

In consequence, the Telidon system will work, no matter what changes may occur in the technology of display monitors. The data base is also independent of any particular type of terminal or communications medium used to transmit information to or between those terminals. Telidon signals can be transmitted over telephone lines, coaxial cable, optical fibre, satellite link, off-air broadcast or some combination of these.

The independence of Telidon components from each other is a unique feature of the Canadian system.

"We wanted this independence because we know there are different rates of change for the terminal, transmission and data base management technologies," says Herb Bown, manager of the image communications laboratory in the Canadian government's Department of Communications. "For example, existing communications are constantly being improved with fibre optics, satellite and other broadband services, as well as improvements in the telephone networks. And we know the resolution of TV itself may well be improved, or it may even be replaced by a totally new display technology.

"It is important we adopt a methodology and an over-all systems approach that permits independence of information storage from the delivery and receiving systems. Otherwise, we'll be stuck with a systems approach with a life of about five years before much of the information in the data banks will have to be redone for the next generation of systems."

Telidon terminals contain a tiny computing device which can serve as a mini-computer at home or in the office. They can be easily modified to display signals from the British Prestel or French Antiope videotex systems. Telidon terminals are also 'smart' enough — because of their mini-computer — to communicate directly with other terminals without help from a central computer. These features are unique and give Telidon a considerable competitive advantage.

For the field trials, Norpak Ltd., a Canadian manufacturer of computer display equipment, started producing Telidon units in 1980. Each is the size of a telephone book and sells for around \$1,200. Its mass-market model may sell for about \$250 and consist of from one to 10 silicon chips mounted on a board which could fit right into a TV.

*Telidon is capable of very advanced graphic representation, enabling the electronic transmission of mathematical, scientific and technical illustrations; charts and statistics; maps and cartoons; as well as signs and symbols for the deaf and other users.*



An independent marketing study, sponsored by the Canadian government, has predicted there may be 600,000 Telidon subscribers in Canada by 1986 and about 1.9 million by 1991. Major telephone companies across the country are participating in videotex field trials.

Bell Canada, in co-operation with the Canadian government, will embark in 1981 on a \$10-million field trial using 1,000 of its own Vista terminals, all of which use Telidon electronics. About 100,000 pages of information — including from travel schedules, news, weather, sports, stock market quotations, consumer bulletins, entertainment guides and classified ads — will be available on demand over residential and commercial participants' color TVs, by pushing a button on a keypad or keyboard. Users may also be able to reserve plane tickets, teleshop and leave messages for other participants with the new system.

Three other major Canadian telephone companies will start their own videotex field trials soon. The Canadian Telecommunications Carriers Association, the trade organization for Canadian telecommunications carriers, is co-operating with the Canadian government in a field trial which will test Telidon transmissions over optical fibres in a small town on the Canadian prairie.

Two Canadian cable TV companies will soon begin videotex field trials. A spokesman for one of these has suggested he might eventually go to more specialized commercial information: "With videotex, we'd like to offer a service to car dealers, for example, where they can get the latest information from Detroit on parts and descriptions of parts, with exploded diagrams."

In September 1979, an electronic newspaper was delivered faster than ever before from Canada across the Atlantic to four Telidon terminals located in Geneva, Switzerland, at Telecom '79, the international telecommunications exposition sponsored by the International Telecommunications Union.

TV Ontario, the educational TV network operated by the government of Ontario has begun an extensive three-phase Telidon trial. The network plans to distribute information on a retrieval basis from existing data bases and then move into computer-based learning systems, both of which could be picked up by Telidon terminals in the home.

*Telidon subscribers will be able to call up weather conditions, news reports, restaurant and theatre listings, and real estate information.*

