

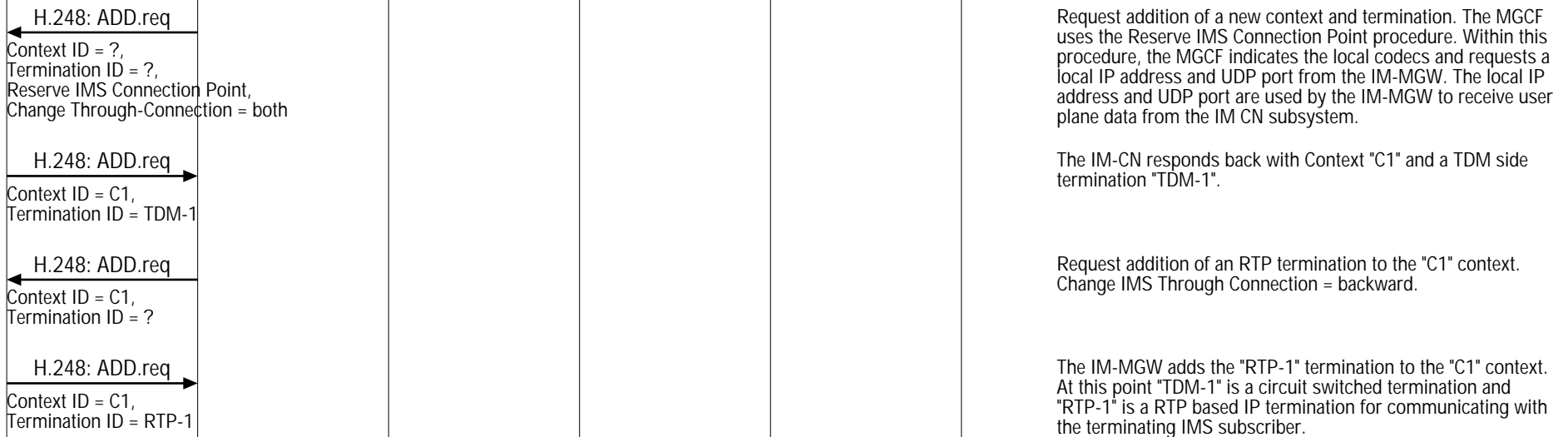
IM-MGW Interfaces (PSTN-ISUP Originated Call; IM-MGW Megaco/H.248 Signaling; PSTN Initiated Release)						
PSTN	IMS Core Network				Called UE	EventStudio System Designer 4.0
PSTN Equipment	PSTN Interface	CSCF Servers			Called User Equipment	
IM-MGW	MGCF	I-CSCF	Term S-CSCF	Term P-CSCF	Called	10-Feb-08 10:59 (Page 1)

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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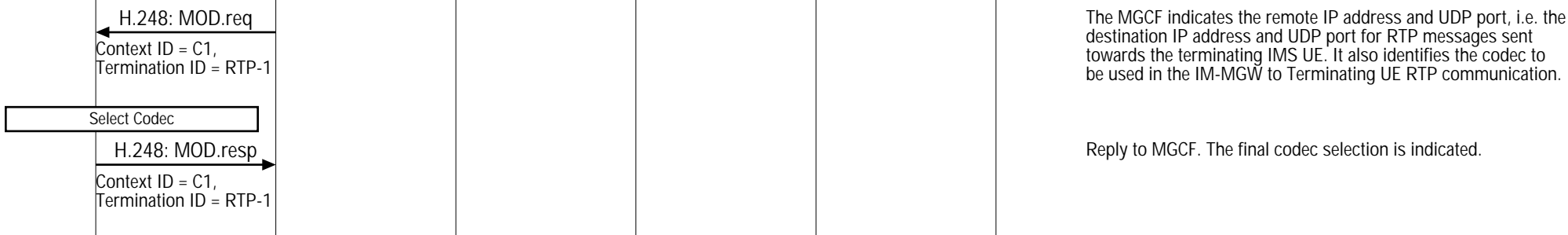
LEG: Detailed PSTN to IMS Call Setup

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

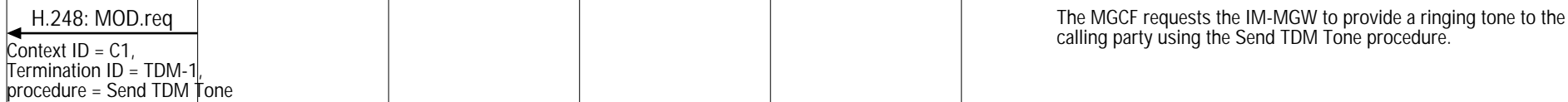


Initial Handshake between MGCF and IMS CSCF Servers

Mn Interactions for Codec selection



ISUP ACM related interactions on Mn interface.



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

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begin
Feed ringing tone on the TDM-1 termination

← Ringing tone

H.248: MOD.resp
Context ID = C1,
Termination ID = TDM-1

IMS Answer to ISUP ANM Handling

H.248: MOD.req
Context ID = C1,
Termination ID = TDM-1,
procedure = Stop TDM Tone

The call has been answered so the MGCF requests the IM-MGW to stop the ring tone on the TDM side.

end
Feed ringing tone on the TDM-1 termination

H.248: MOD.resp
Context ID = C1,
Termination ID = TDM-1

H.248: MOD.req
Context ID = C1,
Termination ID = RTP-1

Request the IM-MGW to both-way through-connect the terminations using the Change IMS Through-Connection or Change TDM Through-Connection procedure.

