

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

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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.

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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

Bollore 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

FITEL

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

Somtel

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



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