PSTN Interfaces (GSM Originating Call)						
Cell		Mobile Network		Fixed N	etwork	EventStudio System Designer 4.0
Mobile Station		Base Stations	ase Stations NSS		TN	, ,
User M	obile	BSS	MSC VLR	R PS		13-Sep-08 21:38 (Page 1)
						LEG: GSM Mobile Originated Call
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This scenario describes the call setup for a GSM originating call. A mobile user calling a land line subscriber is covered here.						
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Begin RR Connection Establishment						
Call related information needs to be transported from the mobile phone to the Mobile Switching Center (MSC). This requires the establishment of a Radio Resource (RR) connection to MSC. The first phase of the call setup just sets up this RR connection.						
Note: The RR CHANNEL REQUEST is sent on a Random Access Channel (RACH). This is a slotted aloha channel that can be used at random, without any coordination between the mobiles. Any mobile can transmit on this channel whenever it wishes. If two mobiles transmit on the channel at the same time, their messages will be lost in a collision. The mobiles will detect the collision via a timeout and retransmit the message after a random back off.						
						LEG: Skip Authentication Procedure
Enable Ciphering						
RR Connection Establishment Completed						
At this point a connection has been setup between the Mobile and the MSC. From this point onward, the BSS is just acting as a conduit for transporting the signaling messages between the Mobile and the MSC.						
Call Setup						
Mode Modify						
inode Modify			ISIID INITIAI	I ADDDESS M	FSSVCE	The MSC routes the call and sends the call
				67, Dialed Digits		towards the called subscriber
		l:		· ·		The PSTN indicates to the MSC that it has received all the digits and the called subscriber is being rung.
			■ISI	UP ANSWER SS7		The called subscriber answers the call.
Conversation						
Call Release						
						LEG: Mobile initiates call release
			ISI	UP RELEASE SS7		The MSC initiates release on the PSTN side.
			ISU	JP RELEASED SS7		The MSC informs the PSTN that the call release has been completed.
			ISUP RE	LEASE COMPL SS7		The PSTN informs that call release has been completed at its end.
RR Connection Release						