

**3GPP TSG RAN Meeting #21**  
**Frankfurt, Germany, 16 - 19 September 2003**

**RP-030427**

**Title:** Revised Draft Report of the 20<sup>th</sup> 3GPP TSG RAN meeting  
(Hämeenlinna, Finland, 3 - 6 June 2003)

**Document for:** Approval

**Source:** 3GPP support team

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César Gutiérrez Miguélez  
ETSI Mobile Competence Center  
cesar.gutierrez@etsi.org

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## Executive Report

TSG RAN meeting #20 took place Hotel Rantasipi Aulanko in Hämeenlinna, Finland.. The meeting started at 9:00 on Tuesday 3<sup>rd</sup> June 2003 and finished at 13:00 on Friday 6<sup>th</sup> June 2003. 101 participants were registered and 173 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	2	26	2	10	40
Rel-4 CRs (Rel-4 excluding Cat A)	2(0)	30(6)	11(9)	14(4)	57(19)
Rel-5 CRs (Rel-5 excluding Cat A)	19(17)	39(12)	54(43)	32(18)	144(90)
Rel-6 CRs (Rel-6 excluding Cat A)	<u>0</u>	6(6)	11(1)	26(7)	43(14)
Total CRs (Total excluding Cat A)	23(19)	101(50)	78(55)	82(39)	284(163)

As a result of the PCG and funding group meetings, some recommendations have been agreed in order to reduce the overall cost of the project (sec.5):

- From 2004 onwards, only one WG meeting between TSGs will be supported by MCC. Exceptions will have to be consulted with the PCG.
- The current TSG/WG structure will be reviewed and a recommendation will be provided to PCG meeting in October
- TSG leaders will provide recommendation to the PCG also on the Working Procedures

Some discussion took place also on the current organization of the RAN Work Plan. Unlike the other TSGs, a few "generic" features encompass the Building Blocks where the actual work is described. A unified approach was suggested, but no agreement was reached. Additionally, it was proposed to keep the stage1 & stage2, which in RAN take the form of Feasibility Studies, in the same Release as the stage 3. This was agreed (RP-030226)

## Release 99, Release 4 & Release 5

The "Early UE" discussion was solved without the need of a vote (sec. 8.1). An indicative show of hands demonstrated a clear majority supporting the CR with the "bitmap" alternative, after which the companies opposing that solution decided to withdraw their position.

A short discussion followed discussing the Release of introduction. The feature is based on Rel99 functionality, so in practical terms the Release of implementation of the CRs is secondary. It was decided to approve only the CRs for Rel-5, in consistency with the fact that no new features can be added to Rel99 and Rel-4.

With these conclusions, the feasibility study for the Early UE introduction is closed.

A long discussion took place on the "Out of service" issue (sec. 7.2.2.1). An Ad Hoc had been held between RAN WG2/CN WG1/SA WG2 in April, where some conclusions could be reached. A short joint session with TSG CN took place during this RAN#20 on Wednesday afternoon; CN aspects were reviewed and it was shown that two interpretations are possible for the UE behaviour in the GPRS Mobile Management protocol. CN will not change MM specifications in Rel-5, whereas RRC may be modified in RAN to allow for one behaviour only in Rel-5. (Currently, when camping to an "Emergency only" cell, the UE can either keep the old RRC connection or go to idle). There is no correlation between RAN modifications and CN

modifications. The final decision for Rel-5 will be taken in RAN#21, for the time being the decision is agreed for R99 and Rel-4 to allow for the two behaviours.

There was a proposal to make the SFN-SFN type II measurement optional, on the basis that it is only useful for positioning when used together with IPDL, which is an optional feature in the network. Finally, it was agreed to make it optional for R99 and Rel-4, Rel-5 to be decided. WG2 will have to study the UE capabilities to allow for this option in various RRC states. (RP-030357)

HSDPA work was finished in RAN WG4 with the approval of the pending requirements and test cases, with the CRs presented at this meeting the feature is closed (sec. 8.5).

## Release 6 and beyond

See Annex F for a summary of the Work Items under TSG RAN responsibility, including the changes of completion dates.

CRs under the WI "Open interface between the SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods" were presented to close the WI, but a discussion raised on the value of the "pathloss" measurement for positioning. The expected completion will be September 2003. (sec 8.4.2)

It was agreed to change the completion date of the WI "Introduction of the Multimedia Broadcast Multicast Service (MBMS) in RAN" to March 2004 (sec. 8.6). MBMS related specifications, TR25.346 and TS25.992 were not approved.

Completion of the MIMO WI is delayed to March 2004 (sec. 8.8). TR25.996 "Spatial Channel Model for Multiple-Input Multiple Output Simulations" is approved and would be put under change control as version 6.0.0.

The Study Item "Viable deployment of UTRA in additional and diverse spectrum arrangements" is closed. The related TR, TR 25.889, "Feasibility Study considering the viable deployment of UTRA in additional and diverse spectrum arrangements", is approved and would be put under change control as version 6.0.0.

The following new WIs have been approved:

- A-GPS minimum performance specification (RP-030308). Work task under the "UE Positioning" block, responsibility in RAN WG4, expected completion date: March 2004
- Subscriber and Equipment Trace support in UTRAN (RP-030355). Responsibility in RAN WG3, Work task under the "Rel-6 Trace Management" feature of SA WG5, expected completion date: September 2003
- Feasibility Study on Uplink Enhancements for UTRA TDD (RP-030359). Responsibility in RAN WG1, Work task under the "Radio Interface Improvement" feature, expected completion date: March 2004

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## 1 Opening of the Meeting

The chairman opened the meeting at 9:00

Antti Toskala (Nokia) gave a brief introduction to the city of Hameenlinna and explained the arrangements for the social event.

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## 2 Approval of the Agenda

**RP-030203 Draft Agenda Meeting #20 (Chairman)**

No comments. The agenda is approved

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## 3 Approval of the meeting report on TSG-RAN #19

**RP-030204 Revised Draft Report of the 19th TSG-RAN meeting (Birmingham, UK, 11 -14 March, 2003) (3GPP support)**

No comments. The report is approved

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## 4 Reminder for IPR declaration

The chairman made the following call for IPRs, and asked ETSI members to check the latest version of ETSI's policy available in the web server:

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.

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## 5 Chairman Report of meetings

**RP-030345 Draft Summary minutes, decisions and actions from 3GPP PCG Meeting#10, Ottawa, 2 May 2003 (Chairman)**

**RP-030346 Recommendations and Considerations on 3GPP Cost Savings (Chairman)**

The chairman explained that it had been approved at the last PCG that only one WG meeting between TSG meetings will have MCC support, additional meetings will be considered exceptional and will require the approval of the PCG. The chairman also noted that there has been a request from PCG to reduce cost, and

reorganization could be a way to achieve this. Further discussion will have to take place at the next meeting and proposals gathered by the TSG leaders for presentation at the PCG beginning of October.  
The documents are noted

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## 6 Liaisons from other groups

### 6.1 Groups outside 3GPP

**RP-030259 LS from ITU-R WP8F on Preliminary Draft New Report on Mitigating Techniques to Address Coexistence Between IMT-2000 TDD and FDD Radio Interface Technologies Within the Frequency Range 2 500-2 690 MHz (ITU-R WP8F)**

This LS has already been presented in WG4 and is under discussion there, it is made available to TSG RAN for information only. The LS is noted

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

**RP-030281 3GPP-OMA overlap (TSG-T vice chair)**

Kevin Holley (O2) presented this document

Kevin made a short presentation of OMA and the intention of this document, which is to summarize the areas where both 3GPP and OMA are working. All RAN WGs have provided the update to the table, and in fact there is no overlap on their work program.

The chairman noted that an area of common interest is codecs, although is not exactly an overlap. It was clarified that OMA doesn't actually design and specify codecs, just focus on transcoding operation.

Jussi Numminen (Nokia) questioned if the same overlap activity is carried out in OMA. Kevin clarified that a similar document was produced there last August.

