The Wireless Network Infrastructure Ecosystem: 2016 – 2030 – Macrocell RAN, Small Cells, C-RAN, RRH, DAS, Carrier Wi-Fi, Mobile Core, Backhaul & Fronthaul

Description:

The term "Wireless Network Infrastructure" has conventionally been associated with macrocell RAN (Radio Access Network) and mobile core segments of mobile operator networks. However, the scope of the term is expanding as mobile operators increase their investments in Heterogeneous Network or HetNet infrastructure such as small cells, carrier Wi-Fi and DAS (Distributed Antenna Systems), to cope with increasing capacity and coverage requirements.

In addition, mobile operators are keen to shift towards a C-RAN (Centralized RAN) architecture, which centralizes baseband functionality to be shared across a large number of distributed radio nodes. In comparison to standalone clusters of base stations, C-RAN provides significant performance and economic benefits such as baseband pooling, enhanced coordination between cells, virtualization, network extensibility and energy efficiency.

Due to a decline in macrocell RAN infrastructure spending, the report estimates that the wireless network infrastructure market will remain relatively flat through 2020, with annual investments of over $61 Billion. We also expect a significant shift in investments towards small cells, C-RAN, DAS and carrier Wi-Fi infrastructure. By 2020, these four submarkets, together with their fronthaul and backhaul segments, will account for over 50% of all wireless network infrastructure spending.


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:

- Due to a decline in macrocell RAN infrastructure spending, the report predicts that the wireless network infrastructure market will remain relatively flat through 2020, with annual investments of over $61 Billion.
- The report predicts a significant shift in investments towards small cells, C-RAN, DAS and carrier Wi-Fi infrastructure. By 2020, these four submarkets, together with their fronthaul and backhaul segments, will account for over 50% of all wireless network infrastructure spending.
- Small cell and C-RAN solutions are beginning to converge as small cell OEMs seek to capitalize on the benefits of centralized coordination for in-building and enterprise coverage.
- Driven by ongoing large scale deployments, we estimate that LTE networks will generate nearly $800 Billion in annual service revenue by 2020.
- Vendors are increasing their focus on profit margins. Many are already cutting staff, embracing operational excellence, evolving their new business models, acquiring niche businesses and expanding their managed services offerings.
- New CapEx commitment avenues such as HetNet infrastructure and virtualization will continue to usher industry restructuring, and market consolidation.

Contents:

1 Introduction
1.1 Executive Summary
1.2 Topics Covered
1.3 Forecast Segmentation
1.4 Key Questions Answered
1.5 Key Findings
1.6 Methodology
1.7 Target Audience
1.8 Companies & Organizations Mentioned

2 An Overview of Wireless Network Infrastructure
2.1 What is Wireless Network Infrastructure?
2.2 2G: GSM & CDMA
2.2.1 2G Trends & Developments
2.2.2 2G Market Summary
2.3 3G: W-CDMA, TD-SCDMA & CDMA2000
2.3.1 3G Trends & Developments
2.3.2 3G Market Summary
2.4 4G: LTE, LTE-Advanced & WiMAX
2.4.1 4G Trends & Developments
2.4.2 4G Market Summary
2.5 5G: IMT-2020 Technologies
2.5.1 5G Trends & Developments
2.5.2 5G Market Summary
2.6 Macrocell RAN
2.6.1 Macrocell RAN Trends & Developments
2.7 HetNet RAN
2.7.1 HetNet RAN Trends & Developments
2.7.2 Small Cells
2.7.3 C-RAN
2.7.4 DAS
2.7.5 Carrier Wi-Fi
2.8 Mobile Core
2.8.1 Mobile Core Trends & Developments
2.9 Mobile Backhaul & Fronthaul
2.9.1 Mobile Backhaul & Fronthaul Trends & Developments

