TSG-RAN meeting #11 Palm Springs, US, March 2000

RP-010084

Source: RAN WG4

Title: Status report for Release 99 specifications from RAN WG4

1 Introduction

This document contains the status report of the release 99 specifications in ownership of 3GPP TSG RAN WG4 at RAN#11

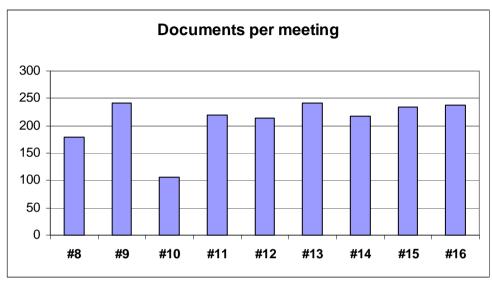
The number and magnitude of corrections to the BTS and UE release 99 specifications are reducing, and yet again significant progress has been made on the RRM documents. More corrections to the RRM documents should be expected at RAN #12.

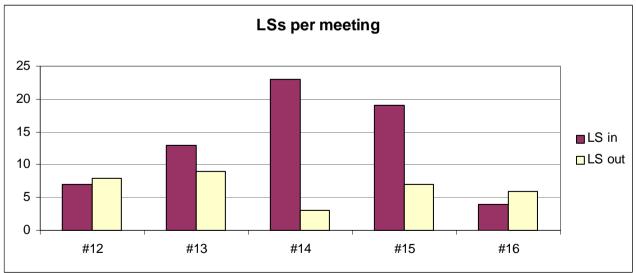
Operators present in the meeting continue to request more detailed simulations to study the effect of compressed mode. Simulations presented so far show a 15-75 % reduction in capacity when compressed mode is active, however we still have not reached consensus on the number of mobiles typically in compressed mode, this has a major effect on capacity loss. Further work to look at the distribution of mobiles has also been requested.

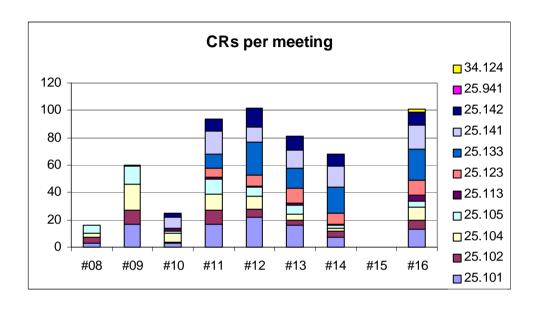
The following contains the status for each report or specification from RAN WG4

| Spec | Title | Ver | No CRs | After RAN ver |
|--------|---|-------|--------|---------------|
| 25.101 | UE Radio transmission and reception (FDD) | 3.5.0 | 9 | 3.6.0 |
| 25.102 | UE Radio transmission and reception (TDD) | 3.5.0 | 4 | 3.6.0 |

| 25.104 | BTS Radio transmission and reception (FDD) | 3.5.0 | 7 | 3.6.0 |
|--------|---|-------|----|-------|
| 25.105 | BTS Radio transmission and reception (TDD) | 3.5.0 | 4 | 3.6.0 |
| 25.123 | Support of RF parameters in Radio Resource Management | 3.4.0 | 8 | 3.5.0 |
| 25.133 | Support of RF parameters in Radio Resource Management | 3.4.0 | 22 | 3.5.0 |
| 25.141 | Basestation conformance testing (FDD) | 3.4.0 | 17 | 3.5.0 |
| 25.142 | Basestation conformance testing (TDD) | 3.4.0 | 9 | 3.5.0 |
| 25.113 | Basestation EMC | 3.4.0 | 2 | 3.5.0 |
| 34.124 | UE EMC | 3.2.0 | 1 | 3.3.0 |
| 25.941 | Document Structure | 3.1.0 | 0 | |
| 25.942 | RF System scenarios | 2.5.0 | 0 | 3.0.0 |







Items that require actions from RAN plenary

None

2 25.101

2.1 Status of the document

Work concluded since last RAN meeting

- Corrections
 - To reflect testing issues identified in completing test specifications
 - Removal of square brackets with confirmation of parameters
 - Addition of performance requirements for 250 kph
- Remaining issues
 - Problems with terminology regarding output power (CR proposed awaiting approval)