Denis Fauconnier (Nortel) raised the issue of MBMS, and asked if OMA is defining applications to run on top of MBMS. How the applications are defined may have an impact on how RAN standardizes MBMS and what radio performance can be expected. In particular, he noted that MBMS in 3GPP is a bearer service with no uplink feedback, so an application defined to rely on such functionality cannot be used over 3GPP MBMS. Kevin answered that the place for such discussion is 3GPP SA WG1, the group defining the requirements and acting as a link between OMA and 3GPP. The chairman will report that to the 3GPP TSG SA plenary.

Kevin reminded that a WorkShop is being organized to deal with OMA-3GPP interaction in September, tentative for Monday and Tuesday the week of TSG RAN #21. The place will be Berlin or Frankfurt, since OMA is located in Berlin and 3GPP is now in Frankfurt. It was clarified that only the Monday could fit to discuss the RAN issues because the meeting will start as usual on Tuesday that week.

RP-030281 is noted

**RP-030233 LS on review of TR "Study into Applicability of GALILEO in LCS" (SA WG2)**

SA WG2 informs that the study of Galileo is taking place and ask WGs concerned to provide comments.

Howard Benn (WG4 chairman) remarked that the TR is already quite detailed, with some simulations already made and performance values given. He recommended WG4 experts analysis and comment.

Antti Toskala (Nokia) warned about having the values in a 3GPP document without the actual RAN experts having looked at them; SA groups do not seem to have the expertise on the area, so it seems that the TR actually captures text from a third party and hasn't been written in SA WG2. Denis Fauconnier (Nortel) noted that there is no WI description available, the TR appears with no background.

WG2 and WG4 are tasked to look at the TR and provide comments to SA WG2. The chairman will report in SA that this sort of feasibility study should take place in RAN WGs and not SA groups.  
RP-030233 is noted

**RP-030234 LS on Stage 3 work for Early UE handling (GERAN WG2)**

No comments. The LS is noted

### 6.3 TSG-RAN WGs

**RP-030231 Delay Values in UTRAN for Conversational PS RAB (RAN WG3)**

Alexander Vesely (Siemens) presented this LS

Jussi Numminen (Nokia) questioned where the values for the UE processing delays come. These are typical figures and resulted from the initial studies for the TR approved in Madrid by RAN and presented to SA. It was questioned if the values in TR25.853 are derived from CS or PS domain. In PS the effects of buffering and packet scheduling should be considered as additional delay. Sami Kekki (Nokia) clarified that these values were derived based on a PS core network and conversational services, where very little buffering should be used. However, the figures are directly taken from the TR, which was created in the Rel-4 timeframe, and agreed that a more up to date scenario and analysis would provide more accurate values.

According to Sami the statement in the LS about "It is expected that there is not any significant increase in the figure for the Access Stratum delay" is to imply that even after some more elaborate studies the delay in the Access Stratum should not be significantly bigger than indicated in the LS. This is due to the service level delay requirements that should be met in any case.

It is also noted that there are no RABs defined in RAN WG2 for voice over PS, basically due to the lack of contributions. ~~Until~~ When this part of the work is done, the delay figure might change ~~drastically~~.

It is agreed to task WG2 to work on the bearers for this service, and companies are encouraged to produce the necessary contributions; due to the urgency of the issue, email discussions on the reflector are also encouraged.

The LS is noted

**RP-030232 Answer to the LS on Antenna Interface Standards Group (AISG) (RAN WG4)**

Volker Hoehn (Vodafone) presented this LS

The LS is noted

The following table contains the list of LSs treated in the meeting:

<del>Tdoc</del> <u>text</u>	Title	Source
RP-030231	Delay Values in UTRAN for Conversational PS RAB	RAN WG3
RP-030232	Answer to the LS on Antenna Interface Standards Group (AISG)	RAN WG4
RP-030233	LS on review of TR "Study into Applicability of GALILEO in LCS"	SA WG2
RP-030234	LS on Stage 3 work for Early UE handling	GERAN WG2
RP-030259	LS from ITU-R WP8F on Preliminary Draft New Report on Mitigating Techniques to Address Coexistence Between IMT-2000 TDD and FDD Radio Interface Technologies Within the Frequency Range 2 500-2 690 MHz	ITU-R WP8F



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

### 7.1 TSG RAN WG1

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

##### **RP-030268 Status Report WG1 (RAN WG1 Chairman)**

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

- 1 CR for Rel99 FDD (UTRAN Transmit carrier power measurement with TX diversity)
- No CRs for Rel4
- 11(FDD) + 5(TDD) correction & clarification CRs agreed for Rel5
  - mostly HSDPA, PCA2, TFCI split mode, 1.28Mcps power control
- 1 CR for Rel6(TDD) agreed in principle
- TFCI transmission power on S-CCPCH issue resolved
- More than 80% of the contributions available on Wednesday before the meeting
- 1 joint session with RAN2, 1 session with RAN3 (informal)
- Around 80% of the time used for Rel'6 discussions
- Around 105 delegates are attending RAN1

Concerning the beamforming discussions (slide 15), Edgar Fernandes (Motorola) raised the concern of UE manufacturers. The feature is mandatory for terminals, the work to produce the test has been done, but the feature cannot be implemented in the network and it seems clear that it doesn't work in SoftHO. It seems a bit absurd to introduce such requirements that cannot be used.

Slide 10: It is clarified that it was effectively agreed that STTD is the only Tx diversity for HS-SCCH, but there were some discussions on the actual text of the CR. The CR is submitted to TSG RAN, and it seems that the version being submitted is the last presented to WG1, no additional changes.

Concerning MBMS, it is questioned if it has already been agreed that MBMS will be supported on Rel99 S-CCPCH. It is clarified that it is not a decision, it is being considered as well as supporting it on the FACH

On slide 12, Enhanced Uplink DCH, Denis noted that the report should be presented at WG2 for comments, since there is an impact on the MAC that needs to be assessed. The possibility of a Work Shop on the WI was commented, although it is believed it is a bit early for that. WG2 should be invited in any case

##### **RP-030269 Supplement (List of agreed CRs) to Report from WG1 chairman to TSG-RAN (RAN WG1)**

Document for information. Noted.

## 7.1.2 Discussions on decisions from WG1

### **RP-030352 Discussion on single transport format detection (Nokia)**

Antti Toskala (Nokia) presented this document

Edgar noted that the current specifications already suggest that option a) is preferred, and reminded that there are many other cases where UE behaviour is not precisely specified. Antti accepted that if the common understanding is option a), Nokia agrees that no further effort. Evelyn questioned if this applies to the case of a single transport channel or multiple transport channels in the CCTrCH.

Several companies objected that the specification is clear as it is now, the problem is more of a configuration than a wrong interpretation.

No option was endorsed, the document is noted.

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

### **RP-030270 CRs (R'99 and Rel4/Rel5 category A) to TS 25.215 on "Correction of transmitted carrier power definition in case of Tx diversity" (RAN WG1)**

Howard Benn (Motorola) commented that there are WG3 CRs linked to those, this should be mentioned on the document coversheet.

Howard noted that the impact on the network should be underlined, it is not negligible.

WG4 and WG1 & WG3 have different understandings on how TX diversity works and the concept of cell. There are also regulatory concerns, since now the TX power cannot be set at the antenna port and would have to take into account the power radiated on all the antennas. Some clarification in the text would be necessary.

After off line discussions, it seems that the current text is accurate, although not clear. The CRs are anyway approved.

### **RP-030365 CRs on TX Diversity correction (R99 and Rel-4/Rel-5 cat A) to TS25.225 (Siemens)**

No comments. The CRs are approved

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

No contributions

## 7.1.5 Approval of independent CRs to Release 5

The following documents contain CRs agreed by RAN WG1:

<b>Tdocs</b>	<b>Title</b>	<b>Decision</b>
RP-030271	CRs (Rel-5) to TS 25.211	Approved
RP-030272	CRs (Rel-5) to TS 25.212	Approved
RP-030273	CRs (Rel-5) to TS 25.214	Approved
RP-030274	CRs (Rel-5) to TS 25.215	Approved 1)
RP-030275	CRs (Rel-5) to TS 25.221	Approved
RP-030276	CRs (Rel-5) to TS 25.222	Approved
RP-030277	CRs (Rel-5) to TS 25.224	Approved

- 1) It is clarified that there is not link to WG3 specifications on this CR. It is also noted that the clarification change in the definition proposed by Motorola for the CRs in RP-030270 should be applied also to this CR. After the off line discussions on TX diversity, it was agreed that there is no need for further clarification and the CRs proposed are correct. All CRs in RP-030274 are approved.

