

## EDITORIAL

### Encryption issue is new bump on electronic superhighway

The US Administration has unveiled plans to crack down on private encryption of computer and voice messages and let its intelligence agencies monitor data flows, thus raising fears amongst private corporations of government economic espionage.

The move is part of the US strategy to fight against terrorism and criminality, in particular money-laundering and drug smuggling, as the Administration believes that encryption is used to communicate in and outside the USA without fear of detection.

The US government plans to develop a technology (so-called "Clipper chip") that would enable the CIA and the FBI to eavesdrop private communications. Users refusing to use an encryption that can be intercepted and decoded by the security services would be denied network access.

But the plan has run into fierce opposition of American and European businesses who routinely use encrypted messages to transmit sensitive information on-line.

The Information Security Business Advisory Group (IBAG), a European organisation representing network users on security issues, said the US initiative was unacceptable and urged European governments not to restrict access to the information superhighway to users relying on an encryption government agencies can decode.

IBAG stressed that "industry needs to know when its sensitive data has been compromised" and advocated that companies deposit the keys to their encryption with "trusted third parties" rather than governments. Therefore, companies would be notified when intelligence agencies want to tap their communications.

More striking however is IBAG's warning that the US plan will greatly reduce the benefit of the information superhighway for the private sector. This could prompt serious worry in Washington, as the development of a National Information Infrastructure (NII) heavily relies on private sector investment.

Reconciling the legitimate interest governments have in protecting public safety and corporations the secrecy of their business

might prove to be a necessary step in ensuring the take-off of the information society.

## EUROPE

Trends: In France, the award to BT France of a contract to set up a business data and voice network illustrates a growing corporate demand for greater telecoms competition and lower tariffs. On the standardisation front, the launch of a joint campaign by Matra and Marconi Italia in favour of a Europe-wide professional radiocommunication standard stresses the need of joint European action to counter US competitors. Separately, the development of the "electronic museum" shows the cultural dimension the information society could convey.

## INFRASTRUCTURE

BT France, the French subsidiary of British Telecoms, has won a five-year contract worth 60 million Ecus to build up and operate a private global voice and data network for France's maritime transport group SCAC-Delmas-Vieljeux (SDV).

The network will channel almost all of SDV's internal communications, including electronic mail, amongst the company's 300 premises around the world. The deal is a setback for France Télécom, whose tariffs were judged too high.

## APPLICATIONS

The US cable television-shopping company QVC Network, which is already active in Great Britain, plans to expand its broadcasting to the rest of Europe.

QVC will start broadcasting its English programming in the Netherlands, Norway, Denmark, Sweden and Belgium before the end of the year, and plans to launch local language channels in French, German and Italian possibly as early as next year.

## LEGISLATION

The Swiss national Post and Telecommunications company could be partly privatised in 1996 according to its president, Dieter SYZ.

Oftel, the British telecoms watchdog, said a ban on British Telecoms offering entertainment services is unlikely to be lifted before 2001 despite warnings by BT that its plans to invest 20 billion Ecus in bringing information superhighways to British homes is pending assurance that the ban will be lifted on the occasion of a 1998 review.

## TECHNOLOGY

French and Italian radiocommunication companies Matra Communication and Marconi Italia have started lobbying some of their European counterparts, including the Netherland's Philips, Germany's Bosch and Switzerland's Ascom, to push for the setting up of a Europe-wide standard for professional digital radiocommunication.

Matra and Marconi aim at countering the digital system currently being developed by America's Motorola, the world's leader in professional radiocommunication.

The potential market for European professional digital radiocommunication is estimated at 3 to 4.5 billion Ecus and would be stirred by demand of national police and security forces whose analogue equipment is too easy to break in.

The European Space Agency (ESA) will install a terrestrial reception station in the Canary Islands for the optical laser signals of the future European satellite Artemis to be launched in 1997.

Artemis will be dedicated to the experimentation and exploitation of new optical laser telecoms techniques, which will enable to develop pan-European satellite mobile telephony.

## INFORMATION SOCIETY

The "electronic museum" is soon to become a reality with the launch this summer of RAMA, a network connecting seven museum in Europe, including the Musée d'Orsay in Paris, the Galleria degli Uffizi in Florence and the Ashmolean Museum in Oxford.

RAMA, which received an initial 6 million Ecus grant from the European Commission, will provide access to digital pictures and video clips of the museums' collections and could eventually link up 250 museums in Europe.

