

## SMW Crowd Taxes Networks on Day 2

As Day 2 of CTIA rolls around, bleary eyed convention goers are increasingly reliant on three things: coffee, sugar, and their mobile data connection. While donuts and coffee are easy enough to find, mobile Internet can be more of a struggle to locate. To find out if the mobile networks of Las Vegas are feeling as fatigued as those of us on the ground, network testing specialists Global Wireless Solutions (GWS) have been walking the convention floor with their Rohde & Schwarz SwissQuall Freerider backpacks for another grueling day.

No network operator was safe, no LTE band was spared, and no voice calls were not rigorously analyzed. The results have been laid bare below...

During testing, Verizon VoLTE was the only network to successfully setup and complete all voice calls. AT&T and Sprint were close but each had a couple of failed calls. In particular, AT&T and Sprint each had a blocked call near the keynote ballroom during the 9:00 session. Plus, AT&T dropped a call on the floor in the Testing Zone, while Sprint blocked another call in the MobileCON area. Like Day 1, T-Mobile's VoLTE struggled to complete call setups, with several blocks in the outside entrance hall near the CTIA Registration, plus a block near the keynote ballroom, and a couple of blocks in the rear of the floor near the Wearables section.

On Day 2, AT&T pulled ahead as the only data network that successfully completed all 600 task requests that GWS executed while transferring over 3 GB of data on their network during the 2 hour test. Each of the other networks failed to complete 3 task requests.

Checking your social media? AT&T loaded Facebook pages faster than any other network. However, if raw speed is what gets you excited, T-Mobile did not disappoint. Despite its VoLTE struggles, T-Mobile continued to set an aggressive pace with a 22 Mbps download and 18 Mbps upload throughput (fairly consistent with Day 1 results). AT&T delivered the next highest download throughput levels at 13 Mbps (improving from 9 Mbps on Day 1). Verizon delivered download throughputs at 11 Mbps, without any of the issues seen during Day 1 as only 5% of all tasks had throughputs less than 1.5 Mbps (versus 40% on Day 1). But Verizon did provide strong upload throughputs of 8 Mbps, second behind T-Mobile. Sprint's LTE network provided about 9 Mbps download and 5 Mbps upload.

Making VoWiFi calls? Using their Mobile Diagnostic App, GWS also tested several networks in six locations around the CTIA hallways and meeting areas. Here's what they found: at the top were Cablevision Freewheel and T-Mobile, each with a 93 percent success rate in making and completing calls, at the bottom was Scratch Wireless with an 82% success rate, and in the middle was Google Fi and Republic Wireless.

Testing is now complete, all networks have put down their phones and turned in their tests. Did everyone pass? According to GWS's CEO, Paul Carter: "This year GWS's detailed tests included performance assessments of advanced and evolving networks and technologies from VoLTE to HD calling to VoWiFi. And overall these ever evolving networks performed well. Ultimately, the show attendees won!" ●

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But fun was the operative word as Claire described the initiatives that have rolled out on his watch, including promotions targeted at competitors like AT&T. It's part of his plan to become the price leader.

"Is it responsible to be a price leader?" Claire said is the question asked of him often, to which he replied that being a price leader in the United States still makes Sprint one of the highest ARPU companies in the world.

Attwell Baker pointed out that Sprint has been promising to improve for a long time but not really come through on that promise.

"What's going to be different now," she asked.

Claire said a big differentiator for Sprint now is the sheer amount of spectrum in its possession, "more than anyone on the planet."

"We're going to leverage our spectrum," said Claire, illustrating that Sprint's network densification plans will add thousands of macro sites and tens of thousands of small cells.

He also talked up Sprint's carrier aggregation work and said the new iPhone supports carrier aggregation, so Sprint customers can expect their peak download speeds to double or triple when they get the new device.

New Cisco CEO Chuck Robbins, who was also in on the keynote conversation, can also look to Apple for a boost.

Cisco recently announced a partnership agreement with Apple and Robbins provided some details about what it will mean for both companies.

One of the key components will be giving customers the ability to prioritize enterprise applications running on iOS, emphasizing mission critical over applications like YouTube.

Robbins also said Cisco is going to take the iPhone and make it an integrated device on its unified communications platform.

Robbins said that Apple CEO Tim Cook even showed up for Cisco's annual sales meeting last week.

Like Claire, Robbins was very bullish on Cisco's future. He said Cisco built a lot of its business on connecting people and places so he was encouraged to see the projected explosion for connections in the coming years.

He also talked about the opportunity that will arise in analyzing all the new data that will come along with all the new connections and how it can be used to optimize business for Cisco's customers.

"We have to help our customers make different decisions based on those connections," said Robbins. ●