INSIGHTS RELEASE

Global IoT device connections to reach 11.7 billion in 2020, surpassing non-IoT devices for the first time

In short

- Global IoT connections to reach 30 billion in 2025, driven largely by cellular IoT, LPWA, and WLAN.
- Global cellular IoT connections will surpass the 2 billion mark by end of 2020.
- In just 5 years, China has become the dominant country for global cellular IoT connections, contributing 75% of all connections in 2020 (vs. just 27% in 2015).
- The new, upcoming segment of LPWA now contributes 18% of all cellular IoT connections, two technologies dominate (LoRa and NB-IoT)

Hamburg/Germany, November 19, 2020: IoT Analytics, a leading provider of market insights and competitive intelligence for the Internet of Things (IoT) and Industry 4.0, projects that there will be 11.7 billion connected IoT devices by the end of 2020. This is one of many findings in IoT Analytics’ latest publications “State of the IoT Q4 2020 & 2021 outlook” as well as the updated Cellular IoT connectivity & LPWA Market Tracker 2010-2025 (Q4/2020 update).

Commenting on the rapid increase in IoT device connections, Knud Lasse Lueth, CEO at IoT Analytics explains, “IoT innovations will from now on dominate the connected device landscape. Despite the ongoing Covid-19 pandemic, the market for Internet of Things continues to grow. In 2020, for the first time, there are more connected IoT devices such as connected cars or smart home devices than there are non-IoT devices such as smartphones or laptops. Of the 21.7 billion active connected devices worldwide, 11.7 billion, or 54%, will be IoT devices at the end of 2020.”

Elaborating further, he adds, “IoT devices are expected to continue to grow much faster than the quasi-saturated market of non-IoT devices. The current forecast is that there will be 31 billion connected IoT devices
by 2025 further driven by new technology standards like LPWA and 5G as well as continued strong IoT device adoption across industries.”

Active cellular IoT connections (based on the 2G, 3G, 4G, 5G, or licensed LPWA standard) have grown 46% in the last 5 years and are continuing to enjoy strong momentum. Commenting on the competitive landscape for cellular IoT, Satyajit Sinha, senior analyst at IoT Analytics notes, “Chinese telecom companies accounted for 75% of global cellular IoT connections in 2020, dominated by China Mobile. The dominance of these Chinese players can be largely attributed to the digital push by the Chinese government which views the adoption of cellular technologies (particularly NB-IoT & 5G) as a competitive asset in the quest to move the equilibrium of technological innovation from the US and Europe towards China. Just five years ago, Chinese firms only accounted for 27% of global connections.”
Low-power wide-area network technologies (LPWA) are currently the fastest-growing IoT connectivity technology. In 2015 there were roughly 10 million global connections, in 2020 there are now 423 million.

Mr. Sinha explains, “The 2020 LPWA market has developed into a two-horse race. LoRa technology, which is operating in the unlicensed spectrum and largely driven by the Lora Alliance, is in a head-to-head battle with NB-IoT, which is operating in the licensed spectrum and mostly driven by leading telecommunication firms around the world. We expect that those two technologies will continue to dominate the market in the coming 5 years, with Sigfox and LTE-M in distant third and fourth places, respectively. While other technologies continue to exist, at this point it does not appear as though they will play a significant role in the overall global market.”

**Market share – Global LPWA connections 2020**

- **LoRa**: 41%
- **NB-IoT**: 44%
- **Sigfox**: 6%
- **LTE-M**: 5%
- **Others**: 3%

More information and further reading:


For further inquiries,

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