

# The Wireless Network Infrastructure Market: 2012 - 2017

<https://marketpublishers.com/r/W1D18C5B002EN.html>

Date: October 2012

Pages: 151

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

ID: W1D18C5B002EN

## Abstracts

Note: We are glad to offer any of other reports by [Signals and Systems Telecom](#) to be delivered free of cost in case of purchase a company wide license of this report

### Synopsis:

The wireless network infrastructure market is currently in a phase of transition as mobile network operators seek to address increasing mobile traffic demands amidst global economic uncertainties. This paradigm shift is bringing new challenges and opportunities to infrastructure vendors.

In 2011, global 2G , 3G and 4G wireless infrastructure revenues stood at \$45.9 billion. Signals and Systems Telecom estimates that these revenues will increase 8 percent year on year (YOY) reaching \$49.7 billion by end of 2012, primarily driven by LTE investments. However, between 2012 and 2017, the market is expected to shrink to \$48.6 billion.

Although, the new wave of 4G macrocell Radio Access Network (RAN) and core network investments will not be able to compensate the overall declines in 2G and 3G equipment sales, operators are expected to significantly increase their spending in the evolving small cell and carrier WiFi equipment market. Small cell and WiFi offload equipment will represent a market worth \$5.4 billion in 2017. Consequently the small cell and WiFi offload market segment is attracting considerable attention from both established vendors as well as startups which solely focus on the small cell market.

This report provides an in-depth assessment of the 2G, 3G and 4G wireless network infrastructure market, and also explores the small cell and WiFi offload, and the mobile backhaul markets. Besides analyzing the key market drivers, challenges, regional

CAPEX commitments and vendor strategies, the report also presents revenue and unit shipment forecasts for the wireless network infrastructure, small cell and WiFi offload, and the mobile backhaul markets from 2012 to 2017 at a regional as well as a global scale. Historical figures and vendor shares are also provided for 2010 and 2011.

**Topics Covered:**

The report covers the following topics

2G (GSM and CDMA) technology and market trends

3G (WCDMA, TD-SCDMA and CDMA-2000) technology and market trends

4G (LTE, WiMAX) technology and market trends

Core network equipment market trends

Mobile backhaul equipment and market trends

WiFi offload, small cell and HetNet technology and market trends

Market drivers for wireless network infrastructure investments

Challenges to the wireless network infrastructure ecosystem

Vendor profiles and strategies

Global and regional market analysis and forecasts

SWOT analysis of the wireless network infrastructure market

**Key Questions Answered:**

The report answers to the following key questions.

How is the 2G, 3G & 4G infrastructure market evolving by segment and region?  
What will the market size be in 2017 and at what rate will it grow?

What trends, challenges and barriers are influencing its growth?

How will the market shape for small cell infrastructure such as Femtocells, Picocells, Microcells and other "HetNet" deployments?

How will WiFi fit into future network architectures for access and offload?

Who are the key vendors in the market, what is their market share and what are their strategies?

What strategies should be adopted by operators and vendors to remain a dominant market force?

Which 2G, 3G & 4G technology constitutes the highest amount of spending and how will this evolve overtime?

How will LTE deployments proceed, and how long will GSM, HSPA and CDMA technologies coexist with LTE?

When will WiMAX infrastructure spending diminish ?

What is the global and regional outlook for RAN and core network sub-markets ?

What is the opportunity for wireless backhaul market, and what new backhaul solutions are evolving?

## Contents

### **1 CHAPTER 1: INTRODUCTION**

- 1.1 Executive Summary
- 1.2 Topics Covered
- 1.3 Key Questions Answered
- 1.4 Key Findings
- 1.5 Methodology
- 1.6 Target Audience
- 1.7 Companies Mentioned 1

