
3GPP TSG SA WG3 Security — S3#18

S3-010285

21-24 May, 2001

Phoenix, Arizona, USA

Work Item Description

Title

**Network Domain Security; MAP application layer security (NDS/MAPsec)
(formerly known as MAP application layer protection)**

This WID replaces WID "MAP application layer protection" (SP-000299).

Togheter with WID "Network Domain Security; IP network layer security" (S3-010276) it also replaces WID "Key Management for core network security" (SP-000301).

1 3GPP Work Area

	Radio Access
X	Core Network
	Services

2 Linked work items

- Related work is in N4 to specify the solutions developed by S3.

3 Justification

An identified security weakness in 2G systems is the absence of security in SS7 networks. This was formerly perceived not to be a problem, since this network was the province of a small number of large institutions. This is no longer the case, and so there is now a need for security precautions.

This work item describes ongoing work in S3, which had been originally tasked by SA to S3 under the name of "MAP Security", an early version of which had originally been included in R'99.

4 Objective

The MAP protocol is used for signaling in and between core networks. It is the objective of this work item to protect all sensitive data transmitted via MAP, e.g. authentication data and user related data. The security characteristics that have been identified as being in need of protection are confidentiality,

integrity, and authentication. These will be ensured by standard procedures, based on cryptographic techniques.

5 Service Aspects

None identified.

6 MMI-Aspects

None identified.

7 Charging Aspects

None identified.

8 Security Aspects

The work item is a security item.

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes				X	
No	X	X	X		X
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

Meeting	Date	Activity
SA3#18	May, 2001	Completion of TS 33.200 Rel4. Forward to SA mailinglist "for information".
SA#13	June, 2001	Present TS Rel4 to SA plenary for approval.
SA3#19	July, 2001	Receive contributions to include local key distribution for 33.200 Rel5.
SA3#20	October, 2001	Prepare CRs to include local key distribution for 33.200 Rel5.
SA#15	December, 2001	Present CRs to Rel5 of TS to include local key distribution for 33.200 Rel5.
SA3#21	Jan/Feb?, 2002	Prepare CRs to 33.200 Rel5 to include inter-operator SA negotiations
SA#16	March, 2002	Present CRs to Rel5 of TS to include inter-operator SA negotiations
SA#17	June, 2002	Stage 3 completion

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
33200	NDS/MAPsec	SA3		SA#13		
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	

11 Work item raporteurs

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12 Work item leadership

TSG SA WG3

13 Supporting Companies

T-Mobile, Vodafone, Ericsson, Telenor, Siemens, BT

14 Classification of the WI (if known)

X	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a This WI is a Feature. This Feature has no active Building Blocks.

14b The WI is a Building Block: