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THE POWER OF INTERCONNECTION, 1908-1913

FROM 1908 TO 1913, access competition entered a critical phase—the beginning of a *breakdown of system exclusivity*. Access competition still placed enormous pressures on both sides to increase the scope of their network. The era of raw expansion was mostly over, however. The greatest potential for growth in the scope of the networks came from more intensive development of toll connectivity among established exchanges and from the growth of telephone penetration within exchanges. In that context dual service came to be perceived as a barrier to communication more often; users began to demand a complementary relationship between the networks rather than an exclusive one. In order to remain competitive, the telephone companies had to respond to that demand. If the scope of the telephone system was to continue to widen, the barriers between the two systems had to be breached. Unfortunately for the independents, their movement was far more prone to disintegration than Bell's. Bell's unified organization and policy made it impervious to fragmentation. The real basis of the Bell system triumph in that period came from maintaining its integrity as a system while relaxing its restrictions on allowing independents to interconnect with it. As a result, large numbers of independent exchanges connected with the Bell system and deserted the exclusive access universe of the organized independent movement.

The relationship between interconnection and network competition was the central preoccupation of that period. There were two distinct aspects to the issue. One was the strategic use of interconnection in the Bell-independent rivalry. The other was the attempt of courts, legislatures and regulatory commissions to find an appropriate public policy regarding interconnection. Should competing networks be compelled to connect or not? Did interconnection preserve or destroy competition? Was the strategic use of interconnection rights an anticompetitive practice or a legitimate exercise of the right of contract? Was it necessary to eliminate competition to bring about universal interconnection? Those questions moved to center stage but only succeeded in producing a welter of contradictory decisions.

The Development of regional independent operating companies

From 1898 to 1906 the story of independent development was largely one of building exchanges and short-haul toll lines. After 1906, the independents began to exploit their control of exchange access to develop competitive intercity long-distance lines. While independent exchange development peaked around 1904, their long- distance activity flourished from 1906 to 1911. Large regional independent operating companies, formed through mergers of several smaller companies, started long-distance subsidiaries and went about constructing access universes comparable in scope to that of a Bell licensee company. The independents, too, began to speak of “universality.” In 1908 A. C. Lindemuth, the proprietor of the Richmond, Virginia, independent exchange, proclaimed “for ten years we have been building exchanges. Let us now build systems.” Dual service could only survive, he knew, if the independents matched the growing scope of the Bell system:

I have adopted...the motto... ‘the Integrity of the Independent System and its Universal Extension.’ That motto implies the continuing of the present independent telephone system as a separate and distinct system, extended into all undeveloped territory whether in city or country, reorganized and strengthened into a complete and effective whole.²⁴⁵

That was more than rhetoric. Numerous regional independents grew up in that period, belying the stereotype of small, exclusively local operations. A typical independent operating company owned exchanges in ten to thirty key cities and signed long-term, exclusive connecting contracts with independent exchanges they did not own. On the borders of their territories, they entered into agreements with the neighboring independent regionals for the interchange of traffic. A sampling of some of those systems follows.

In Missouri and Kansas, *the Kansas City Home Telephone Co.* was the centerpiece of a regional independent network. It served 20,000 of Kansas City, Missouri’s 40,000 subscribers. Its long-distance subsidiary owned 10,000 miles of toll wire in 1909 and offered connections to Topeka, Lawrence, Omaha, and many smaller exchanges in the vicinity. The Kansas City Co. was connected to the competing exchanges in St. Louis and St. Joseph over the lines of two neighboring independent regionals, the Kinloch Telephone Co. and the St. Joseph Home Telephone Co. The Kinloch Co. was another well-established, high quality, and long-lasting independent regional. In 1907 the Kinloch Co. had 21,000 subscribers in St. Louis, about 36 percent of the total, and owned fourteen exchanges in eastern Missouri and central Illinois. Its toll lines covered an area bounded by Sedalia, Missouri, Springfield, Illinois, Terre Haute, Indiana, and Farmington, Illinois.²⁴⁶ The St. Joseph Home Co. had connecting contracts with forty-eight companies in the area, giving it access to 40,000 telephones.²⁴⁷

²⁴⁵ 15 TELEPHONY 267-8 (April 1908).

²⁴⁶ 1910 ANNUAL REPORT OF THE DIRECTORS OF THE KINLOCH LONG DISTANCE TELEPHONE COMPANY OF MISSOURI. Box 16, AT&T-BLA.

²⁴⁷ St. Joseph Home Telephone Co. and the St. Joseph Home Long Distance Co., Boxes 17 and 18, AT&T-BLA.

In Pennsylvania, Maryland, and West Virginia, several large independent regionals competed with the Bell system. The *American Union Telephone Co.*, centered in Harrisburg, Pennsylvania, was formed in 1906 through the merger of twelve independent companies, including the competing exchanges in Harrisburg, Altoona, Lancaster, Williamsport, and Chester. The Keystone Telephone Co. owned exchanges in and around Philadelphia, including Trenton and Camden. The *Consolidated Telephone Company* covered the territory to the north and west of Philadelphia, operating exchanges and toll lines connecting Allentown, Scranton, Wilkes-Barre, and Reading. The Pittsburgh and Allegheny system connected independent exchanges in the western parts of the state. The National Telephone Co. owned exchanges in Wheeling, Steubenville, and other towns in West Virginia. Each of those systems were connected to each other through an organization known as the “Eastern Traffic Association,” a clearing house which accounted for and divided joint toll revenues and coordinated maintenance and operations.²⁴⁸

Headquartered in Aurora, Illinois, The *Inter-state Independent Telephone and Telegraph Co.* owned twenty-nine exchanges in Illinois, including the cities of Peoria, Springfield, Joliet, and Elgin. In 1911 it reached an agreement with the Illinois Tunnel Co. that gave it access to independent subscribers in the city of Chicago. Its lines connected with the Kinloch system to the west and with the Indiana’s New Long Distance Co. to the east.

Centered in Ohio, the *United States Telephone Company* was one of the largest and strongest independent regional systems. It owned twenty-two independent operating companies, including exchanges in Cleveland, Columbus, Akron, and Youngstown, Ohio. Its long-distance lines covered the state of Ohio. After 1906, the financial syndicate controlling U.S. Telephone acquired control of the Home Telephone Co. of Detroit, the Indianapolis independent exchange, and the New Long Distance Telephone Co. The latter connected all of the sizable independent exchanges in the state of Indiana. In 1908 it furnished long-distance service to 800 independent exchanges in Ohio, Indiana, and Michigan, reaching 325,000 telephones.²⁴⁹ The U.S. Telephone Co. required its connecting exchanges to sign a contract that guaranteed the long-distance company exclusive access to the local company’s toll business. The contract was an attempt to secure the same kind of control over interconnection rights embodied in the Bell system’s license contract. It stipulated that the local exchange was not allowed to make connecting arrangements with any other long-distance company for a term of ninety-nine years.

