

The TD-LTE Ecosystem: 2015 - 2020 - Infrastructure, Devices, Subscriptions & Operator Revenue

<https://marketpublishers.com/r/T3D1CA9ABE4EN.html>

Date: February 2015

Pages: 344

Price: US\$ 2,500.00 (Single User License)

ID: T3D1CA9ABE4EN

Abstracts

FDD still remains the prevalent standard for LTE deployment as a natural progression path for GSM, W-CDMA and CDMA network operators. However, unpaired TDD spectrum costs significantly less per MHz/population than its FDD equivalent and is more widely available.

Driven by the technology's lower deployment costs and spectrum availability, the industry has witnessed several prominent TD-LTE network deployments across the globe including SoftBank in Japan, Sprint in the U.S. and Bharti Airtel in India. In particular, China Mobile's TD-LTE network launch has enabled the TD-LTE ecosystem to reach a significant scale of economy, boosting further infrastructure and device investments in TD-LTE technology.

More than a hundred operators have committed to deploy TD-LTE networks throughout the globe. Furthermore, all major device OEMs, including smartphone leaders Apple and Samsung, have commercially launched TD-LTE compatible devices. A large proportion of these devices support both TDD and FDD modes of operation, over multiple frequency bands.

Driven by the thriving ecosystem, TD-LTE operator service revenue is expected to account for over \$230 Billion by the end of 2020. By this period, TD-LTE networks will serve nearly 1 Billion subscribers worldwide.

The "TD-LTE Ecosystem: 2015 – 2020 – Infrastructure, Devices, Subscriptions & Operator Revenue" report presents an in-depth assessment of the TD-LTE market including key market drivers, challenges, operator revenue potential, infrastructure/device deployment commitments, future roadmap, value chain, vendor

strategies and strategic recommendations. The report also presents revenue and shipment market size and forecasts for both infrastructure and devices, along with subscription and service revenue projections for the LTE market as a whole, as well as separate projections for the TD-LTE and LTE FDD sub-markets from 2015 through to 2020. Historical figures are also presented for 2010, 2011, 2012, 2013 and 2014.

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

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

Contents

1 CHAPTER 1: INTRODUCTION

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

2 CHAPTER 2: AN OVERVIEW OF TD-LTE

- 2.1 What is TD-LTE?
- 2.2 Key Differentiator from FDD LTE: Unpaired Spectrum
- 2.3 Price per MHz/Population: The Benefit of Using Unpaired Spectrum
- 2.4 TD-LTE Spectrum Allocation
- 2.5 TCO (Total Cost of Ownership): How Does TD-LTE Compare with FDD LTE?
- 2.6 TD-LTE Performance Assessment
 - 2.6.1 Downlink Performance
 - 2.6.2 Impact of Carrier Aggregation
 - 2.6.3 Uplink Performance
- 2.7 Commercial Availability
 - 2.7.1 Infrastructure
 - 2.7.2 Devices
 - 2.7.3 Operator Services

3 CHAPTER 3: MARKET DRIVERS & BARRIERS

- 3.1 Market Drivers
 - 3.1.1 Capitalizing on Unpaired Spectrum
 - 3.1.2 Ease of Spectrum Acquisition
 - 3.1.3 Flexible Uplink and Downlink Capacity
 - 3.1.4 Interoperability with LTE FDD
 - 3.1.5 Vendor Endorsement
 - 3.1.6 Cheaper Hardware Costs
 - 3.1.7 Smooth Transition from WiMAX and TD-SCDMA

3.1.8 TD-LTE is Not Just a RAN Technology

3.2 Market Barriers

3.2.1 Coverage Comparison with FDD

3.2.2 Transmission Synchronization

3.2.3 Use of Guard Periods

3.2.4 Discontinuous Reception

4 CHAPTER 4: TD-LTE DEPLOYMENT CASE STUDIES

4.1 China Mobile

4.1.1 Coverage Footprint

4.1.2 User Devices

4.1.3 Vendor Selection

4.1.4 Revenue Prospects

4.1.5 Impact of Additional 4G Licenses

4.2 Bharti Airtel

4.2.1 Early Spectrum Auctions

4.2.2 Coverage Footprint & FDD Expansion

4.2.3 User Devices

4.2.4 Vendor Selection

4.2.5 Revenue Prospects

4.3 SoftBank

4.3.1 Coverage Footprint & FDD Expansion

4.3.2 User Devices

4.3.3 Vendor Selection

4.3.4 LTE-Advanced & Carrier Aggregation Deployment

4.3.5 Sprint Acquisition

4.3.6 Performance Assessment

4.3.7 Revenue Prospects

4.4 Sprint

4.4.1 Coverage Footprint

4.4.2 User Devices

4.4.3 Vendor Selection

4.4.4 Wholesale & Roaming Deals

4.4.5 LTE-Advanced & Carrier Aggregation Deployment

4.4.6 Performance Assessment

4.4.7 Revenue Prospects

4.5 UK Broadband

4.5.1 Coverage Footprint

- 4.5.2 User Devices
- 4.5.3 Vendor Selection
- 4.5.4 Wholesale Service Model
- 4.5.5 Revenue Prospects
- 4.6 Singtel Optus
 - 4.6.1 Coverage Footprint
 - 4.6.2 User Devices
 - 4.6.3 Vendor Selection
 - 4.6.4 LTE-Advanced & Carrier Aggregation Deployment
 - 4.6.5 Performance Assessment
 - 4.6.6 Revenue Prospects

5 CHAPTER 5: INDUSTRY ROADMAP & VALUE CHAIN

- 5.1 Industry Roadmap
 - 5.1.1 Initial LTE FDD Rollouts: 2010 - 2011
 - 5.1.2 Rise of the HetNet Ecosystem: 2012 - 2013
 - 5.1.3 A Wave of TD-LTE and LTE-Advanced Deployments: 2014 - 2016
 - 5.1.4 Moving Towards Virtualized Infrastructure: 2017 - 2019
 - 5.1.5 Start of the 5G Era: 2020 & Beyond
- 5.2 Value Chain
- 5.3 Embedded Technology Ecosystem
 - 5.3.1 Chipset Developers
 - 5.3.2 Embedded Component/Software Providers
- 5.4 RAN Ecosystem
 - 5.4.1 Macrocell RAN OEMs
 - 5.4.2 “Pure-Play” and Specialist Small Cell OEMs
 - 5.4.3 WiFi Access Point OEMs
 - 5.4.4 DAS & Repeater Solution Providers
 - 5.4.5 C-RAN Solution Providers
 - 5.4.6 Other Technology & Network Component Providers/Enablers
- 5.5 Mobile Backhaul Ecosystem
 - 5.5.1 Backhaul Solution Providers
- 5.6 Mobile Core Ecosystem
 - 5.6.1 Core Network Infrastructure & Software Providers
- 5.7 Connectivity Ecosystem
 - 5.7.1 2G, 3G & 4G Wireless Carriers
 - 5.7.2 WiFi Connectivity Providers
 - 5.7.3 SCaaS (Small Cells as a Service) Providers

