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.

This sequence diagram was generated with EventStudio System Designer (http://www.EventHelix.com/EventStudio).

**Initial Handshake between MGCF and IMS CSCF Servers**

| INVITE | INVITE tel:1-811-CALLED SIP/2.0, ...
| 100 Trying | 100 Trying
| 183 Session Progress | 183 Session Progress

The public URI in the SIP INVITE is replaced with the called subscriber’s registered IP address and port number. The message is routed to the P-CSCF IP address that was recorded at the time of registration. The Via and Record-Route headers are updated.

The UE replies indicating that the session is in progress. The contact address is set its own IP address. The Via and the Record-Route headers are copied from the received INVITE.

**Mn Interactions for Codec selection**

| PRACK | a=curr:qos local sendrecv,
a=curr:qos remote none,
a=des:qos mandatory local sendrecv,
a=des:qos mandatory remote sendrecv
| 200 CK (PRACK) | 180 Ringing

The Caller now sends a PRACK to inform the called subscriber about the selected Codec. The message also indicates that currently the resources needed for meeting the quality of service requirements of the session are already available (“a=curr:qos local sendrecv”).

This “200 CK” just acknowledges PRACK.

Inform the caller that the called subscriber is being rung. This serves as an implicit indication to the caller that the QoS at the called side has also been met.
Term S-CSCF Interfaces (PSTN-ISUP Originated Call; IM-MGW Megaco/H.248 Signaling; PSTN Initiated Release)

<table>
<thead>
<tr>
<th>PSTN Interface</th>
<th>CSCF Servers</th>
<th>IMS Core Network</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGCF</td>
<td>I-CSCF</td>
<td>Term S-CSCF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Term P-CSCF</td>
</tr>
</tbody>
</table>

**IMS Answer to ISUP ANM Handling**

- **PRACK**
  - The caller acknowledges the ringing message.

- **200 OK (PRACK)**
  - The called subscriber acknowledges the PRACK.

- **200 OK (INVITE)**
  - Notify the caller that the call has been answered.

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

**PSTN Initiated Call Release**

- **BYE**
  - MGCF initiates IMS side call release by sending BYE.

- **200 OK (BYE)**
  - Acknowledge the BYE that was received from the IMS network.

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<table>
<thead>
<tr>
<th>Called Subscriber Initiates Call Release</th>
</tr>
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<tbody>
<tr>
<td>200 OK (BYE)</td>
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<td>BYE</td>
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