Comparably sized independent regionals existed in New York state,²⁵⁰ Kentucky,²⁵¹ Southern California,²⁵² Washington and Oregon,²⁵³ and Minnesota.²⁵⁴ By 1910, independent systems extended in an unbroken line from New York to Kansas along the east-west axis. On the north-south axis, they ran from Tennessee to Minnesota. With the exception of isolated systems in

²⁴⁸ Independent Telephone Cos-Financial History, Box 65, AT&T-BLA.

²⁴⁹ 1908 Annual Report of the United States Telephone Co., Dec. 31, 1908. Box 36, AT&T-BLA.

²⁵⁰ Federal Telephone Co. Box 25, AT&T-BLA.

²⁵¹ Cumberland Telephone and Telegraph, acquisition of Central Home T & T, Kentucky, Box 39, AT&T-BLA.

²⁵² Pacific Tel. & Tel., Los Angeles Consolidation, Box 18, AT&T-BLA.

²⁵³ Acquisition of Pacific Independents, Box 30, AT&T-BLA.

²⁵⁴ Northwestern Exchange Co. Connection with Toll Lines of Tri-State, Box 39, AT&T-BLA.

Dallas, Atlanta, Mobile, and Shreveport, they were all physically connected. The independents did not have the technology or the organization to offer talking circuits over 300 miles in length. Nevertheless, it was clear by the time of Vail's return that the independent regionals were viable competitors for toll traffic as well as exchange subscribers.

Independent toll service was usually lower priced than Bell's and their lines often connected into exchanges where Bell had only a public toll station.²⁵⁵ Independent toll systems had seized a substantial amount of traffic because of their lower rates and sometimes superior exchange access. The incursions into toll business "not only assist the revenue of the opposition but greatly increase its prestige with the more important telephone customers," noted AT&T's Pickernell.²⁵⁶ In upstate New York, the effect of independent toll line competition was so severe that the Bell toll earnings had fallen to 1 to 2 percent. There was a "pronounced loss of business" in AT&T service from Buffalo to Cleveland, Pittsburgh, and Jamestown.²⁵⁷

Bell's war on independent connectivity

With the return of Vail, Bell had a clearly defined goal: the elimination of dual service and the creation of a nationally interconnected monopoly administered by Bell but supervised by regulators. Monopoly would bring about universal service and relief from the low rates locked into place by the fierce competitive struggle. Universal interconnection was not the sole object; Bell also wanted to make sure that it controlled the system. In order to do so, it had to prevent physical connection with overlapping systems and maintain absolute control of interexchange connections. There was a place for independent companies in that scheme, but only as local feeders to the Bell system. In the major cities, dual service was to be eliminated by buying out the independent and physically consolidating the exchanges. If the independent was dominant, Bell would sell out and enter into a connecting contract with the surviving exchange. Consolidation would demonstrate the benefits of a unified service while permitting the companies to raise rates to their "proper level." In the smaller cities and the country, competition would be eliminated by an aggressive new sublicensing effort. Any overlapping, competing telephone systems that remained were to be isolated and squeezed out as all others were absorbed into the system.

Liberalization of sublicensing

Vail's competitive tactics were directly aimed at the growth of connectedness among the independents. One of his most important countermoves was to revitalize Bell's sublicensing efforts. The independent companies who directly overlapped and competed with Bell accounted for only 40 to 45 percent of all independent telephones. The rest of the independent subscribers were in areas unoccupied by Bell. Those noncompeting independents, Vail understood, held the balance of power in the competition for universal coverage. If they could be tied into the Bell system, Bell could broaden its coverage without investing in facilities or engaging in local competition. In many areas, whoever won connecting rights with the majority of the noncompeting independents would have access to the largest number of subscribers.

²⁵⁵ Pickernell, AT&T to E.J. Hall, AT&T, May 12, 1909. Box 1376, AT&T- BLA.

²⁵⁶ Pickernell, AT&T, to E.J. Hall, AT&T, May 12, 1909. Box 1376, AT&T- BLA.

²⁵⁷ Pickernell, AT&T, to E.J. Hall, AT&T, May 21, 1909. Box 1376, AT&T-BLA.

Bell's first sublicense contract had limited the exchange to Bell connections and required the use of Bell telephones. That tactic prevented the independents from running away with the business in the central states, but by the beginning of 1907 it had induced just 14 percent of the independent telephones to be connected to the Bell system. In order to gain access to more independent systems, Vail dramatically liberalized the Bell interconnection conditions. Starting in October 1907, independent exchanges connecting with Bell no longer had to use Western Electric instruments but could keep using independently manufactured telephones as long as they were of "first class" construction and would not impair the quality of service offered over joint lines.²⁵⁸ Letters urged the licensee companies to "pursue vigorously the policy of sublicensing" in the part of their territory which was "more or less unremunerative" or "not yet occupied."²⁵⁹ Managers were warned to make sure that Bell controlled all the toll lines connecting the sublicensed exchanges.²⁶⁰ Vail also allowed Western Electric to begin selling telephones to independent companies for the first time.²⁶¹

Exclusive connecting contracts

Bell went on to liberalize its interconnection policy in a more radical fashion. In an attempt to pry more independent subscribers away from the exclusive control of competing independents, Bell began to interconnect with independent exchanges even when they already maintained connections with competing long-distance lines. In a few cases, it was even willing to connect its toll lines to an independent exchange that was directly competing with one of its own if the independent had a commanding lead in the number of subscribers. Such was the case in Richmond, Indiana, where the independent exchange in 1908 had 2,400 subscribers to the Bell exchange's 100. In lieu of consolidation, L. G. Richardson, President of the Central Union Co., proposed an interconnection agreement that would connect AT&T and Central Union Co. toll lines to the independent exchange in the city. Vail disapproved of the idea but Richardson went ahead with it anyway.²⁶² That tactic was used in Ohio and Indiana, where hundreds of independent exchanges had signed exclusive connecting contracts with the United States Telephone Company (UST). The new policy amounted to soliciting the exchanges to break their contract with UST. Nevertheless, it was an attractive option for the local exchanges, as it gave their customers access to the subscribers and cities controlled by both systems.²⁶³ In 1908 sixteen local independent companies in Ohio and Indiana entered into connecting agreements with Bell in violation of their exclusive contract with UST.²⁶⁴ UST's attempts to block those actions in the courts were unsuccessful (see section below entitled Exclusive Connecting Contracts and the Courts).

²⁵⁸ Vail Circular Letter, Oct. 9, 1907. Box 1376, AT&T-BLA.

²⁵⁹ Vail Circular Letter, Feb. 10, 1908. Box 1376, AT&T-BLA.

²⁶⁰ Vail Circular Letter, Sept. 10, 1908. Box 1376, AT&T-BLA.

²⁶¹ FCC TELEPHONE INVESTIGATION 138(GPO, 1939).

²⁶² Richardson to Vail, July 3, 1908. Vail to Richardson, July 7, 1908. Box 1357, AT&T-BLA.

