
Title: Draft Reply to the LS on Long Term Evolution for the UTRA and UTRAN
Work Item: FS on Evolved UTRA and UTRAN

Source: Nokia
To: SA1
Cc: TSG SA, RAN1, RAN2, RAN3, RAN4, RAN5

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Attachments: RP-050XXX TR 25.913 v x.0.0

1. Provision of the user performance results for E-UTRAN

At TSG RAN#28 the LS in Tdoc RP-050291 from SA1 was reviewed related to the SA1 task to investigate the throughput requirements for Long Term Evolution for the UTRA and UTRAN and provide guidance to TSG RAN.

The working assumptions regarding the requirements for the peak rate rates were confirmed by TSG RAN#28, and are now captured in TR 25.913 version x.0.0, attached to this LS.

Regarding the user throughput for the evolved UTRA and UTRAN, TSG RAN WG1 is expected to carry out simulations for the multiple access technologies under consideration, based on the following scenarios as agreed to be used during the TSG RAN WG1#42 in Athens, in May 2005. The scenarios to be used at this stage are as follows, as covered in R1-050588:

Frequency band	Inter-site distance	Penetration loss	Velocity	Bandwidth
2 GHz	500 m	20 dB	3 km/h	10 MHz
2 GHz	500 m	10 dB	30 km/h	10 MHz
2 GHz	1732 m	20 dB	3 km/h	10 MHz
900 MHz	1000 m	10 dB	3 km/h	1.25 MHz

It is worth noting that first phase studies do not include the larger bandwidths (15 MHz and 20 MHz), which especially in the case of downlink will show higher number for the maximum user specific data rate. In the uplink the difference is not likely to be that significant due UE power limitations.

In a later stage 15 MHz and 20 MHz bandwidths are to be considered as well.

First results on feasible data rates based on the scenarios and technologies under consideration are expected to be available from the TSG RAN WG1#42, to take place in end of August 2005, with more results to follow as the work progresses towards the June 2006 milestone.

2. Actions:

To TSG RAN1 and RAN Working Groups.

ACTION: TSG RAN requests that TSG RAN WG1 to make summary of user data rates results available to TSG SA1 when such a results become available, noting that results during 2005 will be still preliminary indication with final results due for the feasibility study finalisation in-line with the work plan by the June 2006.

3. Date of Next TSG-RAN1 Meeting:

RAN1#42

29 August – 02 September, 2005

London

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