

**TSG-RAN Meeting #8**  
**Düsseldorf, Germany, 21 - 23 June 2000**

***RP-000294***

**Agenda Item: 6**

**Source: CWTS**

**To: TSG-RAN #8**

**Title: Work Item Description "RF Radio Transmission/ Reception,  
System Performance Requirements and Conformance Testing"**

**Document for: Approval**

## Work Item Description

### Title

#### RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing

#### 1 3GPP Work Area

|          |              |
|----------|--------------|
| <b>X</b> | Radio Access |
|          | Core Network |
|          | Services     |

#### 2 Linked work items

*Low chip Rate TDD physical layer*  
*Low Chip Rate TDD UE capabilities*  
*Low chip rate TDD Layer 2 and Layer 3 protocol aspects*  
*Low chip rate TDD UTRAN architecture aspects*  
*Smart Antenna*

#### 3 Justification

The integration of TDD low chip rate option in Release 2000 is discussed and approved in RAN#6. The work plan of the integration of low chip rate TDD in R00 was discussed in RAN#7. As a feature, the low chip rate TDD is sub-divided into several building blocks via the email discussion. This paper is to describe one of the low chip rate TDD building blocks - RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing.

#### 4 Objective

The technical objective of this work item is the description of the low chiprate TDD RF character, the system performance requirement and conformance testing in UTRA TDD. And this work will affect the specifications for working group on RF character and other working group related to the system performance and conformance testing, working group of UE capability.

- As a building block, it includes the following work task:
  - UE radio transmission and reception
  - 
  - BTS radio transmission and reception
  - BTS Conformance testing
  - Requirements for support of Radio Resource Management
  - BTS Electromagnetic compatibility

| <b>Task</b>                                     | <b>Planned Start</b> | <b>Planned Finish</b> |
|---|----------------------|-----------------------|
| Create new TR on low chip rate TDD              | 01/2000              | 09/2000               |
| RAN#9 decide whether new specification required | 09/2000              | 09/2000               |
| Drafting possible new specifications and CRs    | 09/2000              | 12/2000               |

#### 5 Service Aspects

*None*

#### 6 MMI-Aspects

None

**7 Charging Aspects**

None

**8 Security Aspects**

None

**9 Impacts**

| Affects:   | USIM | ME | AN | CN | Others |
|------------|------|----|----|----|--------|
| Yes        |      | X  | X  |    |        |
| No         | X    |    |    | X  | X      |
| Don't know |      |    |    |    |        |

**10 Expected Output and Time scale (to be updated at each plenary)**

| New specifications               |       |   |                      |   |                      |          |
|----------------------------------|-------|---|----------------------|---|----------------------|----------|
| Spec No.                         | Title | Prime<br>rsp. WG  | 2ndary<br>rsp. WG(s) | Presented for<br>information at<br>plenary# | Approved at plenary# | Comments |
|                                  |       |   |                      |   |                      |          |
| Affected existing specifications |       |   |                      |   |                      |          |
| Spec No.                         | CR    | Subject   |                      |   | Approved at plenary# | Comments |
|                                  |       |   |                      |   |                      |          |
| 25.102                           |       | UE Radio Transmission and Reception (TDD)                   |                      |   | RAN#10               |          |
| 25.105                           |       | BTS Radio Transmission and Reception (TDD)                  |                      |   | RAN#10               |          |
| 25.123                           |       | Requirements for Support of Radio Resource Management (TDD) |                      |   | RAN#10               |          |
| 25.142                           |       | Base station conformance testing (TDD)                      |                      |   | RAN#10               |          |
| 25.942                           |       | RF system scenarios   |                      |   | RAN#10               |          |
| 25.113                           |       | Base station EMC  |                      |   | RAN#10               |          |

**11 Work item rapporteurs**

Mr. Daijun Zhang (CATT/CWTS)

**12 Work item leadership**

RAN WG4

**13 Supporting Companies**

**14 Classification of the WI (if known)**

|   |                            |
|---|----------------------------|
|   | Feature (go to 14a)        |
| X | Building Block (go to 14b) |
|   | Work Task (go to 14c)      |

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

The building blocks should be discussed and approved via email discussion

14b The WI is a Building Block: parent Feature

(one Work Item identified as a feature)

Low chip rate TDD

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)