



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



No.2023/CEDO/SR/23/LHB(07 Nos.)-160lmpH

New Delhi, dated 29.11.2023

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

The General Manager,  
All Indian Railways

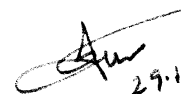
**Sub:** Introduction of LHB EOG Generator Car (LWLRRM2), AC-I CC (LWFCZAC2), AC-II CC (LWSCZAC2), AC-I Sleeper (LWFAC2), AC-3 Tier (LWACCN2), AC-2 Tier (LWACCW2) & AC Hot Buffet Car (LWCBAC2) fitted with pneumatic suspension (air spring capacity 120KN) at secondary stage on FIAT Bogies, up to a maximum speed of **160 kmph** over Indian Railways, by Zonal Railways

Ref: (i) CCRS office letter no. Q.12011/05/2023-24-T.W, dated 29.08.2023  
(ii) RDSO's letter no. SV.FIAT(SC)/Sanction/Rajdhani EOG, dated 19.04.2023  
(iii) RDSO's Revised Final Speed Certificate (FSC) no. SV.AS.ML, dated 03.08.2023

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 **post facto sanction** for introduction of LHB EOG Generator Car (LWLRRM2), AC-I CC (LWFCZAC2), AC-II CC (LWSCZAC2), AC-I Sleeper (LWFAC2), AC-3 Tier (LWACCN2), AC-2 Tier (LWACCW2) & AC Hot Buffet Car (LWCBAC2) fitted with pneumatic suspension (air spring capacity 120KN) at secondary stage on FIAT Bogies, up to a maximum speed of **160 kmph** over Indian Railways, by Zonal Railways with the following stipulations :

**A. For operation of coaches upto 130 kmph-**


- (i) Observance of all conditions laid down in RDSO Revised Final Speed certificate no. SV.AS.ML dt. 03.08.2023 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 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.

  
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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 above 110 Kmph & up to 130 Kmph, Railway shall ensure provision of sturdy fencing of standard design in compliance of Para 202 of IRPWM 2020 to prevent accidents related to trespassing.
- (iv) All the level crossings shall be manned with telecommunication facilities and interlocked for operation of trains at speed upto 130 kmph. Replacement of all level crossing, by Grade Separators shall be planned while proposing increase of speed.
- (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 Oscilograph 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) Coaches 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. 18.08.22 shall be taken.
- (xi) Earthing in the coach body & all the panels shall always be properly maintain

**B. In addition of above, following stipulation shall be applicable for operation of coaches beyond 130 kmph and upto 160 kmph-**

- (i) Supervisors/officers shall not undertake push trolley inspection and working of rail dolly on the face trains having speed more than 130 kmph. Suitable guidelines shall be issued by the Railway in this regard.
- (ii) 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.

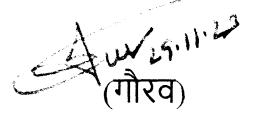
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- (iii) Provision of Train Protection Warning System (TPWS) shall be ensured on the route for operation at speed more than 130 Kmph.
- (iv) Level crossing gates should not be permitted as mandated under Para 202 of IRPWM 2020 for 160 kmph speed. In 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 closed gate.
- (v) Railway shall ensure provision of sturdy fencing of standard design to prevent trespassing by human & cattle to comply Para 202 of IRPWM 2020.
- (vi) At locations which are prone to trespassing even after provision of fencing, suitable RUB of restricted height(2mx2m) should be constructed for crossing of pedestrian as well as cattle
- (vii) 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. RPF/station staff shall be exclusively deployed on platform at the time of passing of above locomotive for safety of public duly ensuring suitable precautionary measures.
- (viii) Periodic drives shall be conducted to check and prevent trespassing by RPF with concerned departments by way of counseling of residents of land adjoining railway track and by conducting surprise check
- (ix) 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.
- (x) 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.
- (xi) Stipulated corridor blocks shall be regularly granted for ensuring track maintenance to required standards considering need of intensive track monitoring/maintenance at higher speed.

  
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(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.
- (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 equipment.

  
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निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

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

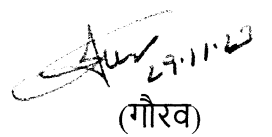
e-mail address: dceg@rb.railnet.gov.in

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**New Delhi, dated 29.11.2023**

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.12011/05/2023-24-T.W, dated 29.08.2023
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(Chg), Railway Board

  
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