**3GPP TSG SA WG 3 (Security) meeting #11**

**S3-000164**

**Mainz, 22-24 January, 2000**

ETSI SMG9 Meeting #20
Rome, Italy, 18 - 21 January, 2000

*Tdoc 9-00-0158*

# Liaison Statement

**Source:**      SMG9

**To:**      S1 and S3

**Title:**      New SIM toolkit feature: "Auto-answer & Mute-ringing"

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SMG9 reviewed at its Rome plenary meeting a proposal to have a new SIM Toolkit feature for R2000, called "Auto-Answer and mute ringing" : see attached doc 9-00-0039.

This feature would allow a SAT application to ask the mobile to disable "ringing" (alerting, in fact) when receiving a call, and to answer to it automatically. It would simplify the MMI in the case of a call-back service as the one which is described in Tdoc 9-00-0039.

Before commencing work on this feature, SMG9 would like to ask S1 for their comments regarding this new service requirement and S3 for their comments regarding potential privacy issues.
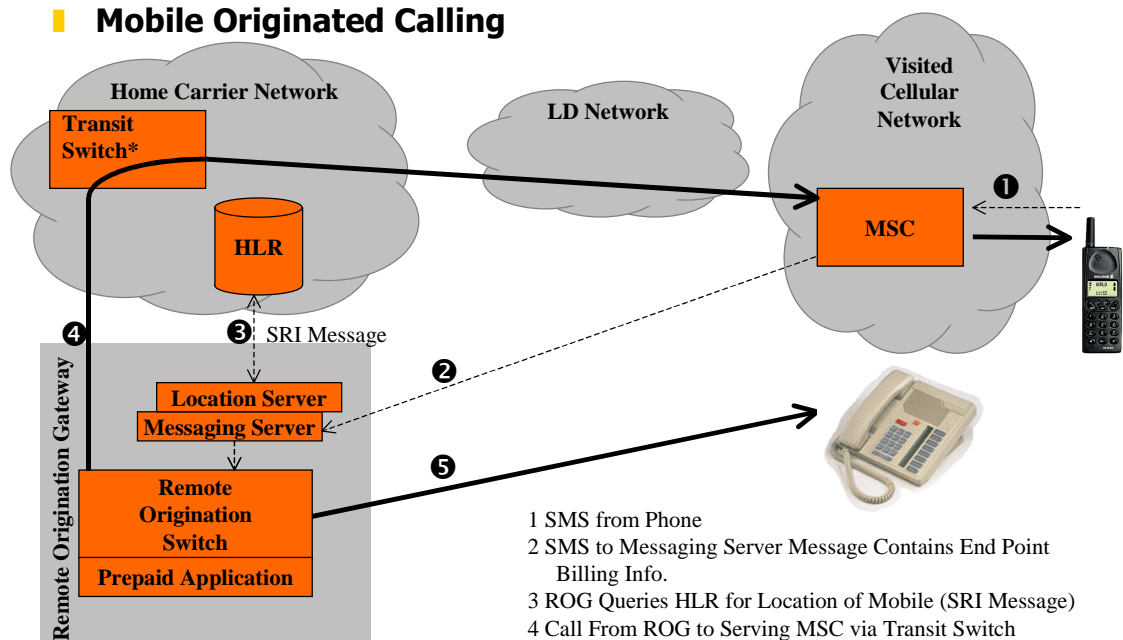
**Source : Gemplus**

# Proposition of Auto-Answer and Mute-ringing STK feature

We are proposing to SMG9 to add an "Auto-Answer and Mute-ringing" functionality to the SIM Toolkit GSM 11.14 specification. The aim of these change requests is to allow the implementation of a seamless "World-Wide Prepaid" service that is network based but automated using SIM Toolkit. This service does not require special network capabilities (see figure 1 hereunder) and offers all the advantages of a network-based prepaid solution without the complexities of more traditional solutions.

