The LTE, LTE-Advanced & 5G Ecosystem: 2016 - 2030 - Infrastructure, Devices, Operator Services, Verticals, Strategies & Forecasts

Description:
As a natural upgrade path for mobile operators from the previously detached GSM, CDMA and TD-SCDMA ecosystems, LTE has emerged as the first truly global mobile communications standard. Commonly marketed as the “4G” standard, LTE promises to provide higher data rates and lower latency at a much lower TCO (Total Cost of Ownership) than 3G technologies.

The TCO and performance is further enhanced by deployment of small cells and the LTE-Advanced standard, which improves performance and data rates using features such as the aggregation of carriers, interference management and advanced antenna techniques.

With over 500 fully commercial network launches, LTE has become a mainstream technology, and a number of mobile operators have already deployed LTE-Advanced technology. The author estimates that LTE service revenues will account for over $600 Billion in 2016. The figure is further expected to grow at a CAGR of more than 5% over the next four years.

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” networks, 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.

By 2020, LTE and 5G infrastructure investments are expected to account for a market worth $32 Billion. This includes spending on distributed macrocells, small cells, C-RAN architecture equipment and mobile core solutions.

The “LTE, LTE-Advanced & 5G Ecosystem: 2016 - 2030 - Infrastructure, Devices, Operator Services, Verticals, Strategies & Forecasts” report presents an in-depth assessment of the LTE, LTE-Advanced and 5G ecosystem including key market drivers, challenges, technologies, service revenue potential, deployment strategies, vertical market opportunities, mobile operator case studies, R&D initiatives, future roadmap, value chain, vendor assessment and market share. The report also tracks revenue and shipments for both infrastructure and devices, along with subscription and service revenue from 2016 through to 2030.

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 LTE, LTE-Advanced and 5G ecosystem?
- How is the ecosystem evolving by segment and region?
- What will the market size be in 2020 and at what rate will it grow?
- What trends, challenges and barriers are influencing its growth?
- Who are the key infrastructure and device vendors, and what are their strategies?
- How will FDD LTE investments compare with TD-LTE?
- What is the outlook for LTE-Advanced adoption?
- What are the future prospects for unlicensed LTE, VoLTE and eMBMS services?
- Will future network rollouts adopt a C-RAN architecture?
- How will NFV and virtualization affect the EPC market?
- What opportunities exist for small cells and how will their proliferation impact the wider LTE/5G infrastructure market?
- How much are vendors and operators investing in 5G R&D efforts?
- What will be the number of 5G subscriptions in 2020 and at what rate will it grow?
- What are the prospects of millimeter wave technology for 5G radio access networking?
Key Findings

The report has the following key findings:

- In 2016, mobile operators will pocket over $600 Billion from commercial LTE service revenues. The figure is further expected to grow at a CAGR of more than 5% over the next four years.
- More than 150 LTE operators have already deployed carrier aggregation technology. By 2020, over 50% of all LTE subscribers will be supported by LTE-Advanced networks.
- Mobile operators are pursuing a range of technologies including unlicensed LTE (LTE-U, LAA, LWA, MulteFire), VoLTE and eMBMS, as they seek to maximize the value of their LTE investments while addressing mobile data traffic growth.
- 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.
- By 2020, LTE and 5G infrastructure investments are expected to account for a market worth $32 Billion. This includes spending on distributed macrocells, small cells, C-RAN architecture equipment and mobile core solutions.
2.5.4 Impact of RAN Sharing
2.5.5 Social, Political, Economic and Environmental Risks
2.5.6 Committing to Initial Investments
2.5.7 Roaming Challenges
2.5.8 Voice Support: VoLTE Comes to Rescue
2.5.9 Investment Returns: The OTT Threat
2.5.10 Backhaul Capacity Limitations

