

Module Interfaces (PSTN-ISUP Originated Call; IM-MGW Megaco/H.248 Signaling; PSTN Initiated Release)

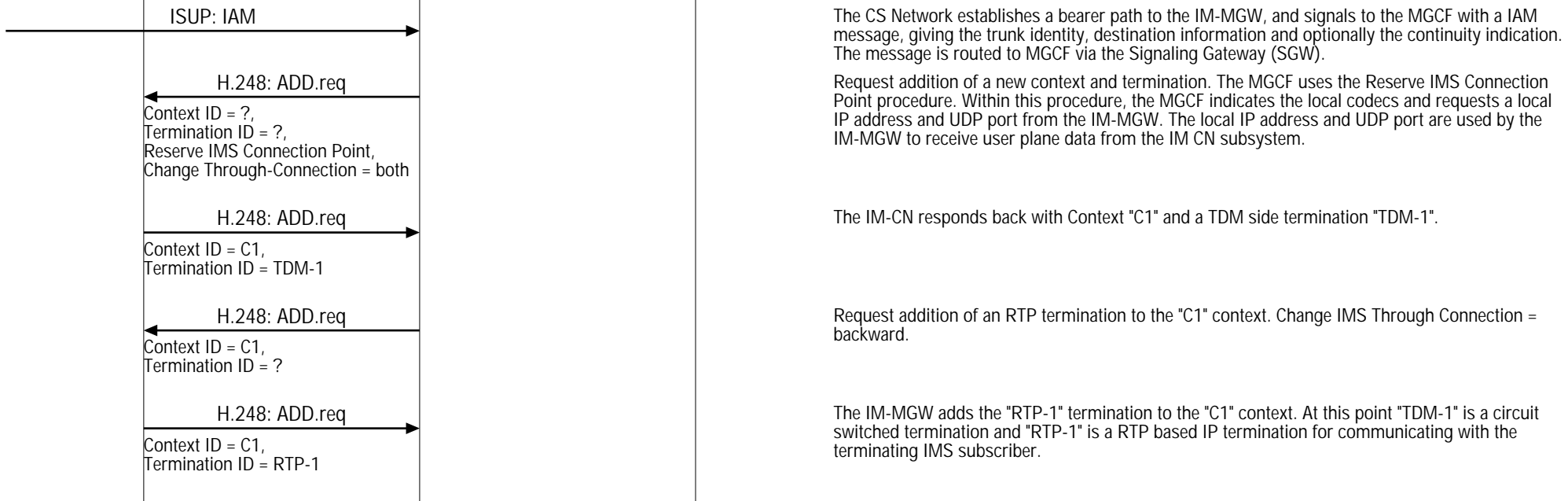
PSTN	IMS Core Network	Called UE	EventStudio System Designer 4.0
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This call flow covers the handling of a CS network originated call with ISUP. In the diagram the MGCF requests seizure of the IM CN subsystem side termination and CS network side bearer termination. When the MGCF receives an answer indication, it requests the IM-MGW to both-way through-connect the terminations.

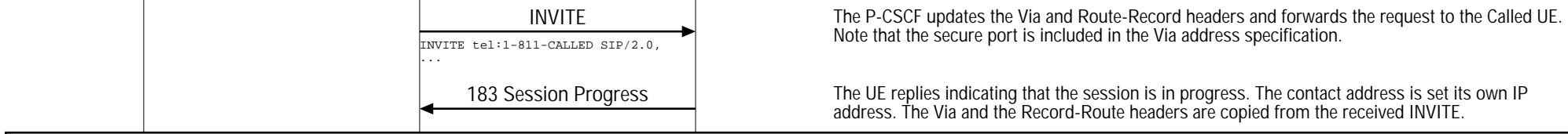
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LEG: Detailed PSTN to IMS Call Setup

