

■ New playout automation allows for 36-channel system

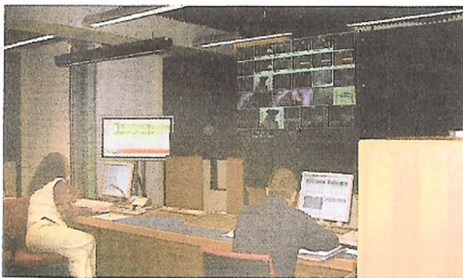
Into full Orbit

By Mike Clark

When Italy-based Orbit Satellite Television and Radio Network wanted to expand the range and style of its channels, it contacted UK independent broadcast systems integrator and manufacturer Television Systems Limited (TSL). TSL won the contract for both systems integration and product supply.

The firm designed and integrated a new playout system using its own products and those supplied by Orbit. The automation system controls all operations, including programme ingest from VTR, caching from LMS or Flexicart to server, playout from the server, master control and effects, closed caption subtitling, voiceover and multiple languages. TSL provided considerable room for growth within the system, as Orbit most likely will expand its service line-up over time.

Orbit is a multichannel, multilingual pay television service, with digital technology able to support a total of 24 television and 24 radio channels. Based in Rome, Orbit was created to provide a vast selection of entertainment and information in English and Arabic to an audience in Europe, with plans to expand this service into Asia and North America and more than 22 nations in the Middle East and North Africa. Orbit's digital decoders allow viewers to access the network, and it contains a



sophisticated encryption system that enables paying subscribers to receive Orbit's encrypted signal.

Frank Kerrin, projects manager with Orbit Communications, is on his second stint with the firm, having returned in 2000 when Orbit was working on its DVB project.

"The system is expandable up to 36 channels, and we've got all the cabling in to do so, with 36 TX paths with DA, etc, but at present we've got four channels plus a 'barker' on it," he explains. "The initial brief was for 12 pay-per-view channels, but after discussions with TSL regarding the possibility of adding other channels, we decided on a system able to be expanded further."

The new system is currently running alongside Orbit's previous 12-channel playout system, which was basically filled as soon as it went on air 10 years ago. Orbit plans to migrate these to the new system, but those already running on it are in

addition to what they already had.

Although a lot of the hardware is installed in the existing CTA, three dedicated rooms have been allocated to the new set-up in the Orbit's premises: a main control room, a suite to control individual channels separately for live events, and an ingest room.

The system installed by TSL includes a Pro-Bel Eclipse 128x128 SDI router expandable to 256x256, a Pro-Bel Freeway 64x16 SDI bypass router in the transmission chain and a five-node SeaChange Broadcast MediaCluster 1600 server.

"We're using a Harris Automation Solutions set-up with four Device Servers — two redundant pairs. We've got two Media Client ingest stations, four Air Client playout control stations and an Air Monitor Client that gives us a playlist display," Kerrin adds. "We've also put in Harris' Cloning Automation System to ensure realtime automated

switch-over from main to back-up if the Device Server fails. We're using Miranda Imagestore automated master controllers in a Presmaster master control system, which is all connected to the automation, so the Imagestores can be controlled from the Presmaster or from the automation — we've got three Presmaster control panels. Connected up to that we also have the Miranda Media Distribution System for distributing graphics and audio files from our graphics and post production areas to the Imagestores." Other kit includes four Sony Flexicarts and 17 Sony MSW-M2100P MPEG IMX players.

TSL products include four AMUs (two in the main control room, one on ingest and one in the press suite), plus four UMDs, three of which are in the ingest room and one in the press suite — they're not used in the main control room, because a Barco rear-screen projection monitoring display system with a 67-inch screen is configured with 18 fixed outputs to monitor up to 18 transmission feeds and 12 routed outputs to monitor various sources. A couple of Sony 42-inch plasma screens are also used to monitor automation timelines.

TSL Director of Systems Julian Knight says, "There was a considerable amount of on-site work, particularly as far as cabling was concerned, as Orbit requested that the system had to be wired for 36 channels — there's a lot of cable in there!"

"We've had direct associations with Orbit for many years, having put in their initial 21-channel TX system way back when they first set up and other things, so our history with Orbit goes a long way back."

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