



The Global M2M/IoT Communications Market

10th Edition

The Global M2M/IoT Communications Market analyses the latest trends and developments in cellular IoT and low power wireless networking. This strategic research report from Berg Insight provides you with 240 pages of unique business intelligence including 5-year industry forecasts and expert commentary on which to base your business decisions.

Global cellular IoT connections reached 3.8 billion in 2024

Berg Insight estimates that the global number of cellular IoT subscribers increased by 14 percent during 2024 to reach 3.8 billion at the end of the year – corresponding to around 30 percent of all mobile subscribers. Until 2029, the number of cellular IoT subscribers is forecasted to grow at a compound annual growth rate (CAGR) of 11.0 percent to reach 6.4 billion at the end of the period. During the same period, cellular IoT connectivity revenues are forecasted to grow at a CAGR of 9.6 percent from € 14.2 billion in 2024 to approximately € 22.4 billion in 2029. Meanwhile the monthly ARPU is expected to drop to from € 0.33 to € 0.30.

China is the world's largest market for cellular IoT connectivity services by volume. According to data from the national telecom regulator, the installed base in the country grew by 14 percent year-on-year to reach 2.7 billion IoT connections at the end of 2024. This corresponded to about 70 percent of the global installed base. Berg Insight believes that the role of the Chinese government is the main explanation for why China is ahead of the rest of the world in the adoption of IoT. Authorities actively endorse large-scale IoT deployments as a method for addressing problems affecting the society, whether it is crime, fire safety, energy conservation or traffic management. The private sector is directed and encouraged to do the same.

North America and Western Europe ranks as the second and third largest markets for IoT solutions with 294 million and 279 million IoT connections respectively at the end of 2024. In contrast to China, developments in these regions are largely driven by commercial interests. The connected car is currently one of the strongest trends with more than 90 percent of new cars sold featuring embedded cellular connectivity in the regions. Other key application areas are fleet management of commercial vehicles, smart utility metering and monitored alarm systems. Latin America, South Asia and Central & Eastern Europe had in the range of 79–97 million IoT connections, while Middle East, Africa and Southeast Asia had between 45–48 million. Australia & Oceania was the smallest region with approximately 20 million IoT connections.

China Mobile is the world's largest provider of cellular IoT connectivity services. At the end of 2024, the operator reported 1.42 billion cellular IoT connections and a year-on-year growth rate of 8 percent. China Telecom and China Unicom ranked second and third with 628 million and 625 million connections respectively. Vodafone ranked first among the Western operators and fourth overall with 204 million connections, followed by AT&T with 143 million in fifth place. Deutsche Telekom and Verizon had in the range of 56–60 million cellular IoT connections each. KDDI, Telefónica

and Orange were the last players in the top ten with 37–49 million connections. The installed bases of the largest mobile operators grew at a rate of 5–26 percent annually.

IoT managed service providers play a key role in the ecosystem with a combined installed base of more than 200 million cellular IoT connections. A key differentiator for IoT managed service providers is the ability to aggregate multiple wireless wide area networks and thus provide superior area coverage, multi-domestic footprints and multi-technology connectivity on a single platform. Due to the nature of their business, the players are becoming increasingly international, supporting customers in many parts of the world. Important players in this category include 1GLOBAL, 1NCE, Aeris, Airnity, BICS, CSL Group, Cubic, emnify, Eseye, floLIVE, Giesecke+Devrient, KORE, Monogoto, Onomondo, Semtech, Soracom, Tata Communications, Teal, Telit Cinterion, Velos IoT and Wireless Logic.

IoT connectivity revenues are growing at a slower rate than the number of connections. Berg Insight's analysis of the IoT business KPIs released by mobile operators in different parts of the world suggests that global IoT connectivity revenues increased by around 12 percent during 2024, while the monthly ARPU dropped by 5 percent. On average, IoT connectivity revenues account for around 2 percent of total revenues for the largest mobile operator groups. As the value in IoT lies in value-added services rather than connectivity, IoT connectivity service providers increasingly focus on boosting their IoT portfolios by adding cloud services, security capabilities and devices on top of their connectivity offering to capture a larger share of the market. Several players have embarked on vertical integration strategies, typically by acquiring local solution providers in application areas like vehicle telematics and asset tracking. Private LTE/5G is an emerging focus area, where many players act as managed service providers.

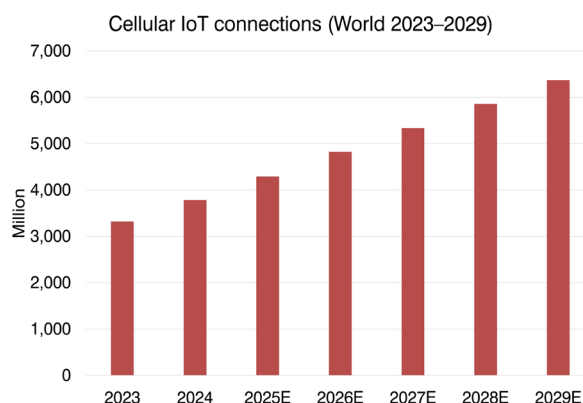


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Highlights from the report

360-degree overview of the cellular IoT communications ecosystem.

Update on the adoption of 5G and LPWA standards for IoT networking.

Reviews of the IoT strategies of the leading mobile operators.

Summary of industry trends in all world regions.

IoT business KPIs for leading global mobile operators.

Statistical data on cellular IoT subscribers in all world regions.

Extensive global and regional market forecasts lasting until 2029.

This report answers the following questions

- How will the global cellular IoT market evolve over the next five years?
- Why has China become the world's largest market for cellular IoT?
- Which are the main market trends in Europe and North America?
- What is the status of cellular IoT in emerging markets?
- What impact will eSIM have on the IoT market?
- What are the leading global mobile operators' strategies for the IoT market?
- How much revenues from IoT were generated by major mobile operators in 2024?
- What is the outlook for LPWA and 5G technologies?



About Berg Insight's IoT market research

Our market reports offer comprehensive information and analysis on key IoT technologies and markets, addressing important concerns including total addressable market, market penetration, market shares, industry landscape, regulatory environment, market trends and forecasts. Our research portfolio today comprises more than 80 items, where each market report focuses on a specific vertical application area or cover horizontal themes. All market reports come with complementary data sets in Excel format that can be easily analysed and converted into tables and charts. We offer a range of different license options together with bundled packages and subscriptions to suit your specific needs.



HORIZONTAL THEMES

The Global M2M/IoT Communications Market

What are the latest trends and developments in cellular IoT, satellite IoT and low power wireless networking? This report covers in-depth the mobile operator perspective on the global M2M/IoT communications market. Get up to date with the latest trends from all main regions and vertical markets with this unique 240 page report.

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The **Global M2M/IoT Communications Market** is the foremost source of information about cellular IoT and low power wireless networking in all regions and major IoT vertical markets. Whether you are a chipset or module vendor, software vendor, utility, vehicle manufacturer, telecom operator, investor, consultant, or government agency, you will gain valuable insights from our in-depth research.

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