3: LTE & LTE-Advanced Deployment Strategies
3.1 Antenna & RAN Strategies
3.1.1 Single RAN vs. Overlay Deployment
3.1.2 Adopting an RRH and FTTA Design
3.1.3 Adopting a C-RAN Architecture
3.1.4 Optimal Antenna Selection
3.1.5 Interference Limitation Strategies
3.1.6 Managing Co-Existence with Legacy 3G/2G RF Sites
3.2 EPC/Mobile Core Strategies
3.2.1 Integration of Functions & Virtualization
3.2.2 Deployment Architecture Choices
3.2.3 Supporting Legacy Networks
3.2.4 Integration with IMS
3.2.5 Embedding DPI for Policy Enforcement & Network Optimization
3.3 LTE Backhaul & Fronthaul Strategies
3.3.1 Architectural Impact of X2 Interface
3.3.2 LTE-Advanced Requirements
3.3.3 Growing Backhaul Capacity & Latency Requirements
3.3.4 IPsec
3.3.5 Technology Options: Fiber, Microwave & Millimeter Wave
3.3.6 Developing a HetNet Backhaul Strategy
3.3.7 Synchronization and Timing
3.3.8 Backhaul Sharing
3.3.9 Fronthaul Options: Fiber vs. Wireless

4: Operator Service Models - Monetizing LTE
4.1 LTE as an Enhanced Data Offering
4.1.1 Driving Consumer Uptake of LTE
4.1.2 Enterprise Specific LTE Plans
4.2 VoLTE & RCS: Enabling Integrated Voice, Video & IM Services
4.2.1 Pricing Strategies
4.2.2 Layered Service Offering for Enterprises
4.3 Fixed Broadband Alternative
4.4 M2M Connectivity
4.4.1 Capitalizing on LTE's Performance Characteristics
4.4.2 Impact of Decommissioning 2G/3G Networks
4.5 Wholesale Services
4.6 LTE Broadcast & eMBMS: Is there a Business Case Yet?

5: Unlicensed LTE Networks
5.1 What is Unlicensed LTE?
5.2 Key Technologies
5.2.1 LTE-U
5.2.2 LAA (License Assisted Access)
5.2.3 LWA (LTE - Wi-Fi Link Aggregation)
5.2.4 MPTCP Based LTE - Wi-Fi Aggregation
5.2.5 MulteFire
5.3 Commercial Prospects
5.4 Mobile Operator Commitments
5.5 Wi-Fi Community Concerns

6: Evolving 5G Ecosystem
6.1 What is 5G?
6.2 5G Requirements
6.2.1 Data Volume
6.2.2 Throughput
6.2.3 Response Time & Latency
6.2.4 Device Density
6.2.5 Availability & Coverage
6.2.6 Battery Life
6.2.7 Energy Saving & Cost Reduction
6.3 Development Timeline
6.4 5G Market Drivers
6.4.1 Why the Need for a 5G Standard?
6.4.2 Improving Spectrum Utilization
6.4.3 Advances in Air Interface Transmission Schemes
6.4.4 Gigabit Wireless Connectivity: Supporting Future Services
6.4.5 Moving Towards the IoT (Internet of Things): Increasing Device Density
6.4.6 Towards a Flatter Network Architecture
6.5 Challenges & Inhibitors to 5G
6.5.1 Skepticism
6.5.2 Standardization Challenges: Too Many Stakeholders
6.5.3 Spectrum Regulation & Complexities
6.5.4 Massive MIMO, Beamforming & Antenna Technology Issues
6.5.5 Higher Frequencies Mean New Infrastructure
6.5.6 Complex Performance Requirements
6.5.7 Energy Efficiency & Technology Scaling
6.6 5G Applications & Use Cases
6.6.1 Extreme Bandwidth Applications: Video, Internet Gaming & Augmented Reality
6.6.2 MTC/M2M, IoT & Ubiquitous Communications
6.6.2.1 Short-burst Traffic
6.6.3 Vertical Industries & Safety Critical Domains

