Processor Interfaces (GSM Inter MSC Handover Call Flow)
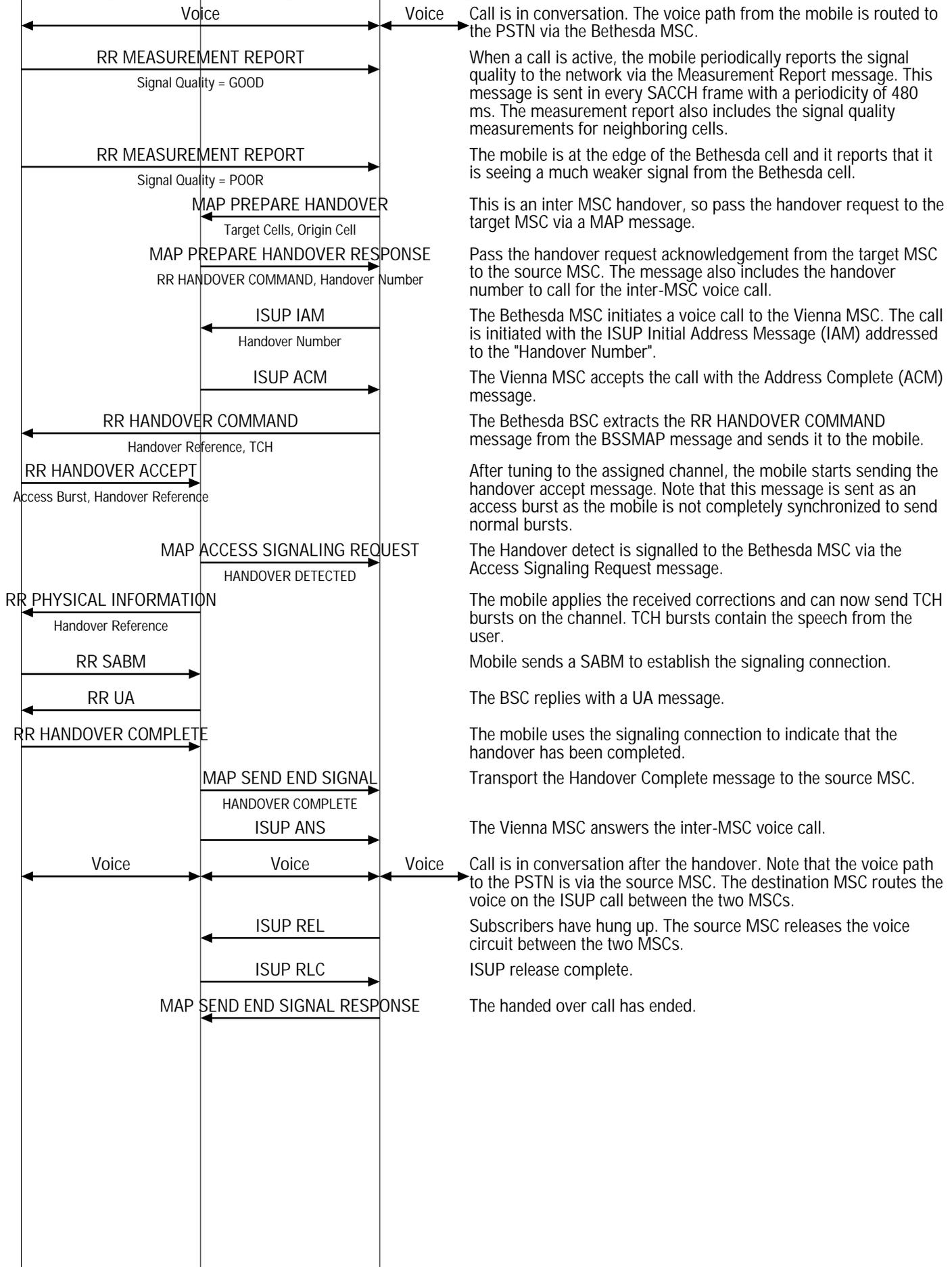
Message	Description
Voice (GSM Mobile ↔ Bethesda, Voice)	Call is in conversation. The voice path from the mobile is routed to the PSTN via the Bethesda MSC.
RR MEASUREMENT REPORT (GSM Mobile → Bethesda) — Signal Quality = GOOD	When a call is active, the mobile periodically reports the signal quality to the network via the Measurement Report message. This message is sent in every SACCH frame with a periodicity of 480 ms. The measurement report also includes the signal quality measurements for neighboring cells.
RR MEASUREMENT REPORT (GSM Mobile → Bethesda) — Signal Quality = POOR	The mobile is at the edge of the Bethesda cell and it reports that it is seeing a much weaker signal from the Bethesda cell.
MAP PREPARE HANDOVER (Bethesda → Vienna) — Target Cells, Origin Cell	This is an inter MSC handover, so pass the handover request to the target MSC via a MAP message.
MAP PREPARE HANDOVER RESPONSE (Vienna → Bethesda) — RR HANDOVER COMMAND, Handover Number	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.
ISUP IAM (Bethesda → Vienna) — Handover Number	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".
ISUP ACM (Vienna → Bethesda)	The Vienna MSC accepts the call with the Address Complete (ACM) message.
RR HANDOVER COMMAND (Bethesda → GSM Mobile) — Handover Reference, TCH	The Bethesda BSC extracts the RR HANDOVER COMMAND message from the BSSMAP message and sends it to the mobile.
RR HANDOVER ACCEPT (GSM Mobile → Vienna) — Access Burst, Handover Reference	After tuning to the assigned channel, the mobile starts sending the handover accept message. Note that this message is sent as an access burst as the mobile is not completely synchronized to send normal bursts.
MAP ACCESS SIGNALING REQUEST (Vienna → Bethesda) — HANDOVER DETECTED	The Handover detect is signalled to the Bethesda MSC via the Access Signaling Request message.
RR PHYSICAL INFORMATION (Vienna → GSM Mobile) — Handover Reference	The mobile applies the received corrections and can now send TCH bursts on the channel. TCH bursts contain the speech from the user.
RR SABM (GSM Mobile → Vienna)	Mobile sends a SABM to establish the signaling connection.
RR UA (Vienna → GSM Mobile)	The BSC replies with a UA message.
RR HANDOVER COMPLETE (GSM Mobile → Vienna)	The mobile uses the signaling connection to indicate that the handover has been completed.
MAP SEND END SIGNAL (Vienna → Bethesda) — HANDOVER COMPLETE	Transport the Handover Complete message to the source MSC.
ISUP ANS (Vienna → Bethesda)	The Vienna MSC answers the inter-MSC voice call.
Voice (GSM Mobile ↔ Vienna ↔ Bethesda, Voice)	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.
ISUP REL (Bethesda → Vienna)	Subscribers have hung up. The source MSC releases the voice circuit between the two MSCs.
ISUP RLC (Vienna → Bethesda)	ISUP release complete.
MAP SEND END SIGNAL RESPONSE (Vienna → Bethesda)	The handed over call has ended.