Abstract

The 3G wireless network system based on the WCDMA technology is a self-interference system. A self-interference system is one in which interference is internally generated by the components that make up the system. Controlling the level of interference on the system is pivotal for stability of WCDMA cells. In this paper a study of the correlation between the uplink noise generated on a WCDMA based cell and the rate of voice and data call drops experienced by User Equipment (UEs) connected to that cell is performed. Network data from a live WCDMA cell in a network is collected and analyzed. This paper is intended to illustrate to engineers one of the many causes of a high call drop rate and ways of mitigating them.

References


**Index Terms**

Computer Science  
Wireless

**Keywords**

Call Drop  
Call Disconnections  
Uplink Load  
UMTS  
WCDMA  
Noise Rise