

satellite communications networks. As of 1994, forty "reseller" companies were providing competitive network services on lines leased from the carriers.

*Canada is also a good place to do business. Banking, communications and transportation services are as good here as anywhere in the world.*

**George Peapples**, former President  
General Motors of Canada

Cellular telephone services are provided by two national carriers, Rogers Cantel Inc. and Mobility Canada. Recently, voice and data services to mobile radio users outside major metropolitan areas have been expanded as a result of the launch of the MSAT satellite, which provides mobile satellite services. Private voice and data networks, including local area networks (LANs), link personal computers in a variety of settings.

In the near future, an increasing number of services will be offered by wireless communications, known as personal communications services (PCS). In December 1995, the federal government awarded licences to four companies — Rogers Cantel, Mobility Canada, Clearnet PCS, and Microcell Telecommunications — to build the PCS networks. Some forecasts suggest that market penetration for wireless telephone usage will reach 30 percent in the next ten years.

### ***The "Information Highway"***

In 1994, the federal government announced its active support for the building of a high speed, interactive "information highway". This interconnected and interactive highway — a network of networks — will put a variety of new services within reach of Canadian homes, businesses, schools, hospitals, government offices and libraries.

Canada will maintain its information highway lead. In 1993, the Stentor Group announced it will spend a total of \$8 billion over a ten-year period on its Beacon Initiative, a program to upgrade Canada's local and long-distance networks to an interactive, two-way, broad-band capability. When complete, 80 to 90 percent of all businesses and homes in Canada will have access to the multimedia traffic lanes and technologies of the information highway.

The Beacon program includes replacing copper wire with fibre optic cable to bring services to neighbourhoods and coaxial cables to cover the last lap to the home. About \$500 million of the Beacon investment will be spent on the installation of advanced switches and other equipment needed for delivery of broad-band audio, video and data services.

Stentor is also developing innovative new services to meet business needs. As part of the Beacon Initiative, the Stentor Alliance has announced that it will set up a venture capital fund of \$50 million to help software and other companies develop multimedia applications and products for use on the information highway.

### ***Canadian Network for the Advancement of Research, Industry and Education***

In 1993, the federal government and Canadian industry launched a \$1.2 billion cooperative communications infrastructure project called the Canadian Network for the Advancement of Research, Industry and Education (CANARIE). Financed mainly by the private sector, CANARIE will link existing regional computer networks in each of Canada's 10 provinces. It will bring researchers and educational communities into an interconnected, interactive network, and will provide the gateway to international networks.