3 Market Drivers, Barriers & Risks
3.1 Market Drivers
3.1.1 Mobile Subscriptions Growth
3.1.2 Smartphone & Tablet Proliferation
3.1.3 Growing Penetration of Mobile Broadband
3.1.4 Mobile Data Traffic Growth
3.1.5 Interest from Vertical Markets
3.1.6 Reducing the TCO (Total Cost of Ownership)
3.1.7 Replacement of Legacy Infrastructure: Continued Growth in Transport Networking
3.1.8 Advances in Spectrum Flexibility & Carrier Aggregation: Driving HetNet Deployments
3.1.9 Strategic Choice for CDMA & WiMAX Operators: Join Mainstream Ecosystem
3.1.10 Addressing Legacy Network Congestion
3.1.11 Bringing Broadband to the Masses
3.1.12 Trend Summary: Which Segments of the Wireless Infrastructure Market Will Witness Growth?
3.2 Barriers & Risks
3.2.1 CapEx Commitments
3.2.2 Spectrum Scarcity
3.2.3 RAN Sharing: A Concept Embraced by Mobile Operators
3.2.4 Operators Are Finding Innovative Ways to Address Capacity Issues
3.2.5 Social, Political, Economic and Environmental Threats
3.2.6 Country Specific Risks
3.3 Key Strategic Options for Mobile Operators
3.4 Business Case for Investments in New and Existing Technologies
3.4.1 Gain Operational Efficiencies Through Strategic Investments
3.4.2 Invest in Capacity for Increased Revenue Opportunities
3.4.3 Deliver Best User Experience
3.4.4 Reduce Competitive Threats
3.4.5 Reserve Network Capacity the M2M Opportunities
3.4.6 Increase Customer Satisfaction
3.4.7 Capitalize on Differentiation Strategies
3.4.8 Evolve Towards the Next Generation

4 Mobile Network CapEx Review
4.1 Global Mobile Network CapEx
4.2 Regional Split
4.3 Key Operator Commitments
4.3.1 China Mobile
4.3.2 China Unicom
4.3.3 AT&T Mobility
4.3.4 Vodafone Group
4.3.5 Verizon Wireless
4.3.6 China Telecom
4.3.7 NTT DoCoMo
4.3.8 Sprint Corporation
4.3.9 SoftBank Corporation
4.3.10 T-Mobile USA
4.3.11 KDDI
4.3.12 DT (Deutsche Telekom)
4.3.13 MTS (Mobile TeleSystems)
4.3.14 Orange
4.3.15 Telenor Group
4.3.16 SK Telecom
4.3.17 Vivo
4.3.18 TIM Brazil
4.3.19 LG Uplus
4.3.20 Telkomsel
4.3.21 Megafon
4.3.22 Bharti Airtel
4.3.23 Movistar Venezuela
4.3.24 TIM (Telecom Italia Mobile)
4.3.25 VimpelCom
4.4 Asia Pacific Mobile Network CapEx
4.5 Eastern Europe Mobile Network CapEx
4.6 Latin & Central America Mobile Network CapEx
4.7 Middle East & Africa Mobile Network CapEx
4.8 North America Mobile Network CapEx
4.9 Western Europe Mobile Network CapEx

5 Mobile Network Subscriptions & Service Revenue Review
5.1 Global Mobile Network Subscriptions
5.2 Global Mobile Network Service Revenue
5.3 Segmentation by Technology
5.3.1 2G & 3G
5.3.2 FDD LTE
5.3.3 TD-LTE
5.3.4 WiMAX
5.3.5 5G
5.4 Regional Split
5.5 Asia Pacific
5.6 Eastern Europe
5.7 Latin & Central America
5.8 Middle East & Africa
5.9 North America
5.10 Western Europe

6 Wireless Network Deployment Strategies
6.1 Antenna & RAN Strategies
6.1.1 Single RAN vs. Overlay Deployment
6.1.2 Adopting an RRH and FTTA Design
6.1.3 Migrating Towards C-RAN Architecture
6.1.4 Optimal Antenna Selection
6.1.5 Interference Limitation Strategies
6.1.6 Managing Co-Existence with Legacy 2G/3G RF Sites
6.2 Mobile Core Strategies
6.2.1 Integration of Functions & Virtualization
6.2.2 Deployment Architecture Choices
6.2.3 Supporting Legacy Networks
6.2.4 Integration with IMS
6.2.5 Embedding DPI for Policy Enforcement & Network Optimization
6.3 Backhaul & Fronthaul Strategies
6.3.1 Architectural Impact of X2 Interface
6.3.2 LTE-Advanced Requirements
6.3.3 Growing Backhaul Capacity & Latency Requirements
6.3.4 IPsec
6.3.5 Technology Options: Fiber, Microwave & Millimeter Wave
6.3.6 Developing a HetNet Backhaul Strategy
6.3.7 Synchronization and Timing
6.3.8 Transport Network Sharing
6.3.9 Fronthaul Options: Alternatives to Dedicated Fiber

