

# Low Power WAN Internet of Things (IoT): Non-cellular LPWAN IoT Market Outlook and Forecasts 2016 - 2021

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## Abstracts

Many Internet of Things (IoT) applications require a combination of nationwide coverage, battery life of up to 10 years, endpoint hardware costs less than \$5 USD, and data rates ranging from hundreds of bits per second (bps) to tens of kilobits per second (kbps). Cellular Wide Area Networks (WAN) have historically been technically and operationally challenged to support Internet of IoT apps and services due to a variety of factors including relatively low bandwidth, good battery life, low hardware and operating cost, and high connection density.

While initially deployed IoT Low Power WANs (LPWANs) have been non-cellular solutions based on proprietary technologies, longer term emerging standards such as Narrowband IoT (NB-IoT) assume a dominant role for certain applications. As cellular and non-cellular IoT WAN solutions both expand, we see enterprise to using more than one IoT network type. We see the emergence of IoT Virtual Network Operators (VNO) providing services that rely upon both types of networks. In addition to services, these IoT VNOs will provide integration services as enterprise customers engage in both Bring Your Own (IoT) Device (BYOD) and Bring Your Own Network (BYON) in the form of their legacy M2M/IoT networks, devices, and service needs.

This research evaluates LPWAN technologies, companies, and solutions. The report assesses developments in the LPWAN ecosystem, analyzes use cases, and provides a view into the future of LPWAN communications. The report includes detailed forecasts for LPWANs 2016 to 2021. All purchases of Mind Commerce reports includes time with an expert analyst who will help you link key findings in the report to the business issues you're addressing. This needs to be used within three months of purchasing the report.

Target Audience:

Non-cellular CSPs

IoT network providers

Mobile network operators

Semiconductor companies

Embedded systems companies

4G/5G/IoT equipment providers

IoT service and application developers

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