5.8 SON Ecosystem

5.8.1 SON Solution Providers

5.9 SDN & NFV Ecosystem

5.9.1 SDN & NFV Providers

6 CHAPTER 6: VENDOR LANDSCAPE

6.1 RAN, CPE & EPC Infrastructure Vendors

6.1.1 Infrastructure Vendor Assessment

6.1.2 Accelleran

6.1.3 Adax

6.1.4 Affirmed Networks

6.1.5 Airspan Networks

6.1.6 Airvana

6.1.7 Alcatel-Lucent

6.1.8 Alcatel-Lucent Shanghai Bell Company

6.1.9 Altiostar Networks

6.1.10 Arcadyan Technology Corporation

6.1.11 Argela

6.1.12 ARItel

6.1.13 ASOCS

6.1.14 Athena Wireless Communications

6.1.15 Axxcelera

6.1.16 Bandrich

6.1.17 Cisco

6.1.18 Connectem

6.1.19 Contela

6.1.20 CS Corporation

6.1.21 Datang Mobile

6.1.22 Ericsson

6.1.23 FiberHome Technologies

6.1.24 Fujitsu

6.1.25 GENBAND

6.1.26 Gemtek Technology

6.1.27 GreenPacket

6.1.28 GrenTech (China GrenTech Corporation)

6.1.29 GWT (Global Wireless Technologies)

6.1.30 Hitachi

6.1.31 HOJY Wireless (Shenzhen Hojy Wireless Company)

- 6.1.32 Huawei
- 6.1.33 ip.access
- 6.1.34 Juni Global
- 6.1.35 Lemko
- 6.1.36 Mavenir
- 6.1.37 MTI Mobile
- 6.1.38 New Postcom Equipment
- 6.1.39 NEC
- 6.1.40 Nokia Networks
- 6.1.41 Nutaq/NuRAN Wireless
- 6.1.42 Oceus Networks
- 6.1.43 Polaris Networks
- 6.1.44 Potevio (China Potevio Company)
- 6.1.45 Quanta Computer
- 6.1.46 Qucell
- 6.1.47 Redline Communications/PureWave Networks
- 6.1.48 Samsung
- 6.1.49 SK Telesys
- 6.1.50 SpiderCloud Wireless
- 6.1.51 Star Solutions
- 6.1.52 Taqua
- 6.1.53 TD Tech (Nokia and Huawei Joint Venture)
- 6.1.54 TEKTELIC Communications
- 6.1.55 Telum
- 6.1.56 Telrad Networks
- 6.1.57 WNC (Wistron NeWeb Corporation)
- 6.1.58 Z-com (ZDC Wireless)
- 6.1.59 ZTE
- 6.2 Device Vendors
 - 6.2.1 Device Vendor Assessment
 - 6.2.2 Apple
 - 6.2.3 BBK Electronics Corporation: Vivo & OPPO
 - 6.2.4 BlackBerry
 - 6.2.5 Coolpad
 - 6.2.6 Fujitsu (Formerly Fujitsu-Toshiba)
 - 6.2.7 HTC
 - 6.2.8 Huawei
 - 6.2.9 Kyocera
 - 6.2.10 Lenovo/Motorola

6.2.11 LG

6.2.12 NEC Mobile Communications

6.2.13 Microsoft Mobile/Nokia

6.2.14 Panasonic

6.2.15 Pantech

6.2.16 Samsung

6.2.17 Sharp

6.2.18 Sony Mobile

6.2.19 TCL Communication

6.2.20 ZTE

6.2.21 Xiaomi

6.3 Enabling Technology Providers

6.3.1 7Layers

6.3.2 AKM (Asahi Kasei Microdevices)

6.3.3 Altair Semiconductor

6.3.4 Anite

6.3.5 Anritsu Corporation

6.3.6 ASTRI (Applied Science and Technology Research Institute)

6.3.7 ATL (A Test Lab Techno Corporation)

6.3.8 Avago Technologies

6.3.9 Bluetest AB

6.3.10 Broadcom

6.3.11 CATR (China Academy of Telecom Research)

6.3.12 CGC (Communications Global Certification)

6.3.13 Comba Telecom Systems Holdings

6.3.14 Comprion

6.3.15 Freescale Semiconductor

6.3.16 HiSilicon Technologies Corporation

6.3.17 ITRI (Industrial Technology Research Institute)

6.3.18 Innofidei Corporation

6.3.19 Intel

6.3.20 JDSU

6.3.21 Lime Microsystems

6.3.22 Marvell Technology Group

6.3.23 Maxim Integrated

6.3.24 MediaTek

6.3.25 MOBI Antenna Technologies (Shenzhen) Company

6.3.26 Multi-Micro (Fujian) Electronic Tech Company

6.3.27 Nvidia Corporation

- 6.3.28 Qualcomm
- 6.3.29 Qorvo
- 6.3.30 RadiSys Corporation
- 6.3.31 Rohde & Schwarz
- 6.3.32 Sequans Communications
- 6.3.33 Skyworks Solutions
- 6.3.34 Spreadtrum Communications
- 6.3.35 Tata Elxsi
- 6.3.36 TDK Corporation
- 6.3.37 TTA (Telecommunications Technology Association)
- 6.3.38 Tongyu Communication
- 6.3.39 Xi'an Sunnada Haitian Antenna Company

7 CHAPTER 7: MARKET ANALYSIS & FORECASTS

- 7.1 LTE Infrastructure Shipments & Revenue
 - 7.1.1 TDD vs. FDD RAN Segmentation
 - 7.1.2 Macrocell vs. Small Cell RAN Submarket Segmentation
 - 7.1.3 Regional Segmentation
- 7.2 LTE RAN Infrastructure Shipments & Revenue
 - 7.2.1 LTE Macrocell RAN Infrastructure Shipments & Revenue
 - 7.2.2 LTE Small Cell RAN Infrastructure Shipments & Revenue
- 7.3 EPC Infrastructure Revenue
- 7.4 TD-LTE RAN Infrastructure Shipments & Revenue
 - 7.4.1 Macrocell vs. Small Cell RAN Submarket Segmentation
 - 7.4.2 TD-LTE Macrocell RAN Infrastructure Shipments & Revenue
 - 7.4.3 TD-LTE Small Cell RAN Infrastructure Shipments & Revenue
- 7.5 LTE FDD RAN Infrastructure Shipments & Revenue
 - 7.5.1 Macrocell vs. Small Cell RAN Submarket Segmentation
 - 7.5.2 LTE FDD Macrocell RAN Infrastructure Shipments & Revenue
 - 7.5.3 LTE FDD Small Cell RAN Infrastructure Shipments & Revenue
- 7.6 LTE Device Shipments & Revenue
 - 7.6.1 TDD vs. FDD Segmentation
 - 7.6.2 Regional Segmentation
 - 7.6.3 Segmentation by Form Factor
 - 7.6.4 Embedded Cards
 - 7.6.5 Consumer Gadgets
 - 7.6.6 Netbooks
 - 7.6.7 PCs

- 7.6.8 Routers
- 7.6.9 Smartphones
- 7.6.10 Tablets
- 7.6.11 USB Dongles
- 7.7 TD-LTE Device Shipments & Revenue
 - 7.7.1 Regional Segmentation
 - 7.7.2 Segmentation by Form Factor
- 7.8 LTE FDD Device Shipments & Revenue
 - 7.8.1 Regional Segmentation
 - 7.8.2 Segmentation by Form Factor
- 7.9 LTE Subscriptions & Service Revenue
 - 7.9.1 TDD vs. FDD Segmentation
 - 7.9.2 Regional Segmentation
 - 7.9.3 Top 20 Countries
 - 7.9.3.1 China
 - 7.9.3.2 USA
 - 7.9.3.3 Japan
 - 7.9.3.4 India
 - 7.9.3.5 Korea
 - 7.9.3.6 Germany
 - 7.9.3.7 UK
 - 7.9.3.8 Indonesia
 - 7.9.3.9 Brazil
 - 7.9.3.10 Italy
 - 7.9.3.11 Russia
 - 7.9.3.12 Spain
 - 7.9.3.13 Saudi Arabia
 - 7.9.3.14 Mexico
 - 7.9.3.15 France
 - 7.9.3.16 Poland
 - 7.9.3.17 Malaysia
 - 7.9.3.18 Australia
 - 7.9.3.19 Philippines
 - 7.9.3.20 Canada
- 7.10 TD-LTE Subscriptions & Service Revenue
 - 7.10.1 TD-LTE Subscriptions
 - 7.10.2 TD-LTE Service Revenue
 - 7.10.3 TD-LTE ARPU
- 7.11 LTE FDD Subscriptions & Service Revenue

