

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड Railway Board)

No. 2024/CEDO/SR/19(1)/12-Coach-Vande Metro

New Delhi, dated 06.09.2024

**The Director General,
Research Designs & Standards,
Manak Nagar,
Lucknow-226011.**

Sub: Future Improvement of 12- Coach formation Vande Metro Coaches, as per ICF layout Drawing Nos. TS/VM/DTC-9-0-001 alt-f for Driving Trailer Coach (VMDTC), TS/VM/MC-9-0-001 alt-f for Motor Coach (VMMC), TS/VM/MC2-9-0-001 alt-f for Motor Coach (VMMC2), TS/VM/MC3-9-0-001 alt-f for Motor Coach (VMMC3), TS/VM/TC-9-0-001 alt-f for Trailer Coach (VMTC) & TS/VM/NDYC-9-0-001 alt-f for Non Driving Trailer Coach (VMNDYC)

Ref: (i) Railway Board's letter no. 2024/CEDO/SR/19/12-Coach-Vande Metro, dated 05.09.2024

(ii) CCRS office letter no. Q.12011/06/2024-25-T.W, dated 09.08.2024

(iii) RDSO's letter no. TS/SC/Trial, dated 23.07.2024

(iv) RDSO's Final Speed Certificate (FSC) no. TS/SC/Trial, dated 27.07.2024

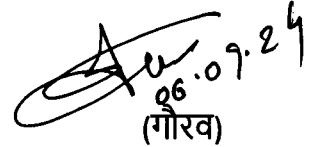
With reference to RDSO above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board has been communicated for introduction of 12- Coach formation Vande Metro Coaches, as per ICF layout Drawing Nos. TS/VM/DTC-9-0-001 alt-f for Driving Trailer Coach (VMDTC), TS/VM/MC-9-0-001 alt-f for Motor Coach (VMMC), TS/VM/MC2-9-0-001 alt-f for Motor Coach (VMMC2), TS/VM/MC3-9-0-001 alt-f for Motor Coach (VMMC3), TS/VM/TC-9-0-001 alt-f for Trailer Coach (VMTC) & TS/VM/NDYC-9-0-001 alt-f for Non Driving Trailer Coach (VMNDYC) up to a maximum speed of 110 kmph over Indian Railways, by Zonal Railways, on track maintained as Para No. 522 of IRPWM, June-2020 vide RB's letter under reference (i) above. CCRS, while recommending for introduction of this Rolling Stock to Railway Board has suggested **following measures for future improvement of the above rolling stock:**

- i. As the 12 car Vande Metro rake is provided with 50% powering, RDSO may plan for Oscillation Trials at higher speed of 130/140 Kmph to realise its full potential.
- ii. The footstep inside the coach is having tread of only 200mm. While deboarding, passenger's feet may not rest properly due to small tread size causing imbalance & may result in injuries. In view of the above the tread size need to be increased while maintaining the riser to tread ratio.
- iii. Future rakes should be provided with "anti-drag feature" in door mechanism.


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- iv. During trial, door obstruction test was conducted and it was observed that obstruction of 25mm was detected. System should be recalibrated for detection of 10mm obstruction at top, middle & bottom of the door.
- v. The design of Vande Metro coaches should conform to EN-15227.
- vi. The cock provided for isolating the bogie are located in the under frame. As it may be difficult for the motor man to isolate the bogie especially during night. Therefore the provision may be explored for isolating the bogie from respective coach itself in consultation with motorman and train managers.
- vii. It was observed that the Deadman handle and microphone are away from the motorman's chair. Feedback regarding the same may be taken from the crew and they may be relocated closer to the motorman's chair, if required.
- viii. The sound level of all kind of alarms in the Cab is very high which may cause discomfort to the Train manager and motorman. Feedback regarding this may taken from them and sound level may be reduced, if required

RDSO is requested to examine above and take necessary action. The compliance of the same should also be submitted to CCRS.


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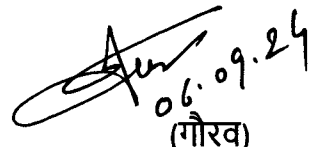
e-mail address: dceg@rb.railnet.gov.in

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Copy forwarded for information to:

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement No Q.12011/06/2024-25-T.W, dated 09.08.2024
2. The Commissioner of Railway Safety, All Circles
3. Executive Director (Standards)Motive Power, RDSO, Lucknow
4. Executive Director (Standards) Track-I, RDSO, Lucknow
5. EDME/Chg, Railway Board


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