Information Note to the Press (Press Release No. 14/2024)

Telecom Regulatory Authority of India

TRAI releases Recommendations on
'Usage of Embedded SIM for Machine-to-Machine (M2M) Communications'.

New Delhi, 21st March 2024 – The Telecom Regulatory Authority of India (TRAI) has today released Recommendations on **'Usage of Embedded SIM for Machine-to-Machine (M2M) Communications'**.

2.　　The Department of Telecommunications (DoT), through its letter dated 09.11.2021, sought TRAI's recommendations under the TRAI Act, 1997 on the usage of embedded SIM for M2M communications. In this regard, TRAI issued a Consultation Paper on 'Embedded SIM for M2M Communications' on 25.07.2022 for soliciting comments/ counter comments from stakeholders. In response, 15 stakeholders submitted their comments. An open house discussion on the consultation paper was held on 14.12.2022 through virtual mode. Based on the comments/ inputs received from stakeholders, extensive deliberations on the subject and on its own analysis, TRAI has finalized its Recommendations on **'Usage of Embedded SIM for Machine-to-Machine (M2M) Communications'**.

3.　　With the rolling out of 5G services in the country, the opportunities for M2M ecosystem have expanded greatly, offering increased scope for applications in various sectors of the economy such as agriculture, transportation, healthcare, and industrial automation. These recommendations are aimed at streamlining the regulatory landscape of M2M embedded SIM (eSIM) in India. Through these Recommendations, the Authority has laid emphasis on ensuring security by way of proper Know Your Customer (KYC), which is essential for ensuring network security, mitigating fraud risks, and enhancing the overall integrity of the M2M eSIM ecosystem. The Authority has also recommended a framework for profile switching of eSIMs and swapping of SM-SR. This will provide significant flexibility to the M2M eSIM users and will promote healthy competition in the sector.

4.　　Implementation of these Recommendations by the Government will promote orderly growth in the M2M eSIM segment of the telecom sector in India and will stimulate the development of a homegrown M2M eSIM ecosystem in the country, thus enabling the growth of modern M2M communication.

5.　　The salient features of these Recommendations are as follows:

(a)　　All communication profiles on any M2M eSIM fitted in an imported device on international roaming in India should be mandatorily converted/ reconfigured into communication profiles of Indian telecom service providers (TSPs) within a period of six

months from the date of activation of international roaming on such M2M eSIM or on change of ownership of the device, whichever is earlier.

(b)   Unified Access Service License holder, Unified License (Access Service Authorization) holder, Unified License (Machine-to-Machine Authorization) holder, Unified License for VNO (Access Service Authorization) holder, Unified License for VNO (Machine-to Machine Authorization) holder and the companies holding M2M Service Providers (M2MSP) Registration with a specific permission to own and manage Subscription Manager-Secure Routing (SM-SR) in India should be permitted to own and manage SM-SRs in the country.

(c)   For installation of profiles of Indian TSPs on M2M eSIMs fitted in the devices imported in India, the concerned Original Equipment Manufacturer (OEM) and M2MSP should be given the flexibility to choose between (i) profile download from the Subscription Manager-Data Preparation (SM-DP) of the Indian TSP to the M2M eSIMs through the existing (foreign) SM-SR, or (ii) profile download from the SM-DP of the Indian TSP to the M2M eSIMs through the new (Indian) SM-SR, after SM-SR switch from foreign to Indian.

(d)   The M2MSP registrant/ telecommunication service licensee, whose SM-SR controls M2M eSIMs in India, should not refuse integration of its SM-SR with the SM-DP of the licensed telecom service provider, whose profiles are to be added in such M2M eSIMs, upon the request of the concerned OEM/ M2MSP. The integration of SM-SR with SM-DP should be carried out in accordance to the GSMA's specifications and should be completed within a period of three months from the date of receipt of the formal request from the concerned OEM/ M2MSP.

(e)   The M2MSP registrant/ telecommunication service licensee, whose SM-SR controls M2M eSIMs in India, should mandatorily facilitate switching of its SM-SR with the SM-SR of another entity, eligible to hold SM-SR in India, upon the request of the concerned OEM/ M2MSP. Such SM-SR switching should be carried out as per the GSMA's specifications and should be completed within a period of six months from the date of receipt of formal request from the concerned OEM/ M2MSP.

(f)   Keeping in view the challenges in its implementation, the use of 901.XX IMSI series allocated by International Telecommunication Union (ITU) to Indian entities should not be permitted for providing M2M services in India, at this stage.

6.   The Recommendations have been placed on 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 +91-11-23210481 or email at advmn@trai.gov.in.

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