

**WinterGreen Research, Inc.**

**Wireless Infrastructure: Market Shares, Strategies, and Forecasts,  
Worldwide, 2013 to 2019**

**Wireless Infrastructure Implements Globally Integrated Core Network,  
Backhaul and Base Station Connectivity Functions**

**Mountains of Opportunity**



Picture by Susan Eustis

**WinterGreen Research, Inc.**

**Lexington, Massachusetts**

[www.wintergreenresearch.com](http://www.wintergreenresearch.com)

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REPORT # SH25701914

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245 TABLES AND FIGURES

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**CHECK OUT THESE KEY TOPICS**

Wireless Infrastructure  
CDMA2000  
GSM  
Global System for Mobile  
Communications  
W-CDMA

Wideband Code Division  
Multiple Access  
LTE  
Long-Term Evolution  
Global Mobile Traffic  
Femtocell

Small Cell  
Broadband Cellular Networks  
Mobile Packet Core  
Mobile Broadband1

**Wireless Infrastructure Strategy: Internet Based Systems Enabled on Smart Phones**

**Wireless Infrastructure: Market Shares, Strategies, and Forecasts, Worldwide, 2013-2019**

**Next Generation Wireless Infrastructure:  
Cloud, Apps, Tablets, and Mobile Devices Enabled**

LEXINGTON, Massachusetts (September 26, 2013) – WinterGreen Research announces that it has published a new study **Wireless Infrastructure: Market Shares, Strategy, and Forecasts, Worldwide, 2013 to 2019**. Next generation mission critical systems are leveraging new technology. The 2013 study has 554 pages, 245 tables and figures. Worldwide Wireless Infrastructure markets are poised to achieve significant growth as Building out core networks and backhaul for smart phones.

A smart phone is not very smart if the infrastructure can't support its applications. In response to the high growth smart phone markets, wireless infrastructure promises to grow dramatically in the near term.. Wireless Infrastructure technologies include WiMax, LTE, 4G and HSPA. These technologies are driving much higher capacity from the base station back to the fiber core. Fiber core is putting extreme pressure on provider's infrastructure and backhaul networks.

WinterGreen Research predicts that the dramatic growth of wireless infrastructure is based on the growth of smart phones to a one trillion market by 2019, serving an installed base of 8.5 billion, many people having more than one smart phone. Wireless infrastructure markets at \$58 billion in 2012 will be \$163 billion by 2019, new markets evolved because of the value that apps provide to smart phones, mobile devices, tablets, and the Internet of things.

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According to Susan Eustis, lead author of the study, “Wireless Infrastructure is being installed to upgrade core networks and upgrade backhaul and base stations to make systems more modern. Infrastructure for the Internet and for smart mobile devices creates demand for more sophisticated web development and web applications that in turn depend on more sophisticated infrastructure. Everything is going mobile. This evolution is driven by mobile smart phones and tablets that provide universal connectivity. Modern systems represent a significant aspect of Internet market evolution.”

The proportions of wireless infrastructure market industry segments are expected to remain much as they are, with the small cells and femtocells achieving strong growth on the access side, the core infrastructure must be upgraded to support the added backhaul backbone infrastructure. Wireless apps are expected to achieve \$37 trillion revenue by 2019. This unbelievable growth occurs as the Internet is expanded to implement the interconnection of everything.

Digital devices proliferate, machine to machine capabilities vastly expand instrumentation. The digital devices become the engine of a world economy, with apps collecting pennies a day for millions of apps from 8.5 billion people with smart phones by 2019.

WinterGreen Research is an independent research organization funded by the sale of market research studies all over the world and by the implementation of ROI models that are used to calculate the total cost of ownership of equipment, services, and software. The company has 35 distributors worldwide, including Global Information Info Shop, Market Research.com, Research and Markets, Bloomberg, electronics.ca, and Thompson Financial. WinterGreen Research is positioned to help customers facing challenges that define the modern enterprises. The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust wintergreen research to work alongside them to ensure the success of the participation in a particular market segment.

WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

Key words: Wireless Infrastructure CDMA2000 GSM Global System for Mobile Communications W-CDMA Wideband Code Division Multiple Access LTE Long-Term Evolution Global Mobile Traffic Femtocell Small Cell Broadband Cellular Networks Mobile Packet Core Mobile Broadband Virtualized Systems, Open Source

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**Companies Profiled**

**Market Leaders**

**Alcatel-Lucent  
Ericsson  
Google / Motorola  
Samsung  
NEC  
ZTE**

**Cisco  
Fujitsu  
Huawei  
LG  
Nokia**

**Market Participants**

**Antenova  
Berkeley-Varitronics Systems  
CDG  
General Dynamics  
Global Mobile Suppliers  
Association  
Juniper Networks  
Micro Mobio**

**MTI Mobile  
Nokia-Microsoft Partnership  
Nokia Siemens Networks  
QRC Technologies  
Qualcomm  
Radisys  
Repeaters Australia  
Reactel**

**RF Hitec  
Siemens AG  
Spirent Communications  
TelLabs  
TelNova Technologies**

**Wireless Infrastructure: Market Shares, Strategies, and Forecasts,  
Worldwide, 2013 to 2019**

**Report Methodology**

This is the 570th report in a series of primary market research reports that provide forecasts in communications, telecommunications, the Internet, computer, software, telephone equipment, health equipment, and energy. Automated process and significant growth potential are priorities in topic selection.

