

Small Cells: -- Markets Reach \$52 Billion By 2025

LEXINGTON, Massachusetts (June 2, 2019) – WinterGreen Research announces that it has published a new study *Small Cells: Market Shares, Strategy, and Forecasts, Worldwide, 2019 to 2025*. The 2019 study has 248 pages, 135 tables and figures. The leading vendors in the small cell market have invested in high-quality technology and processes to develop leading edge monitoring and digital triggering activation capability.

Small Cell markets encompass virtualization, cloud, edge, and functional splits. As 5G networks come on line in 2020, they require increasing sophistication from mobile operators. The challenge going forward in mobile network buildout is to bring together a growing number of LTE and 5G radio access technologies. A range of connectivity services are needed. APIs are needed in each small cell to manage connectivity to a number of customer sensors that are implemented in different segments.

The small cell sales at \$11.5 billion in 2018 are forecast to reach \$52 billion in 2025. Networks spending has been transformed from macro cell tower dominance to 80% of spending on small cells. Small cells support wireless communications across short distances. All the indoor and outdoor places need to increase wireless coverage, providing significant market growth for small cells.

Small Cell markets encompass virtualization, cloud, edge, and functional splits. 5G requires increasing sophistication from mobile operators. The challenge is to bring together a growing number of LTE and 5G radio access technologies. A range of connectivity services are needed. Associated APIs are needed in each small cell to manage connectivity to a number of customer segments.



Copyright 2019 WinterGreen Research, Inc.

-Page 1-

Figure 1. Small Cell Market Driving Forces

- Need for enabling evolution of local communications network
- Availability of fully virtualized, distributed, ultra-reliable software
- Effective software for controlling agile infrastructure
- Automation facilitates large-scale low-cost network densification
- Lowers cost by implementing network through third-party deployments
- Effective integration of base small cell technologies
- Systems integration achieved with open and interoperable standards
- Open and interoperable standards needed to ensure competition
- open and interoperable standards needed to ensure economies of scale
- Adoption of these 5G Era technologies will require culture shifts in processes

Source: WinterGreen Research, Inc.

Small cells need infrastructure across a broad range of commercial and governmental organizations. Each have a part to play in making small cells work along with tower infrastructure to create a broadband commercial network. Service providers are focused on densification. Small cells are a critical part of the infrastructure for several key 5G Era deployment scenarios:

Figure 2. Small Cell Infrastructure Critical Issues

- Service providers are focused on densification
- Small cells are a critical part of the infrastructure for key 5G implementations
- 5G deployment needs small cells
- >6GHz spectrum propagation limits cell sizes
- Shared and license-exempt spectrum mandates lower power
- Areas of hyper-dense broadband traffic need small cells
- Small cells meet demand in cities, stadia, transport hubs
- Scalable deployment
- Low-cost deployment
- Using a low-skilled, third-party, or end-user workforce
- Small/medium enterprises requiring self-deployed indoor coverage
- Coverage extension in rural, remote, moving and temporary deployment
- Scenarios with equipment size, weight or power constraints.

Source: WinterGreen Research, Inc.



Copyright 2019 WinterGreen Research, Inc.

-Page 2-

The digital economy, self-driving cars, drones, traffic lights, and smart things all need more wireless coverage. According to Susan Eustis, leader of the team that prepared the research, “Small cell suppliers have a focus on broadband improvement. Power and performance are being improved. Small cells improve the transmission coverage and density.”

This 5G coverage is needed as IoT, the Internet of things and smart phone video increase transmission needs. “Everything will be connected,” said SoftBank Chief Executive Masayoshi Son, announcing an ARM processor deal in London.

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, and electronics.ca. 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.

Contact:

Susan Eustis, President and Co-Author
WinterGreen Research
6 Raymond St.
Lexington, MA 02421

(781) 863-5078 (Work)

(617) 852-7876 (Cell)

susan@wintergreenresearch.com

www.wintergreenresearch.com



Copyright 2019 WinterGreen Research, Inc.

-Page 3-

Key Words: Key words: Small Cells, Virtualization, Cloud, Edge, Functional splits. , LTE Small Cell, 5G, Network Densification, Hybrid Ethernet Based DAS, DAS, In Building Wireless, Broadband Traffic, In Air Interface Solutions, Outdoor and Stadium Deployments, Heterogeneous Network, Hung On Aerial Coax, Fiber, Or Electricity Cables, Distributed business, Enterprise, End-To-End Integrated Small Cells, Metro Cell Solution Signal Transmission, ADRF Positioning, Bandwidth Allocation, Across enterprise boundaries, ,



Copyright 2019 WinterGreen Research, Inc.

-Page 4-

WinterGreen Research, Inc.
6 Raymond St.
Lexington, MA 02421781) 863-5078
www.wintergreenresearch.com