**RP-030351 CR177 to 25.211 "Removal of the combination of TxAA Mode 1 with HS-SCCH" (Nokia)**

Antti Toskala (Nokia) presented this CR

Edgar Fernandes (Motorola) noted that this is the agreed behaviour, but changes to other specifications might also be needed. It was preferred to provide all CRs together. The principle of the CR is agreed, but the wording and the impact on other specifications must be checked.

The CR is not approved

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

**RP-030278 Linked CRs (Rel-5) to TS 25.123, TS 25.225, TS 25.302 and TS 25.433 on non HS-DSCH power measurement (RAN WG1)**

Some discussions took place related to the TX diversity issues in RP-030270. As a result, all CRs (CR302 to 25.123, CR139 to 25.302 and CR834 to 25.433) are approved except CR70 to 25.225, which is revised in the document below.

**RP-030366 Power Measurement in non HSDPA codes for TDD, CR070r1 to 25.225 (rev of CR in RP-030278) (Siemens)**

The CR is approved

## 7.2 TSG RAN WG2

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

**RP-030356 Report from WG2 chairman to TSG-RAN (RAN WG2 Chairman)**

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

- Release 99 corrections
  - Occupied 3 days of last meeting, number of CRs is stable.
- Release 4 corrections
  - Very few
- Release 5
  - Few HSDPA corrections
  - Completion of last TEIs
- Release 6
  - Joint meeting with RAN3 on MBMS
  - RAN2 and RAN3 progressing now in parallel, well synchronised
- Other
  - Joint meeting with RAN1 on MBMS and some R99 corrections

Denis reminded of the importance of keeping delegates in the WGs, and remarked the current situation with security, only one expert was available for the last WG2 meeting.

On Slide 38, Out Of Service discussion, the CR for timer T317: for R99 and Rel-4 the values should be considered infinity, from Rel-5 onwards all values shall be considered infinity, which in practical terms means the removal of the timer.

On Slide 27, Nokia expressed that the HO UTRAN/GERAN Iu Mode should doubtlessly be part of Rel5. Denis clarified that a list of pending WG2 TEI issues was presented last December, and this was not in the list, hence the question mark.

Mony Kochupillay ("3") raised the concerns of the little effort dedicated to IMS bearers and suggested an Ad Hoc. Denis clarified that in this case contributions haven't been presented, not that they have but were not treated due to the lack of time, what would justify an Ad Hoc.

Edgar Fernandes (Motorola) questioned the situation of the Variable Duplex CRs, which is an issue on-going in WG4 and not yet solved. Denis clarified that the CRs will be kept on hold until the final decision is taken in WG4.

#### **RP-030283 Supplement (List of all agreed/technically endorsed CRs) to Report from WG2 chairman to TSG-RAN (RAN WG2)**

Document for information. Noted.

## **7.2.2 Discussions on decisions from WG2**

### **RP-030288 CRs on TR 25.993 version 6.1.0 affecting earlier releases (RAN WG2)**

The CRs are approved

#### **7.2.2.1 Out of Service Discussions**

The proposal from WG2 chairman is as follows:

- Approve RP-030284: allows a new value to T317 allowing to alleviate UE de-synchronisation with network
- Take RP-030287 as a basis for the RAN Plenary approval
  - RP-030287 requires a UE to maintain RRC connection on emergency camping, while allowing also to release it in R99/R4.
  - Points to be addressed:
    - 1 Value of timer for PLMN search. Suggestion:
      - Write default value of 30s in R99/R4/R5 RAN specifications
      - Send a LS to CN so that they can discuss whether they want to make it a variable.
    - 2 Note allowing Routing Area Update on operator control. Suggestion:
      - Delete the Note from the CR
      - Send a LS to CN so that they can discuss whether they want to make it a variable.
    - 3 Maintain RRC connection is a shall in R5. To be discussed.

And the following endorsed CRs are presented for discussion and decision:

Tdoc	Title
RP-030284	Out of service behaviour' CRs (technically endorsed) - Option 1, (R'99 and Rel-4/Rel-5 category A to TS 25.331)
RP-030285	Out of service behaviour' CRs (technically endorsed) - Option 2, (R'99 and Rel-4/Rel-5 category A to TS 25.331)
RP-030286	Out of service behaviour' CRs (technically endorsed) - Option 3, (R'99 and Rel-4/Rel-5 category A to TS 25.331)
RP-030287	Out of service behaviour' CRs (technically endorsed) - Option 4, (R'99 and Rel-4/Rel-5 category A to TS 25.331)

### Value of timer for PLMN search

Andrew Howell (Motorola) questioned why a LS needs to be sent to CN on the PLMN timer, since this is a value linked to the radio and should be discussed here. Andrew asked if TSG RAN wants to have a variable value, and proposed to send the LS to CN later so they can produce the signalling.

There was a discussion on the need to have it variable. "3" expressed preference for the possibility for operators to set this value according to their conditions, but other operators didn't see the need. Jussi Numminen (Nokia) noted that from a UE manufacturer perspective, the effect perceived from the user when a long value is set would be very negative, so he preferred to have it fixed in the standard.

Vodafone also supported the variable possibility, due to regulatory requirements that may be put in place in the future requesting other values.

Han van Bussel (T-Mobile) questioned who would set the value, the own PLMN or the visited PLMN. If the second, a roaming user would be tied to a certain visited network for too long time without coverage. "3" noted that it would be acceptable for them that the own PLMN sets the value.

There were proposals to rephrase the requirement to "wait at least 30 seconds" before starting the PLMN selection. However, "3" asked for the rationale behind the 30 secs value, it seems taken from GSM and it might not be applicable at all for UTRAN, it might take longer to recover the old network. Han argued that experience shows that 30 is enough, if the old network doesn't appear after that time, it is most likely lost.

### Note allowing Routing Area Update on operator control

It is proposed to send the LS to CN as soon as possible so they can decide in this meeting or to forward it to CN WG1. The LS will explain the behaviour in RAN and leave up to them to decide if they need RAU and operator control.

As defined in RAN, the RAU is an option available for operators for the cases the UE loses the RRC connection, goes into idle and then recovers coverage. This feature is optional for the UE manufacturers, other options are that UE releases connection (RP-030287) or keeps connection (RP-030286). RP-030287 presents a proposal for the UE to reconnect after release and to perform the RAU.

### Maintain RRC connection is a shall in R5 (RP-030287)

Francesco Grilli (Qualcomm) noted that this requirement is hard to fulfil for a UE manufacturer since it would require to keep two RRC connections, one for emergency services in the new network and the RRC connection with the old network. The requirement will increase substantially UE complexity, independently of the Release it is included in. Motorola and Panasonic supported this view.

Alessandro Goia (Vodafone) accepted the complexity reasons, but from a operator perspective, the dual RRC connection is preferred, as well as a coherent behaviour in UEs from different releases. Nokia and Ericsson supported to have it mandatory also in Rel-5.

Niels Andersen (TSG SA chairman) recommended looking at the CN specifications (secs. 4.2.1.1, 4.2.2.3 of TS 24.008), which currently may require to maintain the connection. The changes required in RAN

specifications might just be an alignment with CN specifications, which are difficult to modify as they are also used for GERAN, independently of the arguments raised in RAN. Unfortunately, this alignment may imply additional complexity of UTRAN terminals.

Niels explained that two separate situations are handled here, a temporary loss of coverage, of a period that is subject to discussion, after which the UE comes back to the same PLMN; and a permanent loss of coverage, a situation triggered after that period and when the UE starts the PLMN selection. He noted that the first situation is to be specified by RAN, but in the second situation the UE should follow the existing CN Mobile Management specification.

