Abstract

In this paper, the parameters of the Random Access Channel (RACH) of LTE/ LTE-A based M2M communication under congestion situation are investigated. These parameters include the effect of the Backoff Indicator (BI), Hybrid Automatic Repeat-reQuest (HARQ) and contention resolution timer (CRT) on the Performance of LTE-based M2M Communication. The results indicate that the parameters of the RACH procedure have an impact on the network's performance, such as delay and packets dropped.

References

3. M. Cheng, G. Lin, and H. Wei, "Overload Control for Machine-Type-Communications in
9. IEEE 802.16m-08/413, “Synchronous Non-adaptive HARQ in IEEE 802.16m Uplink”.

Index Terms

Computer Science

Communications
Keywords

M2M, LTE networks, RACH procedure, PRACH.