

**GUARD**

**FILE**

**2023 Pt.II**



No. MRTS/W-90/49A/Pt. XI

**METRO RAILWAY**  
METRO RAIL BHAVAN  
33/1, CHOWRINGHEE ROAD  
KOLKATA - 700 071



Dated 29.06.2023

**Executive Director / Metro**  
**Rail Vikas Nigam Limited**  
24, Deshpriya Shastri Road  
(Beside Tollygunge Railway Station)  
Kolkata-700 033 (edmetrokolkata@gmail.com)

**Sub: Provision of rubber fenders at PF copings to cover the excess gaps between coping and the coach in the section from Joka to Taratala section.**

**Ref:-** 1) This office letter of even no. dated 15.06.2023  
2) Your letter No. ED/Metro/RVNL/KOL/Metro/383 dated 15.06.2023

The matter has been considered in detail and the same was presented before Hon'ble MR also, during his recent visit to Kolkata.

It has been observed that excessive horizontal gap and excessive height difference in PF and Coach floor level, exists only in BG Lines of Kolkata Metro (MRK). The reason being that SoD of BG network of MRK was finalized at least 40 years back, whereas SoD for the SG Line under construction by KMRCL has been finalized very recently, in line with the other new Metros. The problem is further aggravated when actual gaps or level differences are beyond even the BG SOD limits.

A comparative list of SOD clearances in different Metro lines in India are enclosed. Clearly, SOD of BG Lines of MRK is at variance with the rest of the Metro systems. Since, it is practically not possible to change rolling stock dimensions, the SOD dimensions related with platforms are required to be changed.

Metro Railway is processing to change some of the items in our old SOD to remove these discrepancies. The existing & proposed SOD dimensions for our BG network are as tabulated below-

**Platform:-**

No.	Item description	Existing	Proposed	Min Clearance*	Maximum Clearance*
5(a)	Maximum Horizontal distance from Centre of Track to face of Platform coping	1475 mm	1455 mm	75mm	85mm
5(b)	Minimum Horizontal distance from Centre of Track to face of Platform coping	1465 mm	1445 mm		

(\* Maximum Coach width taken as 2740mm as prescribed in SOD)

**Platform:-**

No.	Item description	Existing	Proposed	Min level diff**	Max level diff**
6(a)	Maximum height above Rail Level for passenger platform	1035 mm	1075 mm	05 mm	95 mm
6(b)	Minimum height above Rail Level for passenger platform	1025 mm	1065 mm		

(\*\*Coach floor level varies from 1080 mm to 1160 mm)

However, to avoid repeating discrepancies of past, all under construction/future platforms of BG Metro, must be constructed as per proposed dimensions mentioned above. Necessary corrigendum for SOD of BG Metro, Kolkata shall be got issued before next commissioning.

For existing PF gap, RVNL should provide rubber fenders to maintain clear gap between 75mm to 85 mm. For existing PF height difference, raising of platforms may be planned properly (with insulation) as this may affect utilities like Lift, escalators etc.

Corrigendum for SOD of BG Metro, Kolkata is being processed separately.

DA/As above

Digitally signed by  
VIAJ KUMAR  
SRIVASTAVA  
Date: 2023.06.29  
21:08:43 +05'30'

(V.K.Srivastava)  
Principal Chief Engineer  
Metro Railway

Copy for information to:-

1. General Manager/Metro Railway.
2. Director General/RDSO, Lucknow (dg@rdso.railnet.gov.in)
3. PED/Gati Shakti/Railway Board, New Delhi (pedgs.akk.in@gmail.com)
4. EDCE/G, Railway Board, New Delhi (edceg@rb.railnet.gov.in)
5. ED/UT/RDSO, Lucknow (edco.uths@rdso.railnet.gov.in)
6. PCSO, PCOM, PCEE, PCME - Metro Railway
7. Chief Engineer/O&M, Chief Engineer/Con - Metro Railway
8. Chairman & Managing Director, Rail Vikas Nigam Limited, Plot no 25, First Floor August Kranti Bhawan, Bhikaji Cama Place, R. K. Puram, New Delhi – 110066 (cmdrvnl@rvnl.org)
9. CPM/RVNL/Kol-1 and CPM/RVNL/Kol-2, Rail Vikas Nigam Limited, 24, Deshpriya Shasmal Road (Beside Tollygunge Railway Station), Kolkata-700 033 (cpmlinekolkata@gmail.com, rvnlkol2@gmail.com)

Coach body to PF Coping face Gap & Coach floor to Coping top level diff. (based on approved SoDs)						
S. No.	METRO	Clearances ( in mm)				Remarks
		X		Y		
		Max	Min	Max	Min	
1	MRK SG	85	75	55	25	DC
3	PUNE	75	70	55	45	
4	MMRCL	70	60	45	35	
5	MMRDA	70	60	45	35	
6	MPM	75	66	55	45	
7	CMRL	65	60	55	45	
8	DMRC	65	60	60	50	
9	NAGPUR	75	70	45	35	
10	NOWDA	75	70	55	45	
11	GURGAON	92	87	55	45	DC
12	KOCHI	85	80	45	35	DC
13	KANPUR	75	70	45	35	DC
15	HMRL	75	70	45	35	
16	MMOPL	85	75	60	40	
17	NAVI MUMBAI	75	70	55	45	
18	LMRCL	65	60	45	35	
19	BMRL	70	60	45	35	DC



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



No.2023/CEDO/SR/07/BLCM/{dwarf(1930 x 2600)-triple stack-22t-65 kmph-WDFC} New Delhi, dated 16.06.2023

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

Managing Director,  
DFCCIL,  
5th Floor, Supreme Court,  
Metro Station Building Complex,  
New Delhi - 110001

**Sub:** Introduction of dwarf containers (1930mm high and 2600mm width) in triple stack in empty and loaded condition, on 22t axle load, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCM (A-Car & B-Car) to RDSO's Drg. Nos. WD-21103-S-01 Alt. 3 (A-Car) and WD-21103-S-02 Alt. 3 (B-Car) for operation up to a maximum speed of 65 kmph over Western Freight Corridor of DFCCIL routes of DFCCIL

Ref: (i) RDSO letter no. MW/Container, dated 11.11.2021

(ii) RDSO Provisional Speed Certificate no. MW/Container (TSC/BLCM), dated 11.11.2021 and its Amendment no.1, dated 31.12.2021 & Amendment No. 2 dated 27.02.2023

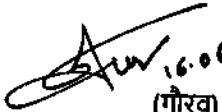
(iii) CCRS letter no. Q.12011/14/2021-22-T.W. BLCM, dated 17.01.2023

With reference to RDSO above application {ref.i}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of dwarf containers (1930mm high and 2600mm width) in triple stack in empty and loaded condition, on 22t axle load, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCM (A-Car & B-Car) to RDSO's Drg. Nos. WD-21103-S-01 Alt. 3 (A-Car) and WD-21103-S-02 Alt. 3 (B-Car) for operation up to a maximum speed of 65 kmph over Western Freight Corridor of DFCCIL routes of DFCCIL with the following stipulations :

- Observance of all conditions laid down in RDSO Provisional Speed Certificate no. MW/Container (TSC/BLCM), dated 11.11.2021 and its Amendment no.1, dated 31.12.2021 & Amendment no.2, dated 27.02.2023 for operation up to a maximum speed of 65 kmph over Western Freight Corridor of DFCCIL routes of DFCCIL, shall be ensured on the DFCs while seeking the sanction of MD/DFCCIL, for introduction of rolling stock on the DFCCIL. All the documents required for the sanction of General Manager as per CE(G) Directorate/Railway Board Policy Circular No. 6, dated 01.05.2023, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure
- Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.

*[Signature]*  
16.06.23

- iii. Anemometers shall be provided on all stations enroute of triple stack dwarf container operation to measure the wind speed for taking necessary action in terms of Para 3.6.5 of Provisional Speed Certificate dated 11.11.2021.
- iv. Action to be taken in case of strong winds as mentioned in Para 3.6.5 of Provisional Speed Certificate dated 11.11.2021 shall be made a part of the Station Working Rule(SWR) of all station falling enroute of triple stack dwarf container operation.
- v. Railway/DFCCIL shall ensure compliance to all stipulations regarding certification, tensile/compressive force, shear strength of Inter Box Connectors (IBCs) mentioned in RDSO's letter no. MW/CONTR/ATL dated 08/09.12.2014.
- vi. Any occurrence of displacement/falling of the containers during operation shall be monitored for a period of 06 months and any such unusual occurrence shall be intimated to Commission.
- vii. Railway/DFCCIL shall ensure loading pattern as mentioned in Para 3.5.3 of Provisional Speed Certificate dated 11.11.2021 for operation of dwarf containers in triple stack on BLCM wagons.
- viii. These containers shall be operated only on BLCM (A-Car & B-Car) in empty as well as loaded conditions unless there is separate sanction for their operation on any other rolling stock.
- ix. Railway shall ensure that containers are lifted and lowered vertically to avoid any damage to inter-box connector locks /Automatic Twist Locks (ATL). Railway shall also ensure proper locking of inter-box connector locks/ATL at the starting station as well as at any station where loading/unloading is done.
- x. No overdue in track/rolling stock maintenance shall be permitted.

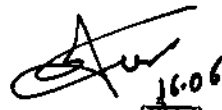
 16.06.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No. 011-23047598]  
e-mail address: dceg@rb.railnet.gov.in

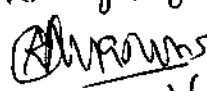
No.2023/CEDO/SR/07/BLCM/(dwarf(1930 x 2600)-triple stack-22t-65 kmph-WDFC) New Delhi, dated 16.06.2023

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/14/2021-22-T.W. BLCM, dated 17.01.2023
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. PEDCE(P), Railway Board
6. EDME(Fr), Railway Board

 16.06.23  
(गौरव)

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अमृत महोत्सव

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

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Azadi Ka  
Amrit Mahotsav

No. 2007/CEDO/SR/11

New Delhi, dated 16.06.2023

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

The General Manager,  
All Indian Railways

**Sub: Operation of BG brake van BVZC on BG sections of IR.**

Ref: (i) RB Sanction letter No. 98/CEDO/SR/9 dated 02.12.2000

(ii) Extension of validity vide RB letter No. 98/CEDO/SR/9 dated 09.12.2003, 28.02.2006 and letter no 2007/CEDO/SR/11 dated 27.06.2007 & dated 03.11.2010

(iii) RDSO Final maximum permissible speed certificate dated 10.07.2000

(iv) CCRS's letter no Q-15013/1/98-RS dated 23.10.2000

(v) RB's letter No. 2007/CEDO/SR/11, dated 23.09.2020

With the approval of Board, Ministry of Railways, Railway Board hereby extended the validity up to 31.12.2025 for running BG Brake Van type BVZC to RDSO's Drawing Nos. WD-81035-S/2 Alt.2, SK75522 (General Arrangement) and SK 79559 on BG section of IR, up to a maximum speed of 100 kmph, over Indian Railway, with the following stipulations:

- Observation of all permanent speed restrictions as specified in current Working Time Table as the case may be and other temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
- Compliance with all the relevant conditions stipulated in RDSO's final maximum permissible speed certificate for BVZC vide letter no. MW/BVZC dated 10.07.2000.
- The BVZCs fit for 100 kmph shall be operated on all rakes on interchangeable basis.
- The BVZCs being turned out after POH from shops after the date of this sanction shall be turned out with 18 month return date.

16.06.23

- v. BVZCs turned out with 18 month return date as above will have marking made on both side of their body in Golden Yellow fluorescent paint (to ensure clear visibility of the marking) as 'FIT FOR 100 KMPH'.
- vi. BVZC brake vans becoming due POH after July 2024 shall necessarily be intercepted for condemnation and shall not be taken up for POH.
- vii. Container Flat wagons and captive BVZC wagons to run at 100 kmph should be equipped with twin pipe air brake system to hasten release of brakes.
- viii. Ensuring fitment of speedometers with recorder in the locomotives and quick coupling arrangement for fitment in BVZCs.

This sanction is valid up to 31.12.2025. In the meanwhile, it is expected that a different type of Brake Van meeting the requirement with the riding criteria for locomotives, would replace the BVZC Brake Vans.

*[Signature]*  
16.06.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No. 011-23047598]  
e-mail address: dceg@rb.railnet.gov.in

No. 2007/CEDO/SR/11

New Delhi, dated 16.06.2023

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow
2. Executive Director (Standards) Motive Power, RDSO, Lucknow
3. Executive Director (Standards) Track, RDSO Lucknow
4. Executive Director ME(Fr.), Railway Board
5. Executive Director ME (Coaching), Railway Board

*[Signature]*  
16.06.23  
(गौरव)

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*[Signature]*  
16/6/23  
ADECE(VIL)





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



No. 2023/CEDO/SD/02/Shimiliguda-60.52

New Delhi, dated 16.06.2023

The General Manager  
East Coast Railway,  
Bhubaneswar

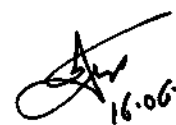
**Sub:- Shimiliguda a Station yard - Condonation of steep gradient w.r.t. Para 2 Note (d) (i), Chapter-II, Schedule -I of IRSOD for BG 2022 (ACS-2) for grade of 1 in 60.52 from Ch: 693m (KTV end) to Ch: 842m (KTV end) for existing slip siding for a length of 149m in Shimiliguda Station yard which is steeper than 1 in 100, in connection with proposed Doubling between Kottavalasa-Koraput on Kottavalasa -Kirandul line of Waltair Division of East Coast Railway.**

**Ref:** (i) CCRS's letter No. Q-11019/02/2023-24-T.W., dated 16.05.2023  
(ii) ECoR's letter No. W1/PLG/CRS/Cond/SMLG Yard/1560, dated 28.02.2023

With reference to the above referred application; sent through the Chief Commissioner of Railway safety, Lucknow; the sanction of the Ministry of Railways, Railway Board is hereby communicated for Condonation to the infringement of steep gradient w.r.t. Para 2 Note (d) (i), Chapter-II, Schedule -I of IRSOD for BG 2022 (ACS-2) for grade of 1 in 60.52 from Ch: 693m (KTV end) to Ch: 842m (KTV end) for existing slip siding for a length of 149m in Shimiliguda Station yard which is steeper than 1 in 100, in connection with proposed Doubling between Kottavalasa-Koraput on Kottavalasa -Kirandul line of Waltair Division of East Coast Railway, as shown in Form-XVII and drawings, enclosed with above mentioned application.

The above condonation is subject to the stipulations as under:

- Provision of Slip siding on both ends shall be ensured as per GAD no 5197122 enclosed with proposal and these sidings shall meet safety requirements of all lines at station. The track profile in yard/approaches as well as location & adequacy of lengths of Slip siding shall be approved by CTE of zonal railway in consultation with PCSO.
- Stabling of vehicles/ load/ train should not be permitted particularly on running lines. No train or vehicle shall be stabled on 'Non-isolated' line without a live engine attached to it with prescribed brake power.
- The shunt signal no. 08 should be relocated at least 30 m ahead of LC No. KK- 22 from Ch.709.0 m (at KTV end).
- Procedure for reception and dispatch as per GR/SR of zonal railway at stations having grades steeper than 1 in 100 will be followed.

  
16.06.23

- v. Locomotive attachment & detachment or reversal MUST be avoided at this station Locomotives attachment/detachment, if unavoidable, shall be done after securing at least 20 vehicles in Goods train & 5 coaches in Passenger train, providing adequate number of skids (to be decided by railway) and ensuring no train is in block section towards falling gradient.
- vi. Yard gradient shall be jointly measured every six months by Engg and Safety officers and record shall be kept with traceability.
- vii. In terms of GR 5.23, the SM shall personally ensure that vehicles standing at the station are properly secured in accordance with special instructions to prevent vehicles from rolling down.
- viii. Following actions shall be taken by LP before leaving in case of load/train is stabled on line having isolation with Locomotive attached or light engine(s) is/are shut down or stabled.
  - a. Application of both SA-9 and A-9 brakes
  - b. Application of Hand brakes and parking brakes.
  - c. Securing the Loco with wooden wedges provided on loco.
- ix. Minimum brake power as per guideline on Brake Power for freight operation issued by ECOR should be ensured.
- x. No shunting shall be allowed at both end unless sufficient number of brakes are put on and all precautions are taken to prevent vehicles getting out of control and a live locomotive is attached towards the falling side of the gradient as specified in Para 5.20 of G&SR.
- xi. CE/CA/SKP/KruDOUBND/2019, the yard gradient shall be prominently displayed in yard diagram available in SM's room/Operating Panel/VDU.
- xii. SOD infringement details shall be maintained in a SOD infringement register maintained by Engineering department.
- xiii. Railway shall issue 'Spl safety precautions in Line with GR provisions to ensure the safety of train operation is not compromised under any circumstances at station having steep gradient.

*[Signature]* 16.06.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No. 011-23047598]  
e-mail address: dceg@rb.railnet.gov.in

No. 2023/CEDO/SD/02/Shimiliguda-60.52

New Delhi, dated 16.06.2023

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q-11019/02/2023-24-T.W., dated 16.05.2023
2. The Commissioner to Railway Safety, South Eastern Circle, Kolkata, w.r.t. his letter no. CRS/ECOR/WAT/2208, dated 10.03.2023

*[Signature]* 16.06.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

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*[Signature]*

16/6/23

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

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Azadi Ka  
Amrit Mahotsav

**No. 2022-CEDO-SR-30-BCPVN-100kmph-IR-DFC**

**New Delhi, dated 16.06.2023**

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

**The General Manager,**  
**All Indian Railways**

**Managing Director,**  
**DFCCIL,**  
**5th Floor, Supreme Court,**  
**Metro Station Building Complex,**  
**New Delhi - 110001**

**Sub: Introduction of Broad Gauge Bogie Parcel Van type 'BCPVN' [Maximum Axle Load:15.25t] to RDSO's Drawing No. WD-13037-S-02 Alt.5 at maximum speed up to 100 Kmph in both empty and loaded conditions over Indian Railway, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL**

**Ref: (i) CCRS office letter no. Q.12011/16/2021-22-T.W, dated 11.10.2022**  
**(ii) RDSO's letter no. MW/SPD/BG/BCPVN dated 09.11.2021**  
**(iii) RDSO's Final Speed Certificate (PSC) no. MW/SPD/BG/BCPVN dated 01.11.2021 and its Amendment no. 1 dated 16.03.2022**

With reference to RDSO above application {ref.ii}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of Broad Gauge Bogie Parcel Van type 'BCPVN' [Maximum Axle Load:15.25t] to RDSO's Drawing No. WD-13037-S-02 Alt.5 at maximum speed up to 100 Kmph in both empty and loaded conditions over Indian Railway, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL with the following stipulations :

- i. Observance of all conditions laid down in RDSO's Final Speed Certificate (FSC) no. MW/SPD/BG/BCPVN dated 01.11.2021 and its Amendment no. 1 dated 16.03.2022 for operation upto a maximum speed up to 100 Kmph in both empty and loaded conditions, shall be ensured on the Railway/DFCs while seeking the sanction of General Manager/MD-DFCCIL, as the case may be, for introduction of rolling stock on the Railway/DFCs. All the documents required for the sanction of General Manager/MD-DFCCIL as per CE(G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure

16.06.23

- ii. Observance of all the permanent and temporary speed restrictions already in force and those that may be imposed from time to time on various accounts.
- iii. Signalling requirement with respect to maximum permissible speed as per standard of Interlocking given in Indian Railways Signal Engineering Manual, July 2021, Para no. 7.8.9 shall be followed.
- iv. Only wagons with functional twin-pipe brake system shall be permitted to run at 75 kmph and above.
- v. No overdue in track/rolling stock maintenance shall be permitted.
- vi. Before starting the operation, the PCME of the concerned Railway shall arrange to certify the track worthiness and safety of the Rolling stock. Proper maintenance of the rolling stock shall be ensured.
- vii. Brakes of the rolling stock shall be in good working order during the operation.

*[Signature]* 16.06.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

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

No. 2022-CEDO-SR-30-BCPVN-100kmph-IR-DFC

New Delhi, dated 16.06.2023

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1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/16/2021-22-T.W, dated 11.10.2022
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(Fr.), Railway Board

*[Signature]* 16.06.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

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*[Signature]*  
16/6/23  
ADEC(CIVIL)



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



No. 2022-CEDO-SR-30(1) -BCPVN-100kmph-IR-DFC

New Delhi, dated 16.06.2023

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

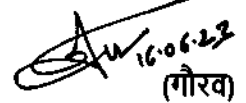
**Sub:** Future Improvement of Broad Gauge Bogie Parcel Van type 'BCPVN' [Maximum Axle Load:15.25t] to RDSO's Drawing No. WD-13037-S-02 Alt.5

- Ref:** (i) Railway Board's letter no. 2022-CEDO-SR-30-BCPVN-100kmph-IR-DFC dated 16.06.2023  
(ii) CCRS office letter no. Q.12011/16/2021-22-T.W, dated 11.10.2022  
(iii) RDSO's letter no. MW/SPD/BG/BCPVN dated 09.11.2021  
(iv) RDSO's Final Speed Certificate (PSC) no. MW/SPD/BG/BCPVN dated 01.11.2021 and its Amendment no. 1 dated 16.03.2022

With reference to RDSO above application {ref.iii}, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board has been communicated for introduction of Broad Gauge Bogie Parcel Van type 'BCPVN' [Maximum Axle Load:15.25t] to RDSO's Drawing No. WD-13037-S-02 Alt.5 at maximum speed up to 100 Kmph in both empty and loaded conditions over Indian Railway, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL 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:

- Light pipe arrangement similar to NMGHS may be provided in the rolling stock for better illumination. Some additional louvers may also be provided.
- Ramp of adequate length flush with the wagon floor may be provided to allow movement of fork lifter inside it for faster handling of goods.
- As the length of the loop lines in DFCCIL are more than that of IR, rakes having more units than what is specified for IR may be operated over DFCCIL for increasing throughput.

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

  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

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

No. 2022-CEDO-SR-30(1) -BCPVN-100kmph-IR-DFC

New Delhi, dated 16.06.2023

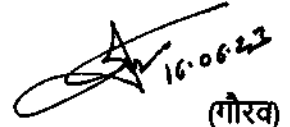
Copy forwarded for information to :

- The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/16/2021-22-T.W, dated 11.10.2022
- The Commissioner of Railway Safety, All Circles
- Executive Director (Standards) Motive Power, RDSO, Lucknow
- Executive Director (Standards) Track-I, RDSO, Lucknow
- EDME(Fr.), Railway Board

Issued through e mail



16/6/23  
ADE(CNVL)

  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड



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



No. 2022/CEDO/SR/39/BOXNLWM1/IR-DFCCIL-22.82t-80-60 kmph New Delhi, dated 29/05/2023

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

Sub: Introduction of new type of rolling stock Broad Gauge Bogie open wagon type 'BOXNLWM1' [Maximum Axle Load:22.82t] to RDSO's Drawing No. WD-08054-S-01 Alt.5 at maximum speed up to 80 kmph in empty and 60 kmph in loaded condition over Indian Railways, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL

Ref:(i) CCRS office letter no. Q.12011/21/2022-23-T.W., dated 19.12.2022

(ii) RDSO's letter no. MW/SPD/BG/BOXNLWM1, dated 11.11.2022

(iii) RDSO's Final Speed Certificate (FSC) no. MW/SPD/BG/BOXNLWM1, dated 02.11.2022

While processing above case for Board's sanction, Member(O&BD) has passed the following remarks as under :

**"Note # 56"**

*Ref above notings (#31 & #48), may be re-examined in consultation with RDSO to permit speeds above 75kmph (empty) with single pipe operation".*

RDSO is requested to examine the issues involved with in consultation of all concerned directorates and submit comprehensive comments at the earliest.

DA: as above (copy of noting).

(गौरव)  
 निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड  
 [Rly No. 030-47598, MTNL No.-011-23047598]  
 e-mail address : dceg@rb.railnet.gov.in

Copy forwarded for information to :

1. Executive Director (Standards) Track-I, RDSO, Lucknow
2. EDME(Freight), Railway Board

Issued through g mail

30/5/23  
 ADE(CIVIL)

Note # 1

No. 2022/CEDO/SR/39/BOXNLWM1/IR-DFCCIL-22.82t-80-60 kmph

Sub: Introduction of new type of rolling stock Broad Gauge Bogie open wagon type 'BOXNLWM1' [Maximum Axle Load:22.82t] to RDSO's Drawing No. WD-08054-S-01 Alt.5, up to a maximum speed of 80 kmph in empty and 60 kmph in loaded condition over BG routes of Indian Railways, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL

Ref:(i) CCRS office letter no. Q.12011/21/2022-23-T.W., dated 19.12.2022(SN-1)

(ii) RDSO's letter no. MW/SPD/BG/BOXNLWM1, dated 11.11.2022 (SN-5)

(iii) RDSO's Final Speed Certificate (FSC) no. MW/SPD/BG/BOXNLWM1, dated 02.11.2022 (SN-6)

1. The P.U.C. is an application from RDSO vide letter no. MW/SPD/BG/BOXNLWM1, dated 11.11.2022 (SN-5), Lucknow, duly forwarded through CCRS/LKO vide letter no. Q.12011/21/2022-23-T.W., dated 19.12.2022 (SN-1), seeking the sanction of Ministry of Railways, Railway Board for introduction of new type of rolling stock Broad Gauge Bogie Covered wagon type 'BOXNLWM1' [Maximum Axle Load:22.82t] to RDSO Drg. No. WD-08054-S-01 Alt. 5 or latest, up to a maximum speed of 80 kmph in empty and 60 kmph in loaded condition over Indian Railway, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL.
2. As per Para 3.6.4 (SN-10) of RDSO's Final Speed Certificate (FSC) no. MW/SPD/BG/BOXNLWM1, dated 02.11.2022, the design of above rolling stock does not infringes any clause of chapter IV(A) IRSOD-2022. Further, ED/Motive Power RDSO vide letter dated 23.08.2018 (SN-16) has stated that speed certificate of all types of rolling stock applicable to IP shall be applicable to DFCCIL also.
3. The application has been duly forwarded by CCRS/LKO with the recommendation for the sanction of the Central Government for introduction of new type of rolling stock Broad Gauge Bogie open wagon type 'BOXNLWM1' [Maximum Axle Load:22.82t] to RDSO's Drawing No. WD-08054-S-01 Alt.5, up to a maximum speed of 80 kmph in empty and 60 kmph in loaded condition over BG routes of Indian Railways, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL, with the stipulations mentioned in Annexure to CCRS letter No. Q.12011/21/2022-23-T.W., dated 19.12.2022; same may kindly be perused (Annexure; SN-2).
4. Railway Board while dealing the cases of 22.82/22.9t axle load wagons (BOXNHL/BOXNHA/ BCNH), had sanctioned 22.82/22.9t axle load wagon (BOXNHL/BOXNHA/BCNH) with a number of stipulations, extract of file no. 2020/CEDO/SR/17E; E-OFFICE 3333243 placed at SN/33-42. On the similar lines, the stipulations for of new type of rolling stock Broad Gauge Bogie open wagon type

'BOXNLWM1' [Maximum Axle Load:22.82t] to RDSO's Drawing No. WD-08054-S-01 Alt.5 up to a maximum speed of 80 kmph in empty and 60 kmph in loaded condition over BG routes of Indian Railways, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL, are proposed as under:

- i. Observance of all conditions laid down in RDSO's Final Speed Certificate (FSC) no. MW/SPD/BG/BOXNLWM1, dated 02.11.2022 for operation up to at maximum speed of 80 kmph in empty and 60 kmph in loaded condition over BG routes of Indian Railways, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL, shall be ensured on the Railway/DFCs while seeking the sanction of General Manager/MD-DFCCIL, as the case may be, for introduction of rolling stock on the Railway/DFCs. All the documents required for the sanction of General Manager/MD-DFCCIL as per CE (G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure.
- ii. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
- ii. The compliance of all the stipulations mentioned in Railway Board letter No. 2020/CE-II/TS/22.82 dt 20.08.2020 (SN-43) shall be ensured by the Railways.
- v. Periodic rail grinding at stipulated frequency should be carried out on routes by ensuring the availability of traffic blocks. Railway should ensure adequate/stipulated block for Rail Grinding & other maintenance inputs.
- v. Railway should ensure installation of way side lubricators as per provision of IR P.Way manual in a time bound manner.
- ii. For Indian Railways, the WILD shall mandatorily be provided before introduction of wagon at speed above 60 Kmph. For speed up to 60 Kmph the WILD may be progressively installed. 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track.
- ii. For DFCCIL, adequate number of WILD and 'Weigh Bridges' shall be progressively installed and their working closely monitored. 100% weighment of loaded wagons shall be ensured at the loading points to avoid running of overloaded wagons on track.
- ii.
- x. No overdue in track/rolling stock maintenance shall be permitted.
- x. Right powering of loaded trains running with 22.9t (CC+8+2) axle load wagons shall be ensured.
- ii. Only wagons with functional twin-pipe brake system shall be permitted to run at 75 kmph and above.
- ii. USFD testing of rail would be carried out at a higher frequency corresponding to 6 GMT of traffic (present stipulation corresponds to 8 GMT).

5. In view of above, case is put up for Board sanction for introduction of new type of rolling stock Broad Gauge Bogie open wagon type 'BOXNLWM1' [Maximum Axle Load:22.82t] to RDSO's Drawing No. WD-08054-S-01 Alt.5, up to a maximum speed of 80 kmph in empty and 60 kmph in loaded condition over BG routes of Indian Railways, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL, with conditions mentioned in Para-4 above, if approved, draft letter (DFA/3139834) to all concerned is also enclosed for approval please.



DCE (G)

EDCE (G)

EDME (Fr)

PED/Safety

AM/CE

Member (Traction and Rolling stock)

Member (Operation and Business development)

Member (Infrastructure)

26/12/2022 11:42 AM

GAURAV  
DCE(G)

Note # 2

26/12/2022 12:26 PM

Ajit Kumar Jha

EDCE(G)

Note # 3

In point no. 4(vi) of note #1 above, "For Indian Railways, *the WILD shall mandatorily be provided* before introduction of wagon at speed above 60 Kmph" need not be mentioned as proposed speed in loaded condition is 60 Kmph only.

29/12/2022 07:06 PM

VINAY KUMAR AGARWAL

EXECUTIVE DIRECTOR ME (FREIGHT)

Note # 4

02/01/2023 11:24 AM



**Digitally Signed**

Amit Varadan

PED/SAFETY

Note # 5

Justification for (i) modifying conditions 4 & 6 of CCRS, (ii) deleting conditions 7, 10, 11 & 12 of CCRS and (iii) adding new conditions USFD Testing, may be incorporated in above proposal.

09/01/2023 03:16 PM

TEJ PRAKASH AGRAWAL

ED/SAFETY

Note # 6

09/01/2023 05:35 PM

Ajit Kumar Jha

EDCE(G)

Note # 7

Re: Note#5

1. ED/SAFETY vide note#5 has observed as under :

Justification for (i) modifying conditions 4 & 6 of CCRS, (ii) deleting conditions 7, 10, 11 & 12 of CCRS and (iii) adding new conditions USFD Testing,

2.(i) Modifying conditions 4 & 6 of CCRS, (ii) Deleting conditions 8, 9 & 12 of CCRS and (iii) Adding new conditions USFD Testing is proposed as per previous Board's approval in file no.

2020/CEDO/SR/12; E-OFFICE 3330251 NOTING is enclosed for perusal please (SN-46-78).

DCE(G)

EDCE(G)

ED/Safety

10/01/2023 02:35 PM

GAURAV

DCE(G)

Note # 8

10/01/2023 04:37 PM

Ajit Kumar Jha

EDCE(G)

Note # 9

RDSO's proposal for introduction of BOXNLWM1 upto a maximum speed of 80 Kmph in empty and 60 Kmph in loaded condition over IR and EDFC/WDFC have been forwarded by CCRS with some conditions. These conditions are either incorporated in above proposal or modified/deleted with justification mentioned at Note#7. Final Speed Certificate have already been issued by RDSO. In view of above may be forwarded.

01/02/2023 05:41 PM

TEJ PRAKASH AGRAWAL

ED/SAFETY

Note # 10

This proposal may kindly be forwarded

DG/Safety

AM/CE

Member (Traction and Rolling stock)

Member (Operation and Business development)

Member (Infrastructure)

01/02/2023 05:48 PM



**Digitally Signed** Amit Varadan

PED/SAFETY

Note # 11

02/02/2023 10:27 AM



**Digitally Signed** Braj Mohan Agrawal

DG/SAFETY

Note # 12

03/02/2023 10:55 AM

Brijesh Kumar Gupta

ADDITIONAL MEMBER (CIVIL ENGINEERING)

Note # 13

06/02/2023 11:34 AM



**Digitally Signed** NAVEEN GULATI

MEMBER T&RS

Note # 14

Please examine.

06/02/2023 06:45 PM  
JAYA VARMA SINHA  
MEMBER(O&BD)

Note # 15

09/02/2023 10:29 AM  
SEEMA KUMAR  
AM/T

Note # 16

09/02/2023 05:54 PM  
MANOJ KUMAR SRIVASTAVA  
PED/TT(M)

Note # 17

Please examine.

15/02/2023 03:17 PM  
H.S.BAJWA  
ED /COAL

Note # 18

Please discuss.

21/02/2023 12:48 PM  
Tushar Saraswat  
JD/TT/POL

Note # 19

21/02/2023 04:21 PM  
JAGBIR SINGH SEHRAWAT  
DD/TT-1

Note # 20

24/02/2023 10:44 AM

RAVI SHEKHAR

OSD/TT

Note # 21

Discussed. May please see...

24/02/2023 11:01 AM

JAGBIR SINGH SEHRAWAT

DD/TT-1

Note # 22

The proposal of R.D.S.O., Lucknow duly forwarded through C.C.R.S./LKO seeking the sanction of Ministry of Railways, Railway Board for introduction of new type of rolling stock Broad Gauge Bogie Covered wagon type 'BOXNLWM1' [Maximum Axle Load:22.82t] to RDSO Drg. No. WD-08054-S-01 Alt. 5 or latest, up to a maximum speed of 80 kmph in empty and 60 kmph in loaded condition over Indian Railway, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL.

CCRS/LKO has recommended with following conditions:

1. Observance of all conditions laid down in RDSO's Final Speed Certificate no. MW/SPD/BG/BOXNLWM1, dated 02.11.2022. Remarks of the Railway/DFCCIL against each para of the Speed Certificate shall be submitted to the Commission before the start of actual operation of rolling stock.
2. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
3. The compliance of all the stipulations mentioned in Railway Board letter No. 2020/CE-II/TS/22.82 dt 20.08.2020 shall be ensured by the Railways.
4. Periodic rail grinding at stipulated frequency should be carried out on routes by ensuring the availability of traffic blocks.
5. Railway should ensure installation of way side lubricators as per provision of IR P. Way manual in a time bound manner.
6. Adequate number of WILD and 'Weigh Bridges' shall be progressively installed and their working closely monitored. 100% weighment of loaded wagons shall be ensured at the loading points to avoid running of overloaded wagons on track.
7. No overdue in track/rolling stock maintenance shall be permitted.
8. Separate maintenance regime to be legislated for higher axle load route on IR.
9. Detailed guidelines for operations of higher axle load train over IR shall be issued covering all issues related to Track, Bridges, Signal, OHE, Rolling Stock & Operating System etc.
10. Right powering of loaded trains running with CC+8+2 axle load wagons shall be ensured.
11. Only wagons with functional twin-pipe brake system shall be permitted to run at 75 kmph and

above.

12. Railway should adopt following measures to improve the reliability of wagons during operation:

- a. Elastomeric (EM) pads & Brake Block must be made MUST CHANGE items during Routine Overhaul (ROH).
- b. During intensive examination, minimum thickness of brake block should be maintained to 25 mm instead of presently prescribed 20 mm to reduce the detachment cases of wagons on account of worn-out brake-head.

DFA/3139834 includes all recommendations of CCRS/LKO except 8,9,12 and with modification of point 4 and 6 and addition of following:

xi.. USFD testing of rail would be carried out at a higher frequency corresponding to 6 GMT of traffic (present stipulation corresponds to 8 GMT).

The reasons behind modifications of 4 and 6 and deleting 8,9,12 of CCRS and additional point of USFD are given at Note#7.

27/02/2023 12:15 PM

RAVI SHEKHAR

OSD/TT

Note # 23

Please peruse Note 22, put up for your approval.

07/03/2023 03:20 PM

Tushar Saraswat

JD/TT/POL

Note # 24

Stipulating speed of 75 kmph or more only for functional twin-pipe braking rakes would adversely impact mobility of the stock. Further, in case of mixing of this type of wagon with other BOXN variants in rakes in single pipe configuration would result in reduction of the speed of the full rake.

Hence, it is suggested that this aspect should be revisited and the stock allowed in empty condition @80 kmph in single pipe formation also.

07/03/2023 06:40 PM

H.S.BAJWA

ED /COAL

Note # 25

09/03/2023 04:50 PM

MANOJ KUMAR SRIVASTAVA

PED/TT(M)

Note # 26

Condition of twin pipe at 75 Kmph and above has been included in other types of wagons also

12/03/2023 11:42 AM

VINAY KUMAR AGARWAL

EXECUTIVE DIRECTOR ME (FREIGHT)

Note # 27

This might lead to disruptions . pls see again

15/03/2023 11:15 AM

MANOJ KUMAR SRIVASTAVA

PED/TT(M)

Note # 28

Kindly prepare summary of provision regarding stipulation of operation of twin pipe in loaded and empty condition included in rolling stock sanctions issued in last two years.

16/03/2023 02:54 PM

VINAY KUMAR AGARWAL

EXECUTIVE DIRECTOR ME (FREIGHT)

Note # 29

As desired above, conditions for Twin Pipe system requirement mentioned in RB sanctions, to run at 75 kmph is summarised and attached herewith.

Submitted for kind perusal, please.

Summary\_twin\_pipe\_Stipulation.xlsx

21/03/2023 05:15 PM

S MURALI

AME (FREIGHT)

Note # 30

Condition of twin pipe for speed at 75 and above is there in many other wagons also. as given in the excel sheet attached in Note#29 above. It is also our stated policy to go in for twin pipe operation, for which necessary conversion of remaining wagons to twin pipe is being undertaken. Hence, a policy decision for permitting operation at speed 75 Kmph and above with single pipe in empty condition needs to be taken, duly considering the technical and operational issues.

Meanwhile, case of introduction of BOXNLWM1 may be moved forward.



24/03/2023 10:16 PM

VINAY KUMAR AGARWAL

EXECUTIVE DIRECTOR ME (FREIGHT)

Note # 31

Introduction of BOXNLWM1 comes with the mandate of twin pipe operation for speeds of 75 kmph and above. Agreed its our long term strategy to have twin pipe operation, it is requested that till necessary conversion of remaining wagons to twin pipe is on ,speed of 80 kmph may remain permitted as of now.

27/03/2023 05:37 PM

MANOJ KUMAR SRIVASTAVA

PED/TT(M)

Note # 32

ok

27/03/2023 09:20 PM

VINAY KUMAR AGARWAL

EXECUTIVE DIRECTOR ME (FREIGHT)

Note # 33

28/03/2023 02:30 PM

MANOJ KUMAR SRIVASTAVA

PED/TT(M)

Note # 34

May be considered.

28/03/2023 02:52 PM

SEEMA KUMAR

AM/T

Note # 35

Ref : previous notes

A revised draft may be put up.

29/03/2023 07:43 PM

JAYA VARMA SINHA

MEMBER(O&BD)

Note # 36

29/03/2023 08:32 PM

Ajit Kumar Jha

EDCE(G)

Note # 37

PED safety may be requested to offer comment on PED/TT(M) note#31

30/03/2023 09:16 PM

GAURAV

DCE(G)

Note # 38

30/03/2023 09:43 PM

Ajit Kumar Jha

EDCE(G)

Note # 39

31/03/2023 12:16 PM

Amit Varadan

PED/SAFETY

Note # 40

Ref Note #31 above, it is stated that working of freight trains on twin pipe brake system improves both safety as well as operational efficiency, the former due to the fact that there is a reduction in train parting cases in twin pipe operation and the latter because it increases the average speed of trains by reducing the brake release time. The attached JPO may be seen towards this.

The stipulation of twin pipe operation above 75 kmph is already mandated for many other types of wagons also. From the point of view of safety, in view of heavier trains due to CC+8+2 loading, the same stipulation may be let to remain in the present case too, with IR striving to complete twin pipe conversion of wagons at the earliest.

JPO on twin pipe operation.pdf

31/03/2023 01:23 PM

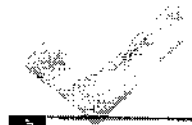
UTKARSH

EDME/SAFETY

Note # 41

Pl discuss

03/04/2023 04:51 PM



**Digitally Signed** Amit Varadan

PED/SAFETY

Note # 42

Discussed.

It is clarified that the stipulation of twin pipe operation above 75 kmph is by the CCRS, as seen from Point No 11 of Note # 22 above.

In view of this, and no cogent reason brought out on file demonstrating that safety in operations will not be affected adversely by changing the speed limit of 75 kmph to 80 kmph, it is still felt that we should continue with the stipulation of operation above 75 kmph with twin pipe even in the case of empties.

May like to forward accordingly.

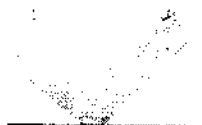
20/04/2023 02:14 PM

UTKARSH

EDME/SAFETY

Note # 43

21/04/2023 11:03 AM



**Digitally Signed** Amit Varadan

PED/SAFETY

Note # 44

21/04/2023 02:18 PM

Ajit Kumar Jha

EDCE(G)

Note # 45

Regarding twin pipe, observation of Safety Directorate vide Note#42 & 43 may kindly be seen.

DCEG

EDCE(G)  
EDME(Fr)  
PED/TT(M)

24/04/2023 01:17 PM

GAURAV

DCE(G)

Note # 46

24/04/2023 01:23 PM

Ajit Kumar Jha

EDCE(G)

Note # 47

24/04/2023 01:58 PM

VINAY KUMAR AGARWAL

EXECUTIVE DIRECTOR ME (FREIGHT)

Note # 48

Twin pipe system ensures faster release of wagons , it does not relate to application of brakes per se. We are limiting ourselves even though we do not capacity to fully make the wagons twin piped. This flexibility has been asked till such time all wagons are made twin piped. CCRS is only recommendary

24/04/2023 05:34 PM

MANOJ KUMAR SRIVASTAVA

PED/TT(M)

Note # 49

The case has already been dealyed a lot. Let us process it with stipualation of twin pipe for opearation at 75 Kmph or more, as proposed in Note#1. Subsequently, decision with regard to this condition, which will invovle many other wagons also, may be taken.

07/05/2023 09:09 AM

VINAY KUMAR AGARWAL

EXECUTIVE DIRECTOR ME (FREIGHT)

Note # 50

08/05/2023 01:10 PM

Ajit Kumar Jha

EDCE(G)

Note # 51

Back ground 1. may be perused at Note#1, wherein CE directorate has proposed the "introduction of new type of rolling stock Broad Gauge Bogie open wagon type 'BOXNLWM1' [Maximum Axle Load:22.82t] to RDSO's Drawing No. WD-08054-S-01 Alt.5. up to a maximum speed of 80 kmph in empty and 60 kmph in loaded condition over BG routes of Indian Railways, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL", same may kindly be perused.

2Above proposal has been agreed by DG/Safety & Member T&RS vide note#11 vide Note#13 respectively.

3ED/Coal Vide Note # 24, has commented that 'stipulating speed of 75 kmph or more only for functional twin-pipe braking rakes would adversely impact mobility of the stock. Further, in case of mixing of this type of wagon with other BOXN variants in rakes in single pipe configuration would result in reduction of the speed of the full rake'. ED/Coal also suggested that "aspect of twin pipe" should be revisited and the stock allowed in empty condition @ 80 kmph in single pipe formation also.

4. EDME/Safety vide Note# 42 has observed that "In view of this, and no cogent reason brought out on file demonstrating that safety in operations will not be affected adversely by changing the speed limit of 75 kmph to 80 kmph, it is still felt that we should continue with the stipulation of operation above 75 kmph with twin pipe even in the case of empties."

