

SIAM

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TD-01: 454

20th January, 2017

To,

Ms Reena Malhotra
DIR NT-III
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Sanchar Bhawan 20
Ashoka Road, New Delhi 110001

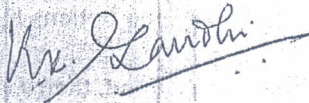
Sub: SIAM comments on Chapter IV: Issues for consultation in TRAI consultation paper

Dear Madam,

This is with reference to SIAM letter TD-01: 276 dated 12th September, 2016 giving comments on Draft M2M Service Providers (M2MSP) Registration Guidelines. A consultation paper has been released by TRAI on spectrum, roaming and QoS related requirement in M2M communications. Enclosed herewith is SIAM response to questions in Chapter IV : Issues for consultation.

Since M2M is a new topic for the automobile industry, it has taken us some time to respond to become more cognizant with the subject. We are aware that the last day for submitting comments has passed, but we request you to kindly consider our submission on the subject matter.

With kind regards,
Yours faithfully,



KK Gandhi



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SIAM Feedback on Consultation Paper by TRAI

1. What should be the framework for introduction of M2M Service providers in the sector? Should it be through amendment in the existing licenses of access service/ISP license and/or licensing authorization in the existing Unified License and UL (VNO) license or it should be kept under OSP Category registration? Please provide rationale to your response.
 - From OEM of automobiles standpoint offering any Connected Services (M2M based Services) would be considered as an add-on feature being sold with the sale of car. Having to apply for a separate license only for this sole purpose does not feel fair and logical from Automobile Standpoint. However, if mandated by the DoT then a new license should be introduced under M2M services based on M2M roadmap framework to clearly distinguish this new topic from other existing licenses.
2. In case a licensing framework for MSP is proposed, what should be the Entry Fee, Performance Bank Guarantee (if any) or Financial Bank Guarantee etc? Please provide detailed justification.
 - In case Automobile OEM is required to register as M2M service provider if connected car solutions are operated and owned by it, then a small entry fee may be charged. However performance bank guarantee or financial guarantee is not required as the company is already registered under relevant acts.
3. Do you propose any other regulatory framework for M2M other than the options mentioned above? If yes, provide detailed input on your proposal.
 - Referring to answers for Q1 and Q2, in case a company is already registered, then a simplified licensing procedure might be deployed for offering M2M services.
4. In your opinion what should be the quantum of spectrum required to meet the M2M communications requirement, keeping a horizon of 10 - 15 years? Please justify your answer.
 - No Comments as it is too early to predict the same.
5. Which spectrum bands are more suitable for M2M communication in India including those from the table 2.3 above? Which of these bands can be made delicensed?
 - Preferred bands would be GSM/EDGE, UMTS, LTE
6. Can a portion of 10 MHz centre gap between uplink and down link of the 700 MHz band (FDD) be used for M2M communications as delicensed band for short range applications with some defined parameters? If so, what quantum? Justify your answer with technical feasibility, keeping in mind the interference issues.
 - No comment.
7. In your opinion should national roaming for M2M/IoT devices be free? (a) If yes, what could be its possible implications? (b) If no, what should be the ceiling tariffs for national roaming for M2M communication?

Society of Indian Automobile Manufacturers

- Yes. Particularly in Automobiles, as also in other IoT applications, the device and Sim may operate in any part of the country. The circle of operation at most times will be different from the home circle and hence huge roaming charges will be incurred. Hence it is imperative that national roaming should be free. Further, this will also help popularize M2M communication and will draw more users.
8. In case of M2M devices, should; (a) roaming on permanent basis be allowed for foreign SIM/eUICC; or (b) Only domestic manufactured SIM/eUICC be allowed? and/or (c) there be a timeline/lifecycle of foreign SIMs to be converted into Indian SIMs/eUICC? (d) any other option is available? Please explain implications and issues involved in all the above scenarios.
- a) Yes, roaming on permanent basis should be allowed for foreign SIM/eUICC as using domestic SIMs might not be feasible from a technical standpoint for foreign manufacturers. Moreover, the services would be provided in partnership with licensed telecom operators.
 - b) Restricting only domestic SIMs would be unfair to foreign players specially if an eUICC SIM is being used. As long as the SIM complies with the required technical and security standards there should be no restriction on the whether International or domestic SIM is used.
 - c) Foreign SIM users may be allowed to give a proposal on the timelines by when and if they would be able to provide a local solution as it might require heavy investments and not favourable business case.
 - General Point: If a eUICC SIM is being used, there is a provision to change the SIM profile from International to local. Therefore imposing a restriction on International eUICC SIMs might not be feasible.
9. In case permanent roaming of M2M devices having inbuilt foreign SIM is allowed, should the international roaming charges be defined by the Regulator or it should be left to the mutual agreement between the roaming partners?
- Whichever benefits the end user the most may be adopted. In case regulators see a risk in predatory pricing being adopted by private operators then they may exercise a pre-defined structure for roaming fees only for M2M based services.
10. What should be the International roaming policy for machines which can communicate in the M2M ecosystem? Provide detailed answer giving justifications.
- There are a number of policies and frameworks that exist today. It is recommended that we adopt a policy which is best suited for the longevity of M2M roadmap planned for India. From Automobile OEM point of view there are two main factors to be considered, Cars imported and cars exported in addition to local manufacturing. For the benefit of all it is best recommended that a policy may be adopted which supports the communication for vehicle imported from another country or those being exported.

