# TSG Services and System Aspects Meeting #19 Birmingham, UK, 17-20 March 2003

SP-030183

Title: Draft Report of the 19<sup>th</sup> 3GPP TSG RAN meeting

(Birmingham, UK, 11 - 14 March 2003)

**Document for:** Information

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### **Executive Report**

TSG RAN meeting #19 took place in the Hotel Hilton Metropole at the National Exhibition Centre, Birmingham, UK. The meeting started at 9:00 on Tuesday 11<sup>th</sup> March 2003 and finished at 13:00 on Friday 14<sup>th</sup> March 2003. 113 participants were registered and 201 documents were presented.

The approved Change Requests (CRs) to TSG RAN specifications are summarized in the following table:

| Release                           | WG1     | WG2      | WG3     | WG4      | Total     |
|-----------------------------------|---------|----------|---------|----------|-----------|
| Release 99                        | 1       | 26       | 7       | 16       | 50        |
| Rel-4 CRs (Rel-4 excluding Cat A) | 2 (1)   | 33 (10)  | 25 (18) | 26 (11)  | 86 (40)   |
| Rel-5 CRs (Rel-5 excluding Cat A) | 23 (20) | 56 (24)  | 53 (28) | 46 (20)  | 178 (92)  |
| Rel-6 CRs (Rel-6 excluding Cat A) |         | 3        | 4       | 23 (8)   | 30 (15)   |
| Total CRs (Total excluding Cat A) | 26 (22) | 118 (63) | 89 (57) | 111 (55) | 344 (197) |

A few controversial issues were treated, with diverse results. The main topic was again the Handling of Early UE (section 9.9.11). An Ad Hoc (RP-030128) was held in January to progress the work on the Iu based solution. Two approaches, IMEI-SV or bitmap, are under discussion. No decision was taken there, and also no consensus could be reached at this meeting. It was however agreed to ask SA WG2 to progress on the architecture aspects of both solutions, and also that two votes will be held (if no agreement is reached before) in the next TSG RAN meeting, to decide on the solution (IMEISV or bitmap) and the Release where the CRs will be incorporated.

### Release 99, Release 4 & Release 5

Some concerns were raised by operators on the use of "should" clauses for UE requirements in TS25.331 (sec. 8.2.1)

The UE support of variable duplex separation was discussed, there is misalignment between the RRC specification and the RF requirements. It seems that UE performance would be affected if support of the functionality is required, WG4 is tasked to study the issue (sec. 8.2.6)

CRs had been agreed by WG3 to specify the TFCI power on S-CCPCH in case of no data, but a paper was presented at this meeting objecting the actual need of that specification. No agreement was reached, WG1 is tasked to study the issue (sec. 8.3.5)

WG4 agreed to close HSDPA-RF Rel-5 activity by next meeting, meaning that no additional requirements & test will be included in that Release after. This was discussed, as some companies believed that Rel-5 HSDPA should contain more tests (sec. 8.4.1)

The issue of the emission limits for ITE being defined by CISPR was brought to the attention of TSG RAN, since it seems that those limits do not protect sufficiently WCDMA receivers. WG4 is tasked to perform the required simulations and, if agreement is reached in the group, liaise with CISPR (RP-030020)

WG4 had been tasked to provide a Layer 3 filter definition, but no agreement was reached there. After an indicative vote in this meeting, the logarithmic proposal was agreed (sec 8.4.2).

The Cell Identification requirements for inter-freq. or inter-RAT handover was debated again. The issue is still under discussion in WG4, and TSG RAN agreed that test cases for particular environments could be added to Rel-5, and in the process clarifications to the core requirements could be added also in Rel-5 (RP-030171)

### Release 6 and beyond

Concerns were raised about the inaccuracy of the completion dates of the Work Items. See Annex F for a summary of the Work Items under TSG RAN responsibility, including the changes of dates and updated WI Description Sheets.

The Feature "Terminal Power Saving" was closed due to the lack of work (sec. 9.1.2).

The MIMO Work Item was updated to create a common building block and separate Work Task for each WG (sec. 9.1.3).

The UMTS 850 MHz was updated. There was considerable debate on the eventual applicability of this frequency arrangement in Europe, finally it was agreed to explicitly mention in the Description Sheet that the WI applies only to ITU Region 2 (sec. 9.1.5).

The Feasibility Study for "The Fast Cell Selection for HS-DSCH" is closed upon request of the rapporteur (sec. 9.9.2).

TR 25.951 v2.0.0 "FDD BS classification" was approved and will be put under change control as version 6.0.0 (RP-030155)

The following Rel-6 TRs under the responsibility of TSG RAN were presented for information: TR 25.992 v1.3.0 "Multimedia Broadcast/Multicast Service (MBMS); UTRAN/GERAN requirements" (RP-030016)

TR 25.996 v1.0.0 "Spatial Channel Model for Multiple-Input Multiple-Output Simulations" (RP-030181) TR 25.895 v1.0.0 "Analysis of higher chip rates for UTRA TDD evolution" (RP-030095)

The following new Work Items/Study Items were approved (sec. 9.10):

- DS-CDMA introduction in the 800 MHz band
- UMTS 1.7/2.1 GHz
- Remote Control of Electrical Tilting Antennas
- FS for Low Output Powers for general purpose FDD BSs
- Network Assisted Cell Change from UTRAN to GERAN network aspects
- Iu enhancements for IMS support in the RAN

The Trace functionality was discussed again. A joint Ad Hoc with SA WG5 had been held with the purpose of clarifying SA WG5 requirements, but the proposed WI Description Sheet (RP-030166) couldn't be agreed by TSG RAN. Due to the blocking situation on this issue, the WIDS could be the subject of a vote at next TSG RAN.

### **ITU-R** issues

Three inputs to the ITU-R were approved:

RP-030092 Proposed response to ITU-R WP8F on coexistence Between IMT-2000 TDD and FDD

Radio Interface Technologies Within the Frequency Range 2 500-2 690 MHz Operating in

Adjacent Bands and in the Same Geographical Area

RP-030176 Proposed Initial submission for updated UTRA FDD and TDD toward Rev. 4 of Rec. ITU-R

M.1457 (TSG RAN)

RP-030177 Proposed updated information on the Roadmap (TSG RAN)

These inputs are informative, the official submission will take place in September 2003.

### 1 Opening of the meeting

Francois Courau (Chairman) opened the meeting at 9:00. Steve Green (DTI) explained the meeting and social event arrangements.

### 2 Approval of the Agenda

#### RP-030005 Revised proposed agenda (Chairman)

François Courau (Chairman) presented the agenda

Decision: the agenda was approved

### 3 Approval of meeting reports

RP-030002 Revised Draft Report of the 18th TSG-RAN meeting (New Orleans, US, 3 - 6 December, 2002) (3GPP Support)

Decision: the report is approved

RP-030128 Revised draft Report of the "Early UE" Ad Hoc meeting (Sophia Antipolis, France 29 – 30 January 2003) (3GPP Support)

Francois Courau (Chairman) gave a brief summary of this meeting.

The Ad Hoc couldn't agree on the content of the Iu information to be transferred from the CN to the RNC. Francois warned against delaying the decision more, in his view the opinions of the companies would not change as time passes by.

Decision: the report is approved

### 4. Reminder for IPR declaration

The chairman reminded the delegates of their obligations concerning IPRs:

The attention of the members of this Technical Specification Group is drawn to the fact **that 3GPP Individual Members have the obligation** under the IPR Policies of their respective Organizational Partners to **inform their respective** Organizational Partners **of Essential IPRs they become aware of**.

The members take note that they are hereby invited:

- ?? to investigate in their company whether their company does own IPRs which are, or are likely to become Essential in respect of the work of the Technical Specification Group.
- ?? to notify the Director-General, or the Chairman of their **respective** Organizational Partners, of all potential IPRs that their company may own, by means of the IPR Statement and the Licensing declaration forms.

### 5 Elections of TSG RAN chairman and vice-chairmen

César Gutiérrez (Secretary) presented the candidates for the chair and vice-chair positions, document RP-030169 contains the candidatures and letters of support.

Eisuke Fukuda (Fujitsu) and Donald Zelmer (Cingular) were the two candidates for the two vice-chairmanships, they were elected without the need of a vote.

Francois Courau (Alcatel) was the only candidate for chairman, he was elected without vote as well.

### 6 Chairman's Reports of meetings

The chairman had already reported by email the issues concerning RAN in TSG SA #18.

### 7 Liaisons from other groups

### 7.1 Groups outside 3GPP

### 7.2 TSG-SA, TSG-T, TSG-CN, TSG-GERAN

RP-030121 LS on comments to DTR/MTS 0082, UMTS Network Integration Testing Methodology and TSS&TP (TSG SA, SP-020844 to ETSI TC MTS, cc 3GPP TSG CN, 3GPP TSG RAN, 3GPP T WG1)

Francois Courau (chairman) explained that this is the common response from all 3GPP TSGs to ETSI TC MTS, explaining that the work being overtaken there should actually be performed in 3GPP. Document DTR/MTS0082 had already been presented in TSG RAN #18

Decision: The LS is noted

# RP-030123 Reply to LS on requirement to test non-transmission of newly defined IEs in RRC protocol for Early UE handling (TSG T WG1, T1-030226 to TSG RAN, cc T, T1, RAN2, SA)

Richard Burbidge (Motorola) presented this LS.T WG1 informs that the requirement from TSG RAN for the Early Ue IEs (RP-020904) will be introduced in July 2003.

Decision: The LS is noted

### RP-030124 LS on LCS architecture descriptions for TS23.002 update (TSG GERAN, GP-030297, Response to S2-023671, to SA WG2, cc TSG RAN, RAN WG3)

Denis Fauconnier (WG2 chairman) noted that WG2 is aware of the LS and working on the issue. Decision: The LS is noted

### RP-030127 LS on Radio Access Bearer for PS conversational testing (TSG SA WG4, S4-030260, to TSG RAN, RAN WG2, TSG CN, cc GERAN WG2)

Paolo Usai (SA WG4 secretary) gave a brief introduction to the background of this LS. SA WG4 is starting a testing effort, funded by external bodies, on the conversational services over packet switched network. On the time schedule, Paolo explained that this is a Rel-6 study.

Paolo explained that IPv6 is not considered for the time being, mainly due to budgetary reasons, and that header compression is still under study, as many other aspects; the attachment contains the current situation of the test. It was argued that ROHC should be used, as it will be in the actual implementations, and it introduces errors that must be considered.

Mony Kochupillai (Three) answered the first question from SA WG4: the RAB presented by SA WG4 is the only one available for that service.

As a conclusion, it seems clear that RAN needs now to investigate the real time services over the packet network. If the delays happen to be more than expected from SA WG4 this should be clarified as soon as possible. RAN WG2 and SA WG4 will have to keep close liaison to check the correctness of the assumptions, and RAN WG3 will have to examine the delay values used by SA WG4.

It was further clarified that, from a RAN perspective, there will no new types of codecs taken into account to estimate the delays.

Decision: The LS is noted

RP-030125 LS on Early UE Handling (TSG CN WG1)

RP-030126 LS response on Early Ue Handling (TSG CN WG4)

RP-030164 LS on early UE handling (TSG SA WG2)

See agenda item 9.9.11

### 7.3 TSG-RAN WGs

#### RP-030122 LS on Antenna Interface Standards Group (AISG) (RAN WG4, R4-030348)

Howard Benn (WG4 chairman) presented this LS

Upon presentation of the AISG draft, RAN WG4 has discovered a number of unclear issues in that specification. WG4 asks RAN to liaise with AISG and to relay the comments.

Volker Hoehn (Vodafone) suggested discuss the whole issue together with the WI proposed (RP-030022). Han van Bussel (T-Mobile) noted that this work should have been done inside 3GPP, to avoid the problems detected in WG4. It was noted also that the AISG document cannot be directly transposed to a 3GPP document, there are some references to particular equipment that can't be used in a 3GPP document and, in any case, there is work to be done by WG3 and WG4. Vodafone agreed with these views, and explained that the intention of the proposed WI is to cover that work.

It was also clarified that due to the fact that AISG has not yet any official status no direct reference can be made to their specific documentation. If this situation is changed then the issue will have to be reconsidered. In the mean time 3GPP TSG RAN will have to elaborate the full specification.

Decision: The LS is noted

#### Summary of incoming LSs:

| Tdoc      | Title   | Source      | Source File | Conclusion                                   |
|-----------|---|-------------|-------------|--|
| RP-030121 | LS on comments to DTR/MTS 0082, UMTS<br>Network Integration Testing Methodology and<br>TSS&TP                         | TSG SA      | SP-020844   | Noted  |
| RP-030123 | Reply to LS on requirement to test non-<br>transmission of newly defined IEs in RRC<br>protocol for Early UE handling | TSG T WG1   | T1-030226   | Noted  |
| RP-030124 | LS on LCS architecture descriptions for TS23.002 update   | TSG GERAN   | GP-030297   | Noted. Under study in RAN WG2                |
| RP-030127 | LS on Radio Access Bearer for PS conversational testing   | TSG SA WG4  | S4-030260   | Noted. RAN WG2 &<br>WG3 to support SA<br>WG4 |
| RP-030125 | LS on Early UE Handling   | TSG CN WG1  | N1-030201   | Noted. See section                           |
| RP-030126 | LS response on Early Ue Handling  | TSG CN WG4  | N4-030220   | 9.9.11                                       |
| RP-030164 | LS on early UE handling   | SA WG2      | S2-031004   | J  |
| RP-030122 | LS on Antenna Interface Standards Group (AISG)  | TSG RAN WG4 | R4-030348   | Noted. New WI approved, see 9.10             |

# Status Report and Approval of contributions on Release'99 and Release 4 and finished work item for Release 5

### 8.1 TSG RAN WG1

### 8.1.1 Report from WG1 including report on actions required from the previous meeting

#### **RP-030130** Status Report WG1 (RAN WG1 Chairman)

Antti Toskala (WG1 chairman) presented this report. The work of WG1 can be briefly summarized as follows:

- Two full WG1 meetings since last TSG RAN#18. Also joint Ad Hoc on MIMO channel modelling with 3GPP2 01/03 (in connection with WG1#30 meeting)
- New TSG RAN WG1 Officials Elected
- Release -99 CRs 1 for FDD, 0 for TDD
- Release 4 CRs total is 0 for FDD, 2 for TDD
- Release 5 CRs total 8 for FDD, 12 for TDD
- Approx. 70% the meeting time used for Rel'6.

Concerning Rel-5 HSDPA discussions (slide 10), Edgar Fernandes (Motorola) questioned if there is still work ongoing in WG 1 on the effect of closed loop TX diversity on HS-SCCH. Antti noted that it was the case, but in principle it would not affect WG4. The concern from Edgar was how the outcome of the discussion in WG1 would affect the simulations in WG4, since WG4 agreed in to finish all Rel-5 HSDPA work in the next meeting. Antti clarified that the work would not affect the single antenna requirements, which are the ones to be completed in WG4 by next meeting, and if any, it would affect TX diversity tests.

There was debate on the MBMS QoS. It was suggested that it is the SA groups (WG1, WG2, WG4) who have to look at the error rates, hence they have to be involved in the discussion. It was objected that it is a

purely RAN issue, the MBMS in RAN should be considered a bearer; the codecs and the requirements from the applications will be the same as for other services, so RAN can handle the issue independently of SA. Paolo Usai (SA WG4 secretary) clarified that SA WG4 has just started to look at MBMS, a number of LSs have been received there but there were no company contributions on the topic. Although it can't be fully ensured that this point, it seems that no new codec will be used for MBMS. It seems agreed that the working assumption in RAN is that the requirements for the QoS will not change, that means that if a new codec is introduced, its requirements from the bearer would be the same as before.

It is clarified that no LS from RAN WG1 has been sent to SA groups on this issue.

### RP-030131 Supplement (List of agreed CRs) to Report from WG1 chairman to TSG-RAN (RAN WG1)

This document recollects all the RAN documents with the CRs agreed in RAN WG1.

#### 8.1.2 Discussions on decisions from WG1

### RP-030017 Correction of UTRAN SIR measurement definition, CR 25.215-135r4 (R99), CR 25.215-136r2 (Rel-4), CR 25.215-133r3 (Rel-5) (Ericsson, Nortel)

Dirk Gerstenberger (Ericsson) presented these CRs.

SIR reporting when a radio link set contains more than one radio link and when Rx diversity is implemented in the Node B is not specified clearly enough. The standard leaves it open to the Node B implementation how to report SIR in case a radio link contains more than one radio link set and in case Rx diversity is deployed in the cells of a Node B. The CRs clarify the SIR definition to take these cases into account.

Dirk clarified that the correction has no impact on the NodeB performance, it affects the report to the RNC but not the internals of the NodeB. Antti Toskala (Nokia) commented that this is not a required correction for Rel99, as the system would work anyway, and should be approved for Rel-5 only. Evelyne Le Strat (Nortel) pointed to the "consequences if not approved" that show a substantial difference in the value reported by NodeBs designed according to the old and the new definition.

There seemed to be agreement on the Rel-5 CR; it was however questioned if the proposed definition was the common understanding between manufacturers for Rel99. Nokia clarified that it the interpretation depends very much on the implementation, so it cannot be ensured.

Decision: CR135r4, CR136r2 are rejected, CR133r3 is approved.

### 8.1.3 Approval of CRs to Release '99 with linked CRs to Release 4 and Release 5

#### **RP-030132** CRs (R'99 and Rel-4/Rel-5 category A) to TS 25.214 (RAN WG1)

Han van Bussel (T-Mobile) questioned why a correction to an informative annex is proposed for Rel99. This triggered the usual discussion on the need of this kind of clarification CRs in Rel99.

Finally Han agreed to approve the CR, but required the WGs, WG1 in particular, to include solid arguments in the "consequences if not approved" field in the coversheet, so it can be easily understood that the CR is really needed.

Decision: The CR is approved

### 8.1.5 Approval of independent CRs to Release 4 with linked CRs to Release 5

#### **RP-030133** CRs (R'el-4 and Rel-5 category A) to TS 25.224 (RAN WG1)

Decision: The CR is approved

### 8.1.5 Approval of independent CRs to Release 5

The following documents contain CRs agreed by RAN WG1:

| Tdoc      | Title                    | Decision     |
|-----------|--------------------------|--------------|
| RP-030134 | CRs (Rel-5) to TS 25.212 | Approved     |
| RP-030135 | CRs (Rel-5) to TS 25.213 | Approved     |
| RP-030136 | CRs (Rel-5) to TS 25.214 | Approved     |
| RP-030137 | CRs (Rel-5) to TS 25.215 | Withdrawn 1) |
| RP-030138 | CRs (Rel-5) to TS 25.221 | Approved     |
| RP-030139 | CRs (Rel-5) to TS 25.222 | Approved     |
| RP-030140 | CRs (Rel-5) to TS 25.223 | Approved     |
| RP-030141 | CRs (Rel-5) to TS 25.224 | Approved     |
| RP-030142 | CRs (Rel-5) to TS 25.225 | Withdrawn 1) |

1) CRs to 25.215 and 25.225 are presented together with WG3 CRs, hence RP-030137 and RP-030142 are withdrawn

### 8.1.6 Approval of linked CRs where the leading one originated from WG1

No contributions

### 8.2 TSG RAN WG2

# 8.2.1 Report from WG2 including report on actions required from the previous meeting

#### **RP-030018** Status Report WG2 (RAN WG2 Chairman)

Revised in RP-030173.

#### RP-030173 WG2 Status Report (Revised) (WG2 Chairman)

Denis Fauconnier (WG2 chairman) presented this report. WG2 activity can be summarized as follows:

- Release 99 corrections
  - Occupied 2 days of last meeting, number of CRs is down.
- Release 4 corrections
  - Very few
- Release 5
  - HSDPA corrections
  - Completion of some TEIs
- Release 6
  - Big progress towards MBMS architecture. Convergence of companies on key functions; reasonable synergy with SA2.
  - Joint meeting with RAN3/SA5 on trace functionality.

- RAN2 Chairman and Vice-Chairman were re-elected
- Other remarks:
  - R99 is still an important part of RAN2 activity, but size and complexity of CRs is decreasing
  - Resolving R99 problems takes time but corrections least (or not) affecting current UE implementations are found
  - Discussion on interaction between CN paging and RRC out-of-service mechanisms. Discussion is first to identify if we do indeed have a problem; Several scenarios have to be analysed.
  - HSDPA complete. Correction phase well under way.
  - Significant increase in MBMS activity, with convergence on previously contentious points
  - R5 TEIs completed as planned. One last may be allowed for the next meeting.
  - RAN WG2 moving towards 4 meetings a year, Some ad-hoc may be needed depending on workload
  - Future work should be mainly on: R99 corrections (still), IMS support, MBMS, Release 6 TEIs
  - Discussion on interaction between CN paging and RRC out-of-service mechanisms. Discussion is first to identify if we do indeed have a problem; Several scenarios have to be analysed.

On the issue of CN paging and RRC out of service , it was clarified that since this is a cross-groups discussion (CN1, SA2, GERAN and RAN2), an ad-hoc is likely to be organised. TSG RAN Chairman indicated that this ad hoc will be discussed during this week together with the 3GPP TSG CN as well as TSG CN WG1 chair to try to fix the date of this workshop. NEC announced that they are willing to host the meeting in Paris. After discussion with the CN leaders a date was agreed for the 24<sup>th</sup> and 25<sup>th</sup> of April to hold the meeting. Invitation and details will be provided later on together with the invitation.

Concerning the Subscriber Trace WI, Antti Toskala (Nokia) objected the conclusion that there is a good understanding of SA WG5 requirements. He agreed that the situation is clearer, but not "good understanding".

Denis clarified that on the MBMS, WG2 will need the confirmation from WG1 on what phys layer channels are to be used.

Regarding the RRC optimization in Rel-5, done currently under the TEI5 WI, Denis explained that the agreement in WG2 was no to accept new optimizations in Rel-5 from this meeting onwards.

Han van Bussel (T-Mobile) questioned the use of the "should" clauses for UE requirements in CRs to 25.331 and asked for the rationale for the choice. Denis explained that roughly half of the cases hold a "should" and the rest are a half "shall" and a half "UE behavior not specified". WG2 does extensive analyze each case, and the "shall" is chosen if there is an agreement between all companies, if there isn't, "should" is left. Three showed the concern of operator on the use of the "should" clauses for UE requirements which will lead inconsistent UE behavior. Han asked for the impact of this on T WG1 test cases. Denis explained that the clauses affected by the "should" statement don't have related tests in T WG1 so far, and WG2 delegates check carefully the existing tests anytime this situation arises.

#### RP-030019 List of agreed CRs from WG2 (RAN WG2)

This document recollects all the RAN documents with the CRs agreed in RAN WG2.

#### 8.2.3 Discussions on decisions from WG2

#### RP-030109 CRs to TR 25.993 Version 6.0.0 also affecting earlier releases (RAN WG2)

Decision: The CRs are approved

### 8.2.3 Approval of CRs to Release '99 with linked CRs to Release 4 and Release 5

The following documents contain CRs agreed by RAN WG2:

| Tdoc      | Title  | Decision   |
|-----------|--|------------|
| RP-030100 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.321     | Approved   |
| RP-030101 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.322     | Approved   |
| RP-030102 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.324     | Approved   |
| RP-030103 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.331 (1) | Approved   |
| RP-030104 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.331 (2) | Approved   |
| RP-030105 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.331 (3) | Approved   |
| RP-030106 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.331 (4) | Approved   |
| RP-030108 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 34.109     | Revised 2) |

2) CRs in RP-030108 (CRs23r2, 24r2, 25r2 to 34.109) are all revised in RP-030162

#### RP-030162 Revision of CRs 023, 024, 025 to 34.109 in RP-030108 (Panasonic)

Decision: The CRs are approved

### RP-030146 Proposed CRs (1904, 1905 and 1906 to Rel99, Rel-4 & Rel-5) to 25.331R99 on Correction on GPS navigation model update mechanism (Motorola, Nokia)

These CRs couldn't be agreed, and companies finally reverted to the CRs that had been discussed in WG2 (presented in the doc below)

Decision: The CRs are rejected

### RP-030187 Proposed CRs to 25.331R99 on Correction on GPS navigation model update mechanism (Nokia)

It is clarified that the CR numbers on the CR coversheets are correct, the cover document holds incorrect numbers.

Decision: The CRs are approved

### 8.2.4 Approval of independent CRs to Release 4 with linked CRs to Release 5

The following documents contain CRs agreed by RAN WG2:

| Tdoc      | Title   | Decision |
|-----------|---|----------|
| RP-030110 | CRs (Rel-4 and Rel-5 Category A) to TS 25.305 | Approved |
| RP-030111 | CRs (Rel-4 and Rel-5 Category A) to TS 25.331 | Approved |

### 8.2.5 Approval of independent CRs to Release 5

The following documents contain CRs agreed by RAN WG2:

| Tdoc      | Title                    | Decision |
|-----------|--------------------------|----------|
| RP-030112 | CRs (Rel-5) to TS 25.302 | Approved |
| RP-030113 | CRs (Rel-5) to TS 25.306 | Approved |
| RP-030114 | CRs (Rel-5) to TS 25.308 | Approved |
| RP-030115 | CRs (Rel-5) to TS 25.321 | Approved |
| RP-030116 | CRs (Rel-5) to TS 25.322 | Approved |
| RP-030117 | CRs (Rel-5) to TS 25.331 | Approved |

### 8.2.6 Approval of linked CRs where the leading one originated from WG2

The following documents contain CRs agreed by RAN WG2:

| Tdoc      | Title   | Decision        |
|-----------|---|-----------------|
| RP-030118 | Linked CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.306, TS 25.331 and TS 25.101 on variable Tx/Rx frequency separation in 1800 and 1900 band | Not approved 3) |
| RP-030119 | Linked CRs (Rel-5) to TS 25.331 and TS 25.423 on HS-DSCH midamble shifts and burst types  | Approved        |
| RP-030120 | CR (Rel-5) to 25.331 on Group release (without security)  | Approved 4)     |

3) Per Beming (Ericsson) argued against approving the CRs to 25.101 in RP-030118 as they are now, since that would put 25.101 in misalignment with 25.306, and proposed the revisions below. Motorola expressed concern on Ericsson's RP-030167, is on moving what is currently in an informative annex to the main body of 25.101, and hence making it mandatory. NEC asked for the operator's view on having the variable duplex in Rel99. Vodafone commented that it was indeed the requirement of operators, but it was later moved to non-mandatory due to complexity reasons.

Finally, it is agreed to study the issue further. WG4 has to examine the impact on performance requirements when the separation is very narrow, and although it is suggested to produce CRs for next TSG RAN, it seems difficult that an agreement could be reached if the performance is actually impacted All of the CRs in RP-030118 are rejected

### RP-030167 Revision of CRs 207, 208, 209 to 25.101 (RP-030118) on "Variable Tx/Rx frequency separation" (Ericsson)

Decision: The CRs are not approved

4) Ericsson agreed to make available the CRs to WG3 specification on Group Release, which had been endorsed by WG3 three months ago but couldn't be reviewed again at last WG3 meeting (and then are not presented here as WG3-agreed). The intention is to approve all CRs related to Group Release together. It seems that WG3 could reach an agreement on its CRs, so as a way forward the WG2 CRs are approved and WG3 CRs will be presented at the next RAN meeting. It is clarified that WG3 will produce Rel-5 CR.

#### 8.3 TSG RAN WG3

# 8.3.1 Report from WG3 including report on actions required from the previous meeting

#### RP-030052 Status report WG3 (RAN WG3 Chairman)

Martin Israelsson (WG3 chairman) presented this report. WG3 activity can be summarized as follows:

- The amount of R99 & Rel-4 CRs has stabilized.

- 7 R99 + Rel-4 and Rel-5 mirror CRs
- 18 Rel-4 + Rel-5 mirror CRs (majority TDD)
- 28 Rel-5 only CRs (majority HSDPA and TDD)
- R99 +mirror CRs requires less than 20% of meeting time.
- Technically correct Early UE CR(s) are available.
- Progress on RAN3 Rel-6 topics has been low despite the separate Rel-6 adhoc.
- Election of new chair performed. New chair from RAN3#35 is Alexander Vesely (Siemens).

Regarding CR035 to 25.435 on SCCPCH power setting (slide 18), Martin clarified that it is a Rel-5 only topic in WG3.

There seems to be some confusion about new measurements being defined in WG3 for HSDPA. Denis Fauconnier (Nortel) clarified that no new physical measurement is being defined, WG3 is discussing new measurement reports that the NodeB is sending to the RNC. Antti Toskala (Nokia) questioned if WG3 is intending to do that new measurement reports in Rel-5 or Rel-6, and asked WG3 to inform RAN on the progress and timescales of the work. He suggested that a Rel-6 HSDPA WI might be necessary.

