

3.5 GHz CBRS: ***Disruptive Spectrum***

Market Study
Second Quarter 2017





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Abstract

In April 2015 the U.S. Federal Communications Commission (FCC) established the Citizens Broadband Radio Service (CBRS) for shared wireless broadband use of the 3550-3700 MHz band (commonly called the 3.5 GHz Band).

In *iGR*'s opinion, the 150 MHz of CBRS has the potential to disrupt the mobile operator's grip on cellular voice and data services by enabling new players – enterprises, schools and universities, hotels and hospitals – to build and operate their own private LTE networks. In addition, it should also enable existing 3.5 GHz license holders – wireless ISPs – to expand their products and services. And, finally, CBRS could enable wired broadband providers to disrupt mobile operators' market share via the residential market.

This market study provides an explanation of how the CBRS licensing scheme works, how the technology elements of the new band work, and the implications of both on the potential adoption of CBRS as another tool in the toolkit to address demand for bandwidth. It also provides a forecast from 2017 to 2022 of the total number of CBRS nodes expected to be deployed in the U.S. The forecasted number of nodes is categorized by Outdoor WISP, Outdoor nonWISP, Inside Commercial, and Inside Residential.

Key questions addressed in this study:

- What is CBRS?
- What are the different license types of CBRS?
- How does the licensing scheme work? What is the potential impact?
- Who are the likely adopters of CBRS?
- What is the current state of the CBRS market?
- How many CBRS nodes of the following categories – outdoor WISP, outdoor nonWISP, inside commercial, and inside residential – are expected to be deployed in the U.S. between 2017 and 2022?

This market study is recommended for:

- Mobile operators, particularly those servicing the U.S. market
- Mobile backhaul providers, including telcos and cable MSOs
- Wired and wireless backhaul vendors and solution providers



- Mobile OEMs, particularly those servicing the U.S. market
- Wired and wireless infrastructure vendors, particularly those servicing the U.S. market
- Financial and investment analysts.