²⁶³ "Our plan of having all toll lines entering our city on one switchboard has been so pleasant and satisfactory to our patrons that I think that when the court order requiring us to remove them becomes known to our patrons, I would not be surprised if some demonstrations on their part would take place expressing their disapproval of being compelled to go back to the old and unsatisfactory way of having more than one toll station in the city." William Shumaker, President, Butler (Indiana) Telephone Co. to L.N. Whitney, Central Union Co., Dec. 1, 1908. Box 1357, AT&T- BLA.

²⁶⁴ J.B. Smith to J.D. Ellsworth, Dec. 5, 1908. Box 1357, AT&T-BLA.

Armed with its new interconnection policies, Bell licensees made great efforts to attract farmer and mutual company lines. “The opposition Bell has shown more activity than ever before in establishing and encouraging rural mutual companies to connect up with its system,” wrote Telephony in 1909. Bell promised rural telephone users service at one-fifth the rate of the independent companies.²⁶⁵ The importance of sublicensing as a form of enlarging the Bell system’s scope was particularly evident in the areas where strong independent toll systems were developing. In the Missouri and Kansas Co.’s territory in mid-1909, sublicensed toll lines outnumbered the Bell licensee’s in mileage, and sublicensed telephones outnumbered Bell-owned telephones by two to one.²⁶⁶ The Bell licensee in the territory around St. Louis was so dependent on sublicensing for toll connections that an AT&T agent speculated that if the sublicensees should happen to break with Bell “the Bell toll business and the Bell development would disappear, and the opposition would absolutely control most of the territory outside of St. Louis.”²⁶⁷

Tables 9-1 and 9-2 show in statistical terms the devastating impact Vail’s policy of absorbing competition through interconnection had upon the independents’ attempt to build a rival system. The number of Bell-connecting independent telephones jumped from 297,218 at the beginning of 1907 to 1.2 million in only two years. By 1914, two-thirds of all independent telephones were connected to the Bell system. The competitive impact of the new policy becomes clear when those numbers are expressed as a proportion of the independent telephones not in direct competition with Bell (see table 9-2); that is, all of the independents not in dual service territories. At the beginning of 1907, only 25 percent of the noncompeting independents were connected to Bell. A year later, 46 percent of them were so connected. By October 1909, 79 percent were connected to Bell.²⁶⁸ By the time of the Kingsbury commitment, 89 percent of all noncompeting independents were embraced by the Bell system’s access universe.

Price war in toll service

Bell’s cooptation of noncompeting independents was supplemented by a price war against selected independent toll lines. The independent long-distance companies were able to charge lower rates because they had lower fixed costs. Unlike Bell, they did not attempt to provide complete toll coverage of an area but concentrated their resources on high volume routes. Bell toll lines served both “fat” and “lean” districts and installed enough capacity to handle most of the traffic. By constructing a simple economic model of those conditions, Pickernell discovered that cutting Bell rates in half to secure a larger share of the traffic would hurt the independent more than it would hurt Bell. The independent’s profit would be “enormously impaired,” while Bell’s would fall only slightly.²⁶⁹ Rate cuts proposed by Pickernell went into effect in May in selected cities of Ohio, the target being the U.S. Telephone Co. The Ohio rate cuts succeeded in increasing Central Union’s toll traffic by 53 percent, while reducing its revenue by only 12 percent.²⁷⁰ In New York state, where strong independent systems in Buffalo, Syracuse, Rochester, and Erie, Pennsylvania existed, cuts went into effect in July.

²⁶⁵ 17 TELEPHONY (Mar. 27 1909).

²⁶⁶ Pickernell to Hall, *supra* note 11.

²⁶⁷ *Id.*

²⁶⁸ Chappelka (1956), 1912 Telephone Census.

²⁶⁹ Pickernell to Vail, Box 1376.

²⁷⁰ Thayer to Vail, Nov. 18, 1909. Box 1376, AT&T-BLA.

TABLE 9-1
INDEPENDENT TELEPHONES CONNECTING WITH BELL, 1907-1914

As of January 1,	1907	1908	1909	1910	1911	1912	1913	1914
#Independent phones	2.16	3.11	3.31	3.47	3.70	4.00	3.93	4.29
#Bell connecting (millions)	0.30	0.83	1.19	1.62	1.95	2.28	2.50	2.88
Percent connecting (%)	14	27	36	47	53	57	64	67
Growth Rate (%)	-	178	44	36	20	17	9	15

Source: Chappelka, 1956; FCC, 1939; Telephone Censuses, 1907, 1912.

TABLE 9-2
NON-COMPETING INDEPENDENT TELEPHONES
CONNECTING WITH BELL, 1907-1914

As of January 1,	1907	1908	1909	1910	1911	1912	1913	1914
#Non-competing Independent phones	1.19	1.80	1.86	2.00	2.35	2.68	2.87	3.23
#Bell connecting (millions)	0.30	0.83	1.19	1.62	1.95	2.28	2.50	2.88
Percent connecting (%)	25	46	64	81	83	85	87	89

Source: Chappelka, 1956; FCC, 1939; Telephone Censuses, 1907, 1912.

The price war made major inroads into the toll business of the United States Telephone Company. In an attempt to stop the loss of its long-distance business, UST tried to get both companies to restore their rates to their original levels. It approached the Central Union Company through the state independent association, which had come into much closer contact with the Bell licensee due to the growing number of sublicensed independent companies. At the instigation of James Brailey, president of UST, a committee of the Ohio Independent Telephone Association met with the Central Union and argued that the lower rates injured the local sublicensees by reducing their commissions from toll traffic. That argument was merely a cover for the real concern, which was that Bell's price war was hurting UST severely. They asked that the state independent

association be given the right to approve or disapprove of any change in toll rates made in the state of Ohio. That price-fixing offer was refused.²⁷¹ As a result, Brailey took steps to sell off the United States Co. property. The United States Co. ended up in the hands of J.P. Morgan & Co.

Acquisitions of competing exchanges

The most direct blows against dual service came from Bell buyouts of competing exchanges. The policy of eliminating dual service in the larger cities through acquisition or sale progressed rapidly during that period. At the beginning of 1907, 59 percent of the Bell exchanges in cities with a population of 5,000 or more had dual telephone exchanges. By October 1913, the number of those cities with competition had been reduced to 37 percent. In smaller cities, mergers of competing exchanges were often followed by the franchising and construction of a new competing exchange. In Marshalltown, Iowa, for example, a new franchise was issued within a month of the takeover.²⁷² In the larger cities, however, the losses were irreversible.