### **2 CHAPTER 2: AN OVERVIEW OF THE WIRELESS INFRASTRUCTURE MARKET**

- 2.1 2G (GSM and CDMA)
  - 2.1.1 2G Trends & Developments
  - 2.1.2 2G Market Summary
- 2.2 3G (WCDMA, TD-SCDMA and CDMA 2000)
  - 2.2.1 3G Trends and Developments
  - 2.2.2 3G Market Summary
- 2.3 4G (LTE and WiMAX)
  - 2.3.1 4G Trends and Developments
  - 2.3.2 4G Market Summary
- 2.4 RAN Market for 2G/3G/4G
  - 2.4.1 RAN Trends and Developments
    - 2.4.1.1 C-RAN
    - 2.4.1.2 HetNets
- 2.5 Mobile Core Network for 2G/3G/4G
  - 2.5.1 Mobile Core Trends and Developments
  - 2.5.2 Summary
- 2.6 Backhaul
  - 2.6.1 Backhaul Trends and Developments
  - 2.6.2 Summary
- 2.7 WiFi Offload
  - 2.7.1 Wi-Fi Trends and Developments
  - 2.7.2 Wi-Fi Summary
- 2.8 Small Cell Market
  - 2.8.1 Femtocell
  - 2.8.2 Picocell

- 2.8.3 Microcell
- 2.8.4 Metrocell
- 2.8.5 Small Cells Trends and Developments

### **3 CHAPTER 3: MARKET DRIVERS, BARRIERS AND RISKS**

#### **3.1 Mobile Infrastructure Market Drivers**

##### **3.1.1 Smartphone and Tablet Proliferation**

3.1.1.1 Strategic Choice for Operators: Reduce Cost per Mega Bit

3.1.1.2 Strategic Choice for Operators: Offer Subsidised and Affordable Smartphones

##### **3.1.2 Mobile Subscription Growth**

3.1.2.1 Strategic Choice for Operators: Upgrade to New Technologies and Architectures

##### **3.1.3 Mobile Broadband Growth**

3.1.3.1 Strategic Choice for Operators: Invest in Backhaul

##### **3.1.4 Data Traffic Growth**

3.1.4.1 Strategic Choice for Operators: Smarter Data offloading

##### **3.1.5 Trend Summary**

#### **3.2 Barriers**

3.2.1 A drop in CAPEX/Sales Ratio

3.2.2 Operators Embracing RAN Sharing

3.2.3 Operators are Finding Innovative Ways to Address Capacity Issues

#### **3.3 Risks**

3.3.1 Political, Social, Economic, Social and Environmental Threats

#### **3.4 Summary of Driving and Resisting Forces**

#### **3.5 Business Case for Investments in New and Existing Technologies**

3.5.1.1 Gain Operational Efficiencies through strategic Investments

3.5.1.2 Invest in Capacity for Increased Revenue Opportunities

3.5.1.3 Deliver Best User Experience

3.5.1.4 Reduce Competitive Threats

3.5.1.5 Target the M2M opportunities

3.5.1.6 Increase Customer Satisfaction

3.5.1.7 Capitalise on Differentiation Strategy

3.5.1.8 Evolve towards NG Networks

### **4 CHAPTER 4: MARKET ANALYSIS AND FORECASTS**

#### **4.1 Market Definition**

#### **4.2 The Global 2G, 3G and 4G Wireless Infrastructure Market**

- 4.3 2G (GSM and CDMA)
  - 4.3.1 Market Assessment
  - 4.3.2 Forecast
  - 4.3.3 Market Opportunity Analysis
  - 4.3.4 Summary
- 4.4 3G (WCDMA, TD-SCDMA and CDMA 2000)
  - 4.4.1 Market Assessment
  - 4.4.2 Forecast
  - 4.4.3 Market Opportunity Analysis
  - 4.4.4 Summary
- 4.5 4G (LTE and WiMax)
  - 4.5.1 LTE Market Assessment
  - 4.5.2 WiMAX Market Assessment
  - 4.5.3 Forecast
  - 4.5.4 4G Market Opportunity Analysis
  - 4.5.5 Summary
- 4.6 RAN
  - 4.6.1 RAN Market Assessment
  - 4.6.2 Forecast
  - 4.6.3 Market Opportunity Analysis
- 4.7 Small Cells
  - 4.7.1 Market Assessment
  - 4.7.2 Forecast
- 4.8 Mobile Core
  - 4.8.1 Packet Core Market Assessment
  - 4.8.2 Forecast
  - 4.8.3 Market Opportunity Analysis
- 4.9 Backhaul
  - 4.9.1 Market Assessment
  - 4.9.2 Forecast
- 4.10 WiFi Market
  - 4.10.1 Wi-Fi Market Assessment
  - 4.10.2 Market Forecast
  - 4.10.3 Wi-Fi Market Opportunity Analysis
- 4.11 Summary