#### RP-030053 List of agreed/technically correct CRs from WG3 (RAN WG3)

This document recollects all the RAN documents with the CRs agreed in RAN WG3.

#### 8.3.2 Discussions on decisions from WG3

No discussions

### 8.3.3 Approval of CRs to Release '99 with linked CRs to Release 4 and Release 5

The following documents contain CRs agreed by RAN WG3:

| Tdoc      | Title   | Decision   |
|-----------|---|------------|
| RP-030054 | CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.414 on TCP Port Number                            | Approved   |
| RP-030055 | CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.423 on Support of Cell Individual Offset in RNSAP | Revised 5) |

5) Several successive revisions (RP-030160, RP-030168 & RP-030183), the CRs were discussed in WG3 reflector. The CRs in RP-030055 are not approved

### RP-030183 Revised CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.423 on Support of Cell Individual Offset in RNSAP (Ericsson)

Decision: The CRs are approved

### 8.3.4 Approval of independent CRs to Release 4 with linked CRs to Release 5

The following documents contain CRs agreed by RAN WG3:

| Tdoc      | Title  | Decision |
|-----------|--|----------|
| RP-030056 | CRs (Rel-4 and Rel-5 Category A) to TS 25.413  | Approved |
| RP-030057 | CRs (Rel-4 and Rel-5 Category A) to TS 25.419 on Correction of Write and Replace functions     | Approved |
| RP-030058 | CRs (Rel-4 and Rel-5 Category A) to TS 25.423  | Approved |
| RP-030059 | CRs (Rel-4 and Rel-5 Category A) to TS 25.433 on Correction of PRACH Midamble for 1.28Mcps TDD | Approved |

### 8.3.5 Approval of independent CRs to Release 5

The following documents contain CRs agreed by RAN WG3:

| Tdoc      | Title   | Decision        |
|-----------|---|-----------------|
| RP-030060 | CRs (Rel-5 only) to 25.413  | Approved        |
| RP-030061 | CR (Rel-5 only) to 25.414 on Minor cleanup of 25.414                                | Approved        |
| RP-030062 | CRs (Rel-5 only) to 25.423  | Approved        |
| RP-030063 | CR (Rel-5 only) to 25.433 on HS-PDSCH Code and Timeslot Resource Assignment for TDD | Approved        |
| RP-030064 | CR (Rel-5 only) to 25.435 on S-CCPCH power setting in case of no data transmission  | Not approved 6) |
| RP-030065 | CRs (Rel-5 only) to 25.453  | Approved        |

6) Ericsson objected the CR and provided the document below as justification. After discussions (see below), the CR is not approved

### RP-030159 Definition of TFCI transmit power on S-CCPCH in case of no data (Ericsson, NTT DoCoMo)

Dirk Gerstenberger (Ericsson) presented this document

In Ericsson's view, it is not necessary to specify the power level of the channel when not transmitting data, since the benefits for UE power saving and impact on system operation is negligible. Ericsson proposes not to approved the CRs in RP-03064. Philippe Sehier (Alcaltel) and Jim Miller (WG3 vice-chairman) objected that the power saving argument wasn't the only one when the CR was agreed in WG3, the NodeB behaviour as of today is unspecified, and also there was a requirement from WG1 to align specifications. Antti Toskala (Nokia) agreed with Ericsson that there is not a huge system impact, thus there is no need for a Rel99 change, but supported to have a clarification in a later Release.

No agreement could be reached off line, WG1 is tasked to study the issue and inform WG3 of the conclusion. The CRs in RP-030159 are not approved

### 8.3.6 Approval of linked CRs where the leading one originated from WG3

The following documents contain CRs agreed by RAN WG3:

| Tdoc      | Title   | Decision    |
|-----------|---|-------------|
| RP-030066 | CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.423 and 25.433 on Corrections to DCH Combining in RL SETUP and RL ADDITION                        | Approved    |
| RP-030067 | CRs (Rel-4 and Rel-5 Category A) to TS 25.413, 25.423 and 25.453 (only Rel-5) on Alignment of "Uncertainty Ellipse" with RRC                    | Approved    |
| RP-030068 | CRs (Rel-4 and Rel-5 Category A) to TS 25.423 and 25.433 on Clarification to DL Power definition for TDD  | Approved    |
| RP-030069 | CRs (Rel-4 and Rel-5 Category A) to TS 25.423 and 25.433 on Clarification to 2nd Interleaving Mode for TDD                                      | Approved    |
| RP-030070 | CRs (Rel-4 and Rel-5 Category A) to TS 25.423, 25.433 and 25.453 (Rel-5 only) on Correction for the Information Exchange Initiation procedure   | Approved    |
| RP-030071 | CRs (Rel-4 and Rel-5 Category A) to TS 25.423 and 25.433 on Midamble Configuration for Midamble Shift LCR                                       | Approved    |
| RP-030072 | CRs (Rel-4 and Rel-5 Category A) to TS 25.423 and 25.433 on TPC Step Size for TDD   | Approved    |
| RP-030073 | CR (Rel-5 only) to TS 25.423 and 25.433 on Clarification of HS-SCCH power offset usage in case of multiple HS-SCCHs                             | Approved    |
| RP-030074 | CR (Rel-5 only) to TS 25.423 and 25.433 on T1 signalling for HSDPA  | Approved    |
| RP-030075 | CR (Rel-5 only) to TS 25.425 and 25.435 on Clarification for the flow control   | Approved    |
| RP-030076 | CR (Rel-5 only) to TS 25.423 and 25.433 on Guaranteed Bit Rate for HSDPA  | Approved    |
| RP-030077 | CR (Rel-5 only) to TS 25.423 and 25.433 on Correction to DL Tx Power for TDD  | Approved    |
| RP-030078 | CR (Rel-5 only) to TS 25.423 and 25.433 on HS-PDSCH Corrections for TDD   | Approved    |
| RP-030079 | CRs (R99 and Rel-4/Rel-5 Category A) to TS 29.108 linked to CN1 on Corrections to the list of RANAP messages transferred on the E-interface     | Approved 7) |
| RP-030080 | CR (Rel-5 only) to TS 25.423 and 25.433 linked to RAN1 (25.225) on Measurement for HS-SICH Outer Loop Power Control                             | Approved    |
| RP-030081 | CR (Rel-5 only) to TS 25.433 linked to RAN1 (25.215) on HS-DSCH: addition of non-HS-DSCH power measurement                                      | Approved    |
| RP-030082 | CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.423 and 25.433 linked to RAN2 (25.331) on Corrections to Channelisation Code TFCI Mapping for TDD | Approved    |

7) These CRs are linked to CN WG1 CRs that have also been approved

### 8.4 TSG RAN WG4

# 8.4.1 Report from WG4 including report on actions required from the previous meeting

#### RP-030023 Status Report WG4 (RAN WG4 Chairman)

Howard Benn (WG4 chairman) presented this report. WG4 activity can be summarized as follows:

- Howard Benn agreed to remain as chair for a further 2 years since there were no other candidates
- 1 RAN WG4 meeting after the last RAN meeting
- Usual number of delegates (around 80),
- 352 input contributions
- Corrections to the specification (cat F numbers)
  - Release 99 15 CRs
  - Release 4 6 CRs
  - Release 5 21 CRs

- Release 6 8 CRs
- There will be one WG meeting before the next plenary.
- Release 99 issues:
  - Cell Identification
  - Layer 3 filter
- HSDPA
  - 7 remaining open actions on testing the variable reference channel
  - RAN 4 request 1 more plenary to complete the work
  - Any tests not completed by next plenary will go into Rel-6
- Other issues
  - Additional bands
  - CISPR document on emissions of IT equipment in the UTRAN bands

Howard clarified the HSDPA requirements and test that are not finished by June would be left for Release 6. Howard explained that the current test of HDPA cover the fixed channel, where the response of the HSDPA system to the variable conditions of the radio channel is not tested. The work on test of the HSDPA considering variable channel is still ongoing and might not be finished by June. Per Beming (Ericsson) objected the approach of postponing to Rel-6 any test that is late, the basis for the decision should be whether the test is essential or not. Giovanni Romano (TIM) also agreed with this view. Per commented that, for example, if in the future RRM test are deemed to be essential, they should be included in Rel-5.

There was considerable debate on the issue, and Howard recommended to look at the status report which lists the actual pending tests. The common view was that the deadline of next meeting is mainly to put pressure in WG4 to finish the tests. Although for the time being no new tests are under discussion in WG4, if a company believes that a new test is necessary in Rel-5 and WG4 agrees, it will be included in Rel-5.

Considering the additional frequency bands, Howard clarified that the intention is that the work is carried on in WG4, although some of the regional organizations proposing the new bands may carry their own simulation work.

Howard clarified that the FDD BS Classification work is almost 100% completed, some CRs are presented to this meeting, basically in the area of max. output power.

Jussi Numminen (Nokia) noted that the area of the new bands needs some careful examination previous to starting the simulations, since it is clear that there commonalities, the channel for example will not change much for the bands under 1GHz.

#### RP-030024 List of agreed CRs from WG4 (RAN WG4 Chairman)

This document recollects all the RAN documents with the CRs agreed in RAN WG4.

#### 8.4.2 Discussions on decisions from WG4

#### RP-030020 Emission limits proposed by CISPR for ITE above 1 GHz (Nokia)

Jussi Numminen (Nokia) presented this document.

The document gives the background of the discussions in WG4 on the emission limits being under approval at CISPR for ITE (Information Technology Equipment). It is Nokia's view that these limits do not protect sufficiently WCDMA receivers.

Meik Kottkamp (Siemens) agreed with most of the document but not the conclusion, and noted that Siemens also have simulations ongoing and it is needed to check the correctness of the simulation from Nokia. This was also the view from Nortel, so far only the results from Nokia are available, and more companies should provide simulations before proposing a new limit. On this basis, the proposed LS in RP-030021 is objected.

It was argued that a LS directly to CISPR is not the preferred way, WG4 is the group where the issue can be discussed and eventually companies can agree on an unified view, but the way to influence CISPR has to be companies contacting their national delegation and trying to steer their vote in CISPR. However, finally it is agreed that WG4 can, if participants agree, send a LS to CISPR.

#### RP-030021 Draft LS on the CISPR limits for ITE over 1GHz (Nokia)

Decision: The draft LS is withdrawn

### RP-030172 Background information of L3 filtering simulation results (Nokia)

**RP-030097** Layer 3 filtering definition (Nokia)

Jussi Numminen (Nokia) presented this document

As a first comment, Motorola and Qualcomm objected that the agreement was no to present a Rel-4 CR.

#### RP-030165 L3 Filtering (Qualcomm)

Serge Willenegger (Qualcomm) presented this document

Edgar Fernandes (Motorola) commented that the current performance requirements are specified with the L3 filtering switched off, so it actually doesn't matter too much what filter is used since the performance offered by the UEs is specified regardless. This view was rejected by Ericsson, as currently are many matters specified and mandated that don't have a performance requirement.

After an indicative vote, it seemed that the majority of the group agreed on the Rel-5 CR on RP-030097. The Rel-4 CR on the same document was rejected. Document RP-030201 contains the Rel-5 CR with a number allocated and the cover page updated

Decision: The documents are noted

#### RP-030201 Layer 3 filtering definition (Rel-5 CR1910 to 25.331) (Nokia et al)

Decision: The CR is approved

#### **RP-030171** Cell Identification Requirements (NEC)

Jean Francois Labal (NEC) presented this document

Takehiro Nakamura (NTT DoCoMo), as co-source, argued in favor of having a reduced set of patterns to simplify Interoperability Testing. Jussi Numminen (Nokia) agreed with the IOT purposes, but on the side conditions for the proposed patterns he noted that it is a very complicated issue, still under discussion in WG4, and suggested not to explicitly request WG4 to define the side conditions. Ericsson commented that the side conditions are already there, 120 kph UE speed and the existing BS clock drift requirements. It is unclear where the side conditions should be incorporated, as the usual procedure is to have it in the test case and not the core requirement. Edgar Fernandes (Motorola) agreed to have the core requirements sufficiently general and formulate a few test with their associated parameters. However, Edgar agreed to have side conditions on the core requirement since, as they are now, they are meaningless as the scenario where they have to be met is undefined.

Han van Bussel (T-Mobile) explained that operators are likely to base their network settings on the requirements as written on the core specification, it can be understood that under some extreme conditions the performance will not meet the specification.

Mony Kochupillai (Three) raised the problem on how an operator can specify the requirement that its UE providers have to fulfill in this area. He questioned if he would have to specify it in terms of the test cases, since the core requirement is too general.

Qualcomm understands that the general requirements should apply by default. However for the most demanding combinations, test cases could be defined based on different requirements.

It seems to be agreed that the core requirements would be kept general, but for extreme conditions or cases particular test and side conditions would be set.

Finally, the following decision was agreed:

In Rel-5, in addition to general requirements, a set of test cases for different environment will be introduced to further clarify the expected UE behaviour. In process of Rel-5 test cases WG4 may add clarifications on the applicability in the core requirements.

### 8.4.3 Approval of CRs to Release '99 with linked CRs to Release 4 and Release 5

The following documents contain CRs agreed by RAN WG4:

| Tdoc      | Title  | Decision |
|-----------|--|----------|
| RP-030025 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.101   | Approved |
| RP-030026 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.123   | Approved |
| RP-030027 | CRs (R'99 and Rel-4/Rel-5/Rel-6 Category A) to TS 25.133   | Approved |
| RP-030028 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.142   | Approved |
| RP-030029 | CRs (R'99 and Rel-4/Rel-5/Rel-6 Category A) to TS 25.104 & TS 25.141 on "Protection of FDD BS receiver"  | Approved |
| RP-030030 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.105 & TS 25.142 on "TDD - GSM co-existence in the same geographic area"   | Approved |
| RP-030031 | CRs (R'99 and Rel-4/Rel-5/Rel-6 Category A) to TS 25.133 on<br>"Correction of UE parameters for Random Access test" (Linked to CR239 to TS34.121 in TP-030045) | Approved |

### 8.4.4 Approval of independent CRs to Release 4 with linked CRs to Release 5

The following documents contain CRs agreed by RAN WG4:

| Tdoc      | Title  | Decision |
|-----------|--|----------|
| RP-030032 | CRs (Rel-4 and Rel-5 Category A) to TS 25.101  | Approved |
| RP-030033 | CRs (Rel-4 and Rel-5 Category A) to TS 25.123  | Approved |
| RP-030034 | CRs (Rel-4 and Rel-5/Rel-6 Category A) to TS 25.133  | Approved |
| RP-030035 | CRs (Rel-4 and Rel-5/Rel-6 Category A) to TS 25.104 & TS 25.141 on "Correction to external equipment definition"                             | Approved |
| RP-030036 | CRs (Rel-4 and Rel-5 Category A) to TS 25.106 & TS 25.143 (Repeaters specifications) on "FDD - GSM co-existence in the same geographic area" | Approved |

### 8.4.5 Approval of independent CRs to Release 5

The following documents contain CRs agreed by RAN WG4:

| Tdoc      | Title  | Decision     |
|-----------|--|--------------|
| RP-030037 | CRs (Rel-5) to TS 25.101   | Approved     |
| RP-030038 | CR (Rel-5) to TS 25.102  | Approved     |
| RP-030039 | CR (Rel-5) to TS 25.113  | Approved     |
| RP-030040 | CRs (Rel-5) to TS 25.133   | Approved     |
| RP-030041 | CRs (Rel-5 and Rel-6 Category A) to TS 25.141  | Approved     |
| RP-030042 | CRs (Rel-5) to TS 25.142   | Approved     |
| RP-030043 | CR (Rel-5) to TS 34.124  | Withdrawn 8) |
| RP-030044 | CRs (Rel-5 and Rel-6 Category A) to TS 25.104 & TS 25.141 on<br>"Clarification of the WCDMA interferer definition for ACS and blocking requirements and tests" | Approved 9)  |
| RP-030045 | CRs (Rel-5) to TS 25.105, TS 25.142 & TR 25.952 on "The definition of UTRA TDD BS classes"   | Approved     |

8) It was discussed on WG4 reflector that the correction should be included in Rel99 and Rel-4 also. No objection was raised, then Ericsson produced a revised CR to Rel-5 (to change the category and WI), and the Rel99 and Rel-4 CRs. These are presented in document RP-030144.

### RP-030144 CRs (R'99 and Rel-4/Rel-5 category A) to TS 34.124 on "Correction to radiated spurious emission measurement bandwidth" (Ericsson)

Decision: The CRs are approved

9) Category and WI Acronym on the cover sheet of CR179 to 25.104 are incorrect WI Acronym on the cover sheet of CR 183 to 25.104 is incorrect

### 8.4.6 Approval of linked CRs where the leading one originated from WG4

No contributions

#### 8.5 TSG RAN ITU-R Ad Hoc

#### RP-030090 Status Report, RAN ITU-R Ad Hoc (ITU-R Ad Hoc Contact Person)

Giovanni Romano (TIM) presented this report.

Decision: The report is noted

### RP-030174 Proposed Initial submission for updated UTRA FDD and TDD toward Rev. 4 of Rec. ITU-R M.1457 (ITU-R Ad Hoc)

Giovanni Romano (TIM) presented this report.

Said Tatesh (Lucent) noted that there is inconsistency on what is provided to ITU, WG1 agreed not to provide Feasibility Studies but it seems that WG4 had a different view. Howard Benn (WG4 chairman) clarified that the FS for "viable deployment of UTRA in additional and diverse spectrum arrangements" was included due to the particular interest of ITU on the topic. Nortel and Siemens objected the list presented also, since some of the topics will not be finished by the deadline. Giovanni explained that this is a first informative paper, it is not the final submission which will be in September. Giovanni also clarified that the inputs come from the WGs, RAN ITU-R is just receiving and compiling the information from the WGs. Concerning the new bands to be investigated, it is agreed to mention the American 850MHz band, the Japanese 800 MHz band and the 1.7/2.1 GHz arrangement as proposed in RP-030098.

After on-line corrections, the document is approved as in RP-030176.

Decision: The document is revised

# RP-030092 Proposed response to ITU-R WP8F on coexistence Between IMT-2000 TDD and FDD Radio Interface Technologies Within the Frequency Range 2 500-2 690 MHz Operating in Adjacent Bands and in the Same Geographical Area (ITU-R Ad Hoc)

Giovanni Romano (TIM) presented this report.

Decision: The document is approved

#### **RP-030093** Proposed updated information on the Roadmap (ITU-R Ad Hoc)

Giovanni Romano (TIM) presented this report.

It is clarified that this is a proposed update for the ITU-R Roadmap, not ITU-T IMT-2000 Roadmap. The document need to be corrected to include the bands as agreed above for the revision of Recommendation M.1457.

Decision: The document is revised

### RP-030176 Proposed Initial submission for updated UTRA FDD and TDD toward Rev. 4 of Rec. ITU-R M.1457 (TSG RAN)

RP-030177 Proposed updated information on the Roadmap (TSG RAN)

Decision: The documents are approved.

RP-030092, RP-030176 and RP-030177 will be provided to 3GPP PCG by TSG RAN chairman for final approval before submission to ITU-R.

# 9 Not completed WI for Release 5 and beyond: Status update and approval of CRs, reports

Many of the Work Items under TSG RAN responsibility have had their completion date changed, this caused a generalised concern on the accuracy of the estimates given by the rapporteurs and WGs, which lead to an incorrect perception of the timing of the whole 3GPP Work Plan. It is requested that the dates suggested in the WI Description Sheets are as realistic as possible, and that WG provide date updates according with the real work pending, in particular avoid changing the dates every few months.

#### **RP-030157** Work Item and Study Item Description Sheets (3GPP Support)

Document provided for information

### 9.1 Radio Interface Improvement Feature

### 9.1.1 Improvement of inter-frequency and inter-system measurements

### RP-030151 Status Report for WI "Improvement of inter-frequency and inter-system measurements" (Rapporteur (Nokia))

Antti Toskala (Nokia) presented this report

Antti explained that the WI in WG1 has very little work, but the WI has a impact on RNC performance that needs to be assessed by WG3.

It was commented that background information is lacking, Antti agreed to bring a list of documents together with the next status report

The proposed completion date in RAN#21 in September is approved

Decision: The report is noted

### 9.1.2 Terminal power saving features

#### **RP-030007** Status Report for WI "Terminal power saving features" (Rapporteur)

Denis Fauconnier (Nortel) presented this report

No work under this feature. It was discussed that no work has ever been done, so the need to keep it is unclear. Arguments to keep the WI open suggested that it is easier to produce work on the area if the WI exists already, instead of creating a new WI Description Sheet and getting it approved. It was objected that this doesn't have to be a problem, actually it should be the way to go.

It was finally approved to close it and move it to the Historic WIs file, but it was agreed that it could be brought back to "active" state in the future if work is identified.

Decision: The report is noted

### 9.1.3 Multiple Input Multiple Output antennas (MIMO)

### RP-030012 Status Report for WI "Multiple Input Multiple Output Antenna" (Rapporteur (Lucent))

Said Tatesh (Lucent) presented this report

Han van Bussel (T-Mobile) questioned why MIMO only applies to HSDPA, since it was supposed to be generic. Said explained that historically the work was intended for HSDPA, although when approved the WI Description Sheet was generic, so it is actually not restricted to HSDPA. However, it was also noted that the technology, from a practical perspective, applies to high data rates hence HSDPA.

Said anticipated that WG4 will have to look at the performance aspects. From WG4 perspective, Howard Benn (WG4 chairman) warned that it would take 3 or 4 meetings before WG4 can complete its part of the work. The concept of testing multiple antenna would require considerable effort there.

Decision: The report is noted

#### RP-030148 updated MIMO WI sheet (Lucent)

Said Tatesh (Lucent) presented this WIDS

It was suggested that separate Work Tasks are created for the work in the different WGs, notably in WG4. Serge Willenegger (Qualcomm) commented that UL MIMO is different than the DL MIMO. The MIMO SI was focused on DL only and resulted in the WI for DL MIMO, consequently Qualcomm is not supporting to include UL in the WI.

Nortel required that all the specifications that could be changed are listed in the WIDS

Han van Bussel (T-Mobile) commented that a clear definition of the scope should be agreed in this meeting. At this point, it is unclear if the work covers downlink or uplink also, or if it is intended for HSDPA or it is generic.

Howard Benn (WG4 chairman) reminded of previous situations when WG1 produced work without consulting the other WGs, and system impact hadn't been properly assessed. In this case, there are implications for RRM, for the performance requirements, impact on existing features that need to be examined.

It was agreed that Lucent will present a new WIDS for the building block, identifying the scope and the work to be carried on by the different WGs. Then the WGs will have to look at it and agree on the WIDS for their particular tasks. The list of affected specifications will be in those WIDS, not the top level one.

Decision: The updated WIDS is not approved

### RP-030181 updated SCM TR 25.996 v1.0.0 "Spatial Channel Model for Multiple-Input Multiple-Output Simulations" (Lucent)

Said Tatesh (Lucent) presented this TR

The TR is presented for information here.

Hidetoshi Suzuki (Panasonic) asked where the task of SCM is defined, in 3GPP or 3GPP2. Said clarified that it is within SCM.

Decision: The TR is noted

#### RP-030192 Updated MIMO WI sheets (Lucent)

Said Tatesh (Lucent) presented this WIDS

Han van Bussel (T-Mobile) questioned if the work on WG4 is considered when setting the completion date to September. It was clarified that the WG4 needs 6 additional months, so the WIDS for the RF part will be updated accordingly

It is objected that Iur impacts not considered. This seems to be an editorial error, as Iub and Iur are together in the title of the WI for WG3.

Nokia commented that the statement "significant performance gains with acceptable impact to both UE and UTRAN" is not only dependant on the method proposed and cannot be generalized.

Decision: The 5 WIDSs are approved

### 9.1.4 Improving Receiver Performance Requirements for the FDD UE

### RP-030050 Status Report for WI "Improving Receiver Performance Requirements for the FDD UE" (Rapporteur (Intel))

Howard Benn (WG4 chairman) presented this report

If no contributions are presented, the rapporteur proposes to close the WI at the next RAN meeting. Decision: The report is noted

#### 9.1.5 UMTS 850

#### RP-030163 Status Report for WI "UMTS 850" (Rapporteur (Cingular))

Don Zelmer (Cingular) presented this report

Serge asked for clarification on the split of responsibility between 3GPP and T1P1. Don agreed to make available the T1P1 Nokia document where the Work Plan is described.

Decision: The report is noted

#### RP-030182 Updated UMTS850 WIDS (Cingular)

Don Zelmer (Cingular) presented this report

Three asked to explicitly clarify that the work is not intended for ITU region 1. In general, Three raised serious objections to adding more bands, which will eventually affect the business plan of companies having paid for UMTS licenses in the core bands. Hashem Madadi (Three) requested the chairman to report these concerns to 3GPP PCG. Eisuke Fukuda (vice chairman) reminded that the regulatory issues and the assignment of bands is not a task of 3GPP. Here, 3GPP simply had the request from T1P1 to produce the technical material for using the technology in that band. Howard Benn (WG4 chairman) also supported this view.

On the request to report to PCG, the chairman clarified that the answer there would be the same as in TSG RAN, 3GPP is producing standards and not regulations, furthermore, 3GPP is mandated to comply with the regulatory requirements from the partners, which is the case here. The chairman reminded that, in the particular case of Europe, the Harmonised Standard used is an extract of the 3GPP specifications having removed the bands that are not allocated in Europe.

Qualcomm commented that the action "define requirements for co-existence" allocated to T1P1 (Proposed Work Plan) is not correct, since it is the FCC who defines the requirements in the US. Qualcomm preferred to state it as "provide requirements" instead.

Finally, an agreement was reached off line to remark that the new band applies only to Region 2. This will be brought to the attention of the 3GPP TSG SA and the PCG by the chairman. This will also be true for all new bands incorporated for specific region or countries.

Decision: The WI Description Sheet is revised.

#### RP-030197 Updated UMTS850 WIDS (Cingular)

Francois Courau (chairman) presented this WIDS

The objective has been updated to explicitly indicate that the WI only applies for deployment in ITU Region 2.

Decision: The revised WI Description Sheet is approved.

### 9.2 RAN Improvement Feature

### 9.2.1 Radio access bearer support enhancement

### RP-030006 Status Report for WI "Radio access bearer support enhancement" (Rapporteur)

Antti Toskala (Nokia) presented this report

Rel-5 work is finished, no work has been identified for Rel-6. Antti explained that no work is foreseen. Meik Kottkamp (Siemens) suggested that the work on voice over IP bearers could enter in this WI, so it is useful to keep it open.

### 9.2.2 Improvement of RRM across RNS and RNS/BSS

### RP-030083 Status report for WI 'Improvement of RRM across RNS and RNS/BSS (Post Rel-5)' (RAN WG3)

Sami Kekki (Nokia) presented this report

Sami Kekki is appointed new rapporteur of this WI.

It is agreed to move the completion date to RAN#22

Decision: The report is noted

### 9.2.3 Beamforming enhancement

#### RP-030088 Status Report for WI "Beamforming enhancements" (Rapporteur (Nokia))

Antti Toskala (Nokia) presented this report

Evelyne Le Strat (Nortel) reminded that there is no support in the Iub for the Rel99 beamforming, not to talk about enhancements. She noted also that there are a few questions from WG1 to WG3 that haven't been solved, it seems that the progress in WG3 on this topic is very slow. Antti agreed that the support for the Rel99 beamforming in the NodeB is the highest priority, given that beamforming support is part of Rel99 for UEs. Martin Israelsson (WG3 chairman) explained that many contributions had been presented, but so far companies hadn't been able to reach an agreement.

The section regarding WG4 was clarified, the discussion in WG4 concerned the definition of "cell portion", and the agreement there was that not new performance requirements are needed.

Decision: The report is noted

### 9.2.4 RRM optimizations for lur and lub

The FS on Improved Access to UE Measurement Data for CRNC to support TDD RRM come under this Feature. Apart of that FS, nothing else is included in this basket Feature. No status report is provided.

### 9.3 UE Positioning

### 9.3.1 UE positioning enhancements

No contributions

# 9.3.2 Open interface between the SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods

### RP-030008 Status Report for WI "Open interface between the SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods" (Rapporteur (Siemens))

Meik Kottkamp (Siemens) presented this report

The level of completion is 90%, Meik explained that the pending issues are very minor and suggested to close the WI; the pending issues will be presented at the next RAN as correction CRs. Lucent requested an extension to RAN#22. As a compromise, it is agreed to modify the completion date to RAN#20.

# RP-030084 CRs (Rel-6 only) to TS 25.401, 25.450, 25.452, 25.453 on Open interface between the SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods (RAN WG3)

Meik Kottkamp (Siemens) presented these CRs

The CRs can be approved now, as the pending issues mentioned above do not affect them directly. Decision: The CRs are approved.