**FIGURE 1 – WORLDWIDE PREPAID**

## Architecture - Worldwide Prepaid (WPP)

### Mobile Originated Calling



1 SMS from Phone
2 SMS to Messaging Server Message Contains End Point Billing Info.
3 ROG Queries HLR for Location of Mobile (SRI Message)
4 Call From ROG to Serving MSC via Transit Switch
5 Call to Dialed Number
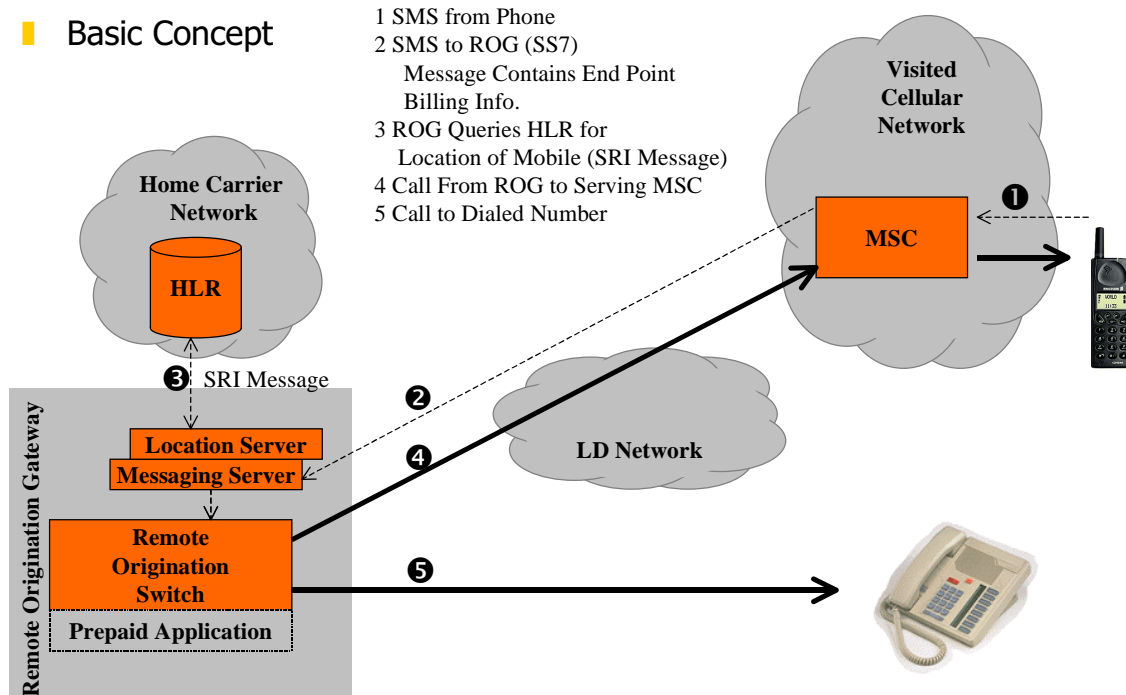
*Typically a GMSC providing transit functionality

The functionality will also make possible the implementation of a "Home Carrier Control" service that will allow a home cellular carrier to control and route all traffic for its customers while they are roaming (see figure 2).

**FIGURE 2 – HOME CARRIER CONTROL**

## Architecture - Home Carrier Control (HCC)

- Basic Concept

1 SMS from Phone
2 SMS to ROG (SS7)
   Message Contains End Point
   Billing Info.
3 ROG Queries HLR for
   Location of Mobile (SRI Message)
4 Call From ROG to Serving MSC
5 Call to Dialed Number

Home Carrier Network
HLR

❸ SRI Message

Remote Origination Gateway

Location Server
Messaging Server

Remote Origination Switch

Prepaid Application

❷

❹

LD Network

Visited Cellular Network

MSC

❶

❺

Without this functionality, users of the "World-wide Prepaid" and "Home Carrier Control" services will be required to answer an incoming call after they have dialled a phone number in order to complete a call.

*Please find the corresponding CR on GSM 11.14 in 9-99-0048 and GSM 11.11 in 9-99-0049*