given that policy, pressures to interconnect with competing exchanges in major cities had to be rebuffed because they would deprive Bell of its bargaining power over the unification process.

In an internal letter, Kingsbury admitted that the only reason he was interested in buying Central Home was the possibility that independent subscribers in Louisville and other parts of Kentucky would begin to demand a connection to Cincinnati.³⁴¹ A major metropolis only 100 miles from Louisville, Cincinnati attracted a substantial part of Kentucky's commerce and communication, yet had always been a Bell monopoly town. If a substantial number of telephone users in Kentucky remained on independent systems, especially one as politically well-connected as the Central Home, there was a danger that Bell could be ordered to supply long-distance connections to its exchange there or that a competing exchange would be established there. Late in 1911, in fact, the Postal Telegraph Company, which had an outlet in Cincinnati, offered to provide four heavy copper long-distance circuits between the Louisville independent exchange and Cincinnati.³⁴²

If the Central Home Co. knew definitely that it was not going to be purchased by Bell, it would either adopt more competitive tactics or, worse, cause legal and political trouble for Bell throughout the state. Kingsbury advised his local operatives to keep them mollified so as to avoid potentially "embarrassing" and "annoying" actions on their part. While he was not able or willing to buy out the independent, he had to convince them that a Bell purchase was imminent or possible.³⁴³ Kingsbury bided his time for two years, conducting an appraisal of the property and encouraging its owners to be patient, but negotiations were broken off in November 1912. The Kingsbury commitment, made about a year later, laid the matter of a sale to rest.

During the lull created by the antitrust agreement, Bell and its allies addressed themselves to the political situation in Kentucky. The company's unpopular litigation against municipal rate regulation in Louisville was settled in 1914, with the company accepting the city's dictates. Its rate litigation with the city of Paducah, which had led to the massive boycott of 1911, was settled by the U.S. Supreme Court in 1915. In the meantime, support for one telephone system had been growing. A new utility bill was passed in 1912, giving the railroad commission the power to compel toll connections. It also contained a provision allowing the railroad commission to authorize consolidations of telephone companies when they were supported by the municipalities involved. The part of the law legalizing mergers was an attempt to skirt the constitutional prohibition on consolidations.

A few months after its passage, the railroad commission approved a merger of the competing systems in Christian and Todd counties³⁴⁴ but expressed doubts about the

³⁴¹ N. C. Kingsbury to George W. Leverett, AT&T General Counsel, Dec. 1, 1911. Box 39, AT&T-BLA.

³⁴² Thomas Tracy to N. C. Kingsbury, Nov. 21, 1911. Box 39, AT&T-BLA.

³⁴³ Kingsbury to W. T. Gentry, Oct. 10, 1912. Box 39, AT&T-BLA.

³⁴⁴ The Kentucky Railroad Commission, Opinion and Resolution, "Application of the Christian-Todd Telephone Co., the Cumberland Telephone and Telegraph Co., the Hopkinsville Home Telephone Co., and the Todd County Home Telephone Co. to Consolidate." July 22, 1912. Box 39, AT&T-BLA.

constitutionality of the ruling. Pending test litigation, neither the commission nor Bell felt ready to proceed with any further consolidations.

Dual service reached its numerical peak in Kentucky in 1914, when there were competing exchanges in sixty-three of the 159 cities with exchanges. Public support for it, however, was rapidly waning. Having extracted itself from its unpopular rate litigation and repaired its relations with the state officials, Bell was in a position to promote the final step needed to eliminate it. In 1916 the legislature passed a constitutional amendment specifically exempting telephone consolidations from the merger prohibition. To become law, the amendment had to be ratified by the state's voters. The vote was scheduled for the November, 1917 elections. Hunt Chipley of Southern Bell, who had been instrumental in building up political support for the move, wrote to Kingsbury that the passage of the bill reflected a major change in public attitudes toward Bell since the Kingsbury commitment:

The legislature passed this bill because it was made plain to them, from all quarters of the state, that the public were tired of supporting dual systems of telephones and that the companies should be put in a position, under proper regulations, to remedy this situation.

