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Signals Flash provides timely information and analysis on major wireless events as they occur. It is a complimentary research bulletin that is intended for the clientele of Signals Research Group, LLC and the subscribers of its Signals Ahead newsletter. For additional information about SRG and the various research and consulting services that we offer, please visit our web site at www.signalsresearch.com.

The Sights and Sounds of LTE

cliff notes for our LTE video clip

- ◆ We just posted a video to the SRG website (Watch it in Action section in the lower left-hand corner) that provides additional insight into our LTE network testing.
- ◆ The video focuses on a pedestrian test from Stockholm and a drive test in Oslo.
- ◆ We include a captured video feed of the Accuver XCAL LTE drive test tool to give a sample of the types of metrics that we captured and which we could watch in real time when conducting the tests.
- ◆ We have also made a modest correction to the report to fix some incorrectly labeled figures – if you would like an updated copy please contact us to receive it.
- ◆ A high-resolution version of the full report is available while if you are interested in obtaining the complete set of data, please contact us for additional information.

Thoughts and Implications

As we indicated in our most recent Signals Ahead, we produced a “behind the scenes” video which shows the sights and sounds of our LTE network drive tests from Stockholm, Sweden and Oslo, Norway. The 4 minute video, which is appropriately set to the music of the Black Eyed Peas – the official band of the drive test, shows us in action as we collected the data.

In addition to still shots of the terrain where the tests occurred, we include a live streaming video feed that we shot with our Logitech webcam and the LiveCast Pro application, which supports the real-time streaming of video to a web-based server where it is subsequently cached for posterity sake. In our case, we encoded the video at 500kbps VGA to thoroughly stress the uplink performance.

We also include a captured video feed of the Accuver XCAL LTE drive test tool which provides an excellent opportunity for readers to see what we saw when we were collecting the data. The information portrayed in these videos shows many of the important KPIs that we include in the Signals Ahead report. If nothing else, these video clips document that the performance that we witnessed and the results that we present in our report are real.

In hindsight, some of the video is a bit choppy and we believe due to a deficiency with our cheap webcam, which also does a terrible job of dealing with the Nordic sun. At only 500kbps the LTE network should not have been the bottleneck, but perhaps the more stringent requirements of the VGA encoding mechanism had a bigger factor than we anticipated.

In any event, the effect is rather slight and it doesn't detract from what would have been eligible for an Academy Award had we finished the video in an expeditious manner.

Separately, at least one observant reader noticed that we mislabeled the CINR versus RSSI scatter plots in the report. Being of the anal nature, we have since corrected these figures so if you would like an updated version of the report, just drop us an email and we will provide it. A high-resolution version is also available.

Finally, if your organization is interested in obtaining all of the raw data that we collected from the two network drive tests, please contact us to discuss licensing terms.

Biography

Michael Thelander is the founder of Signals Research Group, LLC (SRG), a research consultancy that offers thought-leading field research and consulting services on the wireless telecommunications industry. In his current endeavor, he leads a team of industry experts providing technical and operator economic analysis for clients on a global basis. Mr. Thelander is also responsible for the consultancy's Signals Ahead research product, including its widely acclaimed "Chips and Salsa" series of reports that focus on the wireless IC industry.

Previously, Mr. Thelander was an analyst with Deutsche Bank Equity Research, a consultant with KPMG (now known as BearingPoint), and a communications officer with the United States Army. Mr. Thelander has also published numerous articles for leading trade publications and engineering journals throughout his career.

He has been an invited speaker at industry conferences and company-sponsored events around the world and he is frequently quoted by major news sources and industry newsletters, including The Economist, BusinessWeek, The Wall Street Journal, Fortune, Financial Times, Investors Business Daily, Reuters, Bloomberg News, and The China Daily.

Mr. Thelander earned a Masters of Science in Solid State Physics from North Carolina State University and a Masters of Business Administration from the University of Chicago, Graduate School of Business.

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