In a nutshell, how did BBWF go for you?

We had three major areas of focus and within those areas, we had a number of demonstrations at the show. One showcased the latest developments of our Cloud Central Office (CloudCO) and Open Broadband – Broadband Access Abstraction (OB-BAA) which was all about automation and virtualisation and the other demonstrations were all around the Connected Home, where that is going and how a standards-based approach can provide a clear and simple migration path for operators. In addition to the demonstrations, we ran two workshops that were extremely well attended, one exploring the aforementioned Connected Home, and a second covering another key area of focus for the Forum, 5G. Our booth was completely packed during the entire show and we had a lot of traffic running through there. With those three areas, we felt we were right on the money with regard to where people’s interest lay.

Where does fibre optics sit with the Broadband Forum?

It’s a very hot topic for us. In the new year, we will be launching the first certified products for 10G PON, including XGS-PON and NG-PON2. What’s good about this is that we will be ahead of the curve this time. When we did the certifications for GPON, that was designed to open up that market so that any of the ONU players could bid on RFPs, but that was after G-PON had already started to be deployed. This time, however, there will be certification right from the beginning. The hope of the industry, therefore, is that this will really accelerate deployments for 10G PON. I think most people see those [technologies] as precursors of 5G because they fit in with the whole fronthaul/backhaul discussion. So, fibre is a big topic for us, but more of the PON variety. Traditionally, we haven’t done as much work on point-to-point, for example, and while we do pay attention to that sort of technology, it obviously hasn’t needed the same degree of standards activity, so we’ve been more PON focused. I think even in areas where PON wasn’t being deployed as fast, we’re starting to see a lot more announcements and processes are speeding up, with the UK being a good example.

What else is Broadband Forum planning to work on in 2020?

We have four major areas of focus. There’s a lot of activity going on in 5G, the Connected Home, Cloud and Cloud CO, and in 10G access. From an issue perspective, there are a couple of things on top of that which are getting a lot of momentum right now. One is a Vodafone-sponsored project called Broadband Quality Experience Delivered (Broadband QED), which is an acknowledgement that speed should not be the only factor that plays into the perception of the quality of the broadband connection. We’ve been working with machine learning and algorithms for measuring and tapping into all the other aspects of broadband delivery, such as latency, jitter and elements of quality and a whole range of other areas and basically driving that forward. We have seen a lot of companies coming on board with helping to promote and build products around that. Fibre has a play there too, and across the whole broadband spectrum, as companies move towards fibre and delivering hyper-broadband speeds across different media types.

In the Connected Home area, we’ve seen a lot of progress in the evolution of TR069, which hit one billion installations a year ago. This has now evolved into a new platform which we call the User Services Platform (USP). USP has gained a lot of momentum over the last year. In particular, there were a number of demonstrations by the Forum, many of them sponsored by Vodafone and other companies which have been driving that work forward. We’ve also been doing a lot of work in the Connected Home.
[Fibre] is a very hot topic for us. In the new year, we will be launching the first certified products for 10G PON, including XGS-PON and NG-PON2.

around Wi-Fi and mesh Wi-Fi, and its measurability in both quality and the application of mesh.

Looking at 5G, that is going to accelerate toward mass deployment in this coming year so we’ve been doing a lot of foundation work on that with 3GPP and others to establish how convergence happens with the existing network infrastructure and what the services will look like in the converged world of the future. A lot of the work we’ve done to date will come to fruition in the next six-to-nine months as those standards get solidified and we actually see real 5G deployments hitting the market, rather than the trials and technology tweaks we’ve seen up to now.

With our work on Cloud and CloudCO, we made a couple of interesting announcements at BBWF. We’ve been doing a lot of work with Open Networking Foundation on establishing the role that our Open Broadband – Broadband Access Abstraction projects will be playing in the future, which can be best described as a leading path for carriers seeking to implement SDN and virtualisation overall in brownfield deployments. That’s a major area of focus and the demonstrations at BBWF were extremely popular so there’s a lot of momentum in that area. Additionally, there’s the certification of 10G PON at the beginning of 2020. We’ve been doing a lot of activity around that space and we don’t want to limit it to 10G because there’s been a lot of conversations especially driven by 5G around 25G, 40G and 100G, and we’ll be doing a lot of work around that in the coming months as well. The Virtual Broadband Network Gateway is also something that’s getting a lot of focus and momentum.

PD: Does Broadband Forum look at issues around hybrid broadband network management? RM: Yes, this is something we’ve been focused on for quite a long time, to get a more homogenous view of network management for broadband. The more similarly you manage them, the easier it is, as you have to worry about co-existence and certainly migration. Some of our early work was about creating some abstraction but that has progressed ever since. We have a YANG modelling project that has been going on for some time and the idea there is to have as much similarity as possible between the access technologies, which means you can then abstract the management to a higher layer. The YANG itself was delivered as a regular specification and we subsequently took it into an open source project with the automation piece being a particularly interesting feature.