BEREC Draft Report on Enabling the Internet of Things

Questions to stakeholders (BoR (15) 141)

Contribution from PT Portugal

I. Introduction

PT Portugal welcomes BEREC's report on Enabling the Internet of Things, providing its assessment of the state of play on M2M services and, as stated, aiming at fostering an environment that will result in sustainable competition, interoperability of ECS and consumer benefits.

We also welcome the opportunity given by BEREC to contribute to the debate on the regulatory environment surrounding M2M/IoT, in order to foster the implementation of efficient and technological advanced solutions in this ever growing market, which deserves a future-proof and coherent (de)regulation framework that incentivize cross-sector stakeholders' collaboration.

Thus, PT Portugal hereby provides its opinion on the questions raised by BEREC.

II. Questions

1. How do you evaluate the three options mentioned in section 2.2.1.4 (extra-territorial use of national E.164 and E.212 numbers, use of global ITU numbering resources, use of a European numbering scheme) for the provision of M2M services? Which of these solutions is preferable to address the need for global marketing of connected devices? Should these solutions be used complementarily?

PT Portugal believes that both extra-territorial use of national E.164/E.212 numbers and global ITU numbering resources should be supported for the provision of M2M services and may be used complementarily depending on the nature and geographic coverage of the specific services involved. M2M services tend to be global, with no geographical barriers and therefore we do not foresee the advantage for a European numbering scheme

2. How do you regard the market situation in the M2M sector with regard to permanent roaming and national roaming?

As M2M services have evolved to a global market provision, permanent roaming is a key factor for their success and unclear regulatory constraints may jeopardize the business chain. In the analysis of permanent roaming issues and applicable rules it is critical to differentiate person-to-person communications and M2M communications.

It is our believe that any regulatory measure applicable to M2M traffic should be reasonable and clear in terms of transparency. The EU roaming regulation (e.g. RLAH tariffs, notifications) should not be applied to M2M traffic, as its intention is to protect end-users when travelling within the Union and not machine to machine communications.

The evolution of M2M roaming should continue to progress through commercial agreements on a voluntary basis. The parties should maintain the flexibility to select the most adequate commercial model agreement. However, specific treatment of M2M traffic under these agreements is only achievable where and whenever identifiers dedicated to M2M traffic are used, in order to guarantee the detection, accountability and adequate remuneration of the network usage by these IoT devices, namely under permanent roaming situations.

3. Which solution – OTA provisioning of SIM or MNC assignment to M2M users – do you think is preferable to facilitate switching between connectivity providers in the M2M sector? Which advantages, which disadvantages are attached to the two solutions?

It is PT Portugal's believe that switching between connectivity providers in the M2M sector is not an issue, namely because the connectivity component is only an enabler of the service and not the key aspect of the solution provided to a customer.

Nonetheless, we consider that the assignment of MNCs to M2M users should deserve careful consideration to ensure the correct and responsible use of numbering resources. MNC assignment to any M2M user, independently of the size of the companies' projects, could lead to a tremendous waste of IMSIs with increased costs to all mobile operators. Also, there is still a need to clarify some unanswered technical and economical questions in order to foresee if MNC base switching solutions are really effective.

On the other hand, OTA provisioning of SIM cards is at the early stages of worldwide deployment and it has an impact on operator's platforms/processes. In fact, it raises complex issues regarding security and standardization that would oblige MNO's to encompass in significant implementation costs. A clear regulatory environment would thus be needed before the implementation of an OTA provisioning of SIM cards' solution which, in any case, should not be imposed unless there were proven market bottlenecks and sufficient market confidence and demand for such solution.

4. Do you think there is a need to adapt Art. 13a of the Framework Directive to address security concerns in the M2M context? If so, which adaptations do you consider to be useful?

PT Portugal firmly believes that security in the M2M context must be adopted by all stakeholders in the value chain for end-to-end security. We consider that there is no need to adapt Art. 13a of the Framework directive, but that the obligations in what regards security measures must be applied to all the players in the value chain.

5. Do you think there is a need to adapt the Privacy Directive and ePrivacy Directive to address privacy concerns in the M2M context? If so, which adaptations? Do you think that the reform of the Privacy Directive as foreseen in the Council's General Approach of 15 June 2015 on the future General Data Protection Regulation goes in the right direction?

PT Portugal believes that it is crucial to ensure that the same protection rules for confidentiality of communications applies to the same services and to all players in the M2M/IoT value chain, irrespective of sector and geographic location and, as such, that the current framework should be updated to accomplish this level playing field objective.

6. What is the impact of open and proprietary standards on the development of the M2M sector? What are the advantages and disadvantages of open and proprietary standards, taking in account that M2M services may be provided on private or public networks?

Open Interoperable standards are essential for economies of scale, cost reduction and the development of an European Internal market (and even wider, as is the case of M2M/IoT services, which are often provided on a global services) and also for the benefit of consumers.

Although time-to-market is often an issue of open interoperable standards, it should be recognized that 3GPP is finishing the technical specifications for Machine-type-communications (LTE-MTC, EC-GSM and NB-IOT) for the cellular M2M segment, with enhanced coverage, low complexity, low power consumption and low throughput, which are typical requirements of part of M2M services.

PT Portugal thus believes that interoperable specifications and standards across the IoT industry should be supported and promoted.