Source:	**Telenor**
Title:	**A brief status report for WI Network Domain Security**
Document for:	**Discussion and Decision**
Agenda Item:	**8.3**

A brief status report for WI Network Domain Security

This brief status report is divided into two parts:

a)   A summary of actual vs. scheduled progress

b)   An account of some decision that S3 must make

Actual vs. scheduled progress

Below is the time plan for WI Network Domain Security.

Apart from the inclusion of a time plan entry of the work on A, Iu and Iur, the rest of the time plan has already been agreed. Note also that the A, Iu and Iur work implies other entries later on by the responsible workgroups (RAN3 and <?>[1]). This has not yet been agreed by S3, but assuming it will be agreed we still need to make sure that RAN3 and <?> includes the work in their respective schedules.

Actual progress / **Expected progress (estimate based on the received input papers).**

Meeting	Date	Activity
CN/S3 meeting	June 13-14, 2000	Presentation by S2 of R'00 architecture **DONE**
CN	July-August, 2000	Specification of the protocol stacks of the core network interfaces **UNKNOWN**
S3	June-July, 2000	Requirements capture GTP signalling security Feasibility study of GTP signalling security, including definition of work tasks and completion of plan **PARTIALLY DONE**
S3#14	August 1-4, 2000	Requirements capture (CAP, MAP-over-IP, etc.) **Requirement on CAP: NOT DONE** **Requirement on MAP/IP: Decision to go for application layer security, which implies that MAP/SS7 requirement apply. DONE** Feature specification of GTP signalling security **The paper S3-000421 (Motorola) covered this and was taken as starting point for further work. Not yet completed. PARTIALLY DONE**
S3#15	September 12-15, 2000	Specification of other security features (CAP, MAP-over-IP, etc.) **CAP: No relevant input on CAP received as of 10.09.2000 2100. The issue is not yet urgent. UNLIKELY TO BE ACHIEVED** Approval of GTP CRs **GTP CRs: No input received as of 10.09.2000 2100. In order not to miss the SA#9**

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[1] Haven't had to time to check which group is responsible for the A-interface

		target, CRs must be agreed at SA3#15. **THIS WORK MUST BE DONE.**
SA#9	September 25-28, 2000	Approval of GTP CRs
N4#5	November 13-17, 2000	N4 approval of GTP CRs
S3#16	November 27-30, 2000	Feasibility study, including definition of work tasks and completion of plan. Requirements capture for security over A, Iu and Iur interfaces. **Some progress has already been made, especially on the overall NDS architecture. Even though princliples from S3-000434 has been agreed, a lot of work is still required. Input is expected. Input on A, Iu and Iur is still missing. Hopefully, we shall have sufficient input by next meeting.**
CN#10	December 6-8, 2000	Approval of GTP CRs
S3#17	January, 2001	Definition of security architecture, first draft
S3#18	February, 2001	Approval of CRs to the drafts Integration of security architecture (presentation to other WGs)
S3#19	March, 2001	S3 approval of final versions
SA/CN#12	June, 2001	Approval of final versions

Decisions by the S3 plenary

The questions here include the ones asked in the introduction page to the updated WID (S3-000511) and in the editorial comments in the first draft of the NDS TR 33.8xx (S3-000557).

1.	**Agreement on the updated WID on NDS**
2.	**The scope of security for GTP / time plan modifications** GTP already exists in GPRS prior to UMTS. However, for pre-UMTS GTP there is no simple way to separate GTP-U and GTP-C. That being so, one has no effective means to distinguish GTP-C and GTP-U but to inspect the IP payload. If protection of all GTP cannot be afforded, applying IPsec may not be straightforward. For R99 and onwards GTP is more cleanly divided into GTP-U and GTP-C by means of port-numbers. Since the consequences of introducing protection to ALL GTP traffic is likely to be large, S3 is asked if we shall limit our goal for GTP protection to R99 and onwards until protection for pre-R99 GTP has been carefully studied?
3.	**Shall we maintain our goal to protect CAP signalling ?** If so, should we modify our time plan for this activity? *A decision need not necessarily be made now, but we must realize that a lack of decision is a de facto reschedule of this activity*
4.	**Shall A (and even Abis) be part of this WI?** If yes, what shall the scope of the protection be? *Decision must be made no later than S3#16 – inputs will be needed*
5.	**Scope of protection of the Iu and Iur interfaces must be agreed** *Decision must be made no later than S3#16* [2] *– inputs will be needed*

/Geir M. Køien, Telenor R&D

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[2] Assuming here that the proposed WI time plan is agreed