2.2 Change Requests presented for approval

CR list for TS 25.101

| Doc-1st- | Spec | CR | Subject | Ca | Status-2nd- | Versio | Versio |
|-----------|--------|----|---|----|-------------|--------|--------|
| Level | | | | t | Level | | n-New |
| | | | | | | Curre | |
| | | | | | | nt | |
| RP-010085 | 25.101 | 86 | CR to 25.101 for Test Tolerances | F | agreed | 3.5.0 | 3.6.0 |
| RP-010085 | 25.101 | 87 | Proposed CR to TS 25.101 on subclause | F | agreed | 3.5.0 | 3.6.0 |
| | | | 3.2 Abbreviations | | | | |
| RP-010085 | 25.101 | 88 | Correction of version number of the ITU-R | F | agreed | 3.5.0 | 3.6.0 |
| | | | Recommendation SM.329 | | | | |
| RP-010085 | 25.101 | 89 | REL 99 Corrections | F | agreed | 3.5.0 | 3.6.0 |
| RP-010085 | 25.101 | 90 | Tx power during measurement on Rx | F | agreed | 3.5.0 | 3.6.0 |
| | | | characteristics | | | | |

| RP-010085 | 25.101 | 91 | Removal of square brackets and TBDs from TS 25.101 | F | agreed | 3.5.0 | 3.6.0 |
|-----------|--------|----|--|---|--------|-------|-------|
| RP-010085 | 25.101 | 92 | Correction of Definition of multi-code OCNS signal | F | agreed | 3.5.0 | 3.6.0 |
| RP-010085 | 25.101 | 93 | Performance requirement for 250km/h | F | agreed | 3.5.0 | 3.6.0 |
| RP-010085 | 25.101 | 94 | TS25.101 Rel 99 Clarification of UARFCN (channel number) | F | agreed | 3.5.0 | 3.6.0 |

3.1 Status of the document

Work concluded since last RAN meeting

- Corrections
 - Follows changes to 25.101
- Work not completed
 - Final agreement on a few performance requirements

3.2 Change Requests presented for approval

| Doc-1st- Level | Spec | CR | Subject | Ca t | Status-2nd- Level | Versio n- | Versio n-New |
|-------------------|--------|----|---|---------|----------------------|--------------|-----------------|
| | | | | | | Curre nt | |
| RP-010086 | 25.102 | 41 | Relationship between Minimum Requirements and Test Tolerances. | F | agreed | 3.5.0 | 3.6.0 |
| RP-010086 | 25.102 | 42 | Requirements for out-of-synchronisation handling of output power during DTX | F | agreed | 3.5.0 | 3.6.0 |
| RP-010086 | 25.102 | 43 | UE Power Control Accuracy | F | agreed | 3.5.0 | 3.6.0 |
| RP-010086 | 25.102 | 44 | Correction of version number of the ITU-R Recommendation SM.329 | F | agreed | 3.5.0 | 3.6.0 |

4.1 Status of the document

Work concluded since last RAN meeting

- Corrections
 - To reflect testing issues identified in completing test specifications
 - Performance requirements for 250 kph
 - Correction to case 3 implementation margin
 - Addition of environmental test conditions
- Work not completed
 - Final agreement on all test tolerances and definitions

4.2 Change Requests presented for approval

| Doc-1st- | Spec | CR | Subject | Ca | | | Versio |
|-----------|--------|----|--|----|--------|-------------|--------|
| Level | | | | t | Level | n- Curre | n-New |
| | | | | | | nt | |
| RP-010087 | 25.104 | 55 | CR to 25.104 for Test Tolerances | F | agreed | 3.5.0 | 3.6.0 |
| RP-010087 | 25.104 | 56 | Correction of reference to SM.329-8 in TS 25.104 | F | agreed | 3.5.0 | 3.6.0 |
| RP-010087 | 25.104 | 57 | Receiver Blocking requirement for co- existence with GSM/DCS and co-located base stations - revised. | F | agreed | 3.5.0 | 3.6.0 |
| RP-010087 | 25.104 | 58 | UL Performance requirement in fast fading | F | agreed | 3.5.0 | 3.6.0 |
| RP-010087 | 25.104 | 59 | Performance requirement for 250km/h | F | agreed | 3.5.0 | 3.6.0 |
| RP-010087 | 25.104 | 60 | Definition of EVM / PCDE measurement period | F | agreed | 3.5.0 | 3.6.0 |
| RP-010087 | 25.104 | 61 | Inclusion of environmental requirements | F | agreed | 3.5.0 | 3.6.0 |

