For years, the critical communications industry has relied on narrowband LMR (Land Mobile Radio) networks for mission-critical voice and basic data services. Due to the bandwidth limitations of these LMR networks, public safety agencies and other users within the critical communications industry have turned towards commercial LTE networks to support growing demands for mobile broadband services such as video transmission and bandwidth-intensive field applications.

However, most commercial LTE networks do not necessarily meet the priority, security, resilience and availability requirements of the critical communications industry. By providing authority over coverage and capacity, private LTE networks can alleviate these concerns while delivering guaranteed connectivity.

Expected to surpass $800 Million in global investments by the end of 2016, private LTE networks are increasingly becoming the preferred approach to deliver mobile broadband services in the critical communications industry. Fueled by large-scale rollouts in the public safety, energy and other sectors, the market is further expected to grow at a CAGR of 32% between 2016 and 2020.


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

Key Questions Answered

The report provides answers to the following key questions:

- How big is the private LTE network opportunity?
- What trends, challenges and barriers are influencing its growth?
- How is the ecosystem evolving by segment and region?
- What will the market size be in 2020 and at what rate will it grow?
- Which submarkets will see the highest percentage of growth?
- How does standardization impact the adoption of LTE for critical communications?
- When will MCPTT (Mission-Critical Push-to-Talk) and proximity services see large-scale proliferation?
- What opportunities exist for commercial mobile operators in the private LTE network ecosystem?
- Will LTE replace GSM-R and other legacy technologies for railway communications and applications?
- Which spectrum band will be the most dominant choice for private LTE network deployments?
- What are the prospects of rapidly deployable tactical LTE networks in the military and public safety sectors?
- Who are the key market players and what are their strategies?
- What strategies should system integrators and vendors adopt to remain competitive?

Key Findings

The report has the following key findings:

- Expected to surpass $800 Million in global investments by the end of 2016, private LTE networks are increasingly becoming the preferred approach to deliver mobile broadband services in the critical communications industry. Fueled by large-scale rollouts in the public safety, energy and other sectors, the market is further expected to grow at a CAGR of 32% between 2016 and 2020.
By the end of 2020, the North America region will account for over 35% of all private LTE investments worldwide. However, largely driven by South Korea's rollout plans for public safety, railway and maritime LTE networks, the Asia Pacific region will continue to retain a strong position in the market.

Several companies, such as TEN (Texas Energy Network) and INET (Infrastructure Networks) in the United States, have strategically deployed private LTE networks in remote, oil-rich areas, to exclusively provide mobile broadband services to energy companies.

To alleviate large-scale infrastructure investments, several European countries are pairing dedicated private mobile core platforms with commercial LTE networks to deliver prioritized mobile broadband services to public safety subscribers.

Conventional LMR industry players are leveraging partnerships with established LTE infrastructure OEMs such as Ericsson, Nokia, Huawei and Samsung, to offer end-to-end private LTE network solutions.

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