7.11.1 LTE FDD Subscriptions

7.11.2 LTE FDD Service Revenue

7.11.3 LTE FDD ARPU

7.12 Asia Pacific

7.12.1 LTE Infrastructure Revenue

7.12.2 EPC Infrastructure Revenue

7.12.3 LTE Macrocell RAN Infrastructure Shipments & Revenue

7.12.4 LTE Small Cell RAN Infrastructure Shipments & Revenue

7.12.5 TD-LTE Macrocell RAN Infrastructure Shipments & Revenue

7.12.6 TD-LTE Small Cell RAN Infrastructure Shipments & Revenue

7.12.7 LTE FDD Macrocell RAN Infrastructure Shipments & Revenue

7.12.8 LTE FDD Small Cell RAN Infrastructure Shipments & Revenue

7.12.9 LTE Device Shipments & Revenue

7.12.10 TD-LTE Device Shipments & Revenue

7.12.11 LTE FDD Device Shipments & Revenue

7.12.12 LTE Subscriptions

7.12.13 LTE Service Revenue

7.12.14 LTE ARPU

7.13 Eastern Europe

7.13.1 LTE Infrastructure Revenue

7.13.2 EPC Infrastructure Revenue

7.13.3 LTE Macrocell RAN Infrastructure Shipments & Revenue

7.13.4 LTE Small Cell RAN Infrastructure Shipments & Revenue

7.13.5 TD-LTE Macrocell RAN Infrastructure Shipments & Revenue

7.13.6 TD-LTE Small Cell RAN Infrastructure Shipments & Revenue

7.13.7 LTE FDD Macrocell RAN Infrastructure Shipments & Revenue

7.13.8 LTE FDD Small Cell RAN Infrastructure Shipments & Revenue

7.13.9 LTE Device Shipments & Revenue

7.13.10 TD-LTE Device Shipments & Revenue

7.13.11 LTE FDD Device Shipments & Revenue

7.13.12 LTE Subscriptions

7.13.13 LTE Service Revenue

7.13.14 LTE ARPU

7.14 Latin & Central America

7.14.1 LTE Infrastructure Revenue

7.14.2 EPC Infrastructure Revenue

7.14.3 LTE Macrocell RAN Infrastructure Shipments & Revenue

7.14.4 LTE Small Cell RAN Infrastructure Shipments & Revenue

7.14.5 TD-LTE Macrocell RAN Infrastructure Shipments & Revenue

- 7.14.6 TD-LTE Small Cell RAN Infrastructure Shipments & Revenue
- 7.14.7 LTE FDD Macrocell RAN Infrastructure Shipments & Revenue
- 7.14.8 LTE FDD Small Cell RAN Infrastructure Shipments & Revenue
- 7.14.9 LTE Device Shipments & Revenue
- 7.14.10 TD-LTE Device Shipments & Revenue
- 7.14.11 LTE FDD Device Shipments & Revenue
- 7.14.12 LTE Subscriptions
- 7.14.13 LTE Service Revenue
- 7.14.14 LTE ARPU
- 7.15 Middle East & Africa
 - 7.15.1 LTE Infrastructure Revenue
 - 7.15.2 EPC Infrastructure Revenue
 - 7.15.3 LTE Macrocell RAN Infrastructure Shipments & Revenue
 - 7.15.4 LTE Small Cell RAN Infrastructure Shipments & Revenue
 - 7.15.5 TD-LTE Macrocell RAN Infrastructure Shipments & Revenue
 - 7.15.6 TD-LTE Small Cell RAN Infrastructure Shipments & Revenue
 - 7.15.7 LTE FDD Macrocell RAN Infrastructure Shipments & Revenue
 - 7.15.8 LTE FDD Small Cell RAN Infrastructure Shipments & Revenue
 - 7.15.9 LTE Device Shipments & Revenue
 - 7.15.10 TD-LTE Device Shipments & Revenue
 - 7.15.11 LTE FDD Device Shipments & Revenue
 - 7.15.12 LTE Subscriptions
 - 7.15.13 LTE Service Revenue
 - 7.15.14 LTE ARPU
- 7.16 North America
 - 7.16.1 LTE Infrastructure Revenue
 - 7.16.2 EPC Infrastructure Revenue
 - 7.16.3 LTE Macrocell RAN Infrastructure Shipments & Revenue
 - 7.16.4 LTE Small Cell RAN Infrastructure Shipments & Revenue
 - 7.16.5 TD-LTE Macrocell RAN Infrastructure Shipments & Revenue
 - 7.16.6 TD-LTE Small Cell RAN Infrastructure Shipments & Revenue
 - 7.16.7 LTE FDD Macrocell RAN Infrastructure Shipments & Revenue
 - 7.16.8 LTE FDD Small Cell RAN Infrastructure Shipments & Revenue
 - 7.16.9 LTE Device Shipments & Revenue
 - 7.16.10 TD-LTE Device Shipments & Revenue
 - 7.16.11 LTE FDD Device Shipments & Revenue
 - 7.16.12 LTE Subscriptions
 - 7.16.13 LTE Service Revenue
 - 7.16.14 LTE ARPU