To progress the discussion, a joint session will be held with CN experts. For the time being, there is no agreement on the Release to introduce the mandatory ("shall") behaviour.

#### 7.2.2.1.1 Joint session with TSG CN experts

Andrew Howell (Motorola) summarized the situation. When the mobile goes out of coverage and loses the RRC connection, there is a debate on what it has to do and how long it has to wait before starting the PLMN selection procedure. There is dependency on the domain of operation, when the connection is PS, it is preferable to have a long timer; for CS, a short time before looking for a new cell is better, so at least emergencies service can be provided.

Another controversial point is the case of the UE camping to a "Emergencies only" cell after losing the RRC connection to the previous network and how to react when the coverage of the previous network is recovered.

So far and in R99 & Rel-4, two different behaviours are allowed, the UE can either release the RRC connection when camping for "Emergencies only" or keep it. The discussion focus on Rel-5, where only one behaviour would be preferable.

Hannu Hietalahti (CN WG1 chairman) summarized CN1 view. In any case, CN1 protocols wait until they get the indication from the lower layers that the connection is lost. Once this happens, two cases have to be considered: the UE loses connection to a PLMN, goes out of service, and then after some time recovers signal from the same PLMN and the lower layers will inform of this. Other different case is when the UE loses coverage, camps to a forbidden PLMN in "limited service" state and the recovers coverage with the allowed PLMN. This applies to both PS and CS domains. Hannu clarified that the GMM and MM state machines that manage the domains are defined as independent, however some interaction is necessary. He noted that there are two different protocol stacks and are kept alive independently.

Concerning the Emergency Service, Hannu noted that it doesn't exist yet over the PS domain, but it will be implemented in Rel-6. Since this has a major impact on how the whole issue is considered, it is proposed to leave the Out of Service behaviour in Rel-5 as R99 & Rel-4 (two possible options) and specify one solution for Rel-6.

Concerning the behaviour when coming back to a previously registered PLMN, it seems that the UE performs LAU and RAU following different rules on CS and PS domains. It does for CS, but it is unclear for PS. After the discussions, it seems clear that different interpretations of the CN behaviour when re-entering a PLMN are possible. However it seems that it can be tolerated, and it is the case in R99 and Rel-4. Since TSG CN is going to put Rel-5 on "deep freeze" at this plenary and there are few possibilities that a common interpretation for UE behaviour can be agreed any time soon, it is suggested to leave CN specification in Rel-5 as it is and correct in Rel-6.

However, TSG RAN discussion will continue, since CN keeps the different interpretations. The choice for RAN seems to be between having "double paging" or increasing the number of RAUs. The other aspects, under direct responsibility of TSG RAN, can be handled without being impacted by the discussion that need to take place within 3GPP TSG CN

#### 7.2.2.1.2 Conclusions

- RP-030284 is technically approved, it will be merged with the revision of RP-030287 in RP-030371.:
  - If T317 to infinity is supported, UE shall do PLMN search after 30 seconds
- RP-030287 approved with the following changes:
  - Value of minimum timer for PLMN search
    - Give a name to timer
    - Define in RRC a default value of 30s in R99/Rel-4/Rel-5 RAN specifications
- On the note allowing RAU on operator control. It is approved to delete the note from the CR.
- the wording in R99/Rel-4 will become "UE Shall either keep RRC or go to Idle" instead of should(s)
- In Release 6, the UE shall maintain the RRC connection
- Regarding R5:
  - The CR approved at RAN#20 will be the same as R99/Rel-4 i.e. the two behaviours are allowed
  - A technically endorsed Rel-5 CR will be provided to RAN#21 which removes the "go to idle behaviour"
  - RAN#21 will discuss the CR, and a voting may take place. An informal indicative vote took place in this meeting, showing a majority of companies supporting that option.

Agreement on R99/R4/R5 at RAN 20 is captured in RP-030371

#### **RP-030371 Out of service behaviour' CRs (technically endorsed) - Option 4, for decision (R'99 and Rel-4/Rel-5 category A to TS 25.331) (RAN WG2)**

Francesco Grilli (Qualcomm) presented these CRs

It is clarified that 24.008 is not impacted by the change, the Cover Page is not correct at that point.

Francesco clarified that the comment in the ASN.1 only applies to the section of code immediately after, so the comment about the "infinity" value only applies to timer T-317.

The CRs are approved

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

The following documents contain CRs agreed by RAN WG2:

<b>Tdocs</b>	<b>Title</b>	<b>Decision</b>
RP-030289	CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.304	Approved
RP-030290	CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.305	Approved
RP-030291	CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.306	Approved
RP-030292	CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.322	Approved
RP-030293	CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.331 (1)	Approved 2)
RP-030294	CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.331 (2)	Approved 2)
RP-030295	CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.331 (3)	Approved 2)
RP-030296	CRs on stopping RLC entities at relocation (Release '99 and Rel-4/Rel-5 category A) to TS 25.331	Revised in 374
RP-030306	CRs (Release'99 and Rel-4/Rel-5 category A) to TS 25.331 on the Ciphering Mode info IE in 2G-3G Handover	Revised in 349
RP-030307	CRs (Release'99 and Rel-4/Rel-5 category A) to TS 25.331 on Corrections to security procedures in case of SRNS Relocation	Revised in 350

- 2) It is noted that the TS versions on the document cover sheet are incorrect for the Rel-4 and Rel-5, but the CR cover sheets are correct.

**RP-030374 CRs on stopping RLC entities at relocation (Release '99 and Rel-4/Rel-5 category A) to TS 25.331 (Motorola)**

The CRs are approved

**RP-030349 Revision of CR1976 to 25.331 in RP-030306 (Ericsson)**

Revised in RP-030369

**RP-030369 Revision of CR1976 to 25.331 in RP-030306 (Ericsson)**

The CRs are approved

**RP-030350 CRs (Release'99 and Rel-4/Rel-5 category A) to TS 25.331 on Corrections to security procedures in case of SRNS Relocation (Ericsson, Motorola)**

The CRs are approved

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

The following documents contain CRs agreed by RAN WG2:

<b>Tdocs</b>	<b>Title</b>	<b>Decision</b>
RP-030297	CRs (Rel-4 and Rel-5 category A) to TS 25.322	Approved
RP-030298	CRs (Rel-4 and Rel-5 category A) to TS 25.331	Approved

## 7.2.5 Approval of independent CRs to Release 5

The following documents contain CRs agreed by RAN WG2:



Tdocs		Title	Decision
RP-030299	CRs (Rel-5) to TS 25.302		Approved
RP-030300	CRs (Rel-5) to TS 25.305		Approved 3)
RP-030301	CRs (Rel-5) to TS 25.306		Approved
RP-030302	CRs (Rel-5) to TS 25.321		Approved 4)
RP-030303	CRs (Rel-5) to TS 25.331		Approved
RP-030304	CRs (Rel-5) to TS 25.922		Not approved 5)

- 3) Per Beming (Ericsson) commented that the CR should be approved when the Iu CRs is ready, he also noted that SA WG2 has approved its CR to Rel-6, and here WG2 is asking for approval of Rel-5. He suggested to have consistency on both senses. Nokia supported the first point, and suggested to keep it on hold until the Iu CR is approved. It is finally agreed to approve the CR and to recommend SA to introduce the Stage 2 CR in Rel-5 instead of Rel-6. Additionally, WG3 is tasked to produce the CR for the Iu for the next meeting
- 4) CRs 171 and 172 are approved. CR173 is not approved. See RP-030354
- 5) Per Beming (Ericsson) noted that there are a number of open issues on this matter, and suggested that it is likely to see more CRs in the future. He raised the concern of adding what looks like a new feature to Rel-5 stage 2, which is closed. Nokia clarified that GERAN has requested via a LS to have this feature in Release 5, and at least one operator has expressed clear interest in that sense. However, the chairman questioned the feasibility of having stage 3 finished for Release 5. Nokia noted that the CRs are already there, comments have been raised, but no major issue. Ericsson disagreed.
- As a way forward, the CR is agreed in principle, but will not be implemented until the pending issues are solved and stage 3 CRs are ready. This CR can however be revised.

