



Impact of Cognitive Radio in Spectrum Allocation

Anilkumar Dulichand Vishwakarma
Research Scholar
KBCNMU, Jalgaon (India)
anil_karma@yahoo.com

Dr. Girish Ashok Kulkarni
Research Supervisor
KBCNMU, Jalgaon (India)
girish227252@gmail.com

Abstract – Cognitive radio is born as a method that proposes a solution to the problem, dynamically managing the resource. One of the stages that integrate this technology is the spectrum decision, in which the frequency bands are selected and assigned based on the quality of service requirements of the cognitive users. This paper analyses the fundamental elements that make up the cognitive radio and the allocation of spectral bands. Among the main problems in the insertion of new applications and wireless technologies, there is the lack of radio spectrum for its allocation, due to the inefficient way of distribution of the available radio spectrum, which is currently assigned statically. In addition, a synthesis of the development platforms most used in the research on this technology and of the activities developed in order to find guidelines for the adaptable use of the spectrum.

Keywords – Cognitive Radio, Dynamic Spectrum Access, Spectrum Allocation, Spectrum Mobility, Spectrum Detection, etc.