TSG-RAN Working Group 1, AdHoc 21 **TSGR1(00)0819**

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To: TSG RAN WG1
Title: Radio Requirement for low chip rate TDD
Document for: Discussion and Approval

Introduction

To integrate the low chip rate TDD option into R'00, the deployment scenario is going to be clarified. This paper describes the deployment scenario for low chip rate TDD option.

Conclusion

It's proposed to include the following text in TR25.928

---------- changes to TR25.928 begin ----------

4.1 Radio environment

The radio environment recommended by ITU like indoor environment, pedestrian environment, vehicular environment (120km/h) should be well supported by the low chip rate TDD option.

4.2 Service

As one option of TDD mode, the low chip rate option should provide the basic service (bearer service and teleservice) ~~and the supplementary service as well~~. For a IMT-2000 compliant system corresponding to ITU requirement, for the indoor environment, up to 2Mbps data service should be provided. And for outdoor pedestrian environment, the data service should be up to 384kbps and more. For the UE in moving environment (vehicular speed less than 120km/h), the data rate supported should be 384 and more kbps.

4.3 Operational requirement

The low chip rate TDD option should provide the flexibility to be used for high spot or high density area to provide high speed data service or to provide enhanced coverage or be used alone as macro cell to provide the service coverage. It should allow deployment together with FDD system, with high chip rate TDD system, and be similar as high chip rate TDD deploying with other 2G system, etc.

4.3.1 Deployment scenarios

For the low chip rate TDD option, the deployment should be flexible for all the scenarios like macro cell, micro cell and pico cell, etc. and also should provide the fixed wireless access.

4.4 Handover and cell selection/reselection

The low chip rate TDD option should support the handover between ~~systems~~ UTRA modes (e.g, low chip rate TDD to high chip rate TDD, low chip rate TDD to FDD), and between systems (e.g. low chip rate TDD to GSM, etc.).

4.5 Particular characteristics of low chip rate TDD

The features of uplink synchronization, baton handover, smart antenna (beam

forming) etc. have been discussed and agreed to be included in low chip rate option to enable these technologies and provide a high performance for the network.

---------- changes to TR25.928 end ----------