- 9.4 High Speed Downlink Packet Access (HSDPA)
- 9.4.1 High Speed Downlink Packet Access (HSDPA) RF Radio
  Transmission/ Reception, System Performance Requirements and
  Conformance Testing

### RP-030096 Status Report for WI "High Speed Downlink Packet Access (HSDPA-RF)" (Rapporteur (Motorola))

Edgar Fernandes (Motorola) presented this report.

There were comments about the need to keep the RRM test/requirements in Rel-5, even if they are identified after June; but it is unclear what the missing RRM test are, since no new test has been proposed to WG4.

It is agreed to move the completion date to June 2003.

Hidetoshi Suzuki (Panasonic) commented upon the maximum power, some work is necessary in WG2 and WG4 on uplink TFC selection when HS-DPCCH is activated. There was a objection that such work is not necessary. After off line discussions, it is agreed that the issue needs to be studied in the concerned groups. Decision: The report is noted

RP-030046 CRs (Rel-5) for WI "High Speed Downlink Packet Access" (FDD UE) (RAN WG4) RP-030047 CRs (Rel-5) for WI "High Speed Downlink Packet Access" (TDD UE) (RAN WG4)

Howard Benn (Motorola) presented these CRs

Decision: The CRs are approved.

- 9.5 Enhancement of broadcast and introduction of Multicast Capabilities in RAN
- 9.5.1 Introduction of the Multimedia Broadcast Multicast Service (MBMS) in RAN

### RP-030143 Status Report for WI "Introduction of the Multimedia Broadcast Multicast Service (MBMS) in RAN" (Rapporteur (Nokia))

Dimitris Koulakiotis (Nokia) presented this report

Giovanni Romano (TIM) reminded of the requirement expressed in last RAN for WG3 to have time in the meeting for the MBMS, which doesn't seem to be fulfilled. Since it seems that there are few meetings in WG2 and WG3 between now and September, and suggested to have a dedicated Ad Hoc meeting.

#### RP-030015 Update of Work Item Description sheet on "Introduction of the Multimedia **Broadcast Multicast Service (MBMS) in RAN" (Nokia)**

Dimitris Koulakiotis (Nokia) presented this report

It is clarified that the outcome of the work item is the stage 2 TS, which is a RAN-only stage 2. After completion of the stage 2 work, the affected specifications for the CRs will be listed.

It was agreed that TR 25.992 will be kept under the only responsibility of WG2.

There was some discussion on the completion date, as the proposed September deadline was believed too ambitious. Three argued that the work in WG3 can advance fast enough, now that no other big WI is under work there. Three also reminded about the bad reputation of 3GPP when setting deadlines, and recommended to make an effort to fulfil this one. Denis Fauconnier (Nortel) agreed to keep the date as is, but reminded that this only shows the expectation, it doesn't mean necessarily that it will be achieved. The WGs will do their best work, but it can't be guaranteed. Finally, it was agreed to keep it in December and eventually review it in June.

Qualcomm suggests that WG1 has secondary responsibility for stage 2 TR. Nokia questions the proposal. Qualcomm clarifies that given the high level issues that impact physical layer UE capability and possibly other physical layer impacts it is important for WG1 to be involved. Three argued against, as this would simply delay the work. Denis argued that if WG1 is included, GERAN WG1 should be also; he reminded that if these groups are added, any change to the TR would have to be approved by them also. It is finally agreed not to add WG1. However, it was reminded that even though prime responsibility is allocated to one WG, this shall not prevent any work in other WGs. Rather the responsible WG shall gather the information of the work progress in any other WG for its report to the plenary. WG chairs are tasked to ensure that this is the case.

It is agreed that the completion date is September 2003, although it is noted that the completion date for the global stage 2 in SA WG2 is September. It is doubtful that the stage 2 and 3 in RAN could be completed if SA WG2 agrees on changes to the architecture in parallel.

Two Ad Hocs are scheduled: 23-24 April joint Ad Hoc with CN, and 24-25 June RAN only.

Decision: The revised WIDS is approved

#### RP-030016 3GPP TR 25.992 v1.3.0: "Multimedia Broadcast/Multicast Service (MBMS); **UTRAN/GERAN requirements'' (Nokia)**

Dimitris Koulakiotis (Nokia) presented this TR

Dimitris gave a brief explanation of the MBMS work as it is now, no comments were raised.

Decision: The document is noted

#### Evolution of the transport in the UTRAN 9.6

#### **IP/ ATM interoperability (Siemens) RP-030179**

Alexander Vesely (Siemens) presented this document

Alexander explained that there is still work to be done under this WI on the field of IP/ATM interworking, and proposed to follow the work being done by ITU-T. Siemens asks RAN to endorse this approach. Sami Kekki (Nokia) noted that there are other solutions for the option 3 under study in WG3, notably Alcatel has presented a solution alternative to the ITU-T approach, and it seems that it is not clear yet in WG3 which is the best solution. It was noted that if RAN is asked to select a proposal, the different options have to be

presented. Finally, it is agreed to bring the discussion back to WG3, TSG RAN doesn't endorse any particular solution.

Decision: The document is noted

Since work is identified under this generic feature, WG3 will have to produce an status report for the next TSG RAN meeting.

### 9.7 Technical Small Enhancements and Improvements

### RP-030048 CRs (Rel-6) for WI "Technical Enhancements and Improvements" (RAN WG4)

Decision: The CRs are approved

Note: Document RP-030048 contains CR201 to 25.101 Rel-6, which effectively generates the Rel-6 version of this specification. It was agreed in TSG RAN meeting #16 to keep CR166 to 25.101 Rel-6 ("FDD UE Performance Requirements", RP-020300) on hold until the Rel-6 version of the specification was created. This is the case now, so CR166 will also be implemented together with CR201.

#### 9.8 Closed Rel-6 Work Items

#### RP-030049 CRs (Rel-6) for WI "FDD BS Classification" (RAN WG4)

Decision: The CRs are approved

#### **RP-030155** TR 25.951 v2.0.0 "FDD BS classification" (RAN WG4)

Antti Toskala (Nokia) presented this TR.

It was commented that the proper procedure is to have the TR presented before the CRs, so TSG RAN can have a view of the work done before approving the actual changes. However, in this particular case, it is reminded that the reason for approving the CRs was the request from ETSI MSG.

Decision: The TR is approved, it will be brought under Change Control as version 6.0.0

### 9.9 Study Items

### 9.9.1 Radio link performance enhancements

RP-030089 Status Report for SI "Radio link performance enhancement" (Rapporteur (Nokia)) Antti Toskala (Nokia) presented this report.

The references to TSG RAN WG1 TRs (or draft of those) were noted to be missing were agreed to be included in the meeting report:

- HSDPA enhancements TR 25.899, the latest version is in R1-030373
- TX diversity TR has not yet allocated Tdoc number for the latest update but is expected to be based on R1-021441 and the text proposal in R1-030333.
- For TR 25.898, proposed (not yet agreed) structure is in R1-030329. No actual methods yet contained in the TR

### 9.9.2 Fast Cell Selection (FCS) for HS-DSCH

#### RP-030154 Status Report for SI "Fast Cell Selection" (Rapporteur (Lucent))

Said Tatesh (Lucent) presented this report.

Lucent recommended to close this SI, TSG RAN agreed with this proposal.

Decision: The report is noted, the SI is closed.

### 9.9.3 UTRA Wideband Distribution System (WDS)

### RP-030013 Status Report for SI "UTRA Wideband Distribution System (WDS)" (Rapporteur (Tekmar))

Carlo Matarasso (Tekmar) presented this report

It was commented that the completion date is a bit too ambitious, it is agreed to postpone it to September 2003.

Decision: The report is noted

### 9.9.4 Viable deployment of UTRA in additional and diverse spectrum arrangements

### RP-030004 Status Report for SI "Feasibility Study considering the viable deployment of UTRA in additional and diverse spectrum arrangements" (Rapporteur (Ericsson))

Thomas Unshelm (Ericsson) presented this report.

The completion date is moved to June.

Decision: The report is noted

### 9.9.5 Improvement of inter-frequency and inter-system measurement for 1.28 Mcps TDD

### RP-030180 Status Report for SI "Improvement of inter-frequency and inter-system measurement for 1.28Mcps TDD" (Rapporteur (Samsung))

Xiaoqiang Li (Samsung) presented this report

The completion date is changed to September 2003.

Decision: The report is noted

### 9.9.6 Enhancements to OTDOA Positioning using advanced blanking methods

### RP-030011 Status Report for SI "FS on Enhancements to OTDOA Positioning using advanced blanking methods" (Rapporteur)

David Bartlett (CPS) presented this report

Decision: The report is noted

### 9.9.7 Analysis of OFDM for UTRAN evolution

### RP-030161 Status Report for SI "Analysis of OFDM for UTRAN evolution" (Rapporteur (Nortel))

Evelyne Le Strat (Nortel) presented this report

The completion date is moved to December 2003.

The chairman reminded that he must report to the PCG on this Study in April, and asked for documentation that he could bring there. Antti Toskala (WG1 chairman) noted that there are a few WG1 TRs, including the one on OFDM, which have been presented with revision marks but haven't been agreed without by WG1. He suggested to proceed with an email approval in WG1 reflector. Once approved by email the report on OFDM will be provided to the chairman for presentation at the PCG.

The chairman clarified that this Study was approved at the PCG, due the different nature of the physical interface studied, and that the PCG had requested to be informed of the progress.

Decision: The report is noted

### 9.9.8 Uplink Enhancements for Dedicated Transport Channels

### RP-030158 Status report for SI "Uplink enhancements for dedicated transport channels" (Rapporteur (Nokia))

Antti Toskala (Nokia) presented this report

It was noted that this file doesn't contain the latest updates agreed in WG1, which contained additional open issues and a different level of completion. Antti agreed to provide the right file.

It is agreed to change the completion date to December 2003.

Decision: The report is revised

### RP-030190 Revised status report for SI "Uplink enhancements for dedicated transport channels" (Rapporteur (Nokia))

Decision: The report is noted

### 9.9.9 Analysis of Higher Chip Rate for UTRA TDD evolution

### RP-030094 Status report for SI "analysis of higher chip rates for UTRA TDD evolution" (Rapporteur (IPWireless))

Martin Beale (IPWireless) presented this report

The completion date is changed to December 2003.

Decision: The report is noted

### RP-030095 TR25.895 v1.0.0 : Analysis of higher chip rates for UTRA TDD evolution (IPWireless)

Martin Beale (IPWireless) presented this TR

Decision: The TR is endorsed

#### 9.9.10 Evolution of UTRAN Architecture

### RP-030085 Status report for SI 'Feasibility Study on the Evolution of UTRAN Architecture' (RAN WG3)

Sami Kekki (Nokia) presented this report

There was some debate on the accuracy of the completion date. It was reminded that the dates have to be taken seriously by the working groups, although the work is contribution driven and some times it is difficult to estimate properly. It has to be considered that the dates and the percentages of completion are input to the 3GPP Work Plan, which is followed and analyzed by organizations out of 3GPP that assume it is an accurate overview of the work. Finally, the completion date is not changed.

Decision: The report is noted

### 9.9.11 Early UE Handling in UTRAN

### RP-030125 LS on Early UE Handling (TSG CN WG1, N1-030201 to RAN WG3, CN WG4, SA WG2, cc TSG RAN, TSG SA, RAN WG2)

CN WG1 clarifies that the information is already available in the CN and the changes to its specifications are minor

### RP-030126 LS response on Early Ue Handling (TSG CN WG4, N4-030220, to TSG RAN, RAN WG3, SA WG5 cc SA WG2, CN WG1)

CN WG4 reminds about the link to the Trace Work Item, and suggest to reuse the mechanisms used for the "Early UE" in the Trace WI. Antti Toskala (Nokia) warned that the Subscriber Trace has different requirements, it would be used for a limited number of UEs and additional information needs to be transferred, so it is unclear that the "Early UE" information element could be used for it.

### RP-030164 LS on early UE handling (TSG SA WG2, S2-031004, to TSG RAN, cc TSG SA, RAN WG2, TSG GERAN, TSG CN, CN WG1, CN WG4, RAN WG3)

SA WG2 asks TSG RAN to take a clear decision on what has to be send in the information element, as the work in SA WG2 cannot progress in the current blocked situation.

Decision: The LSs are noted

### RP-030010 Status Report for the SI "FS for the Early Mobile Handling in UTRAN" (Rapporteur)

Alan Law (Vodafone) presented this report

No comments. Completion date changed to June 2003.

Decision: The report is noted

#### **RP-030003** Early UE Handling (Nokia)

Antti Toskala (Nokia) presented this document

The document raises a number of arguments against considering the Trace WI and the "Early UE" functionality:

- Trace is a function to be used on a few UEs,
- it is still not defined that the IMEI-SV needs to be used for tracing, as other information can be used to identify the UE,
- the WI has not started yet on the RAN side
- Trace is an optional functionality

As a conclusion, Nokia proposes to go for the bitmap solution, but accepting that if this approach doesn't work properly, it is always possible in the future to univocally link IMEISVs to bitmaps.

Decision: The document is noted

#### **RP-030129** Handling of Early Mobiles (Three)

Mony Kochupillai (Three) presented this document.

In this document, Three stresses the importance of taking a decision in this TSG RAN meeting and implementing the solution in Release 99

Decision: The document is noted

#### RP-030150 Early UE - Proposal for UESBI-Iu encoding (Siemens, Qualcomm)

Alexander Vesely (Siemens) presented this document

Siemens proposes to go for the bitmap solution and presents some modifications to the CRs endorsed by WG3

Decision: The document is noted

#### **RP-030170** Handling of Early Mobiles (Ericsson, TIM, TeliaSonera)

Per Beming (Ericsson) presented this document

Ericsson remarks the similarities on the requirements of the Trace functionality and the IMEISV solution and finally proposes to adopt this for the "Early UE".

Antti Toskala (Nokia) questioned Ericsson if the assumption is that operators will have to have the Trace functionality to have the "Early UE" solution. Per explained that it can be had separately or together.

Decision: The document is noted

The LSs, Status Report and company contributions above were presented the first day of the meeting to start the debate, no discussion followed.

On Thursday, after off line discussions, the chairman asked for show of hands on the preferred Iu solution with the following results:

| Companies against the bitmap solution | Around 7  |
|---------------------------------------|-----------|
| Companies against the IMEISV solution | Around 22 |

On Friday, a heated debate took place. No agreement was reached on the solution, but it was agreed to ask SA WG2 to provide the full analysis of the architecture for both solutions, and TSG RAN will take a decision, either via a vote or an agreement, having all the information from SA WG2.

Alexander Vesely (Siemens) commented on the last version of SA WG2 architecture TR, which doesn't seem quite compliant with the way protocols are specified in WG3 and CN groups.

O2 questioned the sense of approving the CRs as they are now (RP-030086), there are references to a part of an specification that does not exit. There was also debate on what CRs could be approved, Ericsson agreed to approve Rel-5 but not lower Releases. It was objected that it seems strange to implement the CRs to correct faults in Early UE in the latest Release available.

It is proposed to have the feature as Release independent, but there was considerable discussion on what Release independent means. Notably, it is explained that it applies easily to UEs, but networks are generally not deployed according to one Release only. Denis Fauconnier (Nortel) explained also that the concept of "Release independent" should be better phrased as "Optional Feature in Rel99", so the question to TSG RAN is whether a new optional feature can be introduced Rel99, which is frozen for a long time. Denis clarified that there are also impacts on the CN with both solutions, and the Releases where the CRs are incorporated should align between CN and RAN.

Ericsson objected Rel99 and Rel-4 CRs to the core specifications, but agreed to have the contents of the CRs in a Release independent TR.

Three, Telefónica, TIM and Orange agreed with the Release independent approach and requested to adopt a solution in this meeting. A proposal favored by many companies was to approve the Rel-5 CR and produce a

Release independent TR, containing all the available technical information, for the next TSG RAN. The TR will include the information for Rel99 and Rel-4

Alan Law (Vodafone) suggested to stop the discussion, since no agreement could be reached on the approval of the CRs, and postpone the decision for another 3 months. In this case, it seems that a vote will be necessary in the next TSG RAN. Denis summarized that two votes might be necessary, one for the contents of the UESBI and other on the Release, but reminded that SA needs to be aware as the CN changes would have to be implemented on the same Release.

#### It is finally agreed:

- To ask SA WG2 to study both possibilities (IMEISV & bitmap) from a Core Network perspective and provide WG3 with the results of the study
- To ask SA WG2 to involve WG3 and CN groups on the discussion
- To task WG3 to produce the necessary CRs for both options for all Releases
- Inform CN and SA of the decision to create Release independent TRs (25.994 & 25.995). WG2 is tasked to provide the first version of these TRs for the next TSG RAN plenary.
- Two votes will take place at next TSG RAN, on the Release and on the technical solution, and a decision shall be taken imperatively

It seemed unclear to have Release independent TRs and at the same time Release dependent CRs. Denis further clarified that the TRs will be updated anytime an error is found, so in practice only the document file for one Release will contain all the errors and values of the UESBI and the document files for the other Releases of the TR will point to it. Since the error list will have to be considered for all Releases equally, this will avoid the administrative burden of updating all the files. The CRs, on the other side, need to be approved to a precise specification and precise Release (one or more).

The chairman will inform TSG SA of the current blocked situation and the required actions from SA WG2.

### RP-030086 CRs (R99 and Rel-4/Rel-5 Category A) for Early UE handling in UTRAN to 'Transfer UESBI over Iu' (RAN WG3)

Decision: The CRs are not approved

### RP-030195 TS 23.195, Version 1.0.0 Provision of UE Specific Behaviour Information to Network Entities (SA WG2)

Document provided for information

### 9.9.12 Improved access to UE measurement data for CRNC to support TDD RRM

### RP-030087 Status report for SI 'Improved access to UE measurement data for CRNC to support TDD RRM' (RAN WG3)

Jim Miller (Interdigital) presented this report

There were some concerns on the possibility to finish the work by June, Jim noted that the work has advanced very fast in the past and similar progress is expected.

### 9.10 New Work Items/Study Items

### RP-030022 Proposal for New Work Item "Remote Control of Electrical Tilting Antennas" (Vodafone)

Volker Hoehn (Vodafone) presented this new WI

Antti Toskala (Nokia) recommended that AISG is not mentioned at all in the WI itself, due to the strange nature of the group but also because other solutions have to be considered also. Antti expressed concern on the completion dates as well.

Donglin Shen (ATT) questioned why limiting the scope of the WI to antenna tilting, there are other devices that might be controlled with a similar interface, for example antenna beams. O2 supported this view, and suggested having a WI with a broader scope. Volker agreed with these considerations, but preferred to keep this WI as is it is now in order to complete the work as soon as possible.

It is clarified that the RAN part of the work is the transport, the definition of the interface takes place in SA WG5.

The WI Description needs to be updated with some comments from Alcatel, also it should be a Work Task and the completion date is moved to December 2003.

### RP-030193 Proposal for New Work Item "Remote Control of Electrical Tilting Antennas" (Vodafone)

Volker Hoehn (Vodafone) presented this revised WIDS

Decision: The WI is approved

### RP-030147 Proposed SI "Optional Low Level Interface for FDD BSs" (Telefonica, Tekmar)

Juan Antonio Moreno (Telefónica) presented this SI Description Sheet

Howard Benn (Motorola) questioned what is the objective of the Study, regarding the current paper it seems that all those items are already covered by WG4 specifications, and noted that the only room for improvement is the extension of the NBAP signaling to cover lower output levels.

Juan Antonio noted that the proposal is a Study, there might be solutions other than the extension of the signaling range that could at least be considered.

Antti Toskala (Nokia) objected defining an interface point that is internal to the NodeB, and reminded of the potential regulatory implications and the responsibility for the conformance of the resulting system.

Carlo Matarasso (Tekmar) noted that it is a matter of fact that operators are studying to connect equipment to the NodeBs that need a low level input, and having a standardized port in 3GPP would simplify their task to meet any regulatory requirements.

Decision: The document is noted

### RP-030194 Status of supporting low level output powers for FDD base stations within the 3GPP RAN specifications today (Motorola)

Howard Benn (Motorola) presented this document

The paper summarizes the actual changes to the specifications required to have a low level in the current antenna port interface.

It was questioned if the understanding of WG4 and WG3 was the same when referring to the antenna port. Howard clarified that all measurements in WG3 refer to the antenna port, and then it is up to the manufacturer's declaration to specify where that port actually is, it could be at the base station or up on the antenna mast if the power amplifier is located there.

Given the amount of changes needed, Evelyne Le Strat (Nortel) noted that a Study Item, or a Work Item, might not be necessary, the CRs could be considered under the TEI6 Item

Juan Antonio Moreno (Telefónica) agreed to produce a new SI description sheet taking into account the considerations raised on this document

Decision: The document is noted

#### RP-030198 Proposed SI "Optional Low Level Interface for FDD BSs" (Telefonica, Tekmar)

Juan Antonio Moreno (Telefónica) presented this SI Description Sheet

Motorola showed concern on the title of the WI, in its view it suggests a new class of BS which is not the case, and proposes an alternate title: "Low Output Powers for general purpose FDD BSs". Telefónica agreed to change the title

Decision: The Study Item is approved

# RP-030156 Proposed WID for Network Assisted Cell Change from UTRAN to GERAN - network aspects (Vodafone)

Alan Law (Vodafone) presented this WI proposal

No comments.

Decision: The WI is approved

### **RP-030191** Proposed WI: Iu enhancements for IMS support in the RAN (Nortel)

Denis Fauconnier (Nortel) presented this WI proposal

Alcatel raised some concerns on creating a WI with a given solution before considering alternatives, and suggested beginning with a study item first. Nokia suggested to consider the SA WG2 work in the cover sheet. RAN WG3 is tasked to review the Work Item Sheet

Decision: The WI is approved

### 9.10.1 New frequency bands

#### RP-030145 DS-CDMA Introduction in the 800 MHz Band (NTT DoCoMo)

Howard Benn (WG4 chairman) presented this WI Description Sheet

Takehiro Nakamura (NTT DoCoMo) clarified that the uplink/downlink bands are proposed in square brackets, but will be clarified by the next WG4 meeting since this will be decided in Japan in April. It was further clarified that the European GSM bands will not be covered.

Serge Willeggener (Qualcomm) commented that WG4 doesn't have the necessary expertise to carry on the required co-existence and evolution studies on some of the technologies mentioned in 4.1. Takaharu Nakamura (Fujitsu) clarified that part of the study will be performed in the Japanese Council. Serge then commented that the scope of the WI, as currently proposed, is unclear on this section.

It is clarified that the proposal is for FDD only, TDD is not considered.

Since the justification for this WI is the new submission for IMT2000, there was some debate on how to consider the other bands being proposed to this meeting (1.7/2.1 GHz). It was agreed to make the submission papers sufficiently open to cover all new possible bands.

The relation to the UMTS850 WI (already approved in December) was also debated. It was suggested to consider the Japanese bands as an addition to the UMTS850, that is, to merge both proposals. It was clarified that the scope of UMTS850 is wider and the timescale substantially different, however it is agreed that they are closely related, and companies are suggested to share efforts for the simulation work.

Decision: The WI is approved, the WIDS needs to be discussed further. A revision is provided in RP-030178

#### **RP-030178** Revised DS-CDMA Introduction in the 800 MHz Band (NTT DoCoMo)

Takaharu Nakamura (Fujitsu) presented this WI Description sheet

Decision: The WI and the Description Sheet are approved

#### RP-030098 UMTS 1.7/2.1 GHz (Cingular LCC, Nokia, Siemens, Ericsson, Nortel)

Jussi Numminen (Nokia) presented this WI Description Sheet

Decision: The WI is approved, the WIDS needs to be discussed further

### RP-030186 UMTS 1.7/2.1 GHz (Cingular LCC, Nokia, Siemens, Ericsson, Nortel)

Jussi Numminen (Nokia) presented this WI Description Sheet

Decision: The revised WI Description Sheet is approved

### 9.10.2 Subscriber and Equipment Trace

### **RP-030166** Proposed Work Item on Subscriber and Equipment Trace (Nortel Networks)

Denis Fauconnier (Nortel) presented this WI proposal

#### **RP-030188** Scope of Rel-6 WI on Trace enhancement (Nokia)

Sami Kekki (Nokia) presented this document

Nokia clarifies that there are two different trace activation methods under discussion, signaling based and Network Management based. Nokia raises a number of concerns on the feasibility of the second method, and proposes to consider only the first method in the WI in RAN.

Vodafone and Nortel argued against, and noted that there is no agreement on those objections and they should be discussed in RAN WG3 on a technical basis.

There was a long debate on the capability of the radio network to support the requirements set by SA WG5. Sami clarified that the network based activation creates a heavy burden in RAN, but the results are the same as the signaling based method, which is actually already implemented in the RAN specifications anyway.

Denis Fauconnier (Nortel) reminded that the task of RAN is to fulfill the requirements of SA WG5, the WI scope simply refers to those requirements, and since both options are considered there, RAN has to study them. Eventually, if the analysis at one of the RAN WGs shows that the Management Activated method is not feasible, an LS would be sent to SA WG5 requesting to change their requirements.

Discussion followed off line, but no agreement could be reached. Nokia proposed to agree the WI with the scope for the signaling option only, and to task WG3 to study both and eventually modify the Description Sheet to include the Management activated method if it is deemed necessary. Nokia recommends to report to SA that RAN couldn't agree that the two options are necessary.

These terms were not agreed by the proponents of the WI, it was concluded that a vote might be necessary in the next TSG RAN to decide on the WI Description Sheet. It was noted however that nothing stops WG3 to treat documents on the issue, provided that the work on the approved WIs is covered.

Decision: The WI proposal in RP-030166 is not approved

### 10. Technical co-ordination among WGs

# 10.1 Review of status on action points allocated during the previous meeting

See appropriate section 8.x for each WG

### 10.2 Other needs

No discussions

### 11 Outputs to other groups

RP-030184 Answer LS on the Antenna Interface Standards Group (AISG) (Vodafone)

It is agreed to task WG4 to review (with the support from WG3) and send, if agreed, the LS to AISG. Decision: The LS is withdrawn

### 12 Project management

RP-030199 Review of the 3GPP Work Plan (3GPP Support)

RP-030200 3GPP Work Plan (3GPP Support)

Alain Sultan (3GPP Support) presented the Work Plan

Discussion on the completion date of the MBMS WI, see agenda item 9.5

On the "Early UE" work, the chairman clarified that the proposal is to have a Release independent feature. Serge Willegener (Qualcomm) questioned what is the status of a feature if part of it is finished on the CN side and not finished in RAN, being the work independent on the groups, would they be split in two different features? It was commented that this is an SA decision.

The chairman reminded of the importance of setting completion dates as accurate as possible, the expected freezing time of a Release is based on these forecasts.

Three expressed preference for the December 2003 date for freezing of Rel-6.

Eisuke Fukuda (vice chairman) questioned how the contents of Rel-6 could be used for the update of ITU recommendation M.1457 if the freezing takes place in March 2004. The chairman clarified that it is very difficult to correlate the updates for ITU with the 3GPP Releases, and as a matter of fact it happens rarely. The chairman noted that 3GPP has committed to produce yearly updates, regardless of the dates of the Releases.

Per summarized that, from a RAN perspective, the only comment that can be made to the freezing date is that the earliest possible would be December 2003.

Antti Toskala (Nokia) noted that creating WI for Testing linked to RAN WI shouldn't be done automatically, since it may happen that the RAN WI is deleted but Testing activity is left forgotten in the Work Plan leading to an erroneous indication of the Testing work left.

RP-030152 CRs to lists of specs, frozen Releases (3GPP Support)
RP-030153 Specs status list prior to TSGs#19 (3GPP Support)

RP-030189 Specifications not yet under change control, but pertaining to frozen Releases (3GPP Support)

John Meredith (3GPP Support) presented this documents

It is agreed that 25.993 is stopped, and clarified that 25.951 is Rel-6.

### 13 Any other business

No discussions.

### 14 Close of the meeting

The chairman closed the meeting on Friday 14<sup>th</sup> at 13:00. He thanked the hosts for the facility and support provided. He also thanked the hosts for the invitation on the Wednesday evening that reminded him of the good old days when he was able to eat those marvellous fish and ships but he felt a bit disappointed due to the fact that it was not provided wrapped in a newspaper. He thanked the retiring working groups chairs for their active support during the last few years and wished them good luck for their future life of retired chairmen.

