# 3GPP TSG SA WG3 Security — S3#22

#### S3-020312

# 14 - 17 May 2002

# Victoria, Canada

Title: Reply LS on IMS identities for Rel 99/R4 UICC

**Response to:** LS *S2-021526* on IMS identities for Rel 99/R4 UICC from SA2

Source: SA3 To: SA2

**Cc:** SA1, CN1, CN4, T3

**Contact Person:** 

Name: Peter Howard Tel. Number: + 44 1635 676206

E-mail Address: Peter.Howard@vodafone.com

Attachments: None

#### 1. Overall Description:

SA2 have asked whether SA3 see any problems with some CRs on TS 23.228 which strongly recommend that IMSI-derived public user identities (termed Temporary Public User Identity) should not be used in IMS procedures.

SA3 have noted that within SA2 operators have required the flexibility to use Temporary Public User Identities for users and that this is the reason why it is not mandated that the Temporary Public User Identities are always set to be barred. Furthermore SA3 have noted that even if an operator does not bar the Temporary Public User Identity then it is still not intended to make it available for public usage. In particular, some new text in the CR in S2-021524 reads:

"A Temporary public user identity shall not be displayed to the user and shall not be used for public usage such as displaying on a business card."

SA3 would like to indicate that operators who do not follow the strong recommendation to bar the Temporary Public User Identity may be exposing their users to an increased threat of identity and location confidentiality attack. In particular, if an attacker can easily obtain a given user's Temporary Public User Identity then it will be possible to determine the corresponding IMSI and consequently this may increase the effectiveness of attacks on the radio interface to determine whether a given user is at a given location. Although there may be other ways an attacker could link an IMSI to a human user, SA3 believe that the IMS system should not open up new possibilities to compromise user identity and location confidentiality.

Although it would be desirable for security reasons to mandate that the Temporary Public User Identities are always set to be barred, SA3 recognise that operators within SA2 have required the flexibility to use Temporary Public User Identities. Therefore, SA3 can accept the provisions in the CRs on TS 22.228 to restrict the usage of Temporary Public User Identities and to strongly recommend that Temporary Public User Identities should be barred.

### 2. Actions:

### To SA2 group.

ACTION: SA2 should note that SA3 can accept the provisions in the CRs on TS 22.228 to restrict the

usage of Temporary Public User Identities and to strongly recommend that Temporary Public User Identities should be barred.

#### 3. Date of Next TSG-SA3 Meetings:

SA3#24  $9^{th} - 12^{th}$  July 2002 Helsinki, Finland SA3#25  $8^{th} - 11^{th}$  Oct 2002 Munich, Germany