7 Industry Roadmap & Value Chain
7.1 Industry Roadmap
7.1.1 2016 - 2020: Large Scale LTE & HetNet Infrastructure Rollouts
7.1.2 2020 - 2025: The Cloud RAN Era - Moving Towards C-RAN and Virtualization
7.1.3 2025 - 2030: Continued Investments with 5G Network Rollouts
7.2 Value Chain
7.3 Embedded Technology Ecosystem
7.3.1 Chipset Developers
7.3.2 Embedded Component/Software Providers
7.4 RAN Ecosystem
7.4.1 Macrocell RAN OEMs
7.4.2 Pure-Play Small Cell OEMs
7.4.3 Wi-Fi Access Point OEMs
7.4.4 DAS & Repeater Solution Providers
7.4.5 C-RAN Solution Providers
7.4.6 Other Technology Providers
7.5 Transport Networking Ecosystem
7.5.1 Backhaul & Fronthaul Solution Providers
7.6 Mobile Core Ecosystem
7.6.1 Mobile Core Solution Providers
7.7 Connectivity Ecosystem
7.7.1 Mobile Operators
7.7.2 Wi-Fi Connectivity Providers
7.7.3 SCaaS (Small Cells as a Service) Providers
7.8 SON Ecosystem
7.8.1 SON Solution Providers
7.9 SDN & NFV Ecosystem
7.9.1 SDN & NFV Providers

8 Vendor Landscape
8.1 Vendor Outlook
8.1.1 Pricing & Growth Sustainability
8.1.2 Portfolio Diversification
8.2 Vendor Ranking
8.2.1 Macrocell RAN
8.2.2 Mobile Core
8.2.3 Small Cells
8.2.4 Carrier Wi-Fi
8.2.5 C-RAN
8.2.6 DAS
8.2.7 Backhaul & Fronthaul

9 Wireless Network Infrastructure Incumbents
9.1 Cisco Systems
9.2 Ericsson
9.3 Fujitsu
9.4 Hitachi
9.5 Huawei
9.6 NEC Corporation
9.7 Nokia Networks & Alcatel-Lucent
9.8 Samsung Electronics
9.9 ZTE

10 Macrocell RAN, Small Cell, C-RAN & Mobile Core Specialists
10.1 Accelleran
10.2 Adax
10.3 ADB
10.4 Affirmed Networks
10.5 Airspan Networks
10.6 Alpha Networks
10.7 Altiostar Networks
10.8 Arcadyan Technology Corporation
10.9 Argela
10.10 ARItel
10.11 Artemis Networks
10.12 Askey Computer Corporation
10.13 ASOCS
10.14 Athonet
10.15 Athena Wireless Communications (Google)
10.16 Axxcelera Broadband Wireless (Moseley Associates)
10.17 Brocade Communications Systems
10.18 Casa Systems
10.19 CCI (Competitive Companies, Inc.)
10.20 Contela
10.21 CS Corporation
10.22 Datang Mobile
10.23 Dongwon T&i
10.24 Femtel (Suzhou Femtel Communications)
10.25 Gemtek Technology Company
10.26 GENBAND
10.27 GWT (Global Wireless Technologies)
10.28 HP (Hewlett-Packard)
10.29 ip.access
10.30 Juni Global
10.31 Juniper Networks
10.32 Lemko
10.33 LGS Innovations
10.34 Mitel Networks Corporation
10.35 New Postcom Equipment Company
10.36 NewNet Communication Technologies
10.37 Nutaq
10.38 Oceus Networks
10.39 Panda Electronics (Nanjing Panda Electronics Company)
10.40 Parallel Wireless
10.41 Polaris Networks
10.42 Potevio (China Potevio Company)
10.43 Quanta Computer
10.44 Qucell
10.45 Quortus
10.46 Redline Communications
10.47 Sagemcom
10.48 Samji Electronics Company
10.49 SerComm Corporation
10.50 SK Telesys
10.51 SpiderCloud Wireless
10.52 Star Solutions
10.53 Sunnada (Fujian Sunnada Communication Company)
10.54 Taqua  
10.55 Tecom  
10.56 TEKTELIC Communications  
10.57 Telum  
10.58 Telrad Networks  
10.59 WNC (Wistron NeWeb Corporation)  
10.60 Z-Com (ZDC Wireless)  