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|------------------------|--------------------------------|---------|---------|-------------------------------|----------------------|-------------------|
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## Annex B: List of documents

See main body of the report for clarification on documents partially approved or approved with a note xx).

| Tdoc      | Title   | Source                  | Decision       |
|-----------|---|-------------------------|----------------|
| RP-030001 | Proposed agenda   | Chairman                | Revised in 5   |
| RP-030002 | Revised Draft Report of the 18th TSG-RAN meeting (New Orleans, US, 3 - 6 December, 2002)                                  | 3GPP Support            | Approved       |
| RP-030003 | Early UE Handling   | Nokia                   | Noted          |
| RP-030004 | Status Report for SI "Feasibility Study considering the viable deployment of UTRA in additional                           | Rapporteur              | Noted          |
|           | and diverse spectrum arrangements"  | (Ericsson)              |                |
| RP-030005 | Revised proposed agenda   | Chairman                | Approved       |
| RP-030006 | Status Report for WI "Radio access bearer support enhancement"  | Rapporteur              | Noted          |
| RP-030007 | Status Report for WI "Terminal power saving features"   | Rapporteur              | Noted          |
| RP-030008 | Status Report for WI "Open interface between the SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods" | Rapporteur (Siemens)    | Noted          |
| RP-030009 | Status Report for WI "Introduction of the Multimedia Broadcast Multicast Service (MBMS) in RAN"                           | Rapporteur              | Revised in 143 |
| RP-030010 | Status Report for the SI "FS for the Early Mobile Handling in UTRAN"  | Rapporteur              | Noted          |
| RP-030011 | Status Report for SI "FS on Enhancements to OTDOA Positioning using advanced blanking methods"                            | Rapporteur              | Noted          |
| RP-030012 | Status Report for WI "Multiple Input Multiple Output Antenna"   | Rapporteur (Lucent)     | Noted          |
| RP-030013 | Status Report for SI "UTRA Wideband Distribution System (WDS)"  | Rapporteur<br>(Tekmar)  | Noted          |
| RP-030014 | Status Report for SI "Improvement of inter-frequency and inter-system measurement for 1.28Mcps TDD"                       | Rapporteur<br>(Samsung) | Revised in 180 |
| RP-030015 | Update of Work Item Description sheet on "Introduction of the Multimedia Broadcast Multicast Service (MBMS) in RAN"       | Nokia                   | Approved       |
| RP-030016 | 3GPP TR 25.992 v1.3.0: "Multimedia Broadcast/Multicast Service (MBMS); UTRAN/GERAN requirements"                          | Nokia                   | Noted          |
| RP-030017 | Correction of UTRAN SIR measurement definition, CR 25.215-135r4 (R99), CR 25.215-136r2 (Rel-4), CR 25.215-133r3 (Rel-5)   | Ericsson, Nortel        | Approved       |
| RP-030018 | Status Report WG2   | RAN WG2<br>Chairman     | Revised in 173 |
| RP-030019 | List of agreed CRs from WG2   | RAN WG2                 | Noted          |
| RP-030020 | Emission limits proposed by CISPR for ITE above 1 GHz   | Nokia                   | Noted          |
| RP-030021 | Draft LS on the CISPR limits for ITE over 1GHz  | Nokia                   | Not approved   |
| RP-030022 | Proposal for New Work Item "Remote Control of Electrical Tilting Antennas"  | Vodafone                | Revised in 193 |
| RP-030023 | Status Report WG4   | RAN WG4<br>Chairman     | Noted          |

| Tdoc      | Title  | Source     | Decision      |
|-----------|--|------------|---------------|
| RP-030024 | List of agreed CRs from WG4  | RAN WG4    | Noted         |
|           |  | Chairman   |               |
| RP-030025 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.101   | RAN WG4    | Approved      |
| RP-030026 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.123   | RAN WG4    | Approved      |
| RP-030027 | CRs (R'99 and Rel-4/Rel-5/Rel-6 Category A) to TS 25.133                                     | RAN WG4    | Approved      |
| RP-030028 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.142   | RAN WG4    | Approved      |
| RP-030029 | CRs (R'99 and Rel-4/Rel-5/Rel-6 Category A) to TS 25.104 & TS 25.141 on "Protection of FDD   | RAN WG4    | Approved      |
|           | BS receiver"   |            |               |
| RP-030030 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.105 & TS 25.142 on "TDD - GSM co-existence    | RAN WG4    | Approved      |
|           | in the same geographic area"   |            |               |
| RP-030031 | CRs (R'99 and Rel-4/Rel-5/Rel-6 Category A) to TS 25.133 on "Correction of UE parameters for | RAN WG4    | Approved      |
|           | Random Access test" (Linked to CR239 to TS34.121 in TP-030045)                               |            |               |
| RP-030032 | CRs (Rel-4 and Rel-5 Category A) to TS 25.101  | RAN WG4    | Approved      |
| RP-030033 | CRs (Rel-4 and Rel-5 Category A) to TS 25.123  | RAN WG4    | Approved      |
| RP-030034 | CRs (Rel-4 and Rel-5/Rel-6 Category A) to TS 25.133  | RAN WG4    | Approved      |
| RP-030035 | CRs (Rel-4 and Rel-5/Rel-6 Category A) to TS 25.104 & TS 25.141 on "Correction to external   | RAN WG4    | Approved      |
|           | equipment definition"  |            |               |
| RP-030036 | CRs (Rel-4 and Rel-5 Category A) to TS 25.106 & TS 25.143 (Repeaters specifications) on      | RAN WG4    | Approved      |
|           | "FDD - GSM co-existence in the same geographic area"   |            |               |
| RP-030037 | CRs (Rel-5) to TS 25.101   | RAN WG4    | Approved      |
| RP-030038 | CR (Rel-5) to TS 25.102  | RAN WG4    | Approved      |
| RP-030039 | CR (Rel-5) to TS 25.113  | RAN WG4    | Approved      |
| RP-030040 | CRs (Rel-5) to TS 25.133   | RAN WG4    | Approved      |
| RP-030041 | CRs (Rel-5 and Rel-6 Category A) to TS 25.141  | RAN WG4    | Approved      |
| RP-030042 | CRs (Rel-5) to TS 25.142   | RAN WG4    | Approved      |
| RP-030043 | CR (Rel-5) to TS 34.124  | RAN WG4    | Withdrawn 8)  |
| RP-030044 | CRs (Rel-5 and Rel-6 Category A) to TS 25.104 & TS 25.141 on "Clarification of the WCDMA     | RAN WG4    | Approved 9)   |
|           | interferer definition for ACS and blocking requirements and tests"                           |            |               |
| RP-030045 | CRs (Rel-5) to TS 25.105, TS 25.142 & TR 25.952 on "The definition of UTRA TDD BS classes"   | RAN WG4    | Approved      |
| RP-030046 | CRs (Rel-5) for WI "High Speed Downlink Packet Access" (FDD UE)                              | RAN WG4    | Approved      |
| RP-030047 | CRs (Rel-5) for WI "High Speed Downlink Packet Access" (TDD UE)                              | RAN WG4    | Approved      |
| RP-030048 | CRs (Rel-6) for WI "Technical Enhancements and Improvements"                                 | RAN WG4    | Approved      |
| RP-030049 | CRs (Rel-6) for WI "FDD BS Classification"   | RAN WG4    | Approved      |
| RP-030050 | Status Report for WI "Improving Receiver Performance Requirements for the FDD UE"            | Rapporteur | Noted         |
|           |  | (Intel)    |               |
| RP-030051 | Status Report for SI "Analysis of OFDM for UTRAN evolution"                                  | Rapporteur | Revised in 16 |
|           |  | (Nortel)   |               |
| RP-030052 | Status report WG3  | RAN WG3    | Noted         |
|           |  | Chairman   |               |
| RP-030053 | List of agreed/technically correct CRs from WG3  | RAN WG3    | Noted         |

| Tdoc      | Title   | Source  | Decision       |
|-----------|---|---------|----------------|
| RP-030054 | CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.414 on TCP Port Number  | RAN WG3 | Approved       |
| RP-030055 | CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.423 on Support of Cell Individual Offset in RNSAP   | RAN WG3 | Revised 5)     |
| RP-030056 | CRs (Rel-4 and Rel-5 Category A) to TS 25.413   | RAN WG3 | Approved       |
| RP-030057 | CRs (Rel-4 and Rel-5 Category A) to TS 25.419 on Correction of Write and Replace functions  | RAN WG3 | Approved       |
| RP-030058 | CRs (Rel-4 and Rel-5 Category A) to TS 25.423   | RAN WG3 | Approved       |
| RP-030059 | CRs (Rel-4 and Rel-5 Category A) to TS 25.433 on Correction of PRACH Midamble for 1.28Mcps TDD  | RAN WG3 | Approved       |
| RP-030060 | CRs (Rel-5 only) to 25.413  | RAN WG3 | Approved       |
| RP-030061 | CR (Rel-5 only) to 25.414 on Minor cleanup of 25.414  | RAN WG3 | Approved       |
| RP-030062 | CRs (Rel-5 only) to 25.423  | RAN WG3 | Approved       |
| RP-030063 | CR (Rel-5 only) to 25.433 on HS-PDSCH Code and Timeslot Resource Assignment for TDD   | RAN WG3 | Approved       |
| RP-030064 | CR (Rel-5 only) to 25.435 on S-CCPCH power setting in case of no data transmission  | RAN WG3 | Not approved 6 |
| RP-030065 | CRs (Rel-5 only) to 25.453  | RAN WG3 | Approved       |
| RP-030066 | CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.423 and 25.433 on Corrections to DCH Combining in RL SETUP and RL ADDITION                      | RAN WG3 | Approved       |
| RP-030067 | CRs (Rel-4 and Rel-5 Category A) to TS 25.413, 25.423 and 25.453 (only Rel-5) on Alignment of "Uncertainty Ellipse" with RRC                  | RAN WG3 | Approved       |
| RP-030068 | CRs (Rel-4 and Rel-5 Category A) to TS 25.423 and 25.433 on Clarification to DL Power definition for TDD                                      | RAN WG3 | Approved       |
| RP-030069 | CRs (Rel-4 and Rel-5 Category A) to TS 25.423 and 25.433 on Clarification to 2nd Interleaving Mode for TDD                                    | RAN WG3 | Approved       |
| RP-030070 | CRs (Rel-4 and Rel-5 Category A) to TS 25.423, 25.433 and 25.453 (Rel-5 only) on Correction for the Information Exchange Initiation procedure | RAN WG3 | Approved       |
| RP-030071 | CRs (Rel-4 and Rel-5 Category A) to TS 25.423 and 25.433 on Midamble Configuration for Midamble Shift LCR                                     | RAN WG3 | Approved       |
| RP-030072 | CRs (Rel-4 and Rel-5 Category A) to TS 25.423 and 25.433 on TPC Step Size for TDD   | RAN WG3 | Approved       |
| RP-030073 | CR (Rel-5 only) to TS 25.423 and 25.433 on Clarification of HS-SCCH power offset usage in case of multiple HS-SCCHs                           | RAN WG3 | Approved       |
| RP-030074 | CR (Rel-5 only) to TS 25.423 and 25.433 on T1 signalling for HSDPA  | RAN WG3 | Approved       |
| RP-030075 | CR (Rel-5 only) to TS 25.425 and 25.435 on Clarification for the flow control   | RAN WG3 | Approved       |
| RP-030076 | CR (Rel-5 only) to TS 25.423 and 25.433 on Guaranteed Bit Rate for HSDPA  | RAN WG3 | Approved       |
| RP-030077 | CR (Rel-5 only) to TS 25.423 and 25.433 on Correction to DL Tx Power for TDD  | RAN WG3 | Approved       |
| RP-030078 | CR (Rel-5 only) to TS 25.423 and 25.433 on HS-PDSCH Corrections for TDD   | RAN WG3 | Approved       |
| RP-030079 | CRs (R99 and Rel-4/Rel-5 Category A) to TS 29.108 linked to CN1 on Corrections to the list of RANAP messages transferred on the E-interface   | RAN WG3 | Approved 7)    |
| RP-030080 | CR (Rel-5 only) to TS 25.423 and 25.433 linked to RAN1 (25.225) on Measurement for HS-SICH Outer Loop Power Control                           | RAN WG3 | Approved       |
| RP-030081 | CR (Rel-5 only) to TS 25.433 linked to RAN1 (25.215) on HS-DSCH: addition of non-HS-DSCH power measurement                                    | RAN WG3 | Approved       |

| Tdoc      | Title   | Source  | Decision       |
|-----------|---|---|----------------|
| RP-030082 | CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.423 and 25.433 linked to RAN2 (25.331) on Corrections to Channelisation Code TFCI Mapping for TDD   | RAN WG3   | Approved       |
| RP-030083 | Status report for WI 'Improvement of RRM across RNS and RNS/BSS (Post Rel-5)'   | RAN WG3   | Noted          |
| RP-030084 | CRs (Rel-6 only) to TS 25.401, 25.450, 25.452, 25.453 on Open interface between the SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods   | RAN WG3   | Approved       |
| RP-030085 | Status report for SI 'Feasibility Study on the Evolution of UTRAN Architecture'   | RAN WG3   | Noted          |
| RP-030086 | CRs (R99 and Rel-4/Rel-5 Category A) for Early UE handling in UTRAN to 'Transfer UESBI over lu'   | RAN WG3   | Rejected       |
| RP-030087 | Status report for SI 'Improved access to UE measurement data for CRNC to support TDD RRM'   | RAN WG3   | Noted          |
| RP-030088 | Status Report for WI "Beamforming enhancements"   | Rapporteur<br>(Nokia)                                   | Noted          |
| RP-030089 | Status Report for SI "Radio link performance enhancement"   | Rapporteur<br>(Nokia)                                   | Noted          |
| RP-030090 | Status Report, RAN ITU-R Ad Hoc   | ITU-R Ad Hoc<br>Contact Person                          | Noted          |
| RP-030091 | Proposed Initial submission for updated UTRA FDD and TDD toward Rev. 4 of Rec. ITU-R M.1457   | ITU-R Ad Hoc  | Revised in 174 |
| RP-030092 | Proposed response to ITU-R WP8F on coexistence Between IMT-2000 TDD and FDD Radio Interface Technologies Within the Frequency Range 2 500-2 690 MHz Operating in Adjacent Bands and in the Same Geographical Area | ITU-R Ad Hoc  | Approved       |
| RP-030093 | Proposed updated information on the Roadmap   | ITU-R Ad Hoc  | Revised in 175 |
| RP-030094 | Status report for SI "analysis of higher chip rates for UTRA TDD evolution"   | Rapporteur (IPWireless)                                 | Noted          |
| RP-030095 | TR25.895 v1.0.0 : Analysis of higher chip rates for UTRA TDD evolution  | IPWireless  | Noted          |
| RP-030096 | Status Report for WI "High Speed Downlink Packet Access (HSDPA-RF)"   | Rapporteur<br>(Motorola)                                | Noted          |
| RP-030097 | Layer 3 filtering definition  | Nokia et al   | Noted          |
| RP-030098 | UMTS 1.7/2.1 GHz  | Cingular LCC,<br>Nokia,<br>Siemens,<br>Ericsson, Nortel | Revised in 186 |
| RP-030099 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.306  | RAN WG2   | withdrawn      |
| RP-030100 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.321  | RAN WG2   | Approved       |
| RP-030101 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.322  | RAN WG2   | Approved       |
| RP-030102 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.324  | RAN WG2   | Approved       |
| RP-030103 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.331 (1)  | RAN WG2   | Approved       |
| RP-030104 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.331 (2)  | RAN WG2   | Approved       |
| RP-030105 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.331 (3)  | RAN WG2   | Approved       |
| RP-030106 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.331 (4)  | RAN WG2   | Approved       |
| RP-030107 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.331 on the mandatory reading of SIB11/12 before RACH access  | RAN WG2   | Withdrawn      |

| Tdoc      | Title   | Source              | Decision        |
|-----------|---|---------------------|-----------------|
| RP-030108 | CRs (R'99 and Rel-4/Rel-5 Category A) to TS 34.109  | RAN WG2             | Revised 2)      |
| RP-030109 | CRs to TR 25.993 Version 6.0.0 also affecting earlier releases  | RAN WG2             | Approved        |
| RP-030110 | CRs (Rel-4 and Rel-5 Category A) to TS 25.305   | RAN WG2             | Approved        |
| RP-030111 | CRs (Rel-4 and Rel-5 Category A) to TS 25.331   | RAN WG2             | Approved        |
| RP-030112 | CRs (Rel-5) to TS 25.302  | RAN WG2             | Approved        |
| RP-030113 | CRs (Rel-5) to TS 25.306  | RAN WG2             | Approved        |
| RP-030114 | CRs (Rel-5) to TS 25.308  | RAN WG2             | Approved        |
| RP-030115 | CRs (Rel-5) to TS 25.321  | RAN WG2             | Approved        |
| RP-030116 | CRs (Rel-5) to TS 25.322  | RAN WG2             | Approved        |
| RP-030117 | CRs (Rel-5) to TS 25.331  | RAN WG2             | Approved        |
| RP-030118 | Linked CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.306, TS 25.331 and TS 25.101 on variable Tx/Rx frequency separation in 1800 and 1900 band | RAN WG2             | Not approved 3) |
| RP-030119 | Linked CRs (Rel-5) to TS 25.331 and TS 25.423 on HS-DSCH midamble shifts and burst types  | RAN WG2             | Approved        |
| RP-030120 | CR (Rel-5) to 25.331 on Group release (without security)  | RAN WG2             | Approved 4)     |
| RP-030121 | LS on comments to DTR/MTS 0082, UMTS Network Integration Testing Methodology and TSS&TP   | TSG SA              | Noted           |
| RP-030122 | LS on Antenna Interface Standards Group (AISG)  | RAN WG4             | Noted           |
| RP-030123 | Reply to LS on requirement to test non-transmission of newly defined IEs in RRC protocol for Early UE handling                                  | TSG T WG1           | Noted           |
| RP-030124 | LS on LCS architecture descriptions for TS23.002 update   | TSG GERAN           | Noted           |
| RP-030125 | LS on Early UE Handling   | TSG CN WG1          | Noted           |
| RP-030126 | LS response on Early Ue Handling  | TSG CN WG4          | Noted           |
| RP-030127 | LS on Radio Access Bearer for PS conversational testing   | TSG SA WG4          | Noted           |
| RP-030128 | Revised draft Report of of the "Early UE" Ad Hoc meeting (Sophia Antipolis, France 29 – 30 January 2003)  | 3GPP Support        | Approved        |
| RP-030129 | Handling of Early Mobiles   | Three               | Noted           |
| RP-030130 | Status Report WG1   | RAN WG1<br>Chairman | Noted           |
| RP-030131 | Supplement (List of agreed CRs) to Report from WG1 chairman to TSG-RAN  | RAN WG1             | Noted           |
| RP-030132 | CRs (R'99 and Rel-4/Rel-5 category A) to TS 25.214  | RAN WG1             | Approved        |
| RP-030133 | CRs (R'el-4 and Rel-5 category A) to TS 25.224  | RAN WG1             | Approved        |
| RP-030134 | CRs (Rel-5) to TS 25.212  | RAN WG1             | Approved        |
| RP-030135 | CRs (Rel-5) to TS 25.213  | RAN WG1             | Approved        |
| RP-030136 | CRs (Rel-5) to TS 25.214  | RAN WG1             | Approved        |
| RP-030137 | CRs (Rel-5) to TS 25.215  | RAN WG1             | Withdrawn 1)    |
| RP-030138 | CRs (Rel-5) to TS 25.221  | RAN WG1             | Approved        |
| RP-030139 | CRs (Rel-5) to TS 25.222  | RAN WG1             | Approved        |
| RP-030140 | CRs (Rel-5) to TS 25.223  | RAN WG1             | Approved        |
| RP-030141 | CRs (Rel-5) to TS 25.224  | RAN WG1             | Approved        |
| RP-030142 | CRs (Rel-5) to TS 25.225  | RAN WG1             | Withdrawn 1)    |

| Tdoc      | Title  | Source                   | Decision       |
|-----------|--|--------------------------|----------------|
| RP-030143 | Status Report for WI "Introduction of the Multimedia Broadcast Multicast Service (MBMS) in RAN"                                | Rapporteur<br>(Nokia)    | Noted          |
| RP-030144 | CRs (R'99 and Rel-4/Rel-5 category A) to TS 34.124 on "Correction to radiated spurious emission measurement bandwidth"         | Ericsson                 | Approved       |
| RP-030145 | DS-CDMA Introduction in the 800 MHz Band   | NTT DoCoMo               | Revised in 178 |
| RP-030146 | Proposed CRs (1904, 1905 and 1906 to Rel99, Rel-4 & Rel-5) to 25.331R99 on Correction on GPS navigation model update mechanism | Motorola, Nokia          | Withdrawn      |
| RP-030147 | Proposed SI "Optional Low Level Interface for FDD BSs"   | Telefonica,<br>Tekmar    | Revised in 198 |
| RP-030148 | updated MIMO WI sheet  | Lucent                   | Revised in 192 |
| RP-030149 | updated SCM TR 25.996 v6.0.0 "Spatial Channel Model for Multiple-Input Multiple-Output Simulations"                            | Lucent                   | Revised in 181 |
| RP-030150 | Early UE - Proposal for UESBI-Iu encoding  | Siemens,<br>Qualcomm     | Noted          |
| RP-030151 | Status Report for WI "Improvement of inter-frequency and inter-system measurements"  | Rapporteur<br>(Nokia)    | Noted          |
| RP-030152 | CRs to lists of specs, frozen Releases   | 3GPP Support             | Noted          |
| RP-030153 | Specs status list prior to TSGs#19   | 3GPP Support             | Noted          |
| RP-030154 | Status Report for SI "Fast Cell Selection"   | Rapporteur (Lucent)      | Noted          |
| RP-030155 | TR 25.951 v2.0.0 "FDD BS classification"   | RAN WG4                  | Approved       |
| RP-030156 | Proposed WID for Network Assisted Cell Change from UTRAN to GERAN - network aspects  | Vodafone                 | Approved       |
| RP-030157 | Work Item and Study Item Description Sheets  | 3GPP Support             | Noted          |
| RP-030158 | Status report for SI "Uplink enhancements for dedicated transport channels"  | Rapporteur<br>(Nokia)    | Revised in 190 |
| RP-030159 | Definition of TFCI transmit power on S-CCPCH in case of no data  | Ericsson, NTT<br>DoCoMo  | Noted          |
| RP-030160 | Revised CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.423 on Support of Cell Individual Offset in RNSAP                        | Ericsson                 | Revised in 168 |
| RP-030161 | Status Report for SI "Analysis of OFDM for UTRAN evolution"  | Rapporteur (Nortel)      | Noted          |
| RP-030162 | Revision of CRs 023, 024, 025 to 34.109 in RP-030108   | Panasonic                | Approved       |
| RP-030163 | Status Report for WI "UMTS 850"  | Rapporteur<br>(Cingular) | Noted          |
| RP-030164 | LS on early UE handling  | TSG SA WG2               | Noted          |
| RP-030165 | L3 Filtering   | Qualcomm                 | Noted          |
| RP-030166 | Proposed Work Item on Subscriber and Equipment Trace   | Nortel Networks          | Not approved   |
| RP-030167 | Revision of CRs 207, 208, 209 to 25.101 on "Variable Tx/Rx frequency separation"   | Ericsson                 | Rejected       |
| RP-030168 | Revised CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.423 on Support of Cell Individual Offset in RNSAP                        | Ericsson                 | Revised in 183 |

| Tdoc      | Title   | Source  | Decision       |
|-----------|---|---|----------------|
| RP-030169 | Candidatures for TSG RAN elections  | 3GPP Support  | Noted          |
| RP-030170 | Handling of Early Mobiles   | Ericsson, TIM,<br>TeliaSonera                           | Noted          |
| RP-030171 | Cell Identification Requirements  | NEC   | Noted          |
| RP-030172 | Background information of L3 filtering simulation results   | Nokia   | Noted          |
| RP-030173 | WG2 Status Report (Revised)   | WG2 Chairman  | Noted          |
| RP-030174 | Proposed Initial submission for updated UTRA FDD and TDD toward Rev. 4 of Rec. ITU-R M.1457                 | ITU-R Ad Hoc  | Revised in 176 |
| RP-030175 | Proposed updated information on the Roadmap   | ITU-R Ad Hoc  | Revised in 177 |
| RP-030176 | Proposed Initial submission for updated UTRA FDD and TDD toward Rev. 4 of Rec. ITU-R M.1457                 | TSG RAN   | Approved       |
| RP-030177 | Proposed updated information on the Roadmap   | TSG RAN   | Approved       |
| RP-030178 | DS-CDMA Introduction in the 800 MHz Band  | NTT DoCoMo  | Approved       |
| RP-030179 | IP/ ATM interoperability  | Siemens   | Noted          |
| RP-030180 | Status Report for SI "Improvement of inter-frequency and inter-system measurement for 1.28Mcps TDD"         | Rapporteur (Samsung)                                    | Noted          |
| RP-030181 | updated SCM TR 25.996 v1.0.0 "Spatial Channel Model for Multiple-Input Multiple-Output Simulations"         | Lucent  | Noted          |
| RP-030182 | Updated UMTS850 WIDS  | Cingular  | Revised in 197 |
| RP-030183 | Revised CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.423 on Support of Cell Individual Offset in RNSAP     | Ericsson  | Approved       |
| RP-030184 | Answer LS on the Antenna Interface Standards Group (AISG)   | Vodafone  | Withdrawn      |
| RP-030185 | Definition of TFCI transmit power of S-CCPCH in case of no data   | Alcatel   | Withdrawn      |
| RP-030186 | UMTS 1.7/2.1 GHz  | Cingular LCC,<br>Nokia,<br>Siemens,<br>Ericsson, Nortel | Approved       |
| RP-030187 | Proposed CRs to 25.331R99 on Correction on GPS navigation model update mechanism                            | Nokia   | Approved       |
| RP-030188 | Scope of Rel-6 WI on Trace enhancement  | Nokia   | Revised in 189 |
| RP-030189 | Specifications not yet under change control, but pertaining to frozen Releases                              | 3GPP Support  | Noted          |
| RP-030190 | Status report for SI "Uplink enhancements for dedicated transport channels"                                 | Rapporteur<br>(Nokia)                                   | Noted          |
| RP-030191 | Proposed WI: Iu enhancements for IMS support in the RAN   | Nortel  | Approved       |
| RP-030192 | updated MIMO WI sheet   | Lucent  | Approved       |
| RP-030193 | Proposal for New Work Item "Remote Control of Electrical Tilting Antennas"                                  | Vodafone  | Approved       |
| RP-030194 | Status of supporting low level output powers for FDD base stations within the 3GPP RAN specifications today | Motorola  | Noted          |
| RP-030195 | TS 23.195, Version 1.0.0 Provision of UE Specific Behaviour Information to Network Entities                 | SA WG2  | Noted          |
| RP-030196 | Layer 3 filtering definition (Rel-5 CR to 25.133)   | Nokia et al   | Withdrawn      |
| RP-030197 | Updated UMTS850 WIDS  | Cingular  | Approved       |

| Tdoc      | Title  | Source       | Decision |
|-----------|--|--------------|----------|
| RP-030198 | Proposed SI "Optional Low Level Interface for FDD BSs" | Telefonica,  | Approved |
|           |  | Tekmar       |          |
| RP-030199 | Review of the 3GPP Work Plan                           | 3GPP Support | Noted    |
| RP-030200 | 3GPP Work Plan   | 3GPP Support | Noted    |
| RP-030201 | Layer 3 filtering definition (Rel-5 CR1910 to 25.331)  | Nokia et al  | Approved |

# Annex C: List of CRs presented at TSG RAN #19

The table below lists all the CRs presented at RAN#18, regardless of their final status.

