3GPP TSG SA WG3 Security — S3#18

Phoenix, Arizona, USA

21-24 May, 2001

Source: NDS rapporteur

Statusreport for NDS Title:

Document for: Information and decision

Agenda Item: 4.2

Status of NDS

The S3#17bis NDS ad-hoc made some recommendations that needs to be endorsed by this meeting. In particular, the ad-hoc decided to recommend a split of TS33200 into two TS's, one to deal with SS7/MAP security and one to deal with GTP/IP security issues.

S3#18 is therefore asked to endorse a split of TS33200 such that:

- TS33200 is renamed to "Network Domain Security; MAP application layer security" This TS will only contain SS7 and MAPsec material. For Rel4 only MAPsec transport protection is included. This TS will later be updated to Rel5 and then the key mngt related material will be made mandatory.
- TS33xxx is a new TS that will be named "Network Domain Security: IP network layer security" This TS will contain all material from TS33200 v035 that is specific for native IP based protocols. This TS will start off as a Release5 specification.

The S3#17bis NDS ad-hoc made substantial progress on MAPsec. A draft Rel4 version of TS33200 has been forwarded to this meeting. The TS is produced according to the S3#17bis agreement and contains only MAPsec material.

Rapporteur for TS33xxx

Given that TS33200 now is suggested to be split in two it is important that S3 also consider the question of who should be rapporteur for the new TS. In the case that nobody volunteers to become rapporteur of the new TS. Telenor is willing to accept the responsibility.

Cancellation of TR 33.800

TR33800 "Principles of Network Domain Security" has not been updated since the version produced for S3#16 last year. Today it must be considered largely outdated and irrelevant. The important material has been moved to the TS(es) and it would seem that the TR has outlived its usefulness. The S3#17bis NDS ad-hoc therefore accepted the request from the rapporteur to cancel the TR.

S3#18 is asked to endorse the cancellation of TR33800.

S3-010147

NDS - Release 4

A minimum version of MAPsec is found in the draft for TS33200 v050. This version is intended for Rel4 and provided that S3#18 can progress it such that it can be sent to the June SA-plenary we formally have a Rel4 version of the TS.

NDS/MAPsec - Release 5

Assuming that TS33200 NDS/MAPsec is put under change control at the June SA-plenary, S3#19 should proceed to produce CRs to 33200 to include local SA distribution and inter-operator key mngt by means of IKE.

This will effectively produce a Rel5 version of 33200 when the CRs are approved. In order to meet our deadlines it is quite important that S3 completes the necessary CRs to include at least local SA distribution in time for the September SA-plenary.

CRs to include Inter-operator key mngt for MAPsec should be agreed by S3 no later that our Sidney meeting (S3#20?).

NDS/IP - Release 5

The rate of progress for NDS has been slow the last few months. In order to achieve our goal to complete (read: put under change control) the NDS/IP TS by December 2001 it is necessary reach some intermediate milestones.

Since the Phoenix meeting will have to concentrate on NDS Rel4 I assume that the NDS/IP TS cannot be completed at the Phoenix meeting to the extent that it can be forwarded "for information" to the June SA-plenary in Stockholm.

Given this it is essential that S3#19 in London give priority to NDS/IP in order to make sure that the TS can be forwarded to SA "for information" for the September SA-plenary.

Since past experience indicates that a number of issues will come up quite late it is the opinion of the rapporteur that S3 should consider scheduling an additional S3-plenary meeting just before the SA-plenary in September.

A draft for TS33xxx NDS/IP is provided. The draft is based on the GTP/IP related parts of TS33200 v035 and contains the current working assumptions as agreed by S3.

Evolution of NDS/IP (Release 6 ?)

Hopefully NDS/MAPsec can be functionally "concluded" within Rel5. For NDS/IP it seems that an authentication framework might be needed for long-term scalability reasons. It seems unlikely that such an authentication framework can be completed within Rel5.

S3 should therefore consider whether NDS should be evolved into Rel6¹ to include at least a network element authentication framework. Telenor is preparing a contribution discussing such a framework based on a profiled PKI. The contribution will be submitted for information/discussion to S3#19.

Updates for the WIs

With the completion of Rel4 it seems natural to review the three work item descriptions for NDS. Due to time constraints and the need to focus on the essentials its seems premature to review the WID's at this meeting, but it is recommended that the WID's are reviewed at S3#19.

¹ Rel6 does not seem to be defined yet

Deadlines

The following is an attempt to outline the various deadlines that this rapporteur considers important not to miss.

I have taken the liberty of including a S3#19bis plenary meeting. Should S3 feel this not to be necessary, then the deadlines for S3#19bis must be reached at S3#19 instead.

Meeting	NDS/MAPsec deadlines
S3#18	Agreement on TS33200 NDS/MAPsec.
June SA	TS33200 NDS/MAPsec put under change control by SA
S3#19	CRs to TS33200 NDS/MAPsec on "Local SA distribution" to be discussed and possibly agreed.
S3#19bis	Contentious issues regarding CR on "Local SA distribution" to be resolved and the CR to be agreed. CRs to TS33200 NDS/MAPsec on "Inter-operator key mngt" to be discussed.
September SA	CR to TS33200 NDS/MAPsec on "Local SA distribution" approved. This results in a Rel5 version of TS3200.
S3#20	CRs to TS33200 NDS/MAPsec on "Inter-operator key mngt" to be agreed.
December SA	CR to TS33200 NDS/MAPsec on "Inter-operator key mngt" approved. This should functionally complete TS33200 NDS/MAPsec.

Meeting	NDS/IP deadlines
S3#18	First draft of TS33xxx NDS/IP based on material from TS33200 v035 is presented to S3.
June SA	-
S3#19	The TS33xxx NDS/IP draft should be thoroughly discussed and technical progress made. All contentious issues must be identified and the basic architecture ought to be frozen.
	Discussions concerning evolution of NDS.
S3#19bis	A version of TS33xxx NDS/IP must be agreed to be sent to SA "for information".
	NDS evolution should be sketched out and working assumptions be adopted.
September SA	TS33xxx NDS/IP is presented to SA plenary
S3#20	TS33xxx NDS/IP to be updated and "finalized". S3 must agree to send a version of TS33xxx NDS/IP to SA.
	NDS evolution working assumptions to be refined.
December SA	TS33xxx NDS/IP is put under change control be SA.
S3#21	Start to produce CRs for NDS evolution