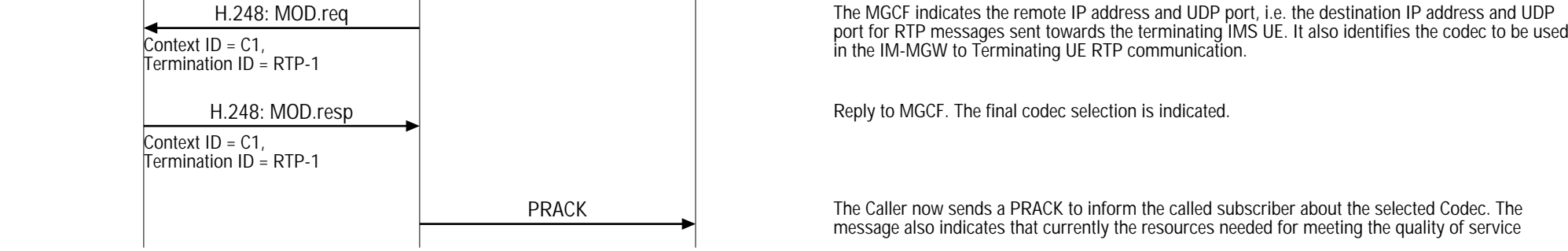
ISUP IAM Handling and Initial IM-MGW and MGCF (Mn) Interactions



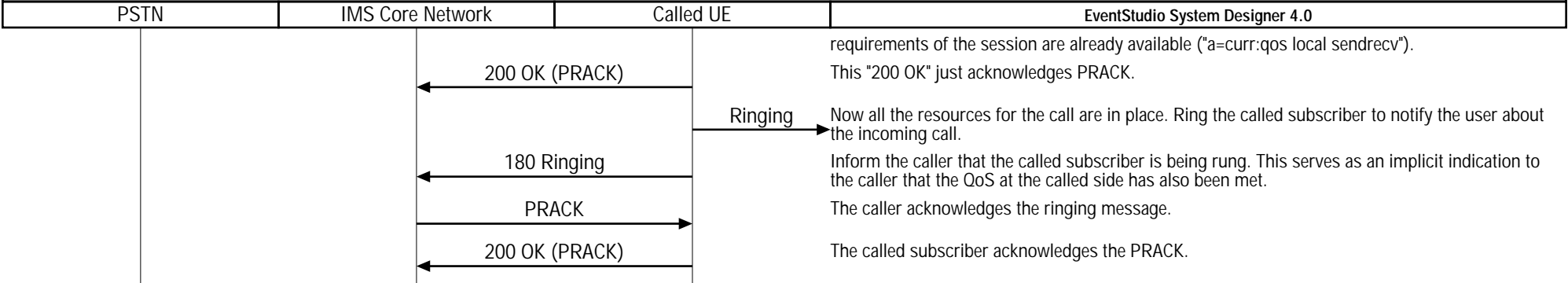
Initial Handshake between MGCF and IMS CSCF Servers