Further it is recommended that TRAI consults existing M2M service capable MNOs for further comments to have an overall perspective.

Society of Indian Automobile Manufacturers

11. In order to provide operational and roaming flexibility to MSPs, would it be feasible to allocate separate MNCs to MSPs? What could be the pros and cons of such arrangement?
- M2M services can be offered using existing data network. The data network can be used for more than one application like M2M and confining separate MNC for M2M does not provide any major value addition, but increases the cost, time to market and complexity unnecessarily. This in turn leads to operational inefficiency and resource wastage. Therefore it is strongly proposed not to have dedicated MNC for MSPs.

Further it is recommended that TRAI consults existing M2M service capable MNOs for further comments.

12. Will the existing measures taken for security of networks and data be adequate for security in M2M context too? Please suggest additional measures, if any, for security of networks and data for M2M communication.
- The same should be adequate. If further measures are required those can be determined once M2M services are into play as then loopholes or gaps could be detected. However this needs discussion with M2M capable MNOs as well.

13. (a) How should the M2M Service providers ensure protection of consumer interest and data privacy of the consumer? Can the issue be dealt in the framework of existing laws? (b) If not, what changes are proposed in Information Technology Act, 2000 and relevant license conditions to protect the security and privacy of an individual? Please comment with justification.
- At present, customer data and privacy are shared over networks and Apps with least amount of challenges. However, as technology continues to advance the IT regulations will have to be updated to keep up with changing trends. It is advised to refer to encryption standards followed by other countries to ensure that India is at par with international standards of data encryption.
 - It is difficult to determine to specific changes to current IT regulations unless there is an issue foreseen or experienced. In general, all M2M service providers will be obligated to ensure to have encryption standards as specified in the current IT Act with the mandate to update their security levels as and when the regulations demand it.
 - With the boom of M2M/IoT the current regulations may be reviewed so that it covers the IoT ecosystem and its varied range of applications and use cases. Most important, it may be required to explicitly define the use of personal information in various circumstances and protect infringement of personal or private data in the right context. For this it may be required to define 'who owns the data', the legal rights of such an owner and the protection offered by law to him/her against unauthorized usage of the data.

Further it is recommended that TRAI consults existing Data security companies to understand the risks involved in such a scenario and get case studies from markets where M2M technologies prevail.

Society of Indian Automobile Manufacturers

14. Is there a need to define different types of SLAs at point of interconnects at various layers of Heterogeneous Networks (HetNets)? What parameters must be considered for defining such SLAs? Please give your comments with justifications.
 - It is expected that the mobile network technologies will evolve Eg: GSM/EDGE, UMTS, LTE ... 5G etc. faster than the car ownership period is 5 to 10 years. It might be required to ensure that there is seamless connectivity throughout the ownership period of a customer. This becomes even more critical if the SIM would be embedded in the circuit. There should be a system/ regulation for the TSPs to ensure comprehensive connectivity across networks and there should be clear SLA parameters to measure the connectivity from time to time. Eg: Offering of Emergency Call services in the future.
15. What should be the distributed optimal duty cycle to optimise the energy efficiency, end-to-end delay and transmission reliability in a M2M network?
 - No comments. It is recommended that views of M2M capable MNOs be heard and consented with.
16. Please give your comments on any related matter not covered in this consultation paper.
 - The consultation Paper along with the draft guidelines do convey that there could be more than one business models existing for MSPs. This is a very realistic scenario and should be considered as a key factor while deciding on the regulatory framework for M2M.

From an Automobile OEM perspective we have the following comments.

- a. The M2M policy must clearly define what constitutes a M2M service. Additionally, to treat the matter holistically, an Application service provider (ASP) may be defined. This would help clarify and differentiate the roles of TSP, MSP and ASP which combine to provide an end-to-end IoT service.
- b. Further, In case M2M service provider prefers to use existing data network (say example through Bluetooth tethering of mobile device), a single time KYC should be enough. In this case if KYC is already done by the mobile service provider, repetition of KYC by M2M is not preferred as it will lead to duplication, complexity and confusion. This should be clearly covered in the policy document.
- c. There should also be a provision be made to allow Automobile OEMs to have an option of getting KYC done through mobile service provider. This should also be covered in the policy document under the relevant business model.
- d. It may prevail that some OEMS would have the backend system located outside the geographical boundaries of India especially foreign manufactures. In such a scenario it is requested that hosting of data which will be the backbone of the services be allowed to be located outside the boundaries of the country. However, OEMs will comply with the requirement of data accessibility in case of National Security Breach or threat of any nature.