GSMA position

E.164 regulatory exceptions for IoT connected services

Background

IoT connected services already deployed on existing mobile networks use E.164 numbers. It makes sense to extend the use of current E.164 numbering in order to avoid the complexity and cost associated with introduction and maintenance of different numbering schemes on parallel architectures. This offers relatively simple implementation in the already existing network infrastructure, including provisioning, billing and operational support systems.

Regardless of increased IPv6 usage or new standards being developed, legacy numbering options based on E.164 numbering resources use, are expected to continue to be required and used for the foreseeable future.

Debate

- Do all IoT connected devices need E.164 numbering resources to work?

- Should IoT connected devices be subject to the same numbering requirements that apply to traditional mobile services?

Industry Position

Some requirements commonly associated with E.164 number use are irrelevant to IoT connected devices and should not apply. Regulators should link requirements to the nature of the service offered independently of the chosen numbering range.

Some of the requirements associated with the use of E.164 ranges are inappropriate for the large majority of IoT connected services. For instance, for an electricity smart meter or an asset tracking tool, some or all of the following requirements are neither required nor relevant:

- Reachable from any device on any other network
- Integration in public national numbering plans with associated pricing transparency rules
- Number portability
- Possibility to call emergency services
- Calling Line Identification (CLI) rules

Regulators should be encouraged to link requirements to the nature of the service offered independently of the chosen numbering range.