

Intelligent Roaming

ABSTRACT

Mobile operators are facing mandatory tariffs on roaming traffic. Reducing the costs involved becomes more and more important. Using Comsys Intelligent Roaming international roaming costs can be reduced up to 100%. Mobile telephony networks have become very popular over the last decade. The possibilities of communicating while abroad have been an important reason for consumers to purchase mobiles. In most cases, today's consumers take their mobiles along on holidays and business trips.

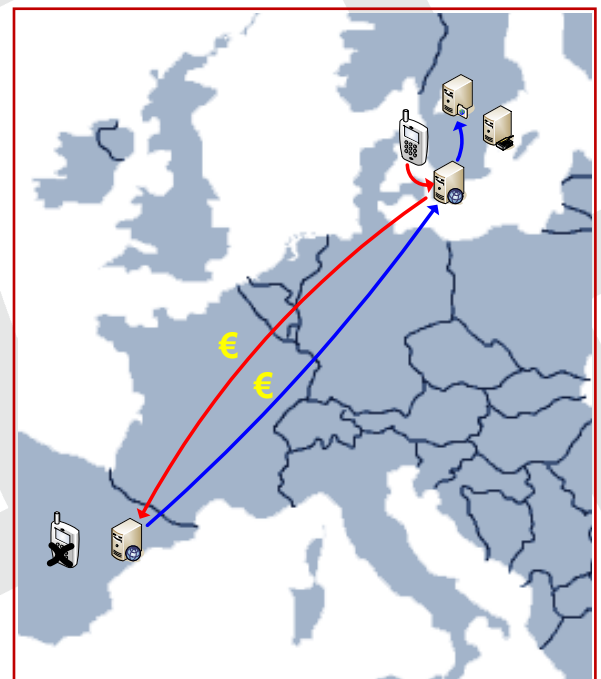
Users are connected to the network of the provider where their subscription is registered. When abroad, mobile phones are registered to another provider's network. Making calls and receiving calls is then enabled by foreign network. This is known as 'roaming'. In European markets, the user receives calls for free in his home network. When receiving calls abroad, the user pays for the connection from his home network to the foreign network. Making calls abroad is also more expensive, because the foreign network operator demands a premium for using his network services as a guest.

Over the last years the European Commission has launched a number of actions to reduce the roaming costs for consumers by maximizing tariffs. The income from roaming subscribers was and is a great contributor to mobile operator's profit, and the tariff changes have impacted operator profit.

VOICEMAIL WHILE ROAMING

One of the great advantages of modern mobiles is the possibility to be reached while abroad. However, the costs involved have surprised many consumers over the years. One striking example is voicemail. While abroad, subscribers pay for the voicemail connections of the persons trying to reach them and again for listening to the voicemail messages. This is logical from a technical point of view but questionable for consumers. As a result, many consumers turn voicemail off when abroad.

When a subscriber is called while being abroad, the call is routed from the home network to the foreign network. This part of the connection is charged to the subscriber who is abroad. Charging international rates to the person calling the national mobile number is not deemed fair. If the subscriber who is abroad rejects the call or does not answer, the call is routed to the voicemail by the foreign network. This results in two international connections: one from the national network to the roaming network and one from the roaming network to the voicemail system in the originating network. Both connections are charged to the originating network and subscribers are also charged.





SOLUTION IMPLEMENTATION

By implementing the Comsys Intelligent Roaming solution the two international connections will be eliminated when calls are diverted to voicemail. Routing to the voicemail is then performed in the home network instead. This saves substantially on roaming costs and it allows the operator more possibilities with the charging of international voicemail.

To implement the solution, Comsys will provide a system that connects to the mobile network switches in the home network. The system will track the calls that are diverted abroad and reroute the calls to the voicemail system directly. The solution is based on Comsys SpeechFrame[®], which has been implemented in (mobile) operator SS7 networks for many years. Intelligent Roaming can be implemented using TDM and SIGTRAN SS7 signaling