Status Report for WI to TSG

Work Item Name: NodeB synchronisation for 1.28Mcps TDD

SOURCE: Rapporteur

TSG: RAN WG: WG1

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Ref. to WI sheet: RAN_Work_Items.doc

Progress Report since the last TSG (for all involved WGs):

This is the rapporteur's report for the status of Work Item (WI) "NodeB synchronisation for 1.28Mcps TDD" in RAN WG1/3.

• RAN WG1

During the WG1#22 meeting in Jeju, several contributions on the WI were presented in the TDD adhoc session. An Improved Algorithm for NodeB synchronisation OTA for 1.28 Mcps TDD was proposed by Siemens. Two further methods, which make use of new synchronisation sequences with respect to the ones currently defined by the standard are presented. Two alternative sequences are proposed of 128 or 192 chip length respectively (by Samsung and Mitsubishi), both sequences extend the DwPTS transmissions over the guard period and also the UpPTS (the latter one).

Based on the discussion, a joint text proposal (r1-01-1318) for TR 25.868 was approved to reflect the new algorithm of Siemens and to include the proposed modified sequences from Samsung and Mitsubishi in other sections for further investigation. And LS was sent to WG3 to answer their request regarding alignment of Node B synchronisation procedures between 1.28Mcps TDD and 3.84Mcps TDD.

According to the WG1 decision, the revised TR will be presented to RAN#14 meeting as version 1.1.0 for information.

RAN WG3

At RAN3#24 meeting in NY TR R3.004 v0.2.1 was approved as version v0.3.0 including the decision during RAN3#23 meeting in Helsinki. At the RAN3#24 meeting several contributions were treated. In the study area synchronisation signalling, instruction and backward compatibility/coexistence synchronisation methods are described. The modifications in NBAP according to the description in the study area that is already included in the TR were mentioned in the agreements and in the associated contribution section. The impact on the lub interface and the backward compatibility according to this WI were also included. All the contributions that are mentioned above should be included in the draft TR with some modifications. An open issue during preliminary phase was detected at this meeting: if the DL Transport Channels synchronisation procedure or the Node synchronisation procedure should be executed during the preliminary phase.

At RAN3#25 meeting in Japan, TR R3.004 v 0.3.1 was approved, as version v0.4.0.The contribution solving the open issue was not presented due to lack of time.

The TR R3.004 v0.4.0 is considered as approx. 80% complete.

List of Completed elements (for complex work items):

List of open issues:

Now with two additional potential candidate burst-types for NodeB synchronisation of 1.28Mcps TDD proposed, comparative evaluation of these proposals is not complete.

Estimates of the level of completion (when possible):

WI completion date review resulting from the discussion at the working group:

This Work item is considered to be completed at RAN#15 (March 2002)

References to WG's internal documentation and/or TRs:

- 1. R1-01-1348 TR25.868 version 1.1.0, NodeB synchronisation for 1.28Mcps TDD,
- 2. R3-913707 TR R3.004 v0.4.0, NodeB synchronisation for 1.28Mcps TDD, (lub/lur aspects).