

Overview of Canadian Telecommunications

◀ This 14.2 m telemetry, tracking and control antenna is part of the ground control segment designed and built by SED Systems Inc. for the Brazilsat project. SED teamed up with prime contractor Spar Aerospace Ltd. on Brazilsat, Canada's eminently successful entry into the communication satellite systems export market.

TELECOMMUNICATIONS HAS PLAYED a vital role in Canadian history. Canada is a vast country—the second largest in the world—stretching some 6,000 km (3,700 miles) from coast to coast and some 4,800 km (3,000 miles) from the United States border to the North Pole. Spanning seven time zones and covering 9,970 square km, Canada has a population of only 25 million living in communities often separated by great distances and geographical barriers. It is a country with two official languages, many different cultures and distinct regional identities.

Excellent communications networks have enabled Canadians not only to conquer distance, but also to express and benefit from the nation's rich diversity. From the invention of the telephone and the first long-distance telephone call, Canada has pioneered telecommunications developments and currently has three separate and complementary microwave routes spanning the country from east to west, as well as the world's first domestic satellite communications network with more than 100 earth stations. There are over 160,000 km (100,000 route miles) of microwave system connecting Canadian communities today. With more than 19 million telephones in service or 76 per 100 population, Canada rates fourth in the world in terms of telephones per 100 population.

In every part of the country, even remote Arctic settlements, Canadians enjoy sophisticated communications services. Telephone, business communications and broadcasting services are delivered by cable, microwave, fibre optics and satellite systems.

This highly sophisticated communications network is provided by a unique blend of monopoly and competition. Ten major telephone companies provide 94 percent of Canada's telephone service and together form the umbrella organization, Telecom Canada. Six of these companies are investor-owned, three are operated by provincial governments and the tenth, Telesat Canada, which provides domestic satellite services, is a co-operative ownership between the federal government and several telecommunications companies. A separate entity, CNCP Telecommunications, is a joint venture of the telecommunications divisions of the Canadian National and Canadian Pacific railways. CNCP provides a public message service, telex data, and a variety of voice and data special services over its completely separate microwave and satellite channels across Canada. CNCP competes with Telecom Canada in these modern business-oriented services and has connection privileges to the local network facilities of the other federally regulated carriers (Bell Canada and British Columbia Telephone Company).

There are about 140 other telephone companies throughout the country consisting of small rural, regional, and municipal systems, all of which interconnect with the major companies for long-distance services.

Communications services internationally are provided by the federal Crown corporation, Teleglobe Canada.