In addition to facilitating art researchers' access at a fingertip to Europe's art collections, RAMA will also ease the work of art curators and custom officials tracking the acquisition and move of art items.

RAMA is only one amongst several museum networks. Last February, the British Library has put on-line digital photographs of its most famous manuscript, the medieval epic poem "Beowulf". In France, the Ministry of Culture runs a database describing 120,000 works of arts. Both services are accessible via the Internet .

More prosaically, the electronic museum could also become a substantial source of revenue, a fact that hasn't escaped the attention of Microsoft chairman William Gates, who has set up Continuum Productions, a company specialising in

amassing electronic-reproduction rights of art treasures from around the world.

RAMA, which is expected to generate a 91 million Ecus revenue by the year 2000, could be used to start a commercial electronic-image service opened to all art lovers competing with private ventures such as Continuum and become a source of income for often cash-starved museums.

## NORTH AMERICA

Trends: For several leading US companies, the current focus is obviously on the development of PC networking. This, however, doesn't slow down the pace of innovation in the field of multimedia applications. Separately, the setting up of a fourth big US long distance operator could be in the making.

## INFRASTRUCTURE

Leading US long distance operator AT&T and US software producer Novell have agreed to connect PCs using Novell's local area business networks via AT&T's network.

Novell's local area network software holds the world's largest market share with two million LANs serving 25 million personal computer users. Interconnecting those LANs could boost AT&T's traffic revenue.

AT&T has already forged similar alliances with US software and hardware manufacturers Lotus Development and Xerox .

The American regional telecoms company Bell Atlantic and the US second long distance operator MCI will launch in June a high-speed data exchange service for corporate personal computer networks.

The service, called Multi-megabit Data Service, will be available in several major East Coast cities such as Washington, Baltimore and Philadelphia. PC users will be connected to MCI's long distance network via Bell Atlantic's local network.

## APPLICATIONS

US regional telecoms company Nynex and US media giant Viacom have unveiled plans to jointly develop interactive entertainment services in the USA and Great Britain.

Their plans include the development of video-on-demand on the basis of the film library of the Paramount TV and movie

studio recently purchased by Viacom.

The two companies also intend to launch interactive versions of Viacom's musical cable channel MTV and children channel Nickelodeon. They will also work on the development of interactive multi-player video games which could be delivered on Nynex' network.

US software producer Microsoft will launch in June a new software stored on CD-ROM providing extensive baseball information as well as a direct on-line access to a daily newspaper on the previous day's baseball statistics and articles by sports columnists.

While most companies offering on-line services focus on potential clients already familiarised with networking, Microsoft adopts a different approach in that it targets a certain category of clients, i.e. baseball fans, with the expectation that they will adopt the proposed format.

## MARKET

US telecoms group LLDS Communications has made an unsolicited \$2 billion offer to buy WilTel, America's fourth long distance operator.

LLDS, currently WilTel's second customer, is in the business of buying access to long distance lines and reselling it at a profit to SMEs. WilTel, which operates a national digital telecoms network it partly owns, provides telecoms services to corporations.

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

## INFORMATION SOCIETY

The University of Virginia's Neurological Institute will develop an ATM network allowing neurosurgeons to view and manipulate 3-dimension magnetic resonance imaging and computerised brain scans in real time before and during surgery from workstations in the operating room.

A subsequent network development will allow surgeons located at distant premises to enjoy the same possibilities.

## ASIA AND PACIFIC

Trends: China tops the news again with a new telecoms mega-contract, "Golden Bridge": this week's winner is IBM. In Japan, NTT presented details of its multimedia experimentation plans.

## INFRASTRUCTURE

US computer maker IBM has been chosen by the Chinese authorities to set up a joint venture to build up a data network linking about 500 cities in China.

The so called "Golden Bridge" project will involve building regional networks in cities and a backbone network inter-connecting the regional systems.

## APPLICATIONS

Japan's national telecoms company Nippon Telegraph and Telephone (NTT) has unveiled the details of its multimedia experimentation programme.

NTT's programme will include trials of private and business applications such as electronic mail, data bases and electronic newspapers as well as video-on-demand and testing optical fibre links to the home. NTT is due to chose partners for its experiments by the end of June.

The content of the press review doesn't necessarily reflect the European Commission's views.