**RP-030354 Comments to CR173r1 to 25.321 on "UE procedure for TB size signalling" in RP-030302 (Panasonic)**

Hideoshi Suzuki (Panasonic) presented this document

Suzuki-San showed that there is an inconsistency between WG1 and WG2 specification. Said Tatesh (Lucent) objected that this is dependant on the UE implementation, he proposed to make a modification to the CR to cope with the two behaviours. It is finally agreed to withdrawn CR173 and to further discuss the issue in the WG.

The document is noted

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

No contributions

## 7.3 TSG RAN WG3

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

**RP-030312 Report from WG3 chairman to TSG-RAN (RAN WG3 chairman)**

Alexander Vesely (WG3 chairman) presented this report. WG3 activity can be summarized as follows:

- The amount of R99 & Rel4 CRs is negligible
  - 5 R99 CRs (w/o mirror CRs for Rel-4 and Rel-5)
  - 10 Rel-4 CRs (w/o mirror CRs for Rel-5)
  - 45 Rel-5 only CRs (majority HSDPA)
  - Complete list of CRs (R99, Rel-4 & Rel-5) in RP-030313
- R99 +mirror CRs requires less than 20% of meeting time
- 2 sets of technically correct Early UE CRs are available (contained in the R99 CR statistic)
- Progress on long-lasting HSDPA discussions
- Progress on RAN3 Rel-6 topics is overall satisfying

On slide 15, HSDPA, Han van Bussel (T-Mobile) questioned if the pending HSDPA issues will be covered in a new WI, and if that is the case, when will it be created. Alexander explained that he expected the new WI proposal for this meeting, but it seems not to be the case and this depends on companies. If no WI is created, the CRs will go under TEI6. Han suggested that if the amount of work is considerable, a new HSDPA WI is preferred.

It was clarified that the HSDPA CRs are generally correcting minor issues, and less CRs are expected for the next meeting.

There was a short discussion on the maximum bitrate specified for HSDPA. Alexander clarified that the RANAP allows up to 16Mbps, Denis Fauconnier (WG2 chairman) clarified that a RAB has been defined, for UE testing purposes, for 10Mbps. In any case, it is clarified that there is no service requirements.

Denis further clarified that the "costly" UE refers to UEs with bad radio conditions, the purpose of the list is that those UEs could be moved out of the cell.

Sami Kekki (Nokia) commented slide 16. RAN WG3 had discussed the contents of the slide on their reflector before the RAN plenary and there it was concluded by several companies that the status of ATM-IP interworking topic is better captured as follows:~~objected slide 16, in his view the ATM-IP interworking discussions are better captured as follows:~~

- So far three ATM-IP interworking options have been agreed for the Rel-5 IP transport option:....
- IETF PseudoWire Emulation End to End was included in the study area of TR25.933 as an alternative for IP-ALCAP based operation

Slide 2, concerning the LS to SA WG2 on Iu enhancements for IMS", Sami explained that some companies proposed to send the LS but at the end this wasn't approved.

### **RP-030313 Supplement (List of all agreed/technically correct CRs) to Report from WG3 chairman to TSG-RAN (RAN WG3)**

Document for information. Noted.

## **7.3.2 Discussions on decisions from WG3**

No contributions

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

The following documents contain CRs agreed by RAN WG3:

<b>Tdocs</b>	<b>Title</b>	<b>Decision</b>
RP-030314	CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.413 on Essential Correction of Iu Release Issue	Approved
RP-030315	CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.419 on Correction of Kill Unsuccessful Outcome	Approved

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

**RP-030316 CRs (Rel-4 and Rel-5 Category A) to TS 25.413 on Iu UP Initialisation during RAB modification (RAN WG3)**

The CRs are approved

**RP-030362 CR114r2, CR115 to 25.419 "Correction of finite number of broadcast" (Nokia)**

The document is withdrawn, the issue will be studied again in WG3

### 7.3.5 Approval of independent CRs to Release 5

The following documents contain CRs agreed by RAN WG3:

<b>Tdocs</b>	<b>Title</b>	<b>Decision</b>
RP-030317	CRs (Rel-5 and Rel-6 Category A) to TS 25.401 on Correction to HS-DSCH transport in case of SRNC not coincident with DRNC and without flow control in the DRNC	Approved
RP-030318	CR (Rel-5 only) to 25.402 on Removal of the Frequency Acquisition for Late-Entrant Cells for 1.28Mcps TDD	Approved
RP-030319	CRs (Rel-5 only) to TS 25.423	Approved
RP-030320	CRs (Rel-5 only) to TS 25.433	Approved
RP-030321	CRs (Rel-5 only) to TS 25.435	Approved
RP-030322	CRs (Rel-5 only) to TS 25.453	Approved
RP-030323	CR (Rel-5 only) to TR 25.933 on Corrections to ATM-IP interworking	Approved

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

The following documents contain CRs agreed by RAN WG3:

Tdocs	Title	Decision
RP-030324	CRs (Rel-4 and Rel-5 Category A) to TS 25.423, 25.433 and 25.453 ( Rel-5 and Rel-6 Category A) on Alignment of the Requested Data Value Information IE description	Approved
RP-030325	CRs (Rel-4 and Rel-5 Category A) to TS 25.423, 25.433 and 25.453 ( Rel-5 and Rel-6 Category A) on GPS trigger condition	Approved
RP-030326	CRs (Rel-4 and Rel-5 Category A) to TS 25.413, 25.419, 25.423, 25.433 and 25.453 ( Rel-5 and Rel-6 Category A) on Correction of Failure message used for logical errors	Approved
RP-030327	CRs (Rel-5 only) to TS 25.425 and 25.435 on Clarification of Capacity Allocation Interval Definition	Approved
RP-030328	CRs (Rel-5 only) to TS 25.423 and 25.433 on Resource handling of HS-DSCH Guaranteed Bit Rate	Approved
RP-030329	CRs (Rel-5 only) to TS 25.423 and 25.433 on HS-SCCH Change Indicator	Approved
RP-030330	CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.423 and 25.433 on Corrections to Tx Diversity	Not approved 6)
RP-030331	CR (Rel-5 only) to TS 25.425 and 25.435 on Correction for the HS-DSCH frame structure	Approved
RP-030332	CR (Rel-5 only) to TS 25.423 and 25.433 on Alignment of TDD HSDPA parameters to RAN2 and RAN 1	Approved
RP-030333	CR (Rel-5 only) to TS 25.423 and 25.433 on HSDPA General Corrections	Approved
RP-030334	CR (Rel-5 only) to TS 25.423 and 25.433 on TDD Channelisation Code LCR correction for HSDPA	Approved
RP-030335	CR (Rel-5 only) to TS 25.423 and 25.433 on Correction to HARQ Memory Partitioning	Approved
RP-030336	CR (Rel-5 only) to TS 25.423 and 25.433 on Clarification for the handling of the HS-DSCH	Approved 7)
RP-030337	CR (Rel-5 only) to TS 25.423 and 25.433 on Correction for the value range of "CQI Feedback cycle, k"	Approved
RP-030338	CR (Rel-5 only) to TS 25.423 linked to RAN2 CR of RAN #19 (25.331) on Group reset	Revised in 358
RP-030344	CRs (Rel-5 only) to TS 25.423 and 25.433 linked to RAN1 (25.215 Rel-6) on Phase Reference Signalling Support	Revised in 353

- 6) Evelyn LeStrat (Nortel) explained that there is a misalignment on the summation of the branches, it is not clear whether it is linear or log; also she highlighted the misalignment of the Tx diversity concept, in WG1 it is applied at a cell level, and in WG4, mainly due to the testing orientation of its specs, it is considered at a NodeB level. For these reasons, the CRs need further analysis. A revision is finally provided in RP-030372.
- 7) CR856r1 to 25.433 is approved, CR837r1 to 25.423 is revised in RP-030279

**RP-030372 CR 863r1 to 25.433 and CR839r1 to 25.423 on "correction of TX diversity" (revision of CRs in RP-030330) (Nortel)**

