Abstract

The need for high capacity downlink in wireless mobile network in future is very much essential and efforts are being made to identify appropriate techniques to attain high capacity downlink. Latest approaches indicated that the orthogonal frequency division multiple access (OFDMA) technique is emerging as a potential technique. While the other techniques result inter-carrier interference, OFDMA technique over comes this problem due to orthogonal location of sub-carriers. This gives advantage by obviating the need for inter-carrier guard band. The issues of efficient utilization of bandwidth, minimizing power consumption and fair distribution of resources among users are central to determine the appropriate technique to be used for resource allocation. This paper discusses various techniques suggested by the researchers for resource allocation and concludes that adaptive algorithm is more efficient compared to static TDMA/FDMA system.
Adaptive Resource Allocation in OFDMA System: A Review

- B. Liu, M. Jiang and D. Yuan, "Adaptive resource allocation in multiuser OFDMA system based on genetic algorithm.

Index Terms

Computer Science

Communication
Keywords
Wireless mobile network  OFDMA  resource allocation  fairness