H.248: MOD.resp
Context ID = C1,
Termination ID = RTP-1

Conversation Mode

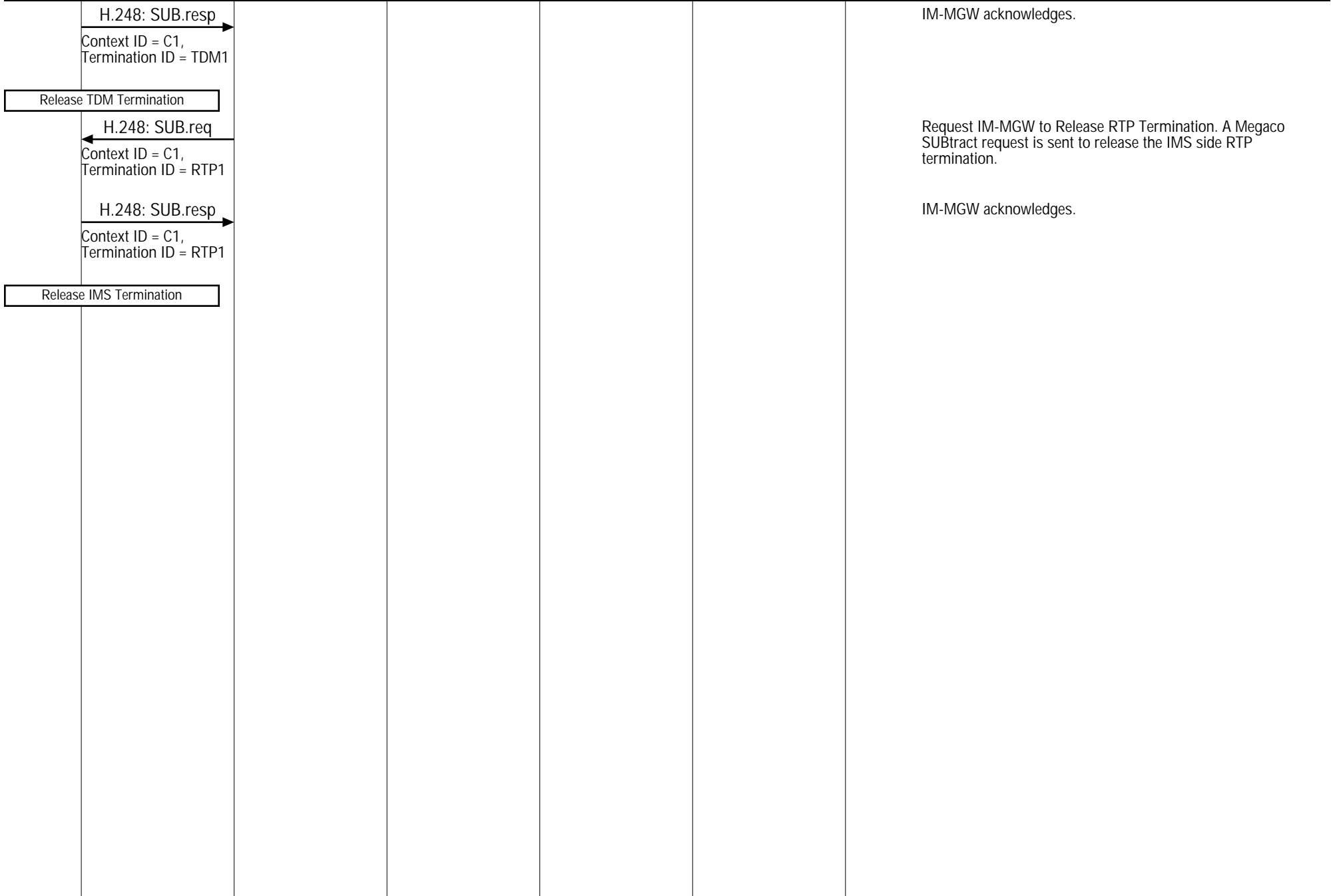
← Voice → RTP voice packets →

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.

H.248: SUB.req
Context ID = C1,
Termination ID = TDM1

LEG: Calling PSTN Subscriber Initiated Call Release
Request IM-MGW to Release TDM Termination. A Megaco SUBtract request is sent to release the PSTN side TDM circuit.

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IM-MGW	MGCF	I-CSCF	Term S-CSCF	Term P-CSCF	Called	10-Feb-08 10:59 (Page 3)



IM-MGW Interfaces (Called IMS Subscriber Initiated Call Release)						
PSTN	IMS Core Network				Called UE	EventStudio System Designer 4.0
PSTN Equipment	PSTN Interface	CSCF Servers			Called User Equipment	
IM-MGW	MGCF	I-CSCF	Term S-CSCF	Term P-CSCF	Called	

10-Feb-08 10:59 (Page 4)

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

