

SCTE PRESENTS

SCTE® PRESENTS: Across the Pond

BY MELISSA COGAVIN, BROADBAND JOURNAL

JULIAN CLOVER, EDITOR OF BROADBAND TV NEWS, RECENTLY REPORTED ON OUR VERY SUCCESSFUL SCTE® PRESENTS: ACROSS THE POND EVNT IN JUNE. HIS EXPERT INSIGHT INTO THE KEY DEVELOPMENTS AND DISCUSSIONS THAT TOOK PLACE OVER THE COURSE OF THE DAY MAKE THIS A GREAT READ IF YOU WERE THERE, AND AN EVEN GREATER READ IF YOU WEREN'T. ENJOY!

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Just as George Bernard Shaw observed that England and America were two countries divided by a common language, SCTE's Across the Pond sessions (25 June, London) proved much the same is true for cable and telecoms technology.

In his introduction SCTE President Dr Anthony Basham described the two countries as being on a "parallel journey". "Even though we're transitioning from cable to fibre all the principles are the same. It's just using fibre, instead of cable, for broadcasting," he said.

It was a theme picked up by Paul Broadhurst, President and Chief Executive, Technetix, who observed that there were almost as many similarities as there were differences. Cable veteran and former Treasurer of the SCTE, Broadhurst is well placed to make this assessment, with half of his business coming from North America and the other half from Europe.

In North America, cable broadband is still the leading distribution technology and grew to 60% from 56% during the Covid period of the early part of the decade. Behind this was the combination of telecoms, XDSL and broadband in a market where that hadn't previously been too much competition. "Lots of people were working from home, at a sort of 30-to 50Mbps max DSL connection, which is all right for streaming video, but just not good enough with all its latency issues for video calls."

In Latin America, where there is plenty of competition from smaller fibre companies, cable has itself been turning to fibre, mainly G-PON "because G-PON is good enough." Whereas in Northern Europe, all the fibre rollouts are mainly X-PON, which offers the ability to deliver speeds of around 10Gbps, though there is some G-PON.

Broadhurst went on, "If you're a cable broadband provider, you've sort of got fixed wireless access attacking at the bottom at the low end. And you've got fibre, which is the more sexy technology in the way people perceive it attacking at the top end."

DOCSIS was now "holding its own" with a loss of only one or two per cent a year in a market that Broadhurst described as a "slow melting ice cube" and "no sign it won't be a main player in 20 years". Operators are now upgrading to DOCSIS 3.1+ or DOCSIS 4.0, which will be the first operators to have upgraded their outside plant in 20 years.

DOCSIS 3.1 is still very common; there is no sign of wireless wireline, but it is being discussed. Work is also underway in integrating 5G with the broadband system.

However, DSL is being eroded by fixed broadband access, and its speeds are unable to match those of the other technologies.

Broadhurst likened the pacy market to the early days of cable where it was "connections, connections, connections", but about 2% of properties remain very difficult to reach, so new technologies are being developed to address this.

Generally, operators are focusing on CAPEX efficiency, demanding any network upgrades are made for minimal cost. "Operators are employing what they call a 'cap and grow'" Broadhurst explained, "which is essentially upgrading to DOCSIS 3.1+, giving you up to five OFDM blocks, that's the capability to do 8Gbps down, two up, which makes cable competitive with XGS-PON, or DOCSIS 4.0. DOCSIS 4.0 gives you even more, more like ten."

In Europe, there is a move towards DOCSIS 4.0 technology, but in a declining market against new fibre-to-the-home build, leading to network upgrades being made only at a minimal cost. "FTTX is really the big thing and there are markets like the UK where there are over 200 altnet companies," Broadhurst continued. "In Germany, we're also seeing large investments. In Southern Europe the regulatory situation allowed telecoms companies to invest in fibre early on."

On the networks themselves, 20% of customers are using 80% of the capacity, so operators are moving these onto fibre.

David Whitehead, Senior Director of Sales Engineering and Solution Architecture, EMEA, Harmonic, said offloading some cable subs onto a fibre network worked if you were fortunate enough to have a parallel deployment. "But for those that don't, it means more capacity. And that increased capacity for cable can come with more spectrum on DOCSIS 3.1, the DOCSIS 3.1+ technologies, and increasingly moving to DOCSIS 4.0.

"Charter's view of the cost of migrating to DOCSIS 4.0 was about \$100 per subscriber connection. And that is very achievable compared to the cost of building a parallel fibre network."



Whitehead said operators were “Stepping away from speed wins” and instead were concentrating on improving the quality of service and this represents a big part of Comcast’s messaging.

The US operator has over 6 million homes on its Ultra Low Latency deployment. “On a loaded network they see the packets”, he explains. “If you’re playing a gaming service, watching a streaming service, it means you’re not being taken out because of poor latency.”

“The Comcast service today has three different application service providers that are marking their packets and that’s limiting in some ways,” says Whitehead. “One of the things we showed at ANGA COM in Cologne is the solution from a company called Cujo, who have an application that runs on a gateway and they have an increasing list of applications, so an operator deploying that technology in their home gateways can start to pick and choose the applications that they want to prioritise through the network.”

