



Research Article



Optimization of Cooperative Spectrum Sensing with Energy Detection in Cognitive Radio Networks

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DOI:

[http://dx.doi.org/
10.17812/IJRA.1.2\(10\)2014](http://dx.doi.org/10.17812/IJRA.1.2(10)2014)

Manuscript:

Received: 25th April, 2014
Accepted: 18th May, 2014
Published: 2nd June, 2014

ABSTRACT

In this paper we consider the cooperative spectrum sensing, in which multiple number of cognitive radios collaborately detect the spectrum holes to use unused spectrum through the method of energy detector. The problem with the cognitive radio network is when the cognitive radio users are increasing, it requires more sensing time. So here a fast spectrum sensing algorithm has been proposed, in which requires fewer than the total number of cognitive radios in cooperative spectrum sensing.

Keywords: Cognitive radio, energy detection, optimization, spectrum sensing.

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IJRA - Year of 2014 Transactions:

Month: April - June
Volume – 1, Issue – 2, Page No's: 50-53
Subject Stream: Electronics

Paper Communication: Author Direct

Paper Reference Id: IJRA-2014: 1(2)50-53