

## From the desk of Rouzbeh



Dr. Rouzbeh Yassini

*The 802.11 Wireless LAN Working Group formally initiated new work on Extremely High Throughput (EHT).*

### **Hello,**

Last month we saw the next shoe to drop in Microsoft's TV White Space (TVWS) strategy. Recall that in July 2017 Microsoft said it could spend up to \$10 billion to get broadband deployed using a broadband wireless network powered by TVWS. It caught my attention.

Now, here's what came this July.

### **Microsoft and Radwin to Team**

We have news of a strategic partnership announced by Microsoft and Radwin, an Israeli company that delivers wireless broadband solutions. A release about this development is available at Microsoft's [WEBSITE](#).

As a follower of BCoE you likely know about the research and tech trials we have conducted surrounding TVWS. A review of our TVWS work is available in our August 2017 [NEWSLETTER](#). The announced partnership is part of Microsoft's Initiative to expand broadband access via a number of technologies, including TVWS.

### **IEEE report**

Paul Nikolich, Chairman IEEE 802 LAN/MAN Standards Committee, IEEE Fellow

The 802 LAN/MAN Standards Committee (consisting of 750+ of dedicated, hardworking volunteer experts from all sectors of the data communications industry; components, silicon, systems and service providers that brought you Ethernet and WiFi Standards) met during the second week of July in San Diego to progress the standardization of a wide array of technologies. I will address a couple of the more interesting new activities in this newsletter.

The 802.11 Wireless LAN Working Group formally initiated new work on Extremely High Throughput (EHT). The focus of the work will be to increase peak throughput and further improve efficiency for high throughput, low latency applications such as video over wireless LAN, gaming, augmented reality and virtual reality in the license exempt portions of the radio frequency spectrum between 1 to 7.125 giga-Hertz. This may be achieved using techniques such as 320 mega-Hertz bandwidths, multiband aggregation, 16 spatial streams and multi-access point coordination. A request to form a Study Group was approved, with the task to further refine the scope and purpose for beginning an EHT Project by May 2019.



The 802.3 Ethernet Working Group formally initiated new work on ‘increased reach Ethernet optical subscriber access (otherwise known as Super-PON). The focus of this work will be to increase maximum reach from 10-20km to 40-50km, increase the maximum number of subscribers per strand from 64 to 1024 leveraging wavelength division multiplexing and to reduce the number of local and regional offices where the active equipment is typically housed. Some of the technologies under consideration will be wavelength division multiplexing, arrayed waveguide gratings, central office optical amplification, and tunable lasers. These technologies will be particularly well suited for deployment by multiple system (cable) operators and telco operators. It is expected a Super PON project could begin as soon as March 2019

So, there you have it – the latest from IEEE 802. activities in both wired and wireless technologies as well as positive news on TVWS. Thanks for reading.

**Rouzbeh**