Survey on Uplink Scheduling Techniques in LTE and LTE-A Networks: M2M, D2D and V2V Perspective

Iresh Dudeja
iresh.dudeja@
tu-ilmenau.de

Kalinga Bhusan Ray
kalinga-bhusan.ray@
tu-ilmenau.de

Mohamud
muhammad-attahir.jibril@
tu-ilmenau.de

qurrat-ul Ainy
qurrat-ul.ainy@
tu-ilmenau.de

***Abstract*—With the advancement of technology and appropriateness of OFDM, it is used as preferred technology for downlink communication between User Equipment and evolved NodeB (eNodeB). However the same scheme is not helpful in the uplink scenario because of its inherent property of high peak to average power ratio (PAPR). High PAPR is not suitable for battery powered low wattage equipment such as cellular phones. This restriction gave rise the possibility of using the single carrier frequency division multiple access (SC-FDMA) which has low PAPR attribute. Selection of SC-FDMA comes with a difficult constraint to be maintained all the time, resources allocated for a particular user must be continuous in nature. Keeping this constraints, many algorithms were proposed to maximize the system throughput at the same time being fair to all users located differently. Mainly these algorithms are based on channel dependent and proportional fairness paradigms.**

I. Introduction

KALINGA

II. Introduction

qurrat-ul.ainy

III. Introduction

IRESH

IV. Introduction

Muhammad Attahir Jibril

V. Conclusion

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References

[1] S. Dasgupta, C. Papadimitriou and U. Vazirani, *Algorithms* , first edition, Mc Graw Hill(2008).
[2] Martin Dietzfelbinger *Primality Testing in Polynomial Time* , first edition, Springer(2004).
[3] The GNU Multiple Precision Arithmetic Library https://gmplib.org/manual/Greatest-Common-Divisor-Algorithms.html(Accessed15thNov'2017).