5.1 Status of the document

Work concluded since last RAN meeting

- Corrections
 - To reflect testing issues identified in completing test specifications
- Work not completed
 - Final agreement on all test tolerances and definitions

5.2 Change Requests presented for approval by category

| Doc-1st- Level | Spec | CR | Subject | Ca t | Status-2nd- Level | Versio n- | Versio n-New |
|-------------------|--------|----|--|---------|----------------------|--------------|-----------------|
| | | | | | | Curre nt | |
| RP-010088 | 25.105 | 48 | Receiver Blocking requirement for co- existence with GSM/DCS and co-located base stations. | F | agreed | 3.5.0 | 3.6.0 |
| RP-010088 | 25.105 | 49 | Relationship between Minimum Requirements and Test Tolerances. | F | agreed | 3.5.0 | 3.6.0 |
| RP-010088 | 25.105 | 50 | Correction of reference to SM.329-8 in TS25.105 | F | agreed | 3.5.0 | 3.6.0 |
| RP-010088 | 25.105 | 51 | BS EVM definition | F | agreed | 3.5.0 | 3.6.0 |

6.1 Status of the document

Document is stable and complete.

6.2 Change Requests presented for approval

None

Work completed since last RAN meeting

- Corrections
 - Alignment with international EMC specifications

7.1 Change Requests presented for approval

| Doc-1st- Level | Spec | CR | Subject | Ca t | Status-2nd- Level | | Versio n-New |
|-------------------|--------|----|---|---------|----------------------|-------|-----------------|
| RP-010089 | 25.113 | 8 | Correction to the description of the radiated spurious emission test method | F | agreed | 3.4.0 | 3.5.0 |
| RP-010089 | 25.113 | 9 | Alignment of TS25.113 with CISPR 22 standard | F | agreed | 3.4.0 | 3.5.0 |

8 25.123 / 25.133

Work since last RAN meeting

- Additional performance requirements for cell DCH and cell FACH state
- Definition of high quality cell

Work not completed

- RAN WG 2 have made changes to their specifications again, since the RAN WG 4 documents track these we might expert further work in this area
- Agreement of some of the performance results while in compressed mode
- Idle mode cell re-selection performance test cases

8.1 Change Requests presented for approval

CR list for TS 25.123

| Doc-1st- | Spec | CR | Subject | Ca | Status-2nd- | Versio | Versio |
|-----------|--------|----|---|----|-------------|--------|--------|
| RP-010090 | 25.123 | 35 | Deletion of cell-selection requirements | F | agreed | 3.4.0 | 3.5.0 |
| RP-010090 | 25.123 | 37 | Corrections in idle mode and | F | agreed | 3.4.0 | 3.5.0 |
| RP-010090 | 25.123 | 38 | Section 8 changes | F | agreed | 3.4.0 | 3.5.0 |
| RP-010090 | 25.123 | 39 | Section 9 Changes | F | agreed | 3.4.0 | 3.5.0 |
| RP-010090 | 25.123 | 40 | Correction of the cell-reselection and | F | agreed | 3.4.0 | 3.5.0 |
| RP-010090 | 25.123 | 41 | Change and completion of the cell- | F | agreed | 3.4.0 | 3.5.0 |
| RP-010090 | 25.123 | 42 | Change of the cell-reselection | F | agreed | 3.4.0 | 3.5.0 |
| RP-010090 | 25.123 | 43 | Extension of reporting range for UTRAN | F | agreed | 3.4.0 | 3.5.0 |

