

NB-IoT Gains Early Commercial Traction in the US

One of the big changes in IoT could come in a payload of just 50 bytes, as major carriers ready for commercial uses of NB-IoT in the US.

The initial commercial deployments on narrowband Internet of Things (NB-IoT) technology are starting in the country. Three major carriers in the country now offer the technology for potential customers.

Over the last two weeks, T-Mobile has launched the first commercial NB-IoT service with Twilio for Sensoneo's trash management system in parts of the US. The carrier has also introduced the first NB-IoT asset tracking system in the US.

T-Mobile initially launched its NB-IoT in July 2018. This was the first nationwide launch in the US.

AT&T introduced its nationwide NB-IoT on April 29 this year. "We have not announced any commercial customers since we launched our NB-IoT network in April," an AT&T spokeswoman tells Light Reading.

AT&T certified its first NB-IoT chip module, the Telit ME910C1, on June 19 2019.

Verizon launched its nationwide NB-IoT network on May 14, 2019. The operator won't reveal any details on any "commercial traffic on any of our networks," says a Verizon spokeswoman. "That would be information our competitors would love to have."

Verizon is testing modules from three vendors -- Quectel, SIM-COM and Telit -- on the network.

Sprint hasn't launched a NB-IoT network yet.

NB-IoT is a Low Power Wide Area (LPWA) technology that allows transmissions of up to 100-kbit/s with a battery life of ten years. AT&T, T-Mobile and Verizon are all deploying NB-IoT in the guard bands of LTE in 200KHz channels. A guard band is the unused part of spectrum between radio channels.

Part of the reason NB-IoT is so low-power compared to normal LTE networks is that the narrowband chipsets and modules are designed to transmit small packets of data on the network and then sleep for days, months or even years between data transmissions.