



Small Cells Market Forecasts and Trends 2011-2016

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Executive Summary

Amid the data driven capacity crunch faced by operators, small cells offer a critical means to enhance network capacity and address all-important traffic hot spots. This report assesses the current market trends and offerings by Tier 1 network vendors, leading femto manufacturers, leading carrier Wi-Fi manufacturers and selected DAS vendors as well as related silicon vendors. Maravedis midyear 2011 research projects the following:

- Maravedis forecasts that the pico and carrier femto small cell market, dominated by 4G small cells, will begin to grow in earnest in mid-to-late 2012, due to a convergence of several factors including:
 - Ramp-up of LTE deployments worldwide
 - Conclusion of small cell trials started in 2011
 - Maturation of pico cell designs announced by large OEMs in early 2011
 - Availability of high performance small cell base stations from Tier-2 manufacturers based on next-generation 3G/4G multi-mode SoCs being sampled in mid-2011.
- Maravedis estimates the small cell market will move toward U.S. \$5B in 2014, approaching maturation in 2015.
- By region Maravedis sees the U.S. and Japan beginning substantial deployments in 2012, closely followed by Europe and China.
- Maravedis sees carrier Wi-Fi, carrier femto and pico cells co-existing in operator deployments as complimentary technologies in the short term, with coming advances in silicon breaking down the distinctions between femto cells and pico cells in two to three years
- Up to now, no carriers have deployed 4G LTE small cells; to date all deployments have been 100 % macro cells.