

case study



Intelsat

"The launch of our expanded hybrid satellite and fiber video network creates new opportunities for delivering standard and high definition feeds for news, sports and other programming between some of the busiest cities in broadcasting today. The end-to-end video delivery solution provided by TANDBERG Television, including its integration services, leaves us well prepared now and far into the future."

Jon Romm, President, Intelsat's Media and Entertainment Unit



thecompany

Intelsat Ltd. offers telephony, corporate network, video and Internet solutions around the globe via capacity on 25 geosynchronous satellites in prime orbital locations. Customers in approximately 200 countries and territories rely on Intelsat's global satellite, teleport and fiber network for high-quality connections, global reach and reliability.

thesituation

A true pioneer in satellite communications, Intelsat has long been a major player in the international satellite industry since its inception in 1964. In response to customer needs, Intelsat recently began providing end-to-end video services through its newly established network of leased fiber, points of presence (POPs) and teleports worldwide.

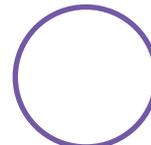
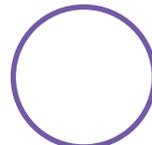
Intelsat announced plans in 2003 to launch a new video delivery network that would bring improved services to North American broadcasters. Launching in early 2004, the network would provide unprecedented service reliability and the flexibility to transmit any type of digital video feed to media centers throughout the United States and globally. Among those feeds would be standard and high definition television for news, sports and syndicated programming.



thechallenge

Intelsat has created an all-digital, hybrid satellite and fiber optic video network. The fiber portion of the network has been developed in collaboration with Level (3) Communications. The network required a turnkey video solution for reliable and flexible transmission of high-quality video content between Intelsat Video POPs in New York, Los Angeles, Washington D.C., Denver and San Francisco, and fiber interconnects into additional North American destinations. These POPs and interconnects would provide access to media companies, sports venues and top news organizations in each region.

To successfully meet the network's demands, Intelsat required a digital compression solution for both standard and high definition video, plus interface equipment to bridge fiber and satellite systems within the network. In addition, control and monitoring equipment was needed to schedule the transfer of video events between multiple sites, centrally manage and allocate resources and bandwidth, and monitor the health of all equipment within the network. The video solution chosen had to be expandable to grow with the network as customer demand necessitated new POPs in additional cities.



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thesolution

TANDBERG Television was selected for its ability to provide all essential equipment for the hybrid satellite and fiber network in one turnkey video solution. Among the many components delivered to multiple sites were the company's fifth-generation MPEG-2 standard E5720 encoders and TT1260 integrated receiver decoders, high definition E5780 encoders and TT1280 IRDs digital compression equipment, and MA5300 ATM adapters for MPEG-2 to ATM bridging and TT6120 MediaLink transport stream processors for interfacing between fiber and satellite systems. The simple upgrade path of the E5720 to the E5780, which requires adding a module to the back of the encoder, was a major selling point for Intelsat.



The key to the overall flexibility of the network lies in TANDBERG Television's CORTEX, an advanced event scheduler that allows Intelsat to centrally manage and allocate resources and bandwidth. CORTEX, along with TANDBERG Television's nCompass Monitoring system to monitor all equipment within the network, was installed at Intelsat's Video Operations Center (VOC) in Washington D.C. At the VOC, operators using CORTEX can book events and transmit video and audio between sites in real-time.



TANDBERG Television's integration skills for network design and construction, plus the provision of third-party routers and ATM switches, solidified the company as the vendor of choice for Intelsat. The complete solution allows Intelsat to take advantage of new business opportunities made possible with this increased capacity and to expand the video network as required.

"TANDBERG Television is among the top providers for complete digital broadcast equipment solutions, with market leading technology and extensive experience in ATM, satellite and fiber-based systems. The solution that TANDBERG Television is providing leaves us plenty of flexibility for growth as our customer base expands, without having to revamp our entire network. And CORTEX, in particular, is the key to this flexibility by allowing us to centrally control equipment and video feeds, while keeping things simple as new sites are added in the future,"

Jon Romm,
President, Intelsat's Media & Entertainment Unit

why TANDBERG Television?

TANDBERG Television has been pioneering digital compression solutions for broadcast systems worldwide since the early 1990s and has an ongoing commitment to delivering solutions that enable broadcasters to build real world systems and grow their digital business models. Along with a previous relationship with Intelsat, its reputation throughout the broadcasting industry as a well-regarded, end-to-end service provider contributed to Intelsat's selection of TANDBERG Television as its vendor of choice.

