

COMPUTATION OF THROUGHPUT FOR OPTIMAL SCHEDULING ALGORITHM FOR COGNITIVE RADIO NETWORK IN 4G

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Abstract

This paper devises a method to compute throughput for optimal scheduling problem in CDMA based Cognitive Radio Network. It will be able to analyse the various wireless protocols such as WiMAX, Wi-Fi and 4G. They find and select the best ones for voice calls, data transmission and so on. Itec commences a cognitive baseband radio (COBRA) architecture targeting 4G requirements at up to 1Gbit/s throughput and multiple asynchronous concurrent streams (for instance simultaneous digital broadcasting reception and high-speed internet access). 4G is an smartest technology that will reduce the number of different technologies to a single global standard. Cognitive Radio (CR) is the very important technology for next generation networks. Cognitive Radio techniques gives the capability to use or share the spectrum in an opportunistic manner. With the use of CR, 4G wireless networks will support global roaming across multiple wireless and mobile networks. In this paper, the role of CR in 4G Communications is reviewed. A cognitive radio is a two-way radio and it changes its transmission or reception parameters automatically.

Keyword : 4G, Cognitive wireless networks, Optimal scheduling, WiMAX

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