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NAB Show Coverage Begins On Page 5

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President's Message

Bill Hayes, BTS President



Greeting members of the Broadcast Technology Society. At the time that I'm writing this, I've recently attended the National Association of Broadcasters (NAB) Show in Las Vegas, and have just returned from the Advanced Television Systems Committee (ATSC) annual conference in Washington, D.C. I'm convinced more than ever that it is an exciting time to be in

broadcasting! There were a couple of very interesting trends that I saw at NAB that make me believe this.

Anyone working in our industry is aware of the huge push of internet protocol (IP) technologies in content distribution. Most broadcast facilities are providing IP streams and services for their consumers to access on-demand and in real time, in addition to their traditional over-the-air streams and services. However, on the creative side—especially in video production—we've stuck with the more traditional AES audio and SDI video because of their relative ease of use and low latency. Even the more recent Society of Motion Picture

and Television Engineers (SMPTE) ST 2022-6 standard for sending digital video over IP networks essentially takes the SDI signal and converts it to packets for transmission over an IP network. In essence, this functions as a replacement for traditional SDI, using CAT-5/6 data cable rather than coax. I know in my own experience as director of engineering for Iowa Public Television, when looking at incremental improvements to my facilities, I didn't see the benefit of switching to this new technology as compelling enough to make the leap. I'm certain that if I were building a completely new facility, I would have given the idea more consideration. However, in light of the existing infrastructure it didn't make sense to me.

At the NAB show, however, I had the opportunity to visit the IP Showcase Pavilion where 40 or more vendors were providing interoperability demonstrations of the hardware, software and services utilizing the soon-to-be-released SMPTE ST 2110 standard. ST 2110 is very different from 2022-6, in that rather than just establishing a one-way Ethernet connection to move an SDI stream, devices are truly networked together. Not only does this allow independent movement of video, audio and metadata over a true network mesh, it also facilitates bidirectional connectivity via a single Ethernet connection. Such a technology will enable a wealth of control and command functionality. The benefits derived here make the rethinking of current and future facility designs a must. While the standard is not completed, it is very close, and manufacturers are already delivering products that are 2110-compliant.

ATSC 3.0 was also a hot topic at NAB, with a 3.0 pavilion showing end-to-end demonstrations of the capabilities and potentials of the standard featured prominently in the Grand Lobby of the Las Vegas Convention Center. One of the first things I noted was the use of the "Next-Gen Television" descriptor at the exhibit, rather than "ATSC 3.0." To me, this is a clear indicator that the people who will be marketing products and services to the consumers are gearing up for a roll-out. While those of us who have been working on ATSC 3.0 since the beginning will probably always think of it by that name, this isn't a particularly consumer-friendly term, nor does it capture one's imagination. In a way, it reminded me of the roll-out of IEEE 1394, better known as FireWire.

Just as with the aforementioned SMPTE 2110, the ATSC 3.0 standard has not yet been officially released. However, like 2110, it is so close to completion that manufacturers are already building compliant hardware, and South Korea has already begun experimental broadcasts of UHD television using ATSC 3.0, with the goal of establishing a fulltime service in time for the 2018 Winter Olympic Games.

The combination of these two rapidly emerging technologies is the reason that I think broadcasting has an exciting future. An IP-based infrastructure that's capable of reaching

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