Abstract

Cognitive radio has emerged as a tempting solution for the spectrum scarcity problem. This article focuses on the recent trends in energy efficient spectrum sensing techniques for the Cognitive Radio (CR) technology. The increasing demand of cognitive radio and its application increases the urge to make the emerging technologies as energy efficient as possible. Spectrum sensing which is one of the most complex and power intensive tasks in a cognitive radio system when made energy efficient increases the longevity of the network. This survey focuses on the new and efficient energy aware sensing techniques for cognitive radio networks and compares them.

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Index Terms

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Keywords

Cognitive radio, Spectrum sensing, Energy efficient sensing, Censoring, Sleeping, Sequential
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sensing, History assisted sensing, WSN assisted sensing, Trust based sensing.