7.17 Western Europe

7.17.1 LTE Infrastructure Revenue

7.17.2 EPC Infrastructure Revenue

7.17.3 LTE Macrocell RAN Infrastructure Shipments & Revenue

7.17.4 LTE Small Cell RAN Infrastructure Shipments & Revenue

7.17.5 TD-LTE Macrocell RAN Infrastructure Shipments & Revenue

7.17.6 TD-LTE Small Cell RAN Infrastructure Shipments & Revenue

7.17.7 LTE FDD Macrocell RAN Infrastructure Shipments & Revenue

7.17.8 LTE FDD Small Cell RAN Infrastructure Shipments & Revenue

7.17.9 LTE Device Shipments & Revenue

7.17.10 TD-LTE Device Shipments & Revenue

7.17.11 LTE FDD Device Shipments & Revenue

7.17.12 LTE Subscriptions

7.17.13 LTE Service Revenue

7.17.14 LTE ARPU

8 CHAPTER 8: CONCLUSION & STRATEGIC RECOMMENDATIONS

8.1 Driving Opportunities for New Frequency Bands: 3.5 GHz TD-LTE Case Study

8.2 Opportunities in the Fixed Broadband and WiMAX Market

8.3 WiMAX Forum Endorses TD-LTE

8.4 TD-LTE Spectrum: Optimal for Capacity Demands & Small Cells

8.5 Impact of Differing Migration Paths

8.6 Unified LTE Standards: The Foundation for TD-LTE Global Scale Economies

8.7 Capitalizing on Tight Interworking between TDD and FDD: Sprint Spark Case Study

8.8 Strategic Recommendations

8.8.1 Recommendations for Operators

8.8.2 Recommendations for Infrastructure Vendors

8.8.3 Recommendations for Device Vendors

List Of Figures

LIST OF FIGURES

- Figure 1: TD-SCDMA Mobile Network Subscriptions: 2010 – 2020 (Millions)
- Figure 2: Difference between TD-LTE and FDD LTE
- Figure 3: TD-LTE Spectrum Availability by Region
- Figure 4: TD-LTE Spectrum Opportunities
- Figure 5: TCO Comparison for TD-LTE & LTE FDD Deployments (\$ per GB)
- Figure 6: Major TD-LTE Infrastructure Vendors
- Figure 7: Major TD-LTE Device Vendors
- Figure 8: Operators Committed to TD-LTE Deployments
- Figure 9: Common TD-LTE and LTE FDD Ecosystem
- Figure 43: The Wireless Network Infrastructure Industry Roadmap: 2010 - 2020
- Figure 44: The Wireless Network Infrastructure Value Chain
- Figure 45: Embedded Technology Ecosystem Players
- Figure 46: Macrocell RAN Ecosystem Players
- Figure 47: Specialist Small Cell RAN Ecosystem Players
- Figure 48: Carrier WiFi Ecosystem Players
- Figure 49: DAS & Repeater Ecosystem Players
- Figure 50: C-RAN Ecosystem Players
- Figure 51: Mobile Backhaul Ecosystem Players
- Figure 52: Mobile Core Ecosystem Players
- Figure 53: List of LTE Trials & Deployments
- Figure 54: SON Ecosystem Players
- Figure 55: SDN & NFV Ecosystem Players
- Figure 23: Global LTE Infrastructure Revenue by Submarket: 2010 – 2020 (\$ Million)
- Figure 24: Global LTE RAN Infrastructure Shipments by TDD/ FDD Technology: 2010 - 2020 (Thousands of Units)
- Figure 25: Global LTE RAN Infrastructure Revenue by TDD/ FDD Technology: 2010 - 2020 (\$ Million)
- Figure 26: Global LTE RAN Infrastructure Shipments by Submarket: 2010 - 2020 (Thousands of Units)
- Figure 27: Global LTE RAN Infrastructure Revenue by Submarket: 2010 - 2020 (\$ Million)
- Figure 28: LTE Infrastructure Revenue by Region: 2010 - 2020 (\$ Million)
- Figure 29: LTE Macrocell Base Station (eNB) Unit Shipments by Region: 2010 – 2020
- Figure 30: LTE Macrocell Base Station (eNB) Unit Shipment Revenue by Region: 2010 – 2020 (\$ Million)

Figure 31: LTE Small Cell Unit Shipments by Region: 2010 – 2020 (Thousands of Units)

Figure 32: LTE Small Cell Unit Shipment Revenue by Region: 2010 – 2020 (\$ Million)

Figure 33: LTE EPC Revenue by Region: 2010 – 2020 (\$ Million)

Figure 34: Global TD-LTE Unit Shipments by Submarket: 2010 – 2020 (Thousands of Units)

Figure 35: Global TD-LTE Unit Shipment Revenue by Submarket: 2010 – 2020 (\$ Million)

Figure 36: TD-LTE Macrocell Base Station (eNB) Unit Shipments by Region: 2010 – 2020

Figure 37: TD-LTE Macrocell Base Station (eNB) Unit Shipment Revenue by Region: 2010 – 2020 (\$ Million)

Figure 38: TD-LTE Small Cell Unit Shipments by Region: 2010 – 2020 (Thousands of Units)

Figure 39: TD-LTE Small Cell Unit Shipment Revenue by Region: 2010 – 2020 (\$ Million)

Figure 40: Global LTE FDD Unit Shipments by Submarket: 2010 – 2020 (Thousands of Units)

Figure 41: Global LTE FDD Unit Shipment Revenue by Submarket: 2010 – 2020 (\$ Million)

Figure 42: LTE FDD Macrocell Base Station (eNB) Unit Shipments by Region: 2010 – 2020

Figure 43: LTE FDD Macrocell Base Station (eNB) Unit Shipment Revenue by Region: 2010 – 2020 (\$ Million)

Figure 44: LTE FDD Small Cell Unit Shipments by Region: 2010 – 2020 (Thousands of Units)

Figure 45: LTE FDD Small Cell Unit Shipment Revenue by Region: 2010 – 2020 (\$ Million)

Figure 46: Global LTE Device Unit Shipments by TDD/FDD Technology: 2010 - 2020 (Millions of Units)

Figure 47: Global LTE Device Unit Shipment Revenue by TDD/FDD Technology: 2010 - 2020 (\$ Billion)

Figure 48: LTE Device Unit Shipments by Region: 2010 - 2020 (Millions of Units)

Figure 49: LTE Device Unit Shipment Revenue by Region: 2010 - 2020 (\$ Billion)

Figure 50: Global LTE Device Unit Shipments by Form Factor: 2010 - 2020 (Millions of Units)

Figure 51: Global LTE Device Unit Shipment Revenue by Form Factor: 2010 - 2020 (\$ Billion)

Figure 52: LTE Embedded Card Unit Shipments: 2010 - 2020 (Millions of Units)

Figure 53: LTE Embedded Card Unit Shipment Revenue: 2010 - 2020 (\$ Billion)

- Figure 54: LTE Consumer Gadget Unit Shipments: 2010 - 2020 (Millions of Units)
- Figure 55: LTE Consumer Gadget Unit Shipment Revenue: 2010 - 2020 (\$ Billion)
- Figure 56: LTE Netbook Unit Shipments: 2010 - 2020 (Millions of Units)
- Figure 57: LTE Netbook Unit Shipment Revenue: 2010 - 2020 (\$ Billion)
- Figure 58: LTE PC Unit Shipments: 2010 - 2020 (Millions of Units)
- Figure 59: LTE PC Unit Shipment Revenue: 2010 - 2020 (\$ Billion)
- Figure 60: LTE Router Unit Shipments: 2010 - 2020 (Millions of Units)
- Figure 61: LTE Router Unit Shipment Revenue: 2010 - 2020 (\$ Billion)
- Figure 62: LTE Smartphone Unit Shipments: 2010 - 2020 (Millions of Units)
- Figure 63: LTE Smartphone Unit Shipment Revenue: 2010 - 2020 (\$ Billion)
- Figure 64: LTE Tablet Unit Shipments: 2010 - 2020 (Millions of Units)
- Figure 65: LTE Tablet Unit Shipment Revenue: 2010 - 2020 (\$ Billion)
- Figure 66: LTE USB Dongle Unit Shipments: 2010 - 2020 (Millions of Units)
- Figure 67: LTE USB Dongle Unit Shipment Revenue: 2010 - 2020 (\$ Billion)
- Figure 68: TD-LTE Device Unit Shipments by Region: 2010 - 2020 (Millions of Units)
- Figure 69: TD-LTE Device Unit Shipment Revenue by Region: 2010 - 2020 (\$ Billion)
- Figure 70: Global TD-LTE Device Unit Shipments by Form Factor: 2010 - 2020 (Millions of Units)
- Figure 71: Global TD-LTE Device Unit Shipment Revenue by Form Factor: 2010 - 2020 (\$ Billion)
- Figure 72: LTE FDD Device Unit Shipments by Region: 2010 - 2020 (Millions of Units)
- Figure 73: LTE FDD Device Unit Shipment Revenue by Region: 2010 - 2020 (\$ Billion)
- Figure 74: Global LTE FDD Device Unit Shipments by Form Factor: 2010 - 2020 (Millions of Units)
- Figure 75: Global LTE FDD Device Unit Shipment Revenue by Form Factor: 2010 - 2020 (\$ Billion)
- Figure 76: Global LTE Subscriptions by TDD/FDD Technology: 2010 - 2020 (Millions)
- Figure 77: Global LTE Service Revenue by TDD/FDD Technology: 2010 - 2020 (\$ Billion)
- Figure 78: Global LTE ARPU by TDD/FDD Technology: 2010 - 2020 (\$ per Month)
- Figure 79: LTE Subscriptions by Region: 2010 - 2020 (Millions)
- Figure 80: LTE Service Revenue by Region: 2010 - 2020 (\$ Billion)
- Figure 81: LTE ARPU by Region: 2010 - 2020 (\$ per Month)
- Figure 82: LTE Subscriptions in Top 20 Countries: 2010 - 2020 (Millions)
- Figure 83: LTE Service Revenue in Top 20 Countries: 2010 - 2020 (\$ Billion)
- Figure 84: LTE ARPU in Top 20 Countries: 2010 - 2020 (\$ per Month)
- Figure 85: LTE Subscriptions in China: 2010 - 2020 (Millions)
- Figure 86: LTE Service Revenue in China: 2010 - 2020 (\$ Billion)
- Figure 87: LTE ARPU in China: 2010 - 2020 (\$ per Month)