The units of the power needs still further discussion in WG3. This group is requested to produce a wording according with the current text in sec 5.2 of 25.214:

*"Higher layer power settings shall be interpreted as settings of the total power, i.e. the sum of the power from the two antennas in case of transmit diversity."*

As a conclusion, the CRs are not approved

**RP-030279 Clarification for the handling of the HS-DSCH (CR837r2 to 25.423) (NEC)**

The CR is approved

**RP-030358 CR (Rel-5 only) to TS 25.423 linked to RAN2 CR of RAN #19 (25.331) on Group reset (Ericsson)**

Nokia raised some comments to the tabular format of the CR regarding the Context Group Information and its extendibility to allow also other Groups than S-RNTI Group. D-RNTI Group Reset has already been discussed in WG3 as a potentially useful procedure. So the S-RNTI Group should be Optional instead of Mandatory to allow it. However, Nokia agreed to proceed with the CR and to continue the discussion in WG3 if there is need to extend the group reset later.~~Nokia raised some comments to the tabular form of the S-RNTI group, but agreed to proceed with the CR and to continue the discussion in WG3.~~

The CR is ~~not~~ approved

**RP-030353 CRs (Rel-5 only) to TS 25.423 and 25.433 linked to RAN1 (25.215 Rel-6) on Phase Reference Signalling Support (Nokia)**

Revised in RP-030367

**RP-030367 CRs (Rel-5 only) to TS 25.423 and 25.433 linked to RAN1 (25.215 Rel-6) on Phase Reference Signalling Support (Nokia)**

Revised in RP-030368

**RP-030368 CRs (Rel-5 only) to TS 25.423 and 25.433 linked to RAN1 (25.215 Rel-6) on Phase Reference Signalling Support (Nokia)**

This is the final revision of CRs in RP-030344. It is preferred to delay the approval and to study the issue further in order to get a solution agreed by all the involved WGs. It is however agreed now that whatever the solution chosen, the CRs will be introduced in Rel-5.

RP-030368 is not approved

Howard Benn (WG4 chairman) clarified that WG4 will probably not set performance requirements for beamforming, notably to the newly introduced definition of "cell portion" as it cannot be easily tested. Said Tatesh (Lucent) noted that if WG1 introduces new measurements to be used for beamforming, requirements might be needed. Antti objected that beamforming is much dependant on the antenna structure, the number of antennas and such implementation dependant issues, so inherently difficult to test and to set requirements.

## 7.4 TSG RAN WG4

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

**RP-030205 Status report WG4 (RAN WG4 Chairman)**

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

- 1 RAN WG4 meeting after the last RAN meeting
- Usual number of delegates (around 80),
- 292 input contributions (finished 1 day early)
- Corrections to the specification (cat F numbers)
  - Release 99 - 10 CRs
  - Release 4 - 4 CRs
  - Release 5 - 18 CRs
  - Release 6 - 7 CRs

- There will be one WG meeting before the next plenary.
- Cell identification
  - R99 Inter-frequency TGPL limitations CR agreed
  - 25.133 CR589
- Testing RRM requirements
  - Excellent progress on producing guidance to T1. Ongoing discussion on where the test tolerance text will reside, in RAN 4 or T1
- On going discussion:
  - Accuracy requirement of non-HSDPA transmit carrier power measurement
  - Requirements for measurement accuracy for SFN-SFN Type 1 and Type 2 measurements
  - Variable duplex spacing
  - Is there a need for it in any band ?
  - Testing with TX diversity
  - LS sent to RAN 1 on CPICH power split
  - UE positioning
  - New GPS work discussed

Hidoshi Suzuki (Panasonic) raised the discussion of where the beamforming test are defined, before or after the antenna connector. Antti Toskala (Nokia) clarified that some time ago it had been decided that no new tests are necessary for beamforming.

Giovanni Romano (TIM) remarked that there are discussions currently in WG1 on HSDPA TX diversity which may affect WG4 tests. Edgar clarified that WG4 tests will not be affected by the decision in WG1, the tests already defined will not need substantial changes whatever the outcome of the discussion in WG1. Howard clarified that if any new performance requirements are proposed, the normal procedure will be followed: a new WI will be presented to Release 6 and the new requirements studied there.

Howard clarified that the BS Classification work is completed now

Concerning the RRM tests (slide 3), Howard clarified that the problem is that RRM experts are in WG4 and the tests are in T WG1 specifications. Eventually, all test related text will be moved to T WG1 specifications. The discussion in WG4 has been on how to define the test uncertainties, the test procedure and the interpretation of the core requirements will be in T WG1 and in T WG1 specs.

On variable duplex distance (slide 4), Ericsson noted that WG4 had been requested to study the issue. To summarize the situation in WG4, Howard asked RAN for clear answers on whether duplex distance is necessary, and second, for which bands is it necessary.

Per Beming (Ericsson) answered that the feature is in the signalling, and it is also in the UE capabilities document, it is then clear that there is a requirement for this feature. Edgar Fernandes (Motorola) objected that the current performance requirements are based on fixed distance, and very likely will not be fulfilled with the shortest separation. Howard remarked that the assumptions to derive the requirements have always been based on fixed, he agreed that WG4 can be asked to check if they are valid for variable, but for the time being this is not clear and needs to be done.

Jussi Numinnen (Nokia) agreed with Howard, and proposed to cover the whole topic in a new WI. It is clear that there is no agreement on the need for the existing bands, but it seems easier to agree that it is required for the new 1.7/2.1 GHz.

Thomas Unshelm (Ericsson) noted that the radio requirements cannot depend on duplex distance, only on the frequency band of operation, basically due to regulatory aspects. They can be more difficult to fulfil with a short separation, but they should be the same. Edgar objected that the RX sensibility will certainly depend on the duplex separation.

It is agreed that for a given band, all the requirements (RF and RRM) should be kept the same for the whole band, regardless of the duplex separation, variable or fixed. In general, it can be taken as an assumption that the RRM requirements will not be changed.

WG4 will have to study the different sensitivity, and the different performance requirements, in the different bands. If it is found that a certain separation is unfeasible, it will be excluded.

Per observed that concerning the bands of applicability, it seems that the separation in band I is wide enough to have the variable duplex without major impediment, bands II and III seem more critical and some requirements may be changed.

Denis Fauconnier (Nortel) clarified that from a signalling perspective, it is possible to have an UE with variable duplex capability in one band and fixed duplex in the other.

On the need of the feature, Denis observed that from a network manufacturers perspective it is not a good idea to have options in the standard that are not going to be used. As an answer, TIM and TeliaSonera expressed support for the feature.

Finally, it is agreed that WG4 will continue to study the issue in all bands. The need of a particular WI, which was objected by Ericsson and supported by Nokia, will be reviewed in WG4 and then in next TSG RAN.

Concerning the "Improvement of Receiver Performance Requirements for FDD UE" WI (slide 6), Vodafone questioned if the study of new UE performance requirements with power control active had been approved. Howard clarified that any change of the scope of the WI has not yet been agreed, so new tests with PC haven't been agreed.

There was the suggestion to include TX diversity under this WI, but it seems clear that it is out of the current scope.

There was a discussion on the link between the MIMO WI in WG4, the Advanced Receivers which could be covered by the "Improvement..." WI, and a possible new HSDPA WI. Said Tatesh (Lucent) warned that it has been difficult to specify the UE RX characteristics during the work in the Spatial Channel Model under the MIMO WI, so the relation is not so direct as may be thought.

Motorola and Nokia suggested to take the opposite approach, to define separate and clear WI for each issue so the work in WG4 can be clearly identified. As a conclusion, WG4 will have to study the current MIMO-RF WI description and consider how the study with advanced receivers should be organized.~~and review it to cover advanced receivers, or to produce a separate WI for advanced receivers.~~

#### **RP-030206 List of agreed CRs (RAN WG4)**

Document for information. Noted

### **7.4.2 Discussions on decisions from WG4**

#### **RP-030305 Linked CRs on variable duplex within the band to TS 25.306 and 25.331 (R99 and Rel-4, Rel-5 CRs on 25.307) (RAN WG2)**

After the discussion reported above, the CRs are rejected

### **RP-030357 SFN - SFN type II measurement (Motorola)**

Edgar Fernandes (Motorola) presented this document.