Independent companies were particularly susceptible to divide-and-conquer acquisitions. Their decentralization made it difficult to weather extended bouts of competition or to adhere to a common policy. Selling out to Bell offered an appealing way to escape from a variety of financial pressures: the diseconomies of growth, price wars with a competitor who was willing and able to sustain losses for an extended period of time, rate restrictions in municipal franchises, and a constant need to raise more capital. Those problems had always existed, however. What precipitated the surge of independent sell-outs between 1910 and 1913 was the failure of independent attempts to build regionally interconnected systems capable of matching the scope of the Bell system. *That failure was primarily the result of Bell's liberalized interconnection policy.* The financial panic of 1907, which made investors less willing to put scarce capital into dual systems, also contributed. The stampede of noncompeting independents into connecting arrangements with Bell between 1907 and 1910 prompted many of the more profit-oriented independent system owners to get out while the getting was good. In 1912 the consolidation trend began to chip away at the urban strongholds of the independents. Competition was eliminated in ten of the sixty-eight cities over 50,000 in population that had had dual service. In that year alone, Bell purchased 136,000 telephone stations and sold 42,650.²⁷³

Early on, Bell takeovers led to the severance of independent toll line connections.²⁷⁴ After 1910, the mediation of utility commissions made the mergers more orderly and protected the interests of the other independent exchanges in the state whose users were dependent upon access to the city. In order to ensure that public reactions against severed connections did not threaten the policy of achieving a universal service monopoly through buyouts, Bell announced the "Vail Commitment" in January 1912. The Vail Commitment was a promise that Bell would leave all

²⁷¹ Richardson to Vail. June 21, 1909. Box 65, AT&T-BLA.

²⁷² 17 TELEPHONY (Feb. 20, 1909).

²⁷³ FCC TELEPHONE INVESTIGATION 140 Table 35 (GPO: 1939).

²⁷⁴ In 1910 and 1911, independents in Adrian, Michigan, Memphis Tennessee, and Clarksville, Tennessee all suffered from severed connections after Bell acquired independently-owned toll lines in the vicinity. The practice was not as common as it has been made out to be, however, as the independents nearly always countered with lawsuits and were fairly influential politically at the state and local levels.

long-distance connections intact when an exchange changed hands. Acquisition would neither enlarge nor restrict the toll access of the exchanges involved.²⁷⁵

Vail made his consolidation overtures explicit beginning in the Fall, 1910. During a national independent association meeting in Chicago, Vail and H. P. Davison of J. P. Morgan & Co. invited independent leaders to meet with them at the Blackstone Hotel. About twenty-five prominent independent representatives responded to the invitation. At the meeting, Vail offered to cooperate with the independents in thoroughly eliminating competition in the telephone business. He told the independents that the destructive warfare between them was costing the Bell Companies millions. He wanted to effect a merger that would end those losses and leave AT&T in control of most of the large cities and long-distance lines, while ceding the smaller places to the independents, where, he admitted, they operated more efficiently than Bell. The specific places to be controlled by AT&T or the independents would be settled through negotiations later. With a representative of the Morgan Co. at his side, Vail said that the merged companies could be capitalized liberally to cover the losses that had been sustained.²⁷⁶

At Vail's suggestion, a committee of seven independent leaders was appointed to conduct the negotiations. What became known as the Committee of Seven met with Vail and Davison several times over the next four months.²⁷⁷ That group became the nucleus of the major mergers that helped create a telephone monopoly. Negotiations concerning the purchase of almost every important independent property were initiated between 1910 and 1913. Though some of those deals were not consummated until a decade later, they represented the beginnings of Bell-independent cooperation in the control of the industry.

Interconnection in law and public policy

The law and public policy regarding interconnection, competition, and monopoly took two divergent and ultimately incompatible paths after 1907. The disturbingly rapid acquisition of competing exchanges by Bell set off antitrust alarms all over the country. Antimonopoly sentiment was at fever pitch; public fears that big businesses were strangling the market economy had led to successful prosecutions of the Northern Securities Company and to the dissolution of Standard Oil and the American Tobacco Company in 1911. Congress passed a new, broader antitrust law, the Clayton Act, in 1913. Other institutional responses at the state and local level, however, pointed in an altogether different direction. Municipalities weary with dual service began to favor consolidation or connection of competing exchanges. State governments began to create utility commissions with the authority to regulate telephone companies, or empowered existing railroad commissions to do so. The majority of them also passed laws authorizing the commissions to

²⁷⁵ For a glimpse of how the Vail Commitment affected consolidations see J.M.B. Hoxsey, Southern Bell, to N.C. Kingsbury, AT&T, Dec. 17, 1912. Box 39, AT&T-BLA. The independent in Louisville claimed that connections to hundreds of cities in Ohio, Indiana, and Illinois had been possible prior to consolidation. Bell suspected that the connections, while physically possible, had never actually been made before and that the independent was exploiting the terms of the Vail commitment to acquire long-distance service over Bell lines. Box 39, AT&T-BLA.

²⁷⁶ 65 TELEPHONY 19-23 (Nov. 29, 1913).

²⁷⁷ The "Committee of Seven" consisted of Frank Woods of Lincoln, Nebraska, E.H. Moulton of Minneapolis, Theodore Gary of Missouri, H.D. Critchfield of Chicago, Arnold Kalman of St. Louis, and B.G. Hubbell of Buffalo. All were owners of large independent systems.

compel the telephone companies to connect their lines. The commissions upheld regulation as a substitute for competition and often encouraged monopoly. The desire to preserve market competition mingled uncomfortably with an impulse to unify the system. As the courts, commissions, cities, and telephone companies groped for a solution to the “telephone situation,” it did not become evident that those two approaches worked at cross purposes to each other until the Kingsbury commitment, made at the end of 1913, transfigured the contradiction into a national policy.

Antitrust Law

The organized independents knew that competition could not be sustained without dual exchanges in as many cities as possible. The weapons they used to fight Bell acquisitions were state and national antitrust laws.²⁷⁸ When the national independent association gained wind of Bell’s intentions to merge independent and Bell properties in 1908, it formed a litigation committee and raised thousands of dollars from independent companies and associations.²⁷⁹ The litigation committee prodded the Attorneys General of Michigan, Nebraska, Kansas, and Missouri to block Bell purchases of independent companies.²⁸⁰ A merger in Marion, Ohio, in 1908 was also countered by a lawsuit under the Valentine Act, a state antitrust law. In Kentucky, merger negotiations between Bell and the Louisville-based independent were called off because the state constitution prohibited the consolidation of competing common carriers. Prodded by complaints from the Postal Telegraph Company, the state of Mississippi sued AT&T for integrating its operations with Western Union, charging that it was trying to monopolize the telegraph business.²⁸¹

Federal antitrust proceedings were initiated in July 1912, when the U.S. Attorney General in the Portland, Oregon district filed a suit under the Sherman Act, charging Bell with an attempt to monopolize the telephone business in the Pacific northwest. For the next six months special agents of the Justice Department took depositions from people involved in the telephone industry around the country. As the new administration of Woodrow Wilson took over the Justice Department in January 1913, the outgoing Attorney General turned over the completed investigation amidst widespread rumors that AT&T would be prosecuted.²⁸²

At the local level, consolidations were opposed by those who feared they would lead to a rate increase or a deterioration of service. Advocates of that position had no trouble finding evidence that Bell rates in noncompetitive cities were higher than those in cities with competition. As Bell and independent plans to consolidate in Kansas City began to be floated, the Kansas City Post waged an effective newspaper war against the merger, noting that while Bell had promised residential rates of \$36 a year, the residential rate in monopolized cities of comparable size was \$42 or \$48 a year. “If the Bell Company charges from \$42 to \$48 a year for residence phones in other cities, won’t it find excuses to do the same thing here if competition is removed?” the paper

²⁷⁸ A.C. Lindemuth, 15 TELEPHONY (June, 1908).

