

## Emerging Technology Briefing

# Private Cellular Technologies (4G/5G)

As the demand for high-speed, low-latency, and reliable communication continues to grow, private cellular technologies, especially 4G and 5G, are becoming the key driver of digital transformations across various sectors. Private 4G/5G networks dedicated to a specific organization or location can enable enhanced performance of critical operations, customization to meet specific needs or requirements, and reduced risk of interference and congestion from public networks.

However, the deployment and integration of these technologies comes with their own set of challenges and barriers to implementation. There can be significant expected and unexpected up-front investments. Additionally, involving optimal coverage, maintaining security standards, and meeting potential regulatory requirements specific to your industry must be considered. Verinext's briefing covers design considerations, deployment strategies, as well as the business and technical advantages of private cellular technologies. We also compare both 4G/5G and WiFi as almost all organizations adopting 4G/5G will continue to have WiFi deployed for the foreseeable future.

### DISCUSSION FRAMEWORK:

#### 1. Introduction: Industry and Marketplace Context

- Unveiling the current landscape of private cellular, its growing significance, and ecosystem maturity.
- Trends, challenges and opportunities in 4G/5G adoption across various high return sectors.
- Demystifying common myths and misconceptions of WiFi and private cellular.

#### 2. Key Design Considerations in Private Cellular (4G/5G)

- Understanding the technical nuances and benefits of 4G vs. 5G.
- Discussing specific design considerations for various sectors: industrial, healthcare, public safety, smart city, and campus networks or specific environments identified.
- Insights into optimizing network design for coverage, capacity, and security.

#### 3. Deploying and Managing Private 4G/5G: Making 4G/5G Work for You

- Tools and techniques for seamless deployment and integration of private cellular networks.
- Addressing the challenges of network compatibility, scalability, and futureproofing.
- Options for managing private cellular networks.

## EXPECTED OUTCOMES:

Participants will gain a comprehensive understanding of how to make the most of 4G/5G in their respective domains as well as the key points in developing a framework for adoption if your organization can benefit significantly in the near term.

### **This briefing aims to empower enterprises with the knowledge to:**

- Identify the best private cellular technology (4G or 5G) suited for your needs.
- Clearly articulate the benefit and potential business value of 4G/5G to your organization in areas including but not limited to operational efficiency, technical and business platform innovation, competitive advantage, and customer experience.
- Understand the design and deployment challenges of 4G/5G and how to navigate them.

## RECOMMENDED PARTICIPANTS:

CTOs, Network Engineers, IT Directors, Infrastructure Planners, City Planners, Healthcare IT Professionals, and those leading Digital Transformation initiatives.

**Expected time:** 60 - 90 minutes.