11 Antenna, DAS & Repeater Solution Specialists  
11.1 AceAxis  
11.2 ADRF (Advanced RF Technologies)  
11.3 Affarii Technologies  
11.4 American Tower Corporation  
11.5 Arqiva  
11.6 Axis Teknologies  
11.7 Black Box Corporation  
11.8 BTI Wireless  
11.9 CCI (Communication Components Inc.)  
11.10 CCI (Crown Castle International)  
11.11 CCI Systems  
11.12 Cobham Wireless  
11.13 Comba Telecom Systems Holdings  
11.14 CommScope  
11.15 Corning  
11.16 Dali Wireless  
11.17 DeltaNode (Bird Technologies)  
11.18 Ethertronics  
11.19 ExteNet Systems  
11.20 Foxcom  
11.21 Galtronics  
11.22 Goodman Networks  
11.23 GrenTech (China GrenTech Corporation)  
11.24 JRC (Japan Radio Company)  
11.25 JMA Wireless  
11.26 Kisan Telecom  
11.27 KMW  
11.28 Kathrein-Werke KG  
11.29 MER-CellO Wireless Solutions  
11.30 Microlab (Wireless Telecom Group)  
11.31 MTI Mobile  
11.32 Nexius  
11.33 Nextivity  
11.34 RF Window  
11.35 RFS (Radio Frequency Systems)  
11.36 Rosenberger  
11.37 SOLiD (SOLiD Technologies)  
11.38 Sumitomo Electric Industries  
11.39 Sunwave Communications  
11.40 TESSCO Technologies  
11.41 Westell Technologies  
11.42 Zinwave  

12 Carrier Wi-Fi Specialists  
12.1 4ipnet  
12.2 ABB  
12.3 Accuris Networks  
12.4 Aerohive Networks  
12.5 Alvarion Technologies  
12.6 Aptilo Networks  
12.7 Aruba Networks  
12.8 Autelan  
12.9 BandwidthX  
12.10 Birdstep Technology
12.11 Browan Communications
12.12 BSG Wireless
12.13 D-Link Corporation
12.14 Edgewater Wireless Systems
12.15 EION Wireless
12.16 Firetide
12.17 Fortinet
12.18 Front Porch
12.19 GoNet Systems
12.20 Handlink Technologies
12.21 Meru Networks
12.22 Netgem
12.23 NETGEAR
12.24 Nomadix
12.25 Panasonic Corporation
12.26 Ro-Timak Technology
12.27 Ruckus Wireless
12.28 Senao Networks
12.29 Smith Micro Software
12.30 SpectrumMax
12.31 Syniverse Technologies
12.32 TP-LINK Technologies
12.33 Tranzeo Wireless Technologies
12.34 Ubiquiti Networks
12.35 WeFi
12.36 Zebra Technologies Corporation
12.37 ZYXEL

13 Enabling Technology Providers
13.1 6WIND
13.2 Ablaze Wireless
13.3 Absolute Analysis
13.4 Accelink Technologies
13.5 ADLINK Technology
13.6 ADI (Analog Devices Inc.)
13.7 Advantech
13.8 AirHop Communications
13.9 AKM (Asahi Kasei Microdevices)
13.10 Allot Communications
13.11 Amarisoft
13.12 Amdocs
13.13 Anritsu Corporation
13.14 Aricent
13.15 ARM Holdings
13.16 Astellia
13.17 ASTRI (Hong Kong Applied Science and Technology Research Institute)
13.18 Artesyn Embedded Technologies
13.19 Artiza Networks
13.20 Avago Technologies
13.21 Azcom Technology
13.22 Benetel
13.23 Blu Wireless Technology
13.24 Broadcom Corporation
13.25 Cadence Design Systems
13.26 Cavium
13.27 CeedTec
13.28 Cellwize
13.29 Celtra
13.30 Coherent Logix
13.31 Comcores ApS
13.32 CommAgility
13.33 D2 Technologies
13.34 Dell
13.98 TEOCO Corporation
13.99 TI (Texas Instruments)
13.100 Tulinx
13.101 U-blox
13.102 Vectron International
13.103 Viavi Solutions
13.104 VPIsystems
13.105 WiPro
13.106 XCellAir
13.107 Xelic
13.108 Xilinx