²⁷⁹ Minutes of the Executive Committee of the International Independent Telephone Association, May 7, 1908. AT&T-BLA.

²⁸⁰ MacMeal 187 (1934).

²⁸¹ 64 TELEPHONY 32 (1913).

²⁸² 64 TELEPHONY 41 (1913).

asked.²⁸³ In many quarters there was still a willingness to rely on the traditional method of competition to control rates and service.

Exclusive connecting contracts and the courts

The dispute over exclusive connecting contracts brings out the complexity of the relationship between interconnection, competition and monopoly. From the viewpoint of the local exchange, an exclusive connecting contract prevented competition by tying all of its long-distance traffic to one carrier. From the viewpoint of the subscriber, exclusivity destroyed their ability to choose long-distance carriers, and made them accept a system with less than universal coverage. To the embattled independent regional systems, however, exclusive access to independent exchanges was its chief competitive advantage against Bell. Opening up its connecting exchanges to Bell subscribers destroyed their ability to compete with a much larger system. Protecting consumers' and local exchanges' right to choose toll carriers would accomplish little if enforcing that right left only one carrier in the field.

The United States Telephone Company lawsuit against Bell for connecting with its contracting exchanges was the testing ground for those issues. It went first to the Common Pleas Court, which treated the case as a simple breach of contract. The court upheld the independent long distance company and ordered the exchanges to sever their connections with Bell toll lines. Bell continued the practice, however, and UST was forced to litigate the case on broader grounds. It sued Bell under the state antitrust laws, charging that its new policy was an attempt to drive UST out of business and monopolize the trade.²⁸⁴ The 1909 decision of the Ohio Supreme Court, however, found not Bell but the United States Company guilty of monopolistic practices. The court invalidated its ninety-nine-year exclusive contracts because they gave the independent long distance company a "monopoly" of the local exchange's long distance business.

In a lively and incisive review of the application of common carrier principles to the telephone, Judge Taylor of the Court dismissed the precedent of the railroad express cases, which for the preceding fifteen years had shielded telephone companies from interconnecting with other companies. The practical demands of railroad operation were completely different from those attending the making of telephone connections, the Judge wrote. While it was physically impossible and unsafe to allow railroad companies to run trains over another company's tracks without the second company's cooperation and consent, the interconnection of telephone companies did not pose the same problems. A long distance company need not be treated differently than any other individual subscriber:

Conceivably, 20 long-distance companies might be connected with the local exchange with the same simplicity and with the same absence of confusion which we find in relation to the local subscriber's lines, and there is no more physical difficulty,...in connecting a subscriber with one of the 20 long-distance lines than in

²⁸³ *Kansas City Post*, Oct. 21 and 22, 1911. Box 17, AT&T-BLA.

²⁸⁴ *United States Tel. Co. v. Central Union Co.*, 171 F.130 (1909).

connecting a subscriber with another local subscriber served by the same exchange.²⁸⁵

As common carriers, telephone companies were required to provide service to all who applied without discrimination. Since the operations required to link subscribers to the lines of a long-distance company were no different from those required to set up a connection with any other subscriber, the company's common carrier obligation could and should be extended to long-distance companies. The U.S. Supreme Court's earlier doctrine that "common carriers" had no obligation to be "common carriers of common carriers" was no longer valid.

The pro-competitive intent of the decision is clear from its basis in antitrust law and its reference to the possibility of "20 long-distance companies" serving a single exchange. Indeed, its reasoning was exactly the same as that underlying the "equal access" provisions of the 1982 Modified Final Judgment, which paved the way for long-distance competition in the 1980s. In theory and in the received version of telephone history, larger networks are supposed to benefit from the refusal to connect and smaller competitors are supposed to favor joining their system to the larger one. In 1909, however, the dominant network was seeking to interconnect with companies bound to its competitors. The Ohio Supreme Court decision allowing it to do so was correctly seen as a setback to the cause of independent long distance competition.

Competition suffered because the court decision interfered with the competing independents' ability to coalesce a critical mass of subscribers and exchanges outside of the Bell system. Joseph Ware, secretary of the national association, expressed the prevailing view among independents:

Judge Tayler fails to grasp the first great principle in the telephone struggle and business, that, excepting the Independent companies are connected together into one system there can be no competition in the telephone business.²⁸⁶

Competition in the telephone business revolved around the scope of access. A few large independent companies were attempting to construct regional access universes that would be competitive with Bell's. In any given region of the country, Bell controlled a far greater number of exchanges than any individual rival. Thus, the many small, scattered independent exchanges held the balance of power. Bell had guaranteed access to a larger number of exchanges to begin with; allowing it to break exclusive contracts binding the small independents to competitive long distance networks would place "50 percent of the Independent force in the doubtful column," a Nebraska independent wrote.²⁸⁷ If all independents did not hold together as a system, Bell would easily dominate the industry by virtue of its nationwide presence and extensive network facilities:

²⁸⁵ *Id.* at 143.

²⁸⁶ Joseph B. Ware, Secretary, International Independent Telephone Association, 17 TELEPHONY (May 29, 1909).

²⁸⁷ "The Necessity of Independent Long Distance Service to Independent Local Companies," 17 TELEPHONY 98 (Jan. 23, 1909).

If our faction [the Independents] were made up of one organization some uniformity of methods could be followed, but to compel an interchange of service under present conditions means elimination of competition in favor of the larger organization and nothing else.²⁸⁸

Ostensibly, nondiscriminatory interconnection would also open Bell exchanges to UST, but the independents expressed doubts about whether that would lead to a truly competitive situation:

The second point which the judge fails to grasp is, that there is no competition where long distance lines are connected into one exchange-where one operator can put messages over all lines. The benefits to the public which come from competition...can only be obtained successfully by having competitive systems, rather than variously owned lines into each exchange, with one long-distance company-the Bell. He overlooks the fact that the Bell company has, or had, a competing local exchange in each of the towns where connection was made with a local company having contract relations with the U.S. Telephone Co., and that, coincident with the connection of the Bell toll lines to the local independent exchange, local competition was eliminated.²⁸⁹

The independents were asserting that nondiscriminatory interconnection was fundamentally incompatible with competition. If Bell could gain access to local subscribers through an independent exchange it would not operate a competitive exchange. If there were competing long-distance lines terminating in a monopoly local exchange, the operators of the exchange would route long-distance calls over their own company's lines rather than those of a competitor.

The tendency to apply concepts of nondiscrimination to the telephone business in such a way as to require competing companies to exchange traffic appeared in other important legal decisions of the period, and represented one strand of thinking.²⁹⁰ The Supreme Court of New York, on the other hand, upheld the validity of exclusive contracts on the grounds that it preserved competition.²⁹¹

²⁸⁸ *Id.*

²⁸⁹ *Id.*

²⁹⁰ The Supreme Court of Indiana required two competing exchanges in West Lebanon to restore their connections after one of the companies discontinued them. *State ex rel Goodwine v. Cadwallader* 172 Ind. 619, 87 N.E. 644 (1909), 89 N.E.