5. Regarding the EDME/Safety above observation, remarks of PED/TT(M) vide note#48 & EDME/Fr vide Note#49, may kindly be seen.

6In view of above, the stipulations for introduction of new type of rolling stock Broad Gauge Bogie open wagon type 'BOXNLWM1' [Maximum Axle Load:22.82t] to RDSO's Drawing No. WD-08054-S-01 Alt.5 up to a maximum speed of 80 kmph in empty and 60 kmph in loaded condition over BG routes of Indian Railways, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL, are proposed as under:

Observance of all conditions laid down in RDSO's Final Speed Certificate (FSC) no. MW/SPD/BG/BOXNLWM1, dated 02.11.2022 for operation up to at maximum speed of 80 kmph in empty and 60 kmph in loaded condition over BG routes of Indian Railways, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL, shall be ensured on the Railway/DFCs while seeking the sanction of General Manager/MD-DFCCIL, as the case may be, for introduction of rolling stock on the Railway/DFCs. All the documents required for the sanction of

General Manager/MD-DFCCIL as per CE (G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure.

Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.

The compliance of all the stipulations mentioned in Railway Board letter No. 2020/CE-II/TS/22.82 dt 20.08.2020 (SN-43) shall be ensured by the Railways.

Periodic rail grinding at stipulated frequency should be carried out on routes by ensuring the availability of traffic blocks. Railway should ensure adequate/stipulated block for Rail Grinding & other maintenance inputs.

Railway should ensure installation of way side lubricators as per provision of IR P.Way manual in a time bound manner.

For Indian Railways, *the WILD shall mandatorily be provided* before introduction of wagon at speed above 60 Kmph. For speed up to 60 Kmph the WILD may be progressively installed. 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track.

For DFCCIL, adequate number of WILD and 'Weigh Bridges' shall be progressively installed and their working closely monitored. 100% weighment of loaded wagons shall be ensured at the loading points to avoid running of overloaded wagons on track.

No overdue in track/rolling stock maintenance shall be permitted.

Right powering of loaded trains running with 22.9t (CC+8+2) axle load wagons shall be ensured.

Only wagons with functional twin-pipe brake system shall be permitted to run at 75 kmph and above.

USFD testing of rail would be carried out at a higher frequency corresponding to 6 GMT of traffic (present stipulation corresponds to 8 GMT).

7. In view of above, MO&BD and MI may be requested to approve the introduction of new type of rolling stock Broad Gauge Bogie open wagon type 'BOXNLWMI' [Maximum Axle Load: 22.82t] to RDSO's Drawing No. WD-08054-S-01 Alt.5, up to a maximum speed of 80 kmph in empty and 60 kmph in loaded condition over BG routes of Indian Railways, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL, with the conditions mentioned in Para-6 above, if approved, draft letter (DFA/3139834) to all concerned is also enclosed for approval please.

DCE (G)

EDCE (G)

EDME (Fr)

AM/CE

Member (Operation and Business development)

Member (Infrastructure)

18/05/2023 02:44 PM

GAURAV

DCE(G)

Note # 52

18/05/2023 02:57 PM

Ajit Kumar Jha

EDCE(G)

Note # 53

Case is recommended for approval.

AM/CE

Member (Traction and Rolling stock)

Member (Operation and Business development)

Member (Infrastructure)

18/05/2023 09:15 PM

VINAY KUMAR AGARWAL

EXECUTIVE DIRECTOR ME (FREIGHT)

Note # 54

The proposal with same recommendations & conditions of RDSO & CCRS was received. DG/Safety (Note#11) and MTRS (Note#13) have agreed to this proposal. Operating Dte desires that (Note#24) condition (x) of Para 6 of our proposal (Note#51) should be changed to 80 kmph which is against CCRS and Safety Dte recommendations (Note#42 & 43). Also, EDME(Ft.) also does not agree (Note#49). Accordingly, we may agree with the proposal as per RDSO's & CCRS's recommendation.

22/05/2023 10:41 AM  
Brijesh Kumar Gupta  
ADDITIONAL MEMBER (CIVIL ENGINEERING)  
Note # 55

22/05/2023 12:54 PM

 Digitally Signed NAVEEN GULATI

MEMBER T&RS

Note # 56

Ref above notings (#31 & #48), maybe re-examined in consultation with RDSO to permit speeds above 75kmph (empty) with single pipe operation.

25/05/2023 08:38 PM  
JAYA VARMA SINHA  
MEMBER(O&BD)  
Note # 57

26/05/2023 12:14 PM  
ROOP NARAYAN SUNKAR  
MEMBER INFRASTRUCTURE  
Note # 58

26/05/2023 05:47 PM  
Brijesh Kumar Gupta  
ADDITIONAL MEMBER (CIVIL ENGINEERING)  
Note # 59

26/05/2023 05:59 PM  
Ajit Kumar Jha  
EDCE(G)



**FINAL SPEED CERTIFICATE FOR OPERATION OF COACHES OF 16 COACH FORMATION OF TRAIN SET WITH NEW DESIGN PROPULSION SYSTEM & BOGIES (VANDE BHARAT TRAIN SET)**

No.	TS/SC/Operation	Date	As signed
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महाप्रबंधक (इंजीनियरिंग),

1. मध्य रेलवे, छत्रपति शिवाजी महाराज टर्मिनस, मुंबई - 400 001
2. पूर्व रेलवे, फेयरली प्लेस, कोलकाता - 700 001
3. उत्तर रेलवे, बडौदा हाउस, नई दिल्ली - 1100 01
4. पूर्वोत्तर रेलवे, गोरखपुर - 27 3001
5. पूर्वोत्तर फ्रन्टियर रेलवे, मालीगांव गुवाहाटी - 781 011
6. दक्षिण रेलवे, अनेक्सी, पार्क टाउन चेन्नई - 600 003
7. दक्षिण मध्य रेलवे, रेल निलायम, सिकंदराबाद - 500 025
8. दक्षिण पूर्व रेलवे, गार्डन रीच, कोलकाता - 700 043
9. पश्चिम रेलवे, चर्च गेट, मुम्बई - 400020
10. उत्तर मध्य रेलवे, सूबेदारगंज, प्रयागराज - 211 011
11. उत्तर पश्चिम रेलवे, जयपुर - 302 006
12. पूर्व मध्य रेलवे, हाजीपुर - 844 101
13. पूर्वोत्तर रेलवे, बीडीए रेंटल रेलवे कॉम्प्लेक्स, भुवनेश्वर - 751 017
14. दक्षिण पश्चिम रेलवे, हुबली - 580 023
15. पश्चिम मध्य रेलवे, जबलपुर - 482 001
16. दक्षिण पूर्व मध्य रेलवे, बिलासपुर - 495 004

AM/sig  
 Amce  
 R/s  
 study  
 &  
 spe  
 Rbe  
 28/3  
 15.06.27

**Sub:** Final speed certificate for operation of Coaches of 16 coach formation of Train Set with new design propulsion system & bogies (Vande Bharat Train Set), up to a maximum speed of 160 kmph over Indian Railways on track maintained as per provisions of Indian Railways Permanent Way Manual, June-2020, containing track geometry standards under para 522.

**Ref:** (i) Railway Board letter no. 2019/M(C)/202/3/Pt dated 11.08.2021 & 13.08.2021.  
 (ii) Railway Board letter no. 2022/CEDO/SD/RS/08 dated 29.06.2022.

**1. IMPORTANT PARAMETERS RELATED TO TRAIN-18 ROLLING STOCK**

Type	Final / Provisional / Oscillation Trial / COCR/ Movement and Oscillation/ Mock Trial	Operation	Validity/ Period or Permanent	IR / Sectional	Permanent
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File No.RDSO-CARR0ENS(SPV)/4/2020-O/o ED/CARRIAGE/RDSO

1158164/2020/O/o ED/CARRIAGE/RDSO	Train Set with new design propulsion system & bogies (Vande Bharat Train Set)	Maximum Designed Axle Load	17 t	Transportation code	Max. Axle Load (t)
				TSDTC	13.61
				TSTC	15.38
				TSMC	15.77
				TSMC2	
				TSNDTC	13.39
				TSNDTC2	

GA Drg. No., Payload & Transportation code of coaches of Train Set with new design propulsion system & bogies (Vande Bharat Train Set)

S N.	Group/ Type of coach	Layout Drawing no.	Transportation code	Payload (t)	Remarks
1.	Driving Trailer Coach (DTC)	TS/DTC-9-0-001	TSDTC	4.327	--
2.	Motor Coach (MC/MC2)	TS/MC-9-0-001 TS/MC2-9-0-001	TSMC TSMC2	6.48	Same coaches except change over switch in MC2
3.	Trailer Coach (TC)	TS/TC-9-0-001	TSTC	6.48	
4.	Non-Driving Trailer Coach- Executive Class (NDTC/EC /NDTC/EC2)	TS/NDTC/EC-9-0-001 TS/NDTC/EC2-9-0-001	TSNDTC TSNDTC2	4.416	Same coaches except 180° rotation

SN	Group/ Type of coach	Bogie General Arrangement Drawing no.
1.	Driving Trailer Coach (DTC)	TS/MC-0-0-001
2.	Motor Coach (MC/MC2)	TS/MC-0-0-001
3.	Trailer Coach (TC)	TS/MC-0-0-001
4.	Non-Driving Trailer Coach- Executive Class (NDTC/EC / NDTC/EC2)	TS/MC-0-0-001

Bogie Arrgt. (Fabricated/Casted)	Fabricated	Gauge	BG
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Type of Bogie	Y Frame	Type of Coupler	Semi-permanent head and balanced draft gear & each DTC is provided with CBC on driving end.	Wheel Dia. (mm)	New	Worn
					952 mm	877 mm

Rake / Train consist for Operation	16 Car rake of Train Set with new design propulsion system & bogies (Vande Bharat Train Set).
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Max. Permissible Speed	Empty	160 kmph	Loaded	160 kmph
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1.1	INTRODUCTION
1.1.1	<p>Train Sets with new design propulsion system &amp; bogies (Vande Bharat Train Set) have been designed as per RDSO spec RDSO/PE/SPEC/EMU/0196-2019 (Rev.0) along-with addendum/corrigendum, for maximum operational speed of 160 kmph. Train Set with new design propulsion system &amp; bogies (Vande Bharat Train Set) is relatively lighter &amp; has 50% powering with under slung propulsion equipments. The coaches of Train set are being manufactured as per the layout drawings approved by Railway Board vide letter no. 2019/M(C)/202/3/Pt dated 11.08.2021. Railway Board further allotted separate transportation codes vide letter no. 2019/M(C)/202/3/Pt dated 13.08.2021 for above coaches.</p>
1.1.2	<p><b>Salient feature of Train Set with new design propulsion system &amp; bogies (Vande Bharat Train Set) Coaches:</b></p> <ul style="list-style-type: none"> <li>(i) Optimized &amp; lighter bogie &amp; propulsion system in comparison to those in earlier train sets in service.</li> <li>(ii) The speed potential of Train set coaches for operation is 160 kmph.</li> <li>(iii) The coaches of Trainset are provided with bogie having fully suspended type of traction motors &amp; bolster less bogie, coil springs in primary suspension and air spring in secondary suspension.</li> <li>(iv) The DTC coaches on both ends are fitted with center buffer coupler (CBC) on driving end side while all other coaches and other side of DTC coaches are fitted with semi-permanent head coupler with balanced draft gear arrangement.</li> <li>(v) The brake system fitted on Train set is microprocessor controlled Electro Pneumatic (EP) brake system.</li> </ul>
1.2	<p>RDSO has conducted oscillation and EBD (Emergency Braking Distance) trials on prototype rake of 16-coach formation of Train Set with new design propulsion system &amp; bogies (Vande Bharat Train Set), manufactured by ICF/Chennai for a maximum operational speed of 160 Kmph on track maintained as per provisions of Indian Railway Permanent Way Manual, June-2020, containing track geometry standards under Para 522. Formation during trials was DTC + MC + TC + MC2 + MC + TC + MC2 + NDTC/EC + NDTC/EC2 + MC2 + TC + MC + MC2 + TC + MC + DTC.</p> <ul style="list-style-type: none"> <li>(i) Oscillation trials of prototype rake of 16-coach formation of Train Set with new design propulsion system &amp; bogies (Vande Bharat Train Set), manufactured by ICF/Chennai were conducted upto a maximum test speed of 115 kmph over <b>Sanehwal – New Morinda (SNL - NMDA)</b> section of Northern Railway on track maintained as per standard specified under Para 522 of Indian Railway Permanent Way Manual, June-2020. The test results as contained in RDSO's report no. RDSO/2022/TG/MT-1900/F/Rev.0/Amendment-Nil Dated: 25.08.2022, indicate satisfactory riding and stability characteristics in inflated condition of air springs in empty and loaded condition on straight track, station yard and curved sections on track up to the test speed of 115 kmph.</li> <li>(ii) Oscillation trials of prototype rake of 16-coach formation of Train Set with new design propulsion system &amp; bogies (Vande Bharat Train Set), manufactured by ICF/Chennai were conducted upto a maximum test speed of 180 kmph over <b>Nagda - Kota- Sawai Madhopur (NAD-KOTA-SWM)</b> section of West Central Railway on track maintained as per standard specified under Para 522 of Indian Railway Permanent Way Manual, June-2020. The Oscillation test results as contained in RDSO's report no. RDSO/2022/TG/MT- 1901/F/Rev.0/Amendment-Nil Dated: 30.08.2022, indicate satisfactory riding and stability characteristics in inflated condition of air springs in empty and loaded condition on straight track, station yard and curved sections on track up to the test speed of 180 kmph.</li> </ul>

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(iii) EBD trials of prototype rake of 16-coach formation of Train Set with new design propulsion system & bogies (Vande Bharat Train Set), manufactured by ICF/Chennai were conducted upto a maximum test speed of 160 kmph over Nagda - Kota - Sawai Madhopur (NAD-KOTA-SWM) section of West Central Railway on track maintained as per standard specified under Para 522 of Indian Railway Permanent Way Manual, June-2020. The EBD test results as contained in RDSO/2022/TG/MT - 1902/F/Rev.0/Amendment-Nil Dated: 02.09.2022 indicate satisfactory Emergency Braking Distance (Wet rail & Dry rail) test in loaded condition. The Emergency Braking Distances (EBD) in different conditions and speeds, in brief, are tabulated below:

Condition	Mode of Brake application	Test Speed (Kmph)	Braking Distance (in meters)	
			Range	Max. value
Wet Rail	Emergency Mode through master controller	160	768.43---802.81	802.81
	Emergency Mode through emergency push button	160	793.10---846.92	846.92
	By moving Driver's brake valve into Emergency position	80	336.38---347.59	347.59
Dry Rail	Emergency Mode through master controller	160	782.63--805.06	805.06
	Emergency Mode through emergency push button	160	743.02--855.89	855.89
	By moving Driver's brake valve into Emergency position	80	307.97--318.43	318.43

2.0	Based on results of above trials, it is certified that Coaches of 16 coach formation of Trainset with new design propulsion system & bogies, are fit for operation up to maximum speed of 160 kmph over Indian Railways on track maintained as per standard specified under Para 522 of Indian Railway Permanent Way Manual, June- 2020, subject to following conditions:
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**2.1 TRACK STRUCTURE DETAILS AND SPEED:**

2.1.1	<b>For speed up to 110kmph</b>
2.1.1.1	The track shall be to a minimum standard of 52kg (72UTS) rail laid on PSC sleeper with 1540 Nos./Km on 250mm ballast cushion below the sleepers which may consist of 100mm clean and rest in caked up condition, on compacted and stable formation.
2.1.1.2	For track maintained to lower standard than that mentioned above, the Chief Engineer shall decide the lower maximum permissible speed on the basis of maintenance condition. In this connection, instructions issued by Railway Board letter no.65/WDO/SR/26 dt 19/20.10.1966 may be seen. When the Chief Engineer considers that the road bed is not compacted or there is improper drainage, he may suitably restrict the maximum permissible speed depending upon the local conditions.
2.1.1.3	The maximum permissible speed on curves shall be decided on the basis of the existing provisions of the Indian Railways Permanent Way Manual, June-2020. Maximum cant deficiency permitted would be 100mm, subject to provision of Para 404 of IRPWM, June - 2020.
2.1.1.4	The welds shall be protected by joggled fish plates as per provisions of USFD Manual and Indian Railways Permanent Way Manual, June 2020, and other policy instructions of

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	<b>AME/NOB/WR</b> The maintenance of Rails & Rail joints shall be ensured as per provision of Indian Railways Permanent Way Manual, June 2020. In addition, wherever condition warrants on account of corrosion on rail/ weld collar, wear on rail, cupping of welds etc. necessary precautions shall be taken for fish plating/ joggled fish plating.
2.1.1.5	Zonal Railway may ensure further detailed examination of track as deemed fit based on age cum condition basis, overdue renewal and condition of formation etc. as per provisions of the Indian Railways Permanent Way Manual, June – 2020 regarding permanent way renewals and may suitably restrict maximum speed of operation based on such examination.
2.1.1.6	Track geometry standards shall be maintained to as per provisions of Indian Railways Permanent Way Manual, June-2020, containing track geometry standards under Para 522.
2.1.2	<b>For speed more than 110kmph and up to 130kmph</b>
2.1.2.1	The track shall be to a minimum standard of 52kg (90UTS) rail laid on PSC sleeper with 1540 Nos./Km on 250mm ballast cushion below the sleepers which may consist of 100mm clean and rest in caked up condition, on compacted and stable formation.
2.1.2.2	For track maintained to lower standard than that mentioned above, the Chief Engineer shall decide the lower maximum permissible speed on the basis of maintenance condition. In this connection, instructions issued by Railway Board letter no.65/WDO/SR/26 dt 19/20.10.1966 may be seen. When the Chief Engineer considers that the road bed is not compacted or there is improper drainage, he may suitably restrict the maximum permissible speed depending upon the local conditions.
2.1.2.3	The maximum permissible speed on curves shall be decided on the basis of the existing provisions of the Indian Railways Permanent Way Manual, June – 2020. Maximum cant deficiency permitted would be 100mm, subject to provision of Para 404 of IRPWM, June - 2020.
2.1.2.4	The welds shall be protected by joggled fish plates as per provisions of USFD Manual and Indian Railways Permanent Way Manual, June 2020, and other policy instructions of Railway Board. The maintenance of Rails & Rail joints shall be ensured as per provision of Indian Railways Permanent Way Manual, June 2020. In addition, wherever condition warrants on account of corrosion on rail/ weld collar, wear on rail, cupping of welds etc. necessary precautions shall be taken for fish plating/ joggled fish plating.
2.1.2.5	Zonal Railway may ensure further detailed examination of track as deemed fit based on age cum condition basis, overdue renewal and condition of formation etc. as per provisions of the Indian Railways Permanent Way Manual, June – 2020 regarding permanent way renewals and may suitably restrict maximum speed of operation based on such examination.
2.1.2.6	Track geometry standards shall be maintained to as per provisions of Indian Railways Permanent Way Manual, June-2020, containing track geometry standards under Para 522.
2.1.2.7	Track geometry shall be monitored once in three months by Track Recording Car, once a month by OMS and once in six month by Oscillograph Car.
2.1.2.8	All turnouts shall be fixed heel curved switches laid on PSC sleeper layout with CMS crossings.
2.1.2.9	Sleeper on bridges (other than ballasted deck) would be steel channel/H-beam/Composite sleepers.
2.1.3	<b>For speed more than 130kmph and up to 160kmph</b>
2.1.3.1	The track shall be to a minimum standard of 60kg (90UTS) rail laid on PSC sleeper with 1660 Nos./Km on 300mm ballast cushion below the sleepers which may consist of 150mm clean and rest in caked up condition, on compacted and stable formation.
2.1.3.2	For track maintained to lower standard than that mentioned above, the Chief Engineer shall decide the lower maximum permissible speed on the basis of maintenance condition. In this connection, instructions issued by Railway Board letter no.65/WDO/SR/26 dt 19/20.10.1966 may be seen. When the Chief Engineer considers that the road bed is not compacted or there is improper drainage, he may suitably restrict the maximum permissible speed depending upon the local conditions.
2.1.3.3	The maximum permissible speed on curves shall be decided on the basis of the existing provisions of the Indian Railways Permanent Way Manual, June – 2020. Maximum cant deficiency permitted would be 100mm, subject to provision of Para 404 of IRPWM, June –

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2.1.3.4	The welds shall be protected by joggled fish plates as per provisions of USFD Manual and Indian Railways Permanent Way Manual, June 2020, and other policy instructions of Railway Board. The maintenance of Rails & Rail joints shall be ensured as per provision of Indian Railways Permanent Way Manual, June 2020. In addition, wherever condition warrants on account of corrosion on rail/ weld collar, wear on rail, cupping of welds etc. necessary precautions shall be taken for fish plating/ joggled fish plating.
2.1.3.5	Zonal Railway may ensure further detailed examination of track as deemed fit based on age cum condition basis, overdue renewal and condition of formation etc. as per provisions of the Indian Railways Permanent Way Manual, June – 2020 regarding permanent way renewals and may suitably restrict maximum speed of operation based on such examination.
2.1.3.6	All the turnouts in facing direction shall be laid with thick web switches with provision of clamp type lock. All the crossings shall be CMS crossing. All other turnout shall be of fixed heel curved switch type with CMS crossing.
2.1.3.7	Track geometry standards shall be maintained to as per provisions of Indian Railways Permanent Way Manual, June-2020, containing track geometry standards under Para 522.
2.1.3.8	All the SEJs shall be of improved type.
2.1.3.9	Sleeper on bridges (other than ballasted deck) would be steel channel/H-beam/Composite sleepers.
2.1.3.10	Track geometry shall be monitored once in two months by Track Recording Car, once a month by OMS and once in four month by Oscillograph Car.
2.1.3.11	Improvement on track geometry parameters on the route of operation of the train to be carried out as required.

**2.3 BRIDGE STIPULATIONS:**

2.3.1	The clearance refers to "Standard RDSO Spans" bridges with standard design of girders, slabs, pipe culverts, piers and abutments etc. issued by RDSO for BGML, RBG, MBG and 25t-2008 standard loadings.				
2.3.2	Superstructures & bearings of "Special Spans" (designed and constructed by Zonal Railways based on site requirements), Arches and sub-structures (including foundation) of all bridges (Standard RDSO spans and Special Spans) are to be got examined by the Chief Bridge Engineer and certified safe with respect to current Indian Railway standard codes with up to-date correction slips.				
2.3.3	The clearance is subject to the following parameters of Train Set with new design propulsion system & bogies (Vande Bharat Train Set) coaches:				
	<b>Rolling Stock Coaches</b>	<b>Maximum tractive effort/axle (KN)</b>	<b>Maximum braking force/axle at rail level in (KN)</b>	<b>Designed Axle Load Capacity</b>	<b>CG height from rail level</b>
	DTC	Not Applicable	16.9	17 t	not exceeding 1830 mm
	TC	Not Applicable	19.13		
	MC/ MC2	25.0	20.43		
	NDTC/EC / NDTC/EC2	Not Applicable	17.85		
2.3.4	(a) In Empty condition, all Standard RDSO spans of BGML, RBG, MBG and 25t-2008 loading are fit for proposed speed of 160 kmph.  (b) In Loaded condition, all Standard RDSO spans of BGML, RBG, MBG and 25t-2008 loading are fit for proposed speed of 160 kmph.				
2.3.5	Location of bridges on which speed restrictions are imposed shall be notified by the Railways and incorporated in the working timetable				
2.3.6	The above clauses have been arrived at considering bridges are in physically sound condition. In case, the bridges are not in satisfactory physical condition, necessary speed restriction to be imposed by Chief Bridge Engineer of Zonal Railway on condition basis.				

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<b>2.4</b>	<b>SIGNALLING STIPULATION:</b>
2.4.1	Provisions of GR, SR, IRSOD, SEM & all extant instructions issued from time to time as applicable shall be complied with.
2.4.2	While running through a station yard, speed of the Rolling stock shall be restricted to the maximum permissible speed as per standard of interlocking provided at the station or any other speed restriction whichever is severe.
2.4.3	In case of Train having EBD of more than 1 km and non-provision of second distant signal/ 4 Aspect automatic signalling in the section, action as per Para 7.8.9 of IRSEM (issue July 2021) shall be taken and suitable speed restriction may be imposed so that EBD of 1 km may be achieved to stop the Train at Home signal ( ON position).

<b>2.5</b>	<b>TRACTION INSTALLATION:</b>
2.5.1	In 25kv AC traction area, Principal Chief Electrical Engineer of the concerned Railway shall have to ensure that the minimum height of contact wire and electrical clearances as stipulated in provisions of Chapter-V and V-A, Electric Traction "Schedule of Dimensions of 1676mm Gauge (BG) revised 2022" with latest Addendum & Corrigendum Slips is not violated and strictly followed to ensure its safe running.
2.5.2	In addition to above, the PCEE of the concerned Railway may impose any temporary speed restriction on the basis of personal knowledge, experience of the sectional OHE and the field conditions prevailing on the particular section.
2.5.3	It will be ensured that the cantilevers in the section have BFB Steady Arm (RI No.2390) with 25 mm Drop Bracket Assembly (RI No.2360).
2.5.4	The current collection shall be made through two number Pantograph preferably with min distance of 200m & fit for high speed operation.
2.5.5	There should not be any Crossed type OHE, otherwise PCEE of concerned Railway will impose speed restriction.
2.5.6	Modification in OHE for running 160 kmph train as advised by NCR vide letter no EL/TRD/NCR/Gatiman dated 19.11.18 may preferably be adopted in section for speed from 140 kmph to 160 kmph.
2.5.7	The 25 kV AC OHE shall have swiveling type Cantilever Assembly having tension in the conductors, regulated automatically with a presag. The presag of 50/100 mm is on the Contact Wire for a maximum span of 72 m, proportionately less for smaller spans.
2.5.8	In case of locations where 25 KV AC Porcelain Section Insulators are installed on main line and lies within first 1/10th and 1/3rd of the span, immediately after the OHE Structure and the Runners are in trailing direction, the maximum speed shall be 120 kmph. At all other locations where 25 KV AC Porcelain Section Insulators are installed, the speed shall be limited to 80 kmph.

<b>2.6</b>	<b>ROLLING STOCK:</b>
2.6.1	Before starting the operation, the PCME of the concerned Railway shall arrange to certify the track worthiness and safety of the Rolling stocks.
2.6.2	In case of air spring gets deflated, the speed shall be limited to 60 kmph.
2.6.3	The Rolling Stock (Vande Bharat Trainset) shall be maintained as per maintenance manual issued by CAMTECH for Vande Bharat Trainset & other extant instructions. Brakes of coaches shall be in good working order during the operation.

<b>2.7</b>	<b>GENERAL:</b>
2.7.1	All the permanent and temporary speed restrictions in force and those that may be imposed from time to time due to track, bridges, curves, signalling interlocking, any specific local conditions etc. shall be observed.
2.7.2	The profile of Driving Trailer coach (TSDTC), Motor Coach (TSMC/TSMC2), Trailer Coach (TSTC) and Non-Driving Trailer coach-Executive Class (TSNDTC / TSNDTC2) of Train set

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1158164/2022/O/o AME/HQ/WVR	clause nos. 14 of Chapter IV (A) of IRSOD (BG), revised 2004, up to ACS 27 (Clause nos. 14 of Chapter IV (A) of IRSOD (BG), revised 2022). Railway Board vide letter no. 2022/CEDO/SD/RS/08 dated 29.06.2022 has condoned the same infringement for running of commercial service in Indian Railways.
2.7.3	The track structure has been specified to standards laid down by Railway Board through letter no. 2014/CE-II/TSC/1Pt.1 dated 8th Sep 2016 for speed above 110kmph and up to 160kmph. The same has been circulated to all Zonal Railways vide letter no. CT/Tech Mission/High Speed dated 19.09.2016. The conditions stipulated in the letter shall be followed by Zonal Railway. CT-20 may also be referred for operation of train at 160kmph.
2.7.4	COCR/Route Proving Run shall be conducted before start of operation as per extant stipulations of Policy Circular No. 6.
2.7.5	Track maintained to C&M-1, Vol-I / other than C&M-1, Vol-I standard/para 607 of Indian Railway Permanent Way Manual Third Reprint 2019 in this speed certificate shall be considered as track maintained as per provisions of Indian Railways Permanent Way Manual, June – 2020, containing track geometry standards under Para – 522.
2.7.6	<b>For speed more than 110kmph and upto 130kmph</b>
2.7.6.1	Concerned Zonal Railway shall ensure provision of fencing at vulnerable location on need basis.
2.7.6.2	All the level crossings shall be manned with telecommunication facilities and preferably interlocked.
2.7.7	<b>For speed more than 130kmph and upto 160kmph</b>
2.7.7.1	All the level crossing shall be manned with telecommunication facilities and interlocked. Removal of level crossings with grade separator shall be planned.
2.7.7.2	Concerned Zonal Railway shall ensure provision of sturdy fencing all along the track
2.7.7.3	Action to be taken for relocation/modification of engineering signals in consultation with S&T and OHE department of Zonal Railways.
2.7.7.4	Stretches of existing weak formations (where permanent/temporary speed restriction is imposed), if any, shall be planned to be rehabilitated/strengthen first before permitting higher speed
2.7.7.5	Zonal Railways should also plan subways at suitable location to avoid trespass and ensure effectiveness of fencing provided.
2.7.7.6	The visibility at level crossing should be as laid down in IRPWM/Railway Board's instructions. All requirements pertaining to level crossing as laid down in IRPWM/Railway Board's instructions should be fulfilled to ensure safety at level crossing. Drainage of the level crossing and adjoining track should be in good condition.

**ENCLOSURES: / संलग्नक:**

- ICF layout drawing no.
  - TS/DTC-9-0-001
  - TS/MC-9-0-001
  - TS/MC2-9-0-001
  - TS/TC-9-0-001
  - TS/NDTC/EC-9-0-001
  - TS/NDTC/EC2-9-0-001
- Railway Board letter no. 2019/M(C)/202/3/Pt dated 11.08.2021 & 13.08.2021.
- Railway Board vide letter no. 2022/CEDO/SD/RS/08 dated 29.06.2022.

Digitally Signed by Nitin

Mehrotra

Date: 03.09.2023 20:56:38

(नितिन मेहरोत्रा)

Reason: Approved

कार्यकारी निदेशक मानक / चालन शक्ति



File No.RDSO-CARR0ENS(SPV)/4/2020-O/o ED/CARRIAGE/RDSO  
1158164/2022/O/o AME/HQ/NWR

प्रतिलिपि:-

1. सचिव, { यांत्रिक/विद्युत / इंजीनियरिंग(जी)}, रेलवेबोर्ड, रेल भवन, नईदिल्ली – 110001
2. मुख्य रेल संरक्षा आयुक्त, अशोक मार्ग, लखनऊ - 226001
3. महाप्रबंधक ( यांत्रिक/विद्युत / परिचालन/ संकेत एवं दूरसंचार)
  1. मध्य रेलवे, छत्रपति शिवाजी टर्मिनस मुंबई – 400 001
  2. पूर्व रेलवे, फेयरली प्लेस, कोलकाता – 700 001
  3. उत्तर रेलवे, बडौदा हाउस, नई दिल्ली – 1100 01
  4. पूर्वोत्तर रेलवे, गोरखपुर - 27 3001
  5. पूर्वोत्तर फ्रन्टियर रेलवे, मालीगांव गुवाहाटी – 781 011
  6. दक्षिण रेलवे, अनेक्सी, पार्क टाउन चेन्नई – 600 003
  7. दक्षिण मध्य रेलवे, रेल निलायम, सिकंदराबाद – 500 025
  8. दक्षिण पूर्व रेलवे, गार्डन रीच, कोलकाता – 700 043
  9. पश्चिम रेलवे, चर्च गेट, मुम्बई – 400020
  10. उत्तर मध्य रेलवे, सूबेदारगंज, प्रयागराज – 211 011
  11. उत्तर पश्चिम रेलवे, जयपुर – 302 006
  12. पूर्व मध्य रेलवे, हाजीपुर – 844 101
  13. पूर्वतटीय रेलवे, बीडीए रेंटल रेलवे कॉम्प्लेक्स, भुवनेश्वर – 751 017
  14. दक्षिण पश्चिम रेलवे, हुबली – 580 023
  15. पश्चिम मध्य रेलवे, जबलपुर - 482 001
  16. दक्षिण पूर्व मध्य रेलवे, बिलासपुर – 495 004
4. प्रबंध निदेशक कोंकण रेलवे कार्पोरेशन बेलापुर भवन ए नवी मुम्बई – 4000 14

**ENCLOSURES: / संलग्नक:**

1. ICF layout drawing no.
  - (i) TS/DTC-9-0-001
  - (ii) TS/MC-9-0-001
  - (iii) TS/MC2-9-0-001
  - (iv) TS/TC-9-0-001
  - (v) TS/NDTC/EC-9-0-001
  - (vi) TS/NDTC/EC2-9-0-001
2. Railway Board letter no. 2019/M(C)/202/3/Pt dated 11.08.2021 & 13.08.2021.
3. Railway Board vide letter no. 2022/CEDO/SD/RS/08 dated 29.06.2022.

**Signed**  
(नितिन मेहरोत्रा)

कार्यकारी निदेशक मानक / चालन शक्ति



डेडीकेटेड फ्रेट कोरीडोर कॉर्पोरेशन ऑफ इण्डिया लि.  
भारत सरकार (रेल मंत्रालय) का उपक्रम

**Dedicated Freight Corridor Corporation of India Ltd.**  
A Government of India (Ministry of Railways) Enterprise

No. HQ/ML/RSA/RS12/201602196

Date: 18.01.2023

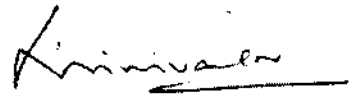
**Additional Member (Civil Engg)**  
**Railway Board**  
**New Delhi**

**Sub: Enhancement of speed of BOXNHL25T over DFC routes**

Ref: (i) EDCE (G)/RB's L/No. 2020/SR/21 dt 25.01.2021

(ii) RDSO speed certificate No. MW/SPD/BG/BOXNHL25T dt  
30.10.2015

1. Vide letter under ref (i), Railway Board has sanctioned the speed of BOXNHL25T at 100/45 Kmph on IR track without any provision of speed for running on DFC routes. However, as per RDSO speed certificate under ref (ii), speed of BOXNHL25T has been certified at 100/70 Kmph after conducting oscillation trial over IR. Accordingly, the same speed of 100/45 Kmph has been implemented over DFC routes also. Further, there is no sanction available of BOXNHL25T when loaded as per CC+8+2/22.9 t loading pattern.
2. It is seen that these wagons are put in the rakes of BOXN variants with CC+8+2/22.9 T loading or BOXNHL rakes resulting in reduction in maximum permissible speed of 45 Kmph for the whole rake in loaded condition, which is adversely affecting the speed potential of DFC route.
3. In view of above, it is requested to take necessary action on the following matters:
  - I. **Separate sanction of BOXNHL25T wagon for DFC routes needs to be issued.**
  - II. **Enhancement of the speed of BOXNHL25T wagon for DFC routes from 45 kmph to 70 Kmph as per RDSO speed certificate (ref-ii), till the separate sanction for DFC is issued.**
  - III. **Sanction for operation of BOXNHL25T when loaded with CC+8+2/22.9 T loading pattern needs to be issued.**

  
(Nanduri Srinivas)  
Director (OP & BD)  
DFCCIL

Copy to:

- I. DG/RDSO/LKO: For information and necessary action please.
- II. EDCE (G) & EDME (Freight)/Railway Board For information and necessary action please
- III. ED (Wagon)/RDSO/LKO: For information and necessary action please

DDG/CCO  
TA/CCO  
4.06.23



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



No. 2022/CEDO/SD/RS/11/Non-ISO-3660mm

New Delhi, dated 19.05.2023

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

**Sub:** Condonation of infringement for movement in loading patterns of (i) Non-ISO containers 3660 mm wide and 2591mm high in single stack (ii)Non-ISO containers 3660 mm wide and 1930mm high in single stack and (iii) Non-ISO containers 3660 mm wide and 1930mm high at bottom and 2600mm wide and 1930mm high container on top in double stack on BG low platform bogie container flat wagon type BLC/BLCM/BLCS/BLL/BLLM(Car A & B) for operation on specified routes over Indian Railways, by *Zonal Railways* and over DFCCIL system by *DFCs*

Ref: (i) Railway Board's letter of even no. dated 07.10.2023  
(ii) RDSO's letter no. CT/CONTR/BG/MG, dated 14.02.2023  
(iii) CCRS office letter no. Q.14011/09/2021-22-T.W.,dated 10.03.2023

With reference to RDSO above applications {ref. (ii)}, sent through the Chief Commissioner of Railway Safety, Lucknow; the sanction of Ministry of Railways, Railway Board is hereby communicated for condonation of infringement w.r.t *IRSOD(BG)-2022* by **Maximum width**, **Maximum height** and **Maximum side height**, as per RDSO Drawing no. WD-21107-S-01 for A-car & Drawing no. WD-21107-S-02 for B-car (for BLC/BLCM wagon), no. WD-21107-S-03 for A-car & Drawing no. WD-21107-S-04 for B-car (for BLCS wagon) & no. WD-21107-S-05 for A-car & Drawing no. WD-21107-S-06 for B-car (for BLL/BLLM wagon) for movement in loading patterns of (i) Non-ISO containers **3660 mm wide and 2591mm high** in single stack (ii)Non-ISO containers **3660 mm wide and 1930mm high** in single stack and (iii) Non-ISO containers **3660 mm wide and 1930mm high at bottom and 2600mm wide and 1930mm high container on top** in double stack, on BG low platform bogie container flat wagon type BLC/BLCM/BLCS/BLL/BLLM(Car A & B), for operation on specified routes over Indian Railways and over routes of DFCCIL. as shown in details enclosed with above mentioned application and reproduced as under:

S. No	Loading Pattern	Item of Chapter-IV (A) of IRSOD	Description of Clause	Dimension as per SoD (mm)	Proposed dimension (mm)	Magnitude of infringement (mm)
1	Loading pattern (i), (ii) & (iii)	24	Maximum width over all projection from 305mm above rail level to 940	3050mm	For BLC/BLCM  3660mm i)Maximum width from 305mm above rail level	305mm on each side from center line of track

*SW*  
19.05.23

S. No	Loading Pattern	Item of Chapter-IV (A) of IRSOD	Description of Clause	Dimension as per SoD (mm)	Proposed dimension (mm)	Magnitude of infringement (mm)
			mm above rail level, when fully loaded		<p>up to 922 mm above rail level is within Diagram no.1(D) of IRSOD (BG), Revised 2022</p> <p>ii) From height of 922mm above rail level up to 940mm above rail level is 3660mm (as shown detail at 'X' in drawing no. WD-21107-S-01 and WD-21107-S-02)</p> <p><b>For BLCS</b></p> <p><b>3660mm</b></p> <p>(i)Maximum width from 305mm above rail level up to 922mm above rail level is within Diagram no.1(D) of IRSOD (BG), Revised 2022</p> <p>(ii) From height of 922mm above rail level up to 940 mm above rail level is 3660mm (as shown detail at 'X' in drawing no. WD-21107-S-03 and WD-21107-S-04)</p> <p><b>For BLL/BLLM</b></p> <p><b>3660mm</b></p> <p>i)Maximum width from 305mm above rail level up to 921mm above rail level is within Diagram no.1(D) of IRSOD (BG),</p>	<p>305mm on each side from center line of track</p> <p>305 mm on each side from center line of track</p>

*[Signature]* 19.05.23

S. No	Loading Pattern	Item of Chapter-IV (A) of IRSOD	Description of Clause	Dimension as per SoD (mm)	Proposed dimension (mm)	Magnitude of infringement (mm)
					Revised 2022  (ii) From height of 921 mm above rail level up to 940 mm above rail level is 3660mm (as shown detail at 'X' in drawing no. WD-21107-S-05 and WD-21107-S-06)	
2	Loading pattern (i), (ii) & (iii)	25	Maximum width over all projection from 940mm above rail level to 1082 mm above rail level, when fully loaded	3050mm increasing gradually to 3150 mm	<p><b>For BLC/BLCM</b></p> <p><b>3660mm</b> Maximum width from 940 mm above rail level up to 1082mm above rail level is 3660mm (as shown detail at 'X' in drawing no. WD-21107-S-01 and WD-21107-S-02)</p> <p><b>For BLCS</b></p> <p><b>3660mm</b> Maximum width from 940mm above rail level up to 1082 mm above rail level is 3660mm (as shown detail at 'X' in drawing no. WD-21107-S-03 and WD-21107-S-04)</p> <p><b>For BLL/BLLM</b></p> <p><b>3660</b> Maximum width from 940 mm above rail level up to 1082 mm above rail level is 3660mm (as shown detail at 'X' in</p>	<p>305mm to 255mm on each side from center line of track from height of 940mm to 1082mm from rail level</p> <p>305mm to 255mm on each side from center line of track from height of 940mm to 1082mm from rail level</p> <p>305mm to 255mm on each side from center line of track from height of 940mm to</p>

S. No	Loading Pattern	Item of Chapter-IV (A) of IRSOD	Description of Clause	Dimension as per SoD (mm)	Proposed dimension (mm)	Magnitude of infringement (mm)
					drawing no. WD-21107-S-05 and WD-21107-S-06)	1082mm from rail level
3	Loading pattern (i), (ii) & (iii)	26	Maximum width over all projection from 1082 mm above rail level to 1170 mm above rail level, when fully loaded	3150mm increasing gradually to 3250mm	For BLC/BLCM/BLCS/ BLL/BLLM 3660mm	255mm to 205mm on each side from center line of track from height of 1082 mm to 1170mm from rail level
4.	Loading pattern (i), (ii) & (iii)	27	Maximum width over all projection from 1170 mm above rail level, when fully loaded to a height of 3735 mm when empty	3250mm	For BLC/BLCM/BLCS/ BLL/BLLM 3660mm	205mm on each side from center line of track
5.	Loading pattern (iii)	30	Max. height above rail level for a width of 1015 mm on either side of the center of unloaded vehicle.	4265 mm	For BLC/BLCM/ BLCS 4877mm  For BLL/BLLM 4876mm	612 mm  611mm
6.	Loading pattern (iii)	31	Max. height above rail level at side of unloaded vehicle	3735mm	For BLC/BLCM/ BLCS 4877mm However, the width of 2600mm container cuts off the slope line at the height of 3841mm and varies 3841 mm to	1036 mm The magnitude of infringement varies from 1036 mm at the beginning of slope line to 943 mm at the

S. No	Loading Pattern	Item of Chapter-IV (A) of IRSOD	Description of Clause	Dimension as per SoD (mm)	Proposed dimension (mm)	Magnitude of infringement (mm)
					<p>varies 3841 mm to 3934mm from Rail level along the slope line of profile of Diagram 1(D) of IRSOD(BG), Revised 2022</p> <p><b>For BLL/BLLM</b></p> <p><b>4876mm</b> However, the width of 2600mm container cuts off the slope line at the height of 3841mm and varies 3841 mm to 3934mm from Rail level along the slope line of profile of Diagram 1(D) of IRSOD(BG), Revised 2022</p>	<p>943 mm at the top of the slope line at a distance of 1300mm and 1015mm respectively from the center of the wagon on either sides</p> <p>(b)1035 mm The magnitude of infringement varies from 1035 mm at the beginning of slope line to 942 mm at the top of the slope line at a distance of 1300mm and 1015mm respectively from the center of the wagon on either sides</p>

Further, above sanction of condonation is subject to the following stipulations :

- Locations with restricted height overhead structures shall be identified by the Zonal Railway. Zonal Railway MUST ensure the removal of any infringement before starting operation of these container wagons in electrified territory.
- Various clearances pertaining to fixed structures, OHE wires/structures, as recommended by RDSO in Note mentioned in Annexure I, II & III (for BLC/BLCM, BLCS, BLL/BLLM-3660 wide containers) of revised application dated 14.02.2023 shall be adhered to.
- All the necessary conditions related to infringements and various clearances to be ensured and precautions to be taken during operation by the Railways shall form part of the RDSO speed certificate, whenever issued.

