
Description:

While LTE and LTE-Advanced deployments are still underway, mobile operators and vendors have already embarked on R&D initiatives to develop so-called “5G” technology, with a vision of commercialization by 2020. 5G is essentially a revolutionary paradigm shift in wireless networking to support the throughput, latency and scalability requirements of future use cases such as extreme bandwidth augmented reality applications and connectivity management for Billions of M2M (Machine to Machine) devices.

Although 5G is yet to be standardized, vendors are aggressively investing in 5G development efforts with a principal focus on new air interface transmission schemes, higher frequency bands and advanced antenna technologies such as Massive MIMO and beamforming. With large scale commercial deployments expected to begin in 2020, we estimate that 5G networks will generate nearly $250 Billion in annual service revenue by 2025.

The “5G Wireless Ecosystem: 2016 - 2030 - Technologies, Applications, Verticals, Strategies & Forecasts” report presents an in-depth assessment of the emerging 5G ecosystem including key market drivers, challenges, enabling technologies, use cases, vertical market applications, spectrum assessment, mobile operator deployment commitments, case studies, standardization, research initiatives and vendor strategies. The report also presents forecasts for 5G investments and operator services.

The report comes with an associated Excel datasheet suite covering quantitative data from all numeric forecasts presented in the report.

Key Findings

The report has the following key findings:

- Although 5G is yet to be standardized, vendors are aggressively investing in 5G development efforts with a principal focus on new air interface transmission schemes, higher frequency bands and advanced antenna technologies such as Massive MIMO and beamforming.

- Driven by regional, national government, mobile operator and vendor initiatives, we expect that over $6 Billion will be spent on 5G R&D and trial investments between 2015 and 2020.

- With large scale commercial deployments expected to begin in 2020, we estimate that 5G networks will generate nearly $250 Billion in annual service revenue by 2025.

- 5G networks are expected to utilize a variety of spectrum bands for diverse applications, ranging from established sub-6 GHz cellular bands to millimeter wave frequencies.

Key Questions Answered

The report provides answers to the following key questions:

- How much will vendors and operators invest in 5G R&D commitments?

- What will be the number of 5G subscriptions in 2020 and at what rate will it grow?

- What will be the key applications of 5G networks?

- What trends, challenges and barriers will influence the development and adoption of 5G?

- Which regions and countries will be the first to adopt 5G?

- Will 5G networks utilize new spectrum bands?
- Who are the key 5G vendors and what are their strategies?
- Will 5G networks rely on a C-RAN architecture?
- What are the prospects of millimeter wave technology for 5G radio access networking?
- What will be the impact of 5G on the M2M and IoT ecosystem?
- Will drone and satellite based communication platforms play a wider role in 5G networks?
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