PoC Client B Interfaces (IMS PoC Client Invitation)

Wireless Network A	IMS				Wireless Network B	EventStudio System Designer 4.0
User Equipment A	IMS Network A		IMS Network B		User Equipment B	
PoC Client A	PoC Server A	IMS Core A	IMS Core B	PoC Server B	PoC Client B	29-Jun-08 11:31 (Page 1)

Push-to-talk over Cellular (PoC) service allows cell phones to used as walkie-talkies. A group of users in a PoC session can communicate by simply pressing a button and speaking when the phone indicates it is OK to do so. The user releases the button when he or she is done speaking.

When a user begins to speak, the PoC server allocates resources and notifies other users in the PoC session that the user is speaking. The PoC server then delivers the speech packets to all the users in the session.

PoC is resource efficient as it allocates resources only when a user is actually speaking. This makes it suitable for applications where there are long gaps between individual session participants speaking.

This flows covers the case where PoC Client A invites PoC Client B to a Pre-established Session by sending SIP REFER request to PoC Server A.

IMS Registration and PoC Session Pre-establishment

IMS Registration and PoC Session Pre-establishment (Click here for details)

PoC Client B registers and pre-establishes the PoC session. Click on the action box to see details.

Invite Client B to a session with SIP REFER

PoC Server A invites PoC Client B

Media Burst Control Protocol (MBCP) Session Setup using RTCP Port

MBCP Connect
protocol = RTCP APP

The PoC Server B sends the MBCP Connect to the PoC Client B. The message includes the PoC Session Identity.

MBCP Media Burst Acknowledgement
protocol = RTCP APP

The PoC Client B acknowledges the reception of the MBCP Connect message.

Push-to-Talk session activated

Indication to the user that the push-to-talk session has been activated.

Talk Burst from PoC Client A to B

MBCP Media Burst Taken
protocol = RTCP APP,
Granted SSRC = PoC Client A

Indicate to PoC Client B that the floor has been assigned to PoC Client.

MBCP Media Burst Acknowledgement
protocol = RTCP APP

Acknowledge the media burst taken message.

PoC Client A Speaking Indication

Notify the user that the floor has been granted to PoC Client A.

RTP Media

Voice

The PoC Client A sends the RTP Media to the PoC Client B via PoC Server A and PoC Server B.

RTP Media

Voice

MBCP Media Burst Idle
protocol = RTCP APP

Floor is available indication

Indication to the user that the floor is now available.

Talk Burst from PoC Client B to A