improve telephone communications in northern Canada and supplement existing microwave systems servicing southern Canada. The ANIK generation of satellites has a projected minimum life cycle of seven years. Telesat Canada has signed contracts with the Canadian Broadcasting Corporation for three radio frequency (RF) channels for English- and French-language television distribution; with a consortium of telecommunications common carriers, including the members of the Trans-Canada Telephone System and CN-CP Telecommunications, for two RF channels to provide voice and data communications between Toronto and Vancouver; and with Bell Canada for two RF channels to provide improved telephone communications in northern Canada. During 1973, it is expected that a contract will be signed between Telesat Canada and the Canadian Overseas Telecommunication Corporation for service starting in early 1974, linking the Canadian end of a new transatlantic cable, CANTAT II, via satellite to central Canada. In addition, the company is negotiating with a number of US telecommunications carriers for the leasing of RF channels on ANIK II to provide US service via satellite in the intervening period until US systems are established in space. By the end of 1972, Telesat Canada was already expanding its initial earth station network to provide for an additional 15 locations for improved telephone communications in the northern parts of Canada during 1973 and 1974.

Because of its early entry into the field of commercial satellite communications, Telesat Canada has acquired a marketable body of managerial and technical expertise in this rapidly evolving field.

## 16.1.2 Telephone and telegraph statistics

**Telephone statistics.** In 1971 there were 1,490 telephone systems operating in Canada compared with 1,716 in 1970; of these systems, 1,171 reported in 1971 and 1,376 in 1970 (Table 16.1). Co-operative systems in rural districts decreased in number from 1,256 to 1,074 in the same comparison and incorporated companies from 84 to 67. The largest of the incorporated companies, Bell Canada, which operates throughout the greater part of Ontario and Quebec and in Newfoundland and the Northwest Territories, served 61% of all the telephones in Canada and the British Columbia Telephone Company, also shareholder-owned, served 10% of the total in 1971. The number of telephones in use continues to increase at the rate of about 5% annually.

Table 16.2 shows the distribution of telephones in use in 1971. Of the total, 71% were residential telephones, and of these, 62% were on private lines, and extension telephones and