  
19.05.23

- iv. Before introduction of subject wagons, Electrical Inspector (EIG) of the concerned Zonal Railway shall approve special "Clearance Study Report" of restricted OHE clearances w.r.t. overline structures & top of rolling stock.
- v. In future, the dimension of 3660 mm shall be adopted in design for rolling stock with the special sanction of the Railway Board in each case.

*[Signature]* 19.05.23  
(गौरव)

निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No.-011-23047598]  
e-mail address :dceg@rb.railnet.gov.in

**No. 2022/CEDO/SD/RS/11/Non-ISO-3660mm**

**New Delhi, dated 19.05.2023**

Copy forwarded for information to:

1. The Chief Commissioner of Railway Safety, Compound of DRM/NER, Ashok Marg, Lucknow-1 w.r.t. his endorsement No. Q.14011/09/2021-22-T.VI., dated 10.03.2023
2. Commissioner of Railway Safety, All Circles
3. ED Standards (Track-1), RDSO, Manak Nagar, Lucknow
4. EDME(Fr.)/Railway Board, New Delhi

*[Signature]* 19.05.23  
(गौरव)

निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No.-011-23047598]  
e-mail address :dceg@rb.railnet.gov.in

*Issued through e-mail*

*[Signature]*  
23.5.23  
ADE(CIVIL)



No. 2010/CEDO/SM/1

**Sub: Submission of System Maps of the Zonal Railways**

Letter regarding System maps addressed to General Managers (Engg.) is placed below for your approval please.

*[Signature]* 19.05.2023  
DCE(G)  
19-05-2023

~~EDCE(G)~~

*[Signature]*  
19.5.23



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



No.2010/CEDO/SM/1

New Delhi, Dated 19.05.2023

The General Managers (Engg.),  
All Indian Railways.

**Sub:- Submission of System Maps of the Zonal Railways**

**Ref:- This office letter No. 92/CEDO/SM/1 dated 11.2.1992**

System Maps of the Zonal Railways are important documents required to be consulted for taking up the investment decisions in Railway Board by MR Cell and Board Members. As per letter dated 11.02.1992 the System Maps updated and corrected as on 31.03.2023 of the Railway should be submitted to Board Office by 30.06.2023. Board have desired that System Maps shall also show the MP Constituencies and District Boundaries in Different Colours.

2. You are, therefore, requested to send 25 copies of the coloured System Map of size A-0 each for Division wise, District wise and MP Constituency wise (dully folded neatly in a cover), updated and corrected as on 31.03.2023 to Board office by 30.06.2023.
3. It may please be ensured that the System Maps have been prepared strictly in accordance with the instructions contained in the letter quoted above.

*[Signature]* 19.05.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड  
[Phone: 030-47598(Rly) : 011-23047598(MTNL)]  
e-mail address : dceg@rb.railnet.gov.in

*Issued through mail*

*[Signature]*  
23.5.23  
ADE(CIVIL)

भारत सरकार GOVERNMENT OF INDIA  
रेल मंत्रालय MINISTRY OF RAILWAYS  
(रेलवे बोर्ड Railway Board)

92/CBDO/SR/1.

रेल कार्ड नं दिल्ली-110001, तिथि

11-02-1982

Rail Bhavan, New Delhi-110001, dated

The General Managers(Msgg.),  
All Indian Railways.

Sub: System Maps.

Ref: 1) This office letter No.82/WDO/SR/1  
dated 12.4.82.

ii) This office letter No.83/WDO/SR/1  
dated 13.5.83.

iii) This office letter No.83/WDO/SR/1  
dated 14.6.83.

iv) This office letter No.85/WDO/SR/1  
dated 7.5.83.

\*\*\*\*\*

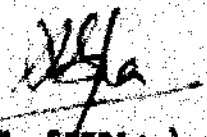
In supersession of all earlier instructions in connection with preparation of System Maps of your railway system (EG, MC and MG) circulated under this office letters quoted above, the Board have decided that the System Maps on all Zonal railways should be prepared to the same standard, as per guide lines given below:-

1. The size of the map should be 75 cms x 60 cms.
2. The system maps should be prepared to the scale 1 cm = 15.00 Kms.
3. Legend to be used on the system maps should be as per specimen enclosed.
4. State boundaries should be shown on the map as indicated in the Specimen Legend and shaded in different colours prominently. The map should also show the divisional jurisdiction by way of colouring the railway lines in different colours.
5. The statistical information pertaining to 'Route Kilometres' and 'Running Track Kilometres' should be tabulated as per format enclosed on the right hand side of the map in a table of about 15 cms x 60 cms.
6. It may be ensured that the information in respect of 'Route Kilometres' and 'Running Track Kilometres' to be shown on the system map tallies with the Kilometrage Statement No.8 being furnished by your railway to the Secretary (Statistics), Railway Board for printing in Indian Railways Annual Books of Statistical Statements and Proforma 'D' in Final Works Programmes Vol.III - Track Renewal.

- (51)
7. Works-in-progress pertaining to New lines, Doublings and Conversions should also be shown on the system map as per the legend.
  8. System Maps should be updated every year as on 31st March and 20 copies submitted by 31st July every year for use in the Board's Office. Fifteen copies of the Public Time Table maps of your railway (Ten plain and five showing divisional jurisdiction and State boundaries in different colours) correct as on 31st March may also be sent alongwith the system maps.
  9. The railways should submit only the printed maps.
  10. System Maps submitted to Board should be signed by one S.A. Grade Officer of the Works Branch only and need not bear any other signatures.

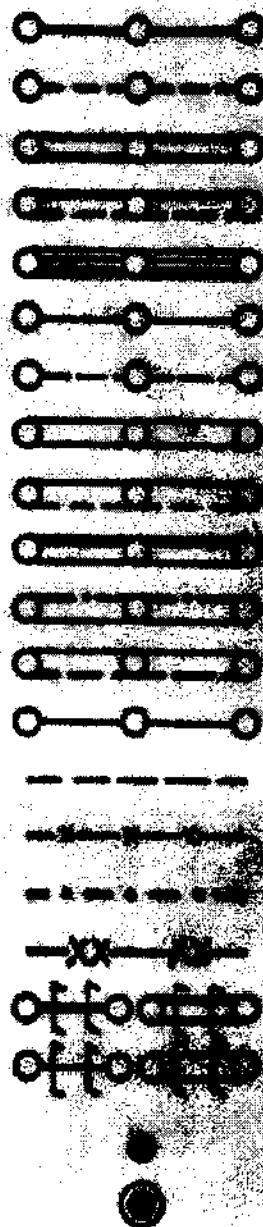
The receipt of this letter may please be acknowledged.

DA: As above.

  
( S.M. SINOLA )  
Executive Director Civil Engineering (G),  
Railway Board.

# LEGEND

- BROAD GAUGE SINGLE LINE.
- BROAD GAUGE NEW LINE UNDER CONSTRUCTION.
- BROAD GAUGE DOUBLE LINE.
- BROAD GAUGE DOUBLING UNDER CONSTRUCTION.
- BROAD GAUGE MULTIPLE LINE.
- METRE GAUGE SINGLE LINE.
- METRE GAUGE SINGLE LINE UNDER CONSTRUCTION.
- METRE GAUGE DOUBLE LINE.
- METRE GAUGE DOUBLING UNDER CONSTRUCTION.
- BROAD GAUGE - METRE GAUGE MIXED LINE.
- BROAD GAUGE METRE GAUGE PARALLEL LINE.
- UNDER CONVERSION METRE GAUGE TO BROAD GAUGE.
- NARROW GAUGE SINGLE LINE.
- DISTRICT BOUNDARY.
- STATE BOUNDARY.
- INTERNATIONAL BOUNDARY.
- OTHER RAILWAY.
- ELECTRIFIED LINE. SINGLE. DOUBLE B.G.
- ELECTRIFIED LINE SINGLE DOUBLE M.G.
- DIVISIONAL HEAD QUARTER
- RAILWAY HEAD QUARTER



## SAMPLE PROFORMA

## ROUTE KILOMETRES

GROUP	BG. 1-676 m	MG. 1-00 m	NG		TOTAL
			0-762 m	0-610 m	
GROUP - A					
GROUP - B					
GROUP - C					
GROUP - D					
GROUP - E					
TOTAL					

## TRACK KILOMETRES

GROUP	BG. 1-676 m	MG. 1-00 m	NG		TOTAL
			0-762 m	0-610 m	
GROUP - A					
GROUP - B					
GROUP - C					
GROUP - D					
GROUP - E					
TOTAL					

## STATE WISE ROUTE KMS / TRACK KMS

STATES	COLOUR SHOWING JURISDICTION	BG. 1-676 m	MG. 1-00 m	NG		TOTAL
				0-762 m	0-610 m	
TOTAL						

## DIVISION WISE ROUTE KMS / TRACK KMS

DIVISION	COLOUR SHOWING JURISDICTION	BG. 1-676 m	MG. 1-00 m	NG		TOTAL
				0-762 m	0-610 m	
TOTAL						

SE

SECTIONS GROUP WISE

BG	SECTIONS	ROUTE KMS
GROUP - A		
GROUP - B		
GROUP - C		
GROUP - D		
GROUP - E		

MB	SECTIONS	ROUTE KMS
O ROUTE		
R <sub>1</sub> ROUTE		
R <sub>2</sub> ROUTE		
R <sub>3</sub> ROUTE		
S <sub>1</sub> ROUTE		
S <sub>2</sub> ROUTE		
S <sub>3</sub> ROUTE		





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



No. 2022/CEDO/SD/1RSOD-2022/O/ACS\_c

New Delhi, Dated 18.05.2023

Addressed to:

(As per list mentioned below)

**Sub: Addendum & Corrigendum Slip (ACS) No. 7 to Standard Schedule of Dimensions, 1676mm Gauge (Broad Gauge) for Eastern and Western Dedicated Freight Corridors of Indian Railways, January 2013**

The Ministry of Railways (Railway Board) have decided that the *Clause 2.1.2 & Clause 9.1.2 of Chapter-II & Chapter -IX: Station Yards* of 'Standard Schedule of Dimensions, 1676mm Gauge (Broad Gauge) for Eastern and Western Dedicated Freight Corridors of Indian Railways, January 2013 be amended as shown in the enclosed Addendum & Corrigendum Slip (ACS) No. 07.

Enclosure: ACS No. 07 (2 pages)

*[Signature]*  
18.05.2023  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

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

**List of Distribution:**

1. General Managers, All Indian Railways & Production Units ✓
2. Managing Director, DFCCIL, 5<sup>th</sup> Floor Pragati Maidan Metro Station, New Delhi-110001 ✓
3. Principal Chief Engineers and Chief Administrative Officers (Con.), All Indian Railways ✓
4. Director General, RDSO, Manak Nagar, Lucknow ✓
5. Director General, NAIR, Vadodara -
6. Chief Commissioner of Railway Safety, Ashok Marg, Lucknow -
7. Commissioner of Railway Safety, All Circles -
8. Director, IRICEN, Rail Path, Pune - 411001 (Maharashtra)
9. Director, IRIEN, P.B. No. 233, Nasik Road - 422101 (Maharashtra)
10. Director, IRISSET, Taar Naka Road, Laila Guda, Secunderabad
11. Director, IRIMEE, Jamalpur - 811214 (Bihar)
12. Director, IRITM, IRITM Campus, Manak Nagar, Lucknow

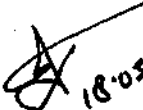
Issued through g mail

*[Signature]*  
18/5/23 ADE (CIVIL)



Copy to:

1. Concerned PSO for kind information of Chairman cum CEO, M/Infra, M/T&RS, M/O&BD, M/Finance, Railway Board
2. Adv./MR, EDPG/MR, OSD/MR, OSD(C-ord)/MR
3. Chief Vigilance Officers, All Indian Railways.
4. DG(RHS), DG(RPF), AM(CE), AM(Works), AM(B), AM(Elec.), AM(RS), AM(ME), AM/Tele, AM/C&IS, AM/Sig., AM(Plg.), AM/L&A, PED(Gati Shakti), PED(Vigilance), PEDCE(P), PED(Infra), EDCE(G), EDGS-I, EDW(Plg.), EDGS-II, ED(PSU), EDVE, ED(Safety), ED (Sig. Dev.), Tele), EDRS(G), EDGS (Elect.), EDEE(G), EDFE, EDE(N), ED(Accounts), ED/T&MPP, EDME(Chg.), EDME(Frt.), ED/Plg., JS(conf), JS(P), JS(G), JS(D), Vigilance-111, Vig(Conf) of Railway Board.

 18.05.2023

**Addendum & Corrigendum Slip (ACS) No. 7 to Standard Schedule of Dimensions,  
1676mm Gauge (Broad Gauge) for Eastern and Western Dedicated Freight Corridors  
of Indian Railways, January 2013**

**Clause 2.1.2 of Chapter —II ‘Station Yards’ of Eastern Corridor and Clause 9.1.2 of Chapter-IX ‘Station Yards’ of Western Corridor shall be read as under:**

Maximum (steepest) gradient in station yards unless special safety devices are adopted and/or special rules enforced to prevent accidents in accordance with approved special instructions.

- i. Desirable/Recommended 1 in 1200
- ii. Maximum (Steepest) 1 in 400

Note:

- a. Desirable/Recommended gradient is generally the good practice, the adoption of which will lead to desirable uniformity on Dedicated Freight Corridor; but it is not to be treated as standards, a departure from which require sanction.
- b. In case it is not possible to provide Desirable/Recommended gradient of 1 in 1200 in yards even after making effort to provide grades as flat as possible, reason for deviation from Desirable/Recommended gradient and up to the specified minimum gradient of 1 in 400 shall be recorded on the ESP.
- c. No station yard shall be constructed nor shall any siding join a DFC main line on a grade steeper than 1 in 100 except where it is unavoidable & then also only with previous sanction of Railway Board obtained through the Commissioner of Railway Safety, when a slip siding or other arrangement is made sufficient to prevent accident.
- d. The powers of condonation of gradient steeper than specified standard maximum gradient of 1 in 400 shall be as under:

1. Existing Yard (incl. works for accommodating IR connectivity\*\*)

(i) Steeper than 1 in 400 and up to 1 in 100 : MD/DFCCIL through Dir/OP&BD

(ii) Steeper in 1 in 100

:Railway Board through Chief  
Commissioner of Railway Safety

\*\* In case special rules are proposed to  
prevent accidents in accordance with  
approved special instructions which affect  
IR operations also, then clearance OF  
same to be obtained from PCSO of  
concerned Zonal Railway before putting  
the proposal to MD/DFCCIL for obtaining  
sanction of condonation.

  
18.05.2013

2. **For New Yards:**

(i) *Steeper than 1 in 400 and upto 1 in 260* : *Commissioner of Railway Safety*

(ii) *Steeper than 1 in 260* : *Railway Board through Chief  
Commissioner of Railway Safety*

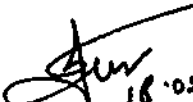
e. **Station Yard means-**

1. **Station Yard will be taken to extent-**

- i. On single line to a distance of 50 m beyond stock rail joint of outer most points at either end of the station.
- ii. On double lines where 2 aspect signaling is provided, from home signal to a distance of 50 m beyond Stock Rail Joint of outer most points at the trailing end or where there are no loops, to last stop signal of each line.
- iii. On double lines where multiple aspect signaling is provided to a distance of 50 m beyond Stock Rail Joint of outer most points at either end of the station or where there are no loops, from Block Section Limit Board to last stop signal of each line.

2. **There must be no change of grade within 30m of any point and crossing.**

\*\*\*\*\*

  
18.05.2022



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



No. 2023/CEDO/SR/15/BOBRNHSM2/22.32t-100-75-IR-100-DFCCIL New Delhi, dated 12.05.2023

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

**The General Manager,**  
**All Indian Railways**

**Managing Director,**  
**DFCCIL,**  
**5th Floor, Supreme Court,**  
**Metro Station Building Complex,**  
**New Delhi - 110001**

**Sub:** Introduction of new type of rolling stock Broad Gauge Bogie Open Rapid Bottom Discharge Coal Hopper wagon type 'BOBRNHSM2' [Maximum Axle Load: 22.32t] to RDSO's Drawing No. WD-91071-S-01 Alt.17, up to a maximum speed of 100 kmph in empty and 75 kmph in loaded conditions over Indian Railways, by Zonal Railways and up to a maximum speed of 100 kmph in both empty and loaded conditions over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL


Ref: (i) RDSO letter no. MW/Container, dated 25.10.2022

(ii) RDSO Final Speed Certificate (FSC) no. MW/BOBRN, dated 20.10.2022 and its Amendment no.1 & 2 dated 10.02.2023 and 14.02.2023 respectively

(iii) CCRS letter no. Q.12011/22/2022-23-T.W., dated 20.02.2023

With reference to RDSO above application {ref.i}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of new type of rolling stock Broad Gauge Bogie Open Rapid Bottom Discharge Coal Hopper wagon type 'BOBRNHSM2' [Maximum Axle Load:22.32t] to RDSO's Drawing No. WD-91071-S-01 Alt.17 up to a maximum speed of 100 kmph in empty and 75 kmph in loaded conditions over Indian Railways, by Zonal Railways and up to a maximum speed of 100 kmph in both empty and loaded conditions over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL with the following stipulations :

- Observance of all conditions laid down in RDSO Final Speed Certificate (FSC) no. MW/BOBRN, dated 20.10.2022 and its Amendment no.1 & 2 dated 10.02.2023 and 14.02.2023 respectively for operation up to a maximum speed of 100 kmph in empty and 75 kmph in loaded conditions over Indian Railways, by Zonal Railways and up to a maximum speed of 100 kmph in both empty and loaded conditions over routes of Eastern & Western

  
12.05.23

**Dedicated Freight Corridor** of DFCs by DFCCIL, shall be ensured on the Railway/DFCs while seeking the sanction of General Manager/MD-DFCCIL, as the case may be, for introduction of rolling stock on the Railway/DFCs. All the documents required for the sanction of General Manager/MD-DFCCIL as per CE (G) Directorate/Railway Board Policy Circular No. 6, dated 01.05.2023, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure.

- ii. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
- iii. Operation of BOBRNHSM2 wagon shall be done in terms of Para 2.7 of the RDSO's Final Speed Certificate no. MW/BOBRN, dated 20.10.2022 and its Amendments.
- iv. 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track.
- v. No overdue in track/rolling stock maintenance shall be permitted.
- vi. Only wagons with functional twin-pipe brake system shall be permitted to run at 75 kmph and above.

*Sur* 12.05.2023  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

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

**No. 2023/CEDO/SR/15/BOBRNHSM2/22.32t-100-75-IR-100-DFCCIL New Delhi, dated 12.05.2023**

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/22/2022-23-T.W., dated 20.02.2023
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(Fr), Railway Board

*Sur* 12.05.2023  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

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*Sur* 12/5/23  
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No. 2023/CEDO/SD/RS/06/BOBRNM2-IR-DFCCIL

New Delhi, dated 12.05.2023

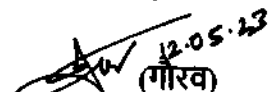
The Director General  
Research Designs & Standards Organisation,  
Manak Nagar, Lucknow-226011.

**Sub:** Condonation of infringements w.r.t. Chapter IV (A) of IRSOD (BG) Revised 2022 by maximum width of BOBRNM2 wagon as per Drawing No. WD-22104-S-01, for operation over specified routes of Indian Railways & routes of Eastern and Western Dedicated Freight Corridors of DFCCIL

**Ref:** (i) RDSO's letter no. CT/DG/LW/BOBR, dated 14.03.2023  
(ii) CCRS office letter no. Q.14011/10/2022-23-T.W.BOBRNM2, dated 17.03.2023

With reference to RDSO above applications {ref.(i)}, sent through the Chief Commissioner of Railway Safety, Lucknow; the sanction of Ministry of Railways, Railway Board is hereby communicated for condonation of infringements w.r.t. Chapter IV (A) of IRSOD (BG) Revised 2022 by maximum width of BOBRNM2 wagon to Drawing No. WD-22104-S-01, for operation over specified routes of Indian Railways & routes of Eastern and Western Dedicated Freight Corridors of DFCCIL, as shown in detail enclosed with above mentioned application, detail of infringements are as under:

- i. **Clause 24**– Maximum width over all projections from 305mm above rail level to 940mm above rail level in fully loaded by 20mm (i.e. 3070mm instead of 3050mm)
- ii. **Clause 25**– Maximum width over all projections from 940mm above rail level to 1082mm above rail level in fully loaded by 20mm (i.e. 3070mm instead of 3050mm)
- iii. **Clause 27**– Maximum width over all projections from 1170mm above rail level when fully loaded to a height of 3735mm when empty by 250mm (i.e. 3500mm instead of 3250mm)

  
(गौरव)  
निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No.-011-23047598]  
e-mail address :dceg@rb.railnet.gov.in

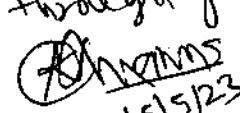
No. 2023/CEDO/SD/RS/06/BOBRNM2-IR-DFCCIL

New Delhi, dated 12.05.2023

Copy forwarded for information to:

1. The Chief Commissioner of Railway Safety, Compound of DRM/NER, Ashok Marg, Lucknow-226001 w.r.t. his endorsement no. Q.14011/10/2022-23-T.W.BOBRNM2, dated 17.03.2023
2. Commissioner of Railway Safety, All Circles
3. ED Standards (Track-1), RDSO, Manak Nagar, Lucknow
4. EDME(Fr), Railway Board, New Delhi

  
(गौरव)  
निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड

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15/5/23  
ADECC/W/L



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



No. 2023/CEDO/SR/14/BLCM{SS-100-12'-3658x2438-22t-IR-DFCCIL} New Delhi, dated 10/05/2023

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

The General Manager,  
All Indian Railways

Managing Director,  
DFCCIL, 5th Floor, Supreme Court,  
Metro Station Building Complex,  
New Delhi - 110001

**Sub:** Introduction of 12' high containers (3658mm height and 2438mm width) in single stack in empty and loaded condition, on 22t axle load, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCM (A-Car & B-Car) to RDSO Drg. no. WD-20020-S-02 Alt. 02 or latest (For A-Car) and WD-20020-S-03 Alt. 02 or latest (For B-Car) for operation up to a maximum speed of 100 kmph over specified routes (including DSDC routes) over **Indian Railway**, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of **DFCs** by DFCCIL


Ref: (i) CCRS letter no. Q.12011/12/2021-22-Tech., dated 07.02.2023

(ii) RDSO letter no. MW/Container, dated 03.01.2023


(iii) RDSO Revised Final Speed Certificate (FSC) no. MW/Container (BLCM/12ft), dated 02.01.2023

With reference to RDSO above application {ref.ii}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of 12' high containers (3658mm height and 2438mm width) in single stack in empty and loaded condition, on 22t axle load, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCM (A-Car & B-Car) to RDSO Drg. no. WD-20020-S-02 Alt. 02 or latest (For A-Car) and WD-20020-S-03 Alt. 02 or latest (For B-Car) for operation up to a maximum speed of 100 kmph over specified routes (including DSDC routes) over **Indian Railway**, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of **DFCs** by DFCCIL with the following stipulations :

- Observance of all conditions laid down in RDSO Revised Final Speed Certificate (FSC) no. MW/Container (BLCM/12ft), dated 02.01.2023 for operation up to a maximum speed of 100 kmph over specified routes (including DSDC routes) over **Indian Railway**, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of **DFCs** by DFCCIL shall be ensured on the Railway/DFCs while seeking the sanction of General Manager/ MD-DFCCIL, as the case may be, for introduction of rolling stock on the Railway/DFCs. All the documents required for the sanction of General Manager/MD-DFCCIL as per CE(G) Directorate/Railway Board Policy Circular No. 6, dated 01.05.2023, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure

  
10.05.23

- ii. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
- iii. Para 3.5.1.1 of Revised Final Speed Certificate (FSC) no. MW/Container (BLCM/12Ft), dt. 02.01.2023 may be read as 'Before initiating the operation over routes of Western DFCCIL, Principal Chief Mechanical Engineer of concerned/adjoining Zonal Railways shall arrange to certify the service worthiness (track worthiness) and safety of the rolling stocks. He shall also ensure the proper maintenance of the rolling stocks'.
- iv. Only wagons with twin-pipe brake system shall be permitted to run at 75 kmph or more in loaded condition. Brakes of the rake of the wagons shall be in good working order during the operation.
- v. Railways/DFCIL shall ensure loading limits as mentioned in Para 3.5.1.3 of Revised Final Speed Certificate dt. 02.01.2023 for operation of 12' high containers on BLCM wagons.
- vi. These containers shall be operated only on BLCM (Car A & B) wagons in empty as well as loaded conditions unless there is separate sanction for their operation on any other rolling stock.
- vii. Railway shall ensure that containers are lifted and lowered vertically to avoid any damage to Automatic Twist Locks (ATL). Railway shall also ensure proper locking of ATL at the starting station as well as at any station where loading/unloading is done by regular checks.
- viii. No overdue in track/rolling stock maintenance shall be permitted.

 10.05.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड


[Rly No. 030-47598, MTNL No. 011-23047598]

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

No. 2023/CEDO/SR/14/BLCM{SS-100-12'-3658x2438-22t-IR-DFCCIL} New Delhi, dated 10/05/2023

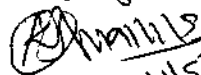
Copy forwarded for information to:

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/12/2021-22-T.W., dated 07.02.2023
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(Fr), Railway Board

 10.05.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

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ADECCIVIL





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



No. 2022/CEDO/SR/PC-6/0

New Delhi, Dated 01.05.2023

General Managers  
All Zonal Railways

Chief Commissioner of Railway  
Safety DRM Office Campus, Lucknow.

**Sub: Policy Circular No. 6, 2023**

Ref: (i) Gazette Notification bearing No. G.S.R. 321(E), Dated 28.04.2023

(ii) RB's Letter No. 2022/CEDO/SR/PC-6/0, Dated 24.03.2023

(iii) Gazette Notification No. S.O. 2368(E), Dated 24.05.2022

(iv) RB's Letter No. 2018/CEDO/SR/PC-6/0, dated 31.10.2018, 12.10.2020, 28.09.2021 & 20.09.2022

- 1) The Policy Circular No. 6 deals with procedure for certification of maximum permissible speed for rolling stock and introduction of trains at different speeds.
- 2) The existing Policy Circular No. 6 was issued vide Letter No. 2018/CEDO/SR/PC-6/0, dated 31.10.2018. Subsequently, the same was amended vide Letter No. 2018/CEDO/SR/PC-6/0, dated 12.10.2020, 28.09.2021 & 20.09.2022.
- 3) With an objective of simplification of all the business processes involved in introduction of Rolling Stock and trains at different speeds, Policy Circular No. 6 has been reviewed by ED committee and its recommendation has been accepted by Board.
- 4) Accordingly, in supersession of existing Policy Circular No. 6, 2018 & its amendments issued vide letters under reference (iv), Board (MT&RS, MO&BD, MInfra) has approved the revised **Policy Circular No. 6, 2023** on '*Procedure for certification of maximum permissible speed for rolling stock and introduction of trains at different speed*', same is enclosed for compliance by all concerned.
- 5) In addition to above, Board has also decided the following:
  - (a) Rolling stock which are already running over Zonal Railways for quite some time, but not having valid Railway Board's sanction, one time sanction may be obtained from Railway Board, through CCRS, on a single proposal of RDSO, to regularize all such cases in one go.
  - (b) RDSO shall process one time sanction of condonation, through CCRS, by Railway Board, for the three different profiles (like MMD) for taking care of different type of dimensions of Rolling Stock i.e (i) Rolling stock which will operate on normal IR routes on Pan India basis (maximum height- 4318mm) (ii) Rolling stock which will operate on DSDC

routes (maximum height- 4877mm) (iii) Rolling stock which will operate on Double Stack Container routes (maximum height- 6827mm). Rolling stock within this profile will not require sanction of condonation of Railway Board again. [Same has already been circulated vide RB's Letter No. 2022/CEDO/SR/PC-6/0, Dated 24.03.2023]

DA: As above

अजीत कुमार झा  
(अजीत कुमार झा) 1.5.23

कार्यपालक निदेशक/सिविल इंजी.(जी)/रेलवे बोर्ड

[Phone: 030-44803: Rly: 011-23383379:MTNL]

e-mail address : edceg2022@gmail.com

Copy to:

1. DG/RDSO, Lucknow for information and necessary action
2. Commissioners of Railway Safety, All Circles, for information and necessary action
3. Concerned PSO for kind information of Chairman & Chief Executive Officer(CEO), Member (Infrastructure), Member (Traction & Rolling Stock), Member (Operation & Business Development), Member (Finance), DG (Safety), Railway Board
4. Adv./MR, EDPG/MR, OSD/MR, OSR(Co-ord)/MR

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03/5/23



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



No.2022/CEDO/SD/01-SITAPUR

New Delhi, dated: 17.04.2023

Chief Administrative Officer/Cons.  
N.E Railway

**Sub: Permanent condonation for infringement due to IRSOD schedule-I, Chapter-II, item-1(ii) Note (C) from km./Chainage 97.890 to km. 98.530 between Sitapur City in connection with Sitapur Jn – Sitapur City doubling project with electrification work of N.E.Railway**

Ref: NER letter No NERCON/ADMN/CAO(C)/RB/2023/GKP dated 07.03.2023

Please refer to N. E. Railway's letter No. NERCON/ADMN/CAO(C)/RB/2023/GKP dated 07.03.2023 regarding feasibility of provision of signalling system for simultaneous operations of on train only between proposed up line and Thompsonganj goods shed line.

The matter has been examined in detail in Board's office. NER is requested to send a fresh proposal alongwith Joint Note dated 07.03.2023 duly approved by General Manager/NER. The proposal should also be contained special precautions proposed to be taken with the approval of PCOM and PCSO.

*[Signature]* 17.04.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

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

Issued through g mail

*[Signature]*  
20/4/23 ADECCMIL



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



No. 2023/CEDO/SR/07/BLCM/{dwarf(1930x2600)-triplestack-22t-65kmph-WDFC}

New Delhi, Dated 11.04.2023

Managing Director,  
DFCCIL,  
5th Floor, Supreme Court,  
Metro Station Building Complex,  
New Delhi - 110001.

**Sub:** Introduction of dwarf containers (1930mm high and 2600mm width) in triple stack in empty and loaded condition, on 22t axle load, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCM (A-Car & B-Car) to RDSO's No. CONTR-07072-S/1 Alt. Nil (BLCM A -Car) and Drg. No. CONTR-07072-S/2 Alt. Nil (BLCM B -Car) for operation up to a maximum speed of 65 kmph over Western Freight Corridor of DFCCIL routes of DFCCIL

**Ref:** (i) RDSO letter no. MW/Container, dated 11.11.2021


(ii) RDSO Provisional Speed Certificate no. MW/Container(TSC/BLCM), dated 11.11.2021 and its Amendment no.1 dated 31.12.2021

(iii) CCRS letter no. Q.12011/14/2021-22-T.W. BLCM, dated 17.01.2023

While processing above case for the sanction of the Railway Board for introduction of dwarf containers (1930mm high and 2600mm width) in triple stack in empty and loaded condition, on 22t axle load, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCM (A-Car & B-Car) to RDSO's No. CONTR-07072-S/1 Alt. Nil (BLCM A -Car) and Drg. No. CONTR-07072-S/2 Alt. Nil (BLCM B -Car) for operation up to a maximum speed of 65 kmph over Western Freight Corridor of DFCCIL routes of DFCCIL, **PEDCE(P), Railway Board** has passed following remarks, reproduced as under:

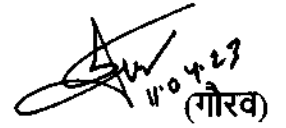
*"CCRS has stipulated following important conditions with respect to operation of dwarf containers in triple stacks, which need to be implemented on DFC. Action plan for fulfilment of these conditions may be asked from DFCCIL before processing for sanction letter for these wagons over DFC:*

- *Anemometers shall be provided on all stations enroute of triple stack dwarf container operation to measure the wind speed for taking necessary action in terms of Para 3.6.5 of Provisional Speed Certificate dated 11.11.2021.*
- *Action to be taken in case of strong winds as mentioned in Para 3.6.5 of Provisional Speed Certificate dated 11.11.2021 shall be made a part of the Station Working Rule(SWR) of all station falling enroute of triple stack dwarf container operation.*

  
11.04.23

- DFCCIL shall ensure compliance to all stipulations regarding certification, tensile/compressive force, shear strength of Inter Box Connectors (IBCs) mentioned in RDSO's letter no. MW/CONTR/ATL dated 08/09.12.2014.
- Any occurrence of displacement/falling of the containers during operation shall be monitored for a period of 06 months and any such unusual occurrence shall be intimated to Commission.
- DFCCIL shall ensure loading pattern as mentioned in Para 3.5.3 of Provisional Speed Certificate dated 11.11.2021 for operation of dwarf containers in triple stack on BLCM wagons.
- These containers shall be operated only BLCM (A-Car & B-Car) in empty as well as loaded conditions unless there is separate sanction for their operation on any other rolling stock.
- Railway shall ensure that containers are lifted and lowered vertically to avoid any damage to inter-box connector locks /Automatic Twist Locks (ATL). Railway shall also ensure proper locking of inter-box connector locks/ATL at the starting station as well as at any station where loading/unloading is done.
- No overdue in track/rolling stock maintenance shall be permitted."

DFCCIL is requested to examine the issues involved and submit comments at the earliest.

  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

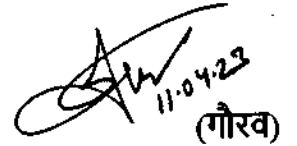
e-mail address: [dceg@rb.railnet.gov.in](mailto:dceg@rb.railnet.gov.in)

No. 2023/CEDO/SR/07/BLCM/{dwarf(1930x2600)-triplestack-22t-65kmph-WDFC}

New Delhi, Dated 11.04.2023

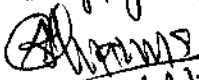
Copy forwarded for information to :

1. Executive Director (Standards) Wagon, RDSO, Lucknow
2. Executive Director (Standards) Track-I, RDSO, Lucknow
3. EDME(Fr.) Railway Board

  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

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



No. 2023/CEDO/SR/13/BLC{SS-75-12'-3658x2438-20.32t-IR-DFCCIL} New Delhi, dated 05.04.2023

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

**Sub** Introduction of 12' high containers (3658mm height and 2438mm width) in single stack in empty and loaded condition, on 20.32t axle load, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLC (A-Car & B-Car) to RDSO's Drg. no. WD-20020- S-02 Ait. 02 (for A-car) and WD-20020- S-03 Ait. 02 (for B-car) for operation up to a maximum speed of 75 kmph over specified routes (including DSDC routes) over **Indian Railway**, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL

**Ref:** (i) RDSO letter no. MW/Container, dated 03.01.2023

(ii) RDSO Revised Final Speed Certificate (FSC) no. MW/Container (BLC/12ft), dated 02.01.2023

(iii) CCRS letter no. Q.12011/13/2021-22-T.W., dated 03.02.2023

(iv) Railway Board letter of even no. dated 03.04.2023

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' high containers (3658mm height and 2438mm width) in single stack in empty and loaded condition, on 20.32t axle load, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLC (A-Car & B-Car) to RDSO's Drg. no. WD-20020- S-02 Ait. 02 (for A-car) and WD-20020- S-03 Ait. 02 (for B-car) for operation up to a maximum speed of 75 kmph over specified routes (including DSDC routes) over **Indian Railway**, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL vide RB's letter under reference (iv) above, while granting sanction for introduction of this Rolling Stock, **Railway Board (Member/O&BD)** has passed the following remarks:

**"Oscillation trials may be conducted at the earliest"**

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

*(Signature)*  
5.04.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No. 011-23047598]  
e-mail address: dceg@rb.railnet.gov.in

No. 2023/CEDO/SR/13/BLC{SS-75-12'-3658x2438-20.32t-IR-DFCCIL} New Delhi, dated 05.04.2023

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/13/2021-22-T.W., dated 03.02.2023
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(Fr), Railway Board

*(Signature)*  
5.04.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

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*(Signature)*  
05/04/23  
ADE(CIVIL)



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



No. 2023/CEDO/SR/13/BLC{SS-75-12'-3658x2438-20.32t-IR-DFCCIL}

New Delhi, dated 03.04.2023

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

**Managing Director,**  
**DFCCIL, 5th Floor, Supreme**  
**Court, Metro Station Building**  
**Complex, New Delhi - 110001**

**Sub** Introduction of 12' high containers (3658mm height and 2438mm width) in single stack in empty and loaded condition, on 20.32t axle load, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLC (A-Car & B-Car) to RDSO's Drg. no. WD-20020- S-02 Ait. 02 (for A-car) and WD-20020- S-03 Ait. 02 (for B-car) for operation up to a maximum speed of 75 kmph over specified routes (including DSDC routes) over **Indian Railway**, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL

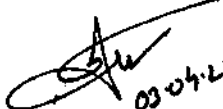
Ref: (i) RDSO letter no. MW/Container, dated 03.01.2023

(ii) RDSO Revised Final Speed Certificate (FSC) no. MW/Container (BLC/12ft), dated 02.01.2023

(iii) CCRS letter no. Q.12011/13/2021-22-T.W., dated 03.02.2023

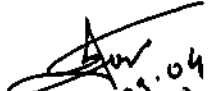
With reference to RDSO above application {ref.i}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of 12' high containers (3658mm height and 2438mm width) in single stack in empty and loaded condition, on 20.32t axle load, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLC (A-Car & B-Car) to RDSO's Drg. no. WD-20020- S-02 Ait. 02 (for A-car) and WD-20020- S-03 Ait. 02 (for B-car) for operation up to a maximum speed of 75 kmph over specified routes (including DSDC routes) over **Indian Railway**, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL with the following stipulations :

- i. Observance of all conditions laid down in RDSO Revised Final Speed Certificate (FSC) no. MW/Container (BLC/12ft), dated 02.01.2023 for operation up to a maximum speed of 75 kmph over specified routes (including DSDC routes) over **Indian Railway** and over routes of Eastern & Western Dedicated Freight Corridor of DFCs shall be ensured on the Railway/DFCs while seeking the sanction of General Manager/ MD-DFCCIL, as the case may be, for introduction of rolling stock on the Railway/DFCs. All the documents required for the sanction of General Manager/MD-DFCCIL as per CE(G) Directorate/Railway Board Policy

  
03.04.23

Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure

- ii. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
- iii. Before initiating the operation over routes of Western DFCCIL, Principal Chief Mechanical Engineer of concerned/adjoining Zonal Railways shall arrange to certify the service worthiness (track worthiness) and safety of the rolling stocks. He shall also ensure the proper maintenance of the rolling stocks.
- iv. Only wagons with twin-pipe brake system shall be permitted to run at 75 kmph in loaded condition. Brakes of the rake of the wagons shall be in good working order during the operation.
- v. Railways/DFCCIL shall ensure loading limits as mentioned in Para 3.5.1.3 of Revised Final Speed Certificate dt. 02.01.2023 for operation of 12' high containers on BLC wagons.
- vi. These containers shall be operated only on BLC (Car A & B) wagons in empty as well as loaded conditions unless there is separate sanction for their operation on any other rolling stock.
- vii. Railway shall ensure that containers are lifted and lowered vertically to avoid any damage to Automatic Twist Locks (ATL). Railway shall also ensure proper locking of ATL at the starting station as well as at any station where loading/unloading is done.
- viii. No overdue in track/rolling stock maintenance shall be permitted.

  
03.04.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]


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

No. 2023/CEDO/SR/13/BLC{SS-75-12'-3658x2438-20.32t-IR-DFCCIL}

New Delhi, dated 03.04.2023

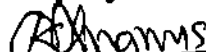
Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/13/2021-22-T.W., dated 03.02.2023
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(Fr), Railway Board

  
03.04.23  
(गौरव)

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

75  
Azadi Ka  
Amrit Mahotsav

No. 2023/CEDO/SR/13(1)/BLC{SS-75-12'-3658x2438-20.32t-IR-DFCCIL}

New Delhi, dated 03.04.2023

The General Manager,  
All Indian Railways

**Sub** Introduction of 12' high containers (3658mm height and 2438mm width) in single stack in empty and loaded condition, on 20.32t axle load, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLC (A-Car & B-Car) to RDSO's Drg. no. WD-20020- S-02 Ait. 02 (for A-car) and WD-20020- S-03 Ait. 02 (for B-car) for operation up to a maximum speed of 75 kmph over specified routes (including DSDC routes) over **Indian Railway**, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL

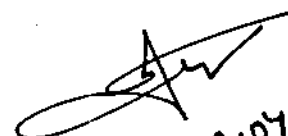
**Ref:** (i) RDSO letter no. MW/Container, dated 03.01.2023

(ii) RDSO Revised Final Speed Certificate (FSC) no. MW/Container (BLC/12ft), dated 02.01.2023

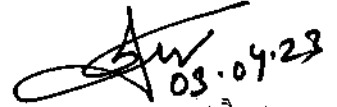
(iii) CCRS letter no. Q.12011/13/2021-22-T.W., dated 03.02.2023

With reference to RDSO above application {ref.i}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of 12' high containers (3658mm height and 2438mm width) in single stack in empty and loaded condition, on 20.32t axle load, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLC (A-Car & B-Car) to RDSO's Drg. no. WD-20020- S-02 Ait. 02 (for A-car) and WD-20020- S-03 Ait. 02 (for B-car) for operation up to a maximum speed of 75 kmph over specified routes (including DSDC routes) over **Indian Railway**, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL with the following stipulations :

- i. Observance of all conditions laid down in RDSO Revised Final Speed Certificate (FSC) no. MW/Container (BLC/12ft), dated 02.01.2023 for operation up to a maximum speed of 75 kmph over specified routes (including DSDC routes) over **Indian Railway**, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL shall be ensured on the Railway/DFCs while seeking the sanction of General Manager/MD-DFCCIL, as the case may be, for introduction of rolling stock on the Railway/DFCs. All the documents required for the sanction of General Manager/MD-DFCCIL as per CE(G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure
- ii. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.

  
03.04.23

- iii. Before initiating the operation over routes of Western DFCCIL, Principal Chief Mechanical Engineer of concerned/adjoining Zonal Railways shall arrange to certify the service worthiness (track worthiness) and safety of the rolling stocks. He shall also ensure the proper maintenance of the rolling stocks.
- iv. Only wagons with twin-pipe brake system shall be permitted to run at 75 kmph in loaded condition. Brakes of the rake of the wagons shall be in good working order during the operation.
- v. Railways/DFCCIL shall ensure loading limits as mentioned in Para 3.5.1.3 of Revised Final Speed Certificate dt. 02.01.2023 for operation of 12' high containers on BLC wagons.
- vi. These containers shall be operated only on BLC (Car A & B) wagons in empty as well as loaded conditions unless there is separate sanction for their operation on any other rolling stock.
- vii. Railway shall ensure that containers are lifted and lowered vertically to avoid any damage to Automatic Twist Locks (ATL). Railway shall also ensure proper locking of ATL at the starting station as well as at any station where loading/unloading is done.
- viii. No overdue in track/rolling stock maintenance shall be permitted.