319 (1909). The court rejected the claim that the notion of common carriage as applied to a telephone company required indiscriminate service to competitors. In doing so it restated the rationale of the express cases, noting that the effect of such interconnection would be parasitic or confiscatory (p.648). But the opinion went on to hold that a telephone exchange that agreed to interconnect with one system in its area was obliged to offer the same privileges and terms to all other exchanges-a departure from, if not a direct contradiction of, the railroad precedents. See also *Medina County Farmers Tel. Co. v. Medina Tel. Co.*, 30 Ohio Dec.Rep. 500 (1911), which relies on the nondiscrimination precedent of *Cadwallader* and cites *U.S. Tel. Co. v. Central Union*.

²⁹¹ Supreme Court of New York, *Wayne Monroe Tel Co. v. Ontario Tel. Co.*, 112 N.Y. Sup. 424: "There is no stronger inducement to the managers of a public service corporation to serve the public well than a healthy apprehension that a rival concern will do so. It is sometimes argued that the presence of two telephone systems in a given district is a disadvantage to the community, which is best served by one system reaching all subscribers; but one system will never be made to reach all subscribers as cheaply as would otherwise be the case if the possibility of

Physical Connection Laws

A different approach to the problem was taking shape at the state level. Twenty eight states passed laws creating regulatory commissions or giving existing railroad commissions jurisdiction over the telephone companies between 1909 and 1913.²⁹² Twenty-six states passed laws authorizing some form of compulsory physical connection between telephone companies from 1907 to 1913, inclusive.²⁹³ In 1910 the Interstate Commerce Commission was given the authority to regulate telephone companies as common carriers. Armed with their new powers to regulate entry, mergers and connections, the utility commissions began to push the telephone system toward a monopolistic structure.

Compulsory physical connection legislation was the most important arena for working out the public policy regarding dual systems. Contrary to common assumptions, the passage of those laws did not end access competition, but merely empowered a utility commission to order connections when petitioned to do so by the telephone users of a specific locality. Rulings required hearings and a finding of public interest, convenience and necessity by the commission, and thus could only be applied on a case-by-case basis. The laws were almost never used to connect urban exchanges engaged in direct competition with each other; more often, they were applied to broaden interexchange access. The restricted scope of their application was attributable to the widespread belief that merging the subscriber sets of the telephone companies would eliminate competition and/or do economic harm one of the two telephone systems. Because there was as yet was no public consensus on the issue of monopoly, the commissions concentrated on cases where dual service restricted communication between different cities.

The flood of physical connection legislation from 1910 to 1913 reflected a change of heart among some of the independents. There had always been public demands for connecting the separate networks, but the combination of Bell and independent opposition had prevented action. By 1910 some independents were beginning to back away from access competition. Those who embraced that view did not see interconnection as a means of preserving competition, but were generally the same independents who worked out consolidations or divisions of territory with Bell. Others saw interconnection as a way to minimize Bell competition at the local level by giving their exchanges access to Bell toll lines.

The physical connection provision of Wisconsin's state utility law was defeated in 1907, when the independents opposed it, but passed in 1911, after they had given up hope of establishing

competition is destroyed.”

²⁹² Jeffrey Cohen, *The Telephone Problem and the Road to Telephone Regulation in the United States, 1876-1917*, 3 J. PoL. HIS. 42 (1991).

²⁹³ South Carolina, 1904* Georgia, 1907* Oklahoma, 1907* Texas, 1907* Maryland, 1910* Kansas, 1911* Michigan, 1911* Ohio, 1911* South Dakota, 1911* Washington, 1911* Wisconsin, 1911* Arizona, 1912* California, 1912* Kentucky, 1912* New Mexico, 1912* Oregon, 1912* Colorado, 1913* Florida, 1913* Idaho, 1913* Illinois, 1913* Indiana, 1913* Maine, 1913* Missouri, 1913* Montana, 1913* Nebraska, 1913* Pennsylvania, 1913* New Jersey, 1914* Virginia, 1914* Minnesota, 1915* North Dakota, 1915* Utah, 1917* New York, 1919.

an exchange in Milwaukee and the state association had become dormant.²⁹⁴ Frank Woods, the president of the National Independent Telephone Association, openly embraced the “universal service” concept and advocated laws compelling the interchange of service between all companies under the supervision of the Interstate Commerce Commission.²⁹⁵ Two years later, Woods worked out a consolidation with Bell that eliminated dual service in most of southeastern Nebraska. In 1911, the NITA national convention followed Woods’s lead and passed a resolution for compulsory connection and state and national regulation.²⁹⁶

The issue of interconnection and cooperation with Bell split the independents, however. A splinter independent association led by the owners of the competing systems in New York, Pennsylvania, and West Virginia was formed in January 1913. One of its leaders, Burt Hubbell, explained that the new association “shall be composed of members who represent telephone companies not owned or controlled by the AT&T, directly or indirectly.”²⁹⁷

Municipal governments also were agitating for the elimination of fragmentation locally. A Cleveland city council resolution of January 1908 declared dual service a “nuisance” and instructed its committee on telephones and telegraphs to investigate the feasibility of compelling the Bell and Cuyahoga exchanges to interconnect. A civic committee in another former independent stronghold, Indianapolis, also recommended a return to one system after an investigation of the telephone situation. Kansas City and Los Angeles both experienced political agitation to connect or consolidated their systems.²⁹⁸ In all cities, however, support for the elimination of dual service was tempered by fears that it would lead to a rate increase.²⁹⁹

Compulsory interconnection laws were vociferously opposed by Bell and by the hard-core independents led by Hubbell. Although their motives were different, their arguments about the competitive effects often paralleled each other. Physical interconnection posed a problem for Bell in that it publicly advocated universal service but was unwilling to bring that goal about by connecting with competing systems. It had to argue that universal service could be achieved best under the administration of one system. A detailed memo outlining its argument was prepared in 1907.³⁰⁰ Its arguments were reflected in Vail’s attack on interconnection of competing systems in the *Annual Reports*.

The Bell memo contrasted the standardization, coordination, and high quality that could be achieved under a monopoly with the chaotic and uncontrolled conditions that would result from nondiscriminatory connection with a multiplicity of independently owned, overlapping systems. It

²⁹⁴ D. Gabel 349 (1987).

²⁹⁵ MacMeal 183 (1934).

²⁹⁶ MacMeal 186 (1934).

²⁹⁷ MacMeal 196 (1934).

²⁹⁸ *Bells may talk to Homes*, KANSAS CITY STAR, Mar. 6, 1911. For more information about the Los Angeles situation, see chapter 10.

²⁹⁹ CLEVELAND PLAIN DEALER, Oct. 2, 1911. After passing several resolutions urging the telephone companies to consolidate, the city council passed a resolution on that date stating its opposition to any rate increase following a merger.

