TSG-RAN Working Group 1 meeting No. 20 ***TSGR1-01-0441***
May 21- 25, Busan, Korea

3GPP TSG-SA WG4 Meeting #16 Tdoc S4-(01)0270
February 26 – March 2, Sophia Antipolis, France

Title:	**LS on TSG-SA4 request for information with regard to the applicable residual (undetected) bit error ratios for radio bearers that should carry RTP/UDP/IP packets compressed with ROHC**
Source:	**TSG-SA WG4 Codec**
To:	**TSG-RAN2**
Cc:	**TSG-RAN1, TSG-CN1**

3GPP TSG-SA WG4 (SA4) thanks RAN2 for their LS response contained in S4-010245 (R2-010756). However the question regarding the applicable residual (undetected) bit error rates for radio bearers that should carry RTP/UDP/IP packets compressed with ROHC seems not to have been properly adressed.

SA4 is interested to understand the range of residual bit error ratios of the RTP payload carried over a radio bearer configuration that carries RTP/UDP/IP packets compressed with ROHC while simultaneously the UDP checksum is not used (i.e., disabled). SA4 assumption is that the lower limit of the residual bit error ratio is given by the functional limits of ROHC.

To be more explicit, SA4 understanding is that there is a requirement from the ROHC algorithm for a minimum residual bit error ratio provided by the layers lower than PDCP. In case the residual bit error(s) happen to be in the compressed RTP/UDP/IP header, the packet (header and payload part) is discarded. In case the residual bit error(s) are in the payload and UDP checksum is not used, the packet will be delivered to the higher layers with residual bit errors in the payload.

SA4 would kindly ask RAN2 to clarify whether above understanding is correct. Additionally, SA4 would like to request information on the range of residual bit error rates for RTP payloads when carried over radio bearers that carry RTP/UDP/IP packets compressed with ROHC. If this is not possible to be provided by RAN2, SA4 would consider it very helpful to receive information on the functional limits of the ROHC algorithm. What is the maximum tolerable residual bit error ratio provided to PDCP layer if ROHC is used?