| Spec   | CR  | R | Phase | Cat | TSG RAN   | WG         | TSG RAN  | Subject  | CR to   | Resulting | WG | Workitem   |
|--------|-----|---|-------|-----|-----------|------------|----------|--|---------|-----------|----|------------|
|        |     |   |       |     | document  | document   | status   |  | version | version   |    |            |
| 25.212 | 165 | 1 | Rel-5 | F   | RP-030134 | R1-030294  | approved | Correction of CQI index to bit mapping                       | 5.3.0   | 5.4.0     | R1 | HSDPA-Phys |
| 25.212 | 166 | 3 | Rel-5 | F   | RP-030134 | R1-030340  | approved | Correction of bit scrambling of HS-DSCH                      | 5.3.0   | 5.4.0     | R1 | HSDPA-Phys |
| 25.212 | 168 | - | Rel-5 | F   | RP-030134 | R1-030240  | approved | Correction of subscript for modulation scheme                | 5.3.0   | 5.4.0     | R1 | HSDPA-Phys |
|        |     |   |       |     |           |            |          | information  |         |           |    | _          |
| 25.213 | 061 | 1 | Rel-5 | F   | RP-030135 | R1-030237  | approved | Removal of the tiny text in Figure 1 and minor corrections   | 5.2.0   | 5.3.0     | R1 | HSDPA-Phys |
|        |     |   |       |     |           |            |          | to 4.2.1   |         |           |    |            |
| 25.214 | 299 | 5 | Rel-5 | F   | RP-030136 | R1-030255  | approved | CQI reporting with TxD                                       | 5.3.0   | 5.4.0     | R1 | HSDPA-Phys |
| 25.214 | 313 | 1 | Rel-5 | F   | RP-030136 | R1-030355  | approved | On closed loop transmit diversity mode 1 verification        | 5.3.0   | 5.4.0     | R1 | TEI-5      |
|        |     |   |       |     |           |            |          | algorithm  |         |           |    |            |
| 25.214 | 315 | 2 | Rel-5 | F   | RP-030136 | R1-030371  | approved | Clarification of SSDT and HSDPA                              | 5.3.0   | 5.4.0     | R1 | HSDPA-Phys |
| 25.214 | 316 | - | R99   | F   | RP-030132 | R1-030356  | approved | Correction on verification algorithm in Annex 1              | 3.11.0  | 3.12.0    | R1 |            |
| 25.214 | 317 | - | Rel-4 | Α   | RP-030132 | R1-030356  | approved | Correction on verification algorithm in Annex 1              | 4.5.0   | 4.6.0     | R1 |            |
| 25.214 | 318 | - | Rel-5 | Α   | RP-030132 | R1-030356  | approved | Correction on verification algorithm in Annex 1              | 5.3.0   | 5.4.0     | R1 |            |
| 25.215 | 133 | 3 | Rel-5 | Α   | RP-030017 |            | approved | Correction of UTRAN SIR measurement definition               | 5.2.0   |           | R1 | -          |
| 25.221 | 109 | 3 | Rel-5 | F   | RP-030138 | R1-030302  | approved | Clarification of number of midamble shifts in different time | 5.3.0   | 5.4.0     | R1 | TEI-5      |
|        |     |   |       |     |           |            |          | slots  |         |           |    |            |
| 25.221 | 110 | 1 | Rel-5 | F   | RP-030138 | R1-030110  | approved | Correction to applicable HS-SICH burst types and timeslot    | 5.3.0   | 5.4.0     | R1 | HSDPA-Phys |
|        |     |   |       |     |           |            |          | formats  |         |           |    |            |
| 25.221 | 111 | - | Rel-5 | F   | RP-030138 | R1-030260  | approved | Correction to HS-SCCH minimum timing requirement for         | 5.3.0   | 5.4.0     | R1 | HSDPA-Phys |
|        |     |   |       |     |           |            |          | UTRA TDD (3.84 Mcps Option)                                  |         |           |    |            |
| 25.221 | 112 | 3 | Rel-5 | F   | RP-030138 | (R1-030366 | approved | Miscellaneous Corrections                                    | 5.3.0   | 5.4.0     | R1 | TEI-5      |
| 25.221 | 113 | - | Rel-5 | F   | RP-030138 | R1-030270  | approved | HSDPA timing requirements                                    | 5.3.0   | 5.4.0     | R1 | HSDPA-Phys |
| 25.222 | 108 | 1 | Rel-5 | F   | RP-030139 | R1-030204  | approved | HSDPA corrections  | 5.3.0   | 5.4.0     | R1 | HSDPA-Phys |
| 25.222 | 109 | 3 | Rel-5 | F   | RP-030139 | (R1-030374 |          | Miscellaneous Corrections                                    | 5.3.0   | 5.4.0     | R1 | TEI-5      |
| 25.223 | 034 | 3 | Rel-5 | F   | RP-030140 | (R1-030368 | approved | Miscellaneous Corrections                                    | 5.2.0   | 5.3.0     | R1 | TEI-5      |
| 25.224 | 109 | 1 | Rel-5 | F   | RP-030141 | R1-030203  | approved | Corrections to TPC Procedures During a DL                    | 5.3.0   | 5.4.0     | R1 | TEI-5      |
|        |     |   |       |     |           |            |          | Transmission Pause   |         |           |    |            |
| 25.224 | 114 | 1 | Rel-5 | F   | RP-030141 | R1-030257  | approved | Corrections to link adaptation procedure for UTRA TDD        | 5.3.0   | 5.4.0     | R1 | HSDPA-Phys |
|        |     |   |       |     |           |            |          | (3.84 Mcps Option)   |         |           |    |            |
| 25.224 | 115 | 2 | Rel-5 | F   | RP-030141 | R1-030295  | approved | Minimum timing requirement for CQI transmission on HS-       | 5.3.0   | 5.4.0     | R1 | HSDPA-Phys |
|        |     | Ш |       |     |           |            |          | SICH in UTRA TDD   |         |           |    |            |
| 25.224 | 117 | 2 | Rel-5 | F   | RP-030141 | R1-030296  | approved | Clarification of downlink closed loop power control          | 5.3.0   | 5.4.0     | R1 | TEI-5      |
|        |     |   |       |     |           |            |          | procedures for 3.84 Mcps TDD                                 |         |           |    |            |

| Spec   | CR   | R   | Phase | Cat | TSG RAN document | WG<br>document | TSG RAN status | Subject   | CR to version | Resulting version | WG | Workitem   |
|--------|------|-----|-------|-----|------------------|----------------|----------------|---|---------------|-------------------|----|------------|
| 25.224 | 118  | 2   | Rel-4 | F   | RP-030133        | R1-030301      | approved       | Corrections to the LCR power control procedure                                  | 4.7.0         | 4.8.0             | R1 | LCRTDDphys |
| 25.224 | 119  | 2   | Rel-5 | A   | RP-030133        | R1-030301      | approved       | Corrections to the LCR power control procedure                                  | 5.3.0         | 5.4.0             |    | LCRTDDphys |
| 25.225 | 065  | 2   | Rel-5 | F   | RP-030080        | R1-030304      |                | Addition of HS-SICH quality measurement for UTRA TDD                            | 5.3.0         | 5.4.0             |    | HSDPA-Phys |
| 25.215 | 135  | 4   | R99   | F   | RP-030017        |                | rejected       | Correction of UTRAN SIR measurement definition                                  | 3.11.0        |                   | R1 | -          |
| 25.215 | 136  | 2   | Rel-4 | Α   | RP-030017        |                | rejected       | Clarification of UTRAN SIR measurement definition                               | 4.6.0         |                   | R1 | -          |
| 25.302 | 136  | -   | Rel-5 | F   | RP-030112        | R2-030537      | approved       | HCSN in TDD DL physical model   | 5.3.0         | 5.4.0             |    | HSDPA-L23  |
| 25.302 | 137  | -   | Rel-5 | F   | RP-030112        | R2-030538      | approved       | Correction on HSDPA physical channel combination                                | 5.3.0         | 5.4.0             | R2 | HSDPA-L23  |
| 25.305 | 084  | - 1 | Rel-4 | F   | RP-030110        |                | approved       | Update to figure 5.1, LMU terminology   | 4.3.0         | 4.4.0             |    | TEI4       |
| 25.305 | 085  | -   | Rel-5 | Α   | RP-030110        |                | approved       | Update to figure 5.1, LMU terminology   | 5.4.0         | 5.5.0             | R2 | TEI4       |
| 25.306 | 061  | -   | Rel-5 | В   | RP-030113        | R2-030561      | approved       | Network Assisted Cell Change from UTRAN to GERAN                                | 5.3.0         | 5.4.0             | R2 | TEI5       |
| 25.306 | 062  | -   | Rel-5 | F   | RP-030113        | R2-030569      | approved       | Modification to the number of soft channel bits required for HS-DSCH (TDD)      | 5.3.0         | 5.4.0             | R2 | HSDPA-L23  |
| 25.308 | 005  | -   | Rel-5 | F   | RP-030114        | R2-030539      | approved       | Correction on HS-DSCH MAC architecture  | 5.3.0         | 5.4.0             | R2 | HSDPA-L23  |
| 25.308 | 006  | -   | Rel-5 | F   | RP-030114        | R2-030549      | approved       | Correction to HS-SCCH detection description                                     | 5.3.0         | 5.4.0             | R2 | HSDPA-L23  |
| 25.321 | 159  | -   | Rel-5 | F   | RP-030115        | R2-030540      | approved       | TDD HCSN determination in MAC-hs  | 5.3.0         | 5.4.0             | R2 | HSDPA-L23  |
| 25.321 | 160  | -   | Rel-5 | F   | RP-030115        | R2-030541      | approved       | Correction to the use of Transport Block Size index equal to 111111 for TDD     | 5.3.0         | 5.4.0             | R2 | HSDPA-L23  |
| 25.321 | 163  | -   | Rel-5 | D   | RP-030115        | R2-030544      | approved       | Editorial changes to MAC-hs   | 5.3.0         | 5.4.0             | R2 | HSDPA-L23  |
| 25.321 | 164  | -   | R99   | F   | RP-030100        | R2-030599      | approved       | Setting of ciphering activation time for TM bearers.                            | 3.14.0        | 3.15.0            | R2 | TEI        |
| 25.321 | 165  | -   | Rel-4 | Α   | RP-030100        | R2-030600      | approved       | Setting of ciphering activation time for TM bearers.                            | 4.7.0         | 4.8.0             | R2 | TEI        |
| 25.321 | 166  | -   | Rel-5 | Α   | RP-030100        | R2-030601      | approved       | Setting of ciphering activation time for TM bearers.                            | 5.3.0         | 5.4.0             | R2 | TEI        |
| 25.321 | 167  | 1   | R99   | F   | RP-030100        | R2-030641      | approved       | TFC Control Implementation  | 3.14.0        | 3.15.0            | R2 |            |
| 25.321 | 168  | 1   | Rel-4 | Α   | RP-030100        | R2-030642      | approved       | TFC Control Implementation  | 4.7.0         | 4.8.0             | R2 |            |
| 25.321 | 169  | 1   | Rel-5 | Α   | RP-030100        | R2-030643      | approved       | TFC Control Implementation  | 5.3.0         | 5.4.0             | R2 | TEI        |
| 25.321 | 170  | -   | Rel-5 | F   | RP-030115        | R2-030610      | approved       | Re-ordering entity corrections  | 5.3.0         | 5.4.0             | R2 | HSDPA-L23  |
| 25.322 | 214  | -   | R99   | F   | RP-030101        | R2-030509      | approved       | Correction to VT(MRW) definition  | 3.13.0        | 3.14.0            | R2 | TEI        |
| 25.322 | 215  | -   | Rel-4 | Α   | RP-030101        | R2-030510      | approved       | Correction to VT(MRW) definition  | 4.7.0         | 4.8.0             | R2 | TEI        |
| 25.322 | 216  | -   | Rel-5 | Α   | RP-030101        | R2-030511      | approved       | Correction to VT(MRW) definition  | 5.3.0         | 5.4.0             | R2 | TEI        |
| 25.322 | 217  | -   | Rel-5 | С   | RP-030116        | R2-030562      | approved       | Enhancement of MRW procedure  | 5.3.0         | 5.4.0             | R2 | HSDPA-L23  |
| 25.324 | 014  | 1   | R99   | F   | RP-030102        | R2-030573      | approved       | Maximum size of BMC PDU   | 3.6.0         | 3.7.0             | R2 |            |
| 25.324 | 015  | 1   | Rel-4 | Α   | RP-030102        | R2-030574      | approved       | Maximum size of BMC PDU   | 4.2.0         | 4.3.0             | R2 | TEI        |
| 25.324 | 016  | 1   | Rel-5 | Α   | RP-030102        | R2-030575      | approved       | Maximum size of BMC PDU   | 5.2.0         | 5.3.0             | R2 |            |
| 25.331 | 1811 | -   | R99   | F   | RP-030103        | R2-030434      | approved       | ASN.1 of the SRNS relocation Info   | 3.13.0        | 3.14.0            | R2 |            |
| 25.331 | 1812 | -   | Rel-4 | Α   | RP-030103        | R2-030435      | approved       | ASN.1 of the SRNS relocation Info   | 4.8.0         | 4.9.0             | R2 | TEI        |
| 25.331 | 1813 | -   | Rel-5 | Α   | RP-030103        | R2-030436      | approved       | ASN.1 of the SRNS relocation Info   | 5.3.0         | 5.4.0             | R2 |            |
| 25.331 | 1814 | -   | R99   | F   | RP-030103        | R2-030437      | approved       | Correction to procedural text for Physical Shared Channel Allocation (TDD only) | 3.13.0        | 3.14.0            | R2 | TEI        |
| 25.331 | 1815 | -   | Rel-4 | Α   | RP-030103        | R2-030438      | approved       | Correction to procedural text for Physical Shared Channel Allocation (TDD only) | 4.8.0         | 4.9.0             | R2 | TEI        |

| Spec   | CR   | R | Phase | Cat | TSG RAN document | WG<br>document | TSG RAN status | Subject  | CR to version | Resulting version | WG | Workitem |
|--------|------|---|-------|-----|------------------|----------------|----------------|--|---------------|-------------------|----|----------|
| 25.331 | 1816 | - | Rel-5 | Α   | RP-030103        | R2-030439      | approved       | Correction to procedural text for Physical Shared Channel Allocation (TDD only)  | 5.3.0         | 5.4.0             | R2 | TEI      |
| 25.331 | 1817 | 1 | R99   | F   | RP-030103        | R2-030515      | approved       | CM and state transition related to measurements, additional measurements, virtual active set and periodic measurements | 3.13.0        | 3.14.0            | R2 | TEI      |
| 25.331 | 1818 | 1 | Rel-4 | F   | RP-030103        | R2-030516      | approved       | CM and state transition related to measurements, additional measurements, virtual active set and periodic measurements | 4.8.0         | 4.9.0             | R2 | TEI      |
| 25.331 | 1819 | 1 | Rel-5 | Α   | RP-030103        | R2-030517      | approved       | CM and state transition related to measurements, additional measurements, virtual active set and periodic measurements | 5.3.0         | 5.4.0             | R2 | TEI      |
| 25.331 | 1820 | - | R99   | F   | RP-030103        | R2-030443      | approved       | Physical channel failure and radio link re-establishment   | 3.13.0        | 3.14.0            | R2 | TEI      |
| 25.331 | 1821 | - | Rel-4 | F   | RP-030103        | R2-030444      | approved       | Physical channel failure and radio link re-establishment   | 4.8.0         | 4.9.0             | R2 |          |
| 25.331 | 1822 | - | Rel-5 | Α   | RP-030103        | R2-030445      | approved       | Physical channel failure and radio link re-establishment   | 5.3.0         | 5.4.0             | R2 | TEI      |
| 25.331 | 1823 | - | R99   | F   | RP-030103        | R2-030446      | approved       | Correction concerning bit numbering convention   | 3.13.0        | 3.14.0            |    | TEI      |
| 25.331 | 1824 | - | Rel-4 | Α   | RP-030103        | R2-030447      | approved       | Correction concerning bit numbering convention   | 4.8.0         | 4.9.0             | R2 |          |
| 25.331 | 1825 | - | Rel-5 | Α   | RP-030103        | R2-030448      | approved       | Correction concerning bit numbering convention   | 5.3.0         | 5.4.0             | R2 | TEI      |
| 25.331 | 1829 | - | R99   | F   | RP-030104        | R2-030455      |                | Additional Measurement reporting list  | 3.13.0        | 3.14.0            | R2 | TEI      |
| 25.331 | 1830 | - | Rel-4 | Α   | RP-030104        | R2-030456      | approved       | Additional Measurement reporting list  | 4.8.0         | 4.9.0             | R2 | TEI      |
| 25.331 | 1831 | - | Rel-5 | Α   | RP-030104        | R2-030457      | approved       | Additional Measurement reporting list  | 5.3.0         | 5.4.0             | R2 | TEI      |
| 25.331 | 1832 | 2 | R99   | F   | RP-030104        | R2-030614      | approved       | Correction on RRC integrity protection procedure   | 3.13.0        | 3.14.0            | R2 | TEI      |
| 25.331 | 1833 | 2 | Rel-4 | Α   | RP-030104        | R2-030615      | approved       | Correction on RRC integrity protection procedure   | 4.8.0         | 4.9.0             | R2 | TEI      |
| 25.331 | 1834 | 2 | Rel-5 | Α   | RP-030104        | R2-030616      | approved       | Correction on RRC integrity protection procedure   | 5.3.0         | 5.4.0             | R2 | TEI      |
| 25.331 | 1835 | - | R99   | F   | RP-030104        | R2-030465      | approved       | Reporting Cell Status and Event 2A   | 3.13.0        | 3.14.0            | R2 | TEI      |
| 25.331 | 1836 | - | Rel-4 | Α   | RP-030104        | R2-030466      | approved       | Reporting Cell Status and Event 2A   | 4.8.0         | 4.9.0             | R2 | TEI      |
| 25.331 | 1837 | - | Rel-5 | Α   | RP-030104        | R2-030467      | approved       | Reporting Cell Status and Event 2A   | 5.3.0         | 5.4.0             | R2 | TEI      |
| 25.331 | 1838 | - | R99   | F   | RP-030104        | R2-030468      | approved       | Correction to the handling of variable TGPS_IDENTITY and IE "Triggering condition 1/2"                                 | 3.13.0        | 3.14.0            | R2 |          |
| 25.331 | 1839 | - | Rel-4 | Α   | RP-030104        | R2-030469      | approved       | Correction to the handling of variable TGPS_IDENTITY and IE "Triggering condition 1/2"                                 | 4.8.0         | 4.9.0             |    | TEI      |
| 25.331 | 1840 | - | Rel-5 | Α   | RP-030104        | R2-030470      |                | Correction to the handling of variable TGPS_IDENTITY and IE "Triggering condition 1/2"                                 | 5.3.0         | 5.4.0             |    | TEI      |
| 25.331 | 1841 | 1 | R99   | F   | RP-030104        | R2-030480      | approved       | Hard handover with pending ciphering activation times  | 3.13.0        | 3.14.0            | R2 |          |
| 25.331 | 1842 | 1 | Rel-4 | Α   | RP-030104        |                | approved       | Hard handover with pending ciphering activation times  | 4.8.0         | 4.9.0             |    | TEI      |
| 25.331 | 1843 | 1 | Rel-5 | Α   | RP-030104        | R2-030482      |                | Hard handover with pending ciphering activation times  | 5.3.0         | 5.4.0             |    | TEI      |
| 25.331 | 1844 | - | R99   | F   | RP-030105        | R2-030474      |                | Correction of default configurations   | 3.13.0        | 3.14.0            | R2 |          |
| 25.331 | 1845 | - | Rel-4 | Α   | RP-030105        | R2-030475      |                | Correction of default configurations   | 4.8.0         | 4.9.0             |    | TEI      |
| 25.331 | 1846 | - | Rel-5 | Α   | RP-030105        | R2-030476      |                | Correction of default configurations   | 5.3.0         | 5.4.0             | R2 |          |
| 25.331 | 1847 | - | R99   | F   | RP-030105        | R2-030477      | approved       | Correction to UE behaviour on entering RRC Connected   | 3.13.0        | 3.14.0            | R2 | TEI      |

| Spec   | CR   | R | Phase | Cat | TSG RAN document | WG<br>document | TSG RAN status | Subject  | CR to version | Resulting version | WG | Workitem   |
|--------|------|---|-------|-----|------------------|----------------|----------------|--|---------------|-------------------|----|------------|
|        |      |   |       |     |                  |                |                | mode   |               |                   |    |            |
| 25.331 | 1848 | - | Rel-4 | Α   | RP-030105        | R2-030478      | approved       | Correction to UE behaviour on entering RRC Connected mode                                    | 4.8.0         | 4.9.0             | R2 | TEI        |
| 25.331 | 1849 | - | Rel-5 | Α   | RP-030105        | R2-030479      | approved       | Correction to UE behaviour on entering RRC Connected mode                                    | 5.3.0         | 5.4.0             | R2 | TEI        |
| 25.331 | 1853 | - | R99   | F   | RP-030105        | R2-030483      | approved       | Update of Start values in USIM on inter-RAT transitions and transitions to idle mode         | 3.13.0        | 3.14.0            | R2 | TEI        |
| 25.331 | 1854 | - | Rel-4 | Α   | RP-030105        | R2-030484      | approved       | Update of Start values in USIM on inter-RAT transitions and transitions to idle mode         | 4.8.0         | 4.9.0             | R2 | TEI        |
| 25.331 | 1855 | - | Rel-5 | Α   | RP-030105        | R2-030485      | approved       | Update of Start values in USIM on inter-RAT transitions and transitions to idle mode         | 5.3.0         | 5.4.0             | R2 | TEI        |
| 25.331 | 1856 | - | R99   | F   | RP-030082        | R2-030486      | approved       | Corrections to Channelisation Code TFCI Mapping for TDD                                      | 3.13.0        | 3.14.0            | R2 | TEI        |
| 25.331 | 1857 | - | Rel-4 | Α   | RP-030082        | R2-030487      | approved       | Corrections to Channelisation Code TFCI Mapping for TDD                                      | 4.8.0         | 4.9.0             | R2 | TEI        |
| 25.331 | 1858 | - | Rel-5 | Α   | RP-030082        | R2-030488      | approved       | Corrections to Channelisation Code TFCI Mapping for TDD                                      | 5.3.0         | 5.4.0             | R2 | TEI        |
| 25.331 | 1859 | - | Rel-4 | F   | RP-030111        | R2-030496      | approved       | Correction of PNBSCH for 1.28Mcps TDD  | 4.8.0         | 4.9.0             | R2 | LCRTDD-L23 |
| 25.331 | 1860 | - | Rel-5 | Α   | RP-030111        | R2-030497      | approved       | Correction of PNBSCH for 1.28Mcps TDD  | 5.3.0         | 5.4.0             | R2 | LCRTDD-L23 |
| 25.331 | 1861 | - | Rel-4 | F   | RP-030111        | R2-030498      |                | Correction of SFN-SFN observed time difference for 1.28Mcps TDD                              | 4.8.0         | 4.9.0             | R2 | LCRTDD-L23 |
| 25.331 | 1862 | - | Rel-5 | Α   | RP-030111        | R2-030499      | approved       | Correction of SFN-SFN observed time difference for 1.28Mcps TDD                              | 5.3.0         | 5.4.0             | R2 | LCRTDD-L23 |
| 25.331 | 1863 | 1 | Rel-4 | F   | RP-030111        | R2-030625      | approved       | ASN.1 corrections concerning missing UE capability extensions                                | 4.8.0         | 4.9.0             | R2 | TEI4       |
| 25.331 | 1864 | 3 | Rel-5 | F   | RP-030111        | R2-030637      | approved       | ASN.1 corrections concerning missing UE capability extensions                                | 5.3.0         | 5.4.0             | R2 | TEI4       |
| 25.331 | 1865 | - | Rel-4 | F   | RP-030111        | R2-030502      | approved       | Extensions for 1.28 Mcps specific elements in system information                             | 4.8.0         | 4.9.0             | R2 | LCRTDD-L23 |
| 25.331 | 1866 | - | Rel-5 | Α   | RP-030111        | R2-030503      | approved       | Extensions for 1.28 Mcps specific elements in system information                             | 5.3.0         | 5.4.0             | R2 | LCRTDD-L23 |
| 25.331 | 1867 | - | Rel-4 | F   | RP-030111        | R2-030504      | approved       | Corrections to power control parameter signalling for 1.28 Mcps TDD                          | 4.8.0         | 4.9.0             | R2 | LCRTDD-L23 |
| 25.331 | 1868 | - | Rel-5 | Α   | RP-030111        | R2-030505      | approved       | Corrections to power control parameter signalling for 1.28 Mcps TDD                          | 5.3.0         | 5.4.0             | R2 | LCRTDD-L23 |
| 25.331 | 1872 | - | Rel-5 | F   | RP-030117        | R2-030545      | approved       | TDD HS-SICH Power Control  | 5.3.0         | 5.4.0             | R2 | HSDPA-L23  |
| 25.331 | 1873 | - | Rel-5 | F   | RP-030117        | R2-030546      | approved       | Usage of separate scrambling code for HSDPA  | 5.3.0         | 5.4.0             | R2 | HSDPA-L23  |
| 25.331 | 1874 | - | Rel-5 | F   | RP-030119        |                | approved       | TDD HS-DSCH midamble shift and burst type  | 5.3.0         | 5.4.0             | R2 | HSDPA-L23  |
| 25.331 | 1875 | - | Rel-5 | F   | RP-030117        | R2-030548      | approved       | Corrections to the IE "Added or Reconfigured MAC-d flow" and the associated table in 10.3.10 | 5.3.0         | 5.4.0             | R2 | HSDPA-L23  |

| Spec   | CR   | R | Phase | Cat | TSG RAN   | WG        | TSG RAN  | Subject   | CR to   | Resulting | WG | Workitem  |
|--------|------|---|-------|-----|-----------|-----------|----------|---|---------|-----------|----|-----------|
|        |      |   |       | _   | document  | document  | status   |   | version | version   |    |           |
| 25.331 | 1877 | 1 | Rel-5 | В   | RP-030117 | R2-030627 | approved | Network Assisted Cell Change from UTRAN to GERAN              | 5.3.0   | 5.4.0     |    | TEI5      |
| 25.331 | 1878 | 1 | Rel-5 | F   | RP-030117 | R2-030617 | approved | Defining more than one DSCH / USCH transport channel          | 5.3.0   | 5.4.0     | R2 | TEI5      |
| 05.004 | 4070 |   | D-1.5 |     | DD 000447 | D0 000507 |          | in PDSCH and PUSCH system information (TDD only)              | 500     | 5.4.0     | D0 | TELE      |
| 25.331 | 1879 | _ | Rel-5 | С   | RP-030117 | R2-030567 | approved | Introducing the use of pre-defined configurations within UTRA | 5.3.0   | 5.4.0     |    | TEI5      |
| 25.331 | 1880 | - | Rel-5 | С   | RP-030120 | R2-030568 | approved | Group release (without security)                              | 5.3.0   | 5.4.0     |    | TEI5      |
| 25.331 | 1881 | 1 | R99   | F   | RP-030105 | R2-030638 | approved | NAS and Integrity procedure interaction                       | 3.13.0  | 3.14.0    |    | TEI       |
| 25.331 | 1882 | - | R99   | F   | RP-030105 |           | approved | Correction to Inter-RAT Measurement Report                    | 3.13.0  | 3.14.0    | R2 |           |
| 25.331 | 1883 | - | Rel-4 | F   | RP-030105 | R2-030578 | approved | Correction to Inter-RAT Measurement Report                    | 4.8.0   | 4.9.0     |    | TEI       |
| 25.331 | 1884 | - | Rel-5 | Α   | RP-030105 | R2-030579 | approved | Correction to Inter-RAT Measurement Report                    | 5.3.0   | 5.4.0     |    | TEI       |
| 25.331 | 1885 | - | R99   | F   | RP-030106 | R2-030580 | approved | Correction of signalling of transport block size for DSCH     | 3.13.0  | 3.14.0    |    | TEI       |
| 25.331 | 1886 | - | Rel-4 | Α   | RP-030106 | R2-030581 | approved | Correction of signalling of transport block size for DSCH     | 4.8.0   | 4.9.0     | R2 | TEI       |
| 25.331 | 1887 | - | Rel-5 | Α   | RP-030106 | R2-030582 | approved | Correction of signalling of transport block size for DSCH     | 5.3.0   | 5.4.0     | R2 | TEI       |
| 25.331 | 1888 | - | R99   | F   | RP-030106 | R2-030583 | approved | PS service continuity when moving between 3G and 2G           | 3.13.0  | 3.14.0    | R2 | TEI       |
| 25.331 | 1889 | - | Rel-4 | Α   | RP-030106 | R2-030584 | approved | PS service continuity when moving between 3G and 2G           | 4.8.0   | 4.9.0     | R2 | TEI       |
| 25.331 | 1890 | - | Rel-5 | Α   | RP-030106 | R2-030585 | approved | PS service continuity when moving between 3G and 2G           | 5.3.0   | 5.4.0     | R2 | TEI       |
| 25.331 | 1891 | 1 | R99   | F   | RP-030106 | R2-030631 | approved | Multiple activations of the same compressed mode pattern      | 3.13.0  | 3.14.0    | R2 | TEI       |
| 25.331 | 1892 | 1 | Rel-4 | Α   | RP-030106 | R2-030632 | approved | Multiple activations of the same compressed mode pattern      | 4.8.0   | 4.9.0     | R2 | TEI       |
| 25.331 | 1893 | 1 | Rel-5 | Α   | RP-030106 | R2-030633 | approved | Multiple activations of the same compressed mode pattern      | 5.3.0   | 5.4.0     | R2 | TEI       |
| 25.331 | 1894 | - | R99   | F   | RP-030106 | R2-030592 | approved | Setting of ciphering activation time for TM bearers.          | 3.13.0  | 3.14.0    | R2 | TEI       |
| 25.331 | 1895 | - | Rel-4 | Α   | RP-030106 | R2-030593 | approved | Setting of ciphering activation time for TM bearers.          | 4.8.0   | 4.9.0     | R2 | TEI       |
| 25.331 | 1896 | - | Rel-5 | Α   | RP-030106 |           | approved | Setting of ciphering activation time for TM bearers.          | 5.3.0   | 5.4.0     |    | TEI       |
| 25.331 | 1897 | - | Rel-5 | F   | RP-030117 |           | approved | Correction of shadow CR implementation                        | 5.3.0   | 5.4.0     | R2 | TEI5      |
| 25.331 | 1898 | - | Rel-4 | F   | RP-030111 | R2-030596 |          | Removal of MRRU parameter in PDCP info                        | 4.8.0   | 4.9.0     | R2 | TEI4      |
| 25.331 | 1899 | - | Rel-5 | Α   | RP-030111 | R2-030597 | approved | Removal of MRRU parameter in PDCP info                        | 5.3.0   | 5.4.0     | R2 | TEI4      |
| 25.331 | 1900 | - | Rel-5 | F   | RP-030117 | R2-030611 | approved | Measurement event for evaluation of best HS-DSCH cell         | 5.3.0   | 5.4.0     | R2 | HSDPA-L23 |
| 25.331 | 1901 | 1 | Rel-4 | Α   | RP-030105 | R2-030639 | approved | NAS and Integrity procedure interaction                       | 4.8.0   | 4.9.0     | R2 | TEI       |
| 25.331 | 1902 | 1 | Rel-5 | Α   | RP-030105 | R2-030640 | approved | NAS and Integrity procedure interaction                       | 5.3.0   | 5.4.0     | R2 | TEI       |
| 25.331 | 1903 | - | Rel-5 | F   | RP-030117 | R2-030623 | approved | Correction to USBI  | 5.3.0   | 5.4.0     | R2 | TEI5      |
| 25.331 | 1907 | - | R99   | F   | RP-030187 | RP-030187 | approved | GPS navigation model update mechanism                         | 3.13.0  |           |    |           |
| 25.331 | 1908 | - | Rel-4 | Α   | RP-030187 | RP-030187 | approved | GPS navigation model update mechanism                         | 4.8.0   |           | R2 | TEI       |
| 25.331 | 1909 | - | Rel-5 | Α   | RP-030187 | RP-030187 | approved | GPS navigation model update mechanism                         | 5.3.0   |           | R2 | TEI       |
| 25.331 | 1910 | - | Rel-5 | F   | RP-030201 | RP-030201 | approved | Layer 3 filtering definition                                  | 5.3.0   |           | R2 | TEI5      |
| 25.993 | 001  | - | Rel-6 | F   | RP-030109 | R2-030489 |          | Streaming and interactive/background RAB combinations         | 6.0.0   | 6.1.0     |    | TEI6      |
| 25.993 | 002  | - | Rel-6 | F   | RP-030109 | R2-030551 | approved | QoS attributes for RABs in 25.993                             | 6.0.0   | 6.1.0     | R2 | TEI6      |
| 25.993 | 003  | - | Rel-6 | F   | RP-030109 | R2-030598 | approved | TDD RABs in 25.993  | 6.0.0   | 6.1.0     | R2 | TEI6      |