7: Enabling Technologies for 5G
7.1 Key Technologies & Concepts
7.1.1 Air Interface: Waveform Options
7.1.2 Millimeter Wave Radio Access
7.1.3 Massive MIMO
7.1.4 Phased Array Antennas
7.1.5 Beamforming
7.1.6 D2D (Device to Device) Communications
7.1.7 Self-Backhauling & Mesh Networking
7.1.8 Cognitive Radio & Spectrum Sensing
7.1.9 Unlicensed Spectrum Usage
7.1.10 LSA (Licensed Shared Access)
7.1.11 Spectrum Aggregation
7.1.12 Integration of VLC (Visible Light Communication)
7.2 Complimentary Technologies
7.2.1 NFV & SDN
7.2.2 HetNet & C-RAN Architecture
7.2.3 Cloud RAN
7.2.4 MEC (Mobile Edge Computing)
7.2.5 Drones & Satellites
7.2.5.1 Satellite Integration in 5G Networks
7.2.5.2 Google and Facebook's Drone Ambitions
7.2.5.3 Interest from Mobile Operators
7.3 How Much is Being Invested in 5G R&D
7.4 R&D Investments by Technology
7.4.1 New Waveforms & Millimeter Wave Radio Access
7.4.2 MIMO, Beamforming & Antenna Technologies
7.4.3 Interference & Spectrum Management
7.4.4 C-RAN, Virtualization & Other Technologies

8: Vertical Markets for LTE & 5G Networks
8.1 Vertical Market Opportunities: Capitalizing on LTE & 5G
8.2 Private LTE & 5G Network Investments
8.3 Key Vertical Markets
8.3.1 Automotive & Transportation
8.3.2 Energy & Utilities
8.3.3 Healthcare
8.3.4 Public Safety
8.3.5 Military
8.3.6 Mining
8.3.7 Smart Cities
8.3.8 Other Sectors
8.4 Vertical Market Case Studies
8.4.1 Abu Dhabi Police
8.4.2 Beach Energy
8.4.3 Busan Transportation Corporation
8.4.4 China Southern Power Grid
8.4.5 Harris County
8.4.6 Qatar MOI (Ministry of Interior)
8.4.7 South Korea’s National Disaster Safety Communications Network
8.4.8 Tampnet
8.4.9 TEN (Texas Energy Network)
8.4.10 U.S. Navy

9: Industry Roadmap & Value Chain
9.1 Industry Roadmap
9.1.1 2016 - 2020: Large Scale LTE-Advanced Rollouts
9.1.2 2020 - 2025: The Cloud RAN Era - Moving Towards C-RAN and Virtualization
9.1.3 2025 - 2030: Continued Investments with 5G Network Rollouts
9.2 Value Chain
9.3 Embedded Technology Ecosystem
9.3.1 Chipset Developers
9.3.2 Embedded Component/Software Providers
9.4 Device Ecosystem
9.4.1 Mobile Device OEMs
9.5 RAN Ecosystem
9.5.1 Macrocell RAN OEMs
9.5.2 Pure-Play Small Cell OEMs
9.5.3 Wi-Fi Access Point OEMs
9.5.4 DAS & Repeater Solution Providers
9.5.5 C-RAN Solution Providers
9.5.6 Other Technology Providers
9.6 Transport Networking Ecosystem
9.6.1 Backhaul & Fronthaul Solution Providers
9.7 Mobile Core Ecosystem
9.7.1 Mobile Core Solution Providers
9.8 Connectivity Ecosystem
9.8.1 Mobile Operators
9.8.2 Wi-Fi Connectivity Providers
9.8.3 SCaaS (Small Cells as a Service) Providers
9.9 SON Ecosystem
9.9.1 SON Solution Providers
9.10 SDN & NFV Ecosystem
9.10.1 SDN & NFV Providers