 03.04.23

(गौरव)

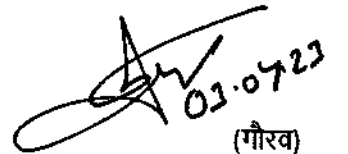
निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

e-mail address: [dceg@rb.rail.gov.in](mailto:dceg@rb.rail.gov.in)

No. 2023/CEDO/SR/13(1)/BLC{SS-75-12'-3658x2438-20.32t-IR-DFCCIL} New Delhi, dated 03.04.2023  
Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/13/2021-22-T.W., dated 03.02.2023
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(Fr), Railway Board

 03.04.23

(गौरव)

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06/4/23

ADE(CIVIL)

No. 2023/CEDO/SD/RS/04/BOBRNM1-IR-DFCCIL

New Delhi, dated 03.04.2023

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

**Sub:** Condonation of infringements w.r.t. IRSOD (BG) Revised 2022 by **maximum width** of **BOBRNM1** to Drawing No. WD-22104-S-01 for operation over specified routes of Indian Railways & routes of Eastern and Western Dedicated Freight Corridors of DFCCIL

Ref: (i) RDSO's letter no. CT/DG/LW/BOBR, dated 10.02.2023

(ii) CCRS office letter no. Q.14011/10/2022-23-T.W.BOBRNM1, dated 20.02.2023

With reference to RDSO above applications {ref.(i)}, sent through the Chief Commissioner of Railway Safety, Lucknow; the sanction of Ministry of Railways, Railway Board is hereby communicated for condonation of infringements w.r.t. Chapter-IV(A), Schedule-I of IRSOD (BG) Revised 2022 by **maximum width** of **BOBRNM1** to Drawing No. WD-22104-S-01 for operation over specified routes of Indian Railways & routes of Eastern and Western Dedicated Freight Corridors of DFCCIL, as shown in detail enclosed with above mentioned application, detail of infringements are as under:

- (i) **Clause 24**— Maximum width over all projections from 305mm above rail level to 940mm above rail level, when fully loaded by 20mm (i.e. 3070mm instead of 3050mm)
- (ii) **Clause 25**— Maximum width over all projections from 940mm above rail level to 1082mm above rail level, when fully loaded by 20mm (i.e. 3070mm instead of 3050mm)
- (iii) **Clause 27**— Maximum width over all projections from 1170mm above rail level, when fully loaded to a height of 3735mm when empty by 250mm (i.e. 3500mm instead of 3250mm)

Further, above sanction of condonation is subject to the following stipulations:

*"Para 3.6.9 of already issued RDSO's Provisional Speed Certificate no. MW/BOBRN dt. 16.12.2022 incorporating its all Amendments for operation of proposed wagon shall be amended to incorporate Railway Board's sanction of condonation of infringement to IRSOD for operation of BOBRNM1 wagon over specified routes of Indian Railways & routes of Eastern and Western Dedicated Freight Corridors of DFCCIL."*

निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No.-011-23047598]  
e-mail address : dceg@rb.railnet.gov.in

No. 2023/CEDO/SD/RS/04/BOBRNM1-IR-DFCCIL

New Delhi, dated 03.04.2023

Copy forwarded for information to:

1. The Chief Commissioner of Railway Safety, Compound of DRM/NER, Ashok Marg, Lucknow-226001 w.r.t. his endorsement No. CCRS office letter no. Q.14011/10/2022-23-T.W.BOBRNM1, dated 20.02.2023
2. Commissioner of Railway Safety, All Circles
3. ED Standards (Track-1), RDSO, Manak Nagar, Lucknow
4. EDME(Fr), Railway Board, New Delhi

निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड

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05/4/23 ADECSIVU



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



No. 2023/CEDO/SD/RS/03/BOBRNHSM1-IR-DFCCIL

New Delhi, dated 03.04.2023

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

Sub: Condonation of infringements w.r.t. IRSOD (BG) Revised 2022 by **maximum width** of BOBRNHSM1 to Drawing No. WD-22104-S-01 for operation over specified routes of Indian Railways & routes of Eastern and Western Dedicated Freight Corridors of DFCCIL

Ref: (i) RDSO's letter no. CT/DG/LW/BOBR, dated 10.02.2023

(ii) CCRS office letter no. Q.14011/10/2022-23-T.W. BOBRNM1, dated 20.02.2023

With reference to RDSO above applications {ref.(i)}, sent through the Chief Commissioner of Railway Safety, Lucknow; the sanction of Ministry of Railways, Railway Board is hereby communicated for condonation of infringements w.r.t. Chapter-IV(A), Schedule-I of IRSOD (BG) Revised 2022 by **maximum width** of BOBRNHSM1 to Drawing No. WD-22104-S-01 for operation over specified routes of Indian Railways & routes of Eastern and Western Dedicated Freight Corridors of DFCCIL, as shown in detail enclosed with above mentioned application, detail of infringements are as under:

- (i) **Clause 24**– Maximum width over all projections from 305mm above rail level to 940mm above rail level when fully loaded by 10 mm on each side, i.e. total maximum infringement is 20mm (i.e. 3070mm instead of 3050mm)
- (ii) **Clause 25**– Maximum width over all projections from 940mm above rail level to 1082mm above rail level when fully loaded by 10 mm on each side, i.e. total maximum infringement is 20mm (i.e. 3070mm instead of 3050mm)
- (iii) **Clause 27**– Maximum width over all projections from 1170mm above rail level when fully loaded to a height of 3735mm when empty by Maximum infringement is 125 mm on each side i.e. total maximum infringement is 250 mm (i.e. 3500mm instead of 3250mm)

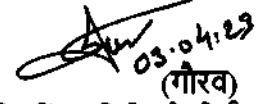
Further, above sanction of condonation is subject to the following stipulations:

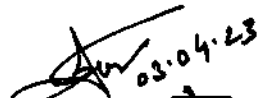
*"Para 3.6.9 of already issued RDSO's Revised Final Speed Certificate no. MW/BOBRN dt. 16.12.2022 incorporating its all Amendments for operation of proposed wagon shall be amended to incorporate Railway Board's sanction of condonation of infringement to IRSOD for operation of BOBRNHSM1 wagon over specified routes of Indian Railways & routes of Eastern and Western Dedicated Freight Corridors of DFCCIL."*

No. 2023/CEDO/SD/RS/03/BOBRNHSM1-IR-DFCCIL

Copy forwarded for information to:

1. The Chief Commissioner of Railway Safety, Compound of DRM/NER, Ashok Marg, Lucknow-226001 w.r.t. his endorsement No. Q.14011/10/2022-23-T.W. BOBRNM1, dated 20.02.2023
2. Commissioner of Railway Safety, All Circles
3. ED Standards (Track-1), RDSO, Manak Nagar, Lucknow
4. EDME(Fr), Railway Board, New Delhi

  
निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No.-011-23047598]  
e-mail address :dceg@rb.railnet.gov.in  
New Delhi, dated 03.04.2023

  
निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड

Issued through g mail  
21/4/23 ADE(CIVIL)

No. 2023/CEDO/SD/RS/02/BOBRNHSM2-IR-DFCCIL

New Delhi, dated 03.04.2023

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

**Sub:** Condonation of infringements w.r.t. IRSOD (BG) Revised 2022 by **maximum width** of BOBRNHSM2 to Drawing No. WD-22104-S-01 for operation over specified routes of Indian Railways & routes of Eastern and Western Dedicated Freight Corridors of DFCCIL

Ref: (i) RDSO's letter no. CT/DG/LW/BOBR, dated 10.02.2023

(ii) CCRS office letter no. Q.14011/10/2022-23-T.W. BOBRNHSM2, dated 20.02.2023

With reference to RDSO above applications {ref.(i)}, sent through the Chief Commissioner of Railway Safety, Lucknow; the sanction of Ministry of Railways, Railway Board is hereby communicated for condonation of infringements w.r.t. Chapter-IV(A), Schedule-I of IRSOD (BG) Revised 2022 by **maximum width** of BOBRNHSM2 to Drawing No. WD-22104-S-01 for operation over specified routes of Indian Railways & routes of Eastern and Western Dedicated Freight Corridors of DFCCIL, as shown in detail enclosed with above mentioned application, detail of infringements are as under:

- (i) **Clause 24**— Maximum width over all projections from 305mm above rail level to 940mm above rail level when fully loaded by 10 mm on each side, i.e. total maximum infringement is 20mm (i.e. 3070mm instead of 3050mm)
- (ii) **Clause 25**— Maximum width over all projections from 940mm above rail level to 1082mm above rail level when fully loaded by 10 mm on each side, i.e. total maximum infringement is 20mm (i.e. 3070mm instead of 3050mm)
- (iii) **Clause 27**— Maximum width over all projections from 1170mm above rail level, when fully loaded to a height of 3735 when empty by Maximum infringement is 125 mm on each side i.e. total maximum infringement is 250mm (i.e. 3500mm instead of 3250mm)

Further, above sanction of condonation is subject to the following stipulations:

*"Para 3.6.9 of already issued RDSO's Revised Final Speed Certificate No. MW/BOBRN dt. 20.10.2022 incorporating its all Amendments for operation of proposed wagon shall be amended to incorporate Railway Board's sanction of condonation of infringement to IRSOD for operation of BOBRNHSM2 wagon over specified routes of Indian Railways & routes of Eastern and Western Dedicated Freight Corridors of DFCCIL."*

*(Signature)*  
03.04.2023  
(गौरव)

निदेशक सिविल इंजीनियरिंग(जी)रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No.-011-23047598]  
e-mail address :dceg@rb.railnet.gov.in

No. 2023/CEDO/SD/RS/02/BOBRNHSM2-IR-DFCCIL

New Delhi, dated 03.04.2023

Copy forwarded for information to:

1. The Chief Commissioner of Railway Safety, Compound of DRM/NER, Ashok Marg, Lucknow-226001 w.r.t. his endorsement No. Q.14011/10/2022-23-T.W. BOBRNHSM2, dated 20.02.2023
2. Commissioner of Railway Safety, All Circles
3. ED Standards (Track-1), RDSO, Manak Nagar, Lucknow
4. EDME(Fr), Railway Board, New Delhi

*(Signature)*  
03.04.2023  
(गौरव)

निदेशक सिविल इंजीनियरिंग(जी)रेलवे बोर्ड

Issued through g mail

*(Signature)*  
03/04/23 ADE(CIVIL)



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



No. 2023/CEDO/SR/17/VandeBharat/NDLS-AGC/160 kmph

New Delhi, Dated 31.03.2023

The Director General,  
RDSO, Manak Nagar,  
Lucknow 226011.

The General Manager,  
North Central Railways


The General Manager,  
Northern Railways

**Sub:** Introduction of Train no. 20171/ 20172 Rani Kamlapati (RKMP) — New Delhi (NDLS), 16 coach train set with new design propulsion system and bogies (Vande Bharat Trainset) [Max Designed Axle Load: 17t ] up to a maximum speed of 160 kmph over Agra Cantt. (AGC) - Tuglakabad (TKD ) section, on both UP and DN lines, by Zonal Railways

- Ref: (i) CCRS office letter no. Q.12011/16/2022-23-T.W./NCR , dated 30.03.2023 & Q.12011/16/2022-23-T.W. NR, dated 30.03.2023  
(ii) GM/NCR letter no. 355-W/CRS/Vande Bharat Exp/160 kmph/PWL-AGC/NCR/Bridge dt. 29.03.2023  
(iii) GM/NR letter no. 519-W/2253/Track (Vande Bharat Train no. 20171/20172), dt. 30.03.2023  
(iv) PCE/NR clarification letter no. 519-W/2253/Track dt. 30.03.2023.  
(iv) RDSO's speed Certificate no. MC/LHB/Coach dt. 29.03.2023

With reference to NC Railway & Northern Railway above applications, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of Train no. 20171/ 20172 Rani Kamlapati (RKMP) — New Delhi (NDLS), 16 coach train set with new design propulsion system and bogies (Vande Bharat Trainset) [Max Designed Axle Load: 17t ] up to a maximum speed of 160 kmph over Agra Cantt. (AGC) - Tuglakabad (TKD ) section, on both UP and DN lines, by Zonal Railways, with the following stipulations

- Compliance of all the conditions/stipulations mentioned in CRS/NEC letter no. 3499/Vande Bharat Train/COCR/NCR dt. 30.03.2023 & CRS/NC letter no. 3499/Vande Bharat Train/COCR/NR dt. 30.03.2023.
- Compliance of all the conditions/stipulations laid down in RDSO Speed certificate and NCR's & NR's Joint Safety Certificate.
- Compliance of all the conditions/stipulations laid down in Railway Board Sanction Letter No. 2016/CEDO/SR/1 dtd 14.01.2016
- Compliance of all the conditions/stipulations laid down in Railway Board sanction letter no 2022/CEDO/SR/24/Vande Bharat-160 kmph dtd 22.09.2022 for sanction of 160 kmph speed Vande Bharat train.

 31.03.2023

- v. Observation of all permanent and temporary speed restrictions in force and /or those may be imposed from time to time on various accounts.
- vi. Railway shall ensure provision of sturdy fencing in section of standard design to prevent trespassing by human & cattle which poses a threat to trains to comply Para 202 of IRPWM 2020.
- vii. Level crossing gates should not be permitted as mandated under Para 202 of IRPWM 2020 for 160 kmph speed. In exceptional cases, relaxation should be taken but duly ensuring adequate safety measures for public safety including deployment of RPF and such gates should be eliminated on high priority. Hangers/frills may be provided on the booms of lifting barriers to prevent cases of 2 wheelers/ public passing underneath barrier of closed gate.
- viii. As the leading coach of Vande Bharat trainset are much lighter than the locomotive, hitting of any obstruction or even cattle run over may lead to serious accident at higher speeds. Therefore,
  - a. *Railway shall identify regular trespassing locations/cattle ingress and to avoid trespassing at these locations, suitable mechanism such as deployment of RPF personnel, regular patrolling, providing subway (for passing farmers along with cattle) etc. shall be put in place.*
  - b. *Periodic drives shall be conducted to check and prevent trespassing by RPF with concerned departments by way of counselling of residents of land adjoining railway track and by conducting surprise checks to act as deterrent.*
- ix. It should be ensured that run through line is not platform line for safety of occupants and rail passengers. In case of any non-compliance, RPF/station staff shall be exclusively deployed on such platform/s at the time of passing of above train for safety of public duly stipulating suitable precautionary measures.
- x. Supervisors/officers shall not undertake push trolley inspection and working of rail dolly on the face of 160 Kmph train. Suitable guidelines shall be issued by the Railway in this regard.
- xi. Zonal railway shall ensure suitable mechanism to ensure strict compliance of provisions of various manuals with respect to preventive measures for rail/weld failures. Rail grinding at regular interval shall be done on the entire route for better riding behavior and to avoid rail fracture/weld failures. Regular greasing of all the curves in the section shall be ensured.
- xii. Stretches of existing weak formations (where PSR/TSR is imposed), if any, shall be planned to be rehabilitated/strengthen first before permitting train operation. Special watch shall be kept during rainy season. PCE may impose SR, where ever required, considering condition of track/bridges to ensure safety of train at 160 kmph.
- xiii. Track geometry shall be ensured compliant to prescribed 160 kmph speed norms as per Para 522 of IRPWM 2020 and monitored once in a month by OMS, once in two months by Track Recording Car and once in Four months by Oscillograph car. Zonal Railway shall interpret the results of runs of OMS, TRC and Oscillograph car and ensure corrective & preventive action.

  
31.03.2023

- xiv. Instance of OHE tripping and sparks/flash over shall be documented and reported to RDSO every month.
- xv. Stipulated corridor blocks shall be regularly granted for ensuring track maintenance to required standards considering need of intensive track monitoring/maintenance at higher speed.
- xvi. Issues needing improvement in the design of the rolling stock shall be documented along with necessary details and shall be promptly reported to RDSO.
- xvii. Zonal railway shall comply with extant directives/guidelines of RDSO/Railway Board for 160 kmph train operation to ensure suitability of track/bridge/OHE/Signaling requirements for safe train operation at 160kmph.
- xviii. Earthing in the coach body and all panels shall be properly maintained.
- xix. All types of braking system shall be maintained and ensured to be in good working condition.
- xx. First train, shall be accompanied by SAG officers of Safety, Engineering, Mechanical, S&T, and TRD branch to confirm safe and satisfactory conditions for subject train for 160 kmph operation. They may impose SR if considered necessary for safety of train.

  
31.03.23  
(गौरव)

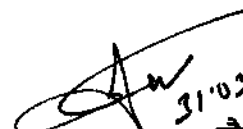
निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No. 011-23047598]  
e-mail address: dceg@rb.railnet.gov.in

No. 2023/CEDO/SR/17/VandeBharat/NDLS-AGC/160 kmph

New Delhi, Dated 31.03.2023

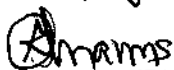
Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement no. Q.12011/16/2022-23-T.W./NCR, dated 30.03.2023 & Q.12011/16/2022-23-T.W. NR, dated 30.03.2023
2. Executive Director (Standards) Motive Power, RDSO, Lucknow
3. Executive Director (Standards) Carriage, RDSO, Lucknow
4. Executive Director Mechanical Coaching, Railway Board

  
31.03.2023  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

Issued through g mail



23/4/23 ADE(CN14)





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आज़ादी का  
अमृत महोत्सव

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

75  
Azadi Ka  
Amrit Mahotsav

No. 2021/CEDO/SD/IRSOD/O/ACS-a

New Delhi, dated 29.03.2023

The General Manager,  
Northeast Frontier Railway,  
Guwahati.

**Sub :** Changes in provisions of IRSOD for provision of Trolley refuge inside long tunnels

**Ref:** NFR's letter No. W/168/CON/Insp/CAO/C-I., dated 14.03.2023

1. Regarding above subject, it is to inform you that Railway Board has issued Indian Railways Schedule of Dimensions 1676mm Gauge(BG) Revised 2022 (available at <https://indianrailways.gov.in>).
2. Now, subject condonation is within the power of CRS, as the "Infringement to any provision of IRSOD Chapter I, II, III, V, VA & VB of Schedule can be condoned by the Commissioner, provided further that for infringement beyond the dimensions prescribed in Schedule II, if any, or whwewever specific mentions in Schedule I, sanction for condonation shall be obtained from Railway Board through Commissioner/Chief Commissioner of Railway Safety".
3. Railway is requested to take further necessary action accordingly.

अजीत कुमार झा  
(अजीत कुमार झा) 29.3.23

कार्यपालक निदेशक/सिविल इंजी.(जी)/रेलवे बोर्ड  
[Phone: 030-44803: Rly: 011-23383379:MTNL]  
e-mail address : edceg2022@gmail.com

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Compound of DRM/NER, Ashok Marg, Lucknow
2. Commissioner of Railway Safety, all Circles
3. PED/GS, Railway Board, New Delhi
4. PED/CE/P Railway Board, New Delhi

Issued through gmail  
29.3.23

**Northeast Frontier Railway**  
(Construction)

Office of the  
General Manager/Con  
Malgaon, Guwahati-781011.  
Dated: 14.03.2023

No.-W/168/CON/Insp/CAO/C-1

To,  
PED/ Gati Shakti,  
Railway Board,  
Rail Bhawan,  
New Delhi- 110001.

Sub: - Change in provisions of IRPWM and IRSOD for provision of Trolley refuge inside long tunnels.

Ref:- 1. CE/Con-5, N.F. Rly/MLG's L/No. WCon/CE/C-5/MIS(I) Dtd. 26.04.2018.  
2. GM/Con/NFR's letter no. 2021/CAO/C-II/Inspection, dtd. 28.02.2022 (Copy enclosed).

1. N.F. Railway is executing the work of 110.625 Km long new BG railway line on Northeast Railway between Jiribam and Imphal. The longest tunnel of the project is Tunnel-12 having 10.275 km length. Tunnel profile has been designed considering the provisions of IRSOD and international guidelines such as UIC-leaflet 779-9R, TSI-SRT-2014 for rail safety.

2. Provisions of IRPWM and IRSOD for trolley refuges in tunnels are as under:

Provisions of IRSOD	Provisions of IRPWM
Para 14 of Schedule-1 Chapter-1 of IRSOD - "Maximum distance apart of refuges in tunnels: 100m"	Para 646 (4) of IRPWM - "In the case of tunnels, the maximum distance apart of trolley refuges shall not exceed 100 meters."

3. N.F. Railway has requested vide letters under reference to Railway Board for condonation in respect of trolley refuges vis-à-vis provisions of IRPWM and IRSOD citing various reasons for not providing the trolley refuges in the tunnels.

4 Various reasons for not providing trolley refuges in the long tunnels are summarised as under:

- In terms of Para 804 (2) (a)(vi) of IRPWM, push trolley working in long tunnels will require power and traffic block. Therefore there is no need to offload the trolley and put it in the trolley refuse.
- From a safety perspective in tunnels, push trolley inspections are not recommended due to continuous steep gradients and curves.

- c) Maintenance efforts are substantially reduced with the provision of ballastless track in tunnels.
- d) Construction of trolley refuges at every 100 m is difficult and has severe cost and time implications as tunnels are being made through NATM which involves lining of heavily reinforced primary support system. Constructing trolley refuges at such close intervals in fragile geology requires heavy support systems and is considered not desirable.
- e) The continuity of permanent/ secondary lining with use of specialized movable gantries is also affected by the openings for trolley refuges.
- f) Provision of trolley refuse also affects continuity of waterproofing lining due to introduction of several joints.
- g) Long tunnels have parallel escape Tunnel with cross passage at every 500 m (maximum) distance for evacuation of passengers and for storage/ transportation of material to various locations. So anybody can reach to within 250 mt distance of any location of main tunnel without any traffic block.
- h) Electrical niches and fire niches are generally provided at every 200 m in the long tunnels.
5. In view of the above, it is requested to consider changing provisions of IRPWM and IRSOD for provision of Trolley refuses inside long tunnels so that for long tunnels trolley refuses need not be provided.

Chmn  
14/03/2023  
(K. K. Aggarwal)  
CAO/Con-UNFR  
N. F. Railway(Con)

D/A: As above.

✓  
Additional Members/Works for kind information.

सुनील शर्मा, भा.रे का मे  
महाप्रबंधक  
**SUNIL SHARMA, I.R.P.S.**  
GENERAL MANAGER



पूर्वोत्तर सीमा रेल (निर्माण)  
N. F. RAILWAY (CONSTRUCTION)  
मालीगाँव, गुवाहाटी - 781011  
MALIGAON, GUWAHATI-781011

No.: 2021/CAO/C-11/Inspection

Dated 28.02.2022

Shri Sanjeev Mittal

**Sub: Condonation for Trolley Refuges in tunnel No- 12 at km 105/650-115/920 between Tupul-Imphal Section of Jiribam- Tupul - Imphal New BG Railway line Project of N. F. Railway Construction.**

**Ref: CE/Con-S, N.F. Rly/MLG's L/No. W/Con/CE/C-5/MIS(11) Dtd. 26.04.2018.**

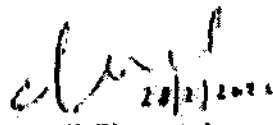
Board has been requested vide above referred letter to approve condonation for provision of trolley refuges in tunnel 12 in line with the dispensation given for provision of Trolley Refuges/Safety Refuges in tunnels and on Bridges & Embankments in USBRL Project vide Rly. Board's Letter No -2012W-2/NR/INL/15 Dated 12.11.2012.

Tunnel 12 in Tupul - Imphal Section of Jiribam Imphal project has very weak rock strata and a stretch of 2.0 Km is falling in soil strata. A parallel escape tunnel is being constructed at 50m from main tunnel with cross passages at every 500m apart. Tunnel is laid at a gradient of 1 in 70 where it is not possible to undertake push trolley inspections.

Almost 7.5 Km of tunnel has already been constructed without trolley refuges based on the dispensation given by Railway Board to USBRL project in the year 2012 and reference of this Ministry to Railway Board under reference. Keeping trolley refuge at every 100 at this stage is too cumbersome and technically challenging without serving any purpose as any trolley inspection in 10 Km long tunnel at a grade of 1 in 70 is possible only under traffic block. Hence trolley refuges would not serve any purpose and can be safely dispensed with.

In view of the above, it is requested that condonation from provision of Trolley Refuges required as per IRSOD/IRWPM, may be given for tunnel No- 12 at km 105/650 - 115/920 of Jiribam-Tupul-Imphal New BG Railway line Project of N F Railway Construction.

With regards.

  
(Sunil Sharma)

**Shri Sanjeev Mittal**  
Member (Infrastructure)  
Ministry of Railways  
Railway Board,  
New Delhi-110001

सूचक : सुसंका  
DOT  
0381-2570697

सूचक  
RLY  
23000

सूचक : सुसंका  
FAX: DOT  
0381-2570705

ई-मेल  
E-mail : gmc@nfrailnet.gov.in

2023/CEDO/SR/16/BOXNHL25T/22.9t/IR(100-75)/DFCCIL(100)

New Delhi, dated 29.03.2023

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

The General Manager,  
All Indian Railways

Managing Director,  
DFCCIL, 5th Floor, Supreme  
Court, Metro Station Building  
Complex, New Delhi - 110001

**Sub:** Introduction of rolling stock Broad Gauge Bogie open wagon type 'BOXNHL25T' at Operational Axle Load: **22.9t** to RDSO's drawing no. WD-15019-S-01 Alt.3 or latest up to a maximum speed of **100 kmph in empty and 75 kmph in loaded condition over Indian Railways, by Zonal Railways** and up to a maximum speed of **100 kmph in both empty and loaded conditions over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL**.

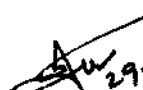
Ref: (i) RDSO letter no. MW/SPD/BG/BOXNHL25T, dated 17.02.2023

(ii) RDSO Final Speed Certificate (FSC) no. MW/SPD/BG/BOXNHL25T, dated 16.02.2023

(iii) CCRS letter no. Q.13011/01/2015-16-T.W., dated 15.03.2023

With reference to RDSO above application {ref.i}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of rolling stock Broad Gauge Bogie open wagon type 'BOXNHL25T' at **Operational Axle Load: 22.9t** to RDSO's drawing no. WD-15019-S-01 Alt.3 or latest, **up to a maximum speed of 100 kmph in empty and 75 kmph in loaded condition over Indian Railways, by Zonal Railways** and up to a maximum speed of **100 kmph in both empty and loaded conditions over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL** with the following stipulations :

- i. Observance of all conditions laid down in RDSO Final Speed Certificate (FSC) no. MW/SPD/BG/BOXNHL25T, dated 16.02.2023 for operation up to a maximum speed of 100 kmph in empty and 75 kmph in loaded conditions over Indian Railways, by Zonal Railways and up to a maximum speed of 100 kmph in both empty and loaded conditions over routes of **Eastern & Western Dedicated Freight Corridor** of DFCs by DFCCIL, shall be ensured on the Railway/DFCs while seeking the sanction of General Manager/MD-DFCCIL, as the case may be, for introduction of rolling stock on the Railway/DFCs. All the documents required for the sanction of General Manager/MD-DFCCIL as per CE (G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure.
- ii. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.

 29.03.23

- iii. List of routes identified for 22.9t axle load shall be submitted to the Commission before the start of actual operation of rolling stock.
- iv. The compliance of all the stipulations mentioned in Railway Board letter No. 2020/CE-II/TS/22.82 dated 20.08.2020 shall be ensured by the Railways.
- v. Periodic rail grinding at stipulated frequency should be carried out on routes by ensuring the availability of traffic blocks.
- vi. Railway/DFCCIL should ensure installation of way side lubricators as per provision of IR P. Way manual in a time bound manner.
- vii. **For Indian Railways, the WILD shall mandatorily be provided** before introduction of wagon at speed in loaded condition above 60 Km/h. For speed up to 60 Km/h the WILD may be progressively installed. 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track.
- viii. **For DFCCIL, adequate number of WILD and 'Weigh Bridges' shall be progressively installed and their working closely monitored.** 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track.
- ix. No overdue in track/rolling stock maintenance shall be permitted.
- x. Right powering of loaded trains running with 22.9t axle load wagons shall be ensured.
- xi. Only wagons with functional twin-pipe brake system shall be permitted to run at 75 km/h and above

*29.03.23*  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

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

2023/CEDO/SR/16/BOXNHL25T/22.9t/IR(100-75)/DFCCIL(100) New Delhi, dated 29.03.2023

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.13011/01/2015-16-T.W., dated 15.03.2023
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(Fr), Railway Board

*29.03.23*  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

Issued through mail  
29/3/23  
ADE(CIVIL)



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



No. 2022/CEDO/SR/PC-6/0

New Delhi, Dated 24.03.2023

Director General  
RDSO

General Managers  
All Zonal Railways

Chief Commissioner of Railway  
Safety DRM Office Campus,  
Lucknow.

**Sub: One Time Condonation of for three different profiles of Rolling Stock**

Ref: (i) ED committee's Report on Policy Circular-6 and Rule 28 & 28A of The Railways Opening for Public Carriage of Passengers Rules, dated 26.09.2022

(ii) RB's letter No. letter no. 2001/CEDO/SR/14, dated 10.07.2001

(iii) RB's letter No. 2011/CEDO/SR/16/O, dated 26.11.2012

1. ED committee report on simplification of all the business processes involved in introduction of Rolling Stock and trains at different speeds has been accepted by Board (MTRS, MO&BD, MI) and for process simplification of condonation of Rolling Stock, Board (MTRS, MO&BD, MI) has decided the following:

*"RDSO shall process one time sanction of condonation ,through CCRS, by Railway Board, for the three different profiles(like MMD) for taking care of different type of dimensions of Rolling Stock i.e (i)Rolling stock which will operate on normal IR routes on Pan India basis (maximum height- 4318mm) (ii) Rolling stock which will operate on DSDC routes (maximum height- 4877mm) (iii) Rolling stock which will operate on Double Stack Container routes (maximum height- 6827mm). Rolling stock within this profile will not require sanction of condonation of Railway Board again".*

2. This will superced the Railway Board stipulations given in letter no. 2001/CEDO/SR/14 dated 10.07.2001 and para no. 9 (4) of ED committee report circulated vide letter No. 2011/CEDO/SR/16/O dated 26.11.2012.

अजीत कुमार झा  
(अजीत कुमार झा) 24.3.23

कार्यपालक निदेशक/सिविल इंजी.(जी)/रेलवे बोर्ड

[Phone: 030-44803: Rly: 011-23383379:MTNL]

e-mail address : edceg2022@gmail.com

Copy to:

1. Commissioners of Railway Safety, All Circles, for information and necessary action
2. Concerned PSO for kind information of Chairman & Chief Executive Officer(CEO), Member (Infrastructure), Member (Traction & Rolling Stock), Member (Finance), Railway Board
3. Adv./MR, EDPG/MR, OSD/MR, OSR(Co-ord)/MR

Issued through g mail

(Signature)

27/3/23

ADP(CIVIL)

No. 2023/CEDO/SR/01/BOBSNS/IR(100/75)-DFCCIL(100)-22.9t

New Delhi, dated 24.03.2023

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

The General Manager,  
All Indian Railways

Managing Director,  
DFCCIL,  
5th Floor, Supreme Court,  
Metro Station Building Complex,  
New Delhi - 110001

**Sub:** Introduction of Broad Gauge Bogie Hopper wagon type 'BOBSNS' [Maximum Axle Load: 22.9t] to RDSO's Drawing No. WD-18076-S-02 Alt.4 up to a maximum speed of **100 kmph in empty and 75 kmph in loaded condition over Indian Railways, by Zonal Railways and 100 kmph in both empty and loaded condition over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL**


Ref: (i) CCRS office letter no. Q.12011/24/2021-22-T.W., dated 30.12.2022

(ii) RDSO's letter no. MW/BOBS, dated 07.11.2022

(iii) RDSO's Final Speed Certificate (FSC) no. MW/BOBS, dated 31.10.2022

With reference to RDSO above application {ref.ii}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of Broad Gauge Bogie Hopper wagon type 'BOBSNS' [Maximum Axle Load: 22.9t] to RDSO's Drawing No. WD-18076-S-02 Alt.4, up to a maximum speed up of 100 kmph in empty and 75 kmph in loaded condition over Indian Railways, by Zonal Railways and 100 kmph in empty and loaded both condition over routes of **Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL with the following stipulations :**

- Observance of all conditions laid down in RDSO's Final Speed Certificate (FSC) no. MW/BOBS, dated 31.10.2022 for operation up to a maximum speed of 100 kmph in empty and 75 kmph in loaded condition over Indian Railways and 100 kmph in both empty and loaded condition over routes of **Eastern & Western Dedicated Freight Corridor of DFCs**, shall be ensured on the Railway/DFCs while seeking the sanction of General Manager/MD-DFCCIL, as the case may be, for introduction of rolling stock on the Railway/DFCs. All the documents required for the sanction of General Manager/MD-DFCCIL as per CE (G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure
- Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
- List of routes identified for 22.9t axle load shall be submitted to the Commission before the start of actual operation of rolling stock.
- The compliance of all the stipulations mentioned in Railway Board letter No. 2020/CE-II/TS/22.82 dated 20.08.2020 shall be ensured by the Railways.
- Periodic rail grinding at stipulated frequency should be carried out on routes by ensuring the availability of traffic blocks. Railway should ensure adequate/stipulated block for Rail Grinding & other maintenance inputs.

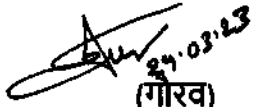
 24.03.23



- vi. Railway/DFCCIL should ensure installation of way side lubricators as per provision of IR P.Way manual in a time bound manner.
- vii. For Indian Railways, the WILD shall mandatorily be provided before introduction of wagon in loaded condition at speed above 60 Kmph. For speed up to 60 Kmph the WILD may be progressively installed. 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track.
- viii. For DFCCIL, adequate number of WILD and 'Weigh Bridges' shall be progressively installed and their working closely monitored. 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track.
- ix. No overdue in track/rolling stock maintenance shall be permitted.
- x. Right powering of loaded trains running with 22.9t (CC+8+2) axle load wagons shall be ensured.
- xi. Only wagons with functional twin-pipe brake system shall be permitted to run at 75 kmph and above.

**For Indian Railways:**

- xii. USTD testing of rail would be carried out at a higher frequency corresponding to 6 GMT of traffic (present stipulation corresponds to 8 GMT).
- xiii. As per Clause 3.1.1.2(a) of RDSO's Final Speed Certificate no. MW/SPD/BG/BCNHL, dated 19.04.2022, for operation in Loaded condition up to 60 kmph for minimum standard of 52kg (90UTS) rail, De-stressing temperature for LWR in Temperature Zone IV would be reduced by 50 C (Tm to Tm+5).
- xiv. Further, as per Clause 3.1.1.2(b) for operation in Loaded condition for speed above 60 kmph and upto 75 kmph for minimum standard of 60kg (90UTS) rail, for temperature Zone IV as per IRPWM, de-stressing of LWR at reduced temperature (Tm to Tm+5) shall be completed before onset of winter season. If De-stressing in Zone IV is not done at lower temperature, loaded wagon will run at 60 kmph during the winter period of 1 st November to 28th /29th of February of next calendar year.

  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

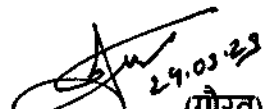
[Rly No. 030-47598, MTNL No. 011-23047598]

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

**No. 2023/CEDO/SR/01/BOBSNS/IR(100/75)-DFCCIL(100)-22.9t New Delhi, dated 24.03.2023**

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/24/2021-22-T.W., dated 30.12.2022
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(Fr), Railway Board

  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

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24/3/23  
ADE (CIVIL)



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



No. 2022-CEDO-SR-36-8-CAR-MEMU-110Kmph(2)

New Delhi, Dated 23.03.2023

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

**Sub:** Future Improvement of 8-car rake formation MEMU stock {Transportation code : MEMU/DMC/IGBT/US, MEMU/TC1/IGBT/US, MEMU/TC2/IGBT/US with main compressor and Layout Drawing No. MEMU/DMC/3PH/US-9-0-001, MEMU/TC7-9-0-001, MEMU/TC8-9-0-001 for Driving Motor Coach (DMC:787), Trailer Coach (TC7: 789), Trailer Coach (TC8:799) with main compressor respectively} fitted with underslung 3-phase IGBT

- Ref:(i) Railway Board's letter no. 2022-CEDO-SR-36-8-CAR-MEMU-110Kmp(1) dated 23.03.2023
- (ii) CCRS office letter no. Q.12011/26/2019-20-T.W, dated 30.11.2022
- (iii) RDSO's letter no. MC/MEMU/3-Phase/US/ICF, dated 13.04.2022 & 30.12.2022
- (iv) RDSO's Final Speed Certificate (FSC) no. MC/MEMU/3-Phase/US/ICF, dated 20.12.2019 and its Amendment no. 1 dated 29.03.2022

With reference to RDSO above application {ref.iii}, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board has been communicated for introduction of 8-car rake formation MEMU stock {Transportation code : MEMU/DMC/IGBT/US, MEMU/TC1/IGBT/US, MEMU/TC2/IGBT/US with main compressor and Layout Drawing No. MEMU/DMC/3PH/US-9-0-001, MEMU/TC7-9-0-001, MEMU/TC8-9-0-001 for Driving Motor Coach (DMC:787), Trailer Coach (TC7: 789), Trailer Coach (TC8:799) with main compressor respectively} fitted with underslung 3-phase IGBT based propulsion system and having pneumatic suspension in secondary stage, up to a maximum operational speed of 110 kmph on track maintained as per Para 522 of IRPWM June 2020 over Indian Railway, by Zonal Railways 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:

- Aerosol-based automatic fire detection and suppression system may be provided in all on-board electrical panels and provision of Aerosol-based automatic fire detection suppression system in underslung electrical components may be explored in future rakes and implemented, if possible.

*[Signature]* 23.03.23

- ii. Available gap between fall plate covers/chequered plates provided between two coaches may cause entrapment of passenger's foot resulting in injury. This gap may be reduced to the extent possible to avoid any such untoward incident.
- iii. Voice logger may be provided for Emergency Talk-Back Unit (ETBU) and for communication between driver and guard with provision of voice recording for at least one hour duration.
- iv. Provision of Volume Control in PA/PIS should be provided from both the cabs.
- v. Vigilance Control Device (VCD) has not been provided in the driver's cab. It may be provided in the future rakes and retrofitted in the existing ones to enhance safety in case of any untoward incident.

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

*[Signature]*  
23.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No. 011-23047598]  
e-mail address: dceg@rb.railnet.gov.in

No. 2022-CEDO-SR-36-8-CAR-MEMU-110Kmph(2)

New Delhi, Dated 23.03.2023

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/26/2019-20-T.W, dated 30.11.2022
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

*[Signature]*  
23.03.23  
(गौरव)

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Issued through mail

*[Signature]*

24/3/23

ADE(CIVIL)



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



No. 2022-CEDO-SR-36-8-CAR-MEMU-110Kmph(1)

New Delhi, Dated 23.03.2023

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

**The General Manager,**  
**All Indian Railways**

**Sub:** Introduction of 8-car rake formation MEMU stock {**Transportation code:** MEMU/DMC/IGBT/US, MEMU/TC1/IGBT/US, MEMU/TC2/IGBT/US with main compressor and **Layout Drawing No.** MEMU/DMC/3PH/US-9-0-001, MEMU/TC7-9-0-001, MEMU/TC8-9-0-001 for Driving Motor Coach (DMC:787), Trailer Coach (TC7: 789), Trailer Coach (TC8:799) with main compressor respectively], fitted with underslung 3-phase IGBT based propulsion system and having pneumatic suspension in secondary stage, up to a maximum operational speed of **110 kmph** on track maintained as per Para 522 of IRPWM June 2020 over **Indian Railway**, by Zonal Railways

**Ref:** (i) CCRS office letter no. Q.12011/26/2019-20-T.W, dated 30.11.2022

(ii) RDSO's letter no. MC/MEMU/3-Phase/US/ICF, dated 13.04.2022 & 30.12.2022

(iii) RDSO's Final Speed Certificate (FSC) no. MC/MEMU/3-Phase/US/ICF, dated 20.12.2019 and its Amendment no. 1 dated 29.03.2022

With reference to RDSO above application {ref.ii}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of 8-car rake formation MEMU stock {**Transportation code** : MEMU/DMC/IGBT/US, MEMU/TC1/IGBT/US, MEMU/TC2/IGBT/US with main compressor and **Layout Drawing No.** MEMU/DMC/3PH/US-9-0-001, MEMU/TC7-9-0-001, MEMU/TC8-9-0-001 for Driving Motor Coach (DMC:787), Trailer Coach (TC7: 789), Trailer Coach (TC8:799) with main compressor respectively}, fitted with underslung 3-phase IGBT based propulsion system and having pneumatic suspension in secondary stage, up to a maximum operational speed of **110 kmph** on track maintained as per Para 522 of IRPWM June 2020 over **Indian Railway**, by Zonal Railways with the following stipulations :

- Observance of all conditions laid down in RDSO's Final Speed Certificate (FSC) no. MC/MEMU/3-Phase/US/ICF, dated 20.12.2019 and its Amendment no. 1 dated 29.03.2022 for operation up to a maximum speed of 110 kmph, shall be ensured on the **Railway** while seeking the sanction of General Manager, for introduction of rolling stock on the **Railway**. All

*Av*  
23.03.23

- the documents required for the sanction of General Manager as per CE(G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure.
- ii. Observance of all permanent and temporary speed restrictions already in force and /or those that may be imposed from time to time on various accounts.
  - iii. As per Para 7.8.9 of IRSEM 2021, important minimum signalling features shall be ensured during train running
  - iv. As per Para 6.1.2 of Revised Policy circular-6 dated 31.10.2018, trains will be introduced in the sections at the speeds as per provision of General rules 1976-Rule 4.08 1(a).
  - v. Railway shall comply all the stipulations mentioned in the EIG (Northern Railway) letter no. 232-Elect/EMU/US-MEMU dated 08.02.2021 for 8-car rake formation MEMU rake
  - vi. Earthing in the coach body & all the panels shall always be properly maintained.
  - vii. Two nos. of fire extinguishers should be provided in each trailer coach.
  - viii. Training must be imparted to crew on following aspects
    - a) To uncouple the semi-permanent Schaku coupler in about 15 min in case of emergency. Necessary tools required for this operation must be made a part of driver/guard tool kit.
    - b) Sequence of operations to be performed before accessing HT equipments.
    - c) Action to be taken in case of Passenger Alarm chain pulling as per extant norms keeping in view the emergencies like fire etc. in which immediate action is required for passenger safety.
  - ix. Detailed Maintenance Manual having coloured photograph should be made available to maintenance staff.

*[Signature]* 23.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

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

**No. 2022-CEDO-SR-36-8-CAR-MEMU-110Kmph(1)**

**New Delhi, Dated 23.03.2023**

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/26/2019-20-T.W, dated 30.11.2022
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

*[Signature]* 23.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

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*[Signature]*  
24/3/23  
ADE (CNIL)



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



No. 2023/CEDO/SR/09/BOBRNHSM1/ IR 80-65-22.9t

New Delhi, dated 22.03.2023

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

The General Manager,  
All Indian Railways

**Sub:** Introduction of Broad Gauge Bogie Open Rapid Discharge Hopper wagon type 'BOBRNHSM1' [Maximum Axle Load:22.9t] to RDSO's Drawing No. WD-91071-S-01 Alt.18, up to a maximum speed of **65 kmph in loaded and empty both** conditions over Indian Railways, by Zonal Railways

Ref:(i) CCRS office letter no. Q.12011/23/2022-23-T.W., dated 01.02.2023

(ii) CCRS office letter no. Q.12011/26/2022-23-T.W., dated 20.03.2023

(iii) RDSO's letter no. MW/BOBRN, dated 16.12.2022

(iv) RDSO's Provisional Speed Certificate (PSC) no. MW/BOBRN, dated 16.12.2022 and its amendment no. 1 dated 23.01.2023

With reference to RDSO above application dated 16.12.2022 {ref.iii}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of Broad Gauge Bogie Open Rapid Discharge Hopper wagon type 'BOBRNHSM1' [Maximum Axle Load:22.9t] to RDSO's Drawing No. WD-91071-S-01 Alt.18 up to a maximum speed of **65 kmph in loaded and empty both** conditions over Indian Railways, by Zonal Railways, with the following stipulations:

- i. Observance of all conditions laid down in RDSO's Provisional Speed Certificate (PSC) no. MW/BOBRN, dated 16.12.2022 and its amendment no. 1 dated 23.01.2023 for operation up to a maximum speed of **65 kmph in loaded and empty both** conditions shall be ensured on the Railway while seeking the sanction of General Manager, for introduction of rolling stock on the Railway. All the documents required for the sanction of General Manager as per CE (G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure
- ii. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
- iii. List of routes identified for 22.9t axle load shall be submitted to the Commission before the start of actual operation of rolling stock.

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22.03.23

- iv. The compliance of all the stipulations mentioned in Railway Board letter No. 2020/CE-II/TS/22.82 dated 20.08.2020 shall be ensured by the Railways.
- v. Periodic rail grinding at stipulated frequency should be carried out on routes by ensuring the availability of traffic blocks. Railway should ensure adequate/stipulated block for Rail Grinding & other maintenance inputs.
- vi. Railway should ensure installation of way side lubricators as per provision of IR P.Way manual in a time bound manner.
- vii. **The WILD shall mandatorily be provided** before introduction of wagon at speed above 60 Kmph. For speed up to 60 Kmph the WILD may be progressively installed. 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track.
- viii. No overdue in track/rolling stock maintenance shall be permitted.
- ix. Right powering of loaded trains running with 22.9t (CC+8+2) axle load wagons shall be ensured.
- x. Only wagons with functional twin-pipe brake system shall be permitted to run at 75 kmph and above.