| Spec   | CR   | R | Phase | Cat | TSG RAN document | WG<br>document | TSG RAN status | Subject   | CR to version | Resulting version | WG | Workitem           |
|--------|------|---|-------|-----|------------------|----------------|----------------|---|---------------|-------------------|----|--------------------|
| 34.109 | 023  | 1 | R99   | F   | RP-030162        |                | approved       | Removal of uplink dummy DCCH transmission function in UE  | 3.8.0         | 3.9.0             | R2 |                    |
| 34.109 | 024  | 1 | Rel-4 | Α   | RP-030162        |                | approved       | Removal of uplink dummy DCCH transmission function in UE  | 4.4.0         | 4.5.0             | R2 | TEI                |
| 34.109 | 025  | 1 | Rel-5 | Α   | RP-030162        |                | approved       | Removal of uplink dummy DCCH transmission function in UE  | 5.2.0         | 5.3.0             | R2 |                    |
| 25.306 | 058  | 1 | R99   | F   | RP-030118        | R2-030563      | rejected       | Variable Tx/Rx frequency separation in 1800 and 1900 band   | 3.7.0         | 3.8.0             | R2 |                    |
| 25.306 | 059  | 1 | Rel-4 | Α   | RP-030118        | R2-030564      | rejected       | Variable Tx/Rx frequency separation in 1800 and 1900 band   | 4.6.0         | 4.7.0             | R2 |                    |
| 25.306 | 060  | 1 | Rel-5 | Α   | RP-030118        | R2-030565      | rejected       | Variable Tx/Rx frequency separation in 1800 and 1900 band   | 5.3.0         | 5.4.0             | R2 |                    |
| 25.331 | 1826 | - | R99   | F   | RP-030118        | R2-030449      | rejected       | Variable Tx/Rx frequency separation in 1800 and 1900 band   | 3.13.0        | 3.14.0            | R2 |                    |
| 25.331 | 1827 | - | Rel-4 | A   | RP-030118        | R2-030450      | rejected       | Variable Tx/Rx frequency separation in 1800 and 1900 band   | 4.8.0         | 4.9.0             | R2 |                    |
| 25.331 | 1828 | - | Rel-5 | A   | RP-030118        | R2-030451      | rejected       | Variable Tx/Rx frequency separation in 1800 and 1900 band   | 5.3.0         | 5.4.0             | R2 |                    |
| 25.331 | 1904 | - | R99   | F   | RP-030146        | None           | withdrawn      | Correction on GPS navigation model update mechanism   | 3.13.0        | 3.14.0            | R2 |                    |
| 25.331 | 1905 | - | Rel-4 | Α   | RP-030146        | None           | withdrawn      | Correction on GPS navigation model update mechanism   | 4.8.0         | 4.9.0             | R2 |                    |
| 25.331 | 1906 | - | Rel-5 | Α   | RP-030146        | None           | withdrawn      | Correction on GPS navigation model update mechanism   | 5.3.0         | 5.4.0             | R2 |                    |
| 34.109 | 023  | - | R99   | F   | RP-030108        | R2-030428      | revised        | Removal of uplink dummy DCCH transmission function in UE  | 3.8.0         | 3.9.0             | R2 | TEI                |
| 34.109 | 024  | - | Rel-4 | Α   | RP-030108        | R2-030429      | revised        | Removal of uplink dummy DCCH transmission function in UE  | 4.4.0         | 4.5.0             | R2 | TEI                |
| 34.109 | 025  | - | Rel-5 | Α   | RP-030108        | R2-030430      |                | Removal of uplink dummy DCCH transmission function in UE  | 5.2.0         | 5.3.0             | R2 | TEI                |
| 25.215 | 134  | 1 | Rel-5 | F   | RP-030081        | R1-030206      | approved       | Non-HSDPA power measurement   | 5.2.0         |                   | R3 | HSDPA-Phys         |
| 25.401 | 065  | - | Rel-6 | С   | RP-030084        | R3-030048      | approved       | CR on revising the definition of SAS to support all REL-4 UE positioning methods  | 5.5.0         | 6.0.0             |    | LCS-Rel4Pos        |
| 25.413 | 546  | 1 | Rel-5 | F   | RP-030060        | R3-030299      | approved       | Addition of RAB Subflows mapping onto the transport channel identifiers of lur in the Source RNC to Target RNC transparent container for HSDPA. | 5.3.0         | 5.4.0             |    | HSDPA-Iurlub       |
| 25.413 | 549  | - | Rel-4 | F   | RP-030067        | R3-030130      |                | Alignment of "Uncertainty Ellipse" with RRC   | 4.7.0         | 4.8.0             |    | TEI4               |
| 25.413 | 550  | - | Rel-5 | Α   | RP-030067        | R3-030131      | approved       | Alignment of "Uncertainty Ellipse" with RRC   | 5.3.0         | 5.4.0             | R3 | TEI4               |
| 25.413 | 551  | 1 | Rel-4 | F   | RP-030056        | R3-030297      |                | Duplicated Iu Connection Identifiers  | 4.7.0         | 4.8.0             | R3 | TEI4               |
| 25.413 | 552  | 1 | Rel-5 | Α   | RP-030056        | R3-030298      | approved       | Duplicated Iu Connection Identifiers  | 5.3.0         | 5.4.0             | R3 | TEI4               |
| 25.413 | 557  | 1 | Rel-5 | В   | RP-030060        | R3-030323      |                | Introduction of IMS Signalling "flag" into R5 RANAP   | 5.3.0         | 5.4.0             |    | TEI5               |
| 25.413 | 558  | - | Rel-5 | F   | RP-030060        | R3-030218      |                | Correction to RANAP due to GERAN lu mode  | 5.3.0         | 5.4.0             |    | GER3GAL-<br>GUCOPL |

| Spec   | CR  | R | Phase | Cat | TSG RAN   | WG        | TSG RAN  | Subject   | CR to   | J       | WG | Workitem      |
|--------|-----|---|-------|-----|-----------|-----------|----------|---|---------|---------|----|---------------|
| 05.440 | 504 |   | D 1.4 | _   | document  | document  | status   |   | version | version | Б. | TELA          |
| 25.413 | 561 | - | Rel-4 | F   | RP-030056 | R3-030292 |          | Essential correction for IMSI coding                                      | 4.7.0   | 4.8.0   |    | TEI4          |
| 25.413 | 562 | - | Rel-5 | Α   | RP-030056 | R3-030293 |          | Essential correction of IMSI coding                                       | 5.3.0   | 5.4.0   |    | TEI4          |
| 25.414 | 052 | - | Rel-5 | F   | RP-030061 | R3-030148 |          | Minor cleanup of 25.414   | 5.3.0   | 5.4.0   |    | TEI5          |
| 25.414 | 053 | - | R99   | F   | RP-030054 | R3-030182 |          | TCP Port number   | 3.12.0  | 3.13.0  |    | TEI           |
| 25.414 | 054 | - | Rel-4 | Α   | RP-030054 | R3-030183 |          | TCP Port number   | 4.5.0   | 4.6.0   |    | TEI           |
| 25.414 | 055 | - | Rel-5 | Α   | RP-030054 | R3-030184 |          | TCP Port number   | 5.3.0   | 5.4.0   |    | TEI           |
| 25.419 | 107 | 1 | Rel-4 | F   | RP-030057 | R3-030290 |          | Correction of Write and Replace functions of SABP                         | 4.6.0   | 4.7.0   |    | TEI4          |
| 25.419 | 108 | 1 | Rel-5 | Α   | RP-030057 |           | approved | Correction of Write and Replace functions of SABP                         | 5.2.0   | 5.3.0   |    | TEI4          |
| 25.423 | 766 | - | Rel-4 | F   | RP-030068 |           | approved | Clarification to DL Power definition for TDD                              | 4.7.0   | 4.8.0   |    | TEI4          |
| 25.423 | 767 | - | Rel-5 | Α   | RP-030068 | R3-030055 | approved | Clarification to DL Power definition for TDD                              | 5.4.0   | 5.5.0   |    | TEI4          |
| 25.423 | 768 | 2 | Rel-5 | F   | RP-030077 |           | approved | Correction to DL Tx Power for TDD   | 5.4.0   | 5.5.0   |    | TEI5          |
| 25.423 | 769 | 1 | Rel-4 | F   | RP-030072 | R3-030279 | approved | TPC Step Size for TDD   | 4.7.0   | 4.8.0   |    | TEI4          |
| 25.423 | 770 | 1 | Rel-5 | Α   | RP-030072 | R3-030280 | approved | TPC Step Size for TDD   | 5.4.0   | 5.5.0   |    | TEI4          |
| 25.423 | 771 | - | Rel-4 | F   | RP-030069 | R3-030064 | approved | Clarification to 2nd Interleaving Mode for TDD                            | 4.7.0   | 4.8.0   | R3 | TEI4          |
| 25.423 | 772 | - | Rel-5 | Α   | RP-030069 | R3-030065 | approved | Clarification to 2nd Interleaving Mode for TDD                            | 5.4.0   | 5.5.0   | R3 | TEI4          |
| 25.423 | 773 | 1 | Rel-5 | F   | RP-030078 | R3-030296 | approved | HS-PDSCH RNSAP Corrections for TDD  | 5.4.0   | 5.5.0   | R3 | HSDPA-lublur  |
| 25.423 | 775 | 1 | Rel-5 | F   | RP-030073 | R3-030301 | approved | Clarification of HS-SCCH Power Offset usage in case of multiple HS-SCCHs  | 5.4.0   | 5.5.0   | R3 | TEI5          |
| 25.423 | 778 | - | Rel-5 | F   | RP-030062 | R3-030077 | approved | Correction of Guaranteed DL Rate  | 5.4.0   | 5.5.0   | R3 | TEI5          |
| 25.423 | 780 | 1 | Rel-5 | F   | RP-030062 | R3-030317 | approved | Correction of the TDD UE capabilities necessary to pass from SRNC to CRNC | 5.4.0   | 5.5.0   | R3 | TEI5          |
| 25.423 | 781 | 1 | Rel-5 | F   | RP-030080 | R3-030311 | approved | HS-SICH quality Reporting to support outer loop power control             | 5.4.0   | 5.5.0   | R3 | HSDPA-lublur  |
| 25.423 | 782 | 1 | R99   | F   | RP-030082 | R3-030264 | approved | Corrections to Channelisation Code TFCI Mapping for TDD                   | 3.12.0  | 3.13.0  | R3 | TEI           |
| 25.423 | 783 | 1 | Rel-4 | Α   | RP-030082 | R3-030265 | approved | Corrections to Channelisation Code TFCI Mapping for TDD                   | 4.7.0   | 4.8.0   | R3 | TEI           |
| 25.423 | 784 | 1 | Rel-5 | Α   | RP-030082 | R3-030266 | approved | Corrections to Channelisation Code TFCI Mapping for TDD                   | 5.4.0   | 5.5.0   | R3 | TEI           |
| 25.423 | 785 | - | Rel-4 | F   | RP-030070 | R3-030104 | approved | Correction for the Information Exchange Initiation procedure              | 4.7.0   | 4.8.0   | R3 | TEI4          |
| 25.423 | 786 | - | Rel-5 | Α   | RP-030070 | R3-030106 | approved | Correction for the Information Exchange Initiation procedure              | 5.4.0   | 5.5.0   | R3 | TEI4          |
| 25.423 | 787 | 1 | Rel-5 | F   | RP-030074 | R3-030302 | approved | T1 signalling for HSDPA   | 5.4.0   | 5.5.0   | R3 | HSDPA-lublur  |
| 25.423 | 788 | 5 | R99   | F   | RP-030183 |           | approved | Support of Cell Individual Offset in RNSAP                                | 3.12.0  | 3.13.0  | R3 | TEI           |
| 25.423 | 789 | 5 | Rel-4 | Α   | RP-030183 |           | approved | Support of Cell Individual Offset in RNSAP                                | 4.7.0   | 4.8.0   | R3 | TEI           |
| 25.423 | 790 | 5 | Rel-5 | Α   | RP-030183 |           | approved | Support of Cell Individual Offset in RNSAP                                | 5.4.0   | 5.5.0   | R3 |               |
| 25.423 | 791 | - | Rel-4 | F   | RP-030071 | R3-030122 |          | Midamble Configuration for Midamble Shift LCR                             | 4.7.0   | 4.8.0   |    | LCRTDD-lublur |
| 25.423 | 792 | - | Rel-5 | Α   | RP-030071 | R3-030123 |          | Midamble Configuration for Midamble Shift LCR                             | 5.4.0   | 5.5.0   | R3 | LCRTDD-lublur |

| Spec   | CR  | R | Phase | Cat | TSG RAN document | WG<br>document | TSG RAN status | Subject  | CR to version | Resulting version | WG | Workitem      |
|--------|-----|---|-------|-----|------------------|----------------|----------------|--|---------------|-------------------|----|---------------|
| 25.423 | 795 | - | Rel-4 | F   | RP-030067        | R3-030132      |                | Alignment of "Uncertainty Ellipse" with RRC                              | 4.7.0         | 4.8.0             | R3 | TEI4          |
| 25.423 | 796 | - | Rel-5 | Α   | RP-030067        | R3-030133      |                | Alignment of "Uncertainty Ellipse" with RRC                              | 5.4.0         | 5.5.0             |    | TEI4          |
| 25.423 | 797 | 2 | Rel-4 | F   | RP-030058        | R3-030342      |                | Uplink Timing Advance Control Parameters in LCR TDD                      | 4.7.0         | 4.8.0             |    | LCRTDD-lublur |
| 25.423 | 798 | 2 | Rel-5 | Α   | RP-030058        | R3-030343      |                | Uplink Timing Advance Control Parameters in LCR TDD                      | 5.4.0         | 5.5.0             |    | LCRTDD-lublur |
| 25.423 | 800 | 1 | Rel-5 | F   | RP-030119        | R3-030285      |                | Signalling of Midamble Shift and Burst type for HS-PDSCH in TDD          | 5.4.0         | 5.5.0             |    | HSDPA-lublur  |
| 25.423 | 801 | - | R99   | F   | RP-030066        | R3-030153      | approved       | Corrections to DCH Combining in RL SETUP and RL ADDITION                 | 3.12.0        | 3.13.0            | R3 | TEI           |
| 25.423 | 802 | - | Rel-4 | А   | RP-030066        | R3-030154      | approved       | Corrections to DCH Combining in RL SETUP and RL ADDITION                 | 4.7.0         | 4.8.0             | R3 | TEI           |
| 25.423 | 803 | - | Rel-5 | А   | RP-030066        | R3-030152      | approved       | Corrections to DCH Combining in RL SETUP and RL ADDITION                 | 5.4.0         | 5.5.0             | R3 | TEI           |
| 25.423 | 808 | - | Rel-4 | F   | RP-030058        | R3-030229      | approved       | Correction on CGA Additional Shapes                                      | 4.7.0         | 4.8.0             | R3 | TEI4          |
| 25.423 | 809 | - | Rel-5 | Α   | RP-030058        | R3-030230      | approved       | Correction on CGA Additional Shapes                                      | 5.4.0         | 5.5.0             | R3 | TEI4          |
| 25.423 | 810 | 2 | Rel-5 | F   | RP-030076        | R3-030321      | approved       | Guaranteed Bit Rate for HSDPA  | 5.4.0         | 5.5.0             | R3 | HSDPA-lublur  |
| 25.425 | 058 | - | Rel-5 | F   | RP-030075        | R3-030313      | approved       | Clarification for the flow control                                       | 5.3.0         | 5.4.0             | R3 | HSDPA-lublur  |
| 25.433 | 790 | - | Rel-4 | F   | RP-030068        | R3-030052      | approved       | Clarification to DL Power definition for TDD                             | 4.7.0         | 4.8.0             | R3 | TEI4          |
| 25.433 | 791 | - | Rel-5 | Α   | RP-030068        | R3-030053      | approved       | Clarification to DL Power definition for TDD                             | 5.3.0         | 5.4.0             | R3 | TEI4          |
| 25.433 | 792 | 3 | Rel-5 | F   | RP-030077        | R3-030360      | approved       | Correction to DL Tx Power for TDD  | 5.3.0         | 5.4.0             | R3 | TEI5          |
| 25.433 | 793 | - | Rel-4 | F   | RP-030072        | R3-030058      | approved       | TPC Step Size for TDD  | 4.7.0         | 4.8.0             | R3 | TEI4          |
| 25.433 | 794 | - | Rel-5 | Α   | RP-030072        | R3-030059      | approved       | TPC Step Size for TDD  | 5.3.0         | 5.4.0             | R3 | TEI4          |
| 25.433 | 795 | - | Rel-4 | F   | RP-030069        | R3-030062      | approved       | Clarification to 2nd Interleaving Mode for TDD                           | 4.7.0         | 4.8.0             | R3 | TEI4          |
| 25.433 | 796 | - | Rel-5 | Α   | RP-030069        | R3-030063      | approved       | Clarification to 2nd Interleaving Mode for TDD                           | 5.3.0         | 5.4.0             | R3 | TEI4          |
| 25.433 | 797 | 2 | Rel-5 | F   | RP-030063        | R3-030363      | approved       | HS-PDSCH Code and Timeslot Resource Assignment for TDD                   | 5.3.0         | 5.4.0             | R3 | HSDPA-lublur  |
| 25.433 | 798 | 1 | Rel-5 | F   | RP-030078        | R3-030295      | approved       | HS-PDSCH NBAP Corrections for TDD  | 5.3.0         | 5.4.0             | R3 | HSDPA-lublur  |
| 25.433 | 800 | 1 | Rel-5 | F   | RP-030073        | R3-030300      | approved       | Clarification of HS-SCCH Power Offset usage in case of multiple HS-SCCHs | 5.3.0         | 5.4.0             | R3 | TEI5          |
| 25.433 | 801 | 1 | Rel-5 | F   | RP-030081        | R3-030283      | approved       | HS-DSCH: Addition of non HS-DSCH power measurement.                      | 5.3.0         | 5.4.0             | R3 | HSDPA-Iublur  |
| 25.433 | 803 | 1 | Rel-5 | F   | RP-030080        | R3-030311      | approved       | HS-SICH quality Reporting to support outer loop power control            | 5.3.0         | 5.4.0             | R3 | HSDPA-Iublur  |
| 25.433 | 804 | 1 | R99   | F   | RP-030082        | R3-030261      | approved       | Corrections to Channelisation Code TFCI Mapping for TDD                  | 3.12.0        | 3.13.0            | R3 | TEI           |
| 25.433 | 805 | 1 | Rel-4 | Α   | RP-030082        | R3-030262      | approved       | Corrections to Channelisation Code TFCI Mapping for TDD                  | 4.7.0         | 4.8.0             | R3 | TEI           |
| 25.433 | 806 | 1 | Rel-5 | Α   | RP-030082        | R3-030263      | approved       | Corrections to Channelisation Code TFCI Mapping for TDD                  | 5.3.0         | 5.4.0             | R3 | TEI           |
| 25.433 | 807 | - | Rel-4 | F   | RP-030070        | R3-030103      | approved       | Correction for the Information Exchange Initiation                       | 4.7.0         | 4.8.0             | R3 | TEI4          |

| Spec   | CR  | R | Phase | Cat | TSG RAN document | WG<br>document | TSG RAN status | Subject  | CR to version | Resulting version | WG | Workitem              |
|--------|-----|---|-------|-----|------------------|----------------|----------------|--|---------------|-------------------|----|-----------------------|
|        |     |   |       |     |                  |                |                | procedure  | 10101011      | 10.0.0            |    |                       |
| 25.433 | 808 | - | Rel-5 | Α   | RP-030070        | R3-030105      | approved       | Correction for the Information Exchange Initiation procedure   | 5.3.0         | 5.4.0             | R3 | TEI4                  |
| 25.433 | 809 | 1 | Rel-5 | F   | RP-030074        | R3-030303      | approved       | T1 signalling for HSDPA  | 5.3.0         | 5.4.0             | R3 | HSDPA-lublur          |
| 25.433 | 810 | - | Rel-4 | F   | RP-030071        | R3-030120      | approved       | Midamble Configuration for Midamble Shift LCR  | 4.7.0         | 4.8.0             | R3 | LCRTDD-lublur         |
| 25.433 | 811 | - | Rel-5 | Α   | RP-030071        | R3-030121      | approved       | Midamble Configuration for Midamble Shift LCR  | 5.3.0         | 5.4.0             | R3 | LCRTDD-lublur         |
| 25.433 | 816 | - | R99   | F   | RP-030066        | R3-030150      | approved       | Corrections to DCH Combining in RL SETUP and RL ADDITION   | 3.12.0        | 3.13.0            | R3 | TEI                   |
| 25.433 | 817 | - | Rel-4 | Α   | RP-030066        | R3-030151      | approved       | Corrections to DCH Combining in RL SETUP and RL ADDITION   | 4.7.0         | 4.8.0             | R3 | TEI                   |
| 25.433 | 818 | - | Rel-5 | Α   | RP-030066        | R3-030152      | approved       | Corrections to DCH Combining in RL SETUP and RL ADDITION   | 5.3.0         | 5.4.0             | R3 | TEI                   |
| 25.433 | 822 | - | Rel-4 | F   | RP-030059        | R3-030172      | approved       | Correction of PRACH Midamble for 1.28Mcps TDD  | 4.7.0         | 4.8.0             | R3 | LCRTDD-lublur         |
| 25.433 | 823 | - | Rel-5 | Α   | RP-030059        | R3-030173      | approved       | Correction of PRACH Midamble for 1.28Mcps TDD  | 5.3.0         | 5.4.0             | R3 | LCRTDD-lublur         |
| 25.433 | 827 | 2 | Rel-5 | F   | RP-030076        | R3-030320      | approved       | Guaranteed Bit Rate for HSDPA  | 5.3.0         | 5.4.0             | R3 | HSDPA-lublur          |
| 25.435 | 096 | - | Rel-5 | F   | RP-030075        | R3-030314      | approved       | Clarification for the flow control   | 5.3.0         | 5.4.0             | R3 | HSDPA-lublur          |
| 25.450 | 003 | - | Rel-6 | С   | RP-030084        | R3-030049      | approved       | CR on revising the position calculation function and definition of SAS to support all REL-4 UE positioning methods | 5.1.0         | 6.0.0             | R3 | LCS-Rel4Pos           |
| 25.452 | 001 | - | Rel-6 | С   | RP-030084        | R3-030050      | approved       | CR on revising the definition of SAS to support all REL-4 UE positioning methods                                   | 5.0.0         | 6.0.0             | R3 | LCS-Rel4Pos           |
| 25.453 | 022 | 2 | Rel-6 | С   | RP-030084        | R3-030362      | approved       | CR on revising the position calculation function and definition of SAS to support all REL-4 UE positioning methods | 5.4.0         | 6.0.0             | R3 | LCS-Rel4Pos           |
| 25.453 | 023 | - | Rel-5 | F   | RP-030065        | R3-030079      | approved       | CR on GPS Almanac and Satellite Health   | 5.4.0         | 5.5.0             | R3 | TEI5                  |
| 25.453 | 024 | - | Rel-5 | F   | RP-030065        | R3-030080      | approved       | CR on GPS Measured Results   | 5.4.0         | 5.5.0             | R3 | TEI5                  |
| 25.453 | 026 | - | Rel-5 | F   | RP-030067        | R3-030134      | approved       | Alignment of "Uncertainty Ellipse" with RRC  | 5.4.0         | 5.5.0             | R3 | TEI4                  |
| 25.453 | 027 | - | Rel-5 | F   | RP-030070        | R3-030278      | approved       | Correction for the Information Exchange Initiation procedure   | 5.4.0         | 5.5.0             | R3 | TEI4                  |
| 29.108 | 011 | 1 | R99   | F   | RP-030079        | R3-030326      | approved       | Corrections to the list of RANAP messages transferred on the E-interface   | 3.2.0         | 3.3.0             | R3 | GSM/UMTS interworking |
| 29.108 | 012 | 1 | Rel-4 | Α   | RP-030079        | R3-030327      | approved       | Corrections to the list of RANAP messages transferred on the E-interface   | 4.3.0         | 4.4.0             | R3 | GSM/UMTS interworking |
| 29.108 | 013 | 1 | Rel-5 | Α   | RP-030079        | R3-030328      | approved       | Corrections to the list of RANAP messages transferred on the E-interface   | 5.2.0         | 5.3.0             | R3 | GSM/UMTS interworking |
| 25.413 | 547 | 1 | R99   | F   | RP-030086        | R3-030330      | rejected       | Transfer of UESBI over lu  | 3.12.0        | 3.13.0            | R3 | RANimp-<br>FSEarlyUE  |
| 25.413 | 548 | 1 | Rel-4 | Α   | RP-030086        | R3-030331      | rejected       | Transfer of UESBI over lu  | 4.7.0         | 4.8.0             |    | RANimp-<br>FSEarlyUE  |
| 25.413 | 555 | 1 | Rel-5 | Α   | RP-030086        | R3-030329      | rejected       | Transfer of UESBI over lu  | 5.3.0         | 5.4.0             | R3 | RANimp-               |

