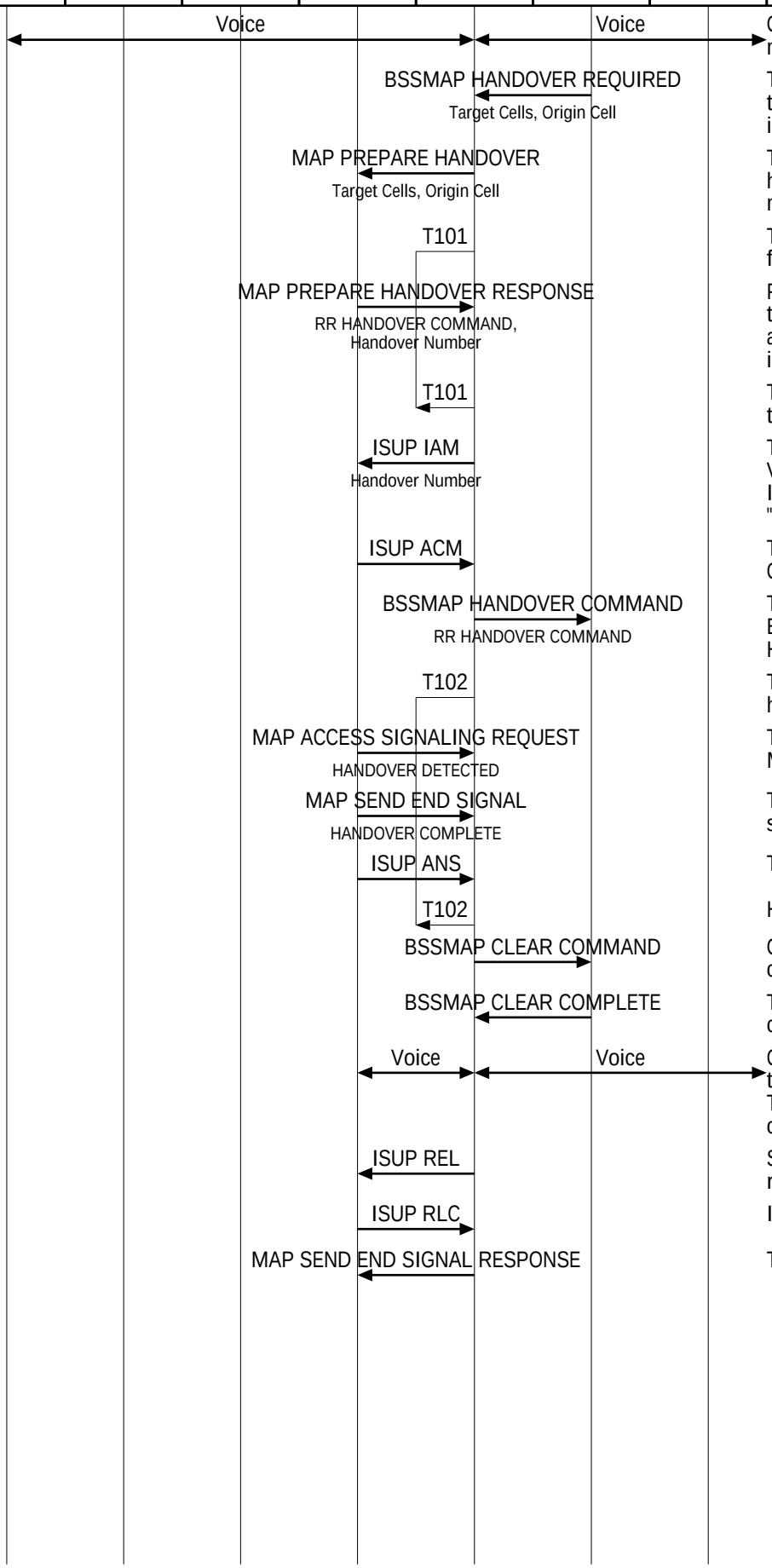
Bethesda_MSC_VLR Interfaces (GSM Inter MSC Handover Call Flow)

Highway	GSM Coverage						EventStudio System Designer 4.0
GSM Mobile	Vienna (Target)			Bethesda (Source)			
Mobile	Vienna Cell	Vienna BSC	Vienna MSC VLR	Bethesda MSC VLR	Bethesda BSC	Bethesda Cell	25-Jan-08 07:26 (Page 1)



Call is in conversation. The voice path from the mobile is routed to the PSTN via the Bethesda MSC.

The BSC decides to request a handover. A list of target cells is provided to the MSC. The Vienna Cell is included in the list of target cells.

This is an inter MSC handover, so pass the handover request to the target MSC via a MAP message.

The MSC-VLR starts a timer to await the response from the Vienna BSC.

Pass the handover request acknowledgement from the target MSC to the source MSC. The message also includes the handover number to call for the inter-MSC voice call.

The MSC has heard back from the destination MSC, thus the T101 timer is stopped.

The Bethesda MSC initiates a voice call to the Vienna MSC. The call is initiated with the ISUP Initial Address Message (IAM) addressed to the "Handover Number".

The Vienna MSC accepts the call with the Address Complete (ACM) message.

The MSC delivers the handover command to the Bethesda BSC. This command encapsulates the RR HANDOVER COMMAND from the destination BSC.

T102 is started to track the completion of the handover.

The Handover detect is signalled to the Bethesda MSC via the Access Signaling Request message.

Transport the Handover Complete message to the source MSC.

The Vienna MSC answers the inter-MSC voice call.

Handover has been completed, so T102 is stopped.

Call release has been completed, now the RR connection is released by the MSC.

The BSS informs the the MSC that the RR connection has been released.

Call is in conversation after the handover. Note that the voice path to the PSTN is via the source MSC. The destination MSC routes the voice on the ISUP call between the two MSCs.

Subscribers have hung up. The source MSC releases the voice circuit between the two MSCs.

ISUP release complete.

The handed over call has ended.