

## EDITORIAL

### An overview of Telecom 95

The huge crowd of users and industry representatives that gathered in Geneva in September for the 1995 edition of the four-yearly world telecoms fair Telecom 95 demonstrated once more the fascination exerted by communications technologies.

A first striking trend compared to Telecom 91 was the presence of new entrants linked to global telecoms liberalisation and technological innovation, in particular telecoms operators from the former communist bloc and the Asia-Pacific region, global corporate communications providers (Concert, Uniworld, Phoenix), mobile operators, as well as global satellite voice and data system operators (GlobalStar, Iridium).

Two other key features of Telecom 95 were the explosion of wireless voice and data communications as well as the omnipresence of multimedia technology through a multitude of demonstrations and experiments which reflected the momentum multimedia is quickly gaining in spite of remaining market uncertainties.

Also striking was the fact that the availability of global satellite systems providing wireless voice and data communications anywhere in the world, from busy Asian metropolis to remote African villages, now seems to be imminent. GlobalStar for instance (Loral, Vodaphone, France Télécom, AirTouch, DASA, Alcatel) will start launching its 48 LEO satellites in 1996 in order to allow its system to be operational from 1998.

A two-day conference on the Internet underlined the Internet's significance in the world of communications. With over 30 million users and an exponential growth rate, it is considered the most tangible example of the emerging global information superhighway.

Finally, the good representation of computer firms tended to confirm their major role in the development of networking technologies, in particular servers and switches.

Beyond these trends, a striking feature was the lack of differentiation both amongst new telecoms and multimedia services. The major telecoms operators presented a similar cocktail of global corporate services, including high-speed data transfer and E-mail, as well as multimedia services for the office and the home (videoconferencing, Internet access, video-on-demand, teleshopping, telebanking, education, culture and health care).

Separately, key multimedia technologies seem to be emerging, with US firms dominating the multimedia platform, in particular Oracle's server software and Digital's Alpha microprocessor, and European companies showing strength in distribution systems, in particular ADSL (compression through twisted-pair copper phone lines). Network configuration mostly comprised fibre optic for the backbone and copper for the local loop.

## EUROPE

Trends: It has been a busy fortnight for the Commission which has tabled its WTO offer, cleared in principle Atlas and taken new initiatives aimed at further liberalising infrastructures from 1996 and striking a balance in Italy's mobile phone market. Meanwhile, France has launched the reform of its legislative telecoms landscape, while Russia announced further privatisation of its telecoms industry.

## MULTIMEDIA APPLICATIONS AND PRODUCTS

ICL, the British computer group controlled by the Japanese electronics company Fujitsu, has launched a new service on the Internet, ICL Commands, which aims at allowing publishers to sell electronic publications and magazines on the Internet.

ICL Commands enables publishers to limit access to on-line material only to users that have a subscription through the use of a password. It also caters for copyright protection through electronic tags that allow to detect the unauthorised forwarding of material as well as through watermarks that appear on-screen and on print-outs.

Two Finnish companies, the news agency STT and the media group Aamulehti, have started testing a new service allowing GSM mobile phones users to receive short news articles into their phone handset by using the GSM's Short Message Service (SMS) facility, which allows for the reception and storing of texts of up to 160 characters.

The two firms intend to launch in 1996 tailor-made news services allowing subscribers to receive news items in the domain of their choice for less than 90 Ecus a month.

## LEGISLATION AND POLICIES

The European Commission has submitted an offer in the name of the European Union and its 15 Member States to the World Trade Organisation (WTO) for the negotiations on the liberalisation of basic telecoms services.

The offer binds the Union's timetable for liberalising telecoms services by 1998 into the WTO process. Foreign ownership restrictions of 20% to 29% would apply in France, Greece, Portugal and Spain unless other countries remove similar limitations.

Only 43 of the WTO's 109 members have agreed to join in the talks, mainly the economically most-advanced ones. So far, only 10 offers have been tabled (Australia, Canada, the EU, Hong Kong, Japan, Mexico, New Zealand, the United States, Slovakia and Switzerland). The deadline for completing the talks is April 30, 1996.

