Organizations

Motion Picture and Television Engineering Society of Japan (MPTESJ)

The Japanese economy has been gradually recovering from the bottom it hit in 1993, although this growth cannot yet be felt in daily life. In October a general election was held, and one of the biggest issues at stake was raising the consumer tax from 3% to 5%. At the same time many people expect a policy of powerful economical activities.

Bureaucratic control of the communications business has been slightly alleviated. As a result, investments in facilities has been increasing gradually. PerfecTV started broadcasting in October, using a communication satellite to provide 57 television and 4 radio channels. Next year, J-SkyB and DirecTV will also begin broadcasting in a similar way.

The Electronics Show began on October 1. Among the demonstrations were digital videodisk (DVD) technology, a wall-type thin TV receiving set using a plasma display panel (PDP), a digital video camera, Internet TV, and a mini disc (MD). The DVD became commercially available in November and the PDP thin TV set in December.

The Motion Picture and Television Equipment Exhibition of 1996 was held at the Kitanomaru Science Museum from May 22 to 24. At that event, the nonlinear editing system seminar gathered a large audience. A theater provided the large-scale screen opening at Aizu, Fukushima Pref., in the Tohoku district in the spring. In October, the first 3-D Imax theater in Tokyo opened at Shinjuku.

More theaters will be opened in various places in order to make the local area more active. In addition, at the same time, the number of movie theater that provides multiplex projection has been increasing gradually, the most recent example being the theater in Ootsu city near Kyoto, which has seven screens.

Computer graphics and other digital signal processing technology is being used widely and effectively for large-scale motion pictures, animation, and other small compositions.

NTL (U.K.)

Having divested itself of its digital compression products division in late 1995, NTL started 1996 with renewed vigor as a pure service provider in the increasingly digital world of U.K. broadcast transmission and telecommunications. Any remaining uncertainties about the company's ownership were settled in March when Britain's third-largest cable company, CableTel, announced that it had acquired NTL for £235 million, in a move that strengthened both organizations. Together they can provide a full-service network with both local delivery and broadband trunk infrastructure. Strength in telecommunications was added with NTL's success in obtaining public telecoms operator (PTO) status and in winning a 10-GHz "local-loop by radio" license from the U.K. government. Also, NTL completed the first phase of its installation of fiber-optic circuits to supplement its national digital microwave network.

One of the most important contracts of NTL's year, and certainly the most challenging, was for provision of both distribution and transmission of Channel 5, the U.K.'s last analog TV network. This is thought to be the first time a single organization had been commissioned to provide the total delivery system for such a network. Thirty-three transmitters were required to be built in under a year, with the added complications of tricky frequency planning and severe restrictions on coverage and interference. New antennas were required at all sites. The satellite distribution system was developed using multiple MPEG-2 digital encoding, with full redundancy through two separate uplinks and two separate satellites. This gives a most flexible arrangement where, if required, Channel 5 can independently select any of four program feeds to any transmitter.

Meanwhile NTL's satellite people were also busy constructing their central London teleport. Right in the heart of London's TV facilities industry, the uplink provides economical digital distribution to cable head-ends for even the smallest programmer. As part of a multiplex on Orion 1 users pay only for the bandwidth they are using, not for a whole transponder. Early takers included Channel One, Performance: The Arts Channel, and the Weather Network. The facility is also chosen as one of the uplinks for Channel 5 distribution.

At IBC, NTL announced another special digital multiplexing arrangement — this time on Astra 1E. In what looks like the only remaining U.K.-originated multiplex on this "digital" satellite, three of Turner Broadcasting's news and entertainment channels are joined by The Travel Channel and The Chinese Channel (and potentially others) in a complex simulcrypt solution devised by NTL engineers.

Bosnia provided NTL's broadcast systems group with its biggest challenge of the year — to build a new independent TV network in under three months! The initiative came from the Dayton peace accord and was funded by the international community to provide balanced multiparty news coverage prior to and after the September elections. The project included new studios, a satellite distribution system, two outside broadcast vehicles, an SNG vehicle, and terrestrial transmitters.

Even without its Advanced Products Division, NTL made great strides in the embryonic technology of digital terrestrial television (DTT). October saw an impressive over-air demonstration of a complete end-to-end DTT system with multiple TV services (including widescreen), advanced teletext, conditional access, and an electronic program guide (EPG), all conforming to the European DVB-T specification (2000-carrier). For the demonstration, NTL constructed a fully operational DTT transmitter system for the London area at Croydon as a blueprint for the dozens of similar transmitters that would be required for DTT all around the U.K. Perfect pictures were easily received in central London on small DMV receiver-decoders with all the functionality of consumer black boxes. Journalists and the industry in general were able to experience first-hand what DTT will be like for the viewer and to see that the technology at least is well and truly there.