### Term I-CSCF Interfaces (Caller and Called are IMS Subscribers)

<table>
<thead>
<tr>
<th>Calling UE</th>
<th>IMS Network</th>
<th>Called UE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visited IMS 1</td>
<td></td>
<td>Home IMS 2</td>
</tr>
<tr>
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<td>Term I-CSCF</td>
<td>Term P-CSCF</td>
</tr>
<tr>
<td>Home IMS 2</td>
<td>Term S-CSCF</td>
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</tr>
<tr>
<td>Called User Equipment</td>
<td></td>
<td></td>
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</tbody>
</table>

#### IMS Routing of Initial SIP INVITE

**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>
```

100 Trying

**Query the SLF to locate HSS**

**INVITE**

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

**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>
```

**180 Ringing**

**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>
```

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

**180 Ringing**

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 S-CSCF removes the Route header and routes the INVITE to the I-CSCF IP address obtained from the DNS query. Note that the S-CSCF has added the telephone URL to the P-Asserted-Identity. The Via and Record-Route headers are also updated with self-address.

The I-CSCF queries the Subscription Location Function (SLF) to identify the HSS that needs to be queried.

Query the HSS to obtain the S-CSCF for the user.

As a part of the message processing, a route entry is added for the Term S-CSCF. A new Via header is added to record that the message traversed this I-CSCF. The message is forwarded to the first route header (in this case, the "Term S-CSCF").
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![EventStudio System Designer 4.0](image)

200 OK 200 OK

Notify the caller that the call has been answered.