

IS-41 GSM Migration

Overview

The need to provide 3G services and standardize networks to achieve efficiencies is driving many mobile operators worldwide to make the shift to global system for mobile communication (GSM) technology. Various factors are contributing to this trend, with mergers, acquisitions and roaming partnerships playing a large role. GSM technology also provides an evolution path to 3G networks and the delivery of new next-generation wireless voice and data services.

In addition to changing the radio access network from time division multiple access (TDMA) or code division multiple access (CDMA), operators will have to migrate the signaling network from IS-41 to GSM. As subscribers are transferred to the new GSM-based network, mobile operators require a flexible solution to manage the required changes in home location register (HLR) routing.

It is important for this transition phase to be transparent to the customer. Allowing subscribers to retain their existing mobile phone number will be key to this process. Also, dual or single technology handsets and SMS messaging must be supported.

Product Description

Once the subscriber migration to the GSM network is complete, Tekelec's turnkey numbering solution, the HLR Router, simplifies database administration and provides the means to easily manage and fully utilize HLRs.

Mobile operators are finding that the capacity of database resources can quickly become exhausted with explosive subscriber growth and as mergers and acquisitions, pre-paid services and number pooling/portability complicate routing in the network. Deploying Tekelec's high capacity solution alleviates congestion and optimizes routing, saving capital expenses as well as administration costs.

Benefits

Tekelec's IS-41 GSM Migration solution allows mobile operators to:

- **Seamlessly transition to/from GSM technology.** Tekelec's solution mediates between the IS-41 and GSM network, providing the HLR routing needed to complete calls during the

migration process.

- **Fully utilize HLR capacity.** Individual subscribers can be migrated to GSM HLRs, allowing each HLR the ability to be filled to 100% capacity.
- **Manage growth.** Tekelec's solution provides the flexibility to easily add or move subscribers to meet changing network needs.
- **Allow subscribers to retain phone number.** The transition phase will be transparent to customers, providing reliable service while allowing them to continue to use their existing mobile phone number.