SFN-SFN type II measurement is used for UE positioning and is mandatory in CELL\_FACH and CELL\_DCH. However, it has been show that UE positioning performance is seriously degraded if IPDL is not used, which is currently an optional feature. The situation is that a mandatory measurement is only useful when an optional feature is supported, so the proponents suggest to make the measurement optional as an UE capability, preferably linked to the support of IPDL.

Qualcomm objected having a the SFN-SFN UE capability directly linked to the IPDL capability.

Denis Fauconnier (Nortel) highlighted that IPDL was made optional a few years ago because WG1 decided that it was not necessary for SFN-SFN type II measurements, and now it seems that WG4 has decided that the measurement cannot work without IPDL; contradictory conclusions...

Antti (former WG1 chairman) explained that at the point WG1 took its decision, it seemed the right way since no performance impacts were analysed. Antti suggested that the procedure is correct, now WG4 has discovered these impacts so it proposes the change. It seems the natural way to go.

Edgar summarized that there are several threads of discussion:

- SFN-SFN being mandatory for CELL\_FACH and CELL\_DCH
- SFN-SFN being mandatory for URA\_PCH and CELL\_PCH
- IPDL being mandatory
- The Releases where it applies

Denis noted that the fact that SFN-SFN without IPDL doesn't work in close proximity of the BS is not such a big issue, since there are other methods working in parallel (TX-RX time difference) that can provide the positioning. Ericsson also noted that internal studies show that SFN-SFN can be used alone in certain scenarios. Denis remarked that the proposal is arriving really late for Rel99, and in his view making the measurement optional is equivalent to deleting it from the standard. Nokia had an opposite view, without IPDL the measurement alone doesn't work, so both features should be linked and made optional or mandatory together.

Concerning the Release, several companies supported to have it optional in R99 and Rel-4 and mandatory in Rel-5. However, it is not agreed that SFN-SFN and IPDL have to be taken together in this discussion related to Releases.

Ericsson requested that whatever decision, it is taken at this meeting and not delayed.

A consensus was reached off line on the following assumptions:

- SFN-SFN type II will be optional for R99 and R4
- The measurement will be an UE Capability independent of IPDL
- Other ~~positioning methods~~ measurements and the possibility to use SFN-SFN type II alone for position will be studied for Rel-5.

It was also agreed that the issue should be solved completely by the next TSG RAN meeting.

WG2 is requested to investigate the existing UE capabilities bits related to positioning and to provide a clear solution covering SFN-SFN measurement and IPDL on the various RRC states.



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

The following documents contain CRs agreed by RAN WG4:

Tdocs	Title	Decision
RP-030207	CRs (R'99 and Rel-4/Rel-5/Rel-6 Category A) to TS 25.101	Approved
RP-030208	CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.123 on "Applicability of Timer T-reselection for 2G cell reselection"	Approved
RP-030209	CRs (R'99 and Rel-4/Rel-5/Rel-6 Category A) to TS 25.133 (1/2)	Approved
RP-030210	CRs (R'99 and Rel-4/Rel-5/Rel-6 Category A) to TS 25.133 (2/2)	Approved

Edgar Fernandes (Motorola) clarified that most of the CRs to 25.133 are related to changes to the test cases to clarify issues for T WG1 to produce the tests.

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

The following documents contain CRs agreed by RAN WG4:

Tdocs	Title	Decision
RP-030211	CRs (Rel-4 and Rel-5 Category A) to TS 25.106 & TS 25.143 (Repeaters specifications) on "Spurious emissions: co-existence with FDD in the same geographic area"	Approved
RP-030212	CRs (Rel-4 and Rel-5 Category A) to TS 25.143 on "Removal of square brackets in test uncertainty of output intermodulation"	Approved

### 7.4.5 Approval of independent CRs to Release 5

The following documents contain CRs agreed by RAN WG4:

Tdocs	Title	Decision
RP-030213	CRs (Rel-5 and Rel-6 Category A) to TS 25.101	Approved
RP-030214	CRs (Rel-5 and Rel-6 Category A) to TS 25.104	Approved
RP-030215	CRs (Rel-5 and Rel-6 Category A) to TS 25.141	Approved
RP-030216	CR (Rel-5) to TS 25.142	Approved
RP-030219	CRs (Rel-5 and Rel-6 Category A) to TS 25.133	Approved
RP-030222	CR (Rel-5) to TS 25.123	Approved

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

No contributions

## 7.5 TSG RAN ITU-R Ad Hoc

### **RP-030280 Status Report (ITU-R Ad Hoc Contact Person)**

Giovanni Romano (TIM) presented this report

First week of September, a conference call with the MRP is scheduled to produce the documents for ITU.

The deadline for presentation of updates for Re4 of M.1457 is October 2003, and it seems clear that by that time 3GPP Rel-6 will not be stable or even finished. Mainly the contents of the updated from 3GPP will come

from Rel-5, but it may be that the status of some of the Rel-6 WI is stable enough (or finished) so they can be included in the update. It has to be noted that in order to send a WI to ITU, the specification where it is contained must be available.

The report is endorsed.

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

### **RP-030360 RAN WIs and SIs, active and historic (3GPP Support)**

Document for information. Noted.

### 8.1 Early UE

#### **RP-030258 Status Report for SI "Early Mobile Handling in UTRAN" (Rapporteur)**

Yannick Le Pezenec (Vodafone) presented this report

No comments. The document is noted

#### **RP-030363 Early UE session Report in SA WG2 (3GPP support)**

#### **RP-030364 TS 23.195 (3GPP support)**

Documents presented for information. Noted.

#### **RP-030339 CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.413 on Introduction of Early UE Handling – Bitmap Option (RAN WG3)**

#### **RP-030340 CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.413 on Introduction of Early UE Handling – IMEISV Option (RAN WG3)**

Each of the groups of CRs introduces one of options under discussion, therefore they are alternative. TSG RAN has to decide on one set.

The issue has been ongoing for one year, so the chairman proposed not to have further discussions and to get an indication of the positions of the participants. A show of hands gave the following approximate results:

Companies opposing IMEI-SV solution	25
Companies opposing bitmap solution	5
Abstention	22

Note: The numbers provided here are only approximate. A show of hands is intended to provide an indication of the general intention, and by no means can be considered the result of a vote.

Some companies felt that the questions were not appropriate, so the questions were rephrased as follows:

Companies supporting IMEI-SV solution	15
Companies supporting bitmap solution	31

Finally, it was decided to repeat the indicative vote directly asking for support to the CRs presented. The results were, roughly, as follows:

Companies supporting the approval of CR573 to TS25.413 Rel-5 in RP-030339 (bitmap solution)	37
Companies against the approval of CR573 to TS25.413 Rel-5 in RP-030339 (bitmap solution)	5
Abstention	12

This show of hands gives a clear majority supporting the approval, in this situation the companies against the approval of the bitmap solution withdrew their opposition and hence the CR is approved.

The choice of the Release was found secondary, it had been agreed that regardless of the Release the CRs were included, the feature is based on Rel99 functionality; an operator doesn't need to have a Rel-5 network to be able to implement the feature, as agreed in TSG SA#19 (see meeting report). Additionally, there is the argument of reducing the changes to Rel99 specifications, furthermore in this case the CRs are adding a new feature which is basically against 3GPP normal rules of operation.

**As a conclusion, only CR573 to TS25.413 in RP-030339 is approved. Other CRs in the document are withdrawn, RP-030340 is withdrawn as well.**

With the decision made the matter is considered completed. During the joint session with 3GPP TSG CN the information was provided to the CN delegates so that consequential CRs on the 3GPP TSG CN specification can be approved at this meeting.

## 8.2 Radio Interface Improvement Feature (RAN)

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

#### **RP-030235 Status Report for WI "Improvement of inter-frequency and inter-system measurements" (Rapporteur)**

Antti Toskala (Nokia) presented this report

Antti informed that it is very difficult to give an estimate of the % completed, if an agreement is reached the work will progress very fast. An estimation could be 10%.