## **5 CHAPTER 5: REGIONAL 2G, 3G AND 4G WIRELESS INFRASTRUCTURE MARKETS**

## 5.1 North American Market

### 5.1.1 Market Dynamics

### 5.1.2 Forecast

## 5.2 Asia Pacific

### 5.2.1 Market Dynamics

### 5.2.2 Forecast

## 5.3 Western Europe

### 5.3.1 Market Dynamics

### 5.3.2 Forecast

## 5.4 Latin and Central America

### 5.4.1 Market Dynamics

### 5.4.2 Forecast

## 5.5 Eastern Europe

### 5.5.1 Market Dynamics

### 5.5.2 Forecast

## 5.6 Africa

### 5.6.1 Market Dynamics

### 5.6.2 Forecast

## 5.7 Middle East

### 5.7.1 Market Dynamics

### 5.7.2 Forecast

## 5.8 Summary

# **6 CHAPTER 6: WIRELESS INFRASTRUCTURE MARKET DYNAMICS**

## 6.1 Vendor Profiles

### 6.1.1 Ericsson

#### 6.1.1.1 Portfolio

#### 6.1.1.2 Strategy

#### 6.1.1.3 Market Momentum

## 6.2 Alcatel Lucent

### 6.2.1 Portfolio

### 6.2.2 Strategy

### 6.2.3 Market Momentum

## 6.3 Huawei

### 6.3.1 Portfolio

### 6.3.2 Strategies

### 6.3.3 Market Momentum

## 6.4 ZTE

- 6.4.1 Portfolio
- 6.4.2 Strategies
- 6.4.3 Market Momentum
- 6.5 NSN
  - 6.5.1 Strategies
  - 6.5.2 Portfolio
  - 6.5.3 Market Momentum
- 6.6 Samsung
  - 6.6.1 Portfolio
  - 6.6.2 Strategy
  - 6.6.3 Market Momentum
- 6.7 Cisco
  - 6.7.1 Portfolio
  - 6.7.2 Strategy
  - 6.7.3 Market Momentum
- 6.8 Alvarion
  - 6.8.1 Portfolio
  - 6.8.2 Strategy
  - 6.8.3 Market Momentum
- 6.9 Acme Packet
  - 6.9.1 Portfolio
  - 6.9.2 Strategy
- 6.10 NEC
- 6.11 Fujitsu
- 6.12 BLiNQ
  - 6.12.1 Market Momentum
- 6.13 Siklu
- 6.14 Vendor Outlook
- 6.15 Vendor Rankings

## **7 CHAPTER 7: CONCLUSION**

- 7.1 SWOT Analysis
- 7.2 Recommendations for Operators
- 7.3 Recommendations for Infrastructure Vendors



## List Of Tables

### LIST OF TABLES

Table 1: RAN Component Segmentation by Technology
Table 2: Backhaul Technologies
Table 3: Strategic Options for Operators
Table 4: RAN Revenues by Technology (\$ billions) 2010-2017
Table 5: Barriers and Risks with WiMAX
Table 6: Key Small Cell Vendors
Table 7: Major Mobile Ethernet Backhaul Vendors
Table 8: Major Mobile Microwave Backhaul Vendors
Table 9: Asia Pacific Market Dynamics
Table 10: Leading Vendors by Key Technologies
Table 11: Vendor Ranking by H1 2012 Revenues
Table 12: Vendor Market Share 2010-2011
Table 13: SWOT Analysis

## List Of Figures

### LIST OF FIGURES

Figure 1: Key Wireless Technologies Used Across the Globe

Figure 2: 3GPP Wireless Technology Evolution

Figure 3: Global GSM Networks 1991 - 2011

Figure 4: Global GSM Subscription (Billions) 1991 - 2011

Figure 5: Global WCDMA and HSPA Subscription (Millions) 2010 - 2017

Figure 6: Global WCDMA Subscription (%) 2012

Figure 7: Global LTE Commercial Launches 2009-2012

Figure 8: Global Smartphone Shipment (Millions) 2009-2017

Figure 9: Global Mobile Handset vs. Smartphone Shipment (Millions) 2010-2017

Figure 10: Global Smartphone Subscribers as a Percentage of the Mobile Subscribers (Billions) 2010-2017