*(Signature)*  
22.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No. 011-23047598]  
e-mail address: dceg@rb.railnet.gov.in

No. 2023/CEDO/SR/09/BOBRNHSM1/ IR 80-65-22.9t

New Delhi, dated 22.03.2023

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/23/2022-23-T.W., dated 01.02.2023 & CCRS office letter no. Q.12011/26/2022-23-T.W., dated 20.03.2023
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(Fr), Railway Board

*(Signature)*  
22.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

Issued through gmail  
*(Signature)*  
23/3/23 ADE(CIVIL)



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



No. 2023/CEDO/SR/12/BOST/IR 80-50-22.9t

New Delhi, Dated 20.03.2023

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

**The General Manager,**  
**All Indian Railways**

**Sub:** Introduction of Broad Gauge Bogie Open wagon type 'BOST' [Maximum Axle Load: 22.9t] to RDSO's Drawing No. WD-00012-S-01 Alt.11 up to a maximum speed of **80 kmph in empty and 50 kmph in loaded** condition over Indian Railways, by Zonal Railways

Ref: (i) CCRS office letter no. Q.12011/25/2022-23-T.W., dated 01.02.2023  
(ii) RDSO's letter no. MW/BOST, dated 16.12.2022  
(iii) RDSO's Provisional Speed Certificate (PSC) no. MW/SPD/BG/BOST, dated 16.12.2022 and its amendment no. 1 dated 19.01.2023

With reference to RDSO above application dated 16.12.2022 {ref.ii}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of Broad Gauge Bogie Open wagon type 'BOST' [Maximum Axle Load: 22.9t] to RDSO's Drawing No. WD-00012-S-01 Alt.11 up to a maximum speed of **80 kmph in empty and 50 kmph in loaded** condition over Indian Railways, by Zonal Railways with the following stipulations :

- i. Observance of all conditions laid down in RDSO's Provisional Speed Certificate (PSC) no. MW/SPD/BG/BOST, dated 16.12.2022 and its amendment no. 1 dated 19.01.2023 for operation up to a maximum speed of **80 kmph in empty and 50 kmph in loaded** condition over Indian Railways, by Zonal Railways, shall be ensured on the Railway while seeking the sanction of General Manager, for introduction of rolling stock on the Railway. All the documents required for the sanction of General Manager as per CE (G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure
- ii. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
- iii. List of routes identified for 22.9t axle load shall be submitted to the Commission before the start of actual operation of rolling stock.

*[Signature]* 20.03.23



- iv. The compliance of all the stipulations mentioned in Railway Board letter no. 2020/CE-II/TS/22.82 dated 20.08.2020 shall be ensured by the Railways.
- v. Periodic rail grinding at stipulated frequency should be carried out on routes by ensuring the availability of traffic blocks. Railway should ensure adequate/stipulated block for Rail Grinding & other maintenance inputs.
- vi. Railway should ensure installation of way side lubricators as per provision of IR P.Way manual in a time bound manner.
- vii. **The WILD shall mandatorily be provided** before introduction of wagon at speed above 60 Kmph. For speed up to 60 Kmph the WILD may be progressively installed. 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track.
- viii. No overdue in track/rolling stock maintenance shall be permitted.
- ix. Right powering of loaded trains running with 22.9t (CC+8+2) axle load wagons shall be ensured.
- x. Only wagons with functional twin-pipe brake system shall be permitted to run at 75 kmph and above.
- xi. USFD testing of rail would be carried out at a higher frequency corresponding to 6 GMT of traffic (present stipulation corresponds to 8 GMT).

*[Signature]* 20.02.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

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

No. 2023/CEDO/SR/12/BOST/IR 80-50-22.9t

New Delhi, Dated 20.03.2023

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/25/2022-23-T.W., dated 01.02.2023
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(Fr), Railway Board

*[Signature]* 20.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

Issued through g mail

*[Signature]*

22/3/23

ADE(CVIL)

No. 2023/CEDO/SR/11/BOSTHSM1/IR 80-60-22.9t

New Delhi, Dated 20.03.2023

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

The General Manager,  
All Indian Railways

**Sub:** Introduction of Broad Gauge Bogie Open wagon type 'BOSTHSM1' [Maximum Axle Load: 22.9t] to RDSO's Drawing No. WD-06032-S-02 Alt.1 up to a maximum speed of **80 kmph in empty and 60 kmph in loaded** condition over Indian Railways, by Zonal Railways


**Ref:** (i) CCRS office letter no. Q.12011/24/2022-23-T.W., dated 01.02.2023

(ii) RDSO's letter no. MW/BOSTHSM2, dated 16.12.2022

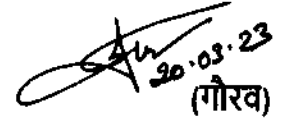
(iii) RDSO's Provisional Speed Certificate (PSC) no. MW/SPD/BG/BOSTHSM1, dated 16.12.2022 and its amendment no. 1 dated 25.01.2023

With reference to RDSO above application dated 16.12.2022 {ref.ii}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of Broad Gauge Bogie Open wagon type 'BOSTHSM1' [Maximum Axle Load: 22.9t] to RDSO's Drawing No. WD-06032-S-02 Alt.1 up to a maximum speed of **80 kmph in empty and 60 kmph in loaded** condition over Indian Railways, by Zonal Railways, by Zonal Railways with the following stipulations:

- i. Observance of all conditions laid down in RDSO's Provisional Speed Certificate (PSC) no. MW/SPD/BG/BOSTHSM1, dated 16.12.2022 and its amendment no. 1 dated 25.01.2023 for operation up to a maximum speed of **80 kmph in empty and 60 kmph in loaded** condition over Indian Railways, by Zonal Railways, shall be ensured on the Railway while seeking the sanction of General Manager, for introduction of rolling stock on the Railway. All the documents required for the sanction of General Manager as per CE (G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure.
- ii. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
- iii. List of routes identified for 22.9t axle load shall be submitted to the Commission before the start of actual operation of rolling stock.

  
20.03.23

- iv. The compliance of all the stipulations mentioned in Railway Board letter No. 20/CE-II/TS/22.82 dated 20.08.2020 shall be ensured by the Railways.
- v. Periodic rail grinding at stipulated frequency should be carried out on routes by ensuring the availability of traffic blocks. Railway should ensure adequate/stipulated block for Rail Grinding & other maintenance inputs.
- vi. Railway should ensure installation of way side lubricators as per provision of IR P. Way manual in a time bound manner.
- vii. **The WILD shall mandatorily be provided** before introduction of wagon at speed above 60 Kmph. For speed up to 60 Kmph the WILD may be progressively installed. 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track.
- viii. No overdue in track/rolling stock maintenance shall be permitted.
- ix. Right powering of loaded trains running with 22.9t (CC+8+2) axle load wagons shall be ensured.
- x. Only wagons with functional twin-pipe brake system shall be permitted to run at 75 kmph and above.
- xi. USFD testing of rail would be carried out at a higher frequency corresponding to 6 GMT of traffic (present stipulation corresponds to 8 GMT).

 20.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

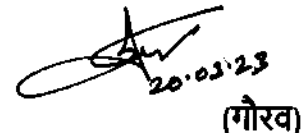
e-mail address: dceg@rb.railnet.gov.in

No. 2023/CEDO/SR/11/BOSTHSM1/IR 80-60-22.9t

New Delhi, Dated 20.03.2023

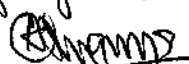
Copy forwarded for information to:

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/24/2022-23-T.W., dated 01.02.2023
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(Fr), Railway Board

 20.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

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22/3/23  
AD EEC (IV/L)



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



99

No. 2023/CEDO/SD/01/Boddavara-80.41

New Delhi, Dated 20.03.2023

The General Manager  
East Coast Railway,  
Bhubaneswar

**Sub:- Boddavara Station yard** - Condonation to the infringement of steep gradient w.r.t. Para 2 Note (d) (i), Chapter-II, Schedule -I of IRSOD for BG 2022 (ACS-2) for grade of 1 in 80.41 from Ch: 762m (KTV end) to Ch: 619m (KTV end) for slip siding for a length of 143m in Boddavara Station yard which is steeper than 1 in 100, in connection with proposed Doubling between Kottavalasa-Koraput on Kottavalasa -Kirandul line of Waltair Division of East Coast Railway.

Ref: (i) CCRS's letter No. Q-11019/01/2022-23-T.W., dated 09.03.2023  
(ii) ECoR's letter No. W1/PLG/CRS/Cond/BDVR Yard/1559, dated 28.02.2023

With reference to the above referred application; sent through the Chief Commissioner of Railway safety, Lucknow; the sanction of the Ministry of Railways, Railway Board is hereby communicated for condonation to the infringement of steep gradient w.r.t. Para 2 Note (d) (i), Chapter-II, Schedule -I of IRSOD for BG 2022 (ACS2) for grade of 1 in 80.41 from Ch: 762m (KTV end) to Ch: 619m (KTV end) for slip siding for a length of 143m in Boddavara Station yard which is steeper than 1 in 100, in connection with proposed Doubling between Kottavalasa-Koraput on Kottavalasa -Kirandul line of Waltair Division of East Coast Railway, as shown in Form-XVII and drawings, enclosed with above mentioned application.

The above condonation is subject to the stipulations as under:

- The shunt stop Signal no.12 should be relocated from Ch. 663.4m on 1 in 80.41 grade to Ch.610m on 1 in 270 grade to avoid shunting on steeper gradient of 1 in 80.41 .
- Procedure for reception and dispatch as per GR/SR of Zonal Railway at stations having grades steeper than 1 in 100 will be followed.
- As far as possible, stabling of vehicles/ load/ train should be avoided particularly on running lines. No train or vehicle shall be stabled on Non-isolated line without a live engine attached to it with prescribed brake power.
- Locomotive attachment/detachment or reversal MUST be avoided at this station. Locomotives attachment/detachment if unavoidable, shall be done after securing at least 20 vehicles in Goods train & 5 coaches in Passenger train, providing adequate number of skids (to be decided by railway) and ensuring no train is in block section towards falling gradient.
- Yard gradient shall be jointly measured every six months by Engg. and Safety officers and record shall be kept with traceability.

*Signature*  
20-03-23

- vi. In terms of GR 5.23 the SM shall personally ensure that vehicles standing at station are properly secured in accordance with special instructions to prevent vehicles from rolling down.
- vii. Following actions shall be taken by LP before leaving in case of load/train is stabled on line having isolation with locomotive attached or light engine(s) is/are shut down or stabled.
  - a. Application of both SA-9 and A-9 brakes,
  - b. Application of Hand brakes and parking brakes.
  - c. Securing the Loco with wooden wedges provided on loco.
- viii. Minimum brake power as per guideline on Brake Power for freight operation issued by ECOR should be ensured. Load table for section should care about right powering of goods train to haul the load without wheel-slipping, if the train stops at the Home Signal and to ensure adequate brake powering of loco (Single/MU) under all weather conditions to prevent roll down in case of air leakage/ pressure loss.
- ix. No shunting shall be allowed at both ends unless sufficient number of brakes are put on and all precautions are taken to prevent vehicles getting out of control and a live locomotive is attached towards the falling side of the gradient as specified in Para 5.20 of G&SR.
- x. Provision of Catch siding on Shivalingapuram end and Slip siding on Kottavalsa end shall be ensured as per GAD no 4305/20 enclosed with proposal and these sidings shall meet safety requirements of all lines at station. The track profile in yard/approaches as well as location & adequacy of lengths of Slip siding/catch siding shall be approved by CTE of zonal railway in consultation with PCSO.
- xi. CE/C/VSKP/KK/DOUB/YD/2019, the yard gradient shall be prominently displayed in yard diagram available in SM's room/Operating Panel/VDU.
- xii. SOD infringement details shall be maintained in a SOD infringement register maintained by Engineering department.
- xiii. Railway shall issue 'Spl safety precautions' in line with GR provisions to ensure that safety of train operation is not compromised under any circumstances at station having steep gradient.

*[Signature]*  
20.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No. 011-23047598]  
e-mail address: dceg@rb.railnet.gov.in

No. 2023/CEDO/SD/01/Boddavara-80.41

New Delhi, Dated 20.03.2023

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q-11019/01/2022-23-T.W., dated 09.03.2023
2. The Commissioner to Railway Safety, South Eastern Circle, Kolkata, w.r.t. his letter no. dated 02.03.2023

*[Signature]*  
20.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

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22/3/23  
ADE (CIVIL)

No. 2023/CEDO/SD/RS/05/ H.R.Panto-Vande Bharat

New Delhi, dated 20/03/2023

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

**Sub :** Condonation of infringements w.r.t. Chapter-IV(A), Schedule-I of IRSOD (BG) Revised, 2022 by **maximum height** (4323mm) for high rise pantograph of Trailer Coaches of Trainset with new design propulsion system & bogies (Vande Bharat Train Set) to ICF Drawing No. ICF/SK3-9-0-406

Ref: (i) CCRS's office letter no. Q.14011/01/2022-23-T.W. dated 15.03.2023

(ii) RDSO's letter no. CT/DEL/Trainset, dated 14.03.2023

With reference to RDSO above applications {ref.(ii)} dated 14.03.2023, sent through the Chief Commissioner of Railway Safety, Lucknow; the sanction of Ministry of Railways, Railway Board is hereby communicated for condonation of infringements w.r.t. Chapter-IV(A), Schedule-I of IRSOD (BG) Revised 2022 by **maximum height** (4323mm) for high rise pantograph of Trailer Coaches of Trainset with new design propulsion system & bogies (Vande Bharat Train Set) to ICF Drawing No. ICF/SK3-9-0-406, as shown in detail enclosed with above mentioned application, detail of infringements is as under:

**Clause 30–** Maximum height above rail level for width of 1015mm on either side of the centre of unloaded vehicles by 58 mm at centre above height of 4265mm decreasing to 0 mm at 735 mm from centre line on each side for high rise pantograph in lockdown condition (i.e. 4323 mm at center and varies to 4265mm instead of 4265mm)

Further, above sanction of condonation is subject to the following stipulations:

*"In case of fixed structures having dimension as per Schedule –II of IRSOD, the operation of proposed rolling stock shall be as per extant rules of ODC."*

*[Signature]* 20.03.23  
(गौरव)

निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No.-011-23047598]  
e-mail address :dceg@rb.railnet.gov.in

No. 2023/CEDO/SD/RS/05/ H.R.Panto-Vande Bharat

New Delhi, dated 20/03/2023

Copy forwarded for information to:

1. The Chief Commissioner of Railway Safety, Compound of DRM/NER, Ashok Marg, Lucknow-226001 w.r.t. his endorsement No. Q.14011/01/2022-23-T.W. dated 15.03.2023
2. Commissioner of Railway Safety, All Circles
3. ED Standards (Track-1), RDSO, Manak Nagar, Lucknow
4. OSD/EE(G), Railway Board, New Delhi

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*[Signature]*  
21/3/23  
ADE(CIVIL)

*[Signature]* 20.03.23  
(गौरव)

निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड



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



No. 2023/CEDO/SR/10/BOBRNM1/ IR 80-65-22.9t

New Delhi, dated 20.03.2023

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

**The General Manager,**  
**All Indian Railways**

**Sub: Introduction of Broad Gauge Bogie Open Rapid Discharge Hopper wagon type 'BOBRNM1' [Maximum Axle Load: 22.9t] to RDSO's Drawing No. WD-91071-S-01 Alt.18 up to a maximum speed of 80 kmph in empty and 65 kmph in loaded condition over Indian Railways, by Zonal Railways**

Ref: (i) CCRS office letter no. Q.12011/23/2022-23-T.W., dated 01.02.2023

(ii) RDSO's letter no. MW/BOBRN, dated 16.12.2022

(iii) RDSO's Provisional Speed Certificate (PSC) no. MW/BOBRN, dated 16.12.2022 and its amendment no. 1 dated 23.01.2023

With reference to RDSO above application dated 16.12.2022 {ref.ii}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of **Broad Gauge Bogie Open Rapid Discharge Hopper wagon type 'BOBRNM1' [Maximum Axle Load:22.9t] to RDSO's Drawing No. WD-91071-S-01 Alt.18 up to a maximum speed of 80 kmph in empty and 65 kmph in loaded condition over Indian Railways, by Zonal Railways with the following stipulations:**

- i. Observance of all conditions laid down in RDSO's Provisional Speed Certificate (PSC) no. MW/BOBRN, dated 16.12.2022 and its amendment no. 1 dated 23.01.2023 for operation up to a maximum speed of **80 kmph in empty and 65 kmph in loaded** condition over Indian Railways, shall be ensured on the Railway while seeking the sanction of General Manager, for introduction of rolling stock on the Railway. All the documents required for the sanction of General Manager as per CE (G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure
- ii. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
- iii. List of routes identified for 22.9t axle load shall be submitted to the Commission before the start of actual operation of rolling stock.
- iv. The compliance of all the stipulations mentioned in Railway Board letter No. 2020/CE-II/TS/22.82 dated 20.08.2020 shall be ensured by the Railways.

*20.03.23*

- v. Periodic rail grinding at stipulated frequency should be carried out on routes by ensuring the availability of traffic blocks. Railway should ensure adequate/stipulated block for Rail Grinding & other maintenance inputs.
- vi. Railway should ensure installation of way side lubricators as per provision of IR P.Way manual in a time bound manner.
- vii. **The WILD shall mandatorily be provided** before introduction of wagon at speed above 60 Kmph. For speed up to 60 Kmph the WILD may be progressively installed. 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track.
- viii. No overdue in track/rolling stock maintenance shall be permitted.
- ix. Right powering of loaded trains running with 22.9t (CC+8+2) axle load wagons shall be ensured.
- x. Only wagons with functional twin-pipe brake system shall be permitted to run at 75 kmph and above.

*(Signature)*  
20.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

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

No. 2023/CEDO/SR/10/BOBRNM1/ IR 80-65-22.9t

New Delhi, dated 20.03.2023

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/23/2022-23-T.W., dated 01.02.2023
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(Fr), Railway Board

*(Signature)*  
20.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

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21/3/23  
ADE(CIVIL)





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



No. 2023/CEDO/SR/04(1)/PCT-UNIMAT 08-4X4 4S-IR-DFCCIL(2)

New Delhi, dated 17.03.2023


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

**Sub:** Future Improvement of **Points & Crossing Tamping Machine (PCT)**, Model-**UNIMAT 08-4X4/4S** supplied by M/s Plasser & Theurer to manufacturer General Arrangement Drawing No. UD00.1342-63.PIND [**Max. Axle Load: 20t**]

**Ref:** (i) Railway Board's letter no. 2023/CEDO/SR/04/PCT-UNIMAT 08-4X4 4S-IR-DFCCIL(1), dated 17.03.2023  
(ii) CCRS office letter no. Q.12011/20/2022-23-T.W, dated 11.01.2023  
(iii) RDSO's letter no. TM/HM/11/56/UNIMAT 08-4X4/4S, dated 20.10.2022 & 16.01.2023  
(iv) RDSO's Provisional Speed Certificate (PSC) no. TM/HM/11/56/UNIMAT 08-4X4/4S, dated 19.05.2022 and its Amendment no. 1 dated 15.11.2022

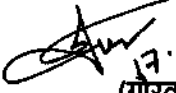
With reference to RDSO above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board has been communicated for introduction **Points & Crossing Tamping Machine (PCT)**, Model-**UNIMAT 08-4X4/4S** supplied by M/s Plasser & Theurer to manufacturer General Arrangement Drawing No. UD00.1342-63.PIND [**Max. Axle Load: 20t**] up to a maximum speed of 65 kmph when running on its own power as well as when running in train formation over **Indian Railway**, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL 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. There is need for interface between Automatic Guiding Computer (ALC) and Data Recording Processor (DRP) to have output of superimposed graph of track parameters recorded before tamping and after tamping.
- ii. It was noticed that due to Wheel Guards provided on some of the wheels proper visual inspection of wheels cannot be carried out. This provision should be reviewed taking into consideration its functionality /benefits as well as limitations created by it. If needed, suitable relocation may be done.
- iii. During tamping of 4th rail, arrangements of tamping tools are such that the all the rail seats have got tamped and squeezed from only one side i.e., either from gauge face side or from non-gauge face side. It is needless to emphasize that to achieve proper tamping, both side of the Rail seats should be tamped together. The arrangement provided in the machine does not ensure effective tamping. There is need to come out with alternate tamping mechanism which can increase effectiveness of tamping.

  
17.03.23

- iv. Provision of display of Feed from the back cameras to front cabin should be made.
- v. In existing arrangements, ascertaining the location of first measuring trolley is being done manually. Human interference in this aspect can be minimised with use of technologies like Cameras, RFID etc.
- vi. Deadman's handle and/or Vigilance Control Device similar to what is available in locomotives should be provided. It is much more essential in this rolling stock as it is driven by single crew.
- vii. Two nos. CCTV cameras have been provided to assist the operator carry out the tamping operations. However, there is no provision to record the CCTV footage for reference during investigation/ enquiry of an unusual incident. Necessary modifications should be made to record CCTV footage for at least 30 days. Provision of CCTV cameras with recording facility inside the cabs of the machine may also be explored in future design of the machine.
- viii. Necessary provision should be made to record the conversation between staff present in the cabs for reference during enquiry of any unusual incident/accident.
- ix. Machine may be equipped with centralised Computer based Monitoring & Control System to monitor the health of various systems such as engine, hydraulics, pneumatic & electrics. Arrangement should also be made for downloading & analysing the data.
- x. At present the stock is proposed to be operated at a speed of 65 Km/h based on the Provisional Speed Certificate issued by RDSO. Oscillation trial of the stock should be planned & conducted at the earliest and Final Speed Certificate issued to utilize its full speed potential.
- xi. Provisions should be made for logging the actual working/operation timings of machine so that performance of the machine can be compared against its rated output.

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

  
17.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

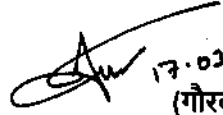
e-mail address: dceg@rb.railnet.gov.in

No. 2023/CEDO/SR/04(1)/PCT-UNIMAT 08-4X4 4S-IR-DFCCIL(2)

New Delhi, dated 17.03.2023

Copy forwarded for information to :

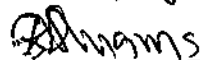
1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement No. Q.12011/20/2022-23-T.W, dated 11.01.2023
2. The Commissioner of Railway Safety, All Circles
3. Executive Director (Standards) Motive Power, RDSO, Lucknow
4. Executive Director (Standards) Track-I, RDSO, Lucknow
5. Executive Director Track(M&Mc), Railway Board

  
17.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

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21/3/23

ADE(CNII)



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



No. 2023/CEDO/SR/04/PCT-UNIMAT 08-4X4 4S-IR-DFCCIL(1)

New Delhi, dated 17.03.2023

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

The General Manager,  
All Indian Railways

Managing Director,  
DFCCIL, 5th Floor,  
Supreme Court,  
Metro Station Building  
Complex, New Delhi - 110001

**Sub:** Introduction of Points & Crossing Tamping Machine (PCT), Model-UNIMAT 08-4X4/4S supplied by M/s Plasser & Theurer to manufacturer General Arrangement Drawing No. UD00.1342-63.PIND [Max. Axle Load: 20t] up to a maximum speed of 65 kmph when running on its own power as well as when running in train formation over Indian Railway, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL

Ref: (i) CCRS office letter no. Q.12011/20/2022-23-T.W, dated 11.01.2023

(ii) RDSO's letter no. TM/HM/11/56/UNIMAT 08-4X4/4S, dated 20.10.2022 & 16.01.2023

(iii) RDSO's Provisional Speed Certificate (PSC) no. TM/HM/11/56/UNIMAT 08-4X4/4S, dated 19.05.2022 and its Amendment no. 1 dated 15.11.2022

With reference to RDSO above application, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of Points & Crossing Tamping Machine (PCT), Model-UNIMAT 08-4X4/4S supplied by M/s Plasser & Theurer to manufacturer General Arrangement Drawing No. UD00.1342-63.PIND [Max. Axle Load: 20t] up to a maximum speed of 65 kmph when running on its own power as well as when running in train formation over Indian Railway, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL with the following stipulations :

- i. Observance of all conditions laid down in RDSO's Provisional Speed Certificate (PSC) no. TM/HM/11/56/UNIMAT 08-4X4/4S, dated 19.05.2022 and its Amendment no. 1 dated 15.11.2022 for operation up to a maximum speed of 65 kmph when running on its own power as well as when running in train formation, shall be ensured on the Railway/DFCs while seeking the sanction of General Manager/ MD-DFCCIL, as the case may be, for introduction of rolling stock on the Railway/DFCs. All the documents required for the sanction of General Manager/MD-DFCCIL as per CE(G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure
- ii. Observance of all permanent and temporary speed restrictions already in force and /or those that may be imposed from time to time on various accounts.
- iii. It shall be ensured that staff working with PCT should wear protective gear such as Helmets, goggles, masks, Reflective jackets, shoes etc. to avoid any injury due to flying of ballast & other small particles.

*[Signature]*  
17.03.23

- iv. While working on double/multiple line sections, Railway shall ensure that the machine or any of its parts does not infringe the adjoining structures or track. Train operation on adjacent track shall only be permitted after ascertaining safety of trains on these tracks.
- v. Points & Crossing Tamping Machine shall be maintained as per OEM's maintenance manual.
- vi. Heat sensor is placed much above the engine location. In such situation it will not be able to assess the temperature of engine in realistic way. To make the alarm system effective, sensors must be placed closer to the engine.
- vii. Proper arrangement has not been made for providing/fixing LV board at the ends of the machine. Suitable fixing arrangement should be made which must ensure prominent display of LV Board.
- viii. At one end of the machine, provision of trailer (trailer in rear) has been made. There is possibility of SPAD (Signal Passing at Danger) due to error in assessment if the machine is worked with trailer in lead position. Railway shall depute machine specific trained Operators only who have been trained for this specific machine.
- ix. For tamping, Operator shifts from driving cab to working cab. Procedure should be laid down for such transits from one cab to another cab.
- x. It shall be ensured that staff working with PCT should wear protective gear such as Helmets, goggles, masks, Reflective jackets, shoes etc. to avoid any injury due to flying of ballast & other small particles.
- xi. 25 kVA 'Danger Sign Board' made of retro reflective material must be pasted on both side of the machine at appropriate location for easy identification by the staff
- xii. Before the start of machine, the operator should ensure that the maintenance is started from the 'zero point' indicated by the SSE/P-Way so as to compare the post run data captured by the machine with the actual measurement on the ground.
- xiii. List of medicines long with their expiry date must be pasted inside the first aid box.

*[Signature]* 17.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

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

No. 2023/CEDO/SR/04/PCT-UNIMAT 08-4X4 4S-IR-DFCCIL(1)

New Delhi, dated 17.03.2023

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.12011/20/2022-23-T.W, dated 11.01.2023
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. Executive Director Track(M&Mc), Railway Board

*[Signature]* 17.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

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Issued through g mail

*[Signature]*

21/3/23

ADE(CIVIL)



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



No. 2023/CEDO/SR/08/BLCS/{dwarf(1930 x 2600)-triple stack-25t-65 kmph-WDFC}

Dated 17.03.2023

Managing Director,  
DFCCIL,  
5th Floor, Supreme Court,  
Metro Station Building Complex,  
New Delhi - 110001.

**Sub:** Introduction of **dwarf containers** (1930mm high and 2600mm width) in **triple stack** in empty and loaded condition, on **25t axle load**, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCS (A-Car & B-Car) to RDSO's No. WD21103-S-03 Alt. 0 (A-Car) and WD-21 103-5-04 Alt. 0 (B-Car) for operation up to a maximum speed of **65 kmph** over **Western Freight Corridor** of **DFCCIL routes** of **DFCCIL**

- Ref:** (i) RDSO letter no. MW/Container, dated 11.11.2021  
(ii) RDSO Provisional Speed Certificate no. MW/Container, dated 11.11.2021 and its Amendment no.1 issued vide MW/Container (TSC/BLCM), dated 31.12.2021  
(iii) CCRS letter no. Q.12011/14/2021-22-T.W. (BLCS), dated 17.01.2023

While processing above case for the sanction of the Railway Board for introduction of **dwarf containers** (1930mm high and 2600mm width) in **triple stack** in empty and loaded condition, on **25t axle load**, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCS (A-Car & B-Car) to RDSO's No. WD21103-S-03 Alt. 0 (A-Car) and WD-21 103-5-04 Alt. 0 (B-Car) for operation up to a maximum speed of **65 kmph** over **Western Freight Corridor** of **DFCCIL routes** of **DFCCIL**, **PEDCE(P), Railway Board** has passed following remarks, reproduced as under:

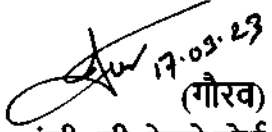
“CCRS has stipulated following important conditions with respect to operation of dwarf containers in triple stacks, which need to be implemented on DFC. Action plan for fulfilment of these conditions may be asked from DFCCIL before processing for sanction letter for these wagons over DFC:

- Anemometers shall be provided on all stations enroute of triple stack dwarf container operation to measure the wind speed for taking necessary action in terms of Para 3.6.5 of Provisional Speed Certificate dated 11.11.2021.
- Action to be taken in case of strong winds as mentioned in Para 3.6.5 of Provisional Speed Certificate dated 11.11.2021 shall be made a part of the Station Working Rule(SWR) of all station falling enroute of triple stack dwarf container operation.

*[Signature]*  
17.03.23

- iii. DFCCIL shall ensure compliance to all stipulations regarding certification, tensile/compressive force, shear strength of Inter Box Connectors(IBC's) mentioned in RDSO's letter no. MW/CONTR/ATL dated 08/09.12.2014.
- iv. Periodic rail grinding at stipulated frequency should be carried out on routes by ensuring the availability of traffic blocks.
- v. Railway should ensure installation of way side lubricators as per provision of IR P.Way manual in a time bound manner.
- vi. Adequate number of WILD and 'Weigh Bridges' shall be progressively installed and their working closely monitored. 100% weighment of loaded wagons shall be ensured at the loading points to avoid running of overloaded wagons on track.
- vii. Detailed guidelines for operations of higher axle load train shall be issued covering all issues related to Track, Bridges, Signal, OHE, Rolling Stock & Operating System etc.
- viii. Infield instrumentation of rails to be done to determine actual in-service rail stresses under various limiting conditions.
- ix. Installation of measuring wheel on the rolling stock to capture real time rail-wheel forces by running it periodically for working out critical forces and planning maintenance intervention, if required, to be done."

DFCCIL is requested to examine the issues involved and submit comments at the earliest.

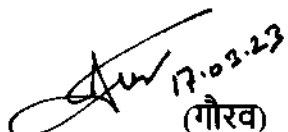
  
 (गौरव)  
 निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड  
 [Rly No. 030-47598, MTNL No. 011-23047598]  
 e-mail address: dceg@rb.railnet.gov.in


No. 2023/CEDO/SR/08/BLCS/{dwarf(1930 x 2600)-triple stack-25t-65 kmph-WDFC}

Dated 17.03.2023

Copy forwarded for information to :

1. Executive Director (Standards) Wagon, RDSO, Lucknow
2. Executive Director (Standards) Track-I, RDSO, Lucknow
3. EDME(Fr.) Railway Board

  
 (गौरव)  
 निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

Issued through g mail  
  
 21/3/23  
 ADE (CNIL)



भारत सरकार  
नागर विमानन मंत्रालय  
(वि रेल्व कर्मचारी)  
GOVERNMENT OF INDIA  
MINISTRY OF CIVIL AVIATION  
(COMMISSION OF RAILWAY SAFETY)

फोन / टेली. 22222222, 22222222 (फोन)  
फैक्स 22222222, 22222222  
ई-मेल : [info@railwaysafety.gov.in](mailto:info@railwaysafety.gov.in)

हार्बर रोड, नई दिल्ली, कर्मचारी भवन  
10, कर्मचारी भवन, कर्मचारी भवन

N.E. Railway, DRI OFFICE CAMPUS  
10, Ashok Marg, Lucknow-226 004

संख्या—Q.12011 / 14 / 2021—22—त.वि.(BLCS)

दिनांक—17.01.2023

सेवा में,

सचिव (सिविल इंजी.)  
रेल मंत्रालय (रेलवे बोर्ड)  
रेल भवन  
नई दिल्ली

[ध्यानार्थ:EDCE(G)]

विषय: Introduction of **dwarf containers** (1930mm high and 2600mm width) in **triple stack** in empty and loaded condition, on **25t axle load**, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCS (A-Car & B-Car) up to a maximum speed of **65 kmph** over **Western Freight Corridor of DFCCIL routes**

- संदर्भ: (i) DG/RDSO's letter No. MW/Container, dated 11.11.2021  
(ii) RDSO's Provisional Speed Certificate (PSC) no. MW/Container, dated 11.11.2021 and its Amendment no.1 issued vide MW/Container (TSC/BLCS) dated 31.12.2021  
(iii) This office's letters of even no. dated 30.11.2021, 08.12.2021 & 30.12.2021  
(iv) RDSO's letter No. MW/Container, dated 10.01.2022  
(v) RDSO's letter No. MW/Container, dated 05.01.2023

Vide Ref (i); RDSO approached this office seeking Railway Board's sanction for introduction of subject rolling stock up to a maximum speed of 65 kmph over Western Freight Corridor of DFCCIL routes on the basis of RDSO's Provisional Speed Certificate mentioned under Ref. (ii). Vide this office letter dated 30.11.2021 (Ref. iii); clarifications regarding subject case were sought by this office from RDSO. Further vide this office letter dated 08.12.2021 (Ref. iii); RDSO was advised to conduct Detailed Oscillation Trials, EBD trials and study to find out maximum tensile and shear force on Inter Box Connectors. RDSO, vide Ref. (iv) furnished clarifications on the observations and submitted that Oscillation trials & EBD Trials shall be conducted in due course. Further, RDSO, vide Ref. (iv) submitted its reply to observations raised vide letter dated 08.12.2021 after a lapse of more than one year.

In view of the of RDSO's clarification/ submissions and the examination of available documents in this office the case is being forwarded to Railway Board with the recommendation for the sanction of the Central Government for operation of **dwarf containers** (1930mm high and 2600mm width) in **triple stack** in empty and loaded condition, on **25t axle load**, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type **BLCS (A-Car & B-Car)** up to a maximum speed of **65 [SIXTY Five] kmph** over **Western Freight Corridor of DFCCIL routes** subject to compliance of the conditions mentioned in **Annexure**.

*This is issued with the approval of Chief Commissioner of Railway Safety.*

Ahmad  
Nadeem  
Siddiqui

Digitally signed by  
Ahmad Nadeem Siddiqui  
Date: 2023.01.17 16:24:59  
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(अहमद नदीम सिद्दीकी)

उप रेल संरक्षा आयुक्त (यांत्रिक)

संलग्नक: यथोक्त

प्रतिलिपि:

महानिदेशक (माल डिब्बा)  
माल डिब्बा निदेशालय (एनेक्सी-1),  
अनुसंधान, अभिकल्प एवं मानक संगठन,  
मानक नगर, लखनऊ-226011

[of CCRS Office's Letter No. Q.12011/14/2021-22-र.वि., Dated 17.01.2023 Dwarf containers in triple stack over BLCS]

**Conditions to be ensured by the Railway for operation of dwarf containers (1930mm high and 2600mm width) in triple stack in empty and loaded condition, on 25t axle load, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCS (A-Car & B-Car) up to a maximum speed of 65 kmph over Western Freight Corridor of DFCCIL routes**

1. Observance of all conditions laid down in RDSO's Provisional Speed Certificate (FSC) no. MW/Container, dated 11.11.2021 and its Amendment no.1 issued vide MW/Container (TSC/BLCS) dated 31.12.2021. **Remarks of the DFCCIL against each Para of this Speed Certificate shall be submitted to the Commission before the start of actual operation of the rolling stock.**
2. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
3. **RDSO shall issue Final Speed Certificate based on Detailed Oscillation Trials Report within 01 month of Railway Board's sanction for operation of the proposed stock**
4. **Anemometers shall be provided on all stations en route of triple stack dwarf container operation to measure the wind speed for taking necessary action in terms of Para 3.6.5 of Provisional Speed Certificate dated 11.11.2021.**
5. **Action to be taken in case of strong winds as mentioned in Para 3.6.5 of Provisional Speed Certificate dated 11.11.2021 shall be made a part of the Station Working Rule(SWR) of all station falling en route of triple stack dwarf container operation**
6. **Profile of the proposed rolling stock infringes Para 11.3 of WDFC SoD. There is no separate sanction for this infringement. Railway Board may, therefore, issue condonation for this infringement.**
7. **DFCCIL shall ensure compliance to all stipulations regarding certification, tensile/compressive force, shear strength of Inter Box Connectors (IBCs) mentioned in RDSO's letter no. MW/CONTR/ATL dated 08/09.12.2014.**
8. **Any occurrence of displacement/falling of the containers during operation shall be monitored for a period of 06 months and any such unusual occurrence shall be intimated to the Commission.**
9. DFCCIL shall ensure loading pattern as mentioned in Para 3.5.4 of Provisional Speed Certificate dated 11.11.2021 for operation of dwarf containers in triple stack on BLCS wagons.
10. These containers shall be operated only BLCS(A-Car & B-Car) in empty as well as loaded conditions unless there is separate sanction for their operation on any other rolling stock
11. Railway shall ensure that containers are lifted and lowered vertically to avoid any damage to inter-box connector locks /Automatic Twist Locks (ATL). Railway shall also ensure proper locking of inter-box connector locks/ATL at the starting station as well as at any station where loading/unloading is done.
12. No overdue in track/rolling stock maintenance shall be permitted.
13. Periodic rail grinding at stipulated frequency should be carried out on routes by ensuring the availability of traffic blocks.
14. Railway should ensure installation of way side lubricators as per provision of IR P.Way manual in a time bound manner.
15. Adequate number of WILD and 'Weigh Bridges' shall be progressively installed and their working closely monitored. 100% weighment of loaded wagons shall be ensured at the loading points to avoid running of overloaded wagons on track.
16. Detailed guidelines for operations of higher axle load train shall be issued covering all issues related to Track, Bridges, Signal, OHE, Rolling Stock & Operating System etc.
17. Right powering of loaded trains running with 25t axle loaded wagons shall be ensured.
18. Rolling stock should not be mixed up with other stock having less axle load or speed potential.

Ahmad  
Nadeem  
Siddiqui

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Ahmad Nadeem  
Siddiqui  
Date: 2023.01.17  
16:25:14 +05'30'



[of CCRS Office's Letter No. Q.12011/14/2021-22-न.वि., Dated 17.01.2023 Dwarf containers in triple stack over BLCS]

19. Railway should adopt following measures to improve the reliability of wagons during operation:
- (i) Elastomeric (EM) pads must be made MUST CHANGE items during Routine Overhaul (ROH).
  - (ii) During intensive examination, minimum thickness of brake block should be maintained to 25 mm instead of presently prescribed 20 mm to reduce the detachment cases of wagons on account of worn-out brake-head.
20. Infield instrumentation of rails to be done to determine actual in-service rail stresses under various limiting conditions.
21. Installation of measuring wheel on the rolling stock to capture real time rail-wheel forces by running it periodically for working out critical forces and planning maintenance intervention, if required, to be done.

\*\*\*

Ahmad  
Nadeem  
Siddiqui

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Ahmad Nadeem  
Siddiqui  
Date: 2023.01.17  
16:25:26 +05'30'

No. 2023/CEDO/SD/RS/01/09-32CSM-DFCCIL

New Delhi, dated 15.03.2023

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

**Sub:** Condonation of infringements w.r.t. Standard Schedule of Dimensions (BG) Eastern and Western Dedicated Freight Corridors of DFCCIL, January 2013 by wheel diameter of Duomatic Two Sleepers Tamping Machine, Model 09-32CSM supplied by M/s Plasser India as per GA Drawing No. UD00.762-IN Version 3

**Ref:** (i) RDSO's letter no. CT/TMM/GENERAL, dated 21.12.2022

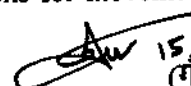
(ii) CCRS office letter no. Q.14011/08/2020-21-TW, dated 13.01.2023

With reference to RDSO above applications {ref.(i)}, sent through the Chief Commissioner of Railway Safety, Lucknow; the sanction of Ministry of Railways, Railway Board is hereby communicated for condonation of infringements w.r.t. Standard Schedule of Dimensions (BG) Eastern and Western Dedicated Freight Corridors of DFCCIL, January 2013 by wheel diameter of Duomatic Two Sleepers Tamping Machine, Model 09-32CSM supplied by M/s Plasser India as per GA Drawing No. UD00.762-IN Version 3, as shown in detail enclosed with above mentioned application, detail of infringements is as under:

- Clause 4.1.2(ii) of Chapter IV of SOD for Eastern DFC and 11.1.2(ii) of Chapter XI of SOD for Western DFC**– Minimum diameter on the tread of new wheel, measured at 63.5mm from wheel gauge face by 110mm (i.e.730mm instead of 840mm)
- Clause 4.1.2(iii) of Chapter IV of SOD for Eastern DFC and 11.1.2(iii) of Chapter XI of SOD for Western DFC**– Minimum diameter on the tread of worn wheel, measured at 63.5mm from wheel gauge face by 70mm (i.e.710mm instead of 780mm)

Further, above sanction of condonation is subject to the following stipulations:

"Instructions related to movement of the machine on Curves, Points and Crossing/Turnouts and Diamond Crossing should be incorporated in the Speed Certificate of its operation, whenever issued by the RDSO. In addition, issues related to movement of the machine in Train formation in case of emergency should also be considered & addressed and accordingly, instructions for movement in such cases should be clearly mentioned in the Speed Certificate."

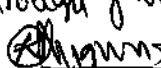
 15.03.23  
(गौरव)  
निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No.-011-23047598]  
e-mail address :dceg@rb.railnet.gov.in


No. 2023/CEDO/SD/RS/01/09-32CSM-DFCCIL

New Delhi, dated 15.03.2023

Copy forwarded for information to:

- The Chief Commissioner of Railway Safety, Compound of DRM/NER, Ashok Marg, Lucknow-226001 w.r.t. his endorsement No. Q.14011/08/2020-21-TW, dated 13.01.2023
- Commissioner of Railway Safety, All Circles
- ED Standards (Track-1), RDSO, Manak Nagar, Lucknow
- EDTk(M & Mc), Railway Board, New Delhi

Issued through g mail  
  
17/3/23  
ADE(CIVIL)

 15.03.23  
(गौरव)  
निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड

No. 2023/CEDO/SR/05/MRS(1)

New Delhi, dated 15.03.2023

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

**The General Manager,**  
**All Indian Railways**

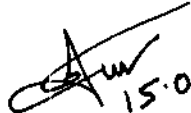
**General Manager,**  
**Metro Railway,**  
**Kolkata.**

**Sub:** Introduction of 8-coach rake lightweight fully furnished 750 Volt DC Metro Rolling Stock (MRS) with 3-phase electric propulsion system to Layout Drawing No. KM-D-J-002(V3), KM-D-J-003(V2) and KM-D-J-004(V2) and Unique Transportation Code EKM/DTC/Dalian. EKM/MC/Dalian and EKM/TC/Dalian for Driving Trailer Car (DTC), Motor Car (MC) and Trailer Car (TC) respectively provided by M/s CRRC Dalian Co. Ltd, up to a maximum speed of 60 kmph on Kolkata Metro Railway

**Ref:** (i) CCRS office letter no. Q.12011/22/2022-23-T.W, dated 13.01.2023  
(ii) RDSO's letter no. MC/MRT/Dalian, dated 16.12.2022 & 30.01.2023  
(iii) RDSO's Final Speed Certificate (FSC) no. MC/MRT/Dalian, dated 16.12.2022

With reference to RDSO above application, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of 8-coach rake lightweight fully furnished 750 Volt DC Metro Rolling Stock (MRS) with 3-phase electric propulsion system to Layout Drg No. KM-D-J-002(V3), KM-D-J-003(V2) and KM-D-J-004(V2) and Unique Transportation Code EKM/DTC/Dalian. EKM/MC/Dalian and EKM/TC/Dalian for Driving Trailer Car (DTC), Motor Car (MC) and Trailer Car (TC) respectively provided by M/s CRRC Dalian Co. Ltd, up to a maximum speed of 60 kmph on Kolkata Metro Railway with the following stipulations :

- i. Observance of all conditions laid down in RDSO's Final Speed Certificate (FSC) no. MC/MRT/Dalian, dated 16.12.2022 for operation up to a maximum speed of 60 kmph on Kolkata Metro Railway, shall be ensured on the Railway while seeking the sanction of General Manager, for introduction of rolling stock on the Railway. All the documents required for the sanction of General Manager as per CE(G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure.
- ii. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
- iii. Metro Railway shall ensure provision of "Smoke/Heat detectors" in all metro coaches with auto alarm facility to cab in short time frame in the interest of public safety.