- Figure 88: LTE Subscriptions in USA: 2010 - 2020 (Millions)
- Figure 89: LTE Service Revenue in USA: 2010 - 2020 (\$ Billion)
- Figure 90: LTE ARPU in USA: 2010 - 2020 (\$ per Month)
- Figure 91: LTE Subscriptions in Japan: 2010 - 2020 (Millions)
- Figure 92: LTE Service Revenue in Japan: 2010 - 2020 (\$ Billion)
- Figure 93: LTE ARPU in Japan: 2010 - 2020 (\$ per Month)
- Figure 94: LTE Subscriptions in India: 2010 - 2020 (Millions)
- Figure 95: LTE Service Revenue in India: 2010 - 2020 (\$ Billion)
- Figure 96: LTE ARPU in India: 2010 - 2020 (\$ per Month)
- Figure 97: LTE Subscriptions in Korea: 2010 - 2020 (Millions)
- Figure 98: LTE Service Revenue in Korea: 2010 - 2020 (\$ Billion)
- Figure 99: LTE ARPU in Korea: 2010 - 2020 (\$ per Month)
- Figure 100: LTE Subscriptions in Germany: 2010 - 2020 (Millions)
- Figure 101: LTE Service Revenue in Germany: 2010 - 2020 (\$ Billion)
- Figure 102: LTE ARPU in Germany: 2010 - 2020 (\$ per Month)
- Figure 103: LTE Subscriptions in UK: 2010 - 2020 (Millions)
- Figure 104: LTE Service Revenue in UK: 2010 - 2020 (\$ Billion)
- Figure 105: LTE ARPU in UK: 2010 - 2020 (\$ per Month)
- Figure 106: LTE Subscriptions in Indonesia: 2010 - 2020 (Millions)
- Figure 107: LTE Service Revenue in Indonesia: 2010 - 2020 (\$ Billion)
- Figure 108: LTE ARPU in Indonesia: 2010 - 2020 (\$ per Month)
- Figure 109: LTE Subscriptions in Brazil: 2010 - 2020 (Millions)
- Figure 110: LTE Service Revenue in Brazil: 2010 - 2020 (\$ Billion)
- Figure 111: LTE ARPU in Brazil: 2010 - 2020 (\$ per Month)
- Figure 112: LTE Subscriptions in Italy: 2010 - 2020 (Millions)
- Figure 113: LTE Service Revenue in Italy: 2010 - 2020 (\$ Billion)
- Figure 114: LTE ARPU in Italy: 2010 - 2020 (\$ per Month)
- Figure 115: LTE Subscriptions in Russia: 2010 - 2020 (Millions)
- Figure 116: LTE Service Revenue in Russia: 2010 - 2020 (\$ Billion)
- Figure 117: LTE ARPU in Russia: 2010 - 2020 (\$ per Month)
- Figure 118: LTE Subscriptions in Spain: 2010 - 2020 (Millions)
- Figure 119: LTE Service Revenue in Spain: 2010 - 2020 (\$ Billion)
- Figure 120: LTE ARPU in Spain: 2010 - 2020 (\$ per Month)
- Figure 121: LTE Subscriptions in Saudi Arabia: 2010 - 2020 (Millions)
- Figure 122: LTE Service Revenue in Saudi Arabia: 2010 - 2020 (\$ Billion)
- Figure 123: LTE ARPU in Saudi Arabia: 2010 - 2020 (\$ per Month)
- Figure 124: LTE Subscriptions in Mexico: 2010 - 2020 (Millions)
- Figure 125: LTE Service Revenue in Mexico: 2010 - 2020 (\$ Billion)
- Figure 126: LTE ARPU in Mexico: 2010 - 2020 (\$ per Month)

- Figure 127: LTE Subscriptions in France: 2010 - 2020 (Millions)
- Figure 128: LTE Service Revenue in France: 2010 - 2020 (\$ Billion)
- Figure 129: LTE ARPU in France: 2010 - 2020 (\$ per Month)
- Figure 130: LTE Subscriptions in Poland: 2010 - 2020 (Millions)
- Figure 131: LTE Service Revenue in Poland: 2010 - 2020 (\$ Billion)
- Figure 132: LTE ARPU in Poland: 2010 - 2020 (\$ per Month)
- Figure 133: LTE Subscriptions in Malaysia: 2010 - 2020 (Millions)
- Figure 134: LTE Service Revenue in Malaysia: 2010 - 2020 (\$ Billion)
- Figure 135: LTE ARPU in Malaysia: 2010 - 2020 (\$ per Month)
- Figure 136: LTE Subscriptions in Australia: 2010 - 2020 (Millions)
- Figure 137: LTE Service Revenue in Australia: 2010 - 2020 (\$ Billion)
- Figure 138: LTE ARPU in Australia: 2010 - 2020 (\$ per Month)
- Figure 139: LTE Subscriptions in Philippines: 2010 - 2020 (Millions)
- Figure 140: LTE Service Revenue in Philippines: 2010 - 2020 (\$ Billion)
- Figure 141: LTE ARPU in Philippines: 2010 - 2020 (\$ per Month)
- Figure 142: LTE Subscriptions in Canada: 2010 - 2020 (Millions)
- Figure 143: LTE Service Revenue in Canada: 2010 - 2020 (\$ Billion)
- Figure 144: LTE ARPU in Canada: 2010 - 2020 (\$ per Month)
- Figure 145: Global TD-LTE Subscriptions: 2010 - 2020 (Millions)
- Figure 146: Global TD-LTE Service Revenue: 2010 - 2020 (\$ Billion)
- Figure 147: Global TD-LTE ARPU: 2010 - 2020 (\$ per Month)
- Figure 148: Global LTE FDD Subscriptions: 2010 - 2020 (Millions)
- Figure 149: Global LTE FDD Service Revenue: 2010 - 2020 (\$ Billion)
- Figure 150: Global LTE FDD ARPU: 2010 - 2020 (\$ per Month)
- Figure 151: Asia Pacific LTE Infrastructure Revenue: 2010 - 2020 (\$ Million)
- Figure 152: Asia Pacific LTE EPC Revenue: 2010 – 2020 (\$ Million)
- Figure 153: Asia Pacific LTE Macrocell Base Station (eNB) Unit Shipments: 2010 – 2020
- Figure 154: Asia Pacific LTE Macrocell Base Station (eNB) Unit Shipment Revenue: 2010 – 2020 (\$ Million)
- Figure 155: Asia Pacific LTE Small Cell Unit Shipments: 2010 – 2020 (Thousands of Units)
- Figure 156: Asia Pacific LTE Small Cell Unit Shipment Revenue: 2010 – 2020 (\$ Million)
- Figure 157: Asia Pacific TD-LTE Macrocell Base Station (eNB) Unit Shipments: 2010 – 2020
- Figure 158: Asia Pacific TD-LTE Macrocell Base Station (eNB) Unit Shipment Revenue: 2010 – 2020 (\$ Million)
- Figure 159: Asia Pacific TD-LTE Small Cell Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 160: Asia Pacific TD-LTE Small Cell Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 161: Asia Pacific LTE FDD Macrocell Base Station (eNB) Unit Shipments: 2010 – 2020

