

Mobile number portability: Making SMS-data services portable

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Abstract

Growth in telecommunications population directly impacts the economy. Advanced economies have discovered that mobile number portability (MNP) helps the economy. Keeping this in mind, many countries in advanced economies have passed regulations making it mandatory for the mobile network operators to implement MNP, in which a subscriber will keep the number but change the network. Following porting of the mobile number, calls need to be routed to the old number in a new network. GSM (global system for mobile communications) has proposed various technology models for supporting voice calls in an MNP scenario. GSM has also suggested technology models to support noncall-related signalling functions like SMS (short message service) point-to-point in MNP scenario. However, data services and application over SMS (SMS-data) is outside the scope of GSM, and no technology is available as of date to support portability of SMS-data services in an MNP scenario. This paper proposes a technology solution for SMS data portability in MNP scenario. It provides experimental results to support such a claim.

Keywords: Mobile number portability, SMS, SMS-data, SMS-data portability, universal SMS routing service.