The European Commission has agreed in principle Atlas, a planned joint venture specialising in global corporate communications between the German and French national telecoms operators Deutsche Telekom and France Télécom.

The green light was given after France and Germany agreed to liberalise alternative infrastructures by July 1, 1996 and the two partners agreed not to merge their data subsidiaries, Transpac and Datex-P, until the 1998 European telecoms liberalisation.

The Commission's official decision on the venture is expected around mid-1996, together with a decision on Phoenix, a global telecoms venture between the French and German operators and the third largest US long distance operator Sprint.

The European Commission has adopted under article 90 of the EU Treaty a Directive allowing cable TV operators to supply all liberalised telecoms services by January 1, 1996.

The Directive also allows cable TV operators to connect their networks to the public telecoms networks as well as interconnect their cable networks.

In the case of telecoms operators who also operate cable networks, Member States are required to ensure the transparency and accounting separation of the two activities for firms with a turnover of more than 50 million Ecus in services other than radio and TV.

The European Commission has asked the Italian government to take measures within three months to abolish distortions in Italy's mobile phone market.

In 1994, Omnitel Pronto Italia, which is jointly owned by the Italian electronics giant Olivetti and the US regional telecoms group Bell Atlantic, was charged an initial 350 million Ecus worth license fee to enter the mobile market. Italy's other mobile operator, the national telecoms operator Telecom Italia, was not asked to make such payment.

The Commission said the Italian government should scrap the distortion by either asking Telecom Italia to make an identical payment or adopting corrective measures equivalent in economic terms to the payment made by Omnitel Pronto.

The French government has unveiled an orientation paper for public debate on France's future telecoms legislation in view of the 1998 telecoms liberalisation in Europe. By mid-January 1996, the government will draft legislation with a view to have it adopted by Parliament in the spring of 1996, so it can attribute licenses in the spring of 1997.

According to the document, the number of licenses for new entrants would not be limited except for non-European companies whose country of origin doesn't offer similar market access. Universal service would be preserved and only the national operator France Télécom would have the capacity to offer it in the foreseeable future. The financing of universal service provision would be based on the payment by new entrants of a local network access fee which would come in addition to the interconnection fee.

The Russian government has said it will sell off to a foreign telecoms company 25% of Svyazinvest, the state-owned telecoms holding which controls 85 local telecoms companies, before the end of 1995. Russia hopes to raise about 1,5 billion Ecus through the sale and intends to sell off another 24% in 1996.

## NORTH AMERICA

Trends: The setting up of a satellite-based global information infrastructure is gaining momentum with the launch of new projects by Lockheed Martin and AT&T. Separately, competition in US long distance telephony is set to intensify with the DoJ's decision to allow US West to enter the sector. On the cultural front, Bill Gates has purchased Bettman-Archiv, the world's largest picture library, in a move to feed the Microsoft Network and to build up its position as a leader in digitised content. As for Microsoft's decision to sell software on the Internet, it reflects the growing importance of the Internet and suggests that it could become the major on-line medium of the future.

## INFRASTRUCTURE

Lockheed Martin, a leading US aerospace and defence group, and the US telecoms giant AT&T said they intended to launch worldwide two-way video, voice and data satellite systems, respectively named Astrolink and Voicestar.

They would rival two similar global projects, Teledesic and Spaceway, as well as CyberStar, a system that would only offer interactive satellite services in the USA.

Voicestar would also allow AT&T to bypass regional telecoms groups when offering local telephony once the deregulation of the US communications market is completed.

The five companies have applied for a license with the US Federal Communications Commission (FCC) which will review the applications in 1996.

Teledesic was proposed by Microsoft chairman Bill Gates and McCaw Cellular founder Graig O. McCaw, Spaceway by Hughes Aircraft, the aerospace arm of General Motors, and Cyberstar by the US aerospace and communications group Loral.

