

## **DYNAMIC RADIO RESOURCE ALLOCATION IN FOURTH GENERATION 3GPP LTE: PART-I**

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### **Abstract**

In this Research paper (part-I), we have designed a new scheme, Cyclic Switching Scheduling Scheme. It performs the probability computation on the radio resources to determine which resource can be assigned to the cell centre users and which resources can be assigned to the cell edge users. It means that, all the users are prioritized first based on their requirement on the resources and its channel condition, a fair scheduling is done as it allocates resources to the users according to their requirement and experienced channel environment noise. Additionally placement of the user is counted in the cell that the resources are being allotted. Our Scheme overcomes drawbacks of Round Robin Scheme in which all resources are allocated to one user at a time and all other user have to be in the waiting queue until their turn comes and the resources get free. As only one user is served at a time thus the overall system performance will be tarnished significantly. It regards as the user's requirements on the radio resources, the channel condition and also the location of the user in the target cell. This scheme is preferably exploited with technique of semi-static intercell interference coordination to achieve the finest in general performance of system.

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**Keywords:** Cyclic Switching Scheduling Scheme, Single Frequency Network, Evolved Node Base Station, LTE