Tuning in Outage Probability Threshold of a GCCS Impact on Operator’s Cost-efficient

Joy Iong-Zong Chen, Yu Hsing Chien
E-mail: jchen@mail.dyu.edu.tw

ABSTRACT
The OP (outage probability) performance of a specified GCCS (green communication cellular system) is evaluated in this article. In order to obtain the most efficiency without modifying the circuit allocation, the deployment of GCCS is assumed to search a best way for adjusting most efficient in application of communication energy. Generally, most important point in the way to earn the energy saving for a cellular radio system is by means of reducing the transmission power. Generally, it is known that there is about over 50% energy wasting in handling the power of circuit, air condition, and others for a cellular system. For discussion such issue, by adopting an effect algorithm to distribute different mobile users to distinct BS (base station) proposed in the report. Certainly, the QoS (quality of service) of the mobile network is needed to be guaranteed, which is maintained by presetting a data rate threshold for both downlink and uplink communications. Finally, there are many parameters are assigned to obtain the purpose of the proposed scheme for power saving, such as preset the threshold value of outage probability, the time of after dark. Furthermore, the results from the derived system performance are shown to express the fact which exists between the cost-efficient for the system operators and the system performance of the cellular radio communications.

Keywords: after dark; GCCS (green communication cellular system); OP (outage probability); QoS.

REFERENCES