

# Orbit deploys new playout system

As part of its efforts to expand and improve its channel services, Orbit worked with systems integrator TSL to design and deploy a new, improved playout system. *Digital Studio* takes a look at the technology.

**W**hen Orbit Satellite Television and Radio Network wanted to expand beyond its 12-channel system, which had been running at full capacity for many years, and instead put in place a new set-up that would run alongside the existing playout facility, they called on systems integrator Television Systems Limited (TSL) to construct and deploy a new playout system for them.

The result of that partnership is a new automated playout system at Orbit that controls all of its 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 was involved from the design stage upwards in what it considers to be a significant contract win. As well as providing technical expertise and design know-how, TSL's audio monitoring and UMD products formed a key part of the contract.

"TSL was responsible for the system

design and hardware integration," says Frank Kerrin, projects manager with Orbit Communications. "Although we do have a highly experienced set of engineers here, we do not have the time or skill set to conduct a full systems integration here. We have worked with TSL in the past and found the company to be highly skilled and professional so we got them to do this one as well," he adds.

One of the key issues with regards to the new system that was discussed and agreed upon very early in the project was to wire the playout facility for 36 channels. Although the initial brief was for a 12-channel PPV set-up, discussions between the two companies led to them putting in place more cabling and associated technology required for up to 36 channels.

The channel count on the new system has gradually expanded since launch with nine channels plus a barker being played out. These are both general and thematic in nature. "We would like to migrate existing services off the original system for reasons of reliability and smoother operation but so far we have just been adding new channels. If we get so many channels that we fill up both facilities then great, but otherwise we will move some channels," explains Kerrin.

At the core of this system lies a Harris Automation technology with four device servers operating as two pairs for redundancy. Two Media Ingest stations, four Air Client playout control stations and an Air Monitor Client have also been installed, with the latter designed to provide playlist

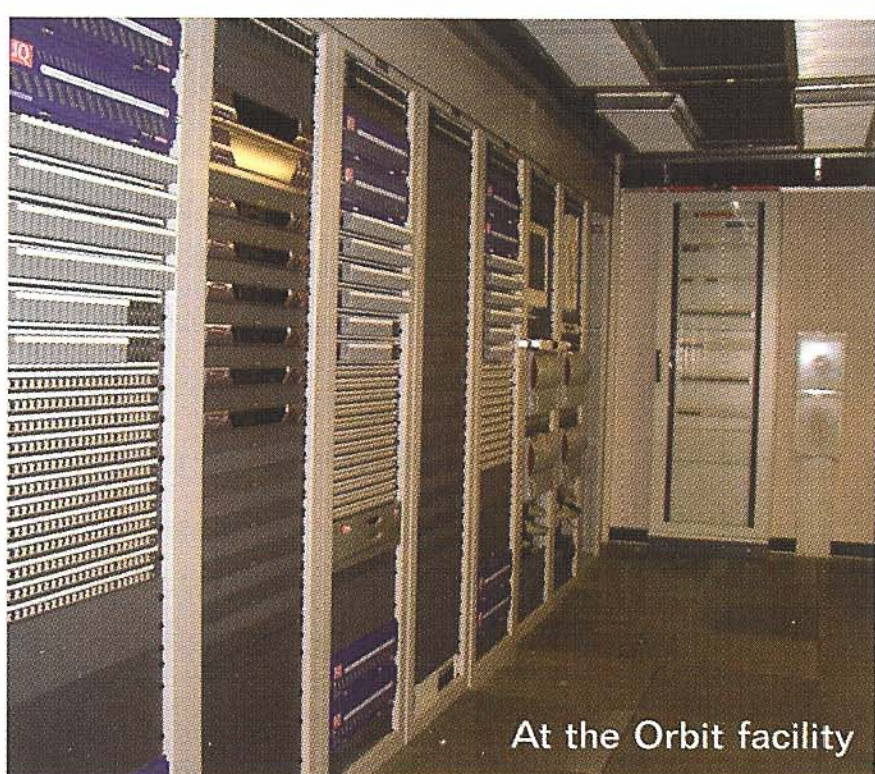


The new Orbit installation will enable playout facility for 36 channels.

display. A Harris Cloning Automation System has also been fitted to handle real-time automated switchover from main to back-up should a Device Server fail under any circumstance.

Since this was a significantly huge project, TSL has used various solutions from key manufacturers like Pro-bel, Miranda, Snell and Wilcox, Tektronix and SeaChange to integrate the system. For instance, a Pro-bel Freeway 64x16 bypass router has been deployed in the transmission chain. A Pro-bel Eclipse 128x128 SDI, which can be expanded to 256x256, sits at the heart of the playout facility.

A Miranda Media Distribution System has been installed to take care of the graphics and audio file distribution. This connects to Miranda Imagestore automated master controllers in a Presmaster master control system. All of this in turn is connected to an automation system, which allows flexibility in terms of the way the Imagestores can be controlled (i.e. either from the Presmaster or via the automation system). The entire solution was pre-built and tested at TSL's facilities in Maidenhead before it was shipped down and installed at the Orbit site. 



At the Orbit facility