

EDITORIAL

How much interactive is interactive television?

Future information superhighways raise high expectations in the field of interactive television. The ultimate vision of interactive TV is that of an active viewer choosing his programming and controlling it as if played on a video recorder, playing two-way video games, home shopping, visiting museums or consulting on-line databases.

This, however, remains a dream which is only starting to become true for a few thousands test users in the USA and Europe. In the meantime, small-scale systems offering simulated or limited interactivity have mushroomed on both sides of the Atlantic.

No existing system allows viewers to directly influence programming. Even Canada's Videoway, a subsidiary of Videotron, which enables users to change camera angles during a sport event, is simply based on zapping between a choice of four cable channels.

Pay-per-view provides an illusion of interactivity by broadcasting a given programme several times a day over several cable channels, every 15 minutes over the Queens network of America's Time Warner, and every two hours for France's Multivision. In the USA, Hughes Communication also provides pay-per-view via satellite.

Interactivity is often achieved through phone lines. This especially applies to tele-shopping channels such as America's QVC and Home Shopping Network, where buyers have to dial up the station.

Actual interactivity is also often delayed. For instance, a French system, Multipoint, enables users to receive information through on-screen optical signals and store their answers on an electronic card and have it read in a device placed in stores to win prizes.

Real-time interactivity is so far limited to systems such as Denmark's Hugo, which allows one viewer to play a game via a key-phone, as well as data services.

Interactive TV data services include information, education, polling or home banking. Technology varies a lot: America's EON

relies on a two-way digitised data transmission over air waves and Videoway on cable with an in-built return channel, while GTE's Main Street and ImagiTrek in the USA are based on phone lines for the user's request and cable for the answer.

But whatever the level of interactivity, a key question remains: are viewers interested in interactive TV and how much are they ready to pay for it? While existing systems and polls give no definitive answer, the issue may soon become crucial in the light of the cost and complexity of setting up fully interactive TV systems. The only certitude is that interactive TV will have to be fast, cheap and user friendly.

EUROPE

Trends: Last week's events tend to show that big private and public European communication players such as France Télécom, Deutsche Telekom, Bertelsmann, Kirch Gruppe and Olivetti are now fully stepping into the multimedia sector. Liberalisation is also progressing with the award of the first data network license to a private group in Germany. Separately, US companies tend to reinforce their presence, in the cable industry in Spain and in corporate long distance services in the United Kingdom.

INFRASTRUCTURE

The German government has awarded its first license to operate a private mobile data network to Gesellschaft für Datenfunk (GfD), a consortium led by German energy and engineering group RWE with a 43% stake.

The network, which will require a 260 million Ecus investment will be available to its first clients in July 1995. It will cover 92% of Germany's residents by 1997 and is expected to have 600,000 customers by the end of the decade.

Other participants in the consortium are Germany's Mannesmann Eurokom (21%), Energie-Versorgung Schwaben (10%), France's cellular operator Cofira, a subsidiary of Compagnie Générale des Eaux (10%) and Britain's RAM Mobile Data Network (10%).

GfD is the private group to be allowed to operate such a data network, which until now fell under the monopoly of the national telecoms company Deutsche Telekom.

The American regional telecoms company US West, America's second largest cable operator Time Warner and Spain's cable company Multimedia Cable have set up a joint venture, Cable y Television de Europa, that plans to build up a cable television network in Spain.

The project is pending the adoption of Spain's future cable TV legislation.

APPLICATIONS

France Télécom, France's national telecoms company, is increasingly positioning itself in the new multimedia sector, mainly through the building up of alliances carried out by its multimedia subsidiary France Télécom Multimédia, created last March.

The company has already taken a minority stake (1.8%) in America's General Magic, took part in the launch on May 30 of France's first pay-per-view television, Multivision, is setting up a joint society with a French museum organisation (Réunion des Musées nationaux) for the marketing of CD-Roms displaying museum catalogues and plans to offer tele-shopping services on a new generation of high-speed Minitel.

France Télécom is also exploring the possibility to co-operate with France's media giant Havas, in which it has recently taken a 5.5% stake, in areas such as interactive educational games, distance shopping catalogues and specialised television channels.

Media Service, a joint venture set up last March by Germany's Deutsche Telekom, media giant Bertelsmann and cable television company Kirch Gruppe to supply new interactive TV services, will launch an interactive TV experiment in Berlin later this year.

The trial, which will involve 50 to 100 test users, will cover the following services: video-on-demand, home-shopping and pay-per-view.

Italy's computer maker Olivetti has presented a new line of multimedia personal computers, DomusLife, dedicated to a family and entertainment use.

The new PCs have an in-built CD-Rom reader and can be used to watch television and video tapes, learn a language interactively or consult electronic encyclopaedias.

