Performance Analysis of Primary User Aware Heuristic Dynamic Spectrum Channel Allocation

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Abstract

In cognitive radio networks, the role of the medium access management layer is incredibly necessary since it permits secondary users to access the spectrum while not moving Primary Users' communications. Secondary users' and first users' pure mathematics has a bearing on the performance of the spectrum sharing algorithms. Also, secondary users' quality changes the topology of the network similarly as interference between the primary and secondary users. The situation of multiuser multichannel psychological feature radio networks introduces new challenges like co-channel interference. Consequently, the ability budget ought to be allotted to the secondary users subject to specific constraints. Hence, completely different secondary users can have different power and interference limits betting on the activity of primary users and on that secondary users are inflicting co-channel interference to every different. additionally, sanctioning Energy gathering in psychological feature radio networks is promising to increase their time period in order that the hybrid interweave/underlay access theme is adopted, which implies that secondary users will access the active and non-active primary user bands.
In this analysis paper, a best primary user aware heuristic dynamic spectrum allocation technique is projected. The study of impact of the subsequent factors: quality of the secondary users, spectrum quality, the primary exclusive regions (PERs), the geographical locations of the nodes, property of secondary users, correlate shadow weakening, and also the activity of each primary users and secondary users.

References


Index Terms

Computer Science  
Signal Processing
Keywords

Cognitive radio networks