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## WinterGreen Research, Inc.

The project leaders take direct responsibility for writing and preparing each report. They have significant experience preparing industry studies. Forecasts are based on primary research and proprietary data bases.

The primary research is conducted by talking to customers, distributors and companies. The survey data is not enough to make accurate assessment of market size, so WinterGreen Research looks at the value of shipments and the average price to achieve market assessments. Our track record in achieving accuracy is unsurpassed in the industry. We are known for being able to develop accurate market shares and projections. This is our specialty.

The analyst process is concentrated on getting good market numbers. This process involves looking at the markets from several different perspectives, including vendor shipments. The interview process is an essential aspect as well. We do have a lot of granular analysis of the different shipments by vendor in the study and addenda prepared after the study was published if that is appropriate.

Forecasts reflect analysis of the market trends in the segment and related segments. Unit and dollar shipments are analyzed through consideration of dollar volume of each market participant in the segment. Installed base analysis and unit analysis is based on interviews and an information search. Market share analysis includes conversations with key customers of products, industry segment leaders, marketing directors, distributors, leading market participants, opinion leaders, and companies seeking to develop measurable market share.

Over 200 in depth interviews are conducted for each report with a broad range of key participants and industry leaders in the market segment. We establish accurate market forecasts based on economic and market conditions as a base. Use input/output ratios, flow charts, and other economic methods to quantify data. Use in-house analysts who meet stringent quality standards.

Interviewing key industry participants, experts and end-users is a central part of the study. Our research includes access to large proprietary databases. Literature search includes analysis of trade publications, government reports, and corporate literature.

Findings and conclusions of this report are based on information gathered from industry sources, including manufacturers, distributors, partners, opinion leaders, and users. Interview data was combined with information gathered through an extensive review of internet and printed sources such as trade publications, trade associations, company literature, and online databases. The projections contained in this report are checked from top down and bottom up analysis to be sure there is congruence from that perspective.

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The base year for analysis and projection is 2010. With 2010 and several years prior to that as a baseline, market projections were developed for 2011 through 2017. These projections are based on a combination of a consensus among the opinion leader contacts interviewed combined with understanding of the key market drivers and their impact from a historical and analytical perspective.

The analytical methodologies used to generate the market estimates are based on penetration analyses, similar market analyses, and delta calculations to supplement independent and dependent variable analysis. All analyses are displaying selected descriptions of products and services.

This research includes referencde to an ROI model that is part of a series that provides IT systems financial planners access to information that supports analysis of all the numbers that impact management of a product launch or large and complex data center. The methodology used in the models relates to having a sophisticated analytical technique for understanding the impact of workload on processor consumption and cost.

WinterGreen Research has looked at the metrics and independent research to develop assumptions that reflect the actual anticipated usage and cost of systems. Comparative analyses reflect the input of these values into models.

The variables and assumptions provided in the market research study and the ROI models are based on extensive experience in providing research to large enterprise organizations and data centers. The ROI models have lists of servers from different manufacturers, Systems z models from IBM, and labor costs by category around the world. This information has been developed from WinterGreen research proprietary data bases constructed as a result of preparing market research studies that address the software, energy, healthcare, telecommunications, and hardware businesses.

### YOU MUST HAVE THIS STUDY

**Wireless Infrastructure: Market Shares, Strategy, and Forecasts,  
2013 to 2019**

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**Wireless Infrastructure Executive Summary**

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The study is designed to give a comprehensive overview of Wireless Infrastructure equipment market segment. Research represents a selection from the mountains of data available of the most relevant and cogent market materials, with selections made by the most senior analysts. Commentary on every aspect of the market from independent analysts creates an independent perspective in the evaluation of the market. In this manner the study presents a comprehensive overview of what is going on in this market, assisting managers with designing market strategies likely to succeed.

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**This section describes selected companies and selected products. Products for this market segment are described with attention to the most significant aspect of features and functions in this category of product. The juxtaposition of a range of different product descriptions from a single market category provides a really good way to access market directions and achieve market competitive analysis. This section is useful because it compliments other views of innovation, providing a clear presentation of all the alternatives for positioning products in this market. Company products are described in the appropriate sections, meaning a company is mentioned several times in the chapter in different places.**

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## Wireless Infrastructure Company Profiles

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This section selectively describes company strategies, partners, acquisitions, and revenue by segment and regional revenue when available. Companies are described by looking at what is most interesting about that company. The descriptions collectively give a sense of market directions within the industry segment. The alphabetical listing of company thumbnail sketches provides an accessible way to find out what is going on in any particular company.

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## **ABOUT THE COMPANY**

**WinterGreen Research**, founded in 1985, provides strategic market assessments in telecommunications, communications equipment, health care, Software, Internet, Energy Generation, Energy Storage, Renewable energy, and advanced computer technology.

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WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

### **ABOUT THE PRINCIPAL AUTHORS**

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Services, and Application Integration markets. Ms. Eustis is a graduate of Barnard College. Ms. Eustis was named Top Woman CEO in 2012 by Who's Who Worldwide. She was named Top Woman Market Research Analyst the same year.

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