10: Vendor & Operator Landscape
10.1 LTE Infrastructure
10.1.1 Accelleran
10.1.2 Adax
10.1.3 Affirmed Networks
10.1.4 Airspan Networks
10.1.5 Altiostar Networks
10.1.6 Arcadyan Technology Corporation
10.1.7 Argela
10.1.8 ARItel
10.1.9 Artemis Networks
10.1.10 ASOCS
10.1.11 Athonet
10.1.12 Axxcelera Broadband Wireless
10.1.13 BaiCells
10.1.14 Brocade Communications Systems
10.1.15 Casa Systems
10.1.16 Cisco Systems
10.1.17 CommScope
10.1.18 Contela
10.1.19 Core Network Dynamics
10.1.20 Datang Mobile
10.1.21 Ericsson
10.1.22 Fujitsu
10.1.23 Gemtek Technology Company
10.1.24 GENBAND
10.1.25 General Dynamics Mission Systems
10.1.26 Google
10.1.27 GWT (Global Wireless Technologies)
10.1.28 Hitachi
10.1.29 Huawei
10.1.30 ip.access
10.1.31 JRC (Japan Radio Company)
10.1.32 Juni Global
10.1.33 Kumu Networks
10.1.34 Lemko Corporation
10.1.35 Luminate Wireless
10.1.36 Mitel Networks Corporation
10.1.37 NEC Corporation
10.1.38 New Postcom Equipment Company
10.1.39 Nokia Networks
10.1.40 Nutaq
10.1.41 Oceus Networks
10.1.42 Phluido
10.1.43 Polaris Networks
10.1.44 Potevio (China Potevio Company)
10.1.45 Quanta Computer
10.1.46 Qucell
10.1.47 Quortus
10.1.48 Redline Communications
10.1.49 Samji Electronics Company
10.1.50 Samsung Electronics
10.1.51 SerComm Corporation
10.1.52 SK Telesys
10.1.53 SpiderCloud Wireless
10.1.54 Star Solutions
10.1.55 Sunnada (Fujian Sunnada Communication Company)
10.1.56 Tecore
10.1.57 TEKTELIC Communications
10.1.58 Telrad Networks
10.1.59 Telum
10.1.60 WNC (Wistron NeWeb Corporation)
10.1.61 Z-com (ZDC Wireless)
10.1.62 ZTE
10.1.63 ZyXEL Communications Corporation
10.2 LTE Devices
10.2.1 Accelerated Concepts
10.2.2 Apple
10.2.3 ASUS (ASUSTeK Computer)
10.2.4 BBK Electronics Corporation
10.2.5 Belkin International
10.2.6 BlackBerry
10.2.7 Coolpad
10.2.8 D-Link Corporation
10.2.9 Dovado
10.2.10 Fujitsu
10.2.11 Gionee
10.2.12 HTC Corporation
10.2.13 Huawei
10.2.14 Kyocera Corporation
10.2.15 Lenovo
10.2.16 LG Electronics
10.2.17 Meizu
10.2.18 Microsoft Corporation
10.2.19 NEC Mobile Communications
10.2.20 Netgear
10.2.21 Novatel Wireless
10.2.22 Panasonic Corporation
10.2.23 Pantech
10.2.24 Samsung Electronics
10.2.25 Sharp Corporation
10.2.26 Sierra Wireless
10.2.27 Sony Mobile Communications
10.2.28 TCL Communication
10.2.29 Xiaomi
10.2.30 ZTE
10.3 LTE Operators
10.3.1 AT&T
10.3.2 China Mobile
10.3.3 EE
10.3.4 KDDI Corporation
10.3.5 KT Corporation
10.3.6 LG Uplus
10.3.7 NTT DoCoMo
10.3.8 SK Telecom
10.3.9 SoftBank Group
10.3.10 Verizon Communications