| Spec   | CR  | R | Phase | Cat | TSG RAN document | WG<br>document | TSG RAN status | Subject  | CR to version | Resulting version | WG | Workitem  |
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|        |     |   |       |     |                  |                |                |  |               |                   |    | FSEarlyUE |
| 25.423 | 788 | 2 | R99   | F   | RP-030055        | R3-030337      | revised        | Support of Cell Individual Offset in RNSAP   | 3.12.0        | 3.13.0            | R3 |           |
| 25.423 | 788 | 3 | R99   | F   | RP-030160        |                | revised        | Support of Cell Individual Offset in RNSAP   | 3.12.0        | 3.13.0            | R3 |           |
| 25.423 | 788 | 4 | R99   | F   | RP-030168        |                | revised        | Support of Cell Individual Offset in RNSAP   | 3.12.0        |                   | R3 |           |
| 25.423 | 789 | 2 | Rel-4 | Α   | RP-030055        | R3-030338      | revised        | Support of Cell Individual Offset in RNSAP   | 4.7.0         | 4.8.0             | R3 |           |
| 25.423 | 789 | 3 | Rel-4 | Α   | RP-030160        |                | revised        | Support of Cell Individual Offset in RNSAP   | 4.7.0         | 4.8.0             | R3 | TEI       |
| 25.423 | 789 | 4 | Rel-4 | Α   | RP-030168        |                | revised        | Support of Cell Individual Offset in RNSAP   | 4.7.0         |                   | R3 | TEI       |
| 25.423 | 790 | 2 | Rel-5 | Α   | RP-030055        | R3-030339      | revised        | Support of Cell Individual Offset in RNSAP   | 5.4.0         | 5.5.0             | R3 | TEI       |
| 25.423 | 790 | 3 | Rel-5 | Α   | RP-030160        |                | revised        | Support of Cell Individual Offset in RNSAP   | 5.4.0         | 5.5.0             | R3 | TEI       |
| 25.423 | 790 | 4 | Rel-5 | Α   | RP-030168        |                | revised        | Support of Cell Individual Offset in RNSAP   | 5.4.0         |                   | R3 | TEI       |
| 25.435 | 095 | 2 | Rel-5 | F   | RP-030064        | R3-030356      | rejected       | S-CCPCH power setting in case of no data transmission  | 5.3.0         | 5.4.0             | R3 | TEI5      |
| 25.101 | 201 | 1 | Rel-6 | F   | RP-030048        | R4-030259      | approved       | Addition of requirement of CSICH demodulation when CA is active.                                     | 5.5.0         |                   | R4 | TEI6      |
| 25.101 | 205 | 1 | Rel-5 | F   | RP-030037        | R4-030331      | approved       | Phase shift due to power steps   | 5.5.0         |                   | R4 | TEI5      |
| 25.101 | 212 | 1 | Rel-5 | F   | RP-030046        | R4-030267      |                | Specification of HSDPA FRC Performance for H-Sets 4 & 5  | 5.5.0         |                   | R4 | HSDPA-RF  |
| 25.101 | 213 | 1 | Rel-5 | F   | RP-030046        | R4-030268      | approved       | Specification of HSDPA FRC Performance with Open Loop Transmit Diversity                             | 5.5.0         |                   | R4 | HSDPA-RF  |
| 25.101 | 215 | 1 | Rel-5 | F   | RP-030046        | R4-030270      | approved       | Clarification of HSDPA FRC Test Procedure on HS-SCCH Signalling Error                                | 5.5.0         |                   | R4 | HSDPA-RF  |
| 25.101 | 217 |   | R99   | F   | RP-030025        | R4-030195      | approved       | The Closed Loop Timing Adjustment Mode parameter for the transmit diversity performance requirements | 3.12.0        |                   | R4 | TEI       |
| 25.101 | 218 |   | Rel-4 | Α   | RP-030025        | R4-030196      | approved       | The Closed Loop Timing Adjustment Mode parameter for the transmit diversity performance requirements | 4.6.0         |                   | R4 | TEI       |
| 25.101 | 219 |   | Rel-5 | Α   | RP-030025        | R4-030197      | approved       | The Closed Loop Timing Adjustment Mode parameter for the transmit diversity performance requirements | 5.5.0         |                   | R4 | TEI       |
| 25.101 | 223 |   | Rel-5 | F   | RP-030037        | R4-030243      | approved       | Correction to PRACH modulation quality   | 5.5.0         |                   | R4 | TEI5      |
| 25.101 | 224 |   | R99   | F   | RP-030025        | R4-030245      | approved       | Downlink power control during compressed mode tests  | 3.12.0        |                   | R4 | TEI       |
| 25.101 | 225 |   | Rel-4 | Α   | RP-030025        | R4-030246      |                | Downlink power control during compressed mode tests  | 4.6.0         |                   | R4 | TEI       |
| 25.101 | 226 |   | Rel-5 | Α   | RP-030025        | R4-030247      | approved       | Downlink power control during compressed mode tests  | 5.5.0         |                   | R4 | TEI       |
| 25.101 | 227 |   | Rel-4 | F   | RP-030032        | R4-030321      | approved       | Correction to PCH demodulation test  | 4.6.0         |                   | R4 | TEI4      |
| 25.101 | 228 |   | Rel-5 | Α   | RP-030032        | R4-030322      | approved       | Correction to PCH demodulation test  | 5.5.0         |                   | R4 | TEI4      |
| 25.102 | 133 | 1 | Rel-5 | F   | RP-030038        | R4-030275      |                | Transmit modulation quality clarification  | 5.3.0         |                   |    | TEI5      |
| 25.102 | 134 |   | Rel-5 | F   | RP-030047        | R4-030306      |                | Clarification of HSDPA FRC test procedure on HS-SCCH signalling error                                | 5.3.0         |                   | R4 | HSDPA-RF  |
| 25.102 | 135 |   | Rel-5 | F   | RP-030047        | R4-030307      | approved       | Addition of VRC definition for 3.84 Mcps & 1.28 Mcps TDD in Annex A                                  | 5.3.0         |                   | R4 | HSDPA-RF  |
| 25.102 | 136 |   | Rel-5 | В   | RP-030047        | R4-030309      | approved       | Additional VRC performance requirement for 1.28 Mcps TDD option                                      | 5.3.0         |                   | R4 | HSDPA-RF  |

| Spec   | CR  | R | Phase | Cat | TSG RAN   | WG        | TSG RAN  | Subject   | CR to   | Resulting | WG | Workitem               |
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|        |     |   |       |     | document  | document  | status   |   | version | version   |    |                        |
| 25.104 | 169 | 1 | R99   | F   | RP-030029 | R4-030293 | approved | Protection of the FDD BS receiver   | 3.11.0  |           |    | TEI                    |
| 25.104 | 170 | 1 | Rel-4 | Α   | RP-030029 | R4-030294 | approved | Protection of the FDD BS receiver   | 4.6.0   |           |    | TEI                    |
| 25.104 | 171 | 1 | Rel-5 | Α   | RP-030029 | R4-030295 | approved | Protection of the FDD BS receiver   | 5.5.0   |           | _  | TEI                    |
| 25.104 | 172 | 1 | Rel-6 | Α   | RP-030029 |           |          | Protection of the FDD BS receiver   | 6.0.0   |           | R4 | TEI                    |
| 25.104 | 175 |   | Rel-6 | В   | RP-030049 | R4-030088 | approved | Co-siting requirements for different FDD BS classes   | 6.0.0   |           | R4 | RInImp-<br>BSClass-FDD |
| 25.104 | 177 | 4 | Rel-6 | В   | RP-030049 | R4-030358 | approved | Maximum output power for different BS class   | 6.0.0   |           | R4 | RInImp-<br>BSClass-FDD |
| 25.104 | 179 | 1 | Rel-5 | Α   | RP-030044 | R4-030258 | approved | Clarification of the W-CDMA interferer definition in BS requirements for ACS and blocking characteristics | 5.5.0   |           | R4 | TEI4                   |
| 25.104 | 180 |   | Rel-4 | F   | RP-030035 | R4-030141 | approved | Correction to external equipment definition   | 4.6.0   |           | R4 | TEI4                   |
| 25.104 | 181 |   | Rel-5 | Α   | RP-030035 |           | approved | Correction to external equipment definition   | 5.5.0   |           | _  | TEI4                   |
| 25.104 | 182 |   | Rel-6 | Α   | RP-030035 | R4-030143 |          | Correction to external equipment definition   | 6.0.0   |           | R4 | TEI4                   |
| 25.104 | 183 |   | Rel-6 | Α   | RP-030044 | R4-030263 |          | Clarification of the W-CDMA interferer definition in BS requirements for ACS and blocking characteristics | 6.0.0   |           | R4 | TEI4                   |
| 25.104 | 184 |   | Rel-6 | F   | RP-030049 | R4-030297 | approved | The definition of UTRA-FDD BS classes   | 6.0.0   |           | R4 | RInImp-<br>BSClass-FDD |
| 25.105 | 145 |   | R99   | F   | RP-030030 | R4-030030 | approved | TDD-GSM co-existence in the same geographic area  | 3.12.0  |           | R4 | TEI                    |
| 25.105 | 146 |   | Rel-4 | Α   | RP-030030 | R4-030031 | approved | TDD-GSM co-existence in the same geographic area  | 4.6.0   |           | R4 | TEI; LCRTDD-<br>RF     |
| 25.105 | 147 |   | Rel-5 | Α   | RP-030030 | R4-030032 | approved | TDD-GSM co-existence in the same geographic area  | 5.3.0   |           | R4 | TEI; LCRTDD-<br>RF     |
| 25.105 | 148 |   | Rel-4 | F   | RP-030035 | R4-030148 | approved | Correction to external equipment definition   | 4.6.0   |           | R4 | TEI4                   |
| 25.105 | 149 |   | Rel-5 | Α   | RP-030035 | R4-030149 |          | Correction to external equipment definition   | 5.3.0   |           | R4 | TEI4                   |
| 25.105 | 150 |   | Rel-5 | F   | RP-030045 | R4-030298 |          | The definition of UTRA-TDD BS classes   | 5.3.0   |           | R4 | RInImp-<br>BSClass-TDD |
| 25.106 | 020 |   | Rel-4 | F   | RP-030036 | R4-030100 | approved | FDD GSM co-existence in the Same Geographic Area  | 4.4.0   |           | R4 | RInImp-REP             |
| 25.106 | 021 |   | Rel-5 | Α   | RP-030036 | R4-030101 | approved | FDD GSM co-existence in the Same Geographic Area  | 5.3.0   |           | R4 | RInImp-REP             |
| 25.113 | 020 |   | Rel-5 | F   | RP-030039 | R4-030086 | approved | Assessment of BLER in Uplink for Immunity Test  | 5.3.0   |           |    | TEI5                   |
| 25.123 | 286 | 1 | Rel-4 | F   | RP-030026 | R4-030261 | approved | Correction of interruption time in TDD Hard Handover  | 4.7.0   |           | R4 | LCRTDD-RF              |
| 25.123 | 287 | 1 | Rel-5 | Α   | RP-030026 | R4-030262 | approved | Correction of interruption time in TDD Hard Handover  | 5.3.0   |           | R4 | LCRTDD-RF              |
| 25.123 | 288 |   | R99   | F   | RP-030026 | R4-030018 |          | Correction of interruption time in TDD Hard Handover  | 3.11.0  |           | R4 | TEI                    |
| 25.123 | 289 |   | Rel-4 | Α   | RP-030026 | R4-030019 |          | Correction of interruption time in TDD Hard Handover  | 4.7.0   |           | R4 | TEI                    |
| 25.123 | 290 |   | Rel-5 | Α   | RP-030026 | R4-030020 |          | Correction of interruption time in TDD Hard Handover  | 5.3.0   |           | R4 | TEI                    |
| 25.123 | 291 |   | Rel-4 | F   | RP-030033 |           | approved | Total received power density definition for TDD BS  | 4.7.0   |           | R4 | TEI4                   |
| 25.123 | 292 |   | Rel-5 | Α   | RP-030033 | R4-030048 |          | Total received power density definition for TDD BS  | 5.3.0   |           | R4 | TEI4                   |
| 25.123 | 293 |   | R99   | F   | RP-030026 | R4-030049 |          | Transmitted code power accuracy   | 3.11.0  |           | R4 | TEI                    |
| 25.123 | 294 |   | Rel-4 | Α   | RP-030026 | R4-030050 | approved | Transmitted code power accuracy   | 4.7.0   |           | R4 | TEI                    |
| 25.123 | 295 |   | Rel-5 | Α   | RP-030026 | R4-030051 | approved | Transmitted code power accuracy   | 5.3.0   |           | R4 | TEI                    |

| Spec   | CR  | R | Phase | Cat | TSG RAN document | WG<br>document | TSG RAN status | Subject  | CR to version | Resulting version | WG | Workitem |
|--------|-----|---|-------|-----|------------------|----------------|----------------|--|---------------|-------------------|----|----------|
| 25.123 | 296 |   | R99   | F   | RP-030026        | R4-030052      |                | UE Timer accuracy for TDD  | 3.11.0        | VEISIOII          | R4 | TEI      |
| 25.123 | 297 |   | Rel-4 | A   | RP-030026        | R4-030052      |                | UE Timer accuracy for TDD  | 4.7.0         |                   |    | TEI      |
| 25.123 | 298 |   | Rel-5 | A   | RP-030026        | R4-030054      |                | UE Timer accuracy for TDD  | 5.3.0         |                   | R4 |          |
| 25.133 | 510 |   | R99   | F   | RP-030027        | R4-030012      |                | Correction of interruption time in FDD/TDD Hard Handover   | 3.12.0        |                   |    | TEI      |
| 25.133 | 511 |   | Rel-4 | A   | RP-030027        | R4-030013      |                | Correction of interruption time in FDD/TDD Hard Handover   | 4.7.0         |                   | R4 | TEI      |
| 25.133 | 512 |   | Rel-5 | Α   | RP-030027        | R4-030014      |                | Correction of interruption time in FDD/TDD Hard Handover   | 5.5.0         |                   |    | TEI      |
| 25.133 | 513 |   | Rel-6 | A   | RP-030027        | R4-030015      |                | Correction of interruption time in FDD/TDD Hard Handover   | 6.0.0         |                   |    | TEI      |
| 25.133 | 514 |   | R99   | F   | RP-030027        |                | approved       | Applicability of Timer T-reselection for 2G cell reselection.  | 3.12.0        |                   |    | TEI      |
| 25.133 | 515 |   | Rel-4 | A   | RP-030027        | R4-030022      |                | Applicability of Timer T-reselection for 2G cell reselection.  | 4.7.0         |                   |    | TEI      |
| 25.133 | 516 |   | Rel-5 | Α   | RP-030027        | R4-030023      |                | Applicability of Timer T-reselection for 2G cell reselection.  | 5.5.0         |                   |    | TEI      |
| 25.133 | 517 |   | Rel-6 | Α   | RP-030027        | R4-030024      |                | Applicability of Timer T-reselection for 2G cell reselection.  | 6.0.0         |                   | R4 | TEI      |
| 25.133 | 519 |   | Rel-5 | F   | RP-030040        | R4-030073      |                | Correction of measurement and reporting capability requirements in CELL_DCH state in case of parallel measurements | 5.5.0         |                   |    | TEI5     |
| 25.133 | 520 |   | Rel-6 | А   | RP-030040        | R4-030074      | approved       | Correction of measurement and reporting capability requirements in CELL_DCH state in case of parallel measurements | 6.0.0         |                   | R4 | TEI5     |
| 25.133 | 521 |   | Rel-5 | Α   | RP-030027        | R4-030076      | approved       | Correction of Hard HO test case  | 5.5.0         |                   | R4 | TEI      |
| 25.133 | 522 |   | Rel-6 | Α   | RP-030027        | R4-030077      | approved       | Correction of Hard HO test case  | 6.0.0         |                   | R4 | TEI      |
| 25.133 | 525 |   | Rel-4 | F   | RP-030034        | R4-030114      | approved       | UE rx-tx time difference type 1  | 4.7.0         |                   | R4 | TEI4     |
| 25.133 | 526 |   | Rel-5 | Α   | RP-030034        | R4-030115      | approved       | UE rx-tx time difference type 1  | 5.5.0         |                   | R4 | TEI4     |
| 25.133 | 527 |   | Rel-6 | Α   | RP-030034        | R4-030116      | approved       | UE rx-tx time difference type 1  | 6.0.0         |                   | R4 | TEI4     |
| 25.133 | 528 |   | R99   | F   | RP-030027        | R4-030154      | approved       | Correction of Hard HO test case  | 3.12.0        |                   | R4 | TEI      |
| 25.133 | 529 |   | Rel-4 | Α   | RP-030027        | R4-030155      | approved       | Correction of Hard HO test case  | 4.7.0         |                   | R4 | TEI      |
| 25.133 | 532 |   | Rel-5 | F   | RP-030040        | R4-030187      | approved       | Changes to TFC selection requirements for codec mode switch  | 5.5.0         |                   | R4 | TEI5     |
| 25.133 | 533 |   | Rel-6 | Α   | RP-030040        | R4-030188      | approved       | Changes to TFC selection requirements for codec mode switch  | 6.0.0         |                   | R4 | TEI5     |
| 25.133 | 544 |   | R99   | F   | RP-030027        | R4-030248      | approved       | Constant Value in Random Access Test requirements  | 3.12.0        |                   | R4 | TEI      |
| 25.133 | 545 |   | Rel-4 | Α   | RP-030027        | R4-030249      | approved       | Constant Value in Random Access Test requirements  | 4.7.0         |                   | R4 | TEI      |
| 25.133 | 546 |   | Rel-5 | Α   | RP-030027        | R4-030250      | approved       | Constant Value in Random Access Test requirements  | 5.5.0         |                   | R4 | TEI      |
| 25.133 | 547 |   | Rel-6 | Α   | RP-030027        | R4-030251      | approved       | Constant Value in Random Access Test requirements  | 6.0.0         |                   | R4 | TEI      |
| 25.133 | 548 |   | R99   | F   | RP-030031        | R4-030278      | approved       | Correction of UE parameters for Random Access test   | 3.12.0        |                   | R4 | TEI      |
| 25.133 | 549 |   | Rel-4 | Α   | RP-030031        | R4-030279      | approved       | Correction of UE parameters for Random Access test   | 4.7.0         |                   | R4 | TEI      |
| 25.133 | 550 |   | Rel-5 | Α   | RP-030031        | R4-030280      | approved       | Correction of UE parameters for Random Access test   | 5.5.0         |                   | R4 | TEI      |
| 25.133 | 551 |   | Rel-6 | Α   | RP-030031        | R4-030281      | approved       | Correction of UE parameters for Random Access test   | 6.0.0         |                   | R4 | TEI      |
| 25.133 | 553 |   | Rel-6 | F   | RP-030048        | R4-030319      | approved       | Corrections of CPICH_Ec/lo relative measurement accuracy requirement   | 6.0.0         |                   | R4 | TEI6     |
| 25.141 | 270 | 1 | R99   | F   | RP-030029        | R4-030314      | approved       | Protection of the FDD BS receiver  | 3.12.0        |                   | R4 | TEI      |

| Spec   | CR  | R | Phase | Cat | TSG RAN document | WG<br>document | TSG RAN status | Subject  |                      | Resulting version | WG | Workitem                                   |
|--------|-----|---|-------|-----|------------------|----------------|----------------|--|----------------------|-------------------|----|--|
| 25.141 | 271 | 1 | Rel-4 | Α   | RP-030029        | R4-030315      |                | Protection of the FDD BS receiver  | <b>version</b> 4.7.0 | VCISIOII          | R4 | TEI  |
| 25.141 | 272 | 1 | Rel-5 | Α   | RP-030029        | R4-030316      |                | Protection of the FDD BS receiver  | 5.5.0                |                   |    | TEI  |
| 25.141 | 273 | 1 | Rel-6 | Α   | RP-030029        | R4-030317      | approved       | Protection of the FDD BS receiver 5.0.0  6.0.0                           |                      |                   |    | TEI  |
| 25.141 | 276 | Ė | Rel-6 | В   | RP-030049        | R4-030089      |                | Co-siting requirements for different FDD BS classes                      | 6.0.0                |                   | R4 | RInImp-                                    |
|        |     |   |       | _   | 5555.5           |                | ωρρ.σ.σα       | or simily requirements on amorem 122 20 staces                           | 0.0.0                |                   |    | BSClass-FDD                                |
| 25.141 | 278 | 3 | Rel-6 | В   | RP-030049        | R4-030350      | approved       | Maximum output power for different BS class                              | 6.0.0                |                   | R4 | RInImp-                                    |
|        |     |   |       |     |                  |                |                |  |                      |                   |    | BSClass-FDD                                |
| 25.141 | 279 | 1 | Rel-5 | F   | RP-030041        | R4-030289      | approved       | Statistical approach for BER BLER tests                                  | 5.5.0                |                   | R4 | TEI5                                       |
| 25.141 | 280 | 1 | Rel-6 | Α   | RP-030041        | R4-030292      | approved       | Statistical approach for BER BLER tests                                  | 6.0.0                |                   | R4 | TEI5                                       |
| 25.141 | 285 | 1 | Rel-5 | F   | RP-030044        | R4-030264      | approved       | Clarification of the W-CDMA interferer definition in BS                  | 5.5.0                |                   | R4 | TEI5                                       |
|        |     |   |       |     |                  |                |                | conformance tests for ACS and blocking characteristics                   |                      |                   |    |  |
| 25.141 | 286 |   | Rel-4 | F   | RP-030035        | R4-030144      | approved       | Correction to external equipment definition                              | 4.7.0                |                   | R4 | TEI4                                       |
| 25.141 | 287 |   | Rel-5 | Α   | RP-030035        | R4-030145      | approved       | Correction to external equipment definition                              | 5.5.0                |                   | R4 | TEI4                                       |
| 25.141 | 288 |   | Rel-6 | Α   | RP-030035        | R4-030146      | approved       | Correction to external equipment definition                              | 6.0.0                |                   | R4 | TEI4                                       |
| 25.141 | 289 |   | Rel-6 | Α   | RP-030044        | R4-030265      | approved       | Clarification of the W-CDMA interferer definition in BS                  | 6.0.0                |                   | R4 | TEI5                                       |
|        |     |   |       |     |                  |                |                | conformance tests for ACS and blocking characteristics                   |                      |                   |    |  |
| 25.141 | 290 |   | Rel-6 | F   | RP-030049        | R4-030299      | approved       | The definition of UTRA-FDD BS classes                                    |                      |                   | R4 | RInImp-<br>BSClass-FDD                     |
| 25.142 | 156 |   | R99   | F   | RP-030030        | R4-030033      | approved       | TDD-GSM co-existence in the same geographic area 3.12.0                  |                      |                   | R4 | TEI  |
| 25.142 | 157 |   | Rel-4 | Α   | RP-030030        | R4-030034      | approved       | TDD-GSM co-existence in the same geographic area                         | 4.7.0                |                   | R4 | TEI; LCRTDD-<br>RF                         |
| 25.142 | 158 |   | Rel-5 | Α   | RP-030030        | R4-030035      | approved       | TDD-GSM co-existence in the same geographic area                         | 5.3.0                |                   | R4 | TEI;LCRTDD-RF                              |
| 25.142 | 159 |   | R99   | F   | RP-030028        | R4-030036      | approved       | Spurious emission requirements for unsynchronized TDD operation          | 3.12.0               |                   | R4 | TEI  |
| 25.142 | 160 |   | Rel-4 | F   | RP-030028        | R4-030037      | approved       | Spurious emission requirements for unsynchronized TDD operation          | 4.7.0                |                   | R4 | TEI; LCRTDD-<br>RF                         |
| 25.142 | 161 |   | Rel-5 | F   | RP-030028        | R4-030038      | approved       | Spurious emission requirements for unsynchronized TDD operation          | 5.3.0                |                   | R4 | TEI; LCRTDD-<br>RF; RInImp-<br>BSClass-TDD |
| 25.142 | 162 |   | Rel-5 | F   | RP-030042        | R4-030039      | approved       | Correction to BS configurations 5.3.0                                    |                      |                   | R4 | TEI5                                       |
| 25.142 | 163 |   | Rel-4 | F   | RP-030035        | R4-030150      | approved       | Correction to external equipment definition 4.7.0                        |                      |                   | R4 | TEI4                                       |
| 25.142 | 164 |   | Rel-5 | Α   | RP-030035        | R4-030151      | approved       | Correction to external equipment definition 5.3.0                        |                      |                   | R4 | TEI4                                       |
| 25.142 | 165 |   | Rel-5 | F   | RP-030042        | R4-030252      | approved       | Correction of Transmit Modulation testing for 3,84 Mcps 5.3.0 TDD Option |                      |                   | R4 | TEI5                                       |
| 25.142 | 166 |   | Rel-5 | F   | RP-030045        | R4-030300      | approved       | The definition of UTRA-TDD BS classes 5.3.0                              |                      |                   | R4 | RInImp-<br>BSClass-TDD                     |
| 25.143 | 029 |   | Rel-4 | F   | RP-030036        | R4-030102      | approved       | FDD GSM co-existence in the Same Geographic Area                         | 4.6.0                |                   | R4 | RInImp-REP                                 |
| 25.143 | 030 |   | Rel-5 | Α   | RP-030036        |                | approved       | FDD GSM co-existence in the Same Geographic Area                         | 5.3.0                |                   |    | RInImp-REP                                 |
| 25.952 | 002 |   | Rel-5 | F   | RP-030045        | R4-030301      | approved       | The definition of UTRA-TDD BS classes                                    | 5.1.0                |                   |    | BSClass-TDD                                |

| Spec   | CR  | R | Phase | Cat | TSG RAN document | WG<br>document | TSG RAN status | Subject  |         | Resulting version | WG  | Workitem |
|--------|-----|---|-------|-----|------------------|----------------|----------------|--|---------|-------------------|-----|----------|
| 04.404 | 040 | 4 | D-1.5 | ^   |                  |                |                |  | version | Version           | D.4 | TEI      |
| 34.124 | 012 | 1 | Rel-5 | Α   | RP-030144        | RP-030144      | approved       | Correction to radiated spurious emission measurement bandwidth | 5.2.0   |                   | R4  | TEI      |
| 34.124 | 013 | - | R99   | F   | RP-030144        | RP-030144      | approved       | Correction to radiated spurious emission measurement bandwidth | 3.3.0   |                   | R4  | TEI      |
| 34.124 | 014 | - | Rel-4 | Α   | RP-030144        | RP-030144      | approved       | Correction to radiated spurious emission measurement bandwidth |         |                   | R4  | TEI      |
| 25.101 | 207 | 1 | R99   | F   | RP-030118        | R4-030286      | rejected       | Variable TX/RX frequency separation in the 1800 and 1900 bands |         |                   | R4  | TEI      |
| 25.101 | 207 | 2 | R99   | F   | RP-030167        |                | rejected       | Variable Tx/Rx frequency separation in the 1800 and 1900 bands | 3.12.0  |                   | R4  | -        |
| 25.101 | 208 | 1 | Rel-4 | А   | RP-030118        | R4-030287      | rejected       | Variable TX/RX frequency separation in the 1800 and 1900 bands | 4.6.0   |                   | R4  | TEI      |
| 25.101 | 208 | 2 | Rel-4 | А   | RP-030167        |                | rejected       | Variable Tx/Rx frequency separation in the 1800 and 1900 bands | 4.6.0   |                   | R4  | -        |
| 25.101 | 209 | 1 | Rel-5 | Α   | RP-030118        | R4-030288      | rejected       | Variable TX/RX frequency separation in the 1800 and 1900 bands | 5.5.0   |                   | R4  | TEI      |
| 25.101 | 209 | 2 | Rel-5 | Α   | RP-030167        |                | rejected       | Variable Tx/Rx frequency separation in the 1800 and 1900 bands | 5.5.0   |                   | R4  | -        |
| 34.124 | 012 |   | Rel-5 | F   | RP-030043        | R4-030041      | withdrawn      | Correction to radiated spurious emission measurement bandwidth | 5.2.0   |                   | R4  | TEI5     |

### Annex D: List of actions

#### All WGs

- Provide clear and solid evidence that the system will not work in the "consequences if not approved" field of the CR cover page for Rel99 and Rel-4 CRs
- Provide accurate information on the expected completion date and percentage completed for the Work Items

#### RAN WG1

- Study the need to specify the TFCI power on S-CCPCH in case of no data, and inform RAN WG3 of the conclusion (sec. 8.3.5)

#### RAN WG2

- Liaise with SA WG4 to check the correctness of the assumptions of the test for the conversational services in PS domain. (RP-030127)

#### RAN WG3

- Verify the delays used by SA WG4 in the test for the conversational services in PS domain (RP-030127)
- Review the Description Sheet of the "Iu enhancements for IMS support in the RAN" WI (RP-030191)

#### **RAN WG4**

- To examine the issue of the performance impact in the UE of the variable duplex distance, and to provide CRs to next TSG RAN if possible (sec. 8.2.6)
- Review and and send, if agreed, the LS to AISG (RP-030184).

