BIF response to TRAI Consultation Paper on Embedded SIM for M2M Communications

PREAMBLE

At the outset, BIF lauds TRAI for coming out with a consultation on this very important subject of Embedded SIM for M2M Communications.

BIF is of the view that though it may be desirable to have a liberalized regime for implementation of International Roaming to cater to the emerging market requirements, however, keeping in view the overarching requirements of national security, it may perhaps be prudent to specify conversion of Foreign SIMs for all M2M Connections (working on eSIMs) to Indian SIMs within a reasonable time frame, which may be suitably decided by the Authority.

With this as the backdrop, we wish to respond to some of the clauses of the Recommendations made by TRAI on the aforesaid issues:

Q1. Whether the TRAI recommended timeline, about the foreign eUICC fitted devices to be on roaming with Indian TSP's network for a maximum period of three years only, needs a review? If yes, what should be the timeline after which the eUICC should mandatorily be configured with Indian TSP's profile?

BIF RESPONSE
a. Yes – the timeline for the foreign eUICC fitted devices as recommended earlier by TRAI needs to be reviewed.
b. BIF is of the view that though it may be desirable to have a liberalized regime for implementation of International Roaming to cater to the emerging market requirements, however, keeping in view the overarching requirements of national security, it may perhaps be prudent to specify conversion of Foreign SIMs for all M2M Connections (working on eSIMs) to Indian SIMs within a reasonable time frame, which may be suitably decided by the Authority.

Q2. Whether there is a need to change the controlling SM-SR from foreign TSP to Indian TSP in case of foreign eUICC fitted devices operating in India? If yes, what should be the methodology and time period within which it should be done?

BIF RESPONSE

Yes –there is a need to change the controlling SM-SR from foreign TSP to Indian TSP. While swap between SM-SR from foreign TSPs to Indian TSP must be permitted, **it should not be mandated as it is a technically and commercially complicated process.** Integration of SM-DP of Indian TSP and foreign located SM-SR should be permitted as long as foreign SM-SR is a GSMA certified site.

Q3. Whether there is a need for the SM-SR of each TSP to be integrated with the SM-DP of each other TSP? If yes, what should be the methodology for integration? Please specify the timelines also.
&
Q4. Whether there is a need to prescribe SM-SR swapping among the Indian TSPs? If yes, what should be the modalities and procedure for such swap?

BIF RESPONSE

We believe that there is no need for Regulatory intervention for integration between SM-DP and SM-SR or SM-SR swap of Indian TSPs and it should be left to the TSPs to mutually decide the methodology for transfer of profile. The profiles can just be shared between TSPs by following agreed protocols (i.e. Profile Donation) to be downloaded into the device to achieve the objective.

Q5. Whether the profile switchover, from one TSP to another, is driven by the user or OEM? If yes, what methods can be deployed to execute such switchover?

BIF RESPONSE

Presently, switching from one TSP to another is based on contractual agreements between TSPs and OEM/M2M Service Providers and the same should be continued. Logically, it is the M2MSP who is responsible for managing M2M Service to consumers and is best suited to decide the TSP connection to be used in order to optimize the performance.

Q6. Whether non-TSP entities, such as OEMs and M2M Service Providers, should be permitted to own SM-SR and manage the subscribed profiles for their devices? If yes, what should be methodology and procedure?

BIF RESPONSE

Considering the Indian security requirements and handling of critical SIM data, it is recommended that SM-SR should be allowed to be owned by TSPs, which will ensure that end to end management of security is done by a licensed entity.

Q7. Whether the use of ITU allocated shared Mobile Country Code 901.XX (Global IMSI) be permitted in India for M2M Communication? If yes, what should be the methodology and procedure? If not, what are the reasons and challenges in implementation of Global IMSI? Please elaborate.

BIF RESPONSE

Yes. India follows ITU Standards for all its Telecom related National Standards. Likewise, India must follow ITU finalised Mobile Country Code for M2M Communications.

Methodology & Procedure

901.xx is a global IMSI series without ties to any country, thus providing network-agnostic, cross-border connectivity at a single price - thus helping manufacturers to build equipment in any part of the globe and deploy anywhere. Global SIMs have traditionally been used for

Maritime and Aerospace connectivity for both satellite and cellular connectivity. They assist in emergency communications in the wake of disaster. '901' is the Mobile Country Code (MCC) assigned and administered by ITU. 'xx' is the Mobile Network Code (MNC) assigned and administered by ITU-TSB.

A written request for obtaining 901.xx IMSI must be submitted to the director of the ITU-TSB. The same has been assigned to 91 entities between 1999 and 2021 (https://www.itu.int/net/ITU-T/inrdb/e212_901.aspx/352.22). Demand for global connectivity for the Internet of Things (IoT) and Machine-to-Machine (M2M) applications is motivating an increasing number of IoT and M2M players to apply for ITU-allocated 'global IMSI ranges'. Global International Mobile Subscriber Identity (IMSI) ranges are signified by the shared Mobile Country Code '901', a code without ties to any country.

Using non-geographic Mobile Network Code (901.XX), the IoT and M2M players can enter into connectivity access agreements with local MNOs (Mobile Network Operators) in each country. Although the technical setup is built on top of GSMA standardized roaming framework (as it is cost effective), these Unilateral Connectivity Access Agreements are usually tailored for the IoT use-cases, and it may be different from bilateral International Roaming Agreements. The agreements can be customized based on the local MNO's terms and conditions suitable to local market and regulations. However, any non-Indian TSP profile should be treated as equivalent to International roaming profile and should be converted to Indian TSP profile within the time period as specified by the Authority.

Q8. Is there any issue, pertaining to the Consumer eSIM, that needs to be addressed? Please highlight the issue and suggest mechanism to address it with justification.

BIF RESPONSE
No Comments

Q9. Give your comments on any related matter that is not covered in this Consultation Paper.

BIF RESPONSE
No Comments