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**Mainz, Germany**

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**3GPP TSG CN WG2  
Milan, ITALY  
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**TDoc N2B000388**

**From: TSG CN WG2 <sup>1)</sup>**  
**To: TSG SA WG3**

**Subject: LS on comments to Enhanced User Identity Confidentiality**

TSG CN WG2 have further progressed the work on the Security Work Item "Enhanced User Identity Confidentiality". The following comments were collected during the discussion:

1. When reading the current text in 3G TS 33.102 on Enhanced User Identity Confidentiality, it is not clear whether the support of this feature is optional or mandatory for certain network entities. It is TSG CN WG2 working assumption that the support of Enhanced User Identity Confidentiality is mandatory for 3G MSC/VLR and SGSN.

TSG SA WG3 is asked to confirm this view and to update the description in 3G TS 33.102 accordingly.

2. Based on received contributions and their working assumptions on the content of the stage 2, N2 agreed the changes to introduce the new concept of the Temporarily Encrypted Mobile Subscriber Identity (TEMSI) to core specifications in the responsibility of TSG CN WG2. The introduction of the TEMSI shall prevent paging of a MS with its non-encrypted IMSI. However a case was identified where the IMSI has to be used, mobile terminated call handling if no subscriber data are available in the VLR and mobile terminated call handling after VLR restart.

There are currently no solutions available to cope with this case. TSG SA WG3 is therefore asked to verify whether this introduces an unexpected large gap in the security concept for Enhanced User Identity Confidentiality.

3. Due to the distributed allocation of TEMSI to 3G subscribers (a VLR is served by several UIDNs) there is a certain probability of a double allocation of TEMSI for subscribers registered in one VLR. This may lead to unsuccessful mobile terminated call handling for those subscribers.

TSG SA WG3 is asked to consider this disadvantage of the TEMSI concept.

CN2 advise SA3 that if SA3 decide to make changes to the stage 2 which cause it to depart significantly from CN2's working assumption then there is a risk that stable stage 3 specifications will not be available for the TSG #7 plenaries. Smaller scale changes to the stage 2 could be tracked at an ad hoc meeting which we plan to hold on 2 & 3 March. SA3 are cordially invited to participate in this meeting.

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