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भारत सरकार- रेल मन्त्रालय
Government of India - Ministry of Railways
अनुसंधान अभिकल्प और मानक संगठन
Research Designs & Standards Organisation
लखनऊ- 226 011 LUCKNOW – 226 011

No: RDSO-SIG0SDAC(CEL)/1/2020 **Date:** 02.02.2021

Central Electronics limited,
4 Industrial Area,
Sahibabad (UP)-201010

Sub: Mitigation of NCR issue in CEL makes MSDAC.
Ref: i) CEL letter no. CEL/CMD/2021 dt 16.01.2021.
ii) CEL/SPD/R&D/RDSO dt 18-01-2021.
iii) This office letter of even no. dated 14.01.2021.

Kindly refer to your reply on the issue as referred to you vide above mentioned letter. It is once again brought out that a detailed investigation by RDSO was carried out after the unsafe failure of SSDAC of one of the vendor of axle counter.

Due to unsafe incident occurred in NCR In 2016 and considering safety related issue & its criticality a detailed analysis/investigation was done and simulation tests were carried out in Signal lab at RDSO for all RDSO approved axle counter systems. Based on results of safety audit & simulation tests, it was observed that similar situation can occur in CEL make axle counter also. As a mitigation plan CEL planned to develop additional "ADMS" unit for the unusual incidence reported by NCR. However, later on finding practical difficulties in the use of additional ADMS card, M/s CEL integrated the ADMS functions in SSC card and developed IDSSC card.

Being a major alteration in the design of the existing system, it needed safety validation of the modification from a reputed ISA having accreditation from ISO/IEC 17065. RDSO already had a panel of ISAs. But being a govt PSU, CEL was allowed to get validation from IIT, Delhi.

However, while going through the assessment report issued by IIT / Delhi, it is found non-conclusive. Further, no hazard analysis was done as per CENELEC standards to arrive at fail safe feature of the system and final recommendation about its SIL level. IIT Delhi has simply given final recommendation as *"The card meets CENELEC standard prEN50126. It is also recommended that the new IDSCC Card may be implemented in all future supplies and as spares for existing systems. The IDSCC card may also be considered for use in HASSDAC and MSDAC systems."*

Since, axle counting system is a safety critical item, its safety validation as per CENELEC standards by a reputed ISA is requirement of specification, RDSO is only concerned about safety and quality improvement of Railway Products for passenger safety. Commercial aspects are looked after by procuring agency.

RDSO strictly follows the Make in India Policy of Govt of India for making Atma Nirbhar Bharat. Needless to mention even the vendor approved under cross approval has to Indigenize the product within stipulated time period under the guarantee of BG.

In light of the above facts, M/s CEL should urgently take action to get the modified system safety validated from a reputed ISA certification agency from RDSO ISA panel as the report from IIT Delhi is non-conclusive. Thus, considering that the mitigation of NCR issue is long pending and its safety repercussions, further supply and installation of CEL make MSDAC is restricted as letter under ref (iii) till mitigation of NCR issue in MSDAC is concluded and assessment of MSDAC system with proper impact analysis is done through an agency specified in RDSO panel of ISAs.

This is issued with the approval of competent authority.

DA: NIL

02.02.21
(H.O. Kushwaha)
Executive Director/Signal-I
For Director General/Signal

Copy to: .
1. Secy to Director General/RDSO for kind information of DG/RDSO
2. Secretary Signal/Rail Bhawan, Railway Board, New Delhi - for kind information please.
3. Executive Director/QA/S&T/RDSO/Delhi