Abstract

Cognitive radio technology is an emerging technology which would enable a set of secondary users (SU) to opportunistically use the spectrum allocated to a primary user (PU) and has potential to serve as a solution to spectrum inefficiency and spectrum shortage problems. However, SUs face number of challenges based on the fluctuating nature of the available spectrum. When PU arrives on a specific frequency band, any SU occupying this band should free the channel for PUs which is referred as Spectrum Mobility. It is an important but unexplored event in cognitive radio network. This paper is a brief overview on the reason, mechanism, challenges and their solutions in spectrum mobility.

References

- Akyildiz, Ian F., et al. "NeXt generation/dynamic spectrum access/cognitive radio
- C-W. Wang and L-C. Wang, &quot;Modeling and Analysis for Proactive-decision Spectrum Handoff in Cognitive Radio Networks&quot;, IEEE International Conference on Communications, June 2009
- Zhang, Caoxie, and Kang G. Shin. &quot;What Should Secondary Users Do Upon

**Index Terms**
Computer Science

**Networks**

**Keywords**
Cognitive Radio Network (CRN)  Spectrum Mobility/Handoff.