

Telecommunications in Ireland

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Ireland

History

The United Telephone Company opened its first exchange (with five subscribers) in 1880. United was taken over in 1882 by the Telephone Company of Ireland, which oversaw a slow growth to 500 lines in Dublin by 1888. The operation was acquired in 1893 by the National Telephone Company, which rapidly developed the network to encompass fifty-six exchanges by 1900. The Post Office, which operated the telegraph and feared revenue losses, began in 1893 slowly to invest in trunk lines and submarine cables. By 1908 the Post owned thirty-three exchanges to National's eighty-five (Litton, 1961).

The threat of Post Office take-over of National Telephone became a reality in 1905; the postmaster general forced a sell-out at the end of National's license period in 1911, paying only £12.4 million where the company had claimed its value was £20.9 million. Military involvement in network construction began in 1909, completely replacing civilians until the outbreak of World War I. By 1918, there were 12,500 lines, half of them around Dublin; three counties were still without exchanges. The network was greatly damaged in the Anglo-Irish and civil wars of the 1920s.

In 1924, the Post Office launched a vigorous program to rebuild and expand the crippled network. By 1930, only western pockets of Mayo and Donegal counties were without exchanges. Dublin received the country's first automatic exchange system in 1927, but economic hardship in the 1930s stalled the network's growth.

In 1937, there were still fewer than 40,000 lines in service (Department of Industry and Commerce of Ireland, 1944). Except for the emergency installation of telephone lines to coastal lookout posts, progress halted altogether during World War II. In 1945 the government earmarked £10 million for a program to reach 100,000 subscribers within fifteen years, which was achieved ahead of schedule. The country's first transatlantic cable was laid in 1956, and Limerick began operating Ireland's first crossbar switch in 1957 (Telecom Eireann, 1987). By 1960, however, Ireland still had only 145,000 telephones in service, fewer than any European nation except Greece, and line density in Dublin was a mere 9.25 percent (Department of Industry and Commerce of Ireland, 1969).

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By the late 1960s, connections were accelerated. By 1979, a total of 436,000 lines were in operation, but the waiting list was still lengthy (Central Statistics Office, 1979, p. 322).

Telecom Eireann

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For Irish telecommunications, the 1980s was an era of catching up. In 1978, the inferior quality of services provided by the government's Department of Posts and Telegraphs forced the newly elected Fianna Fáil government to commission an external and independent group to review Irish telecommunications (Raggett, 1984). Upon completion of its task, the commission issued a report that urged immediate action. The inadequacy of telecommunications was acknowledged. The government established an interim Telecoms Board, and as part of a broad infrastructure program it approved accelerated development.

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Soon after, under the P&T minister Albert Reynolds, the government launched a five-year telecommunications spending program of over \$1 billion for the early 1980s. The program aimed to modernize and upgrade the network to the quality of other European countries and to increase its availability throughout the country (Ergas and Okavana, 1984). The implementation of this program helped to change the government's previous tendency to consider telecommunications as a money maker for its other services.

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The government published legislative proposals based on the review group's report, but enactment of the legislation was impeded by five changes of government in the three years of the interim Telecom Board. The proposals as outlined, however, encountered little political opposition (Keenan, 1985, Raggett, 1984, p. 24).

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Eventually, the Postal and Telecommunications Services Act of 1983 was passed. It created two state-sponsored enterprises, the Bord Telecom Eireann (TE), for telecommunications, and An Post, for the national postal service. Carved from the Department of Post and Telegraphs, a Department of Communications was created to supervise general policy on telecommunications issues (NTIA, 1985). Actual telecommunications operations are provided by Telecom Eireann (TE). Tom Byrnes, an Irish American who has been the managing director of IBM Ireland, served as Chief Executive of TE. TE was required to operate on a profit basis, with near-monopoly rights of service, and embarked on an ambitious modernization program. In 1987, foreign loans helped fund 50 percent of TE's investment program (Garnett, 1987).

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After separating from the PTT, Bord Telecom Eireann was still a state-owned enterprise but operated with greater autonomy, under an exclusive government license. It has an "exclusive privilege," which is somewhat less than a monopoly, up to and including the connection point in the customers' premises. Where TE decides not to provide service, another network operator can be licensed, as in the case of cable service. Such a license can be issued by the PTT minister or by TE itself. Where services are uneconomical, the government can force TE to provide them. In 1985, the cable television committee, established by Communications Minister James Mitchell, recommended the establishment of a national distribution network linking local cable networks through TE.



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Compared to other European countries, Ireland has a relatively low telephone density. In 1990, telephone line density was 26 per 100 people, or 64 percent of households. Total number of lines by 1990 was 950,000, of which 34 percent were business and 64 percent were residential. Annual line charges in 1990 were about \$201 for residential service and \$222 for business.

TE's main problem has been to improve service in Dublin to be comparable to the service existing outside of the capital, a reversal of the usual quality differential (Keenan, 1985). Partly because Dublin was the fastest-growing major city in Europe, telephone installations have lagged far behind. Much of the investment funds, therefore, have been used simply to catch up in the mass provision of basic telephony. TE has also had to grapple with the rate structure, which had been time insensitive for local calls. In addition, it inherited an inflexible, graded employment structure that created problems in the rapidly changing environment.

At first, TE depended on funds from the Ministry of Finance. But as the coalition government of the mid-1980s became increasingly mired in debt, a new strategy was devised that was influenced by the French model. It established a subsidiary, Irish Telecommunications Investments (ITI), which invests funds in the private financial markets and in the telecommunications network. ITI technically owns these assets and charges TE for their use.

