# 3GPP TSG CN Plenary Meeting #18 4<sup>th</sup> - 6<sup>th</sup> December 2002 New Orleans, USA.

Source: CN4

**Title:** Protocol definition for automatic distribution of MAP security keys

**Agenda item:** 9.1

**Document for:** APPROVAL

# **Work Item Description**

#### **Title**

Protocol definition for automatic distribution of MAP security keys

#### 1 3GPP Work Area

		Radio Access
Ī	X	Core Network
Ī		Services

#### 2 Linked work items

Related WIs are:

1. Security enhancements (1571-SA3)

### 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 CN4 for the stage 3 work on Ze interface for automatic key distribution for MAP security.

#### 4 Objective

The MAP protocol is used for signaling in and between core networks. It is the objective of this work item to define the protocol used in Ze interface between KAC and MAP-NE for automatic key distribution to allow allow updating of keys and security policies more frequently and with less possibility for error than with manual updating.

#### 5 Service Aspects

None

# 6 MMI-Aspects

None

#### 7 Charging Aspects

None

# 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)

			New sp	ecifications		
Title		Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
Mobile Application Part				CN#20	CN#21	
		Δffe	cted exist	ing specificati	ions	
CR	Subject			Approved at plenary#		Comments
	Aff	ected ex	isting and	new IETF spe	ecifications	
	Signal Mobile (MAP) flows f	Signalling System No. 7; Mobile Application Part (MAP); Security signalling flows for the Ze interface  CR Subject	Signalling System No. 7; Mobile Application Part (MAP); Security signalling flows for the Ze interface  Affe  CR Subject	Title Prime rsp. WG rsp. WG(s)  Signalling System No. 7; Mobile Application Part (MAP); Security signalling flows for the Ze interface  Affected exist  CR Subject	rsp. WG rsp. WG(s) information at plenary#  Signalling System No. 7; Mobile Application Part (MAP); Security signalling flows for the Ze interface  Affected existing specification of the Ze interface of the	Title Prime rsp. WG 2ndary rsp. WG(s) Presented for information at plenary#  Signalling System No. 7; Mobile Application Part (MAP); Security signalling flows for the Ze interface  Affected existing specifications

# Work item raporteurs

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# Work item leadership

CN4

# 13 Supporting Companies

Nokia, Vodafone, Nortel, Sonera, Orange

# 14 Classification of the WI (if known)

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

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

Rel-6 MAP application layer security (33003-SA3)