

**21 - 24 May, 2001**

**Phoenix, USA**

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**3GPP TSG-S2#17**

**S2-010757**

**26 February – 2 March 2001**

**Gothenburg, Sweden**

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**Title: Proposed Reply LS for " IM User Identities "**

**Source: TSG SA WG2**

**To: TSG CN WG1, TSG SA WG3**

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SA2 thanks the CN1 and SA2 Joint SIP Adhoc for their liaison S2-010660 (N1-010270) which SA2 has considered in a joint session with SA3.

In their joint session with SA3, SA2 agreed relevant text for inclusion in TS 23.228 which SA2 believes answers most of the clarifications requested in N1-010270.

However due to concerns from some SA3 colleagues, SA2 were unable to agree text confirming that the Registration flow is definitely the only time the Private User Identity is sent to the network in SIP signalling messages. SA2 however recommends that for now CN1 continue with their current working assumptions until the relevant associated security issues are resolved by SA3.

The revised section 4.3.3 of TS 23.228 currently is agreed as follows:

### **4.3.3 Identification of users**

#### **4.3.3.1 Private User identities**

Every IM subsystem subscriber shall have a private user identity. The private identity is assigned by the home network operator, and used, for example, for Registration, Authorization, Administration, and Accounting purposes. This identity shall take the form of a Network Access Identifier (NAI) as defined in RFC2486.

Note: It is possible for a representation of the IMSI to be contained within the NAI for the private identity.

The Private User Identity is not used for routing of SIP messages.

The Private User Identity is a unique global identity defined by the Home Network Operator, which may be used within the home network to uniquely identify the user from a network perspective.

The Private User Identity shall be permanently allocated to a user (it is not a dynamic identity), and is valid for the duration of the user's subscription with the home network.

The Private User Identity is used to identify the user's information (for example authentication information) stored within the HSS (for use for example during Registration).

The Private User Identity may be present in charging records based on operator policies.

The Private User Identity identifies the subscription (e.g. IM service capability) not the user.

The Private User Identity is authenticated only during registration of the subscriber, (including re-registration and de-registration).

The HSS and S-CSCF need to obtain and store the Private User Identity .

#### 4.3.3.2 Public user identities

Every IM subsystem subscriber shall have one or more public user identities [Ref 22.228]. The public user identity/identities are used by any user for requesting communications to other users.

Note: For example, this might be included on a business card.

Both telecom numbering and internet naming schemes can be used to address users depending on the Public User identities that the user's have.

The public user identity/identities shall take the form of SIP URL (as defined in RFC2543 and RFC2396) or E.164 numbers.

The Public User Identity/Identities is not authenticated by the network during registration.

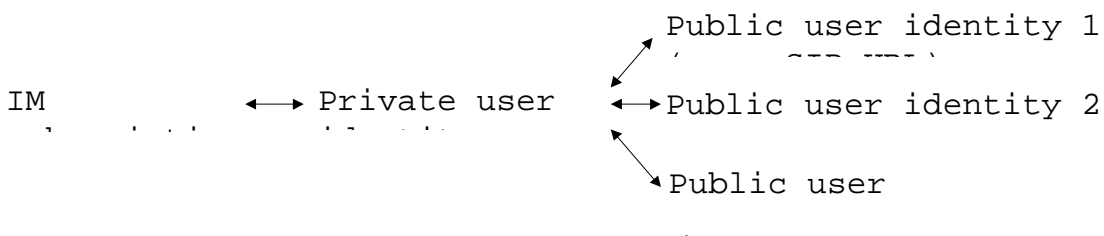
Public User Identities may be used to identify the user's information within the HSS (for example during mobile terminated session set-up).

#### 4.3.3.3 Routing of SIP signaling within the IP MultiMedia SubSystem

Routing of SIP signaling within the IMS shall use SIP URLs. E.164 format public user identities shall not be used for routing within the IMS, and session requests based upon E.164 format public user identities will require conversion into SIP URL format for internal IMS usage.

#### 4.3.3.4 Relationship of Private and public user identities

The home network operator is responsible for the assignment of the private user identifier, and public user identifiers; other identities that are not defined by the operator may also exist.



**Figure x. Relationship of the private user identity and public user identities**

It is not a requirement for a user to be able to register on behalf of another user or for a device to be able to register on behalf of another device or for combinations of the above for the IM subsystem for release 5

Editor's Note: Public User Identity Portability issues are FFS.