IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

 $International\ Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary\ Online\ Journal$

Volume 3, Issue 15, May 2023

Using SciLab Improvement of Channel Capacity with Cell Splitting

Aphasana Mulla and Wrushali Deshmukh

Lecturer, Department of Electronics & Telecomm, Bharati Vidyapeeth Institute of Technology, Navi Mumbai, India

Abstract: Cell splitting in mobile communication is the process in which the bigger cells split up into smaller ones. In mobile communication we use cell splitting so that we can expand the capacity of the system. Cell splitting also helps to increase the number of channels. Whenever there is a bigger network for any area, the number of mobile users also increases. This system can be implemented using MATLAB software. But MATLAB software requires licence. In this paper, cell splitting is implemented using Scilab software. Scilab is an open-source software and therefore cell splitting implemented using Scilab.

Keywords: Scilab, Frequency Reuse, Cell Splitting, Cell

REFERENCES

- [1] Sagar Juneja a, Rajendra Pratap b, Rajnish Sharma a, Semiconductor technologies for 5G implementation at millimeter wave frequencies Design challenges and current state of work.: Engineering Science and Technology.
- [2] Ohaneme C.O.,Onoh G.N., Ifeagwu E.N., Eneh I.I. IMPROVING CHANNEL CAPACITY OF A CELLULAR SYSTEM USING CELL SPLITTING IJSER Journal ISSN 2229-5518.

DOI: 10.48175/568

