

1927, the Governor General and the Prime Minister were able to talk to Canadians from coast to coast using telephone and telegraph facilities and the trans-Canada radio network. Carrier equipment, which enables more than one conversation to be carried on the same pair of telephone lines, was first used in Canada in 1928. In 1932 the first totally Canadian transcontinental telephone network was opened and the first direct radio telephone link with England was inaugurated.

Although continued refinements were made to this national and international network, the next dramatic changes did not occur until the 1950s. In that decade the first trans-Canada microwave system was built and installed to carry telephone conversations and television programs from coast to coast. Also, the first submarine telephone cable was laid across the Atlantic Ocean, replacing the radiotelephone circuit that had been in use for 25 years.

Thus, by 1960, by keeping pace with technological developments throughout the world and particularly in the United States, Canada had a highly automated national telephone network, fully integrated into the over-all North American network and with excellent connections to other, more distant countries.

The Telecommunications Team

The national telephone network was not the result of technological development alone but the creation of many men working together in organizations that evolved and adapted themselves to meet changing conditions.

When the telephone industry was first established in Canada in 1877, representatives or agents of many companies were located in towns and cities across the country, sometimes in direct competition with each other in the same city. Then in 1880, as mentioned earlier, The Bell Telephone Company of Canada was organized to consolidate nearly all the telephone business then developing. At first the Bell planned to serve the whole of Canada but problems created by geography and the scattered nature of settlement influenced it to limit operations to Ontario and Quebec. Separate companies developed in British Columbia and the Maritimes and responsibility for providing telephone service in the Prairie Provinces was undertaken by the respective provincial governments. Today there are 2,330 telephone operating companies which differ widely in size and in scope of operations. They range from tiny rural co-operatives serving perhaps a few families to large shareholder-owned and province-owned systems which number their customers in hundreds of thousands. This blend of large and small, private and government ownership is probably unique in the world.

Although there are many companies providing telephone service, each has a monopoly within its own territory. Direct competition was found to be inefficient and had ceased in Canada by 1890 and the operating companies are subject to government regulation at the appropriate level—federal, provincial or municipal.

With so many independent administrations, the need for a new organization to promote co-operation within the industry and the exchange of information about technical and operating procedures became apparent. In 1921 the Telephone Association of Canada (TAC) was formed, its members being the 12 major telephone companies in Canada; this association also works closely with the smaller independent systems. As the barriers of distance were successively overcome, an even more closely knit organization was required to develop and maintain a coast-to-coast long-distance network that would connect to the facilities of the local telephone systems across the country. In 1931, the Trans-Canada Telephone System was established, its members being:—

The Avalon Telephone Company Limited
 Maritime Telegraph & Telephone Company Limited
 The New Brunswick Telephone Company Limited
 The Bell Telephone Company of Canada
 Manitoba Telephone System
 Saskatchewan Government Telephones
 Alberta Government Telephones
 British Columbia Telephone Company.