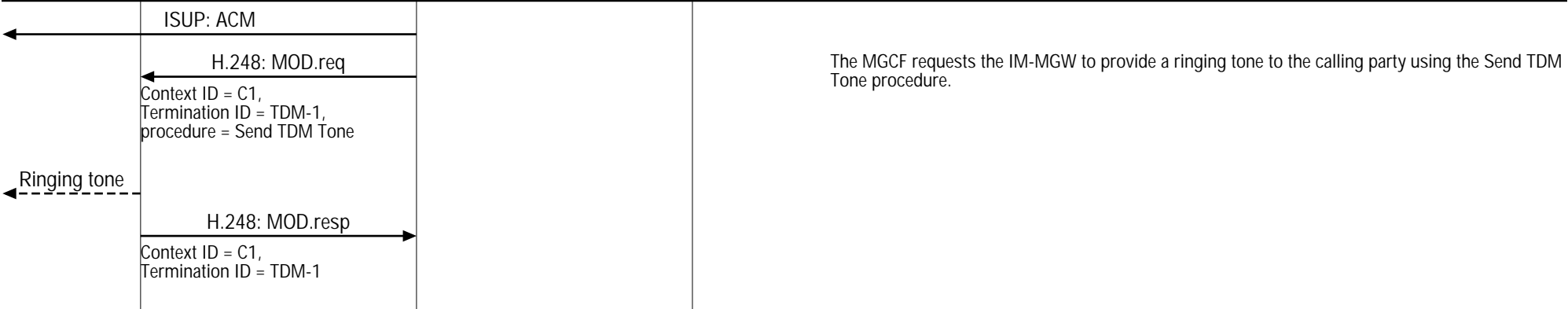
Mn Interactions for Codec selection



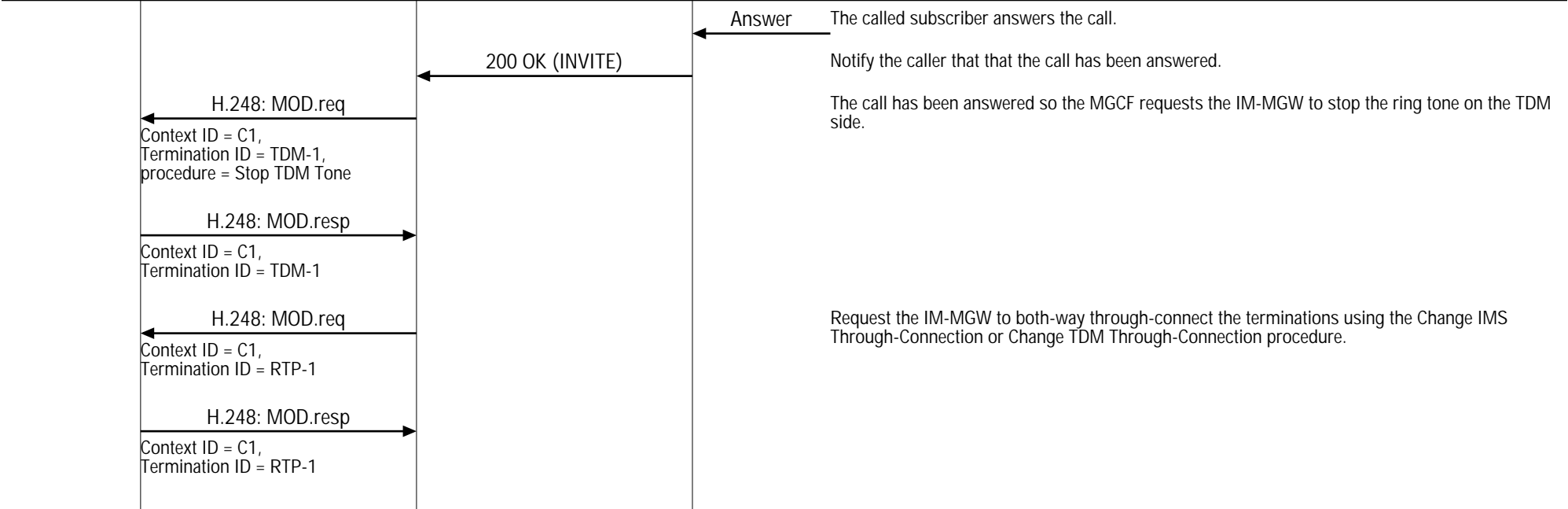
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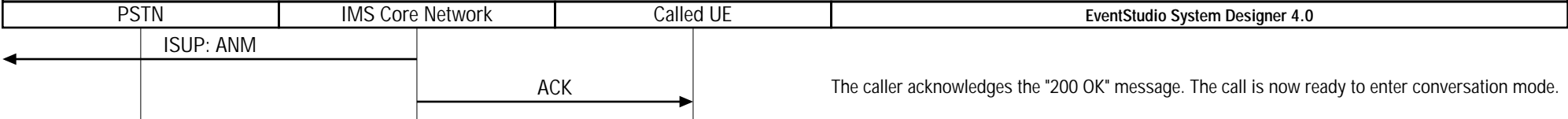
ISUP ACM related interactions on Mn interface.



