

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)**

No. 2013/Proj./HMR/30/12 Vol.I

New Delhi, dated 13.05.2016

Chief Executive & Managing Director,
L & T Metro Rail,
4th Floor - Q3, Cyber Towers,
HITEC City, Madhapur,
Hyderabad - 500 081

Sub: Sanction of introduction of operation of Standard Gauge Metro Coaches manufactured by M/s. Hyundai-Rotem Ltd., Korea with air suspension arrangement at secondary stage to M/s. Hyundai-Rotem Limited's Drawing No. RGA10001AQ0 and RGA10002AQ0 for Driving Motor (DM) and Trailer (T) Coaches respectively over Standard Gauge (SG) system of L&T Metro Rail (Hyderabad) Limited (L&TMRHL), Hyderabad.

Ref: (i) Ministry of Civil Aviation's letter No. Q.16015/01/2016-17-T.W dated 05.05.2016
(ii) RDSO's Interim Speed Certificate No. UTHS/63/HMRL dated 08.05.2015 along with its Amendment No. 1 issued vide No. UTHS/63/HMRL/Mech. dated 25.02.2016

In reference to above letter, provisional sanction of the Ministry of Railways, Railway Board is hereby communicated for operation of Standard Gauge Metro Coaches manufactured by M/s. Hyundai-Rotem Ltd., Korea with air suspension arrangement at secondary stage to M/s. Hyundai-Rotem Limited's Drawing No. RGA10001AQ0 and RGA10002AQ0 for Driving Motor (DM) and Trailer (T) Coaches respectively over Standard Gauge (SG) system of L&T Metro Rail (Hyderabad) Limited (L&TMRHL), Hyderabad on Hyderabad Metro Network up to maximum speed of 80 (EIGHTY) kmph in fully inflated mode, and 60 (SIXTY) kmph in deflated mode of air spring.

Sanction is further subject to conditions mentioned in letter under reference (i) as below:-

1. It shall be ensured by L&TMRHL to develop a mechanism to get their various maintenance practices audited periodically by Ministry of Railways (RDSO).
2. Observance of conditions stipulated in L&T Metro Rail Hyderabad's Joint Safety Certificate along with its concomitant Track Certificate and Bridge Certificate.
3. Observance of all conditions laid down in RDSO's Interim Speed Certificate No. UTHS/63/HMRL dated 08.05.2015 along with its Amendment No. 1 issued vide No. UTHS/63/HMRL/Mech. dated 25.02.2016.
4. Observance of all permanent and temporary speed restrictions in force or those that may be imposed from time to time on account of Track, Bridge, Signalling & Interlocking etc.
5. Compliance of all the conditions stipulated by Railway Board while giving technical clearance for:
 - i. Traction and Power Supply system vide Railway Board's Letter No. 2013/Proj./HMR/30/10 dated 09.09.2014.
 - ii. Signalling/Train control and communication system vide Railway Board's Letter No. 2013/Proj./HMR/30/9 dated 20.01.2015.
 - iii. Approval for adoption of 1 in 40 rail inclination with S 1002 wheel profile vide Railway Board's letter No. 2011/Proj./Hyd-SC/1-2 dated 06.06.2014.
 - iv. Approval for Track structure vide Railway Board's letter No. 2011/Proj./Hyd-SC/1/2 dated 04.09.2014.
 - v. Approval for Fastening System-336 vide Railway Board's letter No. 2011/Proj./Hyd-SC/1/2 Pt. dated 10.12.2014.
 - vi. Approval for Schedule of Dimensions for Hyderabad Metro Rail (SG) vide Railway Board's Letter No. 2011/Proj./HMR/SOD/30/2 dated 01.05.2014.

- vii. Approval for Design Basis Report of viaduct vide Railway Board's letter No. 2012/Proj./HMR/30/4 dated 11th January, 2013.
6. Independent Safety Assessor, vide Certificate No. S.P 1581.42.4 dated 14.09.2015, has certified that that Signalling & Train Control system is adequately safe to be used for Passenger Revenue Operations. L&TMRHL shall ensure compliance of the conditions stipulated in ISA's Certificate and shall maintain and operate the system as per laid down norms to ensure safe operation of trains.
 7. Before initiating the operation of the Metro Coaches, L&TMRHL shall certify the track fitness and safety and fitness of the rolling stock.
 8. L&TMRHL shall ensure proper maintenance of rolling stock, propulsion equipment, control systems, signaling and interlocking, track, OHE and structures.
 9. During rolling stock maintenance, it shall be ensured that the height of life guard, proximity sensor and gear box on Metro Coaches does not infringe Schedule of Dimensions mentioned in items No. 3.1.4 & 3.1.5 of " Schedule of Dimensions of Standard Gauge of Hyderabad Metro Rail Project ".
 10. All train operators and Station Controllers shall be given sufficient training and shall be in possession of competency certificates issued by designated officer.
 11. Adequate training shall be imparted to the maintenance staff responsible for maintaining the rolling stock, signaling and interlocking, OHE and track etc.
 12. In addition to the arrangement for emergency evacuation through emergency doors at the front and rear of the train, L&TMRHL should also consider to provide suitable arrangement in Metro cars to enable emergency evacuation through side doors on to the space available between two tracks on the viaduct.
 13. RDSO has issued interim speed certificate valid for 5 years. The issue of final speed certificate shall be pursued and L&TMRHL shall carry out trial with instrumented Measuring Wheel within 6 months from starting of commercial services as per Railway Board's Letter No. 2011/Proj/Hyd-SC/1/2 dated 29.12.2015.
 14. L&TMRHL shall ensure that the limits of Noise and Vibration parameters of the Metro System are within the permissible limits as per legal and statutory requirement of India.
 15. L&TMRHL shall get all their Maintenance Manuals and instructions related to Rolling Stock approved by RDSO in due course.

Ruth Changsan
13.05.2016

(Ruth Changsan)

Director/Works Planning

Railway Board

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New Delhi, dated 13.05.2016

Copy forwarded for information to:

1. **The Commissioner of Railway Safety**, N.E Railway, DRM office Campus 16, Ashok Marg, Lucknow -226001 w.r.t his endorsement No. Q.16015/01/2016-17-T.W dated 05.05.2016.
2. **Director General**, RDSO, Manak Nagar , Lucknow