ETSI SMG2   *Tdoc SMG2 1130/00*
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Source:	SMG2
To:	SMG10 / TSG SA3
Title:	LS on Security functions in GERAN
Agenda Item:	
Document for:	Decision

Presently SMG2 works very actively on the Release R00 specifications of the GERAN.

GERAN is a term used to describe a GSM and EDGE based 200 kHz radio access network. The GERAN is based on GSM/EDGE release 99, and covers all new features for GSM Release 2000 and subsequent releases, with full backward compatibility to previous releases.
GERAN is connected to the Core Network via the A and Gb interfaces defined in SMG and via the Iups and possibly Iucs interfaces defined in 3GPP. Interworking and commonalities with UTRAN will take a large place in the design of GERAN.

GERAN R00 implies a major redesign of the R99 GSM/GPRS control plane and offers a good opportunity to refresh in a future proofed manner the design of major functionalities of the GERAN. Therefore SMG2 kindly asks SMG10 / TSG SA3 for guidance in the security related matters.

SMG2 would appreciate if SMG10 / TSG SA3 could provide:

- Requirements on ciphering in GERAN with respect to e.g. synchronization including handover cases, different bearers (Real-Time, non-Real Time), etc.

- SMG2 is currently discussing location (protocol) of the ciphering function and would like to know where it is best to place the ciphering function, e.g. before/after channel coding and before/after retransmission protocol.

- The list and the description of the parameters needed for the ciphering function in GERAN

- Requirements on integrity protection in GERAN.

- The list and the description of the parameters needed for the integrity function in GERAN

Further SMG2 would appreciate that the ciphering algorithm to be used in the future releases of GERAN would be designed in time to be introduced in R00 upwards.

For all these concerns a highest possible degree of commonality with UTRAN would be appreciated in order to simplify the design of the network and of multi-RAT MS`s and to facilitate the interworking (handover, etc..) with UTRAN.