14 Mobile Backhaul & Fronthaul Vendors
14.1 3Roam
14.2 4RF
14.3 Accedian Networks
14.4 Actelis Networks
14.5 Actiontec
14.6 Actus Networks
14.7 ADTRAN
14.8 ADVA Optical Networking
14.9 Advantech Wireless
14.10 ALAXALA Networks
14.11 Albis Technologies
14.12 ALCOMA
14.13 Allied Data Technologies
14.14 Allied Telesis
14.15 Aquantia
14.16 Arris
14.17 Avanti Communications
14.18 Aviat Networks
14.19 AVM
14.20 BLINQ Networks
14.21 BluWan
14.22 BridgeWave Communications
14.23 BTI Systems
14.24 CableFree Solutions
14.25 Calix
14.26 Cambium Networks
14.27 Canoga Perkins
14.28 Carlson Wireless Technologies
14.29 CBNL (Cambridge Broadband Networks Ltd.)
14.30 CCS (Cambridge Communication Systems)
14.31 Ceragon
14.32 Cielo Networks
14.33 Ciena Corporation
14.34 Comtrend
14.35 Corecess
14.36 Coriant
14.37 DASAN Networks
14.38 DragonWave
14.39 E-Band Communications (Moseley Associates)
14.40 EBlink
14.41 ECI Telecom
14.42 Elva-1
14.43 Exalt Communications
14.44 Extreme Networks
14.45 FastBack Networks
14.46 Fiberhome Technologies
14.47 FibroLan
14.48 Genmix Technology
14.49 Gilat Satellite Networks
14.50 HFR
14.51 Huahuan
14.52 Hughes Network Systems
14.53 HXI
14.54 iDirect
14.55 Infinera
14.56 Intracom Telecom
14.57 IPITEK
14.58 Iskratel
14.59 KEYMILE
14.60 LightPointe Communications
14.61 Loea Corporation
14.62 MAX4G
14.63 Microwave Networks
14.64 MIMOtech
14.65 MRV Communications
14.66 Nexcomm Systems
14.67 NexxComm Wireless
14.68 Omnitron Systems
14.69 OneAccess Networks
14.70 Polewall
14.71 Positron
14.72 Proxim Wireless Corporation
14.73 RACOM
14.74 RAD Data Communications
14.75 RADWIN
14.76 SAF Tehnika
14.77 SIAE Microelectronics (SIAE Microelectronica)
14.78 Siklu
14.79 SkyFiber
14.80 SMC Networks
14.81 Solectek
14.82 Star Microwave
14.83 Tarana Wireless
14.84 Telco Systems
14.85 Tellion
14.86 Tellumat
14.87 Telsey
14.88 Tilgin
14.89 Trango Systems
14.90 Ubiquoss
14.91 UTStarcom
14.92 Vubiq Networks
14.93 Wave1
14.94 Wavesight
14.95 Xavi Technologies
14.96 Yamaha Corporation
14.97 Zhone Technologies

15: Global Market Analysis & Forecasts
15.1 Market Definition
15.2 Decomposing the Global Wireless Network Infrastructure Market
15.3 Macrocell RAN & Mobile Core
15.4 Macrocells
15.4.1 Segmentation by Air Interface Technology
15.4.1.1 2G & 3G
15.4.1.2 FDD LTE
15.4.1.3 TD-LTE
15.4.1.4 WiMAX
15.4.1.5 5G
15.5 Mobile Core
15.5.1 Segmentation by Technology
15.5.1.1 3G Packet Core
15.5.1.2 HLR
15.5.1.3 MSS
15.5.1.4 LTE EPC
15.5.1.5 WiMAX
15.5.1.6 5G
15.6 Mobile Backhaul
15.6.1 Segmentation by Technology
15.6.1.1 Ethernet
15.6.1.2 Microwave & Millimeter Wave
15.6.1.3 Satellite
15.6.1.4 WDM
15.6.1.5 PON
15.6.1.6 Others
15.7 Small Cells
15.7.1 Segmentation by Use Case
15.7.1.1 Residential
15.7.1.2 Enterprise
15.7.1.3 Urban
15.7.1.4 Rural & Suburban
15.7.2 Segmentation by Form Factor
15.7.2.1 Femtocells
15.7.2.2 Picocells
15.7.2.3 Microcells
15.7.3 Segmentation by Air Interface Technology
15.7.3.1 2G & 3G
15.7.3.2 LTE
15.7.3.3 5G
15.7.4 Segmentation by Deployment Model
15.7.4.1 Indoor
15.7.4.2 Outdoor
15.8 Small Cell Backhaul
15.8.1 Segmentation by Technology
15.8.1.1 DSL
15.8.1.2 Ethernet
15.8.1.3 Microwave
15.8.1.4 Millimeter Wave
15.8.1.5 Satellite
15.8.1.6 Fiber & Others
15.9 Carrier Wi-Fi
15.9.1 Segmentation by Submarket
15.9.1.1 Access Points
15.9.1.2 Access Point Controllers
15.9.2 Segmentation by Integration Approach
15.9.2.1 Standalone Wi-Fi Hotspots
15.9.2.2 Managed Wi-Fi Offload
15.10 C-RAN
15.10.1 Segmentation by Submarket
15.10.1.1 RRHs (Remote Radio Heads)
15.10.1.2 BBU (Baseband Units)
15.10.2 Segmentation by Air Interface Technology
15.10.2.1 3G & LTE
15.10.2.2 5G
15.10.3 Segmentation by Deployment Model
15.10.3.1 Indoor
15.10.3.2 Outdoor
15.11 C-RAN Fronthaul
15.11.1 Segmentation by Technology
15.11.1.1 Dedicated Fiber
15.11.1.2 WDM
15.11.1.3 OTN & PON
15.11.1.4 Ethernet
15.11.1.5 Microwave
15.11.1.6 Millimeter Wave
15.12 DAS
15.12.1 Segmentation by Deployment Model
15.12.1.1 Indoor
15.12.1.2 Outdoor