  
15.03.23

- iv. Kolkata Metro, vide letter no. MR/POH/T/23/Pt.I dated 02.01.2023 has submitted compliance of EIG sanction dated 13.12.2022. Compliance of the items mentioned at Para 1, 4, 8, 9, 10 and 11 shall be ensured in stipulated time period and report shall be submitted to the Commission.
- v. Kolkata Metro shall ensure proper maintenance of rolling stock, propulsion equipment, control systems, Signalling and Interlocking, Track, Traction System and Structures as per schedules prescribed in the Maintenance Manual.
- vi. Before initiating train operations, Kolkata Metro shall certify track fitness and safety of the rolling stock depending upon the actual condition of the bogie suspension system, brake system, wheel, axle and other safety related components.
- vii. Kolkata Metro shall take all precautions regarding electrical clearances and other parameters, as required for ensuring safety of personnel, and for protection of power supply system at the time of train operations.
- viii. Kolkata Metro shall ensure non-availability of traction (Provision of traction cut-off) if more than 50% of the bogies in train formation are in isolated condition. It shall also be ensured that indication/alarm in this regard is also available to driver.
- ix. No overdue/expired fire extinguisher shall be permitted in service
- x. Radio communication facility shall be provided between the train operator and OCC/station throughout the section to enable the driver to contact OCC/station in case of emergency.
- xi. Adequate training shall be imparted to the maintenance staff responsible for maintaining the rolling stock, signalling and interlocking and track etc.
- xii. All train operators and station/section controllers shall be given sufficient training and shall be in possession of valid competency certificates issued by designated officer.
- xiii. Kolkata Metro shall ensure that a procedure for safe movement of rolling stock in Depots and other such areas is also in place.
- xiv. Kolkata Metro should explore possibility of providing aerosol-based fire suppression system in electrical panels, as being provided in LHB coaches, in future rakes. Further, optical fiber based Linear Heat Detection (LHD) may also be explored for detection of heating zones especially in cable trays and electrical panels.
- xv. Compliance to facilities for "Divyangjan" shall be ensured as per specified norms.

*Star* 15.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No. 011-23047598]  
e-mail address: dceg@rb.railnet.gov.in

No. 2023/CEDO/SR/05/MRS(1)

New Delhi, dated 15.03.2023

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.12011/22/2022-23-T.W, dated 13.01.2023
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. OSD/EE(G), Railway Board

*Issued through gmail*

*Star*  
17/3/23  
A DECCIVIL

*Star* 15.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड



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



No. 2023/CEDO/SR/05/MRS(2)

New Delhi, dated 15.03.2023

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

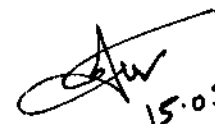
**Sub:** Future improvement of of 8-coach rake lightweight fully furnished 750 Volt DC Metro Rolling Stock (MRS) with 3-phase electric propulsion system to Layout Drawing No. KM-D-J-002(V3), KM-D-J-003(V2) and KM-D-J-004(V2) and Unique Transportation Code EKM/DTC/Dalian. EKM/MC/Dalian and EKM/TC/Dalian for Driving Trailer Car (DTC), Motor Car(MC) and Trailer Car (TC)

- Ref: (i) Railway Board's letter no. 2023/CEDO/SR/05/MRS(1) dated 15.03.2023  
(ii) CCRS office letter no. Q.12011/22/2022-23-T.W, dated 13.01.2023  
(iii) RDSO's letter no. MC/MRT/Dalian, dated 16.12.2022 & 30.01.2023  
(iv) RDSO's Final Speed Certificate (FSC) no. MC/MRT/Dalian, dated 16.12.2022

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 of 8-coach rake lightweight fully furnished 750 Volt DC Metro Rolling Stock (MRS) with 3-phase electric propulsion system to Layout Drg No. KM-D-J-002(V3), KM-D-J-003(V2) and KM-D-J-004(V2) and Unique Transportation Code EKM/DTC/Dalian. EKM/MC/Dalian and EKM/TC/Dalian for Driving Trailer Car (DTC), Motor Car(MC) and Trailer Car (TC) respectively provided by M/s CRRC Dalian Co. Ltd, up to a maximum speed of 60 kmph on Kolkata Metro Railway 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:

**Safety items**

- Provision of adequate number of CCTV cameras with recording facility outside the rake to capture the extant of crowd on the platform and passengers trying to entrain/detrain the rake.
- Provision of Smoke & heat detectors in passenger area.
- Fire survival cables may be provided in the Door Opening Mechanism, PA system, brake system etc.

  
15.03.23

- iv. Aerosol-based automatic fire detection and suppression system may be provided in electrical panels including under-slung components.
- v. Voice logger may be provided for Emergency Talk Back Unit and for communication between driver and guard with provision of voice recording for at least one hour duration.
- vi. Vigilance Control Device (VCD) has not been provided in the driver's cab. It may be provided in the future rakes to enhance safety in case of any untoward incident.
- vii. Necessary changes in the TCMS (Train Control Management System) software should be made for not allowing the traction (provision of traction cut-off) with indication to motorman in case more than 50% of the bogies are in isolated condition.
- viii. Black-box type fire and water resistant voice and video storage device may be provided to analyze cause of any untoward incident.
- ix. Indication showing locked status of Emergency Evacuation Door may be provided on the driver's desk/TCMS.
- x. Hands free mike to be provided for communication between driver/ guard & passengers.
- xi. Coupler & cattle guard may be covered by providing nose cone to enhance aesthetics of the coach.
- xii. The gap between side wall & Grab rail provided outside the Driver's Cab door may be suitably increased to facilitate holding the grab rail while detraining/entraining the Cab.

**Non- Safety items :**

- i. Adequate number of USB mobile charging points may be provided.
- ii. Provision of Dynamic Destination Board in coaches (similar to other Metro rakes) showing relative position of all stations en-route and the current position of the rake.

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

*[Signature]* 15.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

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

**No. 2023/CEDO/SR/05/MRS(2)**

**New Delhi, dated 15.03.2023**

Copy forwarded for information to :

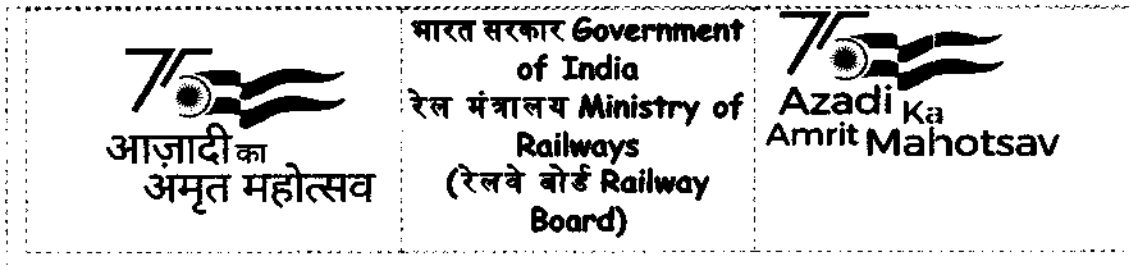
1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement No. Q.12011/22/2022-23-T.W, dated 13.01.2023
2. The Commissioner of Railway Safety, All Circles
3. Executive Director (Standards) Motive Power, RDSO, Lucknow
4. Executive Director (Standards) Track-I, RDSO, Lucknow
5. OSD/EE(G), Railway Board

*Issued through g mail*

*[Signature]*  
17/3/23  
APE (CIVIL)

*[Signature]* 15.03.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड



2022/CEDO/SD/1RSOD-2022/O/ACS\_b

New Delhi, Dated 01.03.2023

The General Managers,  
All Indian Railways

SUB: Location of Kavach / LTE tower

REF: RDSO letter no. CT/SD/Rev/BG/NG dtd.02.11.2022

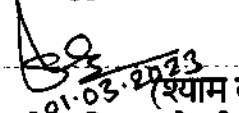
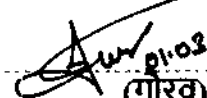
References have been received from Zonal railways in reference to the above. In this regard the following is decided:

1) The Kavach/ LTE tower should be self-sustaining, rigid and properly founded structure designed for appropriate wind speed. The tower / foundation design shall be as per RDSO approved drawing. In case any other design is followed the same shall be approved by CBE of the Zonal Railways.

2) The Kavach / LTE tower location sites shall be finalized jointly by *Signal & Telecommunication and sectional Engineering officers at SS/JAG level*, after inspection and duly considering local conditions, subject to the approval by DRM.

This supersedes all previous instructions on the subject matter.

This issued with approval of Board (M/Infra).

 01.03.2023 (श्याम वर्मा) कार्यकारी निदेशक/संकेत विकास/रेलवे बोर्ड e-mail address: edsd@rb.railnet.gov.in	 01.03.2023 (गौरव) निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड e-mail address: dceg@rb.railnet.gov.in
---	--

2022/CEDO/SD/1RSOD-2022/O/ACS

New Delhi, Dated 01.03.2023

Copy forwarded for information to:

1. Concerned PSO for kind information of Chairman cum CEO, M/Infra, M/T&RS M/O&BD, M/Finance, Railway Board
2. Adv/MR, EDPG/MR, OSD/MR, OSR(Co-ord)/MR
3. DG(RHS), DG(RPF), AM(CE), AM(Works), AM(B), AM(Elec.), AM(RS), AM(ME), AM/Tele, AM/C&IS, AM/Sig., AM(Plg.), PED(B&S), PED(Vigilance), PED(Infra.), PED(GS), PED(CE(P)), EDCE(G), EDC(M&MC), EDCE(B&S), EDF(X), ED(Works), EDW(Plg.), ED/Project(M&N), ED(L&A), ED(PSU), EDYE, ED(Safety), ED(Sig.Dev.), ED(Tele), EDRS(G), EDRE, EDEE(G), EDFE, EDE(N), ED(Accounts), ED/T&MPP, EDME(Chg.), EDME(Frt.), ED/Plg., ED/GS/S&T, ED/GS/F, ED/GS/Civil-I, ED/GS/Civil-II, ED/GS/Elec., JS(conf), JS(P), JS(G), JS(D), Vigilance-III, Vig(Conf) of Railway Board
4. DG/RDSO/LKO

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06/3/23

06/3/23 NOE(CIVIL)



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



No. 2022/CEDO/IRSOD/HRIDC/O

New Delhi, dated 28.02.2023

The Managing Director,  
HRIDC,  
5th Floor, Railtel Tower, Sector 44 Rd, Sector 44,  
Gurugram, Haryana 122003

**Sub:** Standard Dimensions for Tunnels in HORC project fitted with ROCS arrangement for High Rise OHE

Ref : Railway Board letter No. 2022/CEDO/SD/IRSOD-2022/O/ACS\_a , dated 18.10.2022

1. A reference has been received from HRIDC on above subject.
2. The issue has been examined in Board. The Standard Dimension for Tunnels and through Girder Bridge over HRIDC may be considered as per IRSOD-2022 incorporating correction slip.
3. HRIDC is requested to take further necessary action as per the provisions exist in IRSOD-2022, if required.

*(Signature)*  
28.02.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No. 011-23047598]  
e-mail address: dceg@rb.railnet.gov.in

Copy for information to:

- i. ED Standrds (Track-1), RDSO, Lucknow.
- ii. Director(P&P), HRIDC, 5th Floor, Railtel Tower, Sector 44 Rd, Sector 44, Gurugram, Haryana 122003

Issued through gmail

*(Signature)*

6/3/23 ADE(CIVIL)





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



No. 2022/CEDO/IRSOD/HRIDC/O

New Delhi, dated 28.02.2023

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

**Sub:** Preparation of Diagram of MMD for the movement of Double Stack Containers over Indian Railways.

It is desirable to prepare Diagram of MMD, to suit Movement of Double Stack Containers over Indian Railways for inclusion in IRSOD-2022.

RDSO may take further necessary action accordingly.

अजीत कुमार झा  
(अजीत कुमार झा) 28.2.23

कार्यपालक निदेशक/सिविल इंजी.(जी)/रेलवे बोर्ड  
[Phone: 030-44803: Rly: 011-23383379:MTNL]  
e-mail address : [edceg2022@gmail.com](mailto:edceg2022@gmail.com)

Copy to ED Standrds (Track-1), RDSO, Lucknow, for information and necessary action please.

Issued through g mail  
6/3/23 APE(CIVIL)



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



2022/CEDO/SD/1RSOD-2022/O/ACS\_c

New Delhi, Dated 27.02.2023

Addressed to:

(As per list mentioned below)

**Sub: Addendum and Corrigendum Slip (ACS) No. 02 to Indian Railways  
Schedule of Dimension (BG), Revised- 2022**

The Ministry of Railways (Railway Board) have decided that the **Power of Condonation for Maximum (Steepest) Gradient in Station Yards- in Note (d)(i) of Para 2 of Chapter-II of Schedule-I of Indian Railways Schedule of Dimensions 1676 mm Gauge (BG) Revised, 2022** be amended as shown in the enclosed Addendum & Corrigendum Slip (ACS) No. 02.

**Enclosure: ACS No. 02**

*(अजीत कुमार झा)*  
27.2.23

कार्यपालक निदेशक/सिविल इंजी.(जी)/रेलवे बोर्ड

[Phone: 030-44803: Rly: 011-23383379:MTNL]

e-mail address : edceg2022@gmail.com

List of Distribution:

1. General Managers, All Indian Railways & Production Units
2. Principal Chief Engineers and Chief Administrative Officers (Con.), All Indian Railways
3. Director General, RDSO, Manak Nagar, Lucknow
4. Director General, NAIR, Vadodara
5. Chief Commissioner of Railway Safety, Ashok Marg, Lucknow
6. Commissioner of Railway Safety, All Circles
7. Director, IRICEN, Rail Path, Pune - 411001 (Maharashtra)
8. Director, IRIEN, P.B. No. 233, Nasik Road - 422101 (Maharashtra)
9. Director, IRISSET, Taar Naka Road, Laila Guda, Secunderabad
10. Director, IRIMEE, Jamalpur Distt-Jamalpur, PIN-811214 (Bihar).
11. Director, IRITM, Sarswati Residential Estate, IRITM Campus, Manak Nagar, Lucknow

Copy to:

1. Concerned PSO for kind information of Chairman cum CEO, M/Infra, M/T&RS, M/O&BD, M/Finance, Railway Board
2. Adv./MR, EDPG/MR, OSD/MR, OSD(C-ord)/MR
3. Chief Vigilance Officers, All Indian Railways.
4. DG(RHS), DG(RPF), AM(CE), AM(Works), AM(B), AM(Elec.), AM(RS), AM(ME), AM/Tele, AM/C&IS, AM/Sig., AM(Plg.), AM/L&A, PED(GS), PED(Vigilance), PEDCE(P), PED(Infra), EDCE(G), ED(Works), EDW(Plg.), ED/Project(Mon.), ED(PSU), EDYE, ED(Safety), ED(Sig. Dev.), Tele, EDRS(G), EDRE, EDEE(G), EDFE, EDE(N), ED(Accounts), ED/T&MPP, EDME(Chg.), EDME(Frt.), ED/Plg., JS(conf), JS(P), JS(G), JS(D), Vigilance-111, Vig(Conf) of Railway Board.

**Addendum and Corrigendum Slip (ACS) No. 02**  
**to**  
**Schedule-I Indian Railways Schedule of Dimension (BG), Revised - 2022**

Note (d)(i) of Para 2 of Chapter-II of Schedule-I of IRSOD (BG) Revised- 2022 shall be read as under:

**(i) Existing Yard:**

Steeper than 1 in 400 (0.25%) and : **General Manager through  
Principal Chief Safety Officer  
(PCSO)**  
up to 1 in 100 (1.0%)

Steeper than 1 in 100 (1.0%) : **Railway Board through Chief  
Commissioner of Railway Safety**

31/1/23 gmtl mt  
27.2.23

Issued through g mail  
24/3/23 ADECCN/

No. 2023/CEDO/SR/15/BOBRNHSM2/22.32t-100-75-IR-100-DFCCIL

New Delhi, Dated 22.02.2023

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

**Sub:** Introduction of new type of rolling stock Broad Gauge Bogie Open Rapid Bottom Discharge Coal Hopper wagon type 'BOBRNHSM2' [Maximum Axle Load:22.32t] to RDSO's Drawing No. WD-91071-S-01 Alt.17 up to a maximum speed of 100 kmph in empty and 75 kmph in loaded conditions over Indian Railways, by Zonal Railways and up to a maximum speed of 100 kmph in both empty and loaded conditions over routes of **Eastern & Western Dedicated Freight Corridor** of DFCs by DFCCIL

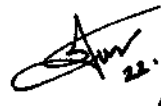
Ref: (i) RDSO letter no. MW/Container, dated 25.10.2022  
(ii) RDSO Final Speed Certificate (FSC) no. MW/BOBRN, dated 20.10.2022 and its Amendment no.1 & 2 dated 10.02.2023 and 14.02.2023 respectively  
(iii) CCRS letter no. Q.12011/22/2022-23-T.W., dated 20.02.2023

Chief Commissioner of Railway Safety, Lucknow; while forwarding the case for the sanction of the Railway Board for introduction of new type of rolling stock Broad Gauge Bogie Open Rapid Bottom Discharge Coal Hopper wagon type 'BOBRNHSM2' [Maximum Axle Load:22.32t] to RDSO's Drawing No. WD-91071-S-01 Alt.17 up to a maximum speed of 100 kmph in empty and 75 kmph in loaded conditions over Indian Railways, by Zonal Railways and up to a maximum speed of 100 kmph in both empty and loaded conditions over routes of **Eastern & Western Dedicated Freight Corridor** of DFCs by DFCCIL, has recommended certain measures to be taken before introduction of the above rolling stocks, reproduced as under:

*Item No.4. Para 3.6.9 of RDSO's Final Speed Certificate no. MW/BOBRN, dated 20.10.2022 and its Amendments shall be amended to incorporate Railway Board's sanction of condonation of infringement to IRSOD for operation of BOBRNHSM2 wagon over IR & DFC routes..*

RDSO is requested to examine the issues involved and submit comments at the earliest.

DA: as above.

  
(गौरव)  
निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No. 011-23047598]  
e-mail address: [dceg@rb.railnet.gov.in](mailto:dceg@rb.railnet.gov.in)


No. 2023/CEDO/SR/15/BOBRNHSM2/22.32t-100-75-IR-100-DFCCIL

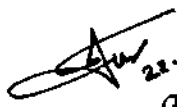
New Delhi, Dated 22.02.2023

Copy forwarded for information to:

1. Executive Director (Standards) Carriage, RDSO, Lucknow
2. Executive Director (Standards) Track-I, RDSO, Lucknow
3. EDME(Fr.) Railway Board

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23/2/23 ADE(CNL)

  
(गौरव)  
निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड



भारत सरकार  
नागर विमानन मंत्रालय  
(रेल संरक्षा आयोग)

फोन/Ph.: 0522-2233087, 2233108 (P&T)  
N.E.Rly. 31-140, N.Rly. 23-290  
फैक्स/Fax-0522-2233085, 2233087  
E-mail: chiefcom@rediffmail.com

GOVERNMENT OF INDIA  
MINISTRY OF CIVIL AVIATION  
(COMMISSION OF RAILWAY SAFETY)

पूर्वोत्तर रेलवे, मं.रे.प्र. कार्यालय परिसर  
16, अशोक मार्ग, लखनऊ-226001

N.E. Railway, DRM OFFICE CAMPUS  
16, Ashok Marg, Lucknow-226 001

संख्या-Q.12011/22/2022-23-त.वि

दिनांक-20.02.2023

सेवा में,

सचिव (सिविल इंजी.)  
रेल मंत्रालय (रेलवे बोर्ड)  
रेल भवन  
नई दिल्ली

[ध्यानार्थ:EDCE(G)]

**विषय: Introduction of new type of rolling stock Broad Gauge Bogie Open Rapid Bottom Discharge Coal Hopper wagon type 'BOBRNHSM2' [Maximum Axle Load:22.32t] to RDSO's Drawing No. WD-91071-S-01 Alt.17 up to a maximum speed of 100 kmph in empty and 75 kmph in loaded conditions over IR B.G. routes and up to a maximum speed of 100 kmph in both empty and loaded conditions Eastern and Western Dedicated Freight Corridors of DFCCIL**

- संदर्भ:** (i) DG/RDSO's letter No. MW/BOBRN, dt. 07.11.2022  
(ii) RDSO's Final Speed Certificate (FSC) no. MW/BOBRN, dt. 20.10.2022 and its Amendment no. 1 and 2 dt. 10.02.2023 and 14.02.2023 respectively  
(iii) This office's letter of even no. dt. 23.11.2022  
(iv) RDSO's letter no. MW/BOBRN, dt. 10.02.2023

Vide Ref (i), RDSO has approached this office seeking Railway Board's sanction for introduction of subject rolling stock up to a maximum speed of 100 kmph in empty and 75 kmph in loaded conditions over IR B.G. routes and up to a maximum speed of 100 kmph in both empty and loaded conditions Eastern and Western Dedicated Freight Corridors of DFCCIL on the basis of RDSO's Final Speed Certificate mentioned under Ref (ii). Vide Ref (iii) [copy enclosed], RDSO was requested to furnish certain clarifications on the subject case. RDSO vide Ref (iv) [copy enclosed] submitted its reply.

Case has been examined by this office in light of abovementioned documents/clarifications and is found to be in order. Accordingly, the same is being forwarded to Railway Board with the *recommendation for the sanction of the Central Government for operation of Broad Gauge Bogie Open Rapid Bottom Discharge Coal Hopper wagon type 'BOBRNHSM2' [Maximum Axle Load:22.32t] to RDSO's Drawing No. WD-91071-S-01 Alt.17 up to a maximum speed of 100 kmph in empty and 75 kmph in loaded conditions over IR B.G. routes and up to a maximum speed of 100 kmph in both empty and loaded conditions Eastern and Western Dedicated Freight Corridors of DFCCIL subject to compliance of the conditions mentioned in Annexure.*

*This is issued with the approval of Chief Commissioner of Railway Safety.*

Ahmad  
Nadeem  
Siddiqui

Digitally signed by  
Ahmad Nadeem  
Siddiqui  
Date: 2023.02.20  
12:01:20 +05'30'

(अहमद नदीम सिद्दीकी)

उप रेल संरक्षा आयुक्त (यांत्रिक)

संलग्नक: यथोक्त

**प्रतिलिपि:**

महानिदेशक (माल डिब्बा)  
माल डिब्बा निदेशालय (एनेक्सी-1),  
अनुसंधान, अभिकल्प एवं मानक संगठन,  
मानक नगर, लखनऊ-226011

**Conditions to be ensured by the Railway for operation of Broad Gauge Bogie Open Rapid Bottom Discharge Coal Hopper wagon type 'BOBRNHSM2' [Maximum Axle Load:22.32t] to RDSO's Drawing No. WD-91071-S-01 Alt.17 up to a maximum speed of 100 kmph in empty and 75 kmph in loaded conditions over IR B.G. routes and up to a maximum speed of 100 kmph in both empty and loaded conditions Eastern and Western Dedicated Freight Corridors of DFCCIL**

1. Observance of all conditions laid down in RDSO's Final Speed Certificate no. MW/BOBRN, dated 20.10.2022 and its Amendment no. 1 and 2 dt. 10.02.2023 and 14.02.2023 respectively. Remarks of the Railway/DFCCIL against each Para of the Speed Certificate shall be submitted to the Commission before the start of actual operation of rolling stock.
2. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
3. Operation of BOBRNHSM2 wagon shall be done in terms of Para 2.7 of the RDSO's Final Speed Certificate no. MW/BOBRN, dated 20.10.2022 and its Amendments.
4. Para 3.6.9 of RDSO's Final Speed Certificate no. MW/BOBRN, dated 20.10.2022 and its Amendments shall be amended to incorporate Railway Board's sanction of condonation of infringement to IRSOD for operation of BOBRNHSM2 wagon over IR & DFC routes.
5. 100% weightment of loaded wagons shall be ensured at the loading points to avoid running of overloaded wagons on track.
6. No overdue in track/rolling stock maintenance shall be permitted.
7. Only wagons with functional twin-pipe brake system shall be permitted to run at 75 kmph and above.
8. Railway should adopt following measures to improve the reliability of wagons during operation:
  - a. Elastomeric (EM) pads & Brake Block must be made MUST CHANGE items during Routine Overhaul (ROH).
  - b. During intensive examination, minimum thickness of brake block should be maintained to 25 mm instead of presently prescribed 20 mm to reduce the detachment cases of wagons on account of worn-out brake-head.

\*\*\*

Ahmad  
Nadeem  
Siddiqui

Digitally signed by  
Ahmad Nadeem  
Siddiqui  
Date: 2023.02.20  
12:01:33 +05'30'



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



No. 2023/CEDO/SR/06/ BCFCM /(100/60)-IR-DFCCIL-22.9t

New Delhi, dated 22.02.2023

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

The General Manager,  
All Indian Railways

Managing Director,  
DFCCIL, 5th Floor, Supreme  
Court, Metro Station Building  
Complex, New Delhi - 110001

**Sub:** Introduction of new type of rolling stock Broad Gauge Bogie Covered Fly ash/cement wagon type 'BCFCM' [Maximum Axle Load:22.9t] to RDSO's Drawing No. WD-15014-S-02 Alt.5 up to a maximum speed of **100 kmph in empty** and **60 kmph in loaded** condition over Indian Railways, by Zonal Railways and over routes of **Eastern & Western Dedicated Freight Corridor** of DFCs by DFCCIL

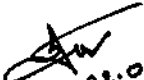
Ref:(i) CCRS office letter no. Q.12011/02/2019-20-T.W., dated 13.01.2023

(ii) RDSO's letter no. MW/SPD/BG/BCFCM, dated 31.10.2022

(iii) RDSO's Final Speed Certificate (FSC) no. MW/SPD/BG/BCFCM, dated 21.10.2022

With reference to RDSO above application {ref.ii}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of new type of rolling stock Broad Gauge Bogie Covered Fly ash/cement wagon type 'BCFCM' [Maximum Axle Load:22.9t] to RDSO's Drawing No. WD-15014-S-02 Alt.5 up to a maximum speed of **100 kmph in empty** and **60 kmph in loaded** condition over Indian Railways, by Zonal Railways and over routes of **Eastern & Western Dedicated Freight Corridor** of DFCs by DFCCIL with the following stipulations :

- Observance of all conditions laid down in RDSO's Final Speed Certificate (FSC) no. MW/SPD/BG/BCFCM, dated 21.10.2022 for operation up to a maximum speed of **100 kmph in empty** and **60 kmph in loaded** condition over Indian Railways, by Zonal Railways and over routes of **Eastern & Western Dedicated Freight Corridor** of DFCs by DFCCIL, shall be ensured on the Railway/DFCs while seeking the sanction of General Manager/MD-DFCCIL, as the case may be, for introduction of rolling stock on the Railway/DFCs. All the documents required for the sanction of General Manager/MD-DFCCIL as per CE (G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure
- Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
- List of routes identified for 22.9t axle load shall be submitted to the Commission before the start of actual operation of rolling stock.
- The compliance of all the stipulations mentioned in Railway Board letter No. 2020/CE-II/TS/22.82 dated 20.08.2020 (SN-53-54) shall be ensured by the Railways.
- Periodic rail grinding at stipulated frequency should be carried out on routes by ensuring the availability of traffic blocks. Railway should ensure adequate/stipulated block for Rail Grinding & other maintenance inputs.

  
22.02.2023

- vi. Railway/DFCCIL should ensure installation of way side lubricators as per provision of IR P. Way manual in a time bound manner.
- vii. **For Indian Railways, the WILD shall mandatorily be provided** before introduction of wagon at speed above 60 Kmph in loaded condition. For speed up to 60 Kmph in loaded condition the WILD may be progressively installed. 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track.
- viii. **For DFCCIL**, adequate number of WILD and 'Weigh Bridges' shall be progressively installed and their working closely monitored. 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track.
- ix. No overdue in track/rolling stock maintenance shall be permitted.
- x. Right powering of loaded trains running with 22.9t (CC+8+2) axle load wagons shall be ensured.
- xi. Only wagons with functional twin-pipe brake system shall be permitted to run at 75 kmph and above.

**For Indian Railways:**

- xii. USFD testing of rail would be carried out at a higher frequency corresponding to 6 GMT of traffic (*present stipulation corresponds to 8 GMT*).
- xiii. *As per Clause 3.1.1.2 of RDSO's Final Speed Certificate no. MW/SPD/BG/BCFCM, dated 21.10.2022, for operation in Loaded condition up to 60 kmph for minimum standard of 52kg (90UTS) rail, De-stressing temperature for LWR in Temperature Zone IV would be reduced by 5 °C (Tm to Tm+5).*

*[Signature]*  
22.02.2023  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

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

**No. 2023/CEDO/SR/06/ BCFCM /(100/60)-IR-DFCCIL-22.9t**      **New Delhi, dated 22.02.2023**

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/02/2019-20-T.W., dated 13.01.2023
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(Fr), Railway Board

*Issued through mail*

*[Signature]*  
23/2/23  
ADE(CWIL)

*[Signature]*  
22.02.2023  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड





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



No. 2022/CEDO/SD/RS/20/BCM-QSK-550-IR-DFCCIL

New Delhi, dated 20.02.2023

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

**Sub:** Condonation of infringement to Indian Railways Schedule of Dimensions (BG), Revised 2022 and Standard Schedule of Dimensions for Eastern & Western Dedicated Freight Corridor January-2013, as per Drawing No.QSK550A-00-00 by Ballast Cleaning Machine, Model QSK-550 supplied by M/s Gemac Engineering Machinery Co. Ltd., China

Ref:(i) RDSO's letter no. CT/TMM/GENERAL, dated 13.09.2022  
(ii) CCRS office letter no. Q.14011/06/2020-21-TW, dated 19.12.2022

With reference to RDSO above applications {ref.(i)}, sent through the Chief Commissioner of Railway Safety, Lucknow; the sanction of Ministry of Railways, Railway Board is hereby communicated for condonation of infringement w.r.t *IRSOD(BG)-2022* and *EDFC/WDFC-SOD* by **maximum bogie centre (22500mm), maximum length of body (28728), maximum length over buffer (29870mm) & maximum distance between axles (20650mm)**, as per Drawing No. QSK550A-00-00 by Ballast Cleaning Machine, Model QSK-550 supplied by M/s Gemac Engineering Machinery Co. Ltd., China., as shown in detail enclosed with above mentioned application, detail of infringements are as under:

**I) IRSOD Chapter IV (D)**

- (A) **Clause 16** –Maximum distance apart of bogie centres for bogie vehicles, by 6500 mm (i.e. 22500mm instead of 16000mm).
- (B) **Clause 18(b)** - Maximum length of body or roof for bogie vehicles, by 7388 mm (i.e. 28728mm instead of 21340mm).
- (C) **Clause 19(b)** - Maximum length over center buffer couplers or side buffers for bogie vehicles, by 7570 mm (i.e. 29870mm instead of 22300mm).
- (D) **Clause 20** - Maximum distance apart between any two adjacent axles, by 6480 mm (i.e. 20650mm instead of 14170mm).

20.02.23

## II) EDFC & WDFC-SOD Chapter IV & XI

- (A) **Clause 4.4.3 & 11.4.3** –Maximum distance apart of bogie centres for bogie vehicles, by 5500 mm (i.e. 22500mm instead of 17000mm).
- (B) **Clause 4.4.5(ii) & 11.4.5(ii)** - Maximum length of body or roof for bogie vehicles, by 4728 mm (i.e. 28728mm instead of 24000mm).
- (C) **Clause 4.4.6(ii) & 11.4.6(ii)** - Maximum length over center buffer couplers or side buffers for bogie vehicles, by 4910 mm (i.e. 29870mm instead of 24960mm).
- (D) **Clause 4.4.7 & 11.4.7** - Maximum distance apart between any two adjacent axles, by 5650 mm (i.e. 20650mm instead of 15000mm).

*(Signature)*  
20.02.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No. 011-23047598]  
e-mail address: dceg@rb.railnet.gov.in

No. 2022/CEDO/SD/RS/20/BCM-QSK-550-IR-DFCCIL

New Delhi, dated 20.02.2023

Copy forwarded for information to:

1. The Chief Commissioner of Railway Safety, Compound of DRM/NER, Ashok Marg, Lucknow-226001 w.r.t. his endorsement No. Q.14011/06/2020-21-TW, dated 19.12.2022
2. Commissioner of Railway Safety, All Circles
3. ED Standards (Track-1), RDSO, Manak Nagar, Lucknow
4. EDTk(M & Mc), Railway Board, New Delhi

*(Signature)*  
20.02.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

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*(Signature)*  
22/2/23  
ADE (CIVIL)



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



No. 2022/CEDO/SR/35(1)/ RGM-10 Stone/ BG-SG-KMRCL(2)

New Delhi, dated 17/02/2023

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

**Sub:** Future Improvement of Rail Grinding Machine (RGM 10 Stone), Model RGH10C2-67 supplied by M/s Harsco Rail, USA to manufacturer General Arrangement Drawing No. 5112695 [Max. Axle Load: (BG-13.05t), (SG-12.88t)]

Ref:(i) Railway Board's letter no. 2022/CEDO/SR/35/ RGM-10 Stone/ BG-SG-KMRCL(1) dated 17.02.2023

(ii) CCRS office letter no. Q.12011/16/2022-23-T.W, dated 30.11.2022

(iii) RDSO's letter no. TM/HM/11/32/RGM-HARSCO, dated 01.09.2022 & 09.12.2022

(iv) RDSO's Provisional Speed Certificate no. TM/HM/11/32/RGM-Harsco, dated 28.06.2022

With reference to RDSO above application {ref.iii}, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board has been communicated for introduction of Rail Grinding Machine (RGM 10 Stone), Model RGH10C2-67 supplied by M/s Harsco Rail, USA to manufacturer General Arrangement Drawing No. 5112695 [Max. Axle Load: (BG-13.05t), (SG-12.88t)] up to maximum speed of 50kmph when running on its own power as well as in train formation over BG rail network of Metro Railway, Kolkata and SG Rail network of Kolkata Metro Rail Corporation Ltd. (KMRCL) 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. Diesel hydraulic transmission has been provided in the machine. In case of failure of hydraulic system due to leakage of hydraulic oil, machine can't be hauled on its own even when its engine is in working condition. This may cause severe repercussion on train punctuality in case of such failure in a block section. In view of the above, provision of Diesel electric transmission system in lieu of diesel hydraulic system may be explored in future designs of the machine.
- ii. Hand operated hydraulic pump has been provided for filling of diesel and hydraulic oil. Feasibility of providing electrical pump in place of manual pump may be explored and implemented, if possible.
- iii. 2 nos. CCTV cameras have been provided to assist the operator carry out the grinding operations. However, there is no provision to record the CCTV footage for reference during investigation/ enquiry of an unusual incident. Necessary modifications should be made to record

*[Signature]*  
17.02.23

CCTV footage for at least 30 days. Provision of CCTV cameras with recording facility inside the cabs of the machine may also be explored in future design of the machine.

- iv. Speedometer is provided in both the cabins but there is no provision to record the instantaneous speed of the machine which can be later downloaded and analysed. Suitable provisions similar to locos must be made to record & download the instantaneous speed.
- v. Deadman's handle and/or Vigilance Control Device similar to what is available in locomotives should be provided. It is much more essential in this rolling stock as it is driven by single crew.
- vi. Provision of fire survival cable should be made in the communication system and brake system for enhanced fire safety.
- vii. Provisions should be made for logging the actual working/operation timings of machine so that performance of the machine can be compared against its rated output.

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

*[Signature]*  
17.02.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

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

No. 2022/CEDO/SR/35(1)/ RGM-10 Stone/ BG-SG-KMRCL(2)

New Delhi, dated 17/02/2023

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.12011/16/2022-23-T.W, dated 30.11.2022
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. Executive Director Track(M&Mc), Railway Board

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*[Signature]*  
23/2/23  
ADE (CIVIL)

*[Signature]*  
17.02.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

No. 2022/CEDO/SR/35/ RGM-10 Stone/ BG-SG-KMRCL(1)

New Delhi, dated 17/02/2023

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

**The General Manager,**  
**All Indian Railways**

**General Manager,**  
**Metro Railway,**  
**Kolkata**

**Sub:** Introduction of Rail Grinding Machine (RGM 10 Stone), Model RGH10C2-67 supplied by M/s Harsco Rail, USA to manufacturer General Arrangement Drawing No. 5112695 [Max. Axle Load: (BG-13.05t), (SG-12.88t)] up to maximum speed of 50kmph when running on its own power as well as in train formation over BG rail network of Metro Railway, Kolkata and SG Rail network of Kolkata Metro Rail Corporation Ltd. (KMRCL)

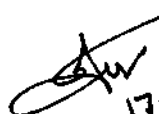
Ref: (i) CCRS office letter no. Q.12011/16/2022-23-T.W, dated 30.11.2022

(ii) RDSO's letter no. TM/HM/11/32/RGM-HARSCO, dated 01.09.2022 & 09.12.2022

(iii) RDSO's Provisional Speed Certificate no. TM/HM/11/32/RGM-Harsco, dated 28.06.2022

With reference to RDSO above application {ref.ii}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of Rail Grinding Machine (RGM 10 Stone), Model RGH10C2-67 supplied by M/s Harsco Rail, USA to manufacturer General Arrangement Drawing No. 5112695 [Max. Axle Load: (BG-13.05t), (SG-12.88t)] up to maximum speed of 50kmph when running on its own power as well as in train formation over BG rail network of Metro Railway, Kolkata and SG Rail network of Kolkata Metro Rail Corporation Ltd. (KMRCL) with the following stipulations:

- i. Observance of all conditions laid down in RDSO's Provisional Speed Certificate (PSC) No. TM/HM/11/32/RGM-Harsco, Dated 28.06.2022 for operation up to a maximum speed of 50 kmph in train formation, shall be ensured on the Railway/KMRCL while seeking the sanction of General Manager, for introduction of rolling stock on the Railway/KMRCL. All the documents required for the sanction of General Manager as per CE(G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure.
- ii. Observance of all permanent and temporary speed restrictions already in force and /or those that may be imposed from time to time on various accounts.
- iii. It shall be ensured that staff working with RGM should wear protective gear such as Helmets, goggles, masks, Reflective jackets, shoes etc. to avoid any injury due to flying of ballast & other small particles.
- iv. While working on double/multiple line sections, Railway shall ensure that the machine or any of its parts does not infringe the adjoining structures or track. Train operation on adjacent tracks shall only be permitted after ascertaining safety of trains on these tracks.

  
17.02.2023

- v. When the wagon is being moved, it shall be ensured that all protruding parts are withdrawn and suitably locked, so that during the run there is no possibility of any infringement occurring to the standard moving dimensions.
- vi. Rail Grinding Machine shall be maintained as per OEM's maintenance manual.
- vii. It was observed that machine can be moved and grinding operation can be performed even when the covers of grinding buggies are in open condition. As this may cause injury to the person standing nearby and in extreme case the protruding part may also hit any fixed structure, the movement and working of the machine should be prohibited in case the covers are accidentally left open.
- viii. As the machine has been designed to Standard Gauge (width 2630 mm), there was sufficient gap between the BG catwalk & machine which may cause entrapment of foot of the maintenance personnel or in extreme case he may even fall down while entering or coming out from the engine room or driver's cab. It is therefore suggested that either a catwalk to Standard Gauge dimensions or hydraulic platform may be provided for maintenance of the machine while the machine is being operated over Broad Gauge.
- ix. It shall be ensured that staff working with RGM should wear protective gear such as Helmets, goggles. Reflective jackets, shoes etc. during operations.
- x. Only one 3.68kg capacity fire extinguisher has been provided inside main cab of the machine. Other cab should also be equipped with similar fire extinguisher.
- xi. When the machine is being moved either on its own power or hauled in train, it shall be ensured that all the protruding parts are withdrawn and suitably locked, so that during the run, there is no possibility of any infringement with the standard moving dimensions.
- xii. All the tools were kept in a chaotic manner inside the machine. A standard tool box including tool kit should be provided. List of these tools should be pasted inside the cabin.
- xiii. Speed limit of the machine should be prominently displayed on either side of the cab.

*Sur 17.02.2023*  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

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

No. 2022/CEDO/SR/35/ RGM-10 Stone/ BG-SG-KMRCL(1)

New Delhi, dated 17/02/2023

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/16/2022-23-T.W, dated 30.11.2022
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. Executive Director Track (M&Mc), Railway Board

*Issue through g mail*

*ADMS*  
*24/2/23*  
*ADE(CIVIL)*

*Sur 17.02.2023*  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

No.2023/CEDO/SR/07/BLCM/{dwarf(1930 x 2600)-triple stack-22t-65 kmph-WDFC} New Delhi, Dated 16.02.2023

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

**Sub:** Introduction of **dwarf containers** (1930mm high and 2600mm width) in **triple stack** in empty and loaded condition, on **22t axle load**, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCM (A-Car & B-Car) to RDSO's No. CONTR-07072-S/1 Alt. Nil (BLCM A -Car) and Drg. No. CONTR-07072-S/2 Alt. Nil (BLCM B -Car) for operation up to a maximum speed of **65 kmph** over **Western Freight Corridor of DFCCIL routes** of DFCCIL

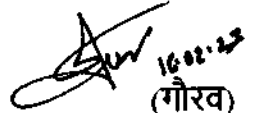
**Ref:** (i) RDSO letter no. MW/Container, dated 11.11.2021  
(ii) RDSO Provisional Speed Certificate no. MW/Container (TSC/BLCM), dated 11.11.2021 and its Amendment no.1, dated 31.12.2021  
(iii) CCRS letter no. Q.12011/14/2021-22-T.W. BLCM, dated 17.01.2023

Chief Commissioner of Railway Safety, Lucknow; while forwarding the case for the sanction of the Railway Board for introduction of **dwarf containers** (1930mm high and 2600mm width) in **triple stack** in empty and loaded condition, on **22t axle load**, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCM (A-Car & B-Car) to RDSO's No. CONTR-07072-S/1 Alt. Nil (BLCM A -Car) and Drg. No. CONTR-07072-S/2 Alt. Nil (BLCM B -Car) for operation up to a maximum speed of **65 kmph** over **Western Freight Corridor of DFCCIL routes** of DFCCIL, has recommended certain measures to be taken before introduction/within 01 month of ssanction of the above rolling stocks, reproduced as under:

- iii RDSO shall issue Final Speed Certificate based on Detailed Oscillation Trials Report within 01 month of Railway Board's sanction for operation of the proposed stock.
- vi. Profile of the proposed rolling stock infringes Para 11.3 of WDFC SoD. There is no separate sanction for this infringement. Railway Board may, therefore, issue condonation for this infringement.

RDSO is requested to examine the issues involved and submit comments at the earliest.

DA: as above.

