Abstract

Cognitive Radio (CR) is an emerging technology in the wireless communication. CR nodes have the capability to change its transmission or reception efficiently without interfering with licensed users. The network formed with CR nodes communicating with each other is called Cognitive Radio Network (CRN). CRN utilizes the unutilized frequency spectrum. Routing in CRN is a main challenge due the rapid changes in the data rates and available channels. In this paper we present the routing protocols used for CRN. We first discuss the routing differences and challenges in CRN. Furthermore we classify the routing protocols depending on the protocol operation.

References

- Kaushik R. Chowdhury, F. Akyildiz, "CRP:A Routing Protocol for Cognitive radio Ad
Routing Protocols used for CRN: A Survey

- IEEE 802.11s http://www.802wirelessworld.com/
- S. M Kamruzzaman, Eunhee Kim, Dong Geun Jeong, "Spectrum and energy aware routing protocol for cognitive radio ad hoc networks;" IEEE International
Conferences on Communications, pp 1-5, 2011.

**Index Terms**

Computer Science

Wireless

**Keywords**

CRNs  CRAHNs  Primary Users (PU)  Routing  Routing protocols for CRNs  Secondary Users (SU).