16 Regional Market Analysis & Forecasts
16.1 Segmentation by Region
16.1.1 Macrocells
16.1.2 Mobile Core
16.1.3 Macrocell Backhaul
16.1.4 Small Cells
16.1.5 Small Cell Backhaul
16.1.6 Carrier Wi-Fi
16.1.7 C-RAN
16.1.8 C-RAN Fronthaul
16.1.9 DAS
16.2 Asia Pacific
16.2.1 Macrocells
16.2.2 Mobile Core
16.2.3 Macrocell Backhaul
16.2.4 Small Cells
16.2.5 Small Cell Backhaul
16.2.6 Carrier Wi-Fi
16.2.7 C-RAN
16.2.8 C-RAN Fronthaul
16.2.9 DAS
16.3 Eastern Europe
16.3.1 Macrocells
16.3.2 Mobile Core
16.3.3 Macrocell Backhaul
16.3.4 Small Cells
16.3.5 Small Cell Backhaul
16.3.6 Carrier Wi-Fi
16.3.7 C-RAN
16.3.8 C-RAN Fronthaul
16.3.9 DAS
16.4 Latin & Central America
16.4.1 Macrocells
16.4.2 Mobile Core
16.4.3 Macrocell Backhaul
16.4.4 Small Cells
16.4.5 Small Cell Backhaul
16.4.6 Carrier Wi-Fi
16.4.7 C-RAN
16.4.8 C-RAN Fronthaul
16.4.9 DAS
16.5 Middle East & Africa
16.5.1 Macrocells
16.5.2 Mobile Core
16.5.3 Macrocell Backhaul
16.5.4 Small Cells
16.5.5 Small Cell Backhaul
16.5.6 Carrier Wi-Fi
16.5.7 C-RAN
16.5.8 C-RAN Fronthaul
16.5.9 DAS
16.6 North America
16.6.1 Macrocells
16.6.2 Mobile Core
16.6.3 Macrocell Backhaul
16.6.4 Small Cells
16.6.5 Small Cell Backhaul
16.6.6 Carrier Wi-Fi
16.6.7 C-RAN
16.6.8 C-RAN Fronthaul
16.6.9 DAS
16.7 Western Europe
16.7.1 Macrocells
16.7.2 Mobile Core
16.7.3 Macrocell Backhaul
16.7.4 Small Cells
16.7.5 Small Cell Backhaul
16.7.6 Carrier Wi-Fi
16.7.7 C-RAN
16.7.8 C-RAN Fronthaul
16.7.9 DAS

