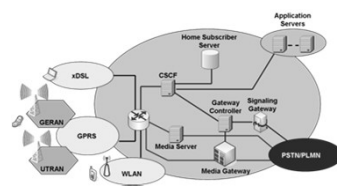


IMS theory in practice

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IMS – IP Multimedia Subsystem

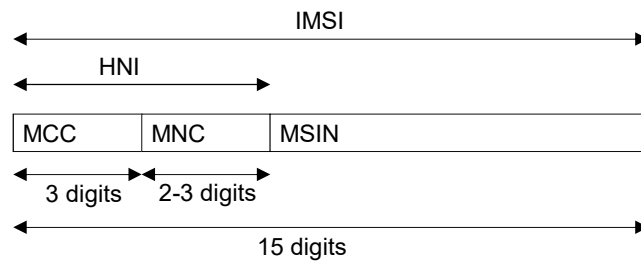
- Temporary IMPU



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IMSI

- IMSI (International Mobile Subscriber Identity) is a collection of maximum 15 digits that globally represent the identity of a mobile subscriber
 - MCC Mobile Country Code
 - MNC Mobile Network Code
 - MSIN Mobile Subscriber Identification Number

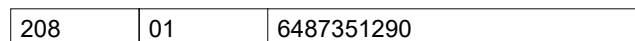


Ex: 20801648735129

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IMS access with USIM

- Private User Identity
 - user part equals to IMSI
 - domain part is composed of MNC, MCC and predefined domain name (.3gppnetwork.org)



20801648735129@ims.mnc01.mcc208.3gppnetwork.org

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IMS access with USIM

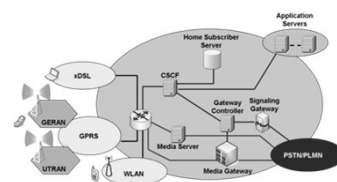
- Temporary Public User Identity
 - usually « barred » so that it cannot be used for IMS communication
 - not displayed to the user and not used for public usage
 - only used during registration to obtain implicitly registered public user identities
 - implicitly registered public user identities are used for session handling
 - similar to private identity