³⁰⁰ Physical Connection, a syllabus and brief on the question of statutorily compelled connection of telephone lines owned by different companies. Memo dated Apr. 25, 1907. AT&T-BLA.

also attempted to argue that independently manufactured telephones would not work with the Bell system as well as Bell telephones, although that point was easily discredited as Bell went about sublicensing thousands of non-Bell systems.

A more significant argument was that competition between connected networks was inherently imperfect and even parasitic. If a Bell exchange in a dual service city had fewer subscribers than its opponent and Bell was forced to connect its toll lines with it, the independent subscribers could benefit from Bell toll access without subscribing to Bell. Bell would lose all of its exchange subscribers to the larger local company:

“If toll lines were forced to connect with competitors, any fellow who feels aggrieved because his call did not reach him promptly when his mother-in-law had cramp colic...can and probably will build a competing line between your most profitable points, hitch onto you at each end, and make you take his calls to all other points on your lines. [If exchanges were forced to connect with competitors,] if a handful of businessmen are hostile to you for any reason,...they will build a co-operative exchange in the business section of the town-hire an operator or two-install telephones for themselves at a cost of only a collar or a little over a month, take out your telephones, connect to your exchange,...and you will hold the bag, and eventually lose out entirely.”³⁰¹

In economic terms, that can be summarized as an argument that interconnection made networks complements rather than competitors. Bell’s defenders also made an appropriability argument: Bell laid out telephone facilities to cover an entire district, including what it called the “fat” and the “lean” areas. Even though some parts of the system were not profitable in isolation, connecting everyone could make the system as a whole profitable. Interconnection laws would allow another company to serve only the profitable areas while benefitting from Bell’s access to the “lean” areas.

The independents’ motive in opposing compulsory interconnection was to preserve dual systems rather than to eliminate them. A unified, fully interconnected telephone system, they believed, could not possibly be a truly competitive one. They advanced two reasons for that view: first, there was a tension, if not an outright contradiction, between competitive rivalry and the kind of interfirm cooperation needed to set up telephone connections jointly; second, the whole competitive process in telephony was driven by access differentials which would disappear once the systems were interconnected.

Establishing a telephone connection over the facilities of two or more companies involved linking their lines at the same time to form an unbroken channel for voice communication. The workers of the two companies had to cooperate rapidly and efficiently, and their methods had to be compatible. The independents did not deny that this was possible. They did point out that the level of cooperation required was so intricate that two companies involved in it could hardly maintain their status as competitors.

³⁰¹ 17 TELEPHONY 129 (Jan. 30, 1909).

Business firms sufficiently cooperative to exchange traffic could just as easily divide the market, fix prices, and cease to compete. By the same token, integrating their operations involved a degree of mutual trust and openness that hardly seemed compatible with business rivalry. Whoever controlled the local exchange, for example, would be in a position to discriminate between the toll lines of the long-distance companies when it routed the traffic or could engage in preferential treatment of one's own subscribers at the expense of the other's. A columnist in the independent trade journal *Telephony* said of making connections over Bell toll lines: "It would be easy to detect discrimination if Bell operators refused to record your calls. But the switchboard having lots of business, some calls will have to wait. Do you think the Bell calls would wait? No! But do you doubt that your calls would wait? They would wait."³⁰² The independent defenders of dual systems also believed, like Bell, that dissolving the access differences between the networks eliminated real competition.

There was at least one advocate of connecting with competing companies within the Bell system. B. E. Sunny, the head of the Chicago Telephone Co., believed that Bell would benefit from voluntarily entering into connecting arrangements. In February 1910, he wrote a memo proposing to operate lines connecting the independent exchanges in Indianapolis, Grand Rapids, Racine, and Aurora to the Bell system. The arrangement would give independent subscribers in those cities access to Chicago, Cincinnati, and Milwaukee. Sunny pointed out that the proposal would have numerous advantages—it would preempt the growing demand for physical connection legislation, allowing Bell to connect on its own terms; it would eliminate the need to grant a franchise to competing companies in cities currently monopolized by Bell; it would greatly increase Bell's toll business, or at least allow them to find out what effects interconnection would have on its traffic; it would reveal the identity of independent long-distance users to Bell, allowing Bell to solicit them to take its own service and save time and money by doing away with the costs of transferring calls between two systems. The only disadvantage Sunny recognized was that it might lead to the loss of exchange subscribers in cities where Bell rates were higher.³⁰³ The proposal was not implemented, however, because the national Bell management feared that interconnection would perpetuate dual systems and ease the pressure for consolidation.

Sunny's arguments tend to support the independents' contention that interconnection would lead to a single system rather than continued competition. A particularly shrewd aspect of Sunny's proposal was that all long-distance calls from independent to Bell points would have to go over Bell lines the whole way. If an independent user in Peoria wanted to call Chicago, for example, he would not be allowed to use independent toll lines between Peoria and Aurora and then transfer to Bell lines; Bell would have to carry the traffic between both cities. The independents knew that those kinds of problems were not only possible but likely when interconnecting competing networks, which is why they viewed the prospect with suspicion. Sunny's proposal is also significant because it may have been used as a model for the interconnection arrangements of the Kingsbury commitment (see chapter 10).

³⁰² 13 *TELEPHONY* 98 (Feb. 1907).

³⁰³ Memo dated approximately February 1910. B.E. Sunny collection, Manuscripts, 1879-1920. Copy in AT&T-L&R.

Case Studies in the Application of Interconnection Laws

Three landmark cases in California, Wisconsin, and Oregon highlight the different facets of the interconnection issue—the attitudes of users toward nonconnected networks, the effects that the telephone companies believed connection would have on their economic viability, and the attitudes of regulators toward competition.

Glen and Tehama Counties, California

In April 1912 complaints calling for physical connection were filed with the state railroad commission by two rural independent telephone systems in northern California.³⁰⁴ The Glen and Tehama County Telephone companies started operation five years earlier in the predominantly rural counties. Prior to their formation, the Bell system had established exchanges only in the cities, had minimal toll lines, and used obsolete equipment. The new companies built exchanges and toll lines throughout their counties using modern independent apparatus. Following the standard pattern of access competition, Bell was forced to install modern switchboards, construct extensive toll lines, and sublicense farmer lines in order to remain competitive. Competition had produced a high level of duplicate subscriptions. At the time of the proceeding the subscriber breakdown was as follows:

TABLE 9.3
TELEPHONE COMPETITION IN GLEN AND TEHAMA COUNTIES, CA, 1912

	Tehama County	Glen County
Bell-connected users:	629	674
Independent users:	457	570
Duplicate users (%):	241 (28%)	329 (36%)

Bell held the majority of users, but only 30 percent of the Bell-connected telephones were leased from Bell; the rest were sublicensed phones owned by farmers. The commission considered connecting the two systems an appropriate solution because the independents offered superior local service while the Bell system had more extensive toll access.