17 Conclusion & Strategic Recommendations
17.1 Competitive Industry Landscape: Acquisitions, Alliances & Consolidation
17.2 Is Virtualization a Threat to the Wireless Network Infrastructure Market?
17.3 Growing Focus on Enterprise RAN Deployments
17.4 Vendor Specific HetNet Offerings: Disrupting Traditional Network Architectures
17.5 Moving Towards C-RAN Architecture
17.5.1 Global Deployment Prospects
17.5.2 From Centralized to Cloud RAN: Virtualizing the RAN
17.5.3 Convergence of C-RAN and Small Cells: Distributing Baseband Intelligence
17.5.4 Interface Options: Is Ethernet a Feasible Solution?
17.5.5 Fronthaul Transport: Are Cheaper Options Emerging?
17.6 Standardization Driving RAN & Wi-Fi Integration
17.7 Outlook for LTE-Advanced
17.7.1 Upgrades for Capacity & Coverage Boosts
17.7.2 Moving Beyond Carrier Aggregation
17.7.3 Service Revenue Prospects
17.8 Status of TD-LTE Investments
17.8.1 China Mobile: Starting an Era of Large-Scale TD-LTE Deployments
17.8.2 Data Offloading Opportunities with TD-LTE Small Cells
17.8.3 Capitalizing on Tight Interworking Between TDD and FDD
17.9 Outlook for VoLTE & RCS
17.10 Bringing LTE-Broadcast & eMBMS into Focus
17.11 Outlook for Unlicensed LTE Small Cells
17.12 5G Development Efforts
17.12.1 Global Deployment Plans
17.12.2 R&D Focus Areas
17.12.3 5G Demonstrations & Performance Assessment
17.13 Smart Cities: Wireless Network Infrastructure Vendors to Lead the Way
17.14 Wireless Incumbents Could Face Cloud Rivals: Thanks to SDN & NFV
17.15 Spectrum: Driving Continued Acquisitions by Incumbent Mobile Operators
17.16 Mobile Operators Will Strive for Agility
17.17 Vertical Market Opportunities
17.18 SWOT Analysis
17.19 Strategic Recommendations
17.19.1 Recommendations for Mobile Operators
17.19.2 Recommendations for Wireless Network Infrastructure Vendors

