

The Global M2M/IoT Communications Market

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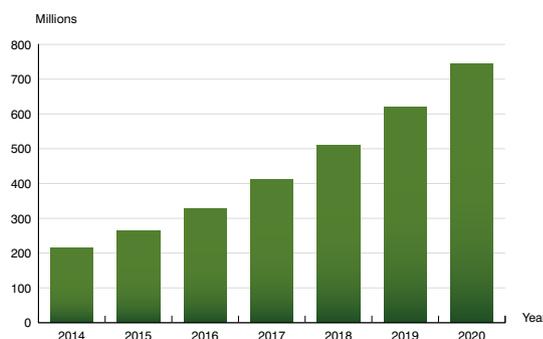


The global number of cellular M2M subscribers reached 265 million at the end of 2015

Berg Insight estimates that the global number of cellular M2M subscribers increased by 23 percent during 2015 to reach 265.2 million at the end of the year – corresponding to around 3 percent of all mobile subscribers. Until 2020, the number of cellular M2M subscribers is forecasted to grow at a compound annual growth rate (CAGR) of 22.9 percent to reach 744.2 million at the end of the period. During the same period, cellular M2M network revenues are forecasted to grow at a CAGR of 23.3 percent from € 8.0 billion in 2015 to approximately € 22.8 billion in 2020. Meanwhile the monthly ARPU is expected to remain stable at around € 2.50.

East Asia was the largest region, closely followed by Western Europe and North America. Altogether they accounted for around 76 percent of the global cellular M2M subscriber base at the end of 2015. Until 2020, the relative share of the regions is expected to decrease slightly as adoption takes off in other parts of the world. At the end of 2015, East Asia was the largest regional market with 90.4 million cellular M2M subscribers, growing 25 percent year-on-year. Western Europe came second with 59.0 million M2M subscribers and 21 percent year-on-year growth. North America ranked third with 52.5 million cellular M2M subscribers, and a year-on-year growth rate of 24 percent. Among individual countries, China was clearly number one with around 70 million M2M subscribers, ahead of the US with approximately 50 million M2M subscribers. The combined size of the EU+EFTA market was around 64 million M2M subscribers.

Berg Insight believes that M2M/IoT has reached a stage of early maturity where a number of players have capitalised on envisioned opportunities to develop substantial new businesses. At the beginning of 2015, the ten largest mobile operators in the M2M market had an estimated combined subscriber base of 164.3 million and year-on-year growth rates of 15–35 percent. China Mobile has an exceptional market position, as the dominant player in the domestic mobile industry. At the end of Q1-2015, the M2M subscriber base was an estimated 46.2 million. Vodafone and AT&T are the top international market players with their respective main bases in Europe and North America. The groups were head-to-head in terms of volume with over 21 million M2M subscribers each. China Unicom and Verizon Wireless were other top five players with 13–14 million connections each. Telefónica, Softbank/Sprint, Deutsche Telekom, Telenor and America Móvil were other top ten players with 8–12 million M2M subscribers each. ►



Cellular M2M network connections (World 2014-2020)

► A common characteristic for them all is that they are multi-regional operations across Europe, the Americas or Asia-Pacific.

Another sign of maturity in the M2M/IoT industry is the release of revenue figures from some telecom operator groups. Verizon and Vodafone reported quarterly M2M/IoT revenues in the range of € 150–200 million each in the first half of 2015 and could be on track to reach € 1 billion on an annual basis within a few years' time. Both groups have substantial telematics businesses, originally established through acquisitions. Besides traditional connectivity and professional services, they generate a considerable share of their sales from automotive products, driver assistance services and connected automotive applications.

The wireless M2M/IoT technology landscape is rapidly changing. 2G networks are gradually taken out of service to be replaced by more efficient 4G technology. At the same time, new enhancements are being added to the LTE standard to better accommodate typical M2M use-cases with large numbers of devices and very low data requirements. In a few years, LTE-M wireless modules will be available for the same price as today's GPRS modules, delivering superior performance using less network resources. A new generation of LPWA technologies hit the market during 2015, offering an alternative roadmap to low cost IoT connectivity outside of the traditional mobile network environment. At the end of the year, the established players in the telecom industry however took back the initiative. In December 2015, the 3GPP accepted the new NB-IoT standard for lightweight M2M communication based on mobile network infrastructure. The NB-IoT and LTE-M standards will be included in 3GPP Release 13, due for publication in January 2016. Berg Insight believes that the initiative will become successful in establishing a global standard for lightweight IoT communication on public networks in the next 3–5 years. NB-IoT has good prospects of becoming the dominant technology for LPWA, although other standards will most likely also remain strong in niche segments.

This report answers the following questions:

- How will the global cellular M2M market evolve over the next five years?
- What are the main drivers behind growth in major regions and industries?
- What is the status of cellular M2M in emerging markets?
- What are the leading global mobile operators' strategies for the M2M/IoT market?
- Which are the strategic options for moving up the M2M/IoT value chain?
- How will LTE-M and NB-IoT transform the cellular M2M market?
- What is the outlook for emerging low power wireless networking technologies?

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Glossary

About the Author



Tobias Ryberg is co-founder and principal analyst responsible for the M2M research series. He is an experienced analyst and author of numerous articles and reports about IT and telecom for leading Swedish and international publishers. All major vertical market segments for Wireless M2M/IoT have been his major research area for the past 12 years.

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