Unfilled service orders dropped from 20 percent of total customers in 1980 to 2.9 percent in 1986, and the waiting period fell to six weeks. Operating revenues rose to IRE784 million, a 20 percent increase from 1985 to 1986 (Dillon, 1987). By 1990, the waiting list for main lines had dropped to 6000, less than one percent of total subscribers (ITU, 1990). In real terms, TE's rates were reduced by almost 30 percent between TE's establishment in 1984 and 1990 (F. McGovern, 1990, communication).

In 1985, Byrnes left TE at the end of his five-year contract; Ireland's Minister for Communications had let the contract lapse without signing the seven-year extension on the terms approved by TE's board. In departing, Byrnes minced no words: "the real tragedy, in my view, is that shortsighted, very shortsighted, politicians combined with arrogant power-hungry bureaucrats, have reinstated the same practices which were disastrous for this country prior to 1979" (Telephony, 1985, p. 83). As an example, Byrnes cites a 1985 attempt by the government to borrow up to \$200 million from private sources through TE's Irish Telecommunications Investments (ITI) subsidiary. ITI was established to help fund TE construction projects, but the Department of Finance ~~ought to~~ use it to relieve Ireland's federal deficit.

Byrnes was succeeded by Fergus McGovern, former head of operations of TE. Some financial help came from the European Community. Ireland was eligible for 64 percent of the budget of the first phase of the EC's \$865 million STAR development program. Its dependence on EC funds was likely to nudge Telecom Eireann to comply with Brussels' liberalization policy.

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Equipment

The supply of subscriber equipment, including first sets, is largely liberalized. For both equipment and other supplies a private provider must obtain type approval from the government and consent from TE for each connection to the public network. The minister of communications grants equipment approval and TE and the Institute of Industrial Research and Standards administer equipment tests. Each private supplier must also demonstrate technical ability and financial viability.

TE supplies equipment through a wholly owned subsidiary, Telecom Eireann Information System (TEIS), which was established to avoid the cross-subsidization and unfair tax advantages of TE (C. D. Rafferty, 1987, commu-

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nication). However in 1990, the Telecommunications Association (TA), a group of some twenty Irish equipment suppliers, charged TE and TEIS with unfair competition before the European Commission. TA accused TE of eighty violations, including undercharging TEIS for services, releasing advance information on orders, and operating as a single source despite professed independence (Evagora, 1990a). The TA urged the establishment of an independent watchdog group modeled on the U.K.'s Oftel. TE denied the charges and TA's lawsuits were unable to stimulate EC injunctive action.

In 1979, a decision was made in favor of digital technology. Two switching systems were introduced, Alcatel's E10B and Ericsson's AXE. Both are produced or assembled in Ireland. These modernization plans largely eliminated manual switching, which in 1978 still accounted for 50 percent of exchanges serving 10 percent of subscribers.

For a quarter century, the Swedish L.M. Ericsson supplied exchanges to Ireland from a manufacturing plant in Athlone. For the new digital switching system, a joint venture of the French Alcatel and Telectron was chosen. Active in transmission, Telectron is the main Irish telecommunications firm, with significant exports to the Middle East.

In 1981, AT&T acquired 45 percent of Telectron. This acquisition forced the relationship between Telectron and Alcatel to dissolve. Alcatel then formed Alcatel Ireland, a local affiliate that is 75 percent French and 25 percent Irish.

Services

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For a long time, Irish international traffic used to be routed through Britain. In 1984, however, Ireland established an Intelsat earth station near Cork. Since then, it has vied to become an international gateway for European traffic, but this goal clashed with tariff reality. Calls placed from Ireland to a number of other European nations tend to cost considerably more than calls traveling in the opposite direction (*Transnational Data and Communications Report*, 1988). Exceptions are calls to generally high-priced countries (Belgium, Greece, Italy, Spain, and Portugal). In 1990, however, rates for digital lines were reduced significantly.

Since 1981, international packet switching service has been available, and in 1984, TE introduced the packet-switched network Eirpac. It allows access to bibliographic and full-text databases. Eirpac also connects to national and international videotex services.

A major VAN service is Cognotec, established by the Confederation of Irish Industry in 1984 and restructured in 1987 with strong insurance industry participation. Its Corporate Treasury service provides company controllers with access to financial information. In partnership with Istel (a subsidiary of AT&T), Cognotec launched its Corporate Treasury service in the U.K. market in 1990. Cognotec's other major service is Clientbank, which gives insurance brokers access to host computers of leading insurance companies.

AgriLine, an agricultural videotex database, was launched in 1986 following a two-year EC-supported trial. It offers weather, market prices, a calendar of events, and farm business news as well as information on crops and livestock management.

Eircell mobile communication is provided by TE. The system uses the TACS technical standard and had 19,000 subscribers in 1990, the EC's third-highest penetration per working population, at comparatively low rates for Europe (F. McGovern, 1990, communication). Eirpage is a joint venture with Motorola Ireland in which TE has 51 percent. It holds the monopoly on national paging services in Ireland.

Data and Special Services Network (DASSNET), launched in 1990, is a significant improvement of the digital leased-line network, providing 64-kbit-2-Mbit connections. The Government Telecommunications Network, linking government departments in Dublin and five provincial centers, planned to use DASSNET, the most advanced network of its kind run by any government in Europe. The network carries details of customs transactions to an online system run by the Revenue Commissioners. The network also facilitates other transport services, including cargo tracking and inventory management.

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