

Fiber optics produced by Bell Northern Research are made of silica, a basic constituent of ordinary sand. They carry light pulses rather than electricity.

> from trunk to subscriber loop applications – where homes receive simultaneous transmission of telephony, data, television and videotex.

> In the small community of Elie, Manitoba, some 150 households were connected by fibre optics, making the field trial the first for multi-use tests of fibre optics systems in a rural community.

In 1981, the Saskatchewan Telephone Company began to install a 3400 kilometre fibre optics broadband network to link a number of communities in the province. Now completed, the digital system is the world's longest commercial fibre optics network and provides full voice and data services, as well as cable television signals to 52 communities.

## Data networks

Canada initiated the first dedicated coaxial data network – a 12-tube cable linking Toronto, Ottawa and Montreal. The country has had its own national digital- based data networks since 1973 when Dataroute was introduced into the Trans-Canada Telephone System. Introduction of Infoswitch and Datapac followed in 1977. The systems, which cover the width of Canada, link into United States systems and other similar overseas networks, including British Telecom's Switchstream service.

## Videotex-Telidon

In 1978 Canada's Department of Communications announced the development of Telidon, an advanced videotex terminal capable of producing graphics with a much higher resolution than competing equipment. It has also shown flexibility and compatibility of data bases with different terminals and has a designed capacity for future expansion. In 1981 Telidon was chosen as the basis for a North American Standard (NAPLS) by ATT and CBS and is now in use throughout North America.

Like other videotex systems, Telidon uses a modified television set or display monitor, an interface decoder device, a telecommunications system and a central computer. Since Telidon has a high degree of 'intelligence' in all its terminals it can fully exploit recent advances in computer graphics and data transmission technologies, making it uniquely suited to converting a television set into a highly advanced information tool.

Consulting services

Canadian telecommunications consultants are respected throughout the world. The largest Canadian consultant in this field, Bell Canada International, has provided international services and gained renown for its expertise during more than five years of work in Saudi Arabia.

Canadian experts offer a complete range of services: from consulting to managing turnkey operations; from initial basic assessment of an organization's needs to managing systems installations; to training local staff before turning over an efficiently operating network.

Since joining the International Telecommunication Union (ITU) in 1907, Canada has been committed to the idea of promoting international cooperation and the extension of international networks.



Mitel's superset 4, a telephone set designed for use with the sx-2000, sx-100 and sx-200. It offers advanced telephone features including electronic messaging on an easy to read liquid crystal display.