11: Market Analysis & Forecasts
11.1 Global LTE Infrastructure Shipments & Revenue
11.1.1 Submarket Segmentation
11.1.2 Regional Segmentation
11.1.3 LTE Distributed Macrocell Base Stations
11.1.3.1 FDD vs. TDD Segmentation
11.1.3.2 FDD LTE Macrocell Base Stations
11.1.3.3 TD-LTE Macrocell Base Stations
11.1.3.4 Regional Segmentation
11.1.4 LTE Small Cells
11.1.4.1 FDD vs. TDD Segmentation
11.1.4.2 FDD LTE Small Cells
11.1.4.3 TD-LTE Small Cells
11.1.4.4 Form Factor Segmentation
11.1.4.5 LTE Femtocells
11.1.4.6 LTE Picocells
11.1.4.7 LTE Microcells
11.1.4.8 Use Case Segmentation
11.1.4.9 Residential LTE Small Cells
11.1.4.10 Enterprise LTE Small Cells
11.1.4.11 Urban LTE Small Cells
11.1.4.12 Rural & Suburban LTE Small Cells
11.1.4.13 Deployment Model Segmentation
11.1.4.14 Indoor LTE Small Cells
11.1.4.15 Outdoor LTE Small Cells
11.1.4.16 Regional Segmentation
11.1.5 LTE C-RAN Architecture Infrastructure
11.1.5.1 Submarket Segmentation
11.1.5.2 LTE RRH
11.1.5.3 Deployment Model Segmentation
11.1.5.4 Indoor LTE RRH
11.1.5.5 Outdoor LTE RRH
11.1.5.6 LTE C-RAN BBU
11.1.5.7 Regional Segmentation
11.1.6 EPC
11.1.6.1 Regional Segmentation
11.2 Global 5G Infrastructure Shipments & Revenue
11.2.1 Submarket Segmentation
11.2.2 Regional Segmentation
11.2.3 5G Distributed Macrocell Base Stations
11.2.4 5G Small Cells
11.2.5 5G C-RAN Architecture Infrastructure
11.2.5.1 Submarket Segmentation
11.2.5.2 5G RRH
11.2.5.3 5G C-RAN BBU
11.2.6 5G Mobile Core
11.3 Global LTE Device Shipments & Revenue
11.3.1 FDD vs. TDD Segmentation
11.3.1.1 FDD LTE Devices
11.3.1.2 TD-LTE Devices
11.3.2 Form Factor Segmentation
11.3.2.1 Handsets
11.3.2.2 Tablets
11.3.2.3 Embedded M2M Modules
11.3.2.4 USB Dongles
11.3.2.5 Routers
11.3.3 Regional Segmentation
11.4 Global 5G Device Shipments & Revenue
11.4.1 Form Factor Segmentation
11.4.1.1 Handsets
11.4.1.2 Tablets
11.4.1.3 Embedded M2M Modules
11.4.1.4 USB Dongles
11.4.1.5 Routers
11.4.2 Regional Segmentation
11.5 Global LTE Subscriptions & Service Revenue
11.5.1 FDD vs. TDD Segmentation
11.5.1.1 FDD LTE Subscriptions
11.5.1.2 TD-LTE Subscriptions
11.5.2 Regional Segmentation