List of Figures

Figure 1: Subsegments of the Wireless Network Infrastructure Market
Figure 2: IMT-2020 Development Roadmap
Figure 3: Macrocell RAN Component Segmentation by Technology
Figure 4: HetNet RAN Component Segmentation by Technology
Figure 5: Global VoLTE Subscriptions: 2016 - 2030 (Millions)
Figure 6: Mobile Backhaul & Fronthaul Segmentation by Technology
Figure 7: Annual Throughput of Mobile Network Data Traffic by Region: 2016 - 2030 (Exabytes)
Figure 8: Annual Global Throughput of Mobile Network Data Traffic by Access Network Technology: 2016 - 2030 (Exabytes)
Figure 9: Global Public Safety LTE Infrastructure Spending: 2016 - 2030 ($ Million)
Figure 10: TCO Comparison for 2G, 3G, LTE and HetNet Deployments ($ per GB)
<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>257</td>
<td>Eastern Europe Carrier Wi-Fi Access Point Controller Unit Shipment Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>258</td>
<td>Eastern Europe RRH Unit Shipments: 2016 - 2030 (Thousands of Units)</td>
</tr>
<tr>
<td>259</td>
<td>Eastern Europe RRH Unit Shipment Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>260</td>
<td>Eastern Europe C-RAN BBU Shipments: 2016 - 2030 (Thousands of Units)</td>
</tr>
<tr>
<td>261</td>
<td>Eastern Europe C-RAN BBU Shipment Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>262</td>
<td>Eastern Europe C-RAN Fronthaul Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>263</td>
<td>Eastern Europe DAS Node Unit Shipments: 2016 - 2020 (Thousands of Units)</td>
</tr>
<tr>
<td>264</td>
<td>Eastern Europe DAS Node Unit Shipment Revenue: 2016 - 2020 ($ Million)</td>
</tr>
<tr>
<td>265</td>
<td>Latin &amp; Central America Wireless Network Infrastructure Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>266</td>
<td>Latin &amp; Central America Macrocell Base Station Shipments: 2016 - 2030 (Thousands of Units)</td>
</tr>
<tr>
<td>267</td>
<td>Latin &amp; Central America Macrocell Base Station Shipment Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>268</td>
<td>Latin &amp; Central America 2G &amp; 3G Macrocell BSC Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>269</td>
<td>Latin &amp; Central America Mobile Core Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>270</td>
<td>Latin &amp; Central America Macrocell Backhaul Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>271</td>
<td>Latin &amp; Central America Small Cell Unit Shipments: 2016 - 2030 (Thousands of Units)</td>
</tr>
<tr>
<td>272</td>
<td>Latin &amp; Central America Small Cell Unit Shipment Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>273</td>
<td>Latin &amp; Central America Small Cell Backhaul Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>274</td>
<td>Latin &amp; Central America Carrier Wi-Fi Access Point Unit Shipments: 2016 - 2030 (Thousands of Units)</td>
</tr>
<tr>
<td>275</td>
<td>Latin &amp; Central America Carrier Wi-Fi Access Point Unit Shipment Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>276</td>
<td>Latin &amp; Central America Carrier Wi-Fi Access Point Controller Unit Shipments: 2016 - 2030 (Thousands of Units)</td>
</tr>
<tr>
<td>277</td>
<td>Latin &amp; Central America Carrier Wi-Fi Access Point Controller Unit Shipment Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>278</td>
<td>Latin &amp; Central America RRH Unit Shipments: 2016 - 2030 (Thousands of Units)</td>
</tr>
<tr>
<td>279</td>
<td>Latin &amp; Central America RRH Unit Shipment Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>280</td>
<td>Latin &amp; Central America C-RAN BBU Shipments: 2016 - 2030 (Thousands of Units)</td>
</tr>
<tr>
<td>281</td>
<td>Latin &amp; Central America C-RAN BBU Shipment Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>282</td>
<td>Latin &amp; Central America C-RAN Fronthaul Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>283</td>
<td>Latin &amp; Central America DAS Node Unit Shipments: 2016 - 2020 (Thousands of Units)</td>
</tr>
<tr>
<td>284</td>
<td>Latin &amp; Central America DAS Node Unit Shipment Revenue: 2016 - 2020 ($ Million)</td>
</tr>
<tr>
<td>285</td>
<td>Middle East &amp; Africa Wireless Network Infrastructure Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>286</td>
<td>Middle East &amp; Africa Macrocell Base Station Shipments: 2016 - 2030 (Thousands of Units)</td>
</tr>
<tr>
<td>287</td>
<td>Middle East &amp; Africa Macrocell Base Station Shipment Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>288</td>
<td>Middle East &amp; Africa 2G &amp; 3G Macrocell BSC Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>289</td>
<td>Middle East &amp; Africa Mobile Core Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>290</td>
<td>Middle East &amp; Africa Backhaul Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>291</td>
<td>Middle East &amp; Africa Small Cell Unit Shipments: 2016 - 2030 (Thousands of Units)</td>
</tr>
<tr>
<td>292</td>
<td>Middle East &amp; Africa Small Cell Unit Shipment Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>293</td>
<td>Middle East &amp; Africa Small Cell Backhaul Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>294</td>
<td>Middle East &amp; Africa Carrier Wi-Fi Access Point Unit Shipments: 2016 - 2030 (Thousands of Units)</td>
</tr>
<tr>
<td>295</td>
<td>Middle East &amp; Africa Carrier Wi-Fi Access Point Unit Shipment Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>296</td>
<td>Middle East &amp; Africa Carrier Wi-Fi Access Point Controller Unit Shipments: 2016 - 2030 (Thousands of Units)</td>
</tr>
<tr>
<td>297</td>
<td>Middle East &amp; Africa Carrier Wi-Fi Access Point Controller Unit Shipment Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>298</td>
<td>Middle East &amp; Africa RRH Unit Shipments: 2016 - 2030 (Thousands of Units)</td>
</tr>
<tr>
<td>299</td>
<td>Middle East &amp; Africa RRH Unit Shipment Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>300</td>
<td>Middle East &amp; Africa C-RAN BBU Shipments: 2016 - 2030 (Thousands of Units)</td>
</tr>
<tr>
<td>301</td>
<td>Middle East &amp; Africa C-RAN BBU Shipment Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>302</td>
<td>Middle East &amp; Africa C-RAN Fronthaul Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>303</td>
<td>Middle East &amp; Africa DAS Node Unit Shipments: 2016 - 2020 (Thousands of Units)</td>
</tr>
<tr>
<td>304</td>
<td>Middle East &amp; Africa DAS Node Unit Shipment Revenue: 2016 - 2020 ($ Million)</td>
</tr>
<tr>
<td>305</td>
<td>North America Wireless Network Infrastructure Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>306</td>
<td>North America Macrocell Base Station Shipments: 2016 - 2030 (Thousands of Units)</td>
</tr>
<tr>
<td>307</td>
<td>North America Macrocell Base Station Shipment Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>308</td>
<td>North America 2G &amp; 3G Macrocell BSC Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>309</td>
<td>North America Mobile Core Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>310</td>
<td>North America Backhaul Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>311</td>
<td>North America Small Cell Unit Shipments: 2016 - 2030 (Thousands of Units)</td>
</tr>
<tr>
<td>312</td>
<td>North America Small Cell Unit Shipment Revenue: 2016 - 2030 ($ Million)</td>
</tr>
<tr>
<td>313</td>
<td>North America Small Cell Backhaul Revenue: 2016 - 2030 ($ Million)</td>
</tr>
</tbody>
</table>
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