IMS Answer to ISUP ANM Handling

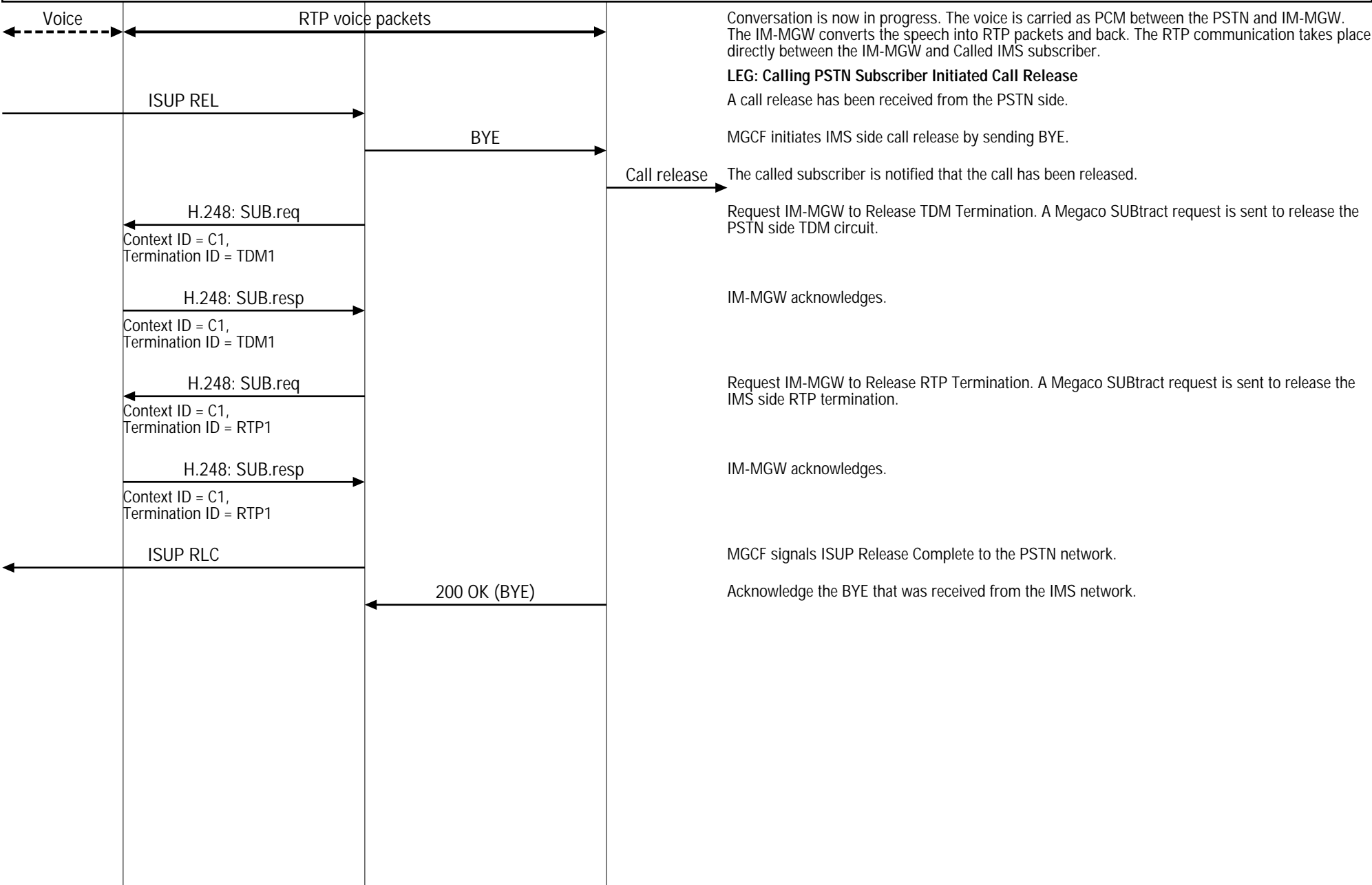


Module Interfaces (PSTN-ISUP Originated Call; IM-MGW Megaco/H.248 Signaling; PSTN Initiated Release)



The caller acknowledges the "200 OK" message. The call is now ready to enter conversation mode.

Conversation Mode



Conversation is now in progress. The voice is carried as PCM between the PSTN and IM-MGW. The IM-MGW converts the speech into RTP packets and back. The RTP communication takes place directly between the IM-MGW and Called IMS subscriber.

LEG: Calling PSTN Subscriber Initiated Call Release

A call release has been received from the PSTN side.

MGCF initiates IMS side call release by sending BYE.

The called subscriber is notified that the call has been released.

Request IM-MGW to Release TDM Termination. A Megaco SUBtract request is sent to release the PSTN side TDM circuit.

IM-MGW acknowledges.

Request IM-MGW to Release RTP Termination. A Megaco SUBtract request is sent to release the IMS side RTP termination.

IM-MGW acknowledges.

MGCF signals ISUP Release Complete to the PSTN network.

Acknowledge the BYE that was received from the IMS network.

Module Interfaces (Called IMS Subscriber Initiated Call Release)