Figure 162: Asia Pacific LTE FDD Macrocell Base Station (eNB) Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 163: Asia Pacific LTE FDD Small Cell Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 164: Asia Pacific LTE FDD Small Cell Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 165: Asia Pacific LTE Device Unit Shipments: 2010 - 2020 (Millions of Units)

Figure 166: Asia Pacific LTE Device Unit Shipment Revenue: 2010 - 2020 (\$ Billion)

Figure 167: Asia Pacific TD-LTE Device Unit Shipments: 2010 - 2020 (Millions of Units)

Figure 168: Asia Pacific TD-LTE Device Unit Shipment Revenue: 2010 - 2020 (\$ Billion)

Figure 169: Asia Pacific LTE FDD Device Unit Shipments: 2010 - 2020 (Millions of Units)

Figure 170: Asia Pacific LTE FDD Device Unit Shipment Revenue: 2010 - 2020 (\$ Billion)

Figure 171: Asia Pacific LTE Subscriptions: 2010 - 2020 (Millions)

Figure 172: Asia Pacific LTE Service Revenue: 2010 - 2020 (\$ Billion)

Figure 173: Asia Pacific LTE ARPU: 2010 - 2020 (\$ per Month)

Figure 174: Eastern Europe LTE Infrastructure Revenue: 2010 - 2020 (\$ Million)

Figure 175: Eastern Europe LTE EPC Revenue: 2010 – 2020 (\$ Million)

Figure 176: Eastern Europe LTE Macrocell Base Station (eNB) Unit Shipments: 2010 – 2020

Figure 177: Eastern Europe LTE Macrocell Base Station (eNB) Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 178: Eastern Europe LTE Small Cell Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 179: Eastern Europe LTE Small Cell Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 180: Eastern Europe TD-LTE Macrocell Base Station (eNB) Unit Shipments: 2010 – 2020

Figure 181: Eastern Europe TD-LTE Macrocell Base Station (eNB) Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 182: Eastern Europe TD-LTE Small Cell Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 183: Eastern Europe TD-LTE Small Cell Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 184: Eastern Europe LTE FDD Macrocell Base Station (eNB) Unit Shipments: 2010 – 2020

Figure 185: Eastern Europe LTE FDD Macrocell Base Station (eNB) Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 186: Eastern Europe LTE FDD Small Cell Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 187: Eastern Europe LTE FDD Small Cell Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 188: Eastern Europe LTE Device Unit Shipments: 2010 - 2020 (Millions of Units)

Figure 189: Eastern Europe LTE Device Unit Shipment Revenue: 2010 - 2020 (\$ Billion)

Figure 190: Eastern Europe TD-LTE Device Unit Shipments: 2010 - 2020 (Millions of Units)

Figure 191: Eastern Europe TD-LTE Device Unit Shipment Revenue: 2010 - 2020 (\$ Billion)

Figure 192: Eastern Europe LTE FDD Device Unit Shipments: 2010 - 2020 (Millions of Units)

Figure 193: Eastern Europe LTE FDD Device Unit Shipment Revenue: 2010 - 2020 (\$ Billion)

Figure 194: Eastern Europe LTE Subscriptions: 2010 - 2020 (Millions)

Figure 195: Eastern Europe LTE Service Revenue: 2010 - 2020 (\$ Billion)

Figure 196: Eastern Europe LTE ARPU: 2010 - 2020 (\$ per Month)

Figure 197: Latin & Central America LTE Infrastructure Revenue: 2010 - 2020 (\$ Million)

Figure 198: Latin & Central America LTE EPC Revenue: 2010 – 2020 (\$ Million)

Figure 199: Latin & Central America LTE Macrocell Base Station (eNB) Unit Shipments: 2010 – 2020

Figure 200: Latin & Central America LTE Macrocell Base Station (eNB) Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 201: Latin & Central America LTE Small Cell Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 202: Latin & Central America LTE Small Cell Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 203: Latin & Central America TD-LTE Macrocell Base Station (eNB) Unit Shipments: 2010 – 2020

Figure 204: Latin & Central America TD-LTE Macrocell Base Station (eNB) Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 205: Latin & Central America TD-LTE Small Cell Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 206: Latin & Central America TD-LTE Small Cell Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 207: Latin & Central America LTE FDD Macrocell Base Station (eNB) Unit Shipments: 2010 – 2020

Figure 208: Latin & Central America LTE FDD Macrocell Base Station (eNB) Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 209: Latin & Central America LTE FDD Small Cell Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 210: Latin & Central America LTE FDD Small Cell Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 211: Latin & Central America LTE Device Unit Shipments: 2010 - 2020 (Millions of Units)

Figure 212: Latin & Central America LTE Device Unit Shipment Revenue: 2010 - 2020 (\$ Billion)

Figure 213: Latin & Central America TD-LTE Device Unit Shipments: 2010 - 2020 (Millions of Units)

Figure 214: Latin & Central America TD-LTE Device Unit Shipment Revenue: 2010 - 2020 (\$ Billion)

Figure 215: Latin & Central America LTE FDD Device Unit Shipments: 2010 - 2020 (Millions of Units)

Figure 216: Latin & Central America LTE FDD Device Unit Shipment Revenue: 2010 - 2020 (\$ Billion)

Figure 217: Latin & Central America LTE Subscriptions: 2010 - 2020 (Millions)

Figure 218: Latin & Central America LTE Service Revenue: 2010 - 2020 (\$ Billion)

Figure 219: Latin & Central America LTE ARPU: 2010 - 2020 (\$ per Month)

Figure 220: Middle East & Africa LTE Infrastructure Revenue: 2010 - 2020 (\$ Million)

Figure 221: Middle East & Africa LTE EPC Revenue: 2010 – 2020 (\$ Million)

Figure 222: Middle East & Africa LTE Macrocell Base Station (eNB) Unit Shipments: 2010 – 2020

Figure 223: Middle East & Africa LTE Macrocell Base Station (eNB) Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 224: Middle East & Africa LTE Small Cell Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 225: Middle East & Africa LTE Small Cell Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 226: Middle East & Africa TD-LTE Macrocell Base Station (eNB) Unit Shipments: 2010 – 2020

Figure 227: Middle East & Africa TD-LTE Macrocell Base Station (eNB) Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 228: Middle East & Africa TD-LTE Small Cell Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 229: Middle East & Africa TD-LTE Small Cell Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 230: Middle East & Africa LTE FDD Macrocell Base Station (eNB) Unit Shipments: 2010 – 2020

