Source: SA WG3 (Security)

Title: CR to 33.220: Removal of editors notes on Transaction Identifiers

(Rel-6)

**Document for:** Approval

Agenda Item: 7.3.3

SA Doc number	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	SA WG3 Doc number	Workitem
SP-040447	33.220	003	1		Removal of editors notes on Transaction Identifiers	F		S3-040410 (Category revised at SA#24)	SEC1-SC

## 3GPP TSG-SA WG3 Meeting #33

Other comments: #

## Tdoc #\$3-040410rev

10" – 14" May 2004, Beijing, China										(Category revised at SA#24)			
CHANGE REQUEST													
*	33.	220	CR (	03	жr	rev	1	ж	Current ve	ersion:	6.0.0	¥	
For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the <b>%</b> symbols.													
Proposed change affects: UICC apps  ■ ME X Radio Access Network Core Network X													
Title: ૠ	Ren	noval c	of editor	s notes c	on Trans	saction	lde	ntifie	rs				
Source: #	SA	WG3											
Work item code: ₩	SEC	C1-SC							Date:	<b>₩</b> 10	0/05/2004		
Category:  # F Use one of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) P (editorial modification) C (ditorial modification) C (functional mo								following reli M Phase 2) lease 1996) lease 1997) lease 1998) lease 4) lease 5)					
Reason for change Summary of chang		Both removed editors notes are no longer necessary  First Note: Content generally out of scope of this specification. Replaced by Note stating this and giving HTTP Digest example.  Second Note: Not applicable under this heading, therefore deleted. (General problem also solved by key lifetime and key renegotiation)											
Consequences if not approved:	¥			rong state: superflu		ote.							
Clauses affected:	¥	4.3.7											
Other specs affected:	¥	X	Test sp	core spec pecification	ons	าร	ж	none	е				

\*\*\*\*\*\*\*\*\*\*\*\*\* begin change \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

## 4.3.7 Requirements on Transaction Identifier

Transaction identifier shall be used to bind the subscriber identity to the keying material in Ua, Ub and Zn interfaces.

Requirements for Transaction Identifier are:

- Transaction Identifier shall be globally unique;
- Transaction Identifier shall be usable as a key identifier in protocols used in the Ua interface;
- NAF shall be able to detect the home network and the BSF of the UE from the Transaction Identifier.

NOTE: Care has to be taken that the parallel use of GBA and non-GBA authentication between UE and NAF does not lead to conflicts, e.g. in the name space. This potential conflict cannot be resolved in a generic way as it is dependent on specific protocol and authentication mechanism used between UE and application server. It is therefore out of scope of this specification.

For the example of HTTP Digest authentication used between UE and NAF, parallel use is possible as the following applies: <username,password>-pairs must be unique to one realm only. As the NAF controls the realm names, it has to ensure that only the GBA based realm is named with the reserved 3GPP realm name. In the special case that the NAF wants to allow non GBA based authentication in the GBA realm also, it has to ensure that no usernames in the format of a Transaction Identifier are used outside GBA based authentication.

Editor's note: Parallel use of GBA and non GBA infrastructure is ffs. There are use cases when NAF may want to use GBA and non GBA based infrastructures at the same time. For example, a NAF may want to authenticate subscribers both by using normal HTTP Digest authentication (where the usernames and passwords are distributed using some other mechanism than GBA), and by using GBA based HTTP Digest. However, it seems that in most telecommunication protocols, the server side (i.e. NAF) controls the name space related to key identifiers (cf. Transaction Identifier). For example, in HTTP authentication, the server issues the usernames, and does not allow the re use of already existing usernames. The parallel use of GBA and non GBA based infrastructures may cause conflicts on Transaction Identifier namespace. In particular, BSF may assign Transaction Identifier values that NAFs are already using with non GBA UEs.

Editor's note: GBA shall further specify on how security associations are removed and/or updated in NAF.

\*\*\*\*\*\*\* end change \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*