Auto-Aligning Street Level Backhaul Successfully Demonstrated by Siklu and AWTG

Kevin Tanzillo, Siklu

Siklu [1] (Petach Tikva, Israel) and technical wireless service provider AWTG [2] (London, UK) have successfully deployed 60 GHz backhaul radios on lighting poles using an auto-alignment toolkit that requires no human intervention.

The installation of Siklu's new toolkit took place in AWTG's Small Cell testbed located in Barnsley, a town of more than 228,000 people in the north central UK, and work was done by Barnsley Council's Highways Department.

AWTG runs its Small Cell testbed and provides a free WiFi service in Barnsley town center. Data usage has grown dramatically and AWTG has been evaluating technologies that can provide stable, high-capacity WiFi coverage.

Upgrading the capacity of street level backhaul is a top priority, but moving to higher throughput line of sight technologies is proving a significant challenge. The question is how to enable non-telco professionals, such as the Barnsley Highways Department, to install complex narrow-beam systems.

AWTG and Siklu set up a field trial for auto-aligning Siklu's EtherHaul-600T link.

"Despite the rain, physically installing the EtherHaul-600T and attaching the auto-alignment kit took two minutes. There really isn't much to the physical installation," said Uri Levi, Siklu's Director of Global Professional Services. "Once we attached the

auto-alignment engine it took 12 minutes for each side to align and then we were getting a full gigabit throughput between the units with zero errors and no dropped packets with no human intervention."

AWTG and Siklu declared the trial a success. "We have a real need for high capacity backhaul that can be installed on street furniture. Siklu's auto-alignment toolkit makes installing it feasible, since we can use any installers. It also reduces the cost of installation, making it a very competitive solution," said Bobby Mughal, Engineering Director of AWTG.

The Siklu auto-alignment kit is in the final stages of development. "We expect to provide a consistent 15-minute auto-alignment time in a few months," said Itzik Ben-Bassat, Siklu's CEO. "This tool changes the economics of using millimeter waves for street level backhaul by greatly reducing installation time and costs."

"The millimeter wave spectrum is interference free, offers huge capacity, and now its installation cost and complexity are on par with less robust street level wireless backhaul technologies."

Siklu will demonstrate the auto-alignment tool at the Small Cell World Summit in London June 10-12.

For more information visit siklu.com [1].

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