CR list for TS 25.133

| Doc-1st- Level | Spec | CR | Subject | Ca t | Status-2nd- Level | Versio n- Curre nt | Versio n-New |
|-------------------|--------|----|---|---------|----------------------|-----------------------------|-----------------|
| RP-010091 | 25.133 | 66 | General idle mode requirements | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 67 | Removal of Signalling Delay Requirements | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 68 | FDD/GSM handover | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 69 | Revised Correction of hard handover delay requirements | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 70 | Cell-Reselection, Measurements of inter- frequency TDD cells | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 71 | Correction of number of events that should be handled by the UE | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 72 | Revised limitations to the usage of compressed mode patterns | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 73 | Measurements on FDD and TDD in Cell-FACH state | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 74 | Measurements on GSM in Cell-FACH state | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 75 | Cell re-selection in Cell-FACH state | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 76 | General Measurement Requirements in CELL_DCH State | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 77 | GSM Measurements | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 78 | Cell reselection performance | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 79 | CPICH Ec/lo mapping | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 80 | UTRAN transport channel BLER measurement | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 81 | UTRAN physical channel BER measurement | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 82 | Test case for FDD/TDD cell re-selection. | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 83 | Requirements for event triggered reporting in fading conditions | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 84 | Modification of soft handover requirements | F | agreed | 3.4.0 | 3.5.0 |

| RP-010091 | 25.133 | 85 | Clarifications of TDD measurements and the use of compressed mode pattern for TDD measurements. | F | agreed | 3.4.0 | 3.5.0 |
|-----------|--------|----|---|---|--------|-------|-------|
| RP-010091 | 25.133 | 86 | UE transmit TIming | F | agreed | 3.4.0 | 3.5.0 |
| RP-010091 | 25.133 | 87 | Correction of the FDD/TDD handover requirement in connected mode. | F | agreed | 3.4.0 | 3.5.0 |

Work concluded since last RAN meeting

- Corrections
 - Addition of extreme conditions
 - Test tolerances
- Work not completed
 - A few test tolerances

9.1 Change Requests presented for approval

| Doc-1st- Level | Spec | CR | Subject | Ca | Status-2nd- Level | Versio n- | Versio n-New |
|-------------------|--------|----|--|----|----------------------|--------------|-----------------|
| | | | | | | Curre nt | |
| RP-010092 | 25.141 | 66 | Correction of blocking test. Alignment with CR to 25.104. | F | agreed | 3.4.1 | 3.5.0 |
| RP-010092 | 25.141 | 67 | UL Performance requirement in fast fading | F | agreed | 3.4.1 | 3.5.0 |
| RP-010092 | 25.141 | 68 | Test description for Case 4(250km/h) | F | agreed | 3.4.1 | 3.5.0 |
| RP-010092 | 25.141 | 69 | Proposed CR to 25.141 on Spectrum Emissions Mask | F | agreed | 3.4.1 | 3.5.0 |
| RP-010092 | 25.141 | 70 | Correction to PICH frame structure | F | agreed | 3.4.1 | 3.5.0 |
| RP-010092 | 25.141 | 71 | Addition of S-CCPCH containing PCH into test models | F | agreed | 3.4.1 | 3.5.0 |
| RP-010092 | 25.141 | 72 | UTRAN Received total wideband power | F | agreed | 3.4.1 | 3.5.0 |
| RP-010092 | 25.141 | 73 | Correction of reference to SM.329-8 in TS 25.141 | F | agreed | 3.4.1 | 3.5.0 |
| RP-010092 | 25.141 | 74 | Corrections to Blocking and Rx Spurious emissions tests in TS 25.141 | F | agreed | 3.4.1 | 3.5.0 |
| RP-010092 | 25.141 | 75 | Rx spurious emissions measurement bandwidth in 25.141 | F | agreed | 3.4.1 | 3.5.0 |