sip:20801648735129@ims.mnc01.mcc208.3gppnetwork.org

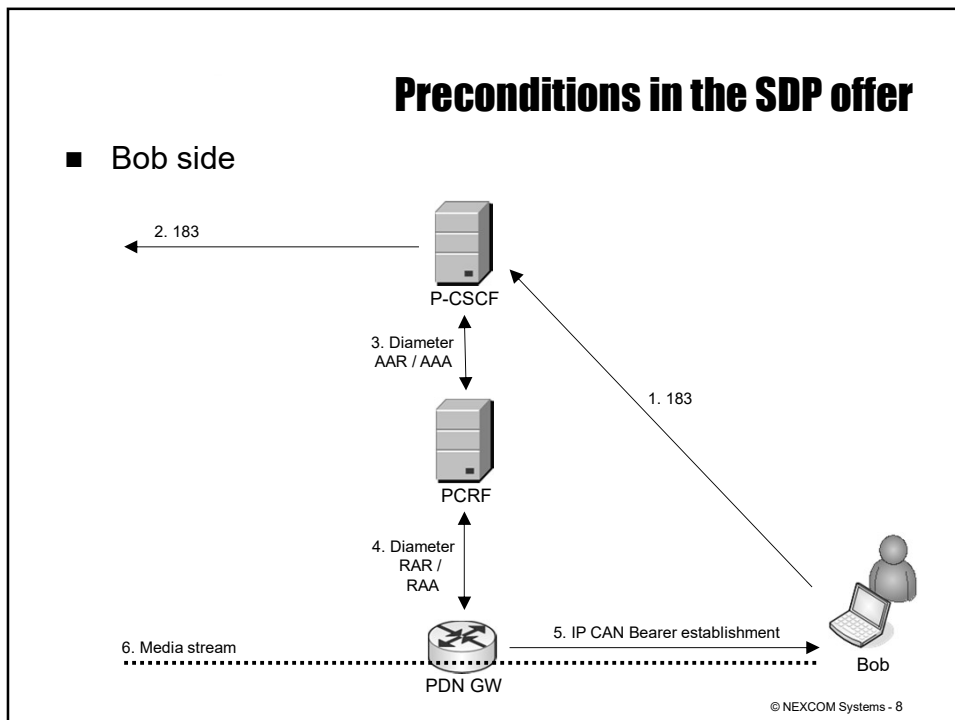
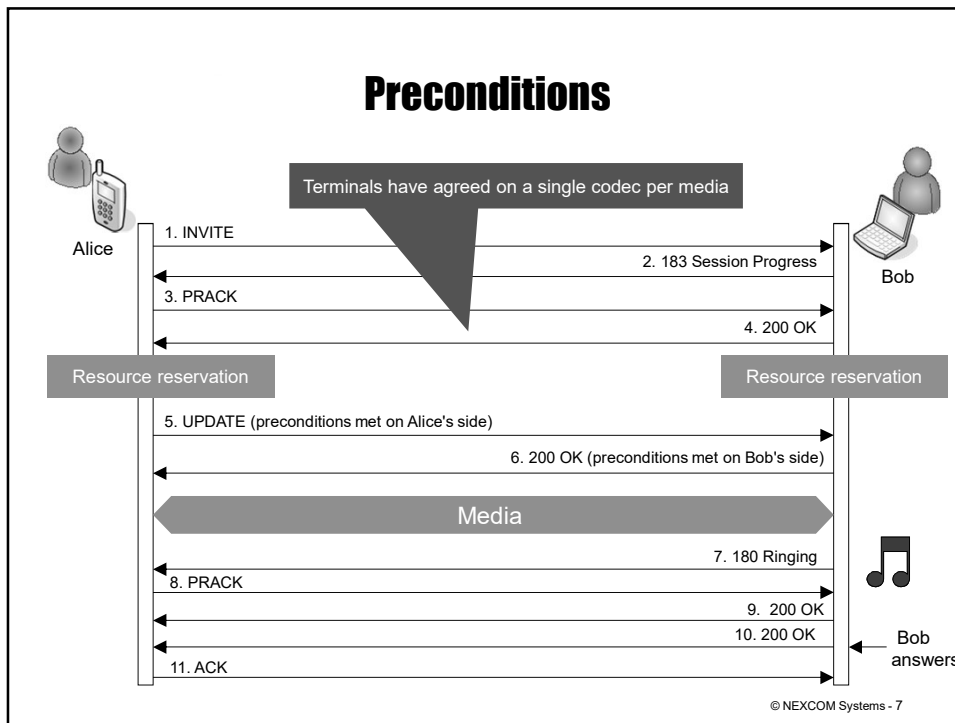
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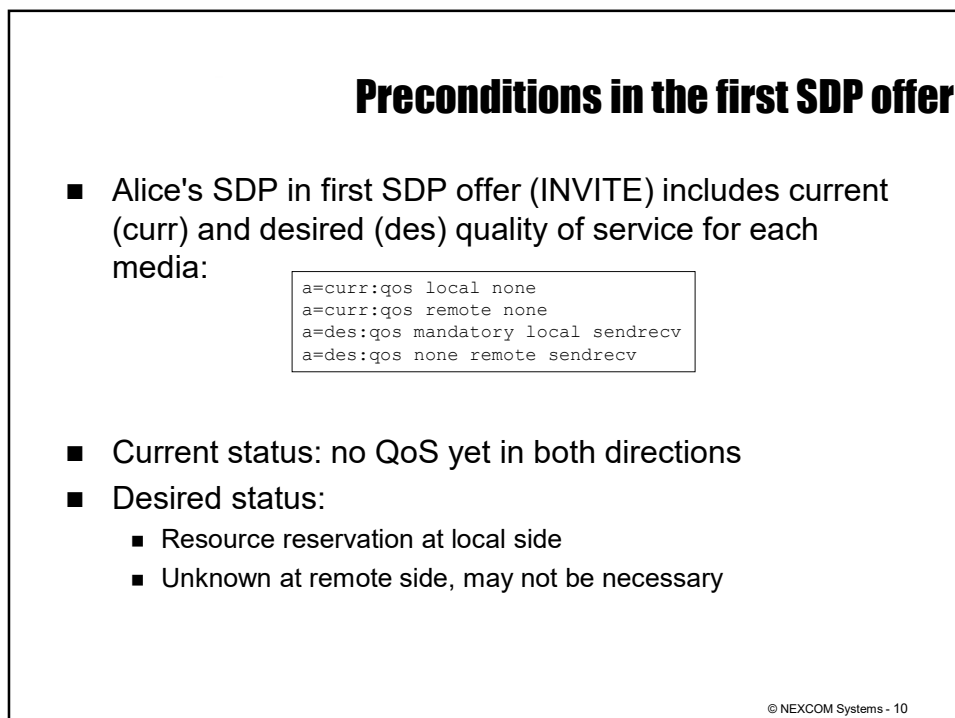
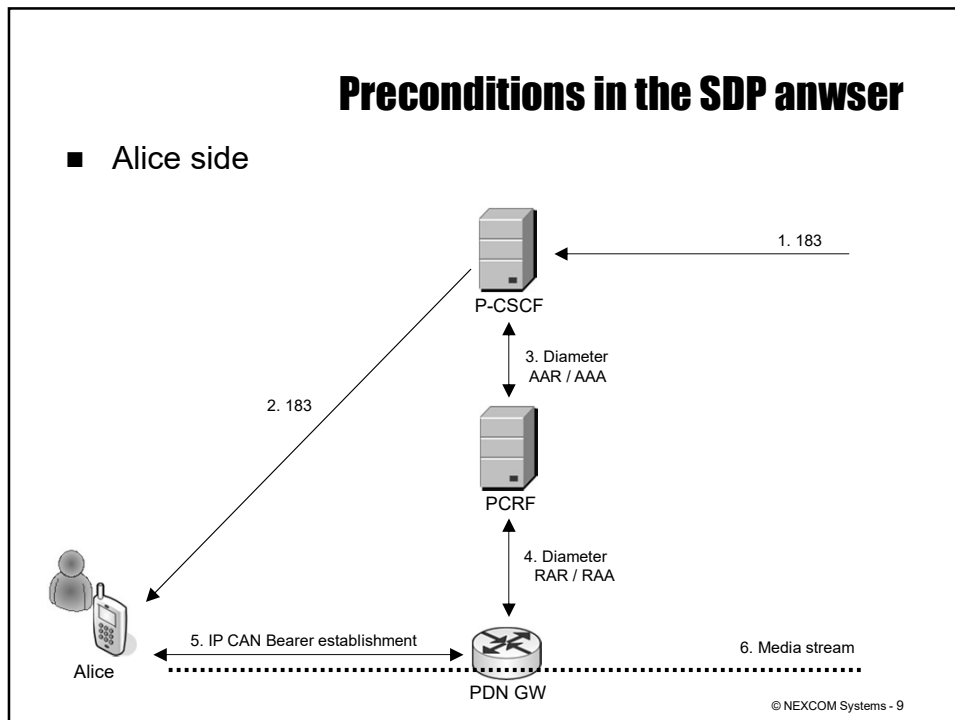
IMS – IP Multimedia Subsystem

- Preconditions



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Preconditions in the first SDP answer

- Bob's first SDP answer indicates requirements at Bob's side:

```
a=curr:qos local none
a=curr:qos remote none
a=des:qos mandatory local sendrecv
a=des:qos mandatory remote sendrecv
a=conf:qos remote sendrecv
```

- Indicates that resource reservation need to be performed also at Bob's side
- Asks for a confirmation when Alice's side has succeeded in reserving resources

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Successful resource reservation

- Bob has indicated that Alice should send a confirmation first
- Once Alice's UE has succeeded, it sends an UPDATE message with:

```
a=curr:qos local sendrecv
a=curr:qos remote none
a=des:qos mandatory local sendrecv
a=des:qos mandatory remote sendrecv
```

- Bob's UE answers with 200 OK to UPDATE:

```
a=curr:qos local sendrecv
a=curr:qos remote sendrecv
a=des:qos mandatory local sendrecv
a=des:qos mandatory remote sendrecv
```

- If it has not finished yet, it indicates success with 180 Ringing response

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