Abstract

The demand for wireless broadband communication services has been growing steadily for last several years. Over the last two decades, wireless communications have gained enormous popularity in all over the world. It offers an attractive option for many personal as well as organizational communication requirements due to various parameters including cost,
effectiveness, and mobility. The next generation mobile communication systems i.e. fourth generation (4G) are needed to support multiple services in different types of environments. 4G is being developed to accommodate the QoS (quality of service) and required data rate such as wireless broadband access, Multimedia Messaging Service (MMS), video chat, mobile TV. This paper focuses the light on various multiple access techniques proposed in 4G communication systems. Among all the multiple access (MA) techniques, it is attempted to demonstrate that IDMA (Interleave Division Multiple Access) technology can efficiently mitigate the interference among users and support high data rates without compromising the required quality of service.

Reference


7. Eli Sofer, Yossi Segal “Tutorial on multi access OFDM (OFDMA) technology”, IEEE Jan, 2005


Index Terms

Computer Science Communications

Key words

CDMA IDMA
Multiple access Interleavers

Multi user detection