



Comments of Philips Lighting India Ltd. On "Consultation Paper "Spectrum, Roaming and QoS related requirements in Machine-to-Machine (M2M) Communications"

Q1. 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.

Philips : We recommend that M2M Service/Solution providers should be registered in OSP Category. As many of the solutions use licensed network offered by TSP's.

Q2. 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.

Q3. Do you propose any other regulatory framework for M2M other than the options mentioned above? If yes, provide detailed input on your proposal.

Q4. 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.

Q5. 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?

Q6. 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.

Q7. 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?

Philips : National Roaming should be free for M2M services and Applications for smooth deployment.

- Q8. 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.

Philips: Our Recommendation is option (a) **roaming on permanent basis should be allowed for foreign SIM/eUICC**, The choice for use of global roaming embedded SIM or a Local eSIM should be left with M2M Solution provider, based on market drivers, business cases, costs and Service Level Agreements.

- Q9. 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?**

Philips: **The permanent roaming charges should be left to mutual agreements between the roaming partners.**

- Q10. What should be the International roaming policy for machines which can communicate in the M2M ecosystem? Provide detailed answer giving justifications.**

Philips: **The International roaming policy should be open for M2M Ecosystems.**

This encourages Innovation and the M2M Ecosystem in India to flourish.

- Q11. 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?**

- Q12. Will the existing measures taken for security of networks and data be adequate for security in M2M context too? Please suggest additional**

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measures, if any, for security of networks and data for M2M communication.

Philips: There could be many different types of M2M Applications, each with different level of sensitivity for data security. Our Recommendation is that Data Security Measure should not be part of M2M regulation. The end user of a M2M Solution should define the data security measures required, based on the nature of his application needs.

Q13. (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.

Philips: Individual consent in accordance with present IT regulation on sharing of personal/sensitive information is sufficient.

Q14. 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.

Q15. What should be the distributed optimal duty cycle to optimise the energy efficiency, end-to-end delay and transmission reliability in a M2M network?

Q16. Please give your comments on any related matter not covered in this consultation paper.