Figure 11: Global Mobile Subscriptions (Billions) 2009-2017

Figure 12: Global Mobile Traffic (Exabyte) 2011-2017

Figure 13: Global 2G, 3G and 4G Wireless Infrastructure Revenues (\$Millions) 2010 - 2017

Figure 14: Global 2G Vs. 4G Wireless Infrastructure Revenues (\$billions) 2011- 2017

Figure 15: Global Wireless RAN Revenues by Technology (\$Billions) 2010 - 2017

Figure 16: Global Mobile Subscription by Technology (%) 2012

Figure 17: Global GSM RAN Revenues (\$ Billions) 2010 - 2017

Figure 18: Global CDMA RAN Revenues (Billions) 2010 - 2017

Figure 19: Global GSM Spend (%) 2011-2017

Figure 20: Global WCDMA RAN Infrastructure Revenues (Billions) 2010 - 2017

Figure 21: TD-SCDMA RAN Revenues (\$ Billions) 2010 - 2017

Figure 22: Global GSM and WCDMA RAN Revenues (\$ Billions) 2010 - 2017

Figure 23: Global LTE RAN Infrastructure Revenues (Billions) 2010 - 2017

Figure 24: Global WiMAX RAN Revenues (Billions) 2010 - 2017

Figure 25: Global RAN Revenues by Technologies (%) 2011 - 2017

Figure 26: Global BTS Unit Shipment 2011 - 2017

Figure 27: Global Base Station Shipment by Region (%) 2011 - 2017

Figure 28: Small Cell Unit Shipments Revenue (USD Millions) 2011 - 2017

Figure 29: Small Cell Unit Shipments (Thousands of Unit Shipments) 2010-2017 by Cell Type

Figure 30: Small Cell Market Share by Vendors (%) 2010-2011

Figure 31: 3G/4G Small Cell Unit Shipments Revenue by Region (USD Millions) 2011 - 2017

Figure 32: Small Cell Unit Shipments (Thousands of Unit Shipments) 2011 - 2017 by Region

Figure 33: Evolved Packet Core Revenues (\$Million) 2011-2017

Figure 34: 3G Packet Core Revenues (\$Million) 2011-2017

Figure 35: HLR and MSC Revenues (\$Million) 2011-2017

Figure 36: Global Spending on Mobile Backhaul Equipment (\$billion): 2011 - 2017

Figure 37: Mobile Microwave Backhaul Market Share by Vendors (%) 2010-2011

Figure 38: Mobile Backhaul Ethernet Market Share by Vendors (%) 2010-2011

Figure 39: Spending on Mobile Backhaul by Technology (%) 2017

Figure 40: Mobile Backhaul Market Revenues by Region (\$ billions) 2011 - 2017

Figure 41: WiFi Offload Small Cell Infrastructure Market Share by Vendor: 2010-2011

Figure 42: 2G, 3G and 4G Wireleses Infrastructure Revenues by Region (\$Millions) 2011 - 2017

Figure 43: 2G, 3G and 4G Wireleses Infrastructure Market Share Comparison (%) by Region 2012-2017

Figure 44: 2G, 3G and 4G Wireleses Infrastructure Market Share by Region (%) 2012

Figure 45: 2G, 3G and 4G Wireleses Infrastructure Market Share by Region (%) 2017

Figure 46: North American 2G, 3G and 4G wireleses Infrastructure Revenues (\$Million) 2010-2017

Figure 47: North American 2G/3G vs. 4G wireleses Infrastructure Revenues (\$Million) 2010-2017

Figure 48: North American 4G wireleses Infrastructure Revenues (\$Million) 2010-2017

Figure 49: North American wireleses Infrastructure Revenues by Technology (\$Million) 2010-2017

