

Information Note to the Press (Press Release No. 28/2025)

For Immediate Release

Telecom Regulatory Authority of India

TRAI releases recommendations on 'the issues Related to Critical Services in the M2M Sector, and Transfer of Ownership of M2M SIMs'.

New Delhi, 22nd April 2025 – Telecom Regulatory Authority of India (TRAI) has today released its recommendations on '**the issues Related to Critical Services in the M2M Sector, and Transfer of Ownership of M2M SIMs**'.

2. Earlier, Department of Telecommunications (DoT), through its letter dated 01.01.2024, had referred to the TRAI's recommendations dated 05.09.2017 on 'Spectrum, Roaming and QoS related requirements in Machine-to-Machine (M2M) Communications', and had requested TRAI to provide reconsidered recommendations, as per the provisions of Section 11 of the TRAI Act 1997 on the following issues:

- (a) Identification of Critical Services in the M2M Sector
- (b) Transfer of Ownership of M2M SIMs

3. In this regard, TRAI, on 24.06.2024, issued a consultation paper on 'the Issues Related to Critical Services in the M2M Sector, and Transfer of Ownership of M2M SIMs' for soliciting comments and counter comments from stakeholders. In response, TRAI received 16 comments and one counter-comment from stakeholders. An open house discussion on the consultation paper was held on 24.10.2024 through virtual mode.

4. Based on the comments received from stakeholders and on its own analysis, TRAI has finalized its recommendations on '**the Issues Related to Critical Services in the M2M Sector, and Transfer of Ownership of M2M SIMs**'.

5. Machine to Machine (M2M) communication can enable applications and services across a broad range of vertical markets such as automotive, utilities, healthcare, safety &

surveillance, financial, public safety, smart city and agriculture. At present, the M2M ecosystem is at an early stage of growth of its lifecycle. As the M2M ecosystem matures, and thereby gains user confidence, more and more services will be delivered to individuals, enterprises and public institutions by using Internet of Things (IoT). Many of such services would be critical IoT services, requiring ultra-reliable, low latency M2M connectivity with very high availability. As critical IoT will be used for delivering services of critical importance, the identification of services as critical IoT service requires to be done well in advance. The identification of a service as a critical IoT service would enable user agencies to enter into suitable service level agreements (SLAs) with telecom service providers. Through the SLAs, telecom service providers may be held accountable for ensuring that the M2M connectivity provided by them meets the requisite telecommunication service performance parameters (such as latency, reliability, and availability) which are sacrosanct for the successful operation of the concerned critical IoT service. Through these recommendations, TRAI has recommended a broad guiding framework for classifying a service as a 'critical IoT service'. TRAI has recommended that a service should be classified as a 'critical IoT service', if it passes the following twin tests:

- (a) Whether the service (application) demands ultra-reliable low-latency M2M connectivity with very high availability?
- (b) Whether any disruption of the M2M connectivity used for delivering the service (application) will have a debilitating impact on national security, economy, public health, or public safety?

6. TRAI has recommended that the classification of critical IoT services of a particular domain/ sector should be done by the ministry/ regulatory body concerned in consultation with Department of Telecommunications (DoT).

7. TRAI has also recommended that for the classification of critical IoT services, DoT should devise an institutional mechanism for the assistance of concerned ministries/ regulatory bodies.

8. TRAI has recommended a technology-agnostic approach for the provision of critical IoT services. Specifically, TRAI has recommended that any wireless M2M communication technology (utilizing unlicensed spectrum, or licensed spectrum) or wired M2M


communication technology should be permitted to be used for the provision of critical IoT services if it meets the prescribed service performance benchmarks.

9. Owing to the pervasive nature of the deployment of IoT devices in all walks of life, the importance of security and privacy requirements of IoT devices is paramount. The security and privacy concerns from IoT devices emanate essentially from the M2M communication modules embedded in them through which IoT devices get connected to telecommunication networks including public internet. With a view to allaying security and privacy concerns in respect of IoT devices, particularly those which are used in critical sectors, TRAI has recommended that the M2M communication modules embedded/ plugged in all IoT devices (which are capable of being connected to telecommunication networks) deployed in the critical sectors identified by National Critical Information Infrastructure Protection Centre (NCIIPC), Government of India should be notified under the framework of Mandatory Testing & Certification of Telecommunication Equipment (MTCTE) in a phased manner.

10. Through these recommendations, TRAI has recommended that the Department of Telecommunications (DoT) should establish a framework for the transfer of M2M Service Provider (M2MSP) registration/ authorisation to the resultant entity in case of merger, demerger, acquisition etc. of M2MSP entities.

11. TRAI has also recommended that DoT should introduce an enabling provision for the transfer of the ownership of M2M SIMs from one M2MSP registration holder/ authorised entity to another.

12. The recommendations have been placed on the TRAI's website www.trai.gov.in. For clarification/ information, if any, Shri Akhilesh Kumar Trivedi, Advisor (Network Spectrum & Licensing), TRAI, may be contacted at Telephone Number +91-11-20907758 or email at advmn@trai.gov.in.


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