| RP-010092 | 25.141 | 76 | Conditions for BS conformance testing (FDD) | F | agreed | 3.4.1 | 3.5.0 |
|-----------|--------|----|--|---|--------|-------|-------|
| RP-010092 | 25.141 | 77 | CR to 25.141 for Test Tolerances | F | agreed | 3.4.1 | 3.5.0 |
| RP-010092 | 25.141 | 78 | CR to 25.141 for Test Tolerances in TX tests | F | agreed | 3.4.1 | 3.5.0 |
| RP-010092 | 25.141 | 79 | Definition of EVM | F | agreed | 3.4.1 | 3.5.0 |
| RP-010092 | 25.141 | 80 | Addition of CPICH to Test Model 4 for EVM measurement | F | agreed | 3.4.1 | 3.5.0 |
| RP-010092 | 25.141 | 81 | Re-introduction of the SCH period into the EVM / PCDE measurements | F | agreed | 3.4.1 | 3.5.0 |
| RP-010092 | 25.141 | 82 | Implementation of Test Tolerances (Receiver part) | F | agreed | 3.4.1 | 3.5.0 |

Work concluded since last RAN meeting

Corrections

10.1 Change Requests presented for approval

| Doc-1st- Level | Spec | CR | Subject | Ca t | Status-2nd- Level | Versio n- Curre nt | Versio n-New |
|-------------------|--------|----|--|---------|----------------------|-----------------------------|-----------------|
| RP-010093 | 25.142 | 47 | Correction of blocking test. Alignment with CR to 25.105. | F | agreed | 3.4.0 | 3.5.0 |
| RP-010093 | 25.142 | 48 | Handling of Test Tolerances - Clause 8 "Performance requirements" | F | agreed | 3.4.0 | 3.5.0 |
| RP-010093 | 25.142 | 49 | Correction of the version number of Recommendation ITU-R SM.329 used as a reference for spurious emissions specifications | F | agreed | 3.4.0 | 3.5.0 |
| RP-010093 | 25.142 | 50 | BS EVM definition | F | agreed | 3.4.0 | 3.5.0 |
| RP-010093 | 25.142 | 51 | Handling of Test Tolerances - Clause 5 "General test conditions and declarations" | F | agreed | 3.4.0 | 3.5.0 |
| RP-010093 | 25.142 | 52 | Handling of Test Tolerances - Clause 6 "Transmitter characteristics" | F | agreed | 3.4.0 | 3.5.0 |
| RP-010093 | 25.142 | 53 | Handling of Test Tolerances - Clause 7 "Receiver characteristics" | F | agreed | 3.4.0 | 3.5.0 |
| RP-010093 | 25.142 | 54 | Handling of Test Tolerances - Annexes | F | agreed | 3.4.0 | 3.5.0 |
| RP-010093 | 25.142 | 55 | Conditions for BS conformance testing (TDD) | F | agreed | 3.4.0 | 3.5.0 |

11 34.124

Work concluded since last RAN meeting

• Corrections Rel99 CRs to TS34.124

| Doc-1st- | Spec | CR | Subject | Ca | Status-2nd- | Versio | Versio |
|-----------|--------|----|-----------------------------------|----|-------------|--------|--------|
| Level | | | | t | Level | n- | n-New |
| | | | | | | Curre | |
| | | | | | | nt | |
| RP-010094 | 34.124 | 5 | Essential corrections to TS34.124 | F | agreed | 3.2.0 | 3.3.0 |

The report is presented for approval at V3.0.0.

13 Concluding remarks

RAN WG4 has achieved considerable progress in our work over the last RAN meeting, and all companies and delegates must be acknowledged for their hard work and fruitful collaboration.

14 RAN WG4 meetings in 2000

| Meeting No. | Date | Host | Location |
|-------------|---------------------|--------------------|--------------------|
| RAN WG4 #17 | 21-25 May 2001 | Ericsson | Gothenburg, Sweden |
| RAN WG4 #18 | 9-13 July 2001 | Siemens | Berlin, Germany |
| RAN WG4 #19 | 3-7 September 2001 | Agilent | Scotland, Europe |
| RAN WG4 #20 | 12-16 November 2001 | US friends of 3GPP | New York, USA |
| RAN # 11 | 13-16 Mar 2001 | | USA |
| RAN # 12 | 12-15 Jun 2001 | | Europe |
| RAN # 13 | 25-28 Sep 2001 | | |
| RAN # 14 | 11-14 Dec 2001 | | |
| | | | |
| | | | |
| _ | | _ | |