Figure 50: North American Core vs. RAN Wireless Infrastructure Revenues (\$millions) 2010-2017

Figure 51: Asia Pacific 2G, 3G and 4G wireleses Infrastructure Revenues (\$Million) 2011-2017

Figure 52: Asia Pacific 2G/3G Vs. 4G wireleses Infrastructure Revenues (\$Million) 2011-2017

Figure 53: Asia Pacific RAN Vs. Core wireleses Infrastructure Revenues (\$Million) 2011-2017

Figure 54: Asia Pacific Wireleses Infrastructure Revenues by Technology (\$Million) 2011-2017

Figure 55: Western Europe Wireleses Infrastructure Revenues (\$Million) 2011-2017

Figure 56: Western Europe 2G/3G vs. 4G Wireleses Infrastructure Revenues (\$Million) 2011-2017

Figure 57: Western Europe Wireleses Infrastructure Revenues (\$Million) by Technology 2011-2017

Figure 58: Western Europe RAN vs. Core Wireleses Infrastructure Revenues (\$Million) 2011-2017

Figure 59: Latin and Central America Wireleses Infrastructure Revenues (\$Million) 2011-2017

Figure 60: Latin and Central America 2G/3G vs. 4G Wireleses Infrastructure Revenues (\$Million) 2011-2017

Figure 61: Latin and Central America Wireleses Infrastructure Revenues by Technology (\$Million) 2011-2017

Figure 62: Latin and Central America Core Vs. RAN Wireleses Infrastructure Revenues (\$Million) 2011-2017

Figure 63: Eastern Europe Wireleses Infrastructure Revenues (\$Million) 2011-2017

Figure 64: Eastern Europe 2G/3G vs. 4G Wireleses Infrastructure Revenues (\$Million) 2011-2017

Figure 65: Eastern Europe Wireleses Infrastructure Revenues by Technology (\$Million) 2011-2017

Figure 66: Eastern Europe Core vs. RAN Wireleses Infrastructure Revenues (\$Million) 2011-2017

Figure 67: Africa Wireleses Infrastructure Revenues (\$Million) 2011-2017

Figure 68: Africa Wireleses 2G/3G vs. 4G Infrastructure Revenues (\$Million) 2011-2017

Figure 69: Africa Wireleses Infrastructure Revenues by Technology (\$Million) 2011-2017

Figure 70: Africa Wireleses Core vs. RAN Infrastructure Revenues (\$Million) 2011-2017

Figure 71: Middle East Wireleses Infrastructure Revenues (\$Million) 2011-2017

Figure 72: Middle East 2G/3G Vs. 4G Wireleses Infrastructure Revenues (\$Million) 2011-2017

Figure 73: Middle East Wireleses Infrastructure Revenues by Technology (\$Million) 2011-2017

Figure 74: Vendor Market Share (%) 2010-2011

## **LIST OF COMPANIES MENTIONED:**

The following companies have been mentioned in the report.

Acme Packet  
Actelis Adtran  
ADVA  
Airvana

Alcatel Lucent  
Alvarion  
ANDA  
Apertio  
Argela  
Axerra  
BLiNQ  
Canoga Perkins  
Celtro  
Ciena  
Cisco  
Clavister  
Clearwire  
Contela  
ECI  
Ericsson  
FibroLAN  
Fujitsu  
Genband  
Hatteras  
HP  
Huawei  
Intel  
Ip-Access  
IPITEK  
Juniper  
Metaswitch Networks  
MetroPCS  
Mindspeed  
Motorola  
MRV  
NEC  
Nortel  
Nokia Siemens Networks  
NTT DoCoMo  
Overture  
Positron  
RAD  
Samsung

Siklu  
Softbank  
Sonus Networks  
Starent Networks  
Telco Systems  
Telefonica  
TeliaSonera  
Tellabs  
Telrad  
Thomson  
Three  
Turin  
Ubee interactive  
Ubiquisys  
UTstarcom  
Vodafone  
Wavion  
Yota  
ZTE

## I would like to order

Product name: The Wireless Network Infrastructure Market: 2012 - 2017

Product link: <https://marketpublishers.com/r/W1D18C5B002EN.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](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/W1D18C5B002EN.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