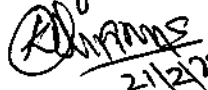
  
(गौरव)  
निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No. 011-23047598]  
e-mail address: dceg@rb.railnet.gov.in

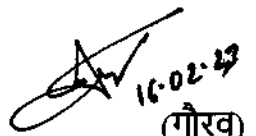
No.2023/CEDO/SR/07/BLCM/{dwarf(1930 x 2600)-triple stack-22t-65 kmph-WDFC} New Delhi, Dated 16.02.2023

Copy forwarded for information to :

1. Executive Director (Standards) Carriage, RDSO, Lucknow
2. Executive Director (Standards) Track-I, RDSO, Lucknow
3. EDME(Fr.) Railway Board

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21/2/23 APE(CIVIL)

  
(गौरव)  
निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड



भारत सरकार  
नागर विमानन मंत्रालय  
(रेल संरक्षा आयोग)  
GOVERNMENT OF INDIA  
MINISTRY OF CIVIL AVIATION  
(COMMISSION OF RAILWAY SAFETY)

फोन / Ph.: 0522-2233087, 2233108 (फैक्स)  
N.E.Rly. 31-140, N.Rly. 23-290  
फैक्स / Fax-0522-2233087, 2233087  
E-mail: oia@nic.com, rediffmail.com

पूर्वोत्तर रेलवे, म.रे.प्र. कार्यालय परिसर  
16, अशोक मार्ग, लखनऊ-226001

N.E. Railway, DRM OFFICE CAMPUS  
16, Ashok Marg, Lucknow-226 001

संख्या—Q.12011 / 14 / 2021—22—त.वि BLCM

दिनांक—17.01.2023

सेवा में,

सचिव (सिविल इंजी.)  
रेल मंत्रालय (रेलवे बोर्ड)  
रेल भवन  
नई दिल्ली

[ध्यानार्थ:EDCE(G)]

विषय: Introduction of **dwarf containers** (1930mm high and 2600mm width) in **triple stack** in empty and loaded condition, on **22t axle load**, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCM (A-Car & B-Car) up to a maximum speed of **65 kmph** over **Western Freight Corridor of DFCCIL routes**

- संदर्भ: (i) DG/RDSO's letter No. MW/Container, dated 11.11.2021  
(ii) RDSO's Provisional Speed Certificate (PSC) no. MW/Container (TSC/BLCM), dated 11.11.2021 and its Amendment no.1 dated 31.12.2021  
(iii) This office's letters of even no. dated 30.11.2021, 08.12.2021 & 30.12.2021  
(iv) RDSO's letter No. MW/Container, dated 10.01.2022  
(v) RDSO's letter No. MW/Container, dated 05.01.2023

Vide Ref (i), RDSO approached this office seeking Railway Board's sanction for introduction of subject rolling stock up to a maximum speed of 65 kmph over Western Freight Corridor of DFCCIL routes on the basis of RDSO's Provisional Speed Certificate mentioned under Ref. (ii). Vide this office letter dated 30.11.2021 (Ref. iii); clarifications regarding subject case were sought by this office from RDSO. Further vide this office letter dated 08.12.2021 (Ref. iii); RDSO was advised to conduct Detailed Oscillation Trials, EBD trials and study to find out maximum tensile and shear force on Inter Box Connectors. RDSO, vide Ref. (iv) furnished clarifications on the observations and submitted that Oscillation trials & EBD Trials shall be conducted in due course. Further, RDSO, vide Ref. (iv) submitted its reply to observations raised vide letter dated 08.12.2021 after a lapse of more than one year.

In view of the of RDSO's clarification/ submissions and the examination of available documents in this office the case is being forwarded to Railway Board with the *recommendation for the sanction of the Central Government for operation of dwarf containers* (1930mm high and 2600mm width) in **triple stack** in empty and loaded condition, on **22t axle load**, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type **BLCM (A-Car & B-Car)** up to a maximum speed of **65 [SIXTY Five] kmph** over **Western Freight Corridor of DFCCIL routes** subject to compliance of the conditions mentioned in **Annexure**.

*This is issued with the approval of Chief Commissioner of Railway Safety.*

Ahmad  
Nadeem  
Siddiqui  
Digitally signed by  
Ahmad Nadeem  
Siddiqui  
Date: 2023.01.17  
16:27:29 +05'30'

(अहमद नदीम सिद्दीकी)

उप रेल संरक्षा आयुक्त (यांत्रिक)

संलग्नक: यथोक्त

प्रतिलिपि:

महानिदेशक (माल डिब्बा)

माल डिब्बा निदेशालय (एनेक्सी-1),

अनुसंधान, अभिकल्प एवं मानक संगठन,

मानक नगर, लखनऊ-226011



**Conditions to be ensured by the Railway for operation of dwarf containers (1930mm high and 2600mm width) in triple stack in empty and loaded condition, on 22t axle load, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCM (A-Car & B-Car) up to a maximum speed of 65 kmph over Western Freight Corridor of DFCCIL routes**

1. Observance of all conditions laid down in RDSO's Provisional Speed Certificate (FSC) no. MW/Container (TSC/BLCM), dated 11.11.2021 and its Amendment no.1 dated 31.12.2021. **Remarks of the DFCCIL against each Para of this Speed Certificate shall be submitted to the Commission before the start of actual operation of the rolling stock.**
2. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
3. **RDSO shall issue Final Speed Certificate based on Detailed Oscillation Trials Report within 01 month of Railway Board's sanction for operation of the proposed stock.**
4. **Anemometers shall be provided on all stations en route of triple stack dwarf container operation to measure the wind speed for taking necessary action in terms of Para 3.6.5 of Provisional Speed Certificate dated 11.11.2021.**
5. **Action to be taken in case of strong winds as mentioned in Para 3.6.5 of Provisional Speed Certificate dated 11.11.2021 shall be made a part of the Station Working Rule (SWR) of all station falling en route of triple stack dwarf container operation.**
6. **Profile of the proposed rolling stock infringes Para 11.3 of WDFC SoD. There is no separate sanction for this infringement. Railway Board may, therefore, issue condonation for this infringement.**
7. **DFCCIL shall ensure compliance to all stipulations regarding certification, tensile/compressive force, shear strength of Inter Box Connectors (IBCs) mentioned in RDSO's letter no. MW/CONTR/ATL dated 08/09.12.2014.**
8. **Any occurrence of displacement/falling of the containers during operation shall be monitored for a period of 06 months and any such unusual occurrence shall be intimated to Commission.**
9. **DFCCIL shall ensure loading pattern as mentioned in Para 3.5.3 of Provisional Speed Certificate dated 11.11.2021 for operation of dwarf containers in triple stack on BLCM wagons.**
10. **These containers shall be operated only BLCM (A-Car & B-Car) in empty as well as loaded conditions unless there is separate sanction for their operation on any other rolling stock.**
11. **Railway shall ensure that containers are lifted and lowered vertically to avoid any damage to inter-box connector locks /Automatic Twist Locks (ATL). Railway shall also ensure proper locking of inter-box connector locks/ATL at the starting station as well as at any station where loading/unloading is done.**
12. **No overdue in track/rolling stock maintenance shall be permitted.**

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No. 2023/CEDO/SR/08/BLCS/{dwarf(1930 x 2600)-triple stack-25t-65 kmph-WDFC} New Delhi, Dated 16.02.2023

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

**Sub:** Introduction of **dwarf containers** (1930mm high and 2600mm width) in **triple stack** in empty and loaded condition, on **25t axle load**, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCS (A-Car & B-Car) to RDSO's No. WD21103-S-03 Alt. 0 (A-Car) and WD-21 103-5-04 Alt. 0 (B-Car) for operation up to a maximum speed of **65 kmph** over **Western Freight Corridor of DFCCIL routes** of DFCCIL

**Ref:** (i) RDSO letter no. MW/Container, dated 11.11.2021

(ii) RDSO Provisional Speed Certificate no. MW/Container, dated 11.11.2021 and its Amendment no.1 issued vide MW/Container (TSC/BLCM), dated 31.12.2021

(iii) CCRS letter no. Q.12011/14/2021-22-T.W. (BLCS), dated 17.01.2023

Chief Commissioner of Railway Safety, Lucknow; while forwarding the case for the sanction of the Railway Board for introduction of **dwarf containers** (1930mm high and 2600mm width) in **triple stack** in empty and loaded condition, on **25t axle load**, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCS (A-Car & B-Car) to RDSO's No. WD21103-S-03 Alt. 0 (A-Car) and WD-21 103-5-04 Alt. 0 (B-Car) for operation up to a maximum speed of **65 kmph** over **Western Freight Corridor of DFCCIL routes** of DFCCIL, has recommended certain measures to be taken before introduction/within 01 month of ssanction of the above rolling stocks, reproduced as under:

- iii RDSO shall issue Final Speed Certificate based on Detailed Oscillation Trials Report within 01 month of Railway Board's sanction for operation of the proposed stock.
- vi. Profile of the proposed rolling stock infringes Para 11.3 of WDFC SoD. There is no separate sanction for this infringement. Railway Board may, therefore, issue condonation for this infringement.

RDSO is requested to examine the issues involved and submit comments at the earliest.

DA: as above.

*(Signature)* 16.02.23  
(गौरव)  
निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No. 011-23047598]  
e-mail address: dceg@rb.railnet.gov.in

No. 2023/CEDO/SR/08/BLCS/{dwarf(1930 x 2600)-triple stack-25t-65 kmph-WDFC} New Delhi, Dated 16.02.2023

Copy forwarded for information to :

1. Executive Director (Standards) Carriage, RDSO, Lucknow
2. Executive Director (Standards) Track-I, RDSO, Lucknow
3. EDME(Fr.) Railway Board

Issued through g mail

*(Signature)*  
21/2/23  
RDE (CN/L)

*(Signature)* 16.02.23  
(गौरव)  
निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड



भारत सरकार  
नागर विमानन मंत्रालय  
(रेल संरक्षा आयोग)  
GOVERNMENT OF INDIA  
MINISTRY OF CIVIL AVIATION  
(COMMISSION OF RAILWAY SAFETY)

फोन/Ph: 0622-2233087, 2233108 (P&T)  
N.E.Rly. 31-140, N.Rly. 22-296  
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E-mail: [officecom@rediffmail.com](mailto:officecom@rediffmail.com)

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पूर्वोत्तर रेलवे, म.रे.प्र. कार्यालय परिसर  
18, अशोक मार्ग, लखनऊ-226001

N.E. Railway, DRM OFFICE CAMPUS  
18, Ashok Marg, Lucknow-226 001

संख्या-Q.12011/14/2021-22-त.वि.(BLCS)

दिनांक-17.01.2023

सेवा में,

सचिव (सिविल इंजी.)  
रेल मंत्रालय (रेलवे बोर्ड)  
रेल भवन  
नई दिल्ली

[ध्यानार्थ:EDCE(G)]

विषय: Introduction of **dwarf containers** (1930mm high and 2600mm width) in **triple stack** in empty and loaded condition, on **25t axle load**, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCS (A-Car & B-Car) up to a maximum speed of **65 kmph** over **Western Freight Corridor of DFCCIL routes**

- संदर्भ: (i) DG/RDSO's letter No. MW/Container, dated 11.11.2021  
(ii) RDSO's Provisional Speed Certificate (PSC) no. MW/Container, dated 11.11.2021 and its Amendment no.1 issued vide MW/Container (TSC/BLCS) dated 31.12.2021  
(iii) This office's letters of even no. dated 30.11.2021, 08.12.2021 & 30.12.2021  
(iv) RDSO's letter No. MW/Container, dated 10.01.2022  
(v) RDSO's letter No. MW/Container, dated 05.01.2023

Vide Ref (i); RDSO approached this office seeking Railway Board's sanction for introduction of subject rolling stock up to a maximum speed of 65 kmph over Western Freight Corridor of DFCCIL routes on the basis of RDSO's Provisional Speed Certificate mentioned under Ref. (ii). Vide this office letter dated 30.11.2021 (Ref. iii); clarifications regarding subject case were sought by this office from RDSO. Further vide this office letter dated 08.12.2021 (Ref. iii); RDSO was advised to conduct Detailed Oscillation Trials, EBD trials and study to find out maximum tensile and shear force on Inter Box Connectors. RDSO, vide Ref. (iv) furnished clarifications on the observations and submitted that Oscillation trials & EBD Trials shall be conducted in due course. Further, RDSO, vide Ref. (iv) submitted its reply to observations raised vide letter dated 08.12.2021 **after a lapse of more than one year.**

In view of the of RDSO's clarification/ submissions and the examination of available documents in this office the case is being forwarded to Railway Board with the *recommendation for the sanction of the Central Government for operation of dwarf containers (1930mm high and 2600mm width) in triple stack in empty and loaded condition, on 25t axle load, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCS (A-Car & B-Car) up to a maximum speed of 65 [SIXTY Five] kmph over Western Freight Corridor of DFCCIL routes subject to compliance of the conditions mentioned in Annexure.*

*This is issued with the approval of Chief Commissioner of Railway Safety.*

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Nadeem  
Siddiqui

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Ahmad Nadeem Siddiqui  
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(अहमद नदीम सिद्दीकी)

उप रेल संरक्षा आयुक्त (यांत्रिक)

संलग्नक: यथोक्त

प्रतिलिपि:

महानिदेशक (माल डिब्बा)

माल डिब्बा निदेशालय (एनेक्सी-1),

अनुसंधान, अभिकल्प एवं मानक संगठन,

मानक नगर, लखनऊ-226011

**Conditions to be ensured by the Railway for operation of dwarf containers (1930mm high and 2600mm width) in triple stack in empty and loaded condition, on 25t axle load, Broad Gauge Bogie Low Platform Bogie Container Flat wagon type BLCS (A-Car & B-Car) up to a maximum speed of 65 kmph over Western Freight Corridor of DFCCIL routes**

1. Observance of all conditions laid down in RDSO's Provisional Speed Certificate (FSC) no. MW/Container, dated 11.11.2021 and its Amendment no.1 issued vide MW/Container (TSC/BLCS) dated 31.12.2021. **Remarks of the DFCCIL against each Para of this Speed Certificate shall be submitted to the Commission before the start of actual operation of the rolling stock.**
2. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
3. **RDSO shall issue Final Speed Certificate based on Detailed Oscillation Trials Report within 01 month of Railway Board's sanction for operation of the proposed stock**
4. **Anemometers shall be provided on all stations en route of triple stack dwarf container operation to measure the wind speed for taking necessary action in terms of Para 3.6.5 of Provisional Speed Certificate dated 11.11.2021.**
5. **Action to be taken in case of strong winds as mentioned in Para 3.6.5 of Provisional Speed Certificate dated 11.11.2021 shall be made a part of the Station Working Rule(SWR) of all station falling en route of triple stack dwarf container operation**
6. **Profile of the proposed rolling stock infringes Para 11.3 of WDFC SoD. There is no separate sanction for this infringement. Railway Board may, therefore, issue condonation for this infringement.**
7. **DFCCIL shall ensure compliance to all stipulations regarding certification, tensile/compressive force, shear strength of Inter Box Connectors (IBCs) mentioned in RDSO's letter no. MW/CONTR/ATL dated 08/09.12.2014.**
8. **Any occurrence of displacement/falling of the containers during operation shall be monitored for a period of 06 months and any such unusual occurrence shall be intimated to the Commission.**
9. DFCCIL shall ensure loading pattern as mentioned in Para 3.5.4 of Provisional Speed Certificate dated 11.11.2021 for operation of dwarf containers in triple stack on BLCS wagons.
10. These containers shall be operated only BLCS(A-Car & B-Car) in empty as well as loaded conditions unless there is separate sanction for their operation on any other rolling stock
11. Railway shall ensure that containers are lifted and lowered vertically to avoid any damage to inter-box connector locks /Automatic Twist Locks (ATL). Railway shall also ensure proper locking of inter-box connector locks/ATL at the starting station as well as at any station where loading/unloading is done.
12. No overdue in track/rolling stock maintenance shall be permitted.
13. Periodic rail grinding at stipulated frequency should be carried out on routes by ensuring the availability of traffic blocks.
14. Railway should ensure installation of way side lubricators as per provision of IR P.Way manual in a time bound manner.
15. Adequate number of WILD and 'Weigh Bridges' shall be progressively installed and their working closely monitored. 100% weighment of loaded wagons shall be ensured at the loading points to avoid running of overloaded wagons on track.
16. Detailed guidelines for operations of higher axle load train shall be issued covering all issues related to Track, Bridges, Signal, OHE, Rolling Stock & Operating System etc.
17. Right powering of loaded trains running with 25t axle loaded wagons shall be ensured.
18. Rolling stock should not be mixed up with other stock having less axle load or speed potential.

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19. Railway should adopt following measures to improve the reliability of wagons during operation:
- (i) Elastomeric (EM) pads must be made MUST CHANGE items during Routine Overhaul (ROH).
  - (ii) During intensive examination, minimum thickness of brake block should be maintained to 25 mm instead of presently prescribed 20 mm to reduce the detachment cases of wagons on account of worn-out brake-head.
20. Infield instrumentation of rails to be done to determine actual in-service rail stresses under various limiting conditions.
21. Installation of measuring wheel on the rolling stock to capture real time rail-wheel forces by running it periodically for working out critical forces and planning maintenance intervention, if required, to be done.

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DN: c=PK, o=CCRS, ou=CCRS, cn=Ahmad Nadeem  
Siddiqui, email=ahmad.nadeem.siddiqui@ccrs.gov.pk, c=PK



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



141

No. 2022/CEDO/SD/RS/10/'RORO'

New Delhi, dated 01.02.2023

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

**Sub:** Condonation of infringement w.r.t *IRSOD(BG)-2022* by **maximum side height** (3953mm to 4080mm) of Broad Gauge Bogie Flat wagon type 'RORO'(Car- A & B) as per RDSO Drawing No. WD-19066-S-02 Alt.-6 & Drawing No. WD-19067-S-02 Alt.-7 for operation over Indian Railway routes and routes of DFCCIL

**Ref:** (i) RDSO's letter no. CT/CONTR/BG/MG, dated 12.04.2022

(ii) CCRS office letter No. Q.14011/02/2022-23-TW, dated 16.07.2022

With reference to RDSO above applications {ref. (i)}, sent through the Chief Commissioner of Railway Safety, Lucknow; the sanction of Ministry of Railways, Railway Board is hereby communicated for condonation of infringement w.r.t *IRSOD(BG)-2022* by **Maximum side height (3953mm to 4080mm)** of Broad Gauge Bogie Flat wagon type 'RORO'(Car- A & B) as per RDSO Drawing No. WD-19066-S-02 Alt.-6 & Drawing No. WD-19067-S-02 Alt.-7 for operation of Broad Gauge Bogie Flat wagon type 'RORO'(Car- A & B) with/without any commodity (Truck) in Empty and Loaded conditions over Indian Railway routes and routes of DFCCIL. Detail of infringements w.r.t. Chapter-IV (A) for *IRSOD-2022* as shown in details enclosed with above mentioned application and reproduced as under:

**Clause 31** – Maximum height above rail level at sides of unloaded vehicles, by 112 at width of 1300mm and 178 mm at width of 1113mm either side from centre line of wagon. Further, the magnitude of infringement decreases 178mm to 146mm at a width from 1113mm RHS to 1015mm LHS (i.e. 3953mm to 4080mm instead of 3735mm).

2. Further, above sanction of condonation is subject to the following stipulations:

- Locations with restricted height overhead structures shall be identified by the Zonal Railway. **Zonal Railway MUST ensure the removal of any infringement before starting operations.**
- Any road vehicle outside the profile as per RDSO drawing No. WD-19066-S-02 (Car-A) & WD-19067-S-02 (Car-B) shall be treated as Over Dimensional Consignment (ODC) and operated accordingly.

*[Signature]*  
01.02.23  
(गौरव)

निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No.-011-23047598]  
e-mail address :dceg@rb.railnet.gov.in  
New Delhi, dated 01.02.2023

No. 2022/CEDO/SD/RS/10/'RORO'

Copy forwarded for information to:

- The Chief Commissioner of Railway Safety, Compound of DRM/NER, Ashok Marg, Lucknow-1 w.r.t. his endorsement No. Q.14011/02/2022-23-TW, dated 16.07.2022
- Commissioner of Railway Safety, All Circles
- ED Standards (Track-1), RDSO, Manak Nagar, Lucknow
- EDME(Fr.)/Railway Board, New Delhi

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01.02.23  
(गौरव)

निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड



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



142

No. 2022-CEDO-SR-32- BCNAHSM2-22.9- IR (75-100)-DFCCIL (100)

New Delhi, dated 24.01.2023

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

The General Manager,  
All Indian Railways

Managing Director,  
DFCCIL,  
5th Floor, Supreme Court,  
Metro Station Building Complex,  
New Delhi - 110001

**Sub:** Introduction of new type of rolling stock Broad Gauge Bogie Covered wagon type 'BCNAHSM2' [Maximum Axle Load:22.82t] to RDSO's Drawing No. WD-05084-S-04 Alt.9 at maximum speed up to 100 kmph in empty and 75 kmph in loaded condition on over **Indian Railway**, by Zonal Railways and with maximum speed up to 100 kmph in both empty and loaded conditions over routes of **Eastern & Western Dedicated Freight Corridor** of DFCs by DFCCIL

Ref:(i) CCRS office letter no. Q.12011/15/2022-23-T.W., dated 14.10.2022

(ii) RDSO's letter no. MW/SPD/BG/BCNAHSM2, dated 25.08.2022

(iii) RDSO's Final Speed Certificate (FSC) no. MW/SPD/BG/BCNAHSM2, dated 23.08.2022

With reference to RDSO above application {ref.ii}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of new type of rolling stock Broad Gauge Bogie Covered wagon type 'BCNAHSM2' [Maximum Axle Load:22.82t] to RDSO's Drawing No. WD-05084-S-04 Alt.9 at maximum speed up to 100 kmph in empty and 75 kmph in loaded condition on over **Indian Railway**, by Zonal Railways and with maximum speed up to 100 kmph in both empty and loaded conditions over routes of **Eastern & Western Dedicated Freight Corridor** of DFCs by DFCCIL with the following stipulations :

- Observance of all conditions laid down in RDSO's Final Speed Certificate (FSC) no. MW/SPD/BG/BCNAHSM2, dated 23.08.2022 for operation up to maximum speed of 100 kmph in empty & 75 kmph in loaded condition over **Indian Railway** and up to maximum speed up to 100 kmph in both empty and loaded conditions over routes of **Eastern & Western Dedicated Freight Corridor** of DFCs, shall be ensured on the Railway/DFCs while seeking the sanction of General Manager/MD-DFCCIL, as the case may be, for introduction of rolling stock on the Railway/DFCs. All the documents required for the sanction of General Manager/MD-DFCCIL as per CE (G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure
- Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
- RDSO should carry out detailed study of poor brake power in BMBS fitted wagons and immediately take corrective measures in all existing & new wagons under intimation to CCRS office.
- List of routes identified for 22.9t axle load shall be submitted to the Commission before the start of actual operation of rolling stock.

24.01.2023

- v. The compliance of all the stipulations mentioned in Railway Board letter No. 2020/CE-II/TS/22.82 dt 20.08.2020 shall be ensured by the Railways.
- vi. Periodic rail grinding at stipulated frequency should be carried out on routes by ~~ensuring~~ the availability of traffic blocks. Railway should ensure adequate/stipulated block for Rail Grinding & other maintenance inputs.
- vii. Railway should ensure installation of way side lubricators as per provision of IR P.Way manual in a time bound manner.
- viii. **For Indian Railways, the WILD shall mandatorily be provided** before introduction of wagon at speed **above 60 Kmph**. For speed up to 60 Kmph the WILD may be progressively installed. 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track.
- ix. **For DFCCIL, adequate number of WILD and 'Weigh Bridges' shall be progressively installed and their working closely monitored.** 100% weighment of loaded wagons shall be ensured at the loading points to avoid running of overloaded wagons on track.
- x. No overdue in track/rolling stock maintenance shall be permitted.
- xi. Right powering of loaded trains running with 22.9t (CC+8+2) axle load wagons shall be ensured.
- xii. Only wagons with twin-pipe brake system shall be permitted to run at 75 kmph and above. Air brake system of wagons with twin-pipe shall be in working order for operation at 75 kmph and above.
- xiii. USFD testing of rail would be carried out at a higher frequency corresponding to 6 GMT of traffic (present stipulation corresponds to 8 GMT).
- xiv. **For Indian Railways:**  
As per Clause 3.1.1.1.2.1 of RDSO's Final Speed Certificate (FSC) no. MW/SPD/BG/BCNAHSM2, dated 23.08.2022, for operation in Loaded condition up to a speed of 60 kmph for minimum standard of 52kg (90UTS) rail, De-stressing temperature for LWR in Temperature Zone IV would be reduced by 5 °C (Tm to Tm+5).

Further, as per clause 3.1.1.1.2.2 for operation in Loaded condition for speed above 60 kmph and up to 75 kmph for minimum standard of 60kg (90UTS) rail, for temperature Zone IV as per IRPWM, de-stressing of LWR at reduced temperature (Tm to Tm+5) shall be completed before onset of winter season. **If De-stressing in Zone IV is not done at lower temperature, loaded wagon will run at 60 kmph during the winter period of 1 st November to 28th /29th of February of next calendar year.**

*[Signature]* 24.01.2023  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

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

No. 2022-CEDO-SR-32- BCNAHSM2-22.9- IR (75-100)-DFCCIL (100) New Delhi, dated 24.01.2023

Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/15/2022-23-T.W., dated 14.10.2022
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(Fr)Railway Board

*[Signature]* 24.01.2023  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

Issued through gmail

*[Signature]*  
31/01/23  
ADFC (VIL)





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



No. 2022/CEDO/SR/37/KMRCL-AC-55kmph

New Delhi, dated 24.01.2023

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

The General Manager,  
All Indian Railways

General Manager,  
Metro Railway,  
Kolkata

**Sub:** Introduction of 8-coach rake Air-Conditioned Kolkata Metro coaches with DC propulsion system to Layout Drg No. MRB/DMC-9-0-001, MRB/NDMC/MC-9-0-001, MRB/NDMC/INV-9-0-001 & MRB/TC-9-0-001 and Unique Transportation Code KM/DMC/AC/ICF-2, KM/NDMC/MC/AC/ICF-2, KM/NDMC/INV/AC/ICF-2 & KM/TC/AC/ICF-2 for Driving Motor Coach, Non-Driving Motor Coach, Non-Driving Motor Coach with inverter, & Trailer Coach respectively provided by M/s BHEL manufactured at ICF Chennai, up to a maximum speed of 55 kmph on Kolkata Metro Railway

Ref: (i) CCRS office letter no. Q.12011/02/2022-23-T.W, dated 19.12.2022

(ii) RDSO's letter no. MC/MRT, dated 13.04.2022

(iii) RDSO's Final Speed Certificate (FSC) No. MC/MRT, dated 09.02.2022 and its Amendment no. 1 dated 15.09.2022


With reference to RDSO above application {ref.ii}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of 8-coach rake Air-Conditioned Kolkata Metro coaches with DC propulsion system to Layout Drg No. MRB/DMC-9-0-001, MRB/NDMC/MC-9-0-001, MRB/NDMC/INV-9-0-001 & MRB/TC-9-0-001 and Unique Transportation Code KM/DMC/AC/ICF-2, KM/NDMC/MC/AC/ICF-2, KM/NDMC/INV/AC/ICF-2 & KM/TC/AC/ICF-2 for Driving Motor Coach, Non-Driving Motor Coach, Non-Driving Motor Coach with inverter, & Trailer Coach respectively, provided by M/s BHEL manufactured at ICF Chennai, up to a maximum speed of 55 kmph on Kolkata Metro Railway with the following stipulations :

- Observance of all conditions laid down in RDSO's Final Speed Certificate no. MC/MRT, dated 09.02.2022 and its Amendment No. 1 dt. 15.09.2022 for operation up to a maximum speed of 55 kmph, shall be ensured on the KMRCL while seeking the sanction of General Manager, for introduction of rolling stock on the KMRCL. All the documents required for the sanction of General Manager as per CE(G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure
- Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
- Kolkata Metro, vide letter no. MRTS/Elect/RS/HQ/Rake (2018) dated 14.11.2022 has submitted compliance of EIG sanction dated 23.08.2021. The items mentioned at Para 3, 5, 7, 8 and 9 have not been complied yet and TDCs for these works have been indicated in the

*[Signature]*  
Jan 24/2023

aforementioned letter. The compliance of these items as & when done may be submitted to the Commission.

- iv. Kolkata Metro shall ensure proper maintenance of rolling stock, propulsion equipment, control systems, Signalling and Interlocking, Track, Traction System and Structures as per schedules prescribed in the Maintenance Manual.
- v. Before initiating train operations, Kolkata Metro shall certify track fitness and safety of the rolling stock depending upon the actual condition of the bogie suspension system, brake system, wheel, axle and other safety related components
- vi. Kolkata Metro shall take all precautions regarding electrical clearances and other parameters, as required for ensuring safety of personnel, and for protection of power supply system at the time of train operations.
- vii. Kolkata Metro shall ensure non-availability of traction (Provision of traction cut-off) if more than 50% of the bogies in train formation are in isolated condition. It shall also be ensured that indication/alarm in this regard is also available to driver.
- viii. Radio communication facility shall be provided between the train operator and OCC/station throughout the section to enable the driver to contact OCC/station in case of emergency.
- ix. Adequate training shall be imparted to the maintenance staff responsible for maintaining the rolling stock, signalling and interlocking and track etc.
- x. All train operators and station/section controllers shall be given sufficient training and shall be in possession of valid competency certificates issued by designated officer.
- xi. Kolkata Metro shall ensure that a procedure for safe movement of rolling stock in Depots and other such areas is also in place.
- xii. Kolkata Metro should explore possibility of providing aerosol-based fire suppression system in electrical panels, as being provided in LHB coaches, in future rakes. Further, optical fiber based Linear Heat Detection (LHD) may also be explored for detection of heating zones especially in cable trays and electrical panels.

  
Jan 24/2023  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

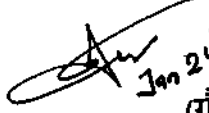
e-mail address: dceg@rb.railnet.gov.in

No. 2022/CEDO/SR/37/KMRCL-AC-55kmph

New Delhi, dated 24.01.2023

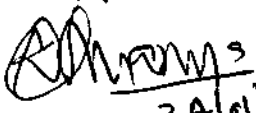
Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow-226001, w.r.t. his endorsement No. Q.12011/02/2022-23-T.W, dated 19.12.2022
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. Director (MTP), Railway Board

  
Jan 24/2023  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

Issued through E-mail

  
24/01/23  
ADE (CIVIL)

No. 2022/CEDO/SR/34/BCFCM1/IR/DFCCIL/100/75/100

New Delhi, dated 16.01.2023

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

The General Manager,  
All Indian Railways

Managing Director,  
DFCCIL, 5th Floor, Supreme Court  
Metro Station Building Complex,  
New Delhi - 110001

**Sub:** Introduction of new type of rolling stock Broad Gauge Bogie Covered flyash /cement wagon type 'BCFCM1' [Maximum Axle Load:22.9t] to RDSO's Drawing No. WD-15014-S-02 Alt.5, up to a maximum speed of 100 kmph in empty and 75 kmph in loaded condition on over Indian Railway, by Zonal Railways and up to a maximum speed of 100 kmph in both empty and loaded conditions over routes of Eastern & Western Dedicated Freight Corridor of DFCs, by DFCCIL

- Ref:** (i) CCRS office letter no. Q.12011/19/2022-23-T.W., dated 09.11.2022  
(ii) RDSO's letter no. MW/SPD/BG/BCFCM1, dated 28.09.2022  
(iii) RDSO's Final Speed Certificate no.MW/SPD/BG/BCFCM1, dated 26.09.2022

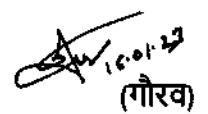
With reference to RDSO above application {ref.ii}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of new type of rolling stock Broad Gauge Bogie Covered flyash /cement wagon type 'BCFCM1' [Maximum Axle Load:22.9t] to RDSO's Drawing No. WD-15014-S-02 Alt.5 up to a maximum speed of 100 kmph in empty and 75 kmph in loaded condition on over Indian Railway, by Zonal Railways and up to a maximum speed of 100 kmph in both empty and loaded conditions over routes of Eastern & Western Dedicated Freight Corridor of DFCs, by DFCCIL with the following stipulations :

- Observance of all conditions laid down in RDSO's Final Speed Certificate no.MW/SPD/BG/BCFCM1, dated 26.09.2022 for operation up to 100 kmph in empty and 75 kmph in loaded condition on over Indian Railway, by Zonal Railways and with maximum speed up to 100 kmph in both empty and loaded conditions over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL, shall be ensured on the Railway/DFCs while seeking the sanction of General Manager/MD-DFCCIL, as the case may be, for introduction of rolling stock on the Railway/DFCs. All the documents required for the sanction of General Manager/MD-DFCCIL as per CE (G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure
- Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
- RDSO should carry out detailed study of poor brake power in BMBS fitted wagons and immediately take corrective measures in all existing & new wagons under intimation to this office
- List of routes identified for 22.9t axle load shall be submitted to the Commission before the start of actual operation of rolling stock.

*[Signature]*  
16.01.23

- v. The compliance of all the stipulations mentioned in Railway Board letter No. 2020/CE-II/TS/22.82 dt 20.08.2020 shall be ensured by the Railways.
- vi. Periodic rail grinding at stipulated frequency should be carried out on routes by ensuring the availability of traffic blocks.
- vii. Railway should ensure installation of way side lubricators as per provision of IR P.Way manual in a time bound manner.
- viii. **For Indian Railways, WILD shall mandatorily be provided before introduction of wagon at speed above 60 Kmph. For speed up to 60 Kmph the WILD may be progressively installed. 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track (as per Railway Board's letter No. 2020/CEDO/SR/12 dated 27.05.2021).**
- ix. **For DFCCIL, Adequate number of 'WILD' and 'Weigh Bridges' shall be progressively installed and their walking closely monitored. 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track.**
- x. No overdue in track/rolling stock maintenance shall be permitted.
- xi. Right powering of loaded trains running with 22.9t axle load wagons shall be ensured.
- xii. Only wagons with functional twin-pipe brake system shall be permitted to run at 75 kmph and above.
- xiii. **For Indian Railways, USFD testing of rail would be carried out at a higher frequency corresponding to 6 GMT of traffic (present stipulation corresponds to 8 GMT).**
- xiv. **For Indian Railways, As per Clause 3.1.1.1.2.1 of RDSO's Final Speed Certificate no.MW/SPD/BG/BCFCM1 dated 26.09.2022, for operation in loaded condition up to a speed of 60 kmph for minimum standard of 52kg (90UTS) rail, for temperature Zone IV as per IRPWM June-2020, de-stressing temperature for LWR in Temperature Zone IV would be reduced by 5 degree C (Tm to Tm+5).**

Further, as per clause 3.1.1.1.2.2 for operation in loaded condition for speed above 60 kmph and upto 75 kmph for minimum standard of 60kg (90UTS) rail, for temperature Zone IV as per IRPWM, de-stressing of LWR at reduced temperature (Tm to Tm+5) shall be completed before onset of winter season. If De-stressing in Zone IV is not done at lower temperature loaded wagon will run at 60 kmph during the winter period of 1st November to 28th /29th of February.

  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

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

No. 2022/CEDO/SR/34/BCFCM1/IR/DFCCIL/100/75/100

New Delhi, dated 16.01.2023

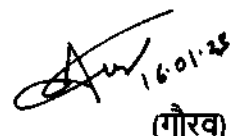
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2. The Commissioner of Railway Safety, All Circles
3. Executive Director (Standards) Motive Power, RDSO, Lucknow
4. Executive Director (Standards) Track-I, RDSO, Lucknow
5. EDME(Fr)Railway Board

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24/01/23 ADECCM

  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड



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



No. 2022/CEDO/SR/38/LWCZACCA-160kmph-AC-DD

New Delhi, dated 16.01.2023

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

The General Manager,  
All Indian Railways

**Sub:** Introduction of LHB EOG AC Double Decker Chair Car fitted with pneumatic suspension (160 KN capacity) at the secondary stage on FIAT bogies to RCF's Layout Drg. no.LD90009. [Unique Transportation Code: LWCZDACAA], up to a maximum speed of 160 kmph over Indian Railways, by Zonal Railways on track maintained as per Para 522 of Indian Railways Permanent Way Manual, June-2020

Ref: (i) CCRS office letter no. Q.12011/20/2022-23-T.W, dated 19.12.2022

(ii) RDSO's letter no. SV.FIAT(SC)/Sanction/LWCZDACAA, dated 28.10.2022

(iii) RDSO's Final Speed Certificate (FSC) no. SV.FIAT(SC)/ LWCZDACAA/160kmph, dated 07.10.2022

With reference to RDSO above application {ref.ii}, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of LHB EOG AC Double Decker Chair Car fitted with pneumatic suspension (160 KN capacity) at the secondary stage on FIAT bogies to RCF's Layout Drg. no.LD90009. [Unique Transportation Code: LWCZDACAA; Axle Load 16.25t], up to a maximum speed of 160 kmph over Indian Railways, by Zonal Railways on track maintained as per Para 522 of Indian Railways Permanent Way Manual, June-2020 with the following stipulations :

**For operation of LWCZDACAA coach upto 130 kmph-**

- Observance of all conditions laid down in RDSO's Final Speed Certificate (FSC) no. SV.FIAT(SC)/ LWCZDACAA/160kmph, dated 07.10.2022 for operation up to a maximum speed of 160 kmph shall be ensured on the Railway while seeking the sanction of General Manager, for introduction of rolling stock on the Railway All the documents required for the sanction of General Manager as per CE(G) Directorate/Railway Board Policy Circular No. 6, dated 31.10.2018, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure.

  
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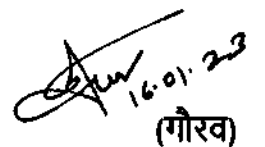
- ii. All the provisions contained in the Railway Board's letter no. 2014/CE-II.TSC/I Pt.1 dated 08.09.2016 regarding track structure for speed beyond 110 kmph should be strictly complied.
- iii. **For speed beyond 110 & up to 130 kmph**, Railway shall ensure provision of sturdy fencing at vulnerable locations to prevent accidents related to trespassing. Zonal Railways should also plan subways at suitable locations to avoid trespass and ensure effectiveness of fencing provided. *For speed beyond 130 kmph and up to 160 kmph, Railway shall ensure provision of sturdy fencing all along the track to prevent accidents related to trespassing.*
- iv. *For running of train above 130 kmph, Zonal Railways shall ensure public announcements and demarcation through a yellow line on the platforms of run through lines, to alert passengers standing on such platforms*
- v. Observance of all permanent and temporary speed restrictions already in force and /or those that may be imposed from time to time on various accounts.
- vi. Zonal Railway shall interpret the results of runs of OMS, TRC and Oscillograph Car and ensure corrective & preventive action, as considered necessary.
- vii. *Signalling requirement with respect to maximum permissible speed as per standard of Interlocking given in Indian Railways Signal Engineering Manual, July 2021, para no. 7.8.9 shall followed.*
- viii. Suitable and reliable communication shall be provided in the locomotive and guards van for communication between loco pilot, guard and adjacent station master.
- ix. LWCZDAA coach shall be maintained as per "Maintenance manual for LHB Coaches".
- x. In case of enroute breakage of primary coil spring action as per instructions contained in RDSO letter no. SV.FIAT Spring dt. 08.11.18 shall be taken.
- xi. Earthing in the coach body & all the panels shall always be properly maintained.
- xii. As stipulated in Railway Board's letter no. 97/M(C)/137/1 Volume-VI, dated 09.06.2004 and RDSO's Report no.CT-20 Rev.2 duly approved by Railway Board's letter no. 2014/CE-II/TK/HS Dated 09.12.2014, the following maintenance facilities are required to be developed by Railways for operation at 160 kmph:
  - a. Well lighted all weather covered area for under gear examination and maintenance of sub-assemblies.
  - b. Boundary wall for safety and security of the rake and the facilities.
  - c. Automatic washing plant at entry point.
  - d. Wheel profile measurement and re-profiling system.
  - e. In-situ wheel changing facility.

  
16.01.23

- f. Automated and instrumented maintenance system in lieu of existing system based on visual inspection.
- g. A separate bay with capacity for lifting and change of complete bogie platform for attention to roof mounted AC equipments.

In addition of above, following stipulation shall be applicable for operation of LWCZDACC coach beyond 130 kmph and upto 160 kmph-

- i. Supervisors/officers shall not undertake push trolley inspection and working of rail dolly on the face of 160 kmph trains. Suitable guidelines shall be issued by the Railway in this regard.
- ii. For running of train above 130 kmph, Zonal Railways shall ensure public announcements and demarcation through a yellow line on the platforms of run through lines, to alert passengers standing on such platforms
- iii. *For speed beyond 130 kmph and up to 160 kmph, Railway shall ensure provision of sturdy fencing all along the track to prevent accidents related to trespassing.*
- iv. Provision of Train Protection warning system shall be ensured on the route for operation at 160 kmph.

  
16.01.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

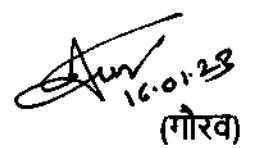
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No. 2022/CEDO/SR/38/LWCZACCA-160kmph-AC-DD

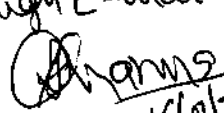
New Delhi, dated 16.01.2023

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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

  
16.01.23  
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

Issued through E-mail  
  
16/01/23  
ADE(CIVIL)



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



No. 2023-CEDO-SR-05-MRS

New Delhi, Dated 16.01.2023

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

**Sub:** Introduction of 8-coach rake lightweight fully furnished 750 Volt DC Metro Rolling Stock (MRS) with 3-phase electric propulsion system to Layout Drg No. KM-D-J-002(V3), KM-D-J-003(V2) and KM-D-J-004(V2) and Unique Transportation Code EKM/DTC/Dalian. EKM/MC/Dalian and EKM/TC/Dalian for Driving Trailer Car (DTC), Motor Car(MC) and Trailer Car (TC) respectively provided by M/s CRRC Dalian Co. Ltd, up to a maximum speed of 60 kmph on Kolkata Metro Railway

Ref: (i) RDSO's letter no. MC/MRT/Dalian, dated 16.12.2022

(ii) CCRS office letter No. Q.12011/22/2022-23-T.W, dated 13.01.2023

Chief Commissioner of Railway Safety, Lucknow; while forwarding the case for the sanction of the Railway Board for introduction of 8-coach rake lightweight fully furnished 750 Volt DC Metro Rolling Stock (MRS) with 3-phase electric propulsion system to Layout Drg No. KM-D-J-002(V3), KM-D-J-003(V2) and KM-D-J-004(V2) and Unique Transportation Code EKM/DTC/Dalian. EKM/MC/Dalian and EKM/TC/Dalian for Driving Trailer Car (DTC), Motor Car (MC) and Trailer Car (TC) respectively provided by M/s CRRC Dalian Co. Ltd, up to a maximum speed of 60 kmph on Kolkata Metro Railway, has recommended certain measures to be taken before introduction of the above rolling stocks, and reproduced as under:

1. When the rake was halted on up gradient and traction was applied, it started to roll back and the holding brake didn't apply. Necessary modifications must be made to ensure that under such circumstances the holding brakes are applied as soon as the train speed increases to more than 3 Kamp in the reverse direction.
2. During speed trial, the TCMS didn't prohibit traction beyond the maximum speed limit of 65Kmph. Necessary modifications must be made to ensure that, if the train exceeds the speed set by the system, system should prohibit traction to bring speed to within the maximum permissible speed limit.
3. Suitable instructions may be pasted outside the flap door of Passenger Talk Back Unit regarding its operation in case of emergency.
4. Stickers showing MR/BP & BC/Aux reservoir pressure may be pasted on the respective gauges.


16.01.2023



5. As controlled discharge Fire Extinguisher has been provided, the minimum pressure limit of Fire Extinguisher must be specified at which it shall be withdrawn from the service and replaced with a new one.
6. Provision should be made for "Divyangjan" and Senior Citizens as per prescribed norms. Stickers in Trilingual (Local language, Hindi, English) indicating the same should be pasted at appropriate locations.
7. All Chinese language stickers provided in driver's cab are to be replaced with stickers in English language.
8. Training must be imparted to crew on following aspects.
  - i. To uncouple the semi permanent coupler in about 15 min in case of emergency.
  - ii. Action to be taken in case of Passenger Alarm chain pulling as per extant norms keeping in view the emergencies like fire etc. in which immediate action is required for passenger safety.
9. Detailed Maintenance Manual with colour photograph should be made available to maintenance staff.

RDSO is requested to examine the issues involved and submit comments at the earliest.

