Module Interfaces (GSM Loc	cation Update Procedure)	
Subscribers	GSM Network	EventStudio System Designer 6
GSM Mobile reaches cell boundary (both cells in same Location Area)		
BC	сн	The BCCH on the primary cell is monitored for signal strength.
Location Area = Maryland, Signal Strength = Good		
BCCH Location Area = Maryland, Signal Strength = Great		The BCCH of the neighboring cells is monitored to determine if any of the
		neighbors have a better signal strength. In this case, the cell has reached the boundary between Rockville and Bethesda cells and it finds that the signal quality
		of the Bethesda cell is better.
GSM Mobile reaches Location Area boundary (old and new cells are in different Location Areas)		
BC	ССН	The BCCH on the beacon frequencies is monitored.
Location Area = Marylan	d, Signal Strength = Good	
BC	сн	Now the Vienna cell is being received with better signal strength, so cell will be
Location Area = Vienna, Signal Strength = Great		picked as primary.
RR Connection Setup		
RR CHANN	EL REQUEST	The mobile establishes a RR connection to send the location update to the
		network.
RR IMMEDIAT	E ASSIGNMENT	A radio channel has been assigned to the GSM mobile.
GSM Location Update Procedure		
RR SABM + MM I OCAT	ION UPDATING REOUFST	The mobile tunes to the assigned radio channel and sends the SABM to initiate
Maryland TMSI, Maryland LAI		the radio connection. The location update is also piggybacked on the message.
RF	R UA	
•		LEG: Inter MSC-VLR location update
	CATION REQUEST	The MSC VI R decides to authenticate the subscriber. The RAND value received
RA	AND	from the HLR is sent to the mobile.
MM AUTHENTIC	ATION RESPONSE	The mobile passes the computed SRES value in the response.
SRES		
Enable Ciphering		
RR CIPHERING I	MODE COMMAND	The BSC sends the CIPHERING MODE COMMAND to the mobile.
mode =	= CLEAR	
RR CIPHERING MODE COMPLETE mode = CIPHERED		Ciphering has already been enabled, so this message is transmitted with ciphering.
TMSI assignment is being sent after ciphering is enabled, the relationship		
		between TMSI and the subscriber cannot be obtained by unauthorized users.
MM TMSI REALLO	CATION COMPLETE	The GSM mobile replies back indicating that the new TMSI allocation has been
KK Connection Release		
RR CHANN	EL RELEASE	The BSC initiates RR release with the mobile.
RR	DISC	The mobile sends a disconnect message to release the LAPm connection.
RR	R UA	The BSC replies with an Unnumbered Acknowledge message.