From the text of the decision it is clear that the local telephone companies viewed interconnection as a way to overcome the competitive advantages given to Bell by its toll lines. They believed that once the two systems were connected they would win the majority of the local exchange subscribers. The utility commissioners also saw interconnection as a means of eliminating duplicate subscriptions and overlapping exchanges. Its ruling pointedly did not disagree with Bell’s contention that it would lose most of its exchange subscribers if telephone users could gain access to its toll lines without subscribing to its local exchanges. Like Bell, the commissioners thought of the telephone as a natural monopoly. That Bell had been forced to extend and improve its service by the new entrants was interpreted by the commission not as evidence for the benefits of competition but as an indication that a monopoly could and should have been doing better.³⁰⁵

³⁰⁴ The commission’s decision is reprinted in 64 TELEPHONY (Mar. 1, 1913).

³⁰⁵ “A reduction of rates...and improvement of service under competition is an indication of one of two things, either that the rates are too high and the service not good enough before the competition arose, or that the rates

Wisconsin

In the city of LaCrosse, Wisconsin (pop. 30,000), Frank Winter, a subscriber to the independent company, petitioned the Wisconsin Railroad Commission to connect the toll lines of the two competing systems in 1912. LaCrosse was the largest city to undertake a physical connection proceeding at that time. The Wisconsin Telephone Co. (Bell) had 1,400 subscribers in the city; the LaCrosse Telephone Co. had 4,200. Both companies had toll facilities offering connections throughout the state, but Wisconsin Telephone lines extended to many places not reached by the local independent. Only 8 percent of the telephone users had duplicate subscriptions, and twelve to fifteen large businesses had PBXs connected to the toll lines of both companies. The petitioner's business required almost daily use of Bell toll facilities. When calls for local people not on the Bell exchange came into the city, messengers had to be dispatched to bring the desired party to a Bell station. Winter requested connecting only the toll lines of the two systems, leaving the division of local exchange service intact. The petitioners argued that the arrangement would be more convenient and would benefit the Bell company by increasing its toll business.³⁰⁶

Wisconsin Telephone opposed the request with its usual arguments. Interconnection would result in the loss of most of its exchange subscribers. If users could obtain access to Bell toll lines without a subscription to Bell's exchange, they would migrate to the larger independent exchange in order to obtain universal local service in addition to Bell's widespread toll line service. To support its contention it introduced evidence from Canada, where interconnection had been ordered in eight cities and Bell's growth in subscribers had been reversed while its local competitors grew.³⁰⁷

The Wisconsin regulators ordered the connection made. Unlike the California Commission, however, they took seriously the question of confiscation of property. "It is evident that the only inducement to subscribe to the Bell system is the fact that thereby the subscriber is connected with a telephone system covering like net work the entire country." In order to compensate for economic damage to Bell's exchange, the commission imposed a surcharge on users of Bell toll lines who did not subscribe to the Bell exchange. "A subscriber who has not installed the telephones of both exchanges is not entitled to the toll service of both exchanges without paying an additional charge," it said.³⁰⁸ A surcharge had also been imposed in Canada, however, where it had failed to stop the desertion of the Bell system. In June 1914 the Wisconsin Commission issued another physical connection order pertaining to the city of Janesville, Wisconsin. In that case the connection order included both local exchange and toll service.³⁰⁹ In LaCrosse, Bell's fears proved to be true-local subscribers gradually deserted the Bell exchange over the next four years until the exchange was closed. In Janesville, however, market shares stabilized, but the exchanges were eventually consolidated anyway.

are made too low and the service too good for the price under the stress of the competition. The former result could and should have been brought about without competition; the second result cannot be permanently maintained even under competition unless the utility according too low a rate is charging too high a rate elsewhere." *Id.*

³⁰⁶ 64 TELEPHONY 25-29 (May 17, 1913). See also D. Gabel 360-68 (1987).

³⁰⁷ D. Gabel 632-63 (1987).

³⁰⁸ 64 TELEPHONY (May 17, 1913).

³⁰⁹ D. Gabel 369 (1987).

Portland, Oregon

Portland, Oregon, in 1913 was a dual service city with about 40,000 Bell telephones, 13,600 Home Co. telephones and 7,000 duplicate subscribers. The Hotel Oregon had Home Co. telephones in its 400 rooms and forty-five Bell system phones in the public places throughout the hotel. The hotel's customers objected to the inconvenience of having to walk to the lobby or hallways to call Bell subscribers in the city. When incoming calls came into the hotel over the Bell system, the hotel staff had to contact the patrons and bring them to a Bell station. The switchboards of the two systems were in the same room in the hotel. The Home Co. was willing to set up a connection between the two, but Bell refused to do so. The only remedy Bell offered was to install duplicate Bell telephones in all the hotel rooms, an expensive proposition for the hotel management. On the motion of the hotel owners, the case was brought to the Oregon Railroad Commission. The commission ordered the telephone companies to connect their hotel switchboards and exchange traffic and charge three and a half cents for each transferred call.

There were other important physical connection cases in Hamilton, Ohio, and Grand Ledge, Michigan. The commission ordered connections, but in each case the decision was appealed. As in the exclusive connecting contract cases, the state supreme courts decisions conflicted with each other. Indiana's Supreme Court ruled against compulsory physical connection in August 1909.³¹⁰ California's Supreme Court overturned the railroad commission's interconnection order in 1913, calling it "confiscatory." The Wisconsin Supreme Court upheld its commission in 1916.³¹¹

Regulation as a substitute for competition

Regulatory commissions often promoted consolidations as well as interconnection. In September 1911, only three months after the bill creating the Ohio utility commission became law, state officials were meeting with representatives of the Bell company to discuss plans for the elimination of dual service throughout the state. In 1912 the Bell and independent telephone companies in southeastern Nebraska worked out a consolidation in which Bell achieved a monopoly in some territories and the independent a monopoly in the others. The deal was made with the aid and approval of the state commission. The Michigan commission presided over the consolidation of the competing exchanges in Detroit in 1912 and helped to assure the remaining independent companies that the change would not impair their access to the city.³¹² When the regulators and their supporters attempted to push for legislation against dual service, however, they were rarely successful. Bills which explicitly prevented competition or permitted mergers between competing companies were defeated in Wisconsin, Illinois, and Ohio in 1909 and 1910. Another merger bill with the support of both Bell and the Morgan interests (which controlled the big independent system in the state) was introduced in Ohio in 1911 but failed to pass again. A similar bill was vetoed by the governor of Nebraska in 1911. While the creation of one system had the support of regulators, it was still controversial with the general public.

The vitality and novelty of the issue of interconnection can be measured by the contradictory nature of the responses it evoked. Exclusive connecting contracts had been declared

³¹⁰ 18 TELEPHONY 159 (Aug. 7. 1909).

³¹¹ Wisconsin Telephone Co. v. Railroad Commission of Wisconsin, 162 W.R. 383 (1916).

³¹² MacMeal 194 (1934).

to be both anti-competitive and the salvation of competition. Their legality had been upheld by one state supreme court and overturned by others. Consolidation of competing telephone companies was being prosecuted under state and federal antitrust laws but actively encouraged by state utility commissions. The commissions could bring about consolidations, but bills explicitly authorizing them were usually defeated. Physical interconnection was the desirable goal, but so was competition and the two did not seem to be compatible. Compelling physical connection was authorized by law in many states but had been declared confiscatory and illegal by some state courts.