

Source: Nortel Networks
To: S1
CC: S2, R2
Title: Proposed Response to LS on Connectionless services during the call.

TSG RAN received your liaison statement on the Connectionless services during the call. TSG RAN would like to provide the following answers to the questions raised, and ask one question:

In GSM, USSD and UUS can be used to send information during a call. A problem with the GSM radio interface is that use of these services affects to the speech quality as the signalling steals speech frames. S1 would like to verify that usage of these services over the UTRAN will not affect speech quality.

The UTRAN specifications allow to transfer the mentioned services without affecting the speech quality. It should be noted that the radio interface provides a flexible mapping of the speech service onto the radio interface, and therefore certain mappings do bear the above mentioned speech degradation, whereas other mappings do not. Nevertheless, the selection of a mapping is based on a combination of factors, like UE capability, radio resource availability, and radio conditions.

On the issue of terminal capability, TSG RAN would like to be informed by SA1 on whether all "speech" terminals should be capable of supporting the connectionless services without speech degradation.

Further it was mentioned by S2 that handover performance in GSM can be compromised by long USSD strings as handover commands towards the MS are buffered and thus delayed. S1 would like to verify that there is no similar impact to handover quality.

RAN WG2 is currently studying the issue for release 99 with the objective to remove the mentioned limitation that existed in GSM. A proposal was made already, and a solution is expected at the next RAN WG2 meeting.

S1 would also like to know if there are any restrictions in receiving the SMS-CB during the call.

The UTRAN specifications allow to receive SMS-CB during a call subject to UE capability.

TSG RAN would like to be informed by SA1 on whether all "speech" terminals should be capable of supporting the reception of SMS-CB during a call.