

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

No. 2020/Sig/G/2/RDSO

New Delhi, dated 23 .04.2024

PCSTEs

All Indian Railways

Sub: Automatic Block Signalling (ABS) - train detection system provided in redundancy.

Ref: (i) RB's letter no. 2012/Sig/M/DAC/DD dtd. 31.12.2013

(ii) RB's letter no. 2023/ABS Committee/Railway Board dtd. 16.11.2023


(iii) RB's letter no. 2007/Sig/M/7/Genl. Dtd. 16.11.2023

(iv) RDSO's TAN no. STS/E/TAN/Dir.Sig.VII Dtd.13.02.2015

The guidelines regarding provision of dual detection and design redundancy to ensure safe & reliable train detection system have been issued vide references above. These include locations and conditions, diversity, resetting, mismatch monitoring through data logger, disconnections etc. However, instances have come to notice in which Zonal Railways have not adhered to implementation of contents of the guidelines. Some important instructions regarding the same to ensure availability of Signalling system with safe and reliable train detection system are reiterated/ given below:

1. All Automatic Block signalling shall be done with Axle counters with design redundancy. Both systems should be monitored separately through data logger along with generation of exception reports/alarms, to be transmitted to S&T staff/ Signal Control about mismatch / failure of the system, which should be attended promptly.
2. Axle Counter DPs to be preferably clamp mounting type, on different rails, with required stagger.
3. During failure of any one of the systems in dual detection, the resetting shall invariably be activated automatically i.e. Auto resetting of failed system by other healthy system with prescribed time delay.

4. Resetting of axle counters shall always be in preparatory mode.
5. In case of failure of both systems in dual detection, Resetting arrangement shall be kept in ASM room and manual resetting to be done with cooperation of ASMs of adjacent stations after ensuring no train in section on the concerned line on which resetting is performed.
6. Redundancy to ensure availability of system has to be designed right from the stage of power supply with separate DC to DC converters for each system, separate cables for main and standby system with cabling in separate paths.
7. Provision of AT supply as per extant guidelines should be ensured along with IPS.
8. Monitoring of auto hut door lock through data logger to be provided.
9. For safety of staff, while working in big groups, provision of lookout person should be adopted.
10. Provision of VHF sets, including 25W sets at auto huts, if required, should be ensured for better communication during maintenance and attending failures.
11. Barring exceptional circumstances, Porta cabins not to be used for S&T works. Auto huts to be provided with proper fencing and earthing arrangements, at approximately 3 KMs or as required. Auto huts to have future space for telecom equipments with separate entry.


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