

9 - 12 July 2002

Helsinki, Finland

Work Item Description

Title

Network Domain Security; IP network layer security (NDS/IP) for Release 6

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

- Related work is in RAN and GERAN work groups (yet to be indentified)

3 Justification

There is a clear need to protect the IP based core network protocols for the control plane to protect the system against attacks.

There may be a need to protect IP based control plane protocols over Iu, Iur, Iub, Iupc and Gb. SA3 will evaluate the need for security protection of the protocols over these interface and then extend NDS/IP to cover the relevant protocols/interfaces (if any).

4 Objective

The general objective is to develop security solutions for all IP based core network protocols which need protection. This notably includes GTP and control protocols used in IMS.

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.

The scope of this WI includes key management and distribution mechanisms for NDS/IP.

This work might also be extended to protection of the user plane.

A further objective is to provide NDS/IP security protection to IP based control plane protocols over UTRAN and GERAN interfaces.

The work is based on TR 25.933: IP Transport in UTRAN.

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	X	
No	X	X			X
Don't know					

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

Meeting	Date	Activity
SA3#24	July 2002	NDS/IP Release6 WID defined
SA#17	September 2002	WID approval
SA3#25	October 2002	Requirement analysis of UTRAN/GERAN protocols and interfaces in need of security protection. LS to relevant RAN/GERAN groups.
SA3#26	November 2002	Evaluation of the scope for NDS/IP in UTRAN and GERAN
SA3#27	TBD, 2003	CR to TS33210 agreed by SA3
SA#19	March 2003	CR to 33.210 presented SA plenary. If approved, the CR will create a Release6 version of TS 33.210 NDS/IP

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
33.210		NDS/IP		19	Release6	

11 Work item rapporteurs

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12 Work item leadership

TSG SA WG3

13 Supporting Companies

T-Mobil, Vodafone, Ericsson, Telenor, Nokia, Siemens, Motorola, AT&T Wireless, Lucent

14 Classification of the WI (if known)

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

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

14b The WI is a Building Block: