MGCF Interfaces (IMS-PSTN(ISUP) Call; Megaco/H.248 Signaling; IMS Caller Initiated Call Release)						
IMS Core Network		PSTN Interface				EventStudio System Designer 6
Home IMS		Signaling		Media		
Orig S-CSCF	BG	CF N	NGCF	IM-MG	W	24-Feb-13 15:23 (Page 1)
This call flow describes the call setup from one IMS subscriber to ISUP PSTN termination. The call is routed via the BGCF (Border Gateway Control Function) to the MGCF (Media Gateway Control Function). The MGCF uses one context with two terminations in IM-MGW (Media Gateway). The termination RTP1 is used towards IMS Core network subsystem entity and the bearer termination TDM1 is used for bearer towards PSTN CS network element.						
This sequence diagram was	generated wit	h EventStudio System Des	signer (http://www	w.EventHelix.com	n/EventStud	lio).
IMS to PSTN(ISUP) call setu						
IMS to PSTN Call Routing v		INVITE tel: <called number="" phone="">, S-CSCF address, <caller@himsl.net, <caller coded="" list<br="" supported="">Record-Route:<bgcf> <orig s-(<br="">P-CSCF> 100 Trying</orig></bgcf></caller></caller@himsl.net, </called>	CSCF> <orig< td=""><td></td><td></td><td>The BGCF selects MGCF in the same network to route the call to the PSTN network. The BGCF forwards the INVITE to MGCF but it does not add itself to the Record-Route header, as it has no need to remain in the signaling path once the session is established.</td></orig<>			The BGCF selects MGCF in the same network to route the call to the PSTN network. The BGCF forwards the INVITE to MGCF but it does not add itself to the Record-Route header, as it has no need to remain in the signaling path once the session is established.
IM-MGW Initial Setup		Select IM-MGW with circu received SDP and	its to given destinatio	in based on		MGCF selects IM-MGW to reserve outgoing channel towards the PSTN called party.
			H.248: A Context ID = ?, Termination ID = UE Codec List, UE RTP Port, UE IP Address	ADD.req		MGCF requests the IM-MGW for a new context. The UE codec, IP address and RTP port number is specified in the message.
			H.248: Al Common Codecs Li Selected local I Selected local I Context ID = C1, Termination ID =	st, TP Port, TP address,		The IM-MGW responds with the allocated context, the common codecs, the local IP address and the RTP port.
		183 Session Progress Common Codecs List, IM-MGW IP Port, IM-MGW IP Address, Record-Route: <mgcf>, <bgcf> <orig p-cscf="">, Contact: <mgcf></mgcf></orig></bgcf></mgcf>	, <orig s-cscf="">,</orig>			The MGCF returns the media stream capabilities of the destination along the signaling path in a "183 Session Progress". The IM-MGW "Common Codec List", IP address and the RTP port number are included in the message.
			H.248: A Context ID = Cl, Termination ID = Request IM-MGW t			Now the MGCF requests the IM-MGW for a circuit switched port towards the PSTN network. Note that the this termination is being requested for the Context C1 that was setup for the RTP connection.