The proposed amendment passed with 63 percent of the vote. It was supported by every major newspaper and board of trade in the state and passed through the legislature almost unanimously. In singling out the telephone for a special exemption from laws intended to preserve competition, Kentucky anticipated the federal Willis-Graham Act of 1921. Even the political composition of the coalition that brought the change about-an alliance of Bell and independents who claimed that they needed to be able to consolidate to maintain their economic viability-was reproduced at the national level four years later. Although the legal prerequisites of a monopoly telephone system had been supplied, Bell did not actually acquire the Central Home system until 1924.

Analysis of Consolidations

In retrospect, it is clear that telephone consolidations were not motivated by Bell's ability to achieve supply-side economies of scale or scope, nor did they result in rate decreases. Pressures for mergers came from both the demand and the supply side, but the cases of Los Angeles, Buffalo, and Kentucky make it clear that no change could have been affected without users.

From the demand side, consolidations were supported because they unified the service. Users in the middle of the communications hierarchy-businesses and professionals-wanted the benefits of unified telephone access without the expense of a duplicate subscription. In the rate changes that accompanied a consolidation, they typically succeeded in raising the telephone costs of both smaller and larger users. The case of Buffalo shows that even without consolidation, users were showing a tendency to converge on a single network.

From the supply side, the mergers were motivated by a desire to eliminate competition and clear the way for a rate increase. Both Bell and the independents had engaged in ferocious access

competition for the preceding fifteen to twenty years. Access competition demanded constant expansion of facilities, which tended to increase costs, while placing severe restraint on rates. Rate pressure came from both the market and municipal franchises and regulations. In competing cities, Bell openly held its rates below its costs in order to hold on to subscribers, even though its cost of providing exchange service was often higher than the independents, subsidizing its losing exchanges with profits from monopolized operations. Bell looked upon the elimination of dual service as an opportunity to recover those losses.

Pressures for a rate increase also came from the fact that consolidation increased the telephone company's short-term expenses.³⁴⁵ The Bell exchange was often unable to use much of the physical plant it had purchased, yet the costs of buying it had to be recovered. The placement of the wires and switchboards of the formerly competing systems usually did not facilitate their combination into one system. If some parts of the telephone exchanges could be combined, money had to be spent on connecting facilities, and in general operations became more complicated as the system grew. The revenue of a combined system was less than the sum of the revenue of both systems because of the loss of duplicate subscribers. Whatever operating economies were achieved by merging were offset by the increased expenses and proportionally less revenue.³⁴⁶

While the user public and the municipal government generally looked favorably upon unification of the service, support for it could evaporate if it was accompanied by a rate increase. A rate increase, of course, was the primary motive of the suppliers. Thus the politics of the transition had to be handled carefully. Bell had a distinct method and agenda to its approach to the consolidations. The promise of universal service was used to develop public support for the change, but the company had to make sure that this came about through consolidation rather than interconnection of competing exchanges. Bell promoted consolidations cautiously, making sure that it had the support or at least tacit consent of telephone users and all relevant government authorities. Technically, new acquisitions violated the Kingsbury commitment, but Bell had learned that it could obtain the Justice Department's approval if the merger had the support of the public and the approval of state and local officials. The only form of restraint imposed on Bell was that it could not come out of the transaction with control of a larger share of the nation's telephones. That made it possible for Bell and the independents to merge by trading territories. The independent would assume control wherever it was dominant or firmly entrenched, while Bell would take over the territories where it had a commanding lead. The Attorney General would then be presented with a list of the exchange territories being swapped, which showed that Bell was losing control over as many telephones as it was gaining. The antitrust officials generally granted their approval to those trades.

During World War I, when the Post Office took over the operation of the telephone system, pressures for consolidation and unification increased. There were still 1,450 competing points

³⁴⁵ The economics of consolidation in Madison, Wisconsin are discussed in 17 TELEPHONY 375 (Mar. 27, 1909).

³⁴⁶ *Id.* See also "Memorandum Regarding Ohio Mergers," Feb. 1912. Box 36, AT&T-BLA. This document contains a detailed analysis of the Bell system's approach to the economics and politics of consolidation in the state of Ohio.

remaining.³⁴⁷ Postmaster General Burluson received numerous letters from the city governments of dual service cities urging his approval of telephone consolidation.³⁴⁸ Several unions, including the Commercial Telegraphers' Union of America and the International Brotherhood of Electrical Workers, sent open letters to the Secretary of War advocating consolidation of telephone and telegraph industries as a means of economizing on technical people who might be used in the Army Signal Corps.³⁴⁹ That type of public support made it even easier for the Justice Department to waive the Kingsbury commitment's restrictions on mergers.