Figure 231: Middle East & Africa LTE FDD Macrocell Base Station (eNB) Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 232: Middle East & Africa LTE FDD Small Cell Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 233: Middle East & Africa LTE FDD Small Cell Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 234: Middle East & Africa LTE Device Unit Shipments: 2010 - 2020 (Millions of Units)

Figure 235: Middle East & Africa LTE Device Unit Shipment Revenue: 2010 - 2020 (\$ Billion)

Figure 236: Middle East & Africa TD-LTE Device Unit Shipments: 2010 - 2020 (Millions of Units)

Figure 237: Middle East & Africa TD-LTE Device Unit Shipment Revenue: 2010 - 2020 (\$ Billion)

Figure 238: Middle East & Africa LTE FDD Device Unit Shipments: 2010 - 2020 (Millions of Units)

Figure 239: Middle East & Africa LTE FDD Device Unit Shipment Revenue: 2010 - 2020 (\$ Billion)

Figure 240: Middle East & Africa LTE Subscriptions: 2010 - 2020 (Millions)

Figure 241: Middle East & Africa LTE Service Revenue: 2010 - 2020 (\$ Billion)

Figure 242: Middle East & Africa LTE ARPU: 2010 - 2020 (\$ per Month)

Figure 243: North America LTE Infrastructure Revenue: 2010 - 2020 (\$ Million)

Figure 244: North America LTE EPC Revenue: 2010 – 2020 (\$ Million)

Figure 245: North America LTE Macrocell Base Station (eNB) Unit Shipments: 2010 – 2020

Figure 246: North America LTE Macrocell Base Station (eNB) Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 247: North America LTE Small Cell Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 248: North America LTE Small Cell Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 249: North America TD-LTE Macrocell Base Station (eNB) Unit Shipments: 2010 – 2020

Figure 250: North America TD-LTE Macrocell Base Station (eNB) Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 251: North America TD-LTE Small Cell Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 252: North America TD-LTE Small Cell Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 253: North America LTE FDD Macrocell Base Station (eNB) Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 254: North America LTE FDD Macrocell Base Station (eNB) Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 255: North America LTE FDD Small Cell Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 256: North America LTE FDD Small Cell Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 257: North America LTE Device Unit Shipments: 2010 - 2020 (Millions of Units)

Figure 258: North America LTE Device Unit Shipment Revenue: 2010 - 2020 (\$ Billion)

Figure 259: North America TD-LTE Device Unit Shipments: 2010 - 2020 (Millions of Units)

Figure 260: North America TD-LTE Device Unit Shipment Revenue: 2010 - 2020 (\$ Billion)

Figure 261: North America LTE FDD Device Unit Shipments: 2010 - 2020 (Millions of Units)

Figure 262: North America LTE FDD Device Unit Shipment Revenue: 2010 - 2020 (\$ Billion)

Figure 263: North America LTE Subscriptions: 2010 - 2020 (Millions)

Figure 264: North America LTE Service Revenue: 2010 - 2020 (\$ Billion)

Figure 265: North America LTE ARPU: 2010 - 2020 (\$ per Month)

Figure 266: Western Europe LTE Infrastructure Revenue: 2010 - 2020 (\$ Million)

Figure 267: Western Europe LTE EPC Revenue: 2010 – 2020 (\$ Million)

Figure 268: Western Europe LTE Macrocell Base Station (eNB) Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 269: Western Europe LTE Macrocell Base Station (eNB) Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 270: Western Europe LTE Small Cell Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 271: Western Europe LTE Small Cell Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 272: Western Europe TD-LTE Macrocell Base Station (eNB) Unit Shipments: 2010 – 2020 (Thousands of Units)

Figure 273: Western Europe TD-LTE Macrocell Base Station (eNB) Unit Shipment Revenue: 2010 – 2020 (\$ Million)

Figure 274: Western Europe TD-LTE Small Cell Unit Shipments: 2010 – 2020

(Thousands of Units)

Figure 275: Western Europe TD-LTE Small Cell Unit Shipment Revenue: 2010 – 2020

(\$ Million)

Figure 276: Western Europe LTE FDD Macrocell Base Station (eNB) Unit Shipments:

2010 – 2020 (Thousands of Units)

Figure 277: Western Europe LTE FDD Macrocell Base Station (eNB) Unit Shipment

Revenue: 2010 – 2020 (\$ Million)

Figure 278: Western Europe LTE FDD Small Cell Unit Shipments: 2010 – 2020

(Thousands of Units)

Figure 279: Western Europe LTE FDD Small Cell Unit Shipment Revenue: 2010 – 2020

(\$ Million)

Figure 280: Western Europe LTE Device Unit Shipments: 2010 - 2020 (Millions of Units)

Figure 281: Western Europe LTE Device Unit Shipment Revenue: 2010 - 2020 (\$

Billion)

Figure 282: Western Europe TD-LTE Device Unit Shipments: 2010 - 2020 (Millions of

Units)

Figure 283: Western Europe TD-LTE Device Unit Shipment Revenue: 2010 - 2020 (\$

Billion)

Figure 284: Western Europe LTE FDD Device Unit Shipments: 2010 - 2020 (Millions of

Units)

Figure 285: Western Europe LTE FDD Device Unit Shipment Revenue: 2010 - 2020 (\$

Billion)

Figure 286: Western Europe LTE Subscriptions: 2010 - 2020 (Millions)

Figure 287: Western Europe LTE Service Revenue: 2010 - 2020 (\$ Billion)

Figure 288: Western Europe LTE ARPU: 2010 - 2020 (\$ per Month)

Figure 289: TD-LTE and LTE FDD Frame Structure

LIST OF COMPANIES MENTIONED

21 VIANET GROUP

2K TELECOM

3GPP (THIRD GENERATION PARTNERSHIP PROJECT)

7LAYERS

Accelleran

Acer

Adax

ADIV

Aero2

Affirmed Networks
Afrimax
AINMT Holdings
Airbus Defence & Space
Airspan Networks
Airvana
AKM (Asahi Kasei Microdevices)
Alcatel-Lucent
Alcatel-Lucent Shanghai Bell Company
Altair Semiconductor
AltioStar Networks
Amdocs
América Móvil
Amethon
Anite
Anritsu Corporation
Antares
Apple
APT
Arcadyan Technology Corporation
Argela
Aria spa
Arieso
ARItel
Asia Express
AsiaTelco
ASOCS
ASTRI (Applied Science and Technology Research Institute)
Athena Wireless Communications
ATL (A Test Lab Techno Corporation)
Augere
Avago Technologies
Axxcelera
Azqtel
B.lite
Bandrich
Banglalion Communications
BBK Electronics Corporation
BEC Technologies

Bell Tell Communications Philippines
Bharti Airtel
BlackBerry
Blu Telecommunications
Bluetest AB
Bollere Telecom S.A.S.
Broadcom
BT
Cablevision SA
CATR (China Academy of Telecom Research)
CGC (Communications Global Certification)
China Mobile
China Telecom
China Unicom
Cisco
Clavister
Clearwire Communications
C-motech
CMRI (China Mobile Research Institute)
Comba Telecom Systems Holdings
Comprion
Connectem
Contela
Coolpad
CS Corporation
Cyan
Cybernet
Cyberspace
Datame
Datang
Datang Mobile
Digicel Group
DIRECT TV
Dish Network
Dish Network
D-Link
Dovado
E-Lins Technology
EPCOS

