Abstract

Cognitive radio (CR) technology is accepted as the most efficient method to improve the spectrum efficiency, which utilizes the available spectrum opportunistically in wireless communication networks. CR acts as a secondary (unlicensed) user to access the primary (licensed) user frequency bands when they are not being used, and release the frequency bands when the primary users are detected. In this paper we propose the system for efficient and flexible spectrum access and utilization amongst the secondary users. The proposed system is implemented by developing fast and efficient algorithm using CR concept. The experimental results have addressed the issues discussed in the proposed system. We optimized the switch delay between the nodes and improved the packet transmission amongst
the nodes.

References

- A survey of dynamic spectrum access: [Signal processing, networking, and regulatory policy], IEEE SIGNAL PROCESSING MAGAZINE, MAY 2007.

Index Terms
Keywords
Cognitive radio  Dynamic spectrum access  spectrum allocation