DA: as above.


  
 16.01.23  
 (गौरव)  
 निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड  
 [Rly No. 030-47598, MTNL No.-011-23047598]  
e-mail address : dceg@rb.railnet.gov.in

**No. 2023-CEDO-SR-05-MRS**

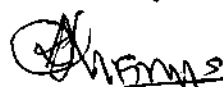
**New Delhi, Dated 16.01.2023**

Copy forwarded for information to :

1. Executive Director (Standards) Motive Power, RDSO, Lucknow
2. Executive Director (Standards) Track-I, RDSO, Lucknow
3. EDME(Coaching) Railway Board

  
 16.01.23  
 (गौरव)  
 निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड  
 [Rly No. 030-47598, MTNL No.-011-23047598]  
e-mail address : dceg@rb.railnet.gov.in

Letter issued through e-mail

  
 16/01/23  
 ADE(ENCL)



भारत सरकार  
नागर विमानन मंत्रालय  
(रेल संस्था आयोग)

GOVERNMENT OF INDIA  
MINISTRY OF CIVIL AVIATION  
(COMMISSION OF RAILWAY SAFETY)

फोन/Ph.: 0822-2233087, 2233108 (P&T)  
N.E.Rly. 31-140, N.Rly. 23-280  
फैक्स/Fax-0822-2233095, 2233087  
E-mail: chiefcom@rediffmail.com

पूर्वोत्तर रेलवे, च.रे.प्र. कार्यालय परिसर  
18, अशोक मार्ग, लखनऊ-226001

N.E. Railway, DRM OFFICE CAMPUS  
18, Ashok Marg, Lucknow-226 001

संख्या-Q.12011 / 22 / 2022-23-त.वि.

दिनांक-13.01.2022

सेवा में,

सचिव (सिविल इंजी.)  
रेल मंत्रालय (रेलवे बोर्ड)  
रेल भवन  
नई दिल्ली

[ध्यानार्थ:EDCE(G)]

**विषय: Introduction of 8-coach rake lightweight fully furnished 750 Volt DC Metro Rolling Stock (MRS) with 3-phase electric propulsion supplied by M/s CRRC Dalian Co. Ltd. on Kolkata Metro Railway upto a maximum speed of 60 kmph**

**संदर्भ:** (i) DG/RDSO's letter No. MC/MRT/Dalian, dated 16.12.2022  
(ii) RDSO's Final Speed Certificate (FSC) no. MC/MRT/Dalian, dated 16.12.2022

Vide Ref. (i), DG/RDSO has approached this office for recommending sanction of Central Government for introduction of "8-coach rake lightweight fully furnished 750 Volt DC Metro Rolling Stock (MRS)" with 3-phase electric propulsion supplied by M/s CRRC Dalian Co. Ltd. on Kolkata Metro Railway upto a maximum speed of 60 kmph on the basis of RDSO's FSC mentioned at Ref. (ii).

Layout Drawing No. and Unique Transportation Code of proposed coaches of 750 Volt DC Metro Rolling Stock are as under:

SN	Type of coach	Layout Drawing No.	Transportation code
1	Driving Trailer Car (DTC)	KM-D-J-002(V3)	EKM/DTC/Dalian
2	Motor Car (MC)	KM-D-J-003(V2)	EKM/MC/Dalian
3	Trailer Car (TC)	KM-D-J-004(V2)	EKM/TC/Dalian

Statutory inspection of the subject rolling stock was carried out by CRS/EC at Noapara Metro Car Shed, Kolkata on 28/29.12.2022 followed by Speed Trial of the rake in KDMI-KMUK section of Kolkata Metro. Inspection report of the rolling stock is enclosed as **Annexure-1**.

Based on the examination of documents/clarifications submitted by RDSO, inspection and subsequent Speed trial of the subject rolling stock, the case is being forwarded to Railway Board with the recommendation for the sanction of the Central Government for introduction of 8-coach rake lightweight fully furnished 750 Volt DC Metro Rolling Stock (MRS) with 3-phase electric propulsion supplied by M/s CRRC Dalian Co. Ltd. on Kolkata Metro Railway upto a maximum speed of 60 [SIXTY] kmph subject to compliance of the conditions mentioned in **Annexure-2**.

'Measures to be taken for improvement of 8-coach rake lightweight fully furnished 750 Volt DC Metro Rolling Stock (MRS)' extracted from CRS/EC Inspection Report is enclosed as **Annexure-3**. The compliance of the same should be submitted to the Commission before the introduction of the subject rolling stock.

Further, 'Measures for future improvement of 8-coach rake lightweight fully furnished 750 Volt DC Metro Rolling Stock (MRS)' are also attached as **Annexure-4**.

*This is issued with the approval of Chief Commissioner of Railway Safety.*

Ahmad  
Nadeem  
Siddiqui

Digitally signed by  
Ahmad Nadeem Siddiqui  
Date: 2023.01.13 14:22:12  
+05'30'

(अहमद नदीम सिद्दीकी)

उप रेल संस्था आयुक्त (यांत्रिक)

संलग्नक: यथोक्त

प्रतिलिपि:

महानिदेशक (सवारी डिब्बा)

सवारी डिब्बा निदेशालय (एनेक्सी-1),

अनुसंधान, अभिकल्प एवं मानक संगठन, मानक नगर, लखनऊ-226011

**Conditions to be ensured by the Railway for introduction of 8-coach rake lightweight fully furnished 750 Volt DC Metro Rolling Stock (MRS) with 3-phase electric propulsion supplied by M/s CRRC Dalian Co. Ltd. on Kolkata Metro Railway upto a maximum speed of 60 kmph**

1. Observance of all conditions laid down in RDSO's Final Speed Certificate (FSC) no. MC/MRT/Dalian, dated 16.12.2022. Remarks of the Railways against each Para of the Speed Certificate shall be submitted to the Commission before the start of actual operation of rolling stock.
2. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
3. Metro Railway shall ensure provision of 'Smoke/Heat detectors' in all metro coaches with auto alarm facility to cab in short time frame in the interest of public safety.
4. Kolkata Metro, vide letter no. MR/POH/T/23/Pl.I dated 02.01.2023 has submitted compliance of EIG sanction dated 13.12.2022. Compliance of the items mentioned at Para 1, 4, 8, 9, 10 and 11 shall be ensured in stipulated time period and report shall be submitted to the Commission.
5. Kolkata Metro shall ensure proper maintenance of rolling stock, propulsion equipment, control systems, Signalling and Interlocking, Track, Traction System and Structures as per schedules prescribed in the Maintenance Manual.
6. Before initiating train operations, Kolkata Metro shall certify track fitness and safety of the rolling stock depending upon the actual condition of the bogie suspension system, brake system, wheel, axle and other safety related components.
7. Kolkata Metro shall take all precautions regarding electrical clearances and other parameters, as required for ensuring safety of personnel, and for protection of power supply system at the time of train operations.
8. Kolkata Metro shall ensure non-availability of traction (Provision of traction cut-off) if more than 50% of the bogies in train formation are in isolated condition. It shall also be ensured that Indication/alarm in this regard is also available to driver.
9. No overdue/expired fire extinguisher shall be permitted in service
10. Radio communication facility shall be provided between the train operator and OCC/station throughout the section to enable the driver to contact OCC/station in case of emergency.
11. Adequate training shall be imparted to the maintenance staff responsible for maintaining the rolling stock, signalling and interlocking and track etc.
12. All train operators and station/section controllers shall be given sufficient training and shall be in possession of valid competency certificates issued by designated officer.
13. Kolkata Metro shall ensure that a procedure for safe movement of rolling stock in Depots and other such areas is also in place.
14. Kolkata Metro should explore possibility of providing aerosol-based fire suppression system in electrical panels, as being provided in LHB coaches, in future rakes. Further, optical fiber based Linear Heat Detection (LHD) may also be explored for detection of heating zones especially in cable trays and electrical panels.
15. Compliance to facilities for 'Divyangjan' shall be ensured as per specified norms.

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**Measures to be taken before introduction of 8-coach rake lightweight fully furnished 750 Volt DC Metro Rolling Stock (MRS) with 3-phase electric propulsion supplied by M/s CRRC Dalian Co. Ltd.**

Statutory inspection of the rolling stock was carried out by CRS/EC at Noapara Metro Car Shed, Kolkata on 28/29.12.2022. Para 3 of CRS Inspection Report which suggests the measures for improvement of inspected rolling stock is reproduced below for taking necessary action for their implementation:

1. When the rake was halted on Up gradient and traction was applied, it started to roll back and the holding brake didn't apply. Necessary modifications must be made to ensure that under such circumstances the holding brakes are applied as soon as the train speed increases to more than 3 Kmph in the reverse direction.
2. During speed trial, the TCMS didn't prohibit traction beyond the maximum speed limit of 65Kmph. Necessary modifications must be made to ensure that, if the train exceeds the speed set by the system, system should prohibit traction to bring speed to within the maximum permissible speed limit.
3. Suitable instructions may be pasted outside the flap door of Passenger Talk Back Unit regarding its operation in case of emergency.
4. Stickers showing MR/BP & BC/Aux reservoir pressure may be pasted on the respective gauges.
5. As controlled discharge Fire Extinguisher has been provided, the minimum pressure limit of Fire Extinguisher must be specified at which it shall be withdrawn from the service and replaced with a new one.
6. Provision should be made for 'Divyangjan' and Senior Citizens as per prescribed norms. Stickers in Trilingual (Local language, Hindi, English) indicating the same should be pasted at appropriate locations.
7. All Chinese language stickers provided in driver's cab are to be replaced with stickers in English language.
8. Training must be imparted to crew on following aspects.
  - i. To uncouple the semi permanent coupler in about 15 min in case of emergency.
  - ii. Action to be taken in case of Passenger Alarm chain pulling as per extant norms keeping in view the emergencies like fire etc. in which immediate action is required for passenger safety.
9. Detailed Maintenance Manual with colour photograph should be made available to maintenance staff.

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**Measures for future improvement of 8-coach rake lightweight fully furnished 750 Volt DC Metro Rolling Stock (MRS) with 3-phase electric propulsion supplied by M/s CRRC Dalian Co. Ltd.**

Statutory inspection of the rolling stock was carried out by CRS/EC at Noapara Metro Car Shed, Kolkata on 28/29.12.2022. Para 4 of CRS Inspection Report which suggests the measures for future improvement of the Trainset is reproduced below for taking necessary action for their implementation:

1. Provision of adequate number of CCTV cameras with recording facility outside the rake to capture the extant of crowd on the platform and passengers trying to entrain/detrain the rake.
2. Provision of Smoke & heat detectors in passenger area.
3. Fire survival cables may be provided in the Door Opening Mechanism, PA system, brake system etc.
4. Aerosol-based automatic fire detection and suppression system may be provided in all electrical panels including under-slung components.
5. Voice logger may be provided for Emergency Talk Back Unit and for communication between driver and guard with provision of voice recording for at least one hour duration.
6. Vigilance Control Device (VCD) has not been provided in the driver's cab. It may be provided in the future rakes to enhance safety in case of any untoward incident.
7. Necessary changes in the TCMS (Train Control Management System) software should be made for not allowing the traction (provision of traction cut-off) with indication to motorman in case more than 50% of the bogies are in isolated condition.
8. Black-box type fire and water resistant voice and video storage device may be provided to analyze cause of any untoward incident.
9. Indication showing locked status of Emergency Evacuation Door may be provided on the driver's desk/TCMS.
10. Hands free mike to be provided for communication between driver/ guard & passengers.
11. Coupler & cattle guard may be covered by providing nose cone to enhance aesthetics of the coach.
12. Adequate number of USB mobile charging points may be provided
13. The gap between side wall & Grab rail provided outside the Driver's Cab door may be suitably increased to facilitate holding the grab rail while detraining/entraining the Cab.
14. Provision of Dynamic Destination Board in coaches (similar to other Metro rakes) showing relative position of all stations en-route and the current position of the rake.

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



No. 2023/CEDO/SR/04/PCT-UNIMAT 08-4X4 4S-IR-DFCCIL

New Delhi, Dated 12.01.2023

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

**Sub:** Introduction of **Points & Crossing Tamping Machine (PCT)**, **Model-UNIMAT 08-4X4/4S** supplied by M/s Plasser&Theurerto manufacturer General Arrangement Drawing No. UD00.1342-63.PIND[Max. Axle Load: 20t] up to a maximum speed of 65 kmph when running on its own power as well as when running in train formation over **Indian Railway**, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL-compliance before introduction reg.

Ref: (i) RDSO's letter no. TM/HM/11/56/UNIMAT 08-4X4/4S, dated 20.10.2022

(ii) CCRS office letter No. Q.12011/20/2022-23-T.W, dated 11.01.2023

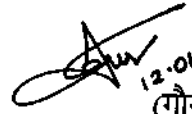
Chief Commissioner of Railway Safety, Lucknow; while forwarding the case for the sanction of the Railway Board for introduction of **Points & Crossing Tamping Machine (PCT)**, **Model-UNIMAT 08-4X4/4S** supplied by M/s Plasser&Theurerto manufacturer General Arrangement Drawing No. UD00.1342-63.PIND[Max. Axle Load: 20t] up to a maximum speed of 65 kmph when running on its own power as well as when running in train formation over **Indian Railway**, by Zonal Railways and over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCIL, has recommended certain measures to be taken before introduction of the above rolling stocks, reproduced as under:

1. Heat sensor is placed much above the engine location. In such situation it will not be able to assess the temperature of engine in realistic way. To make the alarm system effective, sensors must be placed closer to the engine.
2. Audio and Visual alarms from Heat Sensing Alarm system in engine area should be made available in all the cabs of the machine so that operators are alerted in case of any abnormalities.
3. Proper arrangement has not been made for providing/fixing LV board at the ends of the machine. Suitable fixing arrangement should be made which must ensure prominent display of LV Board.
4. Cameras may be provided at sensitive locations including under frame of the machine and its visual display should be available to Operator/Pilot.
5. Provision should be made for easy communication through handsfree mike and speaker near operator's panel and portable device for Personnel working outside.

6. At one end of the machine, provision of trailer (trailer in rear) has been made. There is possibility of SPAD (Signal Passing at Danger) due to error in assessment if the machine is worked with trailer in lead position. Railway shall depute machine specific trained Operators only who have been trained for this specific machine.
7. For tamping, Operator shifts from driving cab to working cab. Procedure should be laid down for such transits from one cab to another cab.
8. It shall be ensured that staff working with PCT should wear protective gear such as Helmets, goggles, masks, Reflective jackets, shoes etc. to avoid any injury due to flying of ballast & other small particles.
9. 25 kVA 'Danger Sign Board' made of retro reflective material must be pasted on both side of the machine at appropriate location for easy identification by the staff
10. Before the start of machine, the operator should ensure that the maintenance is started from the 'zero point' indicated by the SSE/P-Way so as to compare the post run data captured by the machine with the actual measurement on the ground.
11. List of medicines long with their expiry date must be pasted inside the first aid box

RDSO is requested to examine the issues involved and submit comments at the earliest.

DA: as above.

  
12.01.2023  
(गौरव)

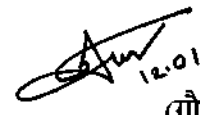
निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No.-011-23047598]  
e-mail address :dceg@rb.railnet.gov.in

No. 2023/CEDO/SR/04/PCT-UNIMAT 08-4X4 4S-IR-DFCCIL

New Delhi, Dated 12.01.2023

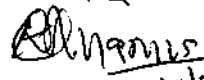
Copy forwarded for information to :

1. Executive Director (Standards) Motive Power, RDSO, Lucknow
2. Executive Director (Standards) Track-I, RDSO, Lucknow
3. EDTk(M&Mc) Railway Board

  
12.01.2023  
(गौरव)

निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No.-011-23047598]  
e-mail address :dceg@rb.railnet.gov.in

Issued through E-mail

  
12/01/23  
ADE(CIVIL)



भारत सरकार  
नागर विमानन मंत्रालय  
(रेल संरक्षा आयोग)  
GOVERNMENT OF INDIA  
MINISTRY OF CIVIL AVIATION  
(COMMISSION OF RAILWAY SAFETY)

फोन/Ph.: 0522-2233087, 2233108 (P&T)  
N.E.Rly. 31-140, N.Rly. 23-280  
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पूर्वोत्तर रेलवे, म.रे.प्र. कार्यालय परिसर  
18, अशोक मार्ग, लखनऊ-226001

N.E. Railway, DRM OFFICE CAMPUS  
18, Ashok Marg, Lucknow-226 001

संख्या-Q.12011/20/2022-23-त.वि.

दिनांक- 11.01.2023

सेवा में,  
सचिव (सिविल इंजी.)  
रेल मंत्रालय (रेलवे बोर्ड)  
रेल भवन  
नई दिल्ली

[ध्यानार्थ:EDCE(G)]

विषय: Introduction of operation of **Points & Crossing Tamping Machine (PCT), Model-UNIMAT 08-4X4/4S** supplied by M/s Plasser & Theurer to manufacturer General Arrangement Drawing No. UD00.1342-63.PIND [Max. Axle Load: 20t], up to a maximum speed of 65 kmph when running on its own power as well as when running in train formation over Indian Railways and over routes of Eastern & Western Dedicated Freight Corridors of DFCCIL.

- संदर्भ: (i) DG/RDSO's letter No. TM/HM/11/56/UNIMAT 08-4X4/4S, dated 19.10.2022  
(ii) RDSO's Provisional Speed Certificate (PSC) no. TM/HM/11/56/UNIMAT 08-4X4/4S, dated 19.05.2022 and its Amendment no. 1 dated 15.11.2022  
(iii) This office's letter of even no. dated 02.11.2022  
(iv) RDSO's letter no. TM/HM/11/56/UNIMAT 08-4X4/4S, dated 15.11.2022  
(v) This office's letter of even no. dated 06.12.2022

Vide ref (i), DG/RDSO has approached this office for recommending sanction of Central Government for introduction of subject rolling stock, up to a maximum speed of 65 kmph when running on its own power as well as when running in train formation over Indian Railways and over routes of Eastern & Western Dedicated Freight Corridors of DFCCIL on the basis of RDSO's PSC mentioned under reference (ii). Vide reference (iii) [copy enclosed], RDSO was advised to furnish certain clarifications on the subject case. Clarifications on the issues were submitted by RDSO to this office vide reference (iv) [copy enclosed]. Vide reference (v) [copy enclosed], RDSO was advised to intimate the location and suitable date for statutory inspection. In consultation with RDSO the statutory inspection was fixed on 27.12.2022

Statutory inspection of the subject rolling stock was carried out by CRS/SC on 27/12/2022 at Zonal Track Machine Depot, Cavalry Barracks, Hyderabad. Inspection report of the rolling stock is enclosed as **Annexure-1**.

Based on the examination of documents/clarifications submitted by RDSO and inspection of the subject rolling stock, the case is being forwarded to Railway Board with the recommendation for the sanction of the Central Government for operation of Points & Crossing Tamping Machine (PCT), Model-UNIMAT 08-4X4/4S supplied by M/s Plasser & Theurer to manufacturer General Arrangement Drawing No. UD00.1342-63.PIND [Max. Axle Load: 20t], up to a maximum speed of **65 [SIXTY FIVE] kmph** when running on its own power as well as when running in train formation over Indian Railways and over routes of Eastern & Western Dedicated Freight Corridors of DFCCIL with conditions mentioned in **Annexure-2**.

Observations from CCRS Inspection Report about 'Measures to be taken before introduction of Points & Crossing Tamping Machine (PCT), Model-UNIMAT 08-4X4/4S' are enclosed as **Annexure-3**. The compliance of the same should be submitted to the Commission before Introduction of the subject rolling stock.

Further, 'Measures for future improvement of Points & Crossing Tamping Machine (PCT), Model-UNIMAT 08-4X4/4S' are attached as **Annexure-4**.

*This is issued with the approval of Chief Commissioner of Railway Safety.*

Ahmad Nadeem Siddiqui  
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(अहमद नदीम सिद्दीकी)

उप रेल संरक्षा आयुक्त (यांत्रिक)

संलग्नक: यथोक्त

प्रतिलिपि:

महानिदेशक (ट्रेक मशीन)

ट्रेक मशीन निदेशालय

अनुसंधान, अभिकल्प एवं मानक संगठन,

मानक नगर, लखनऊ-226011



Conditions to be ensured by the Railway for operation of Points & Crossing Tamping Machine (PCT), Model-UNIMAT 08-4X4/4S supplied by M/s Plasser & Theurer to manufacturer General Arrangement Drawing No. UD00.1342-63.PIND [Max. Axle Load: 20t], up to a maximum speed of 65 kmph when running on its own power as well as when running in train formation over Indian Railways and over routes of Eastern & Western Dedicated Freight Corridors of DFCCIL

1. Observance of all conditions laid down in RDSO's Provisional Speed Certificate (PSC) No. TM/HM/11/56/UNIMAT 08-4X4/4S, dated 19.05.2022 and its Amendment no. 1 dated 15.11.2022 for operation up to a maximum speed of 65 kmph in train formation. **Remarks of the Railway/DFCCIL against each Para of the Speed Certificate shall be submitted to the Commission before start of actual operation of rolling stock.**
2. Observance of all permanent and temporary speed restrictions already in force and /or those that may be imposed from time to time on various accounts.
3. It shall be ensured that staff working with PCT should wear protective gear such as Helmets, goggles, masks, Reflective jackets, shoes etc. to avoid any injury due to flying of ballast & other small particles.
4. While working on double/multiple line sections, Railway shall ensure that the machine or any of its parts does not infringe the adjoining structures or track. Train operation on adjacent tracks shall only be permitted after ascertaining safety of trains on these tracks.
5. Points & Crossing Tamping Machine shall be maintained as per OEM's maintenance manual.

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**Measures to be taken before introduction of Points & Crossing Tamping Machine (PCT), Model-UNIMAT 08-4X4/4S**

Statutory inspection of the rolling stock by the CRS/SC was carried out on 27/12/2022 at Zonal Track Machine Depot, Cavalry Barracks, Hyderabad. Para 2 of CRS Inspection Report which suggests the measures for improvement of inspected rolling stock is reproduced below for taking necessary action for their implementation:

1. Heat sensor is placed much above the engine location. In such situation it will not be able to assess the temperature of engine in realistic way. To make the alarm system effective, sensors must be placed closer to the engine.
2. Audio and Visual alarms from Heat Sensing Alarm system in engine area should be made available in all the cabs of the machine so that operators are alerted in case of any abnormalities.
3. Proper arrangement has not been made for providing/fixing LV board at the ends of the machine. Suitable fixing arrangement should be made which must ensure prominent display of LV Board.
4. Cameras may be provided at sensitive locations including under frame of the machine and its visual display should be available to Operator/Pilot.
5. Provision should be made for easy communication through hands free mike and speaker near operator's panel and portable device for Personnel working outside.
6. At one end of the machine, provision of trailer (trailer in rear) has been made. There is possibility of SPAD (Signal Passing at Danger) due to error in assessment if the machine is worked with trailer in lead position. Railway shall depute machine specific trained Operators only who have been trained for this specific machine.
7. For tamping, Operator shifts from driving cab to working cab. Procedure should be laid down for such transits from one cab to another cab.
8. It shall be ensured that staff working with PCT should wear protective gear such as Helmets, goggles, masks, Reflective jackets, shoes etc. to avoid any injury due to flying of ballast & other small particles.
9. 25 kVA 'Danger Sign Board' made of retro reflective material must be pasted on both side of the machine at appropriate location for easy identification by the staff
10. Before the start of machine, the operator should ensure that the maintenance is started from the 'zero point' indicated by the SSE/P-Way so as to compare the post run data captured by the machine with the actual measurement on the ground.
11. List of medicines long with their expiry date must be pasted inside the first aid box

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**Measures for future improvement of Points & Crossing Tamping Machine (PCT), Model-UNIMAT 08-4X4/4S**

Statutory inspection of the rolling stock by the CRS/SC was carried out on 27/12/2022 at Zonal Track Machine Depot, Cavalry Barracks, Hyderabad. Para 3 of CRS Inspection Report which suggests the measures for future improvement of the machine is reproduced below for taking necessary action for their implementation:

1. There is need for interface between Automatic Guiding Computer (ALC) and Data Recording Processor (DRP) to have output of superimposed graph of track parameters recorded before tamping and after tamping.
2. It was noticed that due to Wheel Guards provided on some of the wheels proper visual inspection of wheels cannot be carried out. This provision should be reviewed taking into consideration its functionality /benefits as well as limitations created by it. If needed, suitable relocation may be done.
3. During tamping of 4th rail, arrangements of tamping tools are such that the all the rail seats have got tamped and squeezed from only one side i.e., either from gauge face side or from non-gauge face side. It is needless to emphasize that to achieve proper tamping, both side of the Rail seats should be tamped together. The arrangement provided in the machine does not ensure effective tamping. There is need to come out with alternate tamping mechanism which can increase effectiveness of tamping.
4. Provision of display of Feed from the back cameras to front cabin should be made.
5. In existing arrangements, ascertaining the location of first measuring trolley is being done manually. Human interference in this aspect can be minimised with use of technologies like Cameras, RFID etc.
6. Deadman's handle and/or Vigilance Control Device similar to what is available in locomotives should be provided. It is much more essential in this rolling stock as it is driven by single crew.
7. Two nos. CCTV cameras have been provided to assist the operator carry out the tamping operations. However, there is no provision to record the CCTV footage for reference during investigation/ enquiry of an unusual incident. Necessary modifications should be made to record CCTV footage for at least 30 days. Provision of CCTV cameras with recording facility inside the cabs of the machine may also be explored in future design of the machine.
8. Necessary provision should be made to record the conversation between staff present in the cabs for reference during enquiry of any unusual incident/accident.
9. Machine may be equipped with centralised Computer based Monitoring & Control System to monitor the health of various systems such as engine, hydraulics, pneumatic & electrics. Arrangement should also be made for downloading & analysing the data.
10. At present the stock is proposed to be operated at a speed of 65 Kmph based on the Provisional Speed Certificate issued by RDSO. Oscillation trial of the stock should be planned & conducted at the earliest and Final Speed Certificate issued to utilize its full speed potential.
11. Provisions should be made for logging the actual working/operation timings of machine so that performance of the machine can be compared against its rated output.

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



No.2023-CEDO-SR-02-MMR-30-9-27kmph

New Delhi, Dated 03.01.2023

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

**Sub:** Introduction of New MG Nilgiri Mountain Railway (NMR) coaches {Transportation code : FCZ, SCZ, SLR & SCZR and Layout Drawing No.: MMR/FCZ-9-0-001 alt g, MMR/SCZ-9-0-001 alt G, MMR/SLR-9-0-001 alt e & MMR/SLR-9-0-001 alt h respectively} manufactured by ICF over Mettupalayam (MTP) to Udhagamandalam (UAM) Section of Southern Railway upto maximum speed of 30 kmph over MTP-QLR (Non-rack section), 9 kmph over QLR-ONR (rack section) and 27 kmph over ONR-UAM (Non-rack section)

Ref: (i) CCRS office letter no. Q.12011/18/2022-23-T.W, dated 02.01.2023

(ii) RDSO's letter no. SV.MG Bogie/NMR, dated 26.09.2022

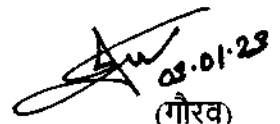
(iii) RDSO's Final Speed Certificate (FSC) No. SV.MG Bogie/NMR, dated 03.11.2022

Chief Commissioner of Railway Safety, Lucknow; while forwarding the case for the sanction of the Railway Board for introduction of New MG Nilgiri Mountain Railway (NMR) coaches {Transportation code : FCZ, SCZ, SLR & SCZR and Layout Drawing No.: MMR/FCZ-9-0-001 alt g, MMR/SCZ-9-0-001 alt G, MMR/SLR-9-0-001 alt e & MMR/SLR-9-0-001 alt h respectively} manufactured by ICF over Mettupalayam (MTP) to Udhagamandalam (UAM) Section of Southern Railway upto maximum speed of 30 kmph over MTP-QLR (Non-rack section), 9 kmph over QLR-ONR (rack section) and 27 kmph over ONR-UAM (Non-rack section), has recommended certain measures to be taken before introduction of the above rolling stocks, reproduced as under:

- i. Dustbin provided in SLRD coach may be shifted towards side wall to allow easy passage to the wheel chair bound passenger.
- ii. Mobile charging points in SLR & SCZ coach have been provided over the window making them inaccessible for use by the passenger. They may be suitably relocated.

RDSO is requested to examine the issues involved and submit comments at the earliest.

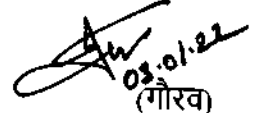
DA: as above.

  
(गौरव)

निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No.-011-23047598]  
e-mail address :dceg@rb.railnet.gov.in


Copy forwarded for information to :

1. Executive Director (Standards) Carriage, RDSO, Lucknow
2. Executive Director (Standards) Track-I, RDSO, Lucknow
3. EDME(Chg) Railway Board

  
03.01.22  
(गौरव)

निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड

Issued through E-mail

  
03/01/23 ADE(CIVIL)

**Conditions to be ensured by the Railway for operation of new MG Nilgiri Mountain Railway (NMR) coaches manufactured by ICF over Mettupalayam (MTP) to Udhamandalam (UAM) Section of Southern Railway upto maximum speed of 30 kmph over MTP-QLR (Non -rack section), 9kmph over QLR-ONR (rack section) and 27kmph over ONR-UAM (Non-rack section)**

1. Observance of all conditions laid down in RDSO's Final Speed Certificate no. SV.MG Bogie/NMR, dated 03.11.2022. Remarks of the Railway against each Para of the Speed Certificate shall be submitted to the Commission before the start of actual operation of rolling stock.
2. Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
3. Railway shall ensure proper maintenance of rolling stock, locomotive, Signalling and Interlocking, Track and Structures as per schedules prescribed in the Maintenance Manual.
4. Suitable and reliable communication shall be provided in the locomotive and guards van for communication between loco pilot, guard and adjacent station master.
5. Brakesman must be properly trained in the operation of the train having new MG NMR coaches before issue of "Competency Certificate" and record of training imparted to them be kept.

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Siddiqui

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Ahmad Nadeem  
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Date: 2023.01.02  
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**Measures to be taken before introduction of New MG Nilgiri Mountain Railway (NMR) coaches manufactured by ICF**

Statutory inspection of the rolling stock by the CCRS was carried out on 17/12/2022 at Mettupalayam (MTP) Railway Station, Southern Railway. Para 3 of CCRS Inspection Report which suggests the measures for improvement of inspected rolling stock is reproduced below for taking necessary action for their implementation:

1. Dustbin provided in SLRD coach may be shifted towards side wall to allow easy passage to the wheel chair bound passenger.
2. Mobile charging points in SLR & SCZ coach have been provided over the window making them inaccessible for use by the passenger. They may be suitably relocated.

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Ahmad  
Nadeem  
Siddiqui

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by Ahmad  
Nadeem Siddiqui  
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भारत सरकार  
नागर विमानन मंत्रालय  
(रेल सुरक्षा आयोग)  
GOVERNMENT OF INDIA  
MINISTRY OF CIVIL AVIATION  
(COMMISSION OF RAILWAY SAFETY)

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पूर्वोत्तर रेलवे, मं.रे.प्र. कार्यालय परिसर  
16, अशोक मार्ग, लखनऊ-226001

N.E. Railway, DRM OFFICE CAMPUS  
16, Ashok Marg, Lucknow-226 001

संख्या-Q.12011/18/2022-23-त.वि.

दिनांक-02.01.2023

सेवा में,  
सचिव (सिविल इंजी.)  
रेल मंत्रालय (रेलवे बोर्ड)  
रेल भवन नई दिल्ली

[ध्यानार्थ:EDCE(G)]

विषय: Introduction of New MG Nilgiri Mountain Railway (NMR) coaches manufactured by ICF over Mettupalayam (MTP) to Udthagmandalam (UAM) Section of Southern Railway upto maximum speed of 30 kmph over MTP-QLR (Non-rack section), 9 kmph over QLR-ONR (rack section) and 27 kmph over ONR-UAM (Non-rack section).

- संदर्भ: (i) DG/RDSO's letter No. SV.MG Bogie/NMR, dated 26.09.2022  
(ii) RDSO's Final Speed Certificate (FSC) No. SV.MG Bogie/NMR, dated 03.11.2022  
(iii) This office's letter of even no. dated 14.10.2022  
(iv) RDSO's letter no. SV.MG Bogie/NMR, dated 03.11.2022

Vide ref (i); DG/RDSO has approached this office for recommending sanction of Central Government for introduction of subject rolling stock, up to a maximum speed 30 kmph over MTP-QLR (Non-rack section), 9 kmph over QLR-ONR (rack section) and 27 kmph over ONR-UAM (Non-rack section) on the basis of RDSO's FSC mentioned under reference (ii).

Unique Transportation Code, Layout Drawing No. and Max. Axle Load of proposed coaches are as under:

SN	Transportation code of NMR coaches	Layout Drawing No.	Max. Axle Load (t)
1	FCZ	NMR/FCZ-9-0-001 alt g	5.06
2	SCZ	NMR/SCZ-9-0-001 alt g	4.96
3	SLR	NMR/SLR-9-0-001 alt e	4.87
4	SCZR	NMR/SLR-9-0-001 alt h	5.13

The subject proposal was examined in this office and RDSO was advised to furnish certain clarifications vide reference (iii) [copy enclosed]. In response, RDSO vide reference (iv) [copy enclosed] submitted clarifications.

Statutory inspection of the subject rolling stock was carried out by CCRS on 17/12/2022 at Mettupalayam (MTP) Railway Station, Southern Railway. Inspection report of the rolling stock is enclosed as **Annexure-1**.

The case has been examined by this office in light of above-mentioned documents/clarifications submitted by RDSO and is found to be in order. Accordingly, the case is being forwarded to Railway Board with the recommendation for the sanction of the Central Government for operation of new MG Nilgiri Mountain Railway (NMR) coaches manufactured by ICF over Mettupalayam (MTP) to Udthagmandalam (UAM) Section of Southern Railway upto maximum speed of 30 [THIRTY] kmph over MTP-QLR (Non-rack section), 9 [NINE] kmph over QLR-ONR (rack section) and 27 [TWENTY SEVEN] kmph over ONR-UAM (Non-rack section) with conditions mentioned in Annexure-2.

Observations from CCRS Inspection Report about 'Measures to be taken before introduction of 'New MG Nilgiri Mountain Railway (NMR) coaches manufactured by ICF' are enclosed as **Annexure-3**. The compliance of the same should also be submitted to the Commission.

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Further, 'Measures for future improvement of the subject rolling stock' are attached as **Annexure-4**.

*This is issued with the approval of Chief Commissioner of Railway Safety.*

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(अहमद नदीम सिद्दीकी)  
उप रेल संरक्षा आयुक्त (यांत्रिक)

संलग्नक: यथोक्त

प्रतिलिपि:

महानिदेशक (सवारी डिब्बा)

सवारी डिब्बा निदेशालय अनुसंधान, अभिकल्प एवं मानक संगठन,  
मानक नगर, लखनऊ-226011

शैलेश कुमार पाठक  
Shailesh Kumar Pathak



मुख्य आयुक्त रेल संरक्षा  
Chief Commissioner of Railway Safety  
नागर विमानन मंत्रालय  
Ministry of Civil Aviation  
रेल संरक्षा आयोग  
(Commission of Railway Safety)  
भारत सरकार  
Government of India

**Statutory inspection of New MG Nilgiri Mountain Railway (NMR) coaches manufactured by ICF**

1. RDSO vide letter no. SV.MG Bogie/NMR, dated 26.09.2022 submitted a proposal for introduction of New MG Nilgiri Mountain Railway (NMR) coaches manufactured by ICF over Mettupalayam (MTP) to Udhagamandalam (UAM) Section of Southern Railway. This application has been submitted based on RDSO's Final Speed Certificate No. SV.MG Bogie/NMR/Operation dated 22.09.2022.
2. The subject proposal was been examined in this office and RDSO was advised to furnish certain clarifications vide this office letter no. Q.12011/18/2022-23-T.W. dated 14.10.2022. In response, RDSO vide its letter dated 03.11.2022 submitted clarifications. Further vide this office letter dated 14/12/2022, RDSO was advised to make the MG Coaches available at Mettupalayam (MTP) Railway Station, Southern Railway for statutory inspection.

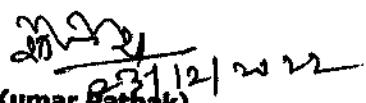
Accordingly, I had inspected the rolling stock at Mettupalayam (MTP) Railway Station, Southern Railway on 17/12/2022. Dy. CRS/Mechanical/LKO, ED/Carriage/RDSO, DRM/SA, ADRM/SA, CRSE/Freight/SR, Dy. CDE/ICF & other officials of RDSO, ICF and Southern Railway accompanied me during the inspection. This was followed by the speed trial in Mettupalayam-Adirely section.

Based on the inspection of rolling stock and the documents submitted by the RDSO, the subject rolling stock is recommended for sanction of Central Govt. subject to the compliance of the conditions mentioned in Para 3 & 4 below:

3. **Measures to be taken before introduction of New MG Nilgiri Mountain Railway (NMR) coaches manufactured by ICF**
  - (i) Dustbin provided in SLRD coach may be shifted towards side wall to allow easy passage to the wheel chair bound passenger.
  - (ii) Mobile charging points in SLR & SCZ coach have been provided over the window making them inaccessible for use by the passenger. They may be suitably relocated.
4. **Measures for future improvement of New MG Nilgiri Mountain Railway (NMR) coaches manufactured by ICF**
  - (i) Section should be planned for renewal by 52 Kg rail & PSC sleeper having provision for rack & pinion arrangement in QLR-ONR section. Rail should be welded to the extent possible and only on sharp curves it should be fish plated ensuring the squaring of joints on both rails
  - (ii) All small span bridges should be replaced with PSC slab in order to avoid jacking of abutment of piers

*[Signature]*  
28/12/2022

- (iii) As per RDSO Speed certificate, the maximum speed in QLR-ONR( rack & pinion section) is 9 Kmph whereas the maximum speed of the existing coaches in the same section is 13 Kmph. This reduction in speed from 13 kmph to 9 kmph corresponds to increase in run time of the train services by 1 hr which may adversely impact the patronage of the service by the tourists. In view of the above, RDSO/Division may plan for the trial of the train to increase the speed in QLR-ONR section to at least 13 Kmph
- (iv) Width of the brakeman working area in FCZ & SCZ coach is only 0.55m which is too less for his effective working & smooth movement. This area should be adequately increased by corresponding reduction in the passenger area.
- (v) Existing FRP panel separating brakeman area from passenger compartment in FCZ coach may be made of glass to provide panoramic view of the section to the passengers.
5. **Technical details** of New MG Nilgiri Mountain Railway (NMR) coaches manufactured by ICF is enclosed as **Annexure-A**.

  
(Shallesh Kumar Pathak)  
Chief Commissioner of Railway Safety

Copy forwarded for information and necessary action to:

1. The Secretary (Civil Engg.), Ministry of Railways, Railway Board, New Delhi
2. The Director General, RDSO, Lucknow

**Measures for future improvement of New MG Nilgiri Mountain Railway (NMR) coaches manufactured by ICF**

Statutory inspection of the rolling stock by the CCRS was carried out on 17/12/2022 at Mettupalayam (MTP) Railway Station, Southern Railway. Para 4 of CCRS Inspection Report which suggests the measures for future improvement of the rolling stock is reproduced below for taking necessary action for their implementation:

1. Section should be planned for renewal by 52 Kg rail & PSC sleeper having provision for rack & pinion arrangement in QLR-ONR section. Rail should be welded to the extent possible and only on sharp curves it should be fish plated ensuring the squaring of joints on both rails
2. All small span bridges should be replaced with PSC slab in order to avoid jacking of abutment of piers
3. As per RDSO Speed certificate, the maximum speed in QLR-ONR( rack & pinion section is 9 Kmph whereas the maximum speed of the existing coaches in the same section is 13 Kmph. This reduction in speed from 13 kmph to 9 kmph corresponds to increase in run time of the train services by 1 hr which may adversely impact the patronage of the service by the tourists. In view of the above, RDSO/Division may plan for the trial of the train to increase the speed in QLR-ONR section to at least 13 Kmph
4. Width of the brakeman working area in FCZ & SCZ coach is only 0.55mm which is too less for his effective working & smooth movement. This area should be adequately increased by corresponding reduction in the passenger area.
5. Existing FRP panel separating brakeman area from passenger compartment in FCZ coach may be made of glass to provide panoramic view of the section to the passengers

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



No. 2022/CEDO/SD/RS/19/BLLM/2896x2438/IR/DFCCIL

New Delhi, dated 02.01.2023

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

**Sub:** Condonation of infringement w.r.t IRSOD (BG) Revised, 2022 by **maximum side height** of ISO/Non-ISO Containers [Max. 9'-6''(2896mm) high and 8'(2438mm) wide] in Single Stack configuration on Broad Gauge Low Platform Bogie Longer Container Flat Wagon type BLLM (Car A & B), as per RITES Drg no. 45-A-2019-S/02 (Car-A) & RITES Drg no. 45-B-2019-S/024 (Car-B) for operation over **Indian Railways** and routes of **Eastern & Western Dedicated Freight Corridors** of DFCCIL

Ref: (i) RDSO's letter no. CT/CONTR/BG/MG, dated 07-11-2022

(ii) CCRS office letter no. Q.14011/05/2022-23-T.W., dated 17.11.2022

With reference to RDSO above applications {ref. (i)}, sent through the Chief Commissioner of Railway Safety, Lucknow; the sanction of Ministry of Railways, Railway Board is hereby communicated for condonation of infringement w.r.t IRSOD (BG) Revised, 2022 by **maximum side height** of ISO/Non-ISO Containers [Max. 9'-6''(2896mm) high and 8'(2438mm) wide] in Single Stack configuration on Broad Gauge Low Platform Bogie Longer Container Flat Wagon type BLLM (Car A & B), as per RITES Drg no. 45-A-2019-S/02 (Car-A) & RITES Drg no. 45-B-2019-S/02 (Car-B) for operation over **Indian Railways** and routes of **Eastern & Western Dedicated Freight Corridors** of DFCCIL, as shown in detail enclosed with above mentioned application, detail of infringements are as under:

**Clause 31-** Max. height above rail level at side of unloaded vehicle by 25mm at the beginning of slope line to zero mm at distance of 1219 mm and 1144 mm respectively from the centre of wagon (i.e. 3867mm to 3892mm instead of 3735mm)

Further, above sanction of condonation is subject to the following stipulations:

- Locations with restricted height overhead structures shall be identified by the Zonal Railway. Zonal Railway MUST ensure the removal of any infringement before starting operation of ISO/Non-ISO Containers [Max. 9'-6''(2896mm) high and 8'(2438mm) wide] in single stack configuration on BLLM (Car A & B) wagons in electrified territory.

*[Signature]*  
02.01.2023

- ii. All the necessary conditions related to infringements and various clearances to be ensured, SHALL form part of the RDSO Speed Certificate whenever issued for the operation of ISO/Non-ISO Containers [Max. 9' - 6" (2896mm) high and 8' (2438mm) wide] in single stack configuration on BLLM (Car A & B) wagons on specified routes of IR and DFCCIL routes.

*[Signature]*  
02.01.2023  
(गौरव)

निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड  
[Rly No. 030-47598, MTNL No.-011-23047598]  
e-mail address :dceg@rb.railnet.gov.in

No. 2022/CEDO/SD/RS/19/BLLM/2896x2438/IR/DFCCIL

New Delhi, dated 02.01.2023

Copy forwarded for information to:

1. The Chief Commissioner of Railway Safety, Compound of DRM/NER, Ashok Marg, Lucknow-226001 w.r.t. his endorsement No. Q.14011/05/2022-23-T.W., dated 17.11.2022
2. Commissioner of Railway Safety, All Circles
3. ED Standards (Track-1), RDSO, Manak Nagar, Lucknow
4. EDME(Fr.)/Railway Board, New Delhi

*[Signature]*  
02.01.2023  
(गौरव)

निदेशक सिविल इंजीनियरिंग(जी)/रेलवे बोर्ड

Issued through E-mail

*[Signature]*  
03/1/22 APE(CAVIL)