Abstract

The goal of 3rd generation systems is to integrate a wide variety of communication services such as high speed data, video and multimedia traffic as well as voice signals. WCDMA as the radio access technology for the 3G has many advantages such as highly efficient spectrum utilization and variable user data rates. Smart antenna technologies are very important for the system implementation. Smart Antennas serve different users by radiating narrow beams. The same frequency can be reused even if the users are in the same cell or the users are well separated. Thus the capacity of the system is increased by implementing this additional intra cell reuse. This project discusses algorithms developed for smart antenna applications to WCDMA.