3GPP TSG SA WG3 Security — S3#20　　　　　　　　　　　　　　　**S3-010573**

27 - 30 November, 2001

Sophia Antipolis, France

TSG-RAN Working Group 3
Meeting #24
New York, USA, 22.-26.10.2001

Source:	**Nokia**
Title:	**Liaison Statement on Security of Rel5 IP Transport in UTRAN**
To:	**TSG-SA WG3**
cc:	
From:	**TSG-RAN WG3**
Contact:	sami.kekki@nokia.com

TSG-RAN WG3 is working on Rel5 Work Item "IP transport in UTRAN". The goal of the WI is to introduce IP transport option on UTRAN interfaces Iu, Iur and Iub for both User plane and for Control plane. One of the areas of this work is the Transport Network Layer security. It is the view of the TSG-RAN WG3 that the security considerations need to be paid attention to in order not to reduce the applicability of IP networks to Rel5 UTRAN.

So far TSG-RAN WG3 has only identified IP Security Architecture (IPSec) as an applicable framework for the security on the IP based Transport Network Layer of Rel5 UTRAN.

Due to the set deadline of the Rel5 work, there is some level of urgency in all open topics of this Rel5 Work Item. For this reason, TSG-RAN WG3 has made the working assumption that the Release 5 IP UTRAN is to be seen as a **closed environment**. That is, there is no access from other networks/users to any of the physical interfaces and transmission links used for UTRAN transport (Iu, Iur, Iub). If this assumption is accepted, then the remaining security aspects are similar to those in Release 99 and Rel-4 ATM UTRAN.

TSG-RAN WG3 would now like to ask advice from the TSG-SA WG3 on the following questions:

Can TSG-SA WG3 confirm the working assumption of TSG-RAN WG3, that the Rel5 IP UTRAN transport networks can be seen as closed environments?

<u>If not:</u>

> *N1. What is the level of security needed to be standardised in Rel5 UTRAN IP option? (authentication, integrity protection, encryption, for some signalling messages, e.g., ciphering keys, for all signalling messages, for all traffic…)*

> *N2. Would TGS-SA WG3 be willing to take the responsibility of standardising the needed transport security for TGS-RAN WG3 to be then incorporated in its Rel5 Transport Network Layer specifications?*

<u>If yes:</u>

Y1: Does TSG-SA WG3 confirm that the threat of internal attacks (from inside this closed environment) is negligible? If not, which type of protection against such internal attacks would be proposed by TSG-SA WG3?

Y2. Does TSG SA3 confirm that the assumption of a closed network holds even in the case where two or more "UTRAN islands" are interconnected via a Virtual Private Network?

TSG-RAN WG3 would appreciate a rapid response from TSG-SA WG3 to this Liaison Statement. At the same time TSG-RAN WG3 would like to thank in advance for any contribution from TSG-SA WG3 in this topic.

Date of Next RAN3 Meetings:

RAN3_25   26th – 30th November 2001   Makuhari, Japan

RAN3_26   TBD - TBD January 2002   TBD, TBD