### IMS Routing of Initial SIP INVITE

**INVITE**

```
INVITE called@hims2.net SIP/2.0,
P-Asserted-Identity: <caller@hims1.net>,
Via: <Orig P-CSCF> <Calling-UE>,
Record-Route: <Orig P-CSCF>,
Route: <Orig S-CSCF>,
Contact: <Calling UE IP> :Port,
SDP: <Caller Supported Codec List>
```

The P-CSCF replaces the preferred identity header with the asserted identity header and forwards the message to the S-CSCF in the home network. It adds a Record-Route header with its own address.

**INVITE**

```
INVITE called@hims2.net SIP/2.0,
P-Asserted-Identity: <caller@hims1.net>,
Via: <Orig S-CSCF> <Orig P-CSCF> <Calling-UE>,
Record-Route: <Orig S-CSCF> <Orig P-CSCF>,
Contact: <Calling UE IP> :Port,
SDP: <Caller Supported Codec List>
```

Use DNS to translate from hims2.net to 'Term I-CSCF' IP address

### IMS Routing of First Response to the SIP Invite

**183 Session Progress**

```
Via: <Orig S-CSCF> <Orig P-CSCF> <Calling-UE>,
Record-Route: <Term S-CSCF> <Orig S-CSCF> <Orig P-CSCF>,
SDP: <Codecs supported by Caller and Called>
```

**183 Session Progress**

```
Via: <Orig P-CSCF> <Calling-UE>,
Record-Route: <Term S-CSCF> <Orig S-CSCF> <Orig P-CSCF>,
SDP: <Codecs supported by Caller and Called>
```

### PDP Context Activation and Audio/Video Path Setup

**PRACK**

```
SDP: <Selected Codec>, <Local-QOS: none>
```

**200 OK**

```
SDP: <Selected Codec>, <Local-QOS: none>
```

**PRACK**

```
SDP: <Selected Codec>, <Local-QOS: none>
```

**200 OK**

```
SDP: <Selected Codec>, <Local-QOS: none>
```

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 not available.

The called subscriber acknowledges the PRACK. The message also indicates that quality of service for the session is not met for the called subscriber.
Since the caller PDP context has been activated, notify the called end that the caller can now meet the quality of service in the send and receive direction.

The caller replies back to the called user. Note that the Local QoS is still set to none as the called PDP context activation has not been completed.

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.

The caller acknowledges the ringing message.

The called subscriber acknowledges the PRACK.

Notify the caller that the call has been answered.

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