TECHNOLOGY

NEC Europe, a subsidiary of Japanese electronics company NEC, said it will open this Summer a multimedia research centre near Bonn, in Germany.

NEC will invest 850.000 E>

Transfer interrupted!

devote most of its activities to the development of techniques to integrate audio-visual, computer and telecoms systems. It also intends to co-operate with European research institutes.

MARKET

MFS Communications, an American optical fibre network operator, said it will offer transatlantic voice, data and video-conferencing links to big corporate clients between Britain and the USA at a price 15 to 20% lower than other British telecoms operators.

MFS, which has already completed the construction of a fibre-optic network in London, said it will expand its services to Frankfurt and Paris in the next months.

Between July 7 and 19, St. Petersburg will be the host city of the first Eastern and Central European audio-visual fair, Marketskaia, which will gather audiovisual producers and buyers from all over Europe.

Marketskaia aims at opening up the Eastern and Western audiovisual markets to each other and to inform Western European participants about regulatory, audience, distribution and production aspects of Eastern Europe's audiovisual landscape.

NORTH AMERICA

Trends: GTE is joining the mainstream with plans to build its own information superhighway, while the competition battle amongst Baby Bells is taking momentum with Southwest's decision to provide phone services over the cable on Bell Atlantic's territory. An attempt by LLDS to set up a fourth big US long distance company has failed. Separately, tele-medicine is quickly emerging as a reality in the United States.

INFRASTRUCTURE

The US regional telecoms operator GTE has unveiled plans to spend \$250 million on setting up a broadband network to offer interactive video services to 500,000 homes by the end of 1995 and seven millions within 10 years.

APPLICATIONS

US electronics group Hewlett Packard (HP) is developing an interactive fax machine, Deskslate, that will allow two people linked by a phone line to commonly examine, modify and annotate the same document.

Deskslate will consist of a flat tablet of about the size of a phone directory, whose top surface mainly consists of a high-definition liquid display screen. An electronic stylus will enable the users to write on the screen. Documents or plans will be visualised on-screen after scanning or transmission from a fax machine or a personal computer.

MARKET

Wiltel, America's fourth largest long distance operator, has declined a recent unsolicited \$2 billion purchase offer by the US telecoms group LLDS Communications.

Wiltel's mother company Williams Companies has, however, agreed to explore other forms of co-operation with LLDS, a supplier of long distance capacity for SMEs.

The completion of the deal would have given LLDS a sufficient size to compete with America's leading long distance operators AT&T, MCI and Sprint.

TECHNOLOGY

The American and Canadian leading cable operators, respectively TCI and Rogers Cablesystems, have decided to test a high-speed modem jointly developed by US chip maker Intel and US electronics group General Instruments (GI).

The reception capacity of the new modem is 1,000 faster than that of traditional modems, thus allowing PC users to enjoy future multimedia services available on the information superhighway. While current modems need 15 minutes to put on screen a high-definition picture, the new high-speed modem will only need a few seconds.

INFORMATION SOCIETY

In the past year, tele-medicine has made substantial progress in the United States with the launch of several private, university and government projects all over the country.

The Medical College of Georgia, for instance, has launched a pilot project offering 25 patients suffering from asthma and high blood-pressure continuous medical control through electronic devices and a direct video link with their practitioner.

On Kwajalein island, the US Army has created a medical centre for distance treatment via a satellite video link of soldiers

stationed in the Pacific region, who previously had to fly to Honolulu for treating serious illness.

Small outlying hospitals in Hawaii, West Virginia, Montana and Oklahoma as well as prison hospitals in Carolina and Georgia have also been electronically connected to major medical centres, who can help them with their expertise.

The US Administration, which has made tele-medicine one of its top-priority in the framework of the setting up of a National Information Infrastructure (NII), believes tele-medicine will save government huge amounts of money and improve the quality of health care. In 1994, it will provide \$285 million to support tele-medicine projects.

ASIA AND PACIFIC

INFRASTRUCTURE

Japan's Ministry for International Trade and Industry (MITI) said the country's telecoms and cable companies have set up a committee to reflect on ways to interconnect their networks.

The committee, which will also include electronics companies and trading houses, will start working this Summer and is expected to release a report within two years.

MARKET

US leading cable operator TCI and Japanese trading house Sumitomo have agreed to set up two joint ventures in Japan to operate cable television channels and supply programming to other cable TV companies.

Finland's Nokia, Europe's largest mobile phone manufacturer, has become the first European company to sell digital cellular phones in Japan, the world's second largest national market for mobile telephones, with the hope to capture around 25% of it.

The content of the press review does not necessarily reflect the European Commission's views.