NBC Affiliate, WLEX-TV Has Found the Ideal Combination of Reliability, Flexibility and Simplicity with Dejero CellSat

CHALLENGE

With around 70,000 fans expected to attend the 2017 Music City Bowl at Nissan Stadium in downtown Nashville, the potential for cellular networks to become congested was high. While cellular connectivity is seemingly everywhere and always available, cellular networks can sometimes become congested or reception may be limited in some areas, resulting in limited bandwidth.

To broadcast the live event and enhance NBC’s coverage with a 90-minute special wrap-around at the end of the game, WLEX-TV needed a simple transmission solution that would provide reliable connectivity regardless of the bandwidth available from the cellular networks—without the additional cost of booking satellite time and hiring specialized satellite operators.

"With Dejero CellSat on board, unlike a traditional SNG truck setup, there is no need to bring in specialist operators or pre-arrange a satellite slot. When the cellular signal alone isn’t strong enough, CellSat will automatically blend in Ku-band IP satellite connectivity to boost bandwidth so we can get high quality live shots to air while saving time and money."

- Sam Gordon, Operations Manager, WLEX-TV

ABOUT WLEX-TV

WLEX-TV is the NBC affiliate in Lexington, Kentucky, and part of the Cordillera Communications Group. As a very popular local station with a broadcast area that covers 40 counties across central Kentucky, they are committed to news, broadcasting more than seven hours of live programming on a typical day.
SOLUTION

Dejero CellSat - a highly reliable, on demand broadcast solution.

WLEX-TV operations manager, Sam Gordon, is no stranger to Dejero’s solutions. Impressed with the quality and user interface of Dejero mobile transmitters, when the WLEX-TV team learned about Dejero’s new connectivity service in partnership with Intelsat, it was a no brainer.

Providing enhanced reliability in situations where cellular networks are congested or cell coverage is limited, Dejero CellSat leverages the company’s patented network blending technology to improve reliability by combining cellular connectivity from multiple mobile network carriers with Ku-band IP satellite connectivity provided by Intelsat.

If available cellular bandwidth dips, up to 7.5 Mb/s of additional satellite bandwidth is automatically provided—more than enough to deliver exceptional picture quality, even if cellular connectivity is lost entirely. It enables broadcasters to manage their transmission costs by using cellular when available, or CellSat when added reliability is desired.

Blending cellular with satellite

The ability of CellSat to deliver reliable connectivity is made possible by our patented and patent pending blending technology.

By analyzing the characteristics of up to six cellular connections and the Intelsat Ku-band IP connection in real time, our algorithm dynamically and intelligently manages the fluctuating bandwidth and latency, choosing the optimal path for delivering the IP packets to the playout destination.

With a focus on simplicity and ease of use in all Dejero’s solutions, CellSat is no exception. Gordon’s team simply put up the dish and the satellite connection is established automatically, but only when the cellular signal alone wasn’t strong enough for a high-quality live transmission. With CellSat, unlike a traditional SNG truck set-up, there is no need to bring in specialist operators or pre-arrange a satellite slot. What’s more, connectivity services are managed and billed by Dejero, instead of from multiple service providers, which greatly simplifies data management.
The camera was connected to the in-vehicle encoder/transmitter using CellSat. Feeds were reconstructed and decoded for playout by a Dejero receiver back at the studio. Using Dejero’s cloud-based management system, studio operators could remotely control the field transmitters, monitor and route the incoming video feeds, and view detailed performance data, leaving the remote crew to get on with the job of covering the event.

RESULTS

WLEX-TV found the ideal combination of reliability, flexibility and simplicity with CellSat. Gordon’s team had confidence they wouldn’t lose connectivity. The solution worked flawlessly for their field operator. Back at the station, video quality was excellent, unable to see any changes from cellular to satellite transmission; the picture quality was that good. The latency also performed just like any other live broadcast they are used to.

Need help building the right solution for your video transport needs?

Start the conversation today with one of our sales representatives.

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