

3GPP TSG RAN WG1#17**Tdoc R1-00-1457**

Stockholm, Sweden

November 21st –24th , 2000**Meeting No. 17****Agenda item:** 8. Reports from the Ad Hoc**Source:** TSG RAN WG1 Chairman**Title:** Report from the HSDPA Ad Hoc**Document for:** Information

1. Introduction

During the afternoon of Day 2 in the TSG RAN WG1 #17 Ad Hoc was held on the HSDPA, starting with the simulation issues and addressing also some of the Hybrid ARQ (HARQ) issues.

Rest of the Tdocs shall be covered in the plenary.

2. The following 10 documents were covered

Tdoc 1357, from Philips, contained system simulation results. For the presentation questions were made e.g. on the SIR estimation used. The simulation output contained e.g. sensitivity analysis of the capacity as a function of the propagation exponent. This presents thus the capacity as a function of cell isolation and it was considered as usefull result for the inclusion in the WG1 TR on HSDPA.

Tdoc 1397, from Motorola, contained system simulations comparing the features in Release'99 with the proposed features for HSDPA. The difference in the data througput if 1:2 when comparing the Rel'99 and HSDPA in the simulated environment. There were some questions e.g. on the traffic mode. The results were felt usefull for the inclusions on the TR as well.

Tdoc 1398, from Motorola, presented system simulations derived for the case of mixed data and speech case. The results showed that it is feasible to mix HSDPA with the speech users. It was noted that the big contribution to the "co-existence" comes from the fact of having possibility to do the scheduling in Node B. Some questions were made on the reverse link impacts which is something is intended to be studied still. On the reverse direction as such there were not doubtpts that simultaneous speech and uplink control communication for HSDPA could not exists. These simulation curves were also considered being very useful for the TR.

Tdoc 1404, by GBT, presend some consideration and simulations on the uplink communication needs with HSDPA. Questions were done on the assumptions with the simulations.

Tdoc 1377, by Sony, presented system level simulations that investigated the needed number of different AMC levels. The conclusions were that the number of AMC level could be reduced to 4 or 5 without significant degradation on the capacity. For the studies environment the use 64 QAM did not contribute much to the achieved capacity.

Tdoc 1326, from Wiscom, contained link level simulations to which confirmed the earlier presented results for different modulations. Also the turbo interleaver was proposed to be extended to cover larger block sizes than Release'99.

Tdoc 1327, from Wiscom, Contained simulation results as a function of the channel estimation error.

Tdoc 1385 and 1386, from Lucent, had simularion results with the MIMO concept. Further simulations around the topic were provided in **Tdoc 1387, 1388**

Tdoc 1345 from Nokia Contained HARQ complexity text proposal for the TR. This will be revised based on the comments given and structured to smaller subsections.

Tdoc 1369 from Nokia Contained HARQ text proposal for the WG1 HSDPA TR. This will be revised to cover also the method as proposed in the 1382.

Tdoc 1382 from Lucent presented a proposal for HARQ incremental redundancy operation, where the main different to the ealier proposed concept afer some discussions was noted to be that also the TTI length may vary as a function of the data rate (in addition to the potential code multiplexing. It was noted that in both cases of the original proposal and the latter one a bit more desriptive figures would have shown that there is not that much difference in case of single user or multiple users shown. Now confusions resulted from presenting other proposal with single user and 2-channels and presenting the other proposal with multiple users but only one ARQ "channels".

Rest of the papers shall be presented in the plenary, continuing from Tdoc 1442.

The Ad Hoc was closed 18.15