

Source: NTT DoCoMo, Inc
Title: Scope of RAN WGs and T1 for HSDPA tests
Agenda Item: 12
Document for: Discussion and Decision

1. Introduction

HSDPA RAB combinations and test coverage are currently being discussed by RAN1/RAN2 and T1. This discussion paper proposes that TSG-RAN should discuss and clarify the scope of RAN1/2 and T1 involvement in HSDPA test development.

2. Discussion

In RAN WGs meetings in August, new RAB combinations for HSDPA testing were discussed. Extreme care was taken in order to limit the additional HSDPA RAB combinations only to those thought to be absolutely necessary to keep the number of test cases low. As a result 3 new HSDPA RABs were recommended as additional reference RB configurations in TS 34.108 [1] (Reference RB configurations captured in clause 6.10 of TS34.108 is used for interoperability tests). It was also discussed that the other proposed RABs that were not included in TS 34.108 should be candidate RB configurations for the inclusion to TR 25.993. Meanwhile T1 are also discussing HSDPA tests and the test coverage in their meetings.

We believe that it is essential for those WGs involved in the test case development to pay special attention for choosing HSDPA reference RABs and keeping the number of test cases reasonable to ensure early market introduction of HSDPA terminals. In order to ensure efficient cooperation between RAN1/2 and T1 and not to duplicate their work, it is also very important to clarify the scope of their responsibility. In principle we feel that a way forward is for RAN1/2 should provide general guidance to T1 and then T1 should decide test coverage and design test cases accordingly.

The current approach taken by RAN1/2 is to recommend minimum set of reference RB configurations and to limit the value of each RB parameter to single choice except for MAC-d PDU size (336 and 656 bits). In order to have sufficient test coverage and ensure interoperability of HSDPA UEs in real networks, we believe that more choice in the value of RB parameters should be made available.

A way forward may be that an appropriate set of values to be tested for each RB parameter can be discussed and they can be added to the reference RB configurations as alternatives or defined as common RB configurations (Common RB configurations are defined in clause 6.11 of TS34.108 for functional tests). Care must be taken to keep the number of test cases from 'exploding' while ensuring good test coverage and interoperability. The priority may be specified for each value or each combination of values to be tested so that appropriate number of test cases can be produced accordingly.

Assuming RAN1/2 provide appropriate guidance for the example shown above, T1 should develop HSDPA test cases accordingly. T1 would keep the number of test cases reasonable based on priorities given by the industry and using the expertise and ample experience gained through choosing and developing Release 99 reference RB configurations.

NTT DoCoMo believes that it is essential to clarify how the work can be split between RAN1/2 and T1 in order to ensure provision of useful services and stable interoperability.

3. Proposal

It is proposed that RAN agrees to the following principle:

RAN1/RAN2 should provide general guidance, including recommendations, on test coverage but then allow T1 to finalise the test coverage and to develop test cases in accordance with industry requirements.

Reference

[1] R2-041898 Addition of new HSDPA RAB configurations (Vodafone, Qualcomm)