PSTN	IMS Core Network	Called UE	EventStudio System Designer 4.0
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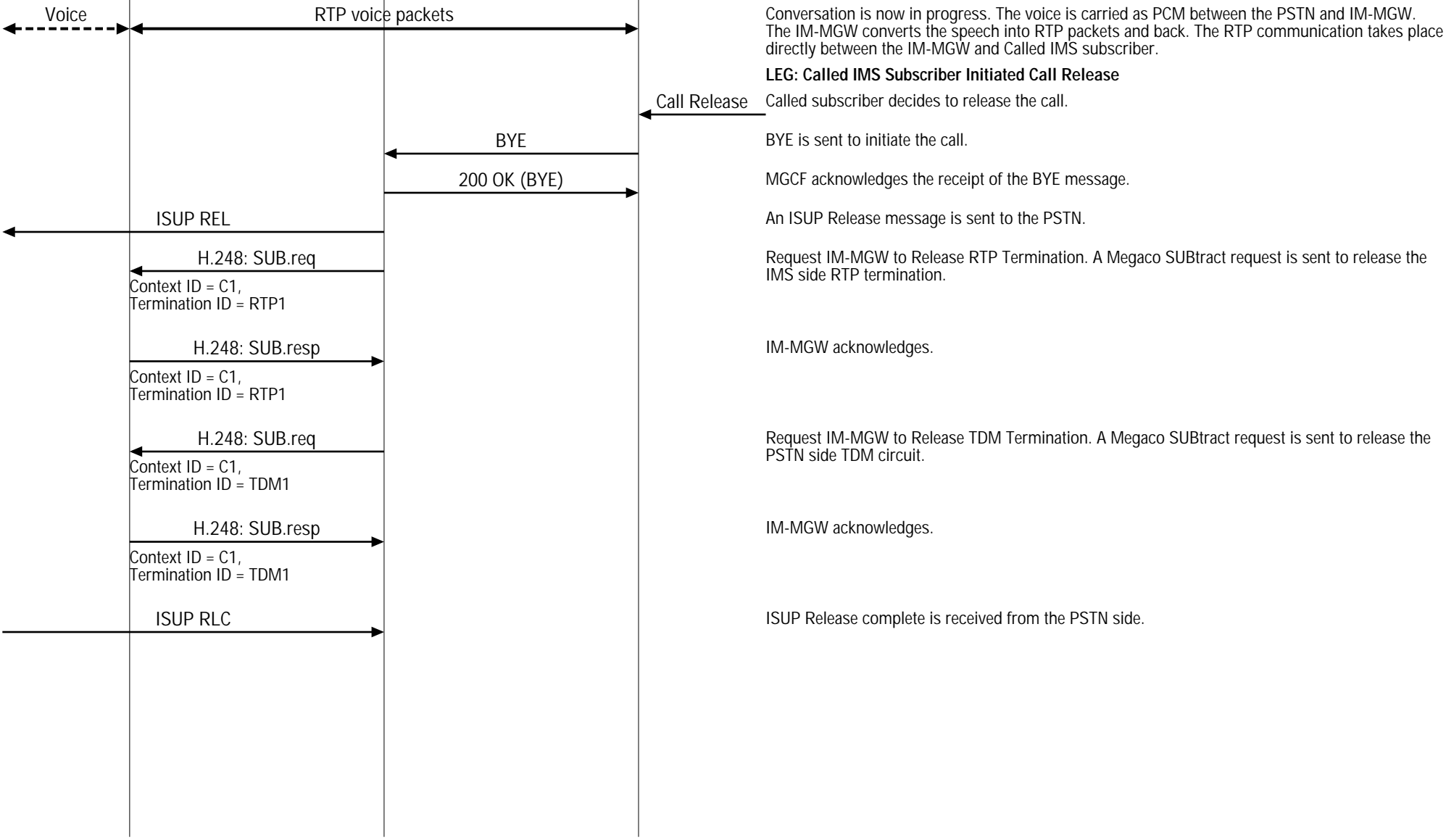
This call flow covers the handling of a CS network originated call with ISUP. In the diagram the MGCF requests seizure of the IM CN subsystem side termination and CS network side bearer termination. When the MGCF receives an answer indication, it requests the IM-MGW to both-way through-connect the terminations.

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LEG: Summary PSTN to IMS Call Flow

Call Setup (Same as Previous Scenario)

Conversation Mode



Conversation is now in progress. The voice is carried as PCM between the PSTN and IM-MGW. The IM-MGW converts the speech into RTP packets and back. The RTP communication takes place directly between the IM-MGW and Called IMS subscriber.

LEG: Called IMS Subscriber Initiated Call Release

Called subscriber decides to release the call.

BYE is sent to initiate the call.

MGCF acknowledges the receipt of the BYE message.

An ISUP Release message is sent to the PSTN.

Request IM-MGW to Release RTP Termination. A Megaco SUBtract request is sent to release the IMS side RTP termination.

IM-MGW acknowledges.

Request IM-MGW to Release TDM Termination. A Megaco SUBtract request is sent to release the PSTN side TDM circuit.

IM-MGW acknowledges.

ISUP Release complete is received from the PSTN side.