11.6 Global 5G Subscriptions & Service Revenue
11.6.1 Regional Segmentation
11.7 Asia Pacific
11.7.1 LTE Infrastructure
11.7.2 LTE Distributed Macrocell Base Stations
11.7.3 LTE Small Cells
11.7.4 LTE C-RAN Architecture Infrastructure
11.7.5 EPC
11.7.6 5G Infrastructure
11.7.7 LTE Devices
11.7.8 5G Devices
11.7.9 LTE Subscriptions & Service Revenue
11.7.10 5G Subscriptions & Service Revenue
11.8 Eastern Europe
11.8.1 LTE Infrastructure
11.8.2 LTE Distributed Macrocell Base Stations
11.8.3 LTE Small Cells
11.8.4 LTE C-RAN Architecture Infrastructure
11.8.5 EPC
11.8.6 5G Infrastructure
11.8.7 LTE Devices
11.8.8 5G Devices
11.8.9 LTE Subscriptions & Service Revenue
11.8.10 5G Subscriptions & Service Revenue
11.9 Latin & Central America
  11.9.1 LTE Infrastructure
  11.9.2 LTE Distributed Macrocell Base Stations
  11.9.3 LTE Small Cells
  11.9.4 LTE C-RAN Architecture Infrastructure
  11.9.5 EPC
  11.9.6 5G Infrastructure
  11.9.7 LTE Devices
  11.9.8 5G Devices
  11.9.9 LTE Subscriptions & Service Revenue
  11.9.10 5G Subscriptions & Service Revenue
11.10 Middle East & Africa
  11.10.1 LTE Infrastructure
  11.10.2 LTE Distributed Macrocell Base Stations
  11.10.3 LTE Small Cells
  11.10.4 LTE C-RAN Architecture Infrastructure
  11.10.5 EPC
  11.10.6 5G Infrastructure
  11.10.7 LTE Devices
  11.10.8 5G Devices
  11.10.9 LTE Subscriptions & Service Revenue
  11.10.10 5G Subscriptions & Service Revenue
11.11 North America
  11.11.1 LTE Infrastructure
  11.11.2 LTE Distributed Macrocell Base Stations
  11.11.3 LTE Small Cells
  11.11.4 LTE C-RAN Architecture Infrastructure
  11.11.5 EPC
  11.11.6 5G Infrastructure
  11.11.7 LTE Devices
  11.11.8 5G Devices
  11.11.9 LTE Subscriptions & Service Revenue
  11.11.10 5G Subscriptions & Service Revenue
11.12 Western Europe
  11.12.1 LTE Infrastructure
  11.12.2 LTE Distributed Macrocell Base Stations
  11.12.3 LTE Small Cells
  11.12.4 LTE C-RAN Architecture Infrastructure
  11.12.5 EPC
  11.12.6 5G Infrastructure
  11.12.7 LTE Devices
  11.12.8 5G Devices
  11.12.9 LTE Subscriptions & Service Revenue
  11.12.10 5G Subscriptions & Service Revenue

