Information Note to the Press (Press Release No. 93/2024)

For Immediate Release

Telecom Regulatory Authority of India

TRAI releases Recommendations on Assignment of Additional Spectrum to Indian Railways for its Safety and Security Applications.

New Delhi, 20th December 2024 – The Telecom Regulatory Authority of India (TRAI) has today released Recommendations on Assignment of Additional Spectrum to Indian Railways for its Safety and Security Applications.

- 2. Department of Telecommunications (DoT), Ministry of Communications, Government of India, through its letter dated 26.07.2023, informed TRAI that Indian Railways has sought an additional 5 MHz of paired spectrum in the 700 MHz band, free of cost, for enhancing its safety and security systems. Through the said letter dated 26.07.2023, DoT requested TRAI to examine and provide its recommendations on the following aspects:
 - (i) The assignment of 5 MHz of additional spectrum to Indian Railways in view of its earlier recommendations dated 25.10.2019 and also in the context of its earlier recommendations with respect to NCRTC dated 28.12.2022 and auction of spectrum dated 11.04.2022.
 - (ii) While providing the recommendations, TRAI may also consider the possibility of sharing of the spectrum between Indian Railways/ NCRTC/ RRTS/ Metro and other similar networks to ensure the efficient utilization of spectrum.
 - (iii) Considering the different spectrum valuation methodology as recommended by TRAI for the 5 MHz of paired spectrum in the 700 MHz band, assigned to Indian Railways and for NCRTC, TRAI may examine and if found necessary recommend uniform spectrum valuation and

- charging methodology considering similar usage in the same spectrum band.
- (iv) Any other recommendations deemed fit for the purpose.
- 3. In this regard, TRAI issued a **consultation paper on 'Assignment of Additional Spectrum to Indian Railways for its Safety and Security Applications'** on 07.02.2024 for seeking comments and counter comments from stakeholders. The last date for furnishing comments and counter comments was 06.03.2024 and 20.03.2024, respectively. In response, eight stakeholders submitted their comments, and three stakeholders furnished their counter-comments. An open house discussion on the consultation paper was held through virtual mode on 03.05.2024.
- 4. Based on the comments and counter-comments received from stakeholders in the consultation process, and on its own analysis, TRAI has finalized the Recommendations on Assignment of Additional Spectrum to Indian Railways for its Safety and Security Applications. Salient points of the recommendations are given below:
 - (a) In addition to the already assigned 5 MHz (paired) frequency spectrum in the 700 MHz frequency band, an additional 5 MHz (paired) frequency spectrum in the 700 MHz frequency band should be assigned to Indian Railways for its safety and security applications along the railway tracks for captive use.
 - (b) DoT should take an early decision on the Authority's earlier recommendation that to ascertain feasibility of radio access network (RAN) sharing, a field trial of RAN sharing through multi-operator core network (MOCN) may be conducted by the Ministry of Railways involving Indian Railways and NCRTC, under the supervision of DoT, as recommended by TRAI through the Recommendations on 'Spectrum Requirements of National Capital Region Transport Corporation (NCRTC) for Train Control System for RRTS Corridors' dated 28.12.2022, Based on the outcome of the field trial, a decision

on the implementation of RAN sharing through MOCN in the overlapping areas among Indian Railways/ NCRTC/ other RRTS/ Metro rail networks can be taken.

- (c) While assigning the frequency spectrum to Indian Railways, the terms of frequency spectrum assignment should include a condition that in case it is determined through the field trial that RAN sharing is feasible, Indian Railways shall implement RAN sharing through MOCN in the overlapping areas with NCRTC/ other RRTS/ Metro rail networks and the same shall be governed through the guidelines issued by DoT.
- (d) Spectrum harmonization should be carried out to assign a contiguous block of 10 MHz of frequency spectrum in the 700 MHz band to Indian Railways and an adjacent 5 MHz block to NCRTC/ other RRTS/ Metro rail networks. At the same time, it should be ensured that minimum disturbance occurs to the running networks.
- (e) Spectrum charges for Indian Railways /NCRTC/ other RRTS/ Metro rail networks should be levied based on the formula for Royalty Charges and License Fees for captive use, as prescribed by DoT.
- 5. The Recommendations have been placed on the TRAI's website (www.trai.gov.in). For any clarification or information, Shri Akhilesh Kumar Trivedi, Advisor (Networks, Spectrum and Licensing), TRAI may be contacted at Telephone Number +91-11-20907758.

(Atul Kumar Chaudhar

Secretary, TRAI