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Agenda Item: Plenary
Source: CWTS

To: TSG RAN WG1, WG2

Title: New Specification Request

Document for: Decision/Approval

Introduction

According to the outcome of the RAN meeting#6, the integration of low chip rate TDD option will be included in Release 2000.

We found that it must use some new physical layer character in low chip rate option to supply some new features such as uplink synchronization, smart antenna, baton handover, etc. After study on the documents about the physical layer character of TD_SCDMA and UTRA_TDD, CWTS found that it is impossible to simply add or modify something in the existing specification to achieve uniformity. So it is suggested to allocate some new specifications for the low chip rate TDD option.

New specification request

The follow documents need new specifications for low chip rate option:

- 1. Physical channels and mapping of transport channels onto physical channels

 Due to the difference of the chip rate and frame structure, the physical channel are
 different for two TDD options. It's suggested to assign a new specification of physical
 channel mapping for low chip rate option. Refer to CWTS specification [3]
- Physical layer procedures
 For low chip rate TDD option, some specific properties such as smart antenna, uplink synchronization, etc., are mandatory. To ease the clarification and description, a new specification document for physical layer procedures for low chip rate is required. Refer to CWTS specification [6]
- 3. Physical layer; measurements To achieve some specific features of the low chip rate option and also due to the difference on the frame structure, the UE and BTS need to do some measurements what are different with high chip rate option. It's proposed to have the physical measurements for low chip rate option in a new specification. Refer to CWTS specification [9].
- 4. Services provided by the physical layer
 Based on the different frame structure and burst structure of the low chip rate option,
 the description of the services provided by physical layer to higher layers have big
 difference with high chip rate option. The suggestion is to describe the services
 provided by the physical layer for low chip rate option in a new specification. Refer to
 CWTS specification [10].

Conclusion

Due to the difference in chip rate and frame structure, some specific properties and features for low chip rate option are different from the high chip rate option. To simplify the working on low chip rate option, it's proposed to have some new specifications allocated for low chip rate option.

Reference

- [1] R1-99f36, 'The value of 1.28Mcps for low chip rateTDD'
- [2] R1-99f37, 'CWTS Specification TS C101'
- [3] R1-99f38, 'CWTS Specification TS C102'
- [4] R1-99f39, 'CWTS Specification TS C103'
- [5] R1-99f40, 'CWTS Specification TS C104'
- [6] R1-99f41, 'CWTS Specification TS C105'
- [7] RP-99511, 'CWTS Specification TS C401'
- [8] RP-99512, 'CWTS Specification TS C402'
- [9] CWTS TS C106 (v2.0.0), 'Physical layer; measurements'
- [10] CWTS TS C002(v3.0.0), 'Service provided by physical layer'