Effect of RACH Procedure on the Performance of LTE-based M2M Communication

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

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Index Terms

Computer Science  Communications
Keywords

M2M, LTE networks, RACH procedure, PRACH..