

GSMA position

Background

Since March 2014, the Dutch Ministry of Economic Affairs has been permitting the subdivision of Mobile Network Codes (MNC) in the Netherlands and allocation of IMSI's to private parties.

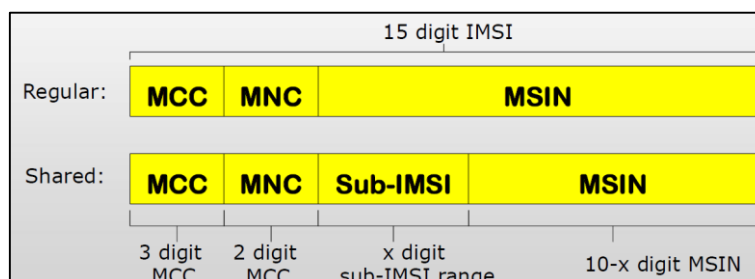


Figure 1 - IMSI Structure

Private parties, such as utility companies, or other IoT service providers that receive such allocations, could therefore issue IMSIs to their customers independently of a mobile operator. However, they would have to use the services of an independent home location register (HLR) network proxy, to allow their IMSIs to roam onto the private party's preferred MNO via means of a national roaming agreement.

The Electronic Communications Committee (ECC) within the European Conference of Postal and Telecommunications Administrations (CEPT) recommends that European countries should consider introducing more flexibility on the assignment of MNCs to enable IoT service providers to directly own IMSIs. Possible recommended options include a shared or a unique MNC for IoT service providers.

This recommendation was developed in consideration of the high costs that an IoT provider would face if it had to physically replace a large number of SIM cards, should it want to change connectivity provider.

Debate

- What are the implications if regulators follow the model implemented in the Netherlands?
- Which solutions are available to guarantee IoT customers have the ability to switch provider?

Industry Position

MNC numbering allocation policies enabling the use of shared MNC should be carefully assessed in light of their implementation costs, and their technical and logistical complexities. The GSMA believes that its specification for remote provisioning of Embedded SIMs is more efficient and is likely to have lower implementation costs.

The GSMA specification for remote provisioning of Embedded SIMs addresses concerns regarding the ability to switch connectivity providers for IoT connected devices.

Technical solutions for changing connectivity provider are available today that eliminate the need to physically replace the SIM or to change MNC allocation policy. The use of a remote provisioning

capability, such as that defined in GSMA Embedded SIM specifications, provides a solution that enables providers to select a connectivity provider at a later stage in the product lifecycle, i.e. when it reaches its customers, potentially in another country. It also facilitates ease of switching connectivity provider. The GSMA Embedded SIM specifications were developed specifically for large multi-national deployments where it can be challenging to provision connectivity from the outset, or when deployed devices have a long lifetime and/or are deployed in locations where physical SIM replacement is not practical.