# Annex E: Meeting schedule

TSG RAN WG1 meetings:

| Meeting # | Date                | Host                          | Location         |
|-----------|---------------------|-------------------------------|------------------|
| 32        | 7-11 April 2003     | Samsung                       | Seoul, Korea     |
| 33        | 19-23 May 2003      | European Friends of 3GPP      | Paris, France    |
| 34        | 25-29 August 2003   | North American Frieds of 3GPP | New York, USA    |
| 35        | 6-10 October 2003   | Samsung                       | Seoul, Korea     |
| 36        | 17-21 November 2003 | European Friends of 3GPP      | Lisbon, Portugal |

### TSG RAN WG2 meetings:

| Meeting # | Date                          | Host                     | Location                 |  |  |
|-----------|-------------------------------|--------------------------|--------------------------|--|--|
| 35        | 35 07 - 11 April 2003 Samsung |                          | Seoul, Korea             |  |  |
| 36        | 19 - 23 May 2003              | European Friends of 3GPP | Paris, France            |  |  |
| 37        | 25 - 29 August 2003           | European Friends of 3GPP | Europe                   |  |  |
| 38        | 06 - 10 October 2003          | ETSI                     | Sophia Antipolis, France |  |  |
| 39        | 17 - 21 November 2003         | Qualcomm                 | San Diego, US            |  |  |

### TSG RAN WG3 meetings:

| Meeting # | Date                  | Host                     | Location                 |  |  |  |
|-----------|-----------------------|--------------------------|--------------------------|--|--|--|
| 35        | 07 - 11 April 2003    | Samsung                  | Seoul, Korea             |  |  |  |
| 36        | 19 - 23 May 2003      | European Friends of 3GPP | Paris, France            |  |  |  |
| 37        | 25 - 29 August 2003   | European Friends of 3GPP | Europe                   |  |  |  |
| 38        | 06 - 10 October 2003  | ETSI                     | Sophia Antipolis, France |  |  |  |
| 39        | 17 - 21 November 2003 | Qualcomm                 | San Diego, US            |  |  |  |

TSG RAN WG4 meetings:

| Meeting # | Date                  | Host                     | Location      |  |  |
|-----------|-----------------------|--------------------------|---------------|--|--|
| 27        | 19 - 23 May 2003      | European Friends of 3GPP | Paris, France |  |  |
| 28        | 18-22 August 2003     | CATT                     | China         |  |  |
| 29        | 17 - 21 November 2003 | Qualcomm                 | San Diego, US |  |  |

### TSG RAN meetings:

| Meeting # | Date                   | Host                        | Location             |
|-----------|------------------------|-----------------------------|----------------------|
| 20        | 03 - 06 June 2003      | Nokia                       | Hämeenlinna, Finland |
| 21        | 16 - 19 September 2003 | Siemens                     | Berlin, Germany      |
| 22        | 09 - 12 December 2003  | ARIB/TTC/NA Friends of 3GPP | Hawaii, US           |
| 23        | 09 - 12 March 2004     |                             | China                |
| 24        | 01 - 04 June 2004      |                             |                      |
| 25        | 07 - 10 September 2004 |                             | US                   |
| 26        | 07 - 10 December 2004  |                             | Europe               |

## Annex F: Summary of RAN Work Items

This table lists RAN Work Items, existing and new, discussed at meeting #19. Note that the level of completion is merely an ESTIMATION, provided by the WG, the rapporteur or the 3GPP support. With the exception of HSDPA, which is a Release 5 WI, the rest are Release 6 or later.

Abbreviations used: %: Level of completion

BB: Building Block

Feat: Feature

FS: Feasibility Study

SI: Study Item WI: Work Item WT: Work Task

| Туре      | WI name   | WI acronym             | Leading<br>WG | %   | Finish date | Status report | Remarks  |
|-----------|---|------------------------|---------------|-----|-------------|---------------|--|
| Feat      | Radio Interface Improvement   | Rinimp                 | TSG<br>RAN    |     |             |               |  |
| BB        | Improvement of inter-frequency and inter-system measurements  | RInImp-IfIsM           | WG1           | 5%  | Sept 03     | RP-030151     | Completion date changed from June 03                                     |
| BB        | Terminal power saving features  | RInImp-TPS             | WG2           | 0%  |             | RP-030007     | No work done. Closed   |
| BB        | Multiple Input Multiple Output antennas (MIMO)  | RInImp-MIMO            | WG1           | 40% | Sept 03     | RP-030012     | The WIDS is updated in RP-030192. Also, new WIs are created for each WG. |
| New<br>WI | Multiple Input Multiple Output Antennas – Physical Layer  | RInImp-MIMO-<br>Phys   | WG1           |     | Sept 03     |               | New WI. Description Sheet in RP-030192                                   |
| New<br>WI | Multiple Input Multiple Output Antennas – Layer 2,3 aspects   | RInImp-MIMO-L23        | WG2           |     | Sept 03     |               | New WI. Description Sheet in RP-030192                                   |
| New<br>WI | Multiple Input Multiple Output Antennas- Iub/Iur Protocol<br>Aspects  | RInImp-MIMO-<br>lublur | WG3           |     | Sept 03     |               | New WI. Description Sheet in RP-030192                                   |
| New<br>WI | Multiple Input Multiple Output Antennas - RF Radio<br>Transmission/ Reception, System Performance<br>Requirements and Conformance Testing | RInImp-MIMO-RF         | WG4           |     | March 04    |               | New WI. Description Sheet in RP-030192                                   |
| BB        | Improving Receiver Performance Requirements for the FDD UE  | RInImp -<br>UERecPerf  | WG4           | -   | Sept 03     | RP-030050     |  |
| BB        | UMTS 850  | RInImp-UMTS850         | WG4           | 10% | March 04    | RP-030163     | Updated WIDS in RP-030197  |
| New<br>BB | DS-CDMA Introduction in the 800 MHz Band  | RInImp-UMTS800         | WG4           |     | Sept 03     |               | New WI. Description Sheet in RP-030178                                   |

| Туре      | WI name  | WI acronym                | Leading<br>WG | %   | Finish date | Status report | Remarks   |
|-----------|--|---------------------------|---------------|-----|-------------|---------------|---|
| New<br>BB | UMTS 1.7/2.1 GHz   | RInImp-<br>UMTS1721       | WG4           |     | Dec 03      |               | New WI. Description Sheet in RP-030186                            |
| SI        | FS on Radio link performance enhancements  | RInImp-RIperf             | WG1           | 40% | Sept 03     | RP-030089     |   |
| SI        | FS on Fast Cell Selection (FCS) for HS-DSCH  | RInImp-FCS                | WG1           | 20% | March 03    | RP-030154     | No progress, SI Closed  |
| SI        | FS on UTRA Wideband Distribution System  | RInImp-WDS                | WG4           | 40% | Sept 03     | RP-030013     | Completion date changed from March 03                             |
| SI        | FS for the viable deployment of UTRA in additional and diverse spectrum arrangements               | RInImp-<br>UMTSBands      | WG4           | 90% | June 03     | RP-030004     | Completion date changed from March 03                             |
| SI        | FS on Improvement of inter-frequency and inter-system measurement for 1.28 Mcps TDD                | RInImp-IfIsMLCR           | WG1           | 55% | Sept 03     | RP-030180     | Completion date changed from March 03                             |
| SI        | FS for the Analysis of OFDM for UTRAN enhancement  | RInImp-FSOFDM             | WG1           | 30% | Dec 03      | RP-030161     | Completion date changed from June 03                              |
| SI        | FS on Uplink Enhancements for Dedicated Transport Channels   | RInImp-<br>FSUpDTrCh      | WG1           | 35% | Dec 03      | RP-030158     | Completion date changed from June 03                              |
| SI        | FS on Analysis of higher chip rates for UTRA TDD evolution   | RInImp-<br>FSVHCRTDD      | WG1           | 30% | Dec 03      | RP-030094     | Completion date changed from June 03                              |
| New<br>SI | FS on Low Output Powers for general purpose FDD BSs  |                           | WG4           |     | Sept 03     |               | New SI. Description Sheet in RP-030198                            |
|           |  |                           |               |     |             |               |   |
| Feat      | RAN Improvement Feature  | RANimp                    | TSG<br>RAN    |     |             |               |   |
| BB        | Radio access bearer support enhancement  | RANimp-RABSE              | WG2           | 0%  |             | RP-030006     |   |
| New<br>WT | Iu enhancements for IMS support in the RAN   | RANimp-RABSE-<br>luEnhIMS | WG3           |     | Sept 03     |               | New WI. Description Sheet in RP-030191                            |
| BB        | Improvement of RRM across RNS and RNS/BSS  | RRM1                      | WG3           | 35% | Dec 03      | RP-030083     | Completion date changed from June 03                              |
| BB        | Beamforming Enhancements   | RANimp-BFE                | WG1           | 80% | June 03     | RP-030088     |   |
| SI        | FS on the Evolution of UTRAN Architecture  | RANimp-FSEvo              | WG3           | 5%  | June 03     | RP-030085     |   |
| SI        | FS for the Early Mobile Handling in UTRAN  | RANimp-<br>FSEarlyUE      | WG2           | 65% | June 03     | RP-030010     |   |
| BB        | RRM optimizations for lur and lub  | RANimp-RRMopt             | WG3           |     |             |               | Generic BB  |
| SI        | Improved Access to UE Measurement Data for CRNC to support TDD RRM                                 |                           | WG3           | 15% | June 03     | RP-030087     |   |
| New<br>BB | Remote Control of Electrical Tilting Antennas  | RANimp-TiltAnt            | WG3           |     | Dec 03      |               | New WI. Description Sheet in RP-030193                            |
| New<br>BB | Network Assisted Cell Change (NACC) from UTRAN to GERAN – network-side aspects                     | RANimp-NACC               | WG3           |     | Sept 03     |               | New WI. Description Sheet in RP-030156                            |
| ВВ        | UE positioning   |                           | TSG<br>RAN    |     |             |               | This is a building block under SA WG2 feature "Location Services" |
| WT        | UE positioning enhancements  |                           | WG2           |     |             |               | Generic WI  |
| WT        | Open interface between the SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods | LCS-Rel4Pos               | WG2           | 90% | June 03     | RP-030008     | Completion date changed from March 03                             |

| Туре | WI name  | WI acronym | Leading<br>WG | %   | Finish date | Status report | Remarks                                |
|------|--|------------|---------------|-----|-------------|---------------|--|
| SI   | FS on Enhancements to OTDOA Positioning using advanced blanking methods  |            | WG2           | 50% | June 03     | RP-030011     |  |
|      |  |            |               |     |             |               |  |
| Feat | High Speed Downlink Packet Access  | HSDPA      | TSG           |     |             |               |  |
|      |  |            | RAN           |     |             |               |  |
| BB   | HSDPA - RF Radio Transmission/ Reception, System                         | HSDPA-RF   | WG4           | 90% | June 03     | RP-030096     | Completion date changed from March 03, |
|      | Performance Requirements and Conformance Testing                         |            |               |     |             |               | HSDPA-RF remains part of Rel-5         |
|      |  |            |               |     |             |               |  |
| BB   | Introduction of the Multimedia Broadcast Multicast Service (MBMS) in RAN | MBMS-RAN   | WG2           | 15% | Sept 03     | RP-030143     | Updated WIDS in RP-030015              |
|      |  |            |               |     |             |               |  |
| Feat | Evolution of the transport in the UTRAN                                  | ETRAN      | TSG           |     |             |               | Generic Feature                        |
|      | ·  |            | RAN           |     |             |               |  |

# TSG Services and System Aspects Meeting #19 Birmingham, UK, 17-20 March 2003

SP-030183

Title: Approved Report of the "Early UE" Ad Hoc meeting

(Sophia Antipolis, France 29 – 30 January 2003)

**Document for:** Information

Source: 3GPP support team



### 1 Opening of the Meeting

Francois Courau (Chairman) opened the meeting at 9:00 Wednesday 29<sup>th</sup>. The agenda proposed in document **RPA030001** was approved without comments.

As a reminder, the requirement from TSG RAN for this Ad Hoc is the following:

The TSG RAN Ad Hoc shall select the content of the Information Element to be sent from the Core Network to the RNC. The identified solutions are either the full IMEI-SV or a bit string based on IMEI-SV defining what is correctly or not supported by the UE. After having selected a solution, a LS shall be sent to relevant CN and SA working groups

The chairman informed the participants about the IPR obligations of the 3GPP member companies according to the Policies of Organizational Partners.

The attention of the members of this Technical Specification Group is drawn to the fact **that 3GPP Individual Members have the obligation** under the IPR Policies of their respective Organizational Partners to **inform their respective** Organizational Partners **of Essential IPRs they become aware of**.

The members take note that they are hereby invited:

- ?? to investigate in their company whether their company does own IPRs which are, or are likely to become Essential in respect of the work of the Technical Specification Group.
- ?? to notify the Director-General, or the Chairman of their **respective** Organizational Partners, of all potential IPRs that their company may own, by means of the IPR Statement and the Licensing declaration forms.

### 2 Documents and discussions

#### RPA030004 Efficient handling of early mobiles with the UTRAN (Vodafone)

Alan Law (Vodafone) presented this document.

The documents first highlights the requirements from an operators perspective:

- Ensure that a UE with specific behaviour issues, despite a legitimate attempt to implement the standards, can be handled in a stable manner within the UTRAN in a timely fashion
- Validated UE behaviour should be documented in the standards, together with recommended handling
  of the behaviour. This should result in common behaviour of UEs in the long term, with consistent
  handling across networks aiding roaming.

Vodafone also remarks that a solution has to be reached in this Ad Hoc, so vendors can start the implementation it as soon as possible. Vodafone recommends the adoption of the IMEISV solution, a number of arguments are proposed in the document.

Laurent Thiebaut (Alcatel) noted that document **RPA030003** (Efficient handling of early mobiles with the UTRAN, Alcatel) gives remarks and responses to the arguments presented by Vodafone in RPA030004. The document was not comprehensively presented, but it was however used as a basis for the discussion.

The chairman noted that the intention of the mechanism being discussed is not to solve the situation of a new UE being put into service and behaving incorrectly in existing networks or, plainly, not working; but the case instead when a feature is activated in the network, and as a result all UE (or many) stop working or start malfunctioning.

In such scenario, a feature, which might have been part of the standard, was not implemented in the networks against whom the terminals were tested in the IOTs. The feature is implemented at a later stage, and many of the old UEs, not tested under the new conditions, may start presenting problems.

As an exemple, he cited DSCH (already in the standard) that may not be used in the first deployment of networks, but activated later.

Denis Fauconnier (Nortel) questioned the "Validated UE behaviour" (requirement 2) and warned that incorrect behaviour could become a new option in the standard, as a solution is implemented in the networks without prior discussion in 3GPP. In a way such a solution could be considered "validated" and forced into the standard.

Some UEs models may have incorrect behaviour, if this is somehow documented in the standard, and even new test cases may be created, the incorrect behaviour may become an standardised optional behaviour. Denis also pointed the importance of the IOT. If these tests are done properly and comprehensively, the cases of new UEs presenting incorrect behaviour under existing networks would me low.

Haschem Madadi (Three) briefly supported Vodafone's arguments and positioned Three as a supporting company for the IMEISV solution.

Alan clarified that the specific problem on the UTRAN mentioned (bullet 6) actually appear, equipment in operator's networks is normally from more than one vendor. A given UE model may behave differently when connected to the different vendor's equipment. This is very much undesirable from the operator's perspective and it shouldn't be the case, but in real life it is very likely to happen.

Donglin Shen (ATT) noted that the IMEISV might be the best solution for an operator, but probably it is not the best compromise in terms of complexity. The complexity of multiple UE faulty database and solution management/maintenance for IMEI/SV over Iu proposal will result in higher maintenance and operational cost to operators. He also noted that the solution will lead to different behaviour of terminals on different operators, as each will, at least on a first stage, implement a "proprietary" solution. In ATT's view, this is undesirable and so, Donglin expressed support for the bitmap solution.

# RPA030008 3GPP's role on handling UE faults using Bitmap on Iu (Alcatel, ATT Wireless, Fujitsu, Lucent technologies, NEC, Nokia, Nortel, Orange, Panasonic, Philips, Siemens & T-Mobile)

Michael Roberts (NEC) presented this document.

The document supports the bitmap approach and emphasizes the importance of discussing the problems and faults in an open and public forum like 3GPP. It presents the following consequences of having the IMEISV available in the RNC:

- Bespoke implementations between UE and RNC manufacturers which give an unfair advantage over those UE and RNC manufacturers that have only implemented the standard. This is foreseen as being both undesirable and unfair, in what is meant to be a global and open standard.
- If a UE has a fault, the fact that IMEI-SV is available to the RNC there is no onus on the mobile manufacturer to bring the problem to the standard and there is no way to force this UE manufacturer to come to the standard. In fact the UE manufacturer may choose to deliberately not announce the

problem. In this case, it is sufficient for the UE manufacturer to negotiate directly with the RNC/Operator in order to fix his problem.

Additionally, it is remarked that an implementation of the patches via a bitmap will ensure that the UEs will have the same behaviour and level of service when roaming from one network vendor to another, or nationally or internationally.

It was discussed the misuse of a particular bit of the bitmap for a proprietary solution, in the form of an operator requesting its mobile providers to set up a bit to one to mark a particular behaviour. It was noted that the same situation can happen with the IMEISV solution, it would be even easier since each different mobile can be immediately identified. Denis Fauconnier (Nortel) explained there is a subtle difference: with IMEISV, it would be possible to have differentiated behaviour and proprietary solutions, and still be in accordance with the standard; whereas the misuse of one of the bits of the bitmap would make those terminals or network uncompliant with the standard as far as the usage of the bit has not been agreed and standardised.

It was raised the situation where UE and network manufacturers address the malfunctioning of a given combination UE & network in an undisclosed way. This arrangements might actually be triggered by the concerned operator. This will produce de facto solutions that are not discussed and agreed by the full comunity. Andrea De Pasquale (Vodafone) addressed these concerns, since even a big operator like Vodafone has different network providers and multiple combinations UE-Network, so it is not foreseeable to arrange in a hidden way each malfunctioning situation.

After some discussion, the requirements from Vodafone in **RPA030004** were edited and agreed as follows:

Operators need a solution that will ensure that a UE with specific behaviour issues, despite a legitimate attempt to implement the standards, can be handled in a stable manner within the UTRAN in a timely fashion.

UE specific behaviour should be documented in 3GPP Documentation, together with recommended handling of the behaviour.

It is agreed that this Iu solution is to be used in "exceptional" cases that affect a high number of terminals, and not for small issues. Notably the case of existing terminals that stop working properly when a feature is activated. Per Beming (Ericsson) noted that the other "small" issues have to be addressed somehow, and wondered if those cases would be discussed in 3GPP at all, or documented in the TR approved time ago. Han van Bussel (T-Mobile) clarified that most of the problems can probably be handled with solutions different to Iu based solutions, e.g. by avoiding certain parameter settings and combinations, as the experience of GSM shows. He explained that the problem & solution can and should be documented in a 3GPP TR.

Andrea Buldorini (TIM) asked which solution would be faster when a problem is detected. Denis Fauconnier clarified that both solutions are equally fast, since the behaviour and the solution has to be discussed and agreed.

Per Beming questioned why "a single solution which is far more likely to be implemented by the operator community" (section 1.1). It was clarified that it is up to the operator to decide if it implements the agreed solution or not. Han van Bussel explained that it is a matter of the cost of the patches and their effect on the operation of the network. It is clarified that this consideration affects both solutions, with the IMEISV solution a patch would be required for each IMEISV.

There was debate on the size of the information to be transferred on the Iu. Alan Law noted that the IMEISV is fixed, but the bitmap is unpredictable. It may happen that there is a huge number of problems to be solved and bits assigned. It is noted that, even using a bitmap the size of the IMEISV (64 bits), it allows for a huge number of problems to be covered.

#### RPA030013 LS on Message Size Limitations on Iu and A interface (SA WG2)

Laurent Thiebaut (Alcatel) presented this LS.

This LS contains **RPA030005** (Liaison statement from GERAN2 on Architectural Impacts of Early UE Handling) attached. In this LS, SA WG2 reports the size constraints in the SCCP message "Connection Request" which is normally used to transfer the "HO Request" RANAP & BSSMAP messages.

The chairman commented that SA WG2 actually acknowledges that IMEISV can be transported safely, only the case of bitmap bigger size than the IMEISV would present problems. Hence, a bitmap same size of the IMEISV or shorter wouldn't impact the transfer in SCCP.

# RPA030006 Considerations on SCCP limitations for the transfer of information between the core network and the access network (Vodafone)

Ian Park (Vodafone) presented this document.

The document presents a solution to transfer large payload with the SCCP "Connection Request" message, in order to overcome the limitation explained in the LS from SA WG2 in the previous document. It is however noted that the workaround is not compatible with GSM phase 1.

The use of vendor specific ID within the bitmap was heavily contested, Antti Toskala (Nokia) commented that the principle of the bitmap, 3GPP specified, was that it would be vendor independent. Antti questioned also the need to transfer the bitmap in such early SCCP message. Alan Law (Vodafone) explained that in order to have the information in the RAN as soon as possible, such solution is preferable against using the "Common ID" procedure, which takes place later. There was some debate on which option, early SCCP messages or "Common ID", would be better from RAN WG3 perspective. It seems that the proposal for the SCCP "Connection Request" message has not been reviewed in RAN WG3, Vodafone is then invited to present it there.

#### **RPA030007** Management of UE faults information in the future (NTT DoCoMo)

Jean Jacques Davidian (NTT DoCoMo) presented this document.

The document deals with architecture issues, and gives two alternatives on where to store the data with the mapping between the IMEISV and the bitmap and when to access that data. It was noted that this is an issue to be discussed in SA WG2, anyhow Juan Noguera (NEC) commented that some impact on UTRAN can be observed in this paper, the first architecture requires that the IMEISV is always sent to the RNC, even if no especial requirements are associated to that IMEISV; in the second architecture the MSC checks with the mapping database first and would only send the specific UE information if it is required. This has an impact on performance. Per Beming (Ericsson) objected this view, the impact on RNC workload of receiving and checking the IMEISV is negligible.

Jean Jacques clarified that NTT's position is to support the bitmap solution rather than the IMEISV.

It was questioned where would the mapping IMEISV-faults be stored in the case of the IMEISV solution. Would it be the RNC or an external centralised database? Vodafone commented that this shouldn't be subjected to standardisation. Denis Fauconnier explained that moving to the RNC the information with the

mapping IMEISV-to-problem & patch could be done via O&M in a first stage, but at some point this may become very big to handle and a centralized database, with an additional interface to the RNCs, will be required; this new interface will have to be standardised.

As a summary, the IMEISV solution will put a heavier load in the UTRAN nodes, and the bitmap will charge more the core network. In one case, the database will be distributed in the RNCs, in the second, the mapping database will be centralised. However, no agreement was reached on any solution.

# RPA030009 Network implementation considerations for early UE handling (NEC, Alcatel, Fujitsu)

Michael Roberts (NEC) presented this document.

The document examines the impact on network nodes of the two alternatives proposed, and concludes two main differences:

- For the IMEI-SV solution the RNCs must process the IMEI-SV every time an Iu connection is established, irrespective on whether the UE is faulty or not. For the bitmap solution, RNCs only receive the bitmap for UEs requiring special handling.
- In both case the RNC needs to be updated when a new fault is detected, but in addition, with IMEI-SV solution, RNCs need also be updated each time a new terminal version is discovered to have an already existing fault.

It is therefore concluded that the bitmap solution presents lower impact on the RNC.

No comments were made after the presentation.

#### **RPA030011** Early UE Handling (Nokia)

Antti Toskala (Nokia) presented this document

The document presents the requirements to be fulfilled as shown in last RAN TSG meeting (RP-020856), and lists a number of benefits of the bitmap solution against the IMEISV solution.

Alan Law (Vodafone) questioned the storage requirements for IMEISV against bitmap. The 50/100 figures do no seem to be justified, Andrea De Pasquale (Vodafone) noted that the memory requirements are significative if the absolute values are considerable, but 100 times a small memory may still be a small memory.

#### **RPA030010** Early UE - proposal for further work (Siemens)

Alexander Vesely (Siemens) presented this document.

The document proposes a collection of methods to encode UE information into a bitstring, including plain IMEISV. A list of the requirements expressed in the past is also compiled, and then each method is evaluated for each requirement. The solution of choice proposes a bitmap of UE faults together with a pointer to the version of the "Early UE"

Juan Noguera (NEC) warned about the flexibility of current network implementations. It might prove very difficult to create a patch to the RNC software given its current state of development.

Juan also commented that situations brought to 3GPP would be those where roaming or handover is affected. The situation were a particular mobile malfunctions in the network of a vendor can be solved among the involved parties and it is unlikely that it is brought to 3GPP. Similar agreements will be reached with other network vendors, and only very few situations would not be solved this way.

#### **RPA030012** Process to handle early UEs in RAN (Nortel, NEC)

Denis Fauconnier (Nortel) presented this document.

The document presents the procedure to follow in 3GPP when faults are detected and a solution is discussed.

The document was endorsed in principle, although it was recommended not to make use of the vote by correspondence. Also it is noted that the text is oriented to the bitmap solution, and no agreement has been reached on the solution yet.

### 3 Conclusion

After many off line sessions, no agreement could be reached on what of the two solutions would be preferable. However, some conclusions could be drawn:

It seemed acceptable that the "Early UE" solutions, as being discussed, will address the case of many different UE models showing the same incorrect behaviour, due to the activation in the networks of a feature that, for whatever reason, had not undergone proper interoperability testing.

The case of faulty mobiles, due to insufficient IOT testing or erroneous implementation of the standard by one manufacturer, was believed to be a completely different situation which should be addressed separately. It was unclear if these cases should be handled by 3GPP, by an external fora (i.e. GCF) or by private agreements between the interested parties.

It was accepted that work could progress even if the actual solution isn't agreed. Both cases imply the transfer of an Information Element with some kind of UE specific information (UESBI), it is believed that the architecture could be defined independently. Also, the changes to the RANAP, and other Core Network protocols, could be agreed without having the actual semantics of the IE defined.

As a conclusion, the meeting drafted a LS informing the interested parties of the status of the discussions.

#### RPA030014 LS on early UE handling (TSG RAN Ad Hoc)

Denis Fauconnier (Nortel) presented this LS

The LS informs SA WG2, CN WGs, RAN WGs and GERAN of the lack of agreement on the actual contents of the information element UESBI to be transferred. The LS notes that this will be decided by TSG RAN at a later stage . However, SA WG2 is prompted to finish the work on the architecture to exchange the UESBI, independently of the semantics, RAN WG3 and CN WGs are required to prepare the CRs to the relevant protocols and to point to 25.413 (RANAP) for the final definition of the IE semantics.

Alexander Vesely (Siemens) noted that this is probably the worst result, as no decision has been actually taken. He noted that approving the CRs for a UESBI container now, but not defining the contents or the use, would allow proprietary implementation of that content. It was noted that the extension container mechanism, already approved at last RAN, would allow for any the implementation of proprietary procedures for information exchanges between the nodes.

Some debate aroused on the size of the container, and the possibility to transfer it through the MAP. It seems however that a size between 8 and 16 octets is informally agreed.

The chairman recommended companies to task their SA WG2 delegates to put as much effort as possible to study the issue.

## 4 Closing of the meeting

The chairman closed the meeting on Thursday  $30^{th}$  at 13:00. He thanked the participants for their involvement and ETSI for the organization.

### Annex A: List of participants

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### Annex B: List of documents

All the meeting documents can be found at:

ftp://ftp.3gpp.org/tsg\_ran/TSG\_RAN/TSGR\_AHs/2003\_01\_Early\_UE/

| Tdoc      | Title  | Source  |  |  |
|-----------|--|---|--|--|
| RPA030001 | Draft Agenda   | Chairman  |  |  |
| RPA030002 | On the location of the conversion IMEISV to bitmap of UE faults (BMUEF)  | Alcatel   |  |  |
| RPA030003 | Efficient handling of early mobiles with the UTRAN   | Alcatel   |  |  |
| RPA030004 | Efficient handling of early mobiles with the UTRAN   | Vodafone  |  |  |
| RPA030005 | Liaison statement from GERAN2 on Architectural Impacts of Early UE Handling  | Vodafone  |  |  |
| RPA030006 | Considerations on SCCP limitations for the transfer of information between the core network and the access network | Vodafone  |  |  |
| RPA030007 | Management of UE faults information in the future  | NTT DoCoMo  |  |  |
| RPA030008 | 3GPP's role on handling UE faults using Bitmap on Iu   | Alcatel, ATT Wireless, Fujitsu, Lucent technologies, NEC, Nokia, Nortel, Orange, Panasonic, Philips, Siemens & T-Mobile |  |  |
| RPA030009 | Network implementation considerations for early UE handling  | NEC, Alcatel, Fujitsu   |  |  |
| RPA030010 | Early UE - proposal for further work   | Siemens   |  |  |
| RPA030011 | Early UE Handling  | Nokia   |  |  |
| RPA030012 | Process to handle early UEs in RAN   | Nortel, NEC   |  |  |
| RPA030013 | LS on Message Size Limitations on Iu and A interface   | SA WG2  |  |  |
| RPA030014 | LS on early UE handling  | 3GPP TSG RAN ad-hoc   |  |  |