Astrolink would cost an estimated \$4 billion, Teledesic \$9 billion, Spaceway \$3.2 billion, Voicestar also several billion dollars and CyberStar only \$400 to \$500 million

#### MULTIMEDIA APPLICATIONS AND PRODUCTS

Microsoft, the world's leader in PC software, has said it will launch a pilot programme to experiment the sale of its most popular pieces of software over the Internet.

Microsoft will in particular review whether its security measures against hackers and viruses while buyers download software are efficient. So far, only a handful of software firms such as Symantec, Novell and Oracle sold their products on the Internet.

The move suggests that Microsoft is pursuing a twofold strategy in which the development of its commercial on-line service Microsoft Network would not prevent it to exploit the Internet's commercial potential.

#### LEGISLATION AND POLICIES

The US Department of Justice has agreed to allow the US regional telecoms firm US West to offer long distance services outside its region to cable TV subscribers to whom it sells local phone services. The plan must still be approved by a US federal court.

US West, which owns cable television assets in Rochester, New York, and in the region of rival BellSouth, offers local phone services to its cable TV subscribers.

US West would be the second Baby Bell after Ameritech to be granted the right to offer long distance services. Ameritech has been authorised to do so in its region.

The US Federal Communications Commission (FCC) has decided not to grant TCI, the leading US cable operator, a license for direct-to-the-home satellite TV broadcasting but to ask it instead to bid for the license in an auction to be held on

January 18, 1996.

TCI needs the license to carry out its plans to launch in June 1996 a \$1 billion worth nationwide satellite system to rival Direct TV, a similar 175-channel system launched in April 1994 by Hughes Aircraft, the satellite unit of General Motors, and the French electronics group Thomson. Contenders in the auction will include an alliance between the US long distance and media giants MCI and News Corporation.

## TECHNOLOGY

America's Oracle, the world's second largest software manufacturer and leader in data base software, has said it will launch in 1996 WebTV, a new piece of software that will allow Internet users to enjoy interactive video services on their personal computer.

While downloading video on one's PC is currently a time consuming process, WebTV would allow to access video servers in real-time. The new system would initially be aimed at business users with access to high-speed networks.

## SOCIAL, SOCIETAL AND CULTURAL

Corbis Corp., a US company owned by Microsoft President Bill Gates, which specialises in buying electronic reproduction rights of pictures from around the world, has bought Bettmann Archive, the world's largest picture library.

Bettman owns 16 million pictures, mainly photographs, including an 11-million picture fund bought in 1990 from the US news agency United Press International.

Corbis already owns the rights of 500,000 pictures, including paintings of the National Galleries in London and Washington as well as the Barnes Foundation.

## ASIA AND PACIFIC

## MARKET AND COMPANIES

The Japanese national telecoms operator NTT, the British telecoms group Cable & Wireless (C&W), Hong Kong Telecom, a subsidiary of C&W, and the Japanese trading firm Itochu have agreed to set up a joint venture, provisionally named PHS International, to promote the PHS standard for digital mobile telephony in Asia.

The Personal Handyphone System (PHS), a technology whose installation is less costly than Europe's cellular standard GSM and is mainly designed for urban use, was launched by NTT in Tokyo and Hokkaido last July and has 100,000 subscribers.

C&W bought a 5% stake in NTT's PHS operation. PHS has also the backing of 35 electronics and telecoms firms, including Japan's Matsushita, Hitachi, NEC, Fujitsu, Sony, Sharp and Sanyo, and America's Motorola and AT&T.

The US regional telecoms group Nynex said it would buy 23% of Excelcomindo, an Indonesian mobile operator which will spend 600 million Ecus in the development of a nationwide cellular system. Other investors include the Japanese trading firm Mitsui, the Asian investment group Asian Infrastructure Fund and Indonesia's PT Telekomindo.

Separately, another US regional telecoms company, US West, the Indonesian telecoms group PT Artimas Kencana Murni and local investors have agreed to form a joint venture that will invest 150 million Ecus in the modernisation and expansion of phone services in Indonesia's West Java Province. US West will have a 35% stake in the venture.

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