E-Plus
Ericsson
Etisalat
Fanoos Telecom
Far EasTone
FiberHome Technologies
First Media
FITELE
Freescale Semiconductor
Fujitsu
Fujitsu-Toshiba
GCT
Gemtek Technology
GENBAND
General Dynamics Broadband
Global Mobile
Globe Telecom
GreenPacket
GrenTech (China GrenTech Corporation)
GUYACOM
GWT (Global Wireless Technologies)
HiSilicon Technologies Corporation
Hitachi
HOJY Wireless (Shenzhen Hojy Wireless Company)
Horizon Wi-COM
HTC
Huawei
Huayu Wireless
IBM
iBurst
IBW
Imagine Group
Indochina Telecom
Innofidei Corporation
Integrated Telecom
Intel
INWI
ip.access
Itisaluna

ITRI (Industrial Technology Research Institute)
JDSU
Juni Global
KT (Korea Telecom)
Kyocera
Lanka Bell
Leadcore
Lemko
Lenovo
LG
Lime Microsystems
Marvell Semiconductor
Marvell Technology Group
Mavenir
Maxim Integrated
MediaTek
Microsoft Mobile
MIMOon
Mitrastar Corporation
MOBI Antenna Technologies (Shenzhen) Company
Mobilink
Mobily
MobinNet Telecom
Modacom
Motorola Mobility
MTI Mobile
MTN Nigeria
Multi-Micro (Fujian) Electronic Tech Corporation
Multinet Systems
NBN
NEC Corporation
NEC Mobile Communications
NEO-SKY
Neotel
Net One
Netcomm
Netgear
NetGem
NetSet Communications

New Postcom Equipment
Newroztelecom
NextWave Wireless
NII
Nokia Networks
Novatel Wireless
nTelos
NuRAN Wireless
Nutaq
Nvidia Corporation
Oceus Networks
Omantel
Omnivision
On Telecom
Option
Osnova Telecom
Outremer Telecom
Pacific Bangladesh Telecom
Packet One Networks (Malaysia)
Panasonic
Pantech
PCCW-HKT
Planet
Polaris Networks
Potevio (China Potevio Company)
Procera Networks
PT Berca
PT Internux
PT Smartfren Telecom Tbk
PT. Corbec Communication
PureWave Networks
Qorvo
Qualcomm
Quanta Computer
Quark Communications
Qubee (Augere Pakistan)
Qubee (Augere Wireless Broadband Bangladesh)
Qucell
R Spain

RadiSys Corporation
Red Hat
Redline Communications
Redlink Communications
Reliance
Renesas Mobile
Rohde & Schwarz
Salnet
Samsung
Seiko
Sequans Communications
Sharp
SignShine
Singtel
Singtel Optus
SK Telecom
SK Telesys
Skyworks Solutions
SMART Communications
Smoltelecom
Softbank Mobile Corporation
Softnet Group
Sometel
Sony Mobile
Soyuz Telecom
Spectranet
SpiderCloud Wireless
Spreadtrum Communications
Sprint
Star Solutions
STC (Saudi Telecom Company)
ST-Ericsson
Swift Networks
T&W Electronics
Taiwan Mobile
Taqua
Tata Elxsi
Tatung InfoComm Corporation
TCL Communication

TD Tech
TDK Corporation
TEKTELIC Communications
Telecommunication Services of Trinidad and Tobago
T-elek
Telenor
Telkom Mobile
Tellhigh Telecom
Telrad Networks
Telum
Tishknet
Tongyu Communication
TOT
Trendium
TTA (Telecommunications Technology Association)
TTK
UK Broadband
Ukrainian High Technologies (Freshtel)
Umniah Mobile
UNITEL S.A.
VeeTIME
VelaTel Global Communications
Vividwireless Group
VMAX
VMware
Vodafone
Voentelecom
VOYACOM B.V.B.A
VTR
Wateen Telecom
WeTelecom
WIND
WiMAX Forum
WNC (Wistron NeWeb Corporation)
Woosh
Xi'an Sunnada Haitian Antenna Company
Xiaomi
Xplornet Communications
Yemen Mobile

YooMee Africa
Yota Devices
YTL Communications
Yulong Computer
Z-com (ZDC Wireless)
ZTE

About

The report covers the following topics:

TD-LTE infrastructure

TD-LTE devices

TD-LTE spectrum

TD-LTE subscriptions and service revenues

TD-LTE network deployment case studies

Market drivers and barriers

TD-LTE infrastructure and device vendor assessment

Wireless network infrastructure industry roadmap and value chain

Company profiles and strategies of TD-LTE ecosystem players

Interview transcripts from two leading players in the TD-LTE ecosystem; Intel and Sequans

Market analysis and forecasts from 2014 till 2020

Strategic recommendations for TD-LTE operators, infrastructure and device vendors

- Historical Revenue & Forecast Segmentation

Market forecasts and historical revenue/unit shipment/subscription figures are provided for each of the following submarkets and their subcategories:

1. LTE Infrastructure Shipments & Revenue

TD-LTE Macrocell eNodeBs (eNBs)

LTE FDD Macrocell eNBs

LTE FDD Small Cells

TD-LTE Small Cells

EPC

2. LTE Device Shipments & Revenue

TD-LTE

LTE FDD

Form Factor (Embedded Cards, Consumer Gadgets, Netbooks, PCs, Routers, Smartphones, Tablets and USB Dongles)

3. LTE Subscriptions and Operator Service Revenue

TD-LTE

LTE FDD

4. Regional Markets

Asia Pacific

Eastern Europe

Latin & Central America

Middle East & Africa

North America

Western Europe

5. Top 20 Country Markets

Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Korea, Malaysia, Mexico, Philippines, Poland, Russia, Saudi Arabia, Spain, UK and USA

· Key Questions Answered

The report provides answers to the following key questions:

How big is the TD-LTE ecosystem?

How is the TD-LTE 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 TD-LTE vendors and what are their strategies?

What strategies should be adopted by wireless carriers, infrastructure and device vendors to remain a dominant market force in the TD-LTE ecosystem?

How much are vendors and operators investing in TD-LTE?

How low is the Total Cost of Ownership (TCO) of a TD-LTE deployment in comparison to a FDD LTE network?

What opportunities exist for TD-LTE small cells in the 3.5 GHz and above spectrum bands?

How will TD-LTE ARPU evolve overtime?

Which countries will see the highest number of TD-LTE subscriptions?

Will all WiMAX operators transition to TD-LTE?

Key Findings

TD-LTE infrastructure investments on macrocell and small cell equipment are expected to grow at a CAGR of 15% over the next 6 years, eventually reaching \$13 Billion by the end of 2020

By 2020, TD-LTE subscriptions will also reach nearly 1 Billion, and account for over \$230 Billion in service revenues

2014 will see large scale commercialization of TD-LTE capable smartphones. TD-LTE device shipments will surpass 100 Million in 2014 alone, driven by recent and upcoming TD-LTE smartphone launches

Utilizing 3.5 GHz and above TDD spectrum bands can significantly improve network performance and help operators in leveraging new technologies such as LTE Hotspot Improvements (LTE-Hi)

2014 will see a significant improvement in the scale of economy for the TD-LTE ecosystem, and tighter integration between TDD and FDD

Huawei currently leads the TD-LTE infrastructure market share. However, Ericsson is expected to capitalize on upcoming deployments opportunities in both Europe and Asia

I would like to order

Product name: The TD-LTE Ecosystem: 2015 - 2020 - Infrastructure, Devices, Subscriptions & Operator Revenue

Product link: <https://marketpublishers.com/r/T3D1CA9ABE4EN.html>

Price: US\$ 2,500.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/T3D1CA9ABE4EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970