Completing the Transition

In large cities such as Buffalo, Louisville, and Los Angeles, public policy was consumed with the problem of what to do with established competitors. Given the heavy capital requirements and the entrenched position of the existing firms, there was little threat that a new company would enter. That was not true of the small towns and rural areas, however. There telephone competition continued with the vigor of the early 1900s until the state utility commissions actively suppressed it.³⁵⁰

The state of Ohio affords a revealing case study. The state law authorized the PUC to prevent telephone companies from "invading the territory" of another company without a certificate of public interest, convenience, and necessity from the commission. When numerous farmer and small town telephone companies came to the commission to obtain permission to compete with an existing company, showing that they could supply better service or offer lower rates, the commission refused whenever it had the authority to do so. In a case involving the Village of New Washington, the PUC denied permission to set up a new phone system even though the proposed service was at lower rates and the application was supported by a pleading filed by the Village government.³⁵¹ Entry was suppressed because prevention of a "multiplicity of telephone systems" and the confinement of telephone service to "one well regulated company" was "the whole intention of the [utilities] Act," a judge ruled.³⁵²

When another small town company attempted to enter the territory of a neighboring company because of the latter's failure to maintain its facilities in proper working condition, the PUC's opinion denied that this was a legitimate reason for competition. The filing of a complaint before the PUC, it said, could compel any company to improve its facilities. In other words, the commission was determined to substitute regulatory remedies for problems of service and rates formerly addressed by means of competition.

³⁴⁷ Memorandum, Acting Statistician, AT&T, Jan. 9, 1918, Box 13, AT&T-BLA.

³⁴⁸ See, for example, resolutions from the city council of Toledo, Canton, and Findlay, Ohio, dated, respectively, Nov. 22, Oct. 9th, and Oct. 21st, 1918; Box 27, AT&T-BLA.

³⁴⁹ Consolidation of Telephone and Telegaraph Cos to Aid WWI War Effort-1918, Box 13, AT&T-BLA.

³⁵⁰ The April 24, 1909 TELEPHONY reported that the independent telephone companies of New York opposed commission regulation "because of the prejudice of that body against competition in public utilities."

³⁵¹ In the matter of the application of the Cranberry Horne Telephone Co. for authority to construct a Telephone System in the Village of New Washington. Ohio, Ohio Public Utilities Commission Case #204, (July 11, 1912). AT&T-L&R.

³⁵² Clinton Telephone Co. v. New Burlington Telephone Co., Ohio Public Utilities Commission, Sept. 1912.

That evidence suggests that while dual service was still economically viable in many parts of the country, its elimination was mandated politically by the victory of the regulated monopoly paradigm. That adamant reliance on regulatory solutions reflected a movement that embraced all utilities. Once the telephone industry had been classified as a natural monopoly, regulatory commissions insisted on applying to it the techniques of regulatory control as a substitute for the market.

After the end of World War I there were still competing exchanges in 1,000 locations, including twelve major cities. Further consolidations were blocked by the Kingsbury commitment and more importantly by the Clayton antitrust act.³⁵³ The telephone companies' inability to consolidate, they claimed, made it impossible for them to raise money to rebuild their systems. In a movement that had the active support of both Bell and independent interests, Congress amended the Transportation Act to permit the consolidation of dual telephone systems with the approval of the Interstate Commerce Commission. In introducing the Willis-Graham Act of 1921, Senator Graham stated:

I think I am stating the opinion of most men who have considered the matter, that it is believed to be better policy to have one telephone system in a community that serves all the people, even though it may be at an advanced rate, properly regulated by State boards or commissions, than it is to have two competing telephone systems. There is nothing more exasperating, nothing that annoys the ordinary business man or the ordinary person more than to have two competing local telephone systems, so that he must have in his house and in his office two telephones, on neither one of which he can get all the people he wants to be in communication with.³⁵⁴

The passage of the Willis-Graham Act gave the imprimatur of the U.S. Congress to the elimination of the last vestiges of competition. It cleared the way for major consolidations in Ohio, Kentucky, and elsewhere, although such consolidations had been taking place gradually since 1916.

³⁵³ Section 7 of the Clayton antitrust act prohibited mergers which created a monopoly.

³⁵⁴ CONG. REC., June 1, 1921, p. 1966.