भारत सरकार Government of India

रेल मंत्रालय Ministry of Railways

रेलवे बोर्ड Railway Board

No. 2021/CEDO/SR/01(1) **New Delhi, dated 08.01.2021**

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

The General Manager,
All Indian Railways

Sub: Introduction of operation of LHB AC Vistadome coach [Unique Transportation Code: **LWCTZAC**; Maximum Axle Load: **16.25t**] fitted with pneumatic suspension (120 KN capacity) at the secondary stage on FIAT bogies to RDSO's Drawing no. CSC-1848 up to maximum speed of **160 kmph**, *by Zonal Railways,* on track maintained as per provisions of Indian Railway Permanent Way Manual, June 2020

Ref: (i) RDSO's letter No. SV.FIAT(SC)/Sanction/LWCTZAC, dated 01.01.2021
(ii) RDSO's Final Speed Certificate (FSC) No. SV.FIAT(SC)/LWCTZAC/ 160 kmph, dated 01.01.2021
(iii) CCRS office's letter No. 12011/14/2020-21-T.W, dated 05.01.2021

With reference to RDSO above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of operation of LHB AC Vistadome coach [Unique Transportation Code: **LWCTZAC**; Maximum Axle Load: **16.25t**] fitted with pneumatic suspension (120 KN capacity) at the secondary stage on FIAT bogies to RDSO's Drawing No. CSC-1848 up to maximum speed of **160 kmph**, *by Zonal Railways,* on track maintained as per provisions of Indian Railway Permanent Way Manual, June 2020, containing track geometry standards under para 522 over Indian Railway system, with following stipulations :

i. Before introducing actual operation of LWCTZAC coaches, Railway shall fulfil all the conditions/stipulations given in RDSO's Final Speed Certificate No. SV.FIAT(SC)/LWCTZAC/160kmph, dated 01.01.2021 for operation up to a maximum 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. **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.**
ii. As per para 6.1.2 of 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).
iii. Observance of all permanent and temporary speed restrictions already in force and /or those that may be imposed from time to time due to track, bridges, curves, signaling, interlocking, any specific local conditions etc.
iv. Location of bridges on which speed restrictions have been imposed shall be notified by the Railways and incorporated in the working timetable.

Prem Sagar
08.01.2021

v. For speed 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 location 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.

vi. Track geometry shall be monitored by Track Recording Car (TRC), Oscillograph Car and OMS at laid down frequency.

vii. Zonal Railway shall interpret the results of runs of OMS, TRC and Oscillograph Car and ensure corrective & preventive action, as considered necessary.

viii. Rail grinding at regular interval shall be done on the entire route for better riding behaviour and to avoid rail fracture/weld failures, as per instructions issued by Board from time to time.. Regular greasing of all the curves in the section shall be ensured.

ix. Stretches of existing weak formations (where permanent/temporary speed restriction is imposed), if any, shall be planned to be rehabilitated/strengthened first, before permitting higher speed.

x. All the provision contained in IRSEM Chapter VII, Section M, Para 7.131 (A&C slip no. 6) regarding standards of signalling and interlocking shall be complied with.

xi. Signalling to protect level crossings should be provided as per Section 'D' (Para 7.43 to 7.46), Chapter-VII of IRSEM. As per para 7.46.2 of IRSEM, there should be no LC gate within the Block Overlap (180m) from the Home signal. If it is there, Home signal should be relocated and placed beyond 180m. No new level crossing should be located within Signal/Block Overlap.

xii. Provision of Train Protection Warning System (TPWS) shall be ensured on the route for operation at 160 kmph.

xiii. Suitable and reliable communication shall be provided in the locomotive and guards van for communication between loco pilot, guard and adjacent station master.

xiv. 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.

xv. Railway shall ensure that run-through line is NOT the platform line.

xvi. Before initiating the operation, PCME of the concerned Railway shall certify the track worthiness and safety of the rolling stock.

xvii. In case air spring gets deflated, the speed shall be limited to 60 kmph. Failure Indication cum Brake Application (FIBA) device shall be provided in pneumatic circuit of Air Spring and Air Brake.

xviii. Brakes of the rolling stock shall be in good working order during the operation.

xix. The Wheel Slide Protection (WSP) device of all the coaches in the rake shall be 100% functional at the starting station.

xx. Proper maintenance of the Coach shall be ensured. Coach shall be maintained as per "Maintenance Manual for LHB Coaching Stock" issued by CAMTECH.

xxi. Before running of these coaches, Zonal Railways should assess the local conditions for safe operation at ghat sections/hilly terrain etc. especially during monsoon season.

xxii. Earthing in the coach body & all the panels shall always be properly maintained.

xxiii. As only one end of the coach is having vestibule, Zonal Railway must ensure that these coaches are attached only at the end of the rake.

xxiv. 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:

Prem Sagar
08.01.2

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
h. Platform for attention to roof mounted AC equipments

Prem Sagar
08.01.21
(प्रेम सागर गुप्ता)
कार्यकारी निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड
[Phone: 030-44803(Rly) : 011-23383379(MTNL)]

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. 12011/14/2020-21-T.W, dated 05.01.2021
2. Executive Director (Standards)Motive Power, RDSO, Lucknow
3. Executive Director (Standards) Track-I, RDSO, Lucknow
4. Executive Director ME(Coaching) , Railway Board

(प्रेम सागर गुप्ता)
कृते, सचिव रेलवे बोर्ड