

### 16.1.1.5 Telecommunications in the North

Anik is the Inuit word for brother. Anik I opened a new era of telecommunications in the North providing reliability, flexibility and new services, including television broadcasting, to remote communities not served by surface facilities. Northern communication is accomplished mainly by microwave and tropospheric scatter systems and high-frequency radio. Both methods, as well as land line facilities, are still used.

Telecommunications services in the North are operated mainly by CN Telecommunications and Bell Canada. British Columbia Telephone Company provides telecommunications services along the West Coast to Alaska.

CN Telecommunications covers an area that runs north through British Columbia from Fort St. John and includes all of the Yukon Territory and Northwest Territories west of longitude 102°. Bell Canada serves the eastern half of the Northwest Territories up to and including Grise Fjord in the Arctic Circle and all Northern Quebec. Newfoundland Telephones operates in Labrador while Ontario Northland Communications serves northeastern Ontario.

Throughout the North, CNT and Bell Canada automatic telephone exchanges are connected to the Canadian networks, through them to the North American networks and through Teleglobe Canada to overseas networks. Microwave tropospheric scatter and the domestic satellite systems are used to penetrate the heart of the Arctic and connect to the North American continental telecommunications network. It is also possible to communicate within the coverage area through high-frequency equipment with mining camps, oil and gas exploration sites, construction camps and outposts.

### 16.1.2 Telephone and telegraph statistics

**Telephone statistics.** In 1976 Canada had an estimated 821 telephone systems compared to 860 in 1975; of these, 806 filed returns with Statistics Canada compared to 850 in 1975 (Table 16.1). Although the number of co-operative systems declined from 737 in 1975 to 720 in 1976, growth in the telephone industry was particularly evident in the large telephone companies. The largest incorporated telephone company, Bell Canada, operates in Ontario, Quebec and the Northwest Territories. In 1976 it owned and operated 8.3 million of approximately 13.9 million telephones in Canada. The BC Telephone Company, also owned by shareholders, operated 1.4 million of the total telephones in 1976.

Table 16.2 shows the distribution of telephones by province in 1976. Of the 1976 total, 70.3% or 9.8 million were residential telephones and 4.1 million were business telephones. Alberta had the most telephones per 100 population with 65.2, followed by Ontario at 63.7 and British Columbia at 61.9. As Table 16.3 shows, each Canadian averaged 953 calls in 1976.

Table 16.4 shows capitalization, revenue and expenditure of telephone companies plus the number of employees, salaries and wages paid for 1971-76. Provincial figures for 1975 and 1976 are given in Table 16.5.

**Telecommunications statistics.** Nine telecommunications companies operated in Canada during 1976. This was the fourth year of commercial operations of Telesat Canada, which added over \$29 million in revenue to the operation of commercial telecommunications carriers. The operating revenues of telecommunications companies increased from \$259.1 million in 1975 to \$278.3 million in 1976 or 7.4% while expenses for the same period increased from \$193.8 million to \$213.7 million or 10.3% (Table 16.6). The property and equipment for these nine telecommunications companies increased by \$38.1 million to \$977.7 million in 1976, from \$939.6 million in 1975. These figures include investment in property and equipment by Telesat Canada, which in 1976 was reported at \$155.1 million.

### 16.1.3 Federal regulations and services

**The Department of Communications.** The department, established in April 1969, is responsible for ensuring that all Canadians obtain the best possible access to an expanding range of communications services. This involves not only technological