

Growth in media needs a boon for teleports

In the ever-changing broadcast landscape, how do teleports keep up with broadcasters' varied needs? **Millette Manalo-Burgos** finds out.

Satellite broadcasting has always been a reliable platform for broadcasters — enabling them to broaden the reach of their content. And as industry players notes, the need for satellite services will remain constant. “Satellite broadcasting continues on a growth trend in Asia, from a continuing expansion of the subscriber base due to rising incomes, and to growth in HDTV,” Robert Bell, executive director of World Teleport Association (WTA) tells *APB*. “That upward trend may moderate if concerns about emerging market financial stability prove true, but it will continue in the long term.”

According to WTA, new media platforms are proving to be a boon not only for broadcasters, but also to teleport operators. Bell adds: “Over-the-top (OTT) is growing fast as well, which may be a counter trend as viewers consider substituting broadband for pay-TV. The good news for teleport operators is that they are perfectly positioned to assist with the transition from traditional to OTT TV. The content runs through their ingest and management system, and customising it for delivery to computers and mobile devices is a natural extension of their services.”

Indeed, the teleport operators that *APB* interviewed revealed that satellite broadcast-related services would remain important to broadcasters, and that these growing needs may prove to be an opportunity for operators to enhance their offerings.

For example, Peter Ostapiuk, head of Media Product Services for Intelsat, explains: “As the media and broadband landscapes continue to converge, media customers are in need of new and efficient IP-based content delivery services. Intelsat is continuing to innovate and provide satellite-based solutions to address these challenges.”

He also points out that there are currently two Intelsat teleports serving the Asia-Pacific region. These are located in Fuchstadt, Germany, which serves South Eastern, Central and Middle Eastern Asia and in California, USA, which serves the Pacific Rim.

Ostapiuk says that North American media customers are using IntelsatOne Prism, an IP content distribution



Intelsat's teleport in Fuchstadt, Germany, provides satellite broadcast services to Asian clients.



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— Robert Bell, executive director of World Teleport Association

managed service that is fully integrated with Intelsat's global satellite fleet and IntelsatOne terrestrial network.

“The core of the IntelsatOne Prism solution is based on the Newtec Dialog multi-service platform, which was installed in Intelsat's Atlanta teleport in Ellenwood, Georgia in January this year,” he adds.

“By utilising the IntelsatOne Prism fully automated managed service, service providers are able to conduct multiple content transmissions via one platform — including live video, file transfer, VoIP (video-over-IP), Internet access and data exchange — enabling efficient, high-quality, multi-screen content delivery. In addition, IntelsatOne Prism ensures future-proof content delivery with the flexibility to adapt to evolving formats and standards.”

Teleport operators in the Asia-

Pacific region are innovating to accommodate customers' growing needs as well. In Malaysia, for example, Measat Satellite Systems, which maintains a huge teleport facility in Cyberjaya, sees Asia as a key market for its services.

“Asia is a key market for Measat's satellite and teleport services, and we see the market growing. This is due to Asia's large population base and general lack of terrestrial fibre as a viable communications option for Asia's rural and remote locations,” says John Loke, VP of network engineering and operations for Measat.

“Communications services such as those provided via the Measat Teleport and Broadcast Center (MTBC) enable key broadcast, telecommunications and broadband sectors in Asia.”

Loke adds that Asia is experiencing growth in broadcast, telecommunications and broadband services. “With



Measat Satellite Systems maintains a huge teleport facility in Cyberjaya, Malaysia, which allows the company to innovate to accommodate to customers' growing needs.



In Singapore, dominant telecommunications company Singtel provides broadcast satellite services, via its teleport facilities around the island. For one client, Singtel supplies downlink services to the IPTV provider that is based in Singapore for downlinking the broadcaster's TV channels from hot-bird satellites and hosting their video headend equipment as well.

the transition to HD still under way, pay-TV demands for HD content are growing. Cellular backhaul across the region is also growing as Asia's large population becomes more affluent and increasingly connected via mobile devices."

Measat's broadcast services that interest customers include the company's 4K/Ultra HD (UHD) platform, which uses the latest compression techniques such as DVB-S2/S2X modulation and HEVC/H.265 encoding. "The infrastructure is scalable and allows us to offer competitive bandwidth solutions for 4K/UHD, HD and SD channel distribution," says Loke. "This service is supported by a redundant dedicated 1Gbps link connecting MTBC with a diversity site, IP layers interconnectivity, and state-of-the-art monitoring tools."

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For broadcasters looking to deploy new platforms, Singtel says its robust antenna farm can downlink TV channels from the respective hotbirds in the Asia-Pacific region. Besides downlinking, Singtel also provides hosting of customers' equipment, including cable headends and easy access to fibre connectivity.

Singtel's three teleports point to more than 30 satellites and is supported by an extensive terrestrial network of more than 200 PoPs in over 160 global cities.

Meanwhile, content remains king, and demand for increased high-quality content is driving media growth in Asia, declares

Intelsat's Ostapiuk, saying: "In developed markets such as Japan, viewers are moving towards widespread 4K/UHD adoption, while many emerging regions are leapfrogging developed markets with increased emphasis on HD and even 4K/UHD content, such as in India. This need for high-quality programming — both 4K/UHD and HD — is only going to increase."

He adds: "Satellite's ability to quickly scale and cost-effectively deliver services is a critical differentiator for direct-to-home (DTH) operators, which are key clients for teleport operators.

"We also continue to see the need for distribution of content from around the globe to or into the Asia-Pacific region," says Ostapiuk. "The growth of regionalised content is driving more bandwidth demand. What was one channel and one feed is now increasing to multiple channels and multiple feeds as content be-

comes customised by nationality or language."

Thus, while assured that broadcasters' need for teleport services would continue to grow, what are the changes in store for the teleport facilities? Measat's Loke predicts that teleports will continue to play a vital role by providing uplink/downlink transmissions between satellites and the ground.

He explains: "In terms of the broadcast landscape, there will be a paradigm shift. Consumers are moving from linear broadcasting to non-linear, meaning they are moving from TV sets to their mobile devices and on-demand viewing."

Accordingly, satellite operators are also moving to provide connectivity for this new mode of video consumption, Loke adds. HTS (High Through Satellites) are being launched to provide Internet connectivity to support broadcasting services in countries where the terrestrial infrastructure is still in

the development stage.

Teleport operators need to support HTS services in the Ku- and Ka-band. "The challenge here is for teleport operators to invest in the right infrastructure to mitigate the impact of rain fade. In addition, teleports need to be carrier-neutral to allow multiple IP transit operators to connect into the teleport. Teleport operators will also need to form ties with IP transit providers for the latter to land within the teleport," Loke explains.

WTA's Bell also sees big challenges for teleports in the future. He says: "The teleport of the future will be less capital- and hardware-intensive and more service- and software-intensive. For broadcasters, teleport operators will be high-value outsourced service providers that manage the programme contribution and distribution end-to-end. They provide seamless global coverage across satellite and terrestrial platforms." **APB**