12: Infrastructure, Devices, Operator Services & Verticals Summary
12.1 Infrastructure
  12.1.1 Commercial Availability
  12.1.2 RAN Vendor Share: Who Leads the Market?
  12.1.3 The Outlook for Tier 2 Vendors: Samsung and Fujitsu Lead the Market
  12.1.4 Impact of Small Cells & Unlicensed Spectrum
  12.1.5 EPC Vendor Share
  12.1.6 How will NFV Affect the EPC Market?
12.2 Devices
  12.2.1 Commercial Device Availability
  12.2.2 Are Smartphones the Most Dominant Form Factor?
  12.2.3 Vendor Share: Who Leads the Market?
  12.2.4 What About Chipsets?
12.3 Subscriptions & Operator Services
  12.3.1 Economic Downturn: Initial Deployment Delays
  12.3.2 Commercial Availability
  12.3.3 How Big is the LTE Service Revenue Opportunity?
  12.3.4 Vertical Market Opportunities
12.3.5 Outlook for LTE-Advanced
12.3.6 Moving Beyond Carrier Aggregation
12.3.7 Outlook for LTE Broadcast & eMBMS
12.3.8 Outlook for VoLTE & RCS

List of Figures

Figure 1: LTE Architecture
Figure 2: E-UTRAN Architecture
Figure 3: EPC Architecture
Figure 4: Functional Split between E-UTRAN and the EPC
Figure 5: Annual Throughput of Mobile Network Data Traffic by Region: 2016 - 2030 (Exabytes)
Figure 7: Mobile Network Service Revenue by Region: 2016 - 2030 ($ Billion)
Figure 8: TCO Comparison for 2G, 3G, LTE and HetNet Deployments ($ per GB)
Figure 9: Legacy RAN to C-RAN Architectural Migration
Figure 11: Global Unlicensed LTE Small Cell Unit Shipments: 2016 - 2030 (Thousands of Units)
Figure 12: Global Unlicensed LTE Small Cell Unit Shipment Revenue: 2016 - 2030 ($ Million)
Figure 12: 5G Requirements
Figure 13: IMT-2020 Development Roadmap
Figure 14: Potential Waveform Options for 5G
Figure 15: D2D Communication Scenarios
Figure 16: LSA Concept
Figure 17: NFV Concept
Figure 18: C-RAN Architecture
Figure 19: Cloud RAN Concept
Figure 20: Global 5G R&D Investments: 2016 - 2020 ($ Million)
Figure 21: Global 5G R&D Investments by Technology: 2016 - 2020 ($ Million)
Figure 22: Global 5G R&D Investments on New Waveforms & Millimeter Wave Radio Access: 2016 - 2020 ($ Million)
Figure 23: Global 5G R&D Investments on MIMO, Beamforming & Antenna Technologies: 2016 - 2020 ($ Million)
Figure 24: Global 5G R&D Investments on Interference & Spectrum Management: 2016 - 2020 ($ Million)
Figure 25: Global 5G R&D Investments on C-RAN, Virtualization & Other Technologies: 2016 - 2020 ($ Million)
Figure 26: Global Private LTE & 5G Network Infrastructure Revenue by Vertical: 2016 - 2030 ($ Million)
Figure 27: Global Private LTE & 5G Network Infrastructure Investments in the Transportation Sector: 2016 - 2030 ($ Million)
Figure 28: Global Private LTE & 5G Network Infrastructure Investments in the Energy & Utilities Sector: 2016 - 2030 ($ Million)
Figure 29: Global Private LTE & 5G Network Infrastructure Investments in the Public Safety Sector: 2016 - 2030 ($ Million)
Figure 30: Military LTE Network Architecture
Figure 31: Global Private LTE & 5G Network Infrastructure Investments in the Military Sector: 2016 - 2030 ($ Million)
Figure 32: Global Private LTE & 5G Network Infrastructure Investments in Mining & Other Sectors: 2016 - 2030 ($ Million)
Figure 33: The LTE & 5G Industry Roadmap: 2016 - 2030
Figure 34: Wireless Network Infrastructure Value Chain
Figure 35: Global LTE Infrastructure Revenue: 2016 - 2030 ($ Million)
Figure 36: Global LTE Infrastructure Revenue by Submarket: 2016 - 2030 ($ Million)
Figure 37: LTE Infrastructure Revenue by Region: 2016 - 2030 ($ Million)
Figure 38: Global LTE Macrocell Base Station Unit Shipments: 2016 - 2030 (Thousands of Units)
Figure 39: Global LTE Macrocell Base Station Unit Shipment Revenue: 2016 - 2030 ($ Million)
Figure 40: Global LTE Macrocell Base Station Unit Shipments by Technology: 2016 - 2030 (Thousands of Units)
Figure 41: Global LTE Macrocell Base Station Unit Shipment Revenue by Technology: 2016 - 2030 ($ Million)
Figure 42: Global FDD LTE Macrocell Base Station Unit Shipments: 2016 - 2030 (Thousands of Units)
Figure 43: Global FDD LTE Macrocell Base Station Unit Shipment Revenue: 2016 - 2030 ($ Million)
Figure 44: Global TD-LTE Macrocell Base Station Unit Shipments: 2016 - 2030 (Thousands of Units)
Figure 45: Global TD-LTE Macrocell Base Station Unit Shipment Revenue: 2016 - 2030 ($ Million)
Figure 46: LTE Macrocell Base Station Shipments by Region: 2016 - 2030 (Thousands of Units)
Figure 47: LTE Macrocell Base Station Shipment Revenue by Region: 2016 - 2030 ($ Million)
Figure 48: Global LTE Small Cell Unit Shipments: 2016 - 2030 (Thousands of Units)
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