

भारत सरकार) GOVERNMENT OF INDIA  
(रेल मंत्रालय) MINISTRY OF RAILWAYS  
(रेलवे बोर्ड) (RAILWAY BOARD)

No.2020/Tele Dev/Implementation of LTE

Dated: 22.10.2020

Director General,  
RDSO  
Lucknow

(Kind attention: ED/Telecom/RDSO)

**Sub: Implementation of LTE-R on Indian Railways**

1. Long Term Evolution for Railways (LTE-R), the next generation Mobile Train Radio Communication system is planned to cater Indian Railways' present and future demands of voice and data traffic.
2. In this context, the works for provision of LTE system have already been sanctioned over 30,000 Rkm on Indian Railways and the same is to be rolled out in coming years.
3. Following applications/solutions are contemplated on LTE-R:
  - 3.1. Mission Critical Passenger Safety Services & Applications
  - 3.2. Video Surveillance through CCTV cameras in trains and Passenger information System.
  - 3.3. Internet of Things (IoT) on Rolling Stock & Fixed assets.
  - 3.4. Voice and Data Needs of IR
4. In order to make uniform, cost effective, integrated and standard system over Indian Railway, the followings to be studied and report to be prepared by RDSO:
  - 4.1. Architecture of LTE system for Indian Railways
  - 4.2. Design inputs for Radio Network Planning, Cell Range and Inter Site (eNodeB) Distance
  - 4.3. Dimensioning of EPC (Evolved Packet Core)
  - 4.4. Planning, Positioning and Deployment of EPC over Indian Railway network.
5. RDSO to submit report within 90 days.

This issues with the approval of Member (Infra).

Kindly acknowledge the receipt and ensure compliance.

UMESH  
BALONDA

Digitally signed by UMESH  
BALONDA  
Date: 2020.10.22 15:29:16  
+05'30'

(UmeshBalonda)

Exec.Director (Tele.Dev)

E-Mail: [edtd@rb.railnet.gov.in](mailto:edtd@rb.railnet.gov.in)