Such prioritisation brings up the issue of network neutrality, but Whitehead doesn’t believe it’s the issue it once was. “It gives more of an opportunity to differentiate that I

don’t think we have in quite the same way here, but certainly it gives more flexibility now to operators to prioritise their own services. Whether that’s good or bad I think remains to be seen.”

DOCSIS 4.0 is now available to all operators, whereas only a year ago, this was restricted to those who had a developer agreement with Broadcom.

Even the small city carriers are acknowledging that DOCSIS 4.0 is important to them.

The real threat is coming from wireless broadband. Just as homes ‘cut the cord’ for their TV, so too wired broadband is coming under pressure. Verizon and T-Mobile are already successfully building a FWA (Fixed Wireless Access) business in the US.

Meanwhile, President Trump has revised rules established during the Biden administration for distributing \$42.5 billion in funding for rural broadband funding. This eases the restrictions on Elon Musk’s Starlink and other satellite-based providers.

As streaming services take over from traditional broadcast TV, the load on

broadband services has been increasing. In May 2025, for the first time in the United States, viewing on streaming services overtook that of cable and broadcast TV. Since Nielsen started tracking usage in 2021, broadcast was down 21% and cable 39%, while streaming has grown around 71%.

“The more loading, the closer you get to congestion, and you then have to start to think about segmentation.”

QUALITY OF EXPERIENCE

Despite the increased use of prioritisation, 47% of US subscribers have cancelled a subscription due to buffering, according to Bitmovin figures quoted by Hamid El Gharbaoui, operations manager, UK & Nordics, Witbe.

El Gharbaoui said the dozens of platforms that are now available internationally were creating even higher user expectations. “The result of that is a massive operational challenge where every bug increases churn. Studies show that every second of delay increases the likelihood of abandonment; with the number of offers available to consumers now, people stop complaining, they just leave.”



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The problem is made worse by the fragmentation of devices – the more devices or operating systems, the greater the number of versions of each app will be required.

El Gharbaoui warned that the number of connected TVs, rising to a predicted 2bn by 2030, all requiring constant updates and offering increasing amounts of content will see an onslaught of ‘shifting bugs’, creating ‘monumental headaches.’

The antidote appears to be AI, where robots can learn to read and navigate menu structures or keyboards across platforms. “Instead of describing very small actions to navigate we can just have one global instruction asking the robot to recognise where you are and navigate to this sub menu itself, so the net result is the robot learns as it progresses, and the end user needs less time to perform validation.”

LEARNING EXPERIENCE

The conversation pivoted towards training. Cesar Ruiz, President & CEO, The Learning Alliance, based in Florida, surprised no one when he said that no young person actually wakes up and declares they want to be a cable engineer. His challenge is to convince them that it’s actually an important part of society.

In the United States, Ruiz has focused in on those who have English as a second language, as well as US Veterans, who make up 80% of learners. “When they come out of the military they have nowhere to go,” Ruiz explains. Rather than traditional classroom learning, The Learning Alliance has created a 12-hour-a-day boot camp in Florida. It boasts a 86% retention rate after a year, double that of the industry as a whole.

Ruiz’s shared his concerns, echoed by much of the industry in Europe that the engineering workforce is an aging demographic, and unless we act quickly, there is the potential “loss of a lot of knowledge.”

DEI

Diversity, equity, and inclusion (DEI) has been going through a tough time since the Trump administration arrived to Make America Great Again. While the term has shifted in meaning, the motivation behind the term remains unchanged. Maria

Brennan, President & CEO at Women in Cable Telecommunications, Lauren Trudeau, Vice President of Operations, OpenVault, and our own Melissa Cogavin, Editor of Broadband Journal explored this idea on the last panel of the day, “Four Global Women, One Powerful Conversation.”

“I’m not saying that DEI is important because half the population are women, but because it’s good for business,” Brennan told delegates, adding that “Only 22% of AI professionals globally are female, and only 15% of AI professionals in the UK are people of colour.” She added that it was important to have “a wide swath of demographic when you are serving a wide swath of consumer.”

Covid had brought great changes to the workplace: “You can be yourself in the workplace now much more than you could be before,” said Trudeau. But she also pointed to changes between generations, describing a young colleague who was both flummoxed by a stapler, and where exactly on an envelope to put a stamp.

Whether that is due to the two years of lockdowns or other, more institutional failings isn’t really clear, but it speaks to a wider disconnect between generations and general knowledge.

Colleagues who need that extra push can benefit from mentoring or sponsoring. “The difference between mentoring and sponsoring is subtle but important,” Maria explained. “Mentoring is more like coaching, whereas sponsoring is a more supportive role, speaking up for people when they are not in the room, facilitating introductions and so on.” She added, that it was particularly important for younger people.

The advice was to find your network and exploit it, rather than waiting for it to come to you.

SCTE® Presents: Across The Pond was a thorough exploration of the technical, commercial and social elements of our industry that are similar but different to those of North America, and a big thank you to the speakers whose expertise across all of these were both fascinating and valuable.

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SAVE THE DATE

Our next event,

SCTE® Presents: TV to IP - The Capacity Challenge

takes place at One Great George Street on Wednesday October 8.

Register at

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