

Work Item Description

Title

Network Domain Security; MAP application layer security (NDS/MAPsec)

1 3GPP Work Area

	Radio Access
X	Core Network
	Services

2 Linked work items

Related CN4 stage 3 work.

3 Justification

Fraudulent SMS traffic creating customer dissatisfaction and leading to financial losses for operators has been encountered by several network operators. MAP payload encryption is an important element to combat it.

The current specification of MAP application layer security (TS 33.200) does not cover SMS related MAP traffic. Moreover, automatic security association and key management procedures are missing from the specification.

4 Objective

The objectives of this work item are

- to create a suitable MAPsec protection profile for SMS related MAP operations and
- to replace the manual security association and key management procedures described in the (informative) Annex A of TS 33.200 by a normative Automatic Key Management specification.

Some work in respect of the second objective has already been carried out (cf. SP-020115; SA#15) and, if still appropriate, should be re-used.

5 Service Aspects

None identified.

6 MMI-Aspects

None identified.

7 Charging Aspects

None identified.

8 Security Aspects

Indeed, this work item is a security issue.

9 Impacts

Affects:	UICC apps	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)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
n/a						
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
33.200		MAPsec protection profile for SMS related MAP operations		SA#25		
33.200		Automatic security association and key management procedures		SA#26 (?)		

11 Work item rapporteurs

tba

12 Work item leadership

TSG SA WG3

13 Supporting Companies

T-Mobile, Vodafone, **3**, TeliaSonera

14 Classification of the WI (if known)

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

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

(one Work Item identified as a feature)

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)