The report is noted

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

#### **RP-030241 Status Report for WI "Improving Receiver Performance Requirements for the FDD UE" (Rapporteur)**

Howard Benn (WG4 chairman) presented this report.

Yannick Le Pezenec (Vodafone) questioned if the intention is now to focus on the test aspects, (improve the modelling of the inter cell interference) and not on the performance aspects. Howard commented that this was exactly the discussion in WG4 where no agreement was reached, he expected that a decision can be taken at next WG4 meeting.

The report is noted

### 8.2.3 UMTS 850

#### **RP-030242 Status Report for WI "UMTS 850" (Rapporteur)**

Don Zelmer (Cingular) presented this report

Giovanni Romano (TIM) questioned if this work would be ready for the update of Rev4 of M.1457 in ITU. Don explained that the work will be ready for October for the update. Don also noted that the completion level as of now is around 40%.

The report is noted

## 8.2.4 DS CDMA Introduction in the 800MHz Band

### **RP-030243 Status Report for WI "DS-CDMA Introduction in the 800 MHz Band" (Rapporteur)**

Takehiro Nakamura (NTT DoCoMo) presented this report

Nakamura-San explained that the work is WG4 only, and he confirmed the date of next TSG RAN for completion. He also agreed that the new band arrangement can be presented for the update of M.1457.

The report is noted

## 8.2.5 UMTS 1.7/2.1 GHz

### **RP-030244 Status Report for WI "UMTS 1.7/2.1 GHz" (Rapporteur)**

Jussi Numminen (Nokia) presented this report

Jussi noted that is foreseeable to include this WI in the updated to M.1457. Giovanni Romano (TIM) clarified that in order to submit any WI to ITU the level of completion should be 80%, which will not probably be the case for this WI.

The report is noted

## 8.3 RAN Improvement Feature

### 8.3.1 Radio access bearer support enhancement

#### **RP-030253 Status Report for WI "Radio access bearer support enhancement" (Rapporteur)**

Sami Kekki (Nokia) presented this document

No comments. No progress. The document is noted

#### 8.3.1.1 Iu enhancements for IMS support in the RAN

#### **RP-030254 Status Report for WI "Iu enhancements for IMS support in the RAN" (Rapporteur)**

Denis Fauconnier (Nortel) presented this report

Very little progress, ~~the work has not started~~. The completion date is changed to March 2004

The report is noted

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

#### **RP-030255 Status Report for WI "Improvement of RRM across RNS and RNS/BSS" (Rapporteur)**

Sami Kekki (Nokia) presented this report

No progress. The completion date is maintained.

The report is noted

### 8.3.3 Beamforming enhancement

#### **RP-030256 Status Report for WI "Beamforming Enhancements" (Rapporteur)**

~~Karri Ranta-aho~~ ~~Jussi Kahtava~~ (Nokia) presented this report

There was a debate on the Release for the CRs. The current proposal of Rel-5 is supported by the fact that beamforming is mandatory in R99 UE, the sooner the feature is available in the network, the better. It was argued that no Rel-5 CRs should be accepted for a new feature, and in any case, from a network perspective, there is no difference on including the CRs to Rel-5 or Rel-6 since the networks are anyway a mixture of Releases.

It was highlighted that two issues are presented here, the missing signalling in Iur and Iub and the missing measurements to support S-CPICH on one side, and the notion of cell portion on the other. Howard Benn (WG4 chairman) suggested to handle the missing parts in Rel-5 but to postpone the "cell portion" feature to Rel-6.

The agreed completion date is September 2003

The report is noted

### 8.3.4 RRM optimizations for Iur and Iub

No contributions

### 8.3.5 Remote Control of Electrical Tilting Antennas

#### **RP-030261 Status Report for WI "Remote Control of Electrical Tilting Antennas" (Rapporteur)**

Volker Hoehn (Vodafone) presented this report

There was some discussion on the SA WG5 part of the work, a particular Work Task might be necessary from that group. The situation will be revisited at next TSG RAN.

The report is noted

### 8.3.6 Network Assisted Cell Change (NACC) from UTRAN to GERAN – network-side aspects

#### **RP-030262 Status Report for WI "Network Assisted Cell Change (NACC) from UTRAN to GERAN – network-side aspects" (Rapporteur)**

Yannick Le Pezenec (Vodafone) presented this report

Change in completion date to December 2003. Antti Toskala (Nokia) noted that support in the terminal is in Rel-5, and network support will be in Rel-6. Antti requested that this situation is avoided in the future.

The report is noted, and having different Release for a feature between UE and UTRAN should be avoided in the future.

## 8.4 UE Positioning

### 8.4.1 UE positioning enhancements

No contributions

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

### **RP-030263 Status Report for WI "Open interface between the SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods" (Rapporteur)**

Meik Kotkampp (Siemens) presented this report

Meik explained that the WI is ready for conclusion upon approval of the CRs in RP-030341.

### **RP-030341 CRs (Rel-6 only) to TS 25.453 for WI 'Open interface between SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods' (RAN WG3)**

The need of the pathloss value is contested. Some companies believe that there is not enough evidence that it is useful and reliable for positioning, since its calculation will be implementation dependant and the accuracy of the measurement will be poor. It was also argued that the fact it is used currently in GSM doesn't mean that it can be used in the same way in UTRAN.

The off line discussion showed that further work on the pathloss reporting is needed, it seemed agreed that pathloss indication is helpful for positioning, but the concerns raised about the particular measurement need to be further addressed.

As a conclusion, the **CR028 to 25.453 in RP-030341 is not approved, CR035 to 25.453 in RP-030341 is approved**. The WI is not closed, is left at 95% completion level and the completion date will be RAN #21.

## 8.5 High Speed Downlink Packet Access (HSDPA)

### **RP-030265 Status Report for WI "HSDPA - RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing" (Rapporteur)**

Edgar Fernandes (Motorola) presented the report

Edgar explained that the WI is now finished, the final set of CRs are presented in the documents below.

The report is noted

### **RP-030217 CRs (Rel-5 and Rel-6 Category A) to TS 25.101 under WI "High Speed Downlink Packet Access" (FDD) (RAN WG4)**

### **RP-030218 CRs (Rel-5) to TS 25.102 & TS 25.123 under WI "High Speed Downlink Packet Access" (TDD) (RAN WG4)**

The CRs are approved

## 8.6 Enhancement of Broadcast and introduction of Multicast Capabilities in RAN

### **RP-030266 Status Report for WI "Introduction of the Multimedia Broadcast Multicast Service (MBMS) in RAN" (Rapporteur)**

~~Sami Kekki~~Juha Mikola (Nokia) presented this report

There was some debate on the need of an uplink for each UE receiving the MBMS channels. Denis Fauconnier (Nortel) presented the concept of "trusted" application, and as an example he suggested an application running on MBMS requires a periodical feedback from the UEs to be supported by a dedicated link, it will draw excessive resources from the radio. A trusted application would be one that the operator can be sure it is not behaving that way in an uncontrolled manner.

Alexander Vesely (WG3 chairman) noted that some of the discussions that took place in WG3, and that are reported in his meeting report, are not taken in this Status Report. He also noted that from a WG3 perspective, the TR and TS aren't ready yet to be under change control. Ericsson also pointed out that there are many issues on those specifications for further study.

There were some comments on the way the Ad Hoc worked, mentioning that MCC participation should be preferable to have a proper meeting support.

There was a long debate on the completion date. It is clear that September is not achievable, the discussion moved to the choice between December 2003 and March 2004. Several companies noted that the work in WG3 will be hardly finished before March, "3" opposed this views and believed that December is the proper date. In principle, MBMS is using existing R99 layer 1, so WG1 will not have to introduce changes to its specifications, hence WG4 will not need to perform simulations to derive RRM requirements. Finally, although no consensus was achieved, the date of March 2004 is accepted.

Juho Pirskanen (juho.pirskanen@nokia.com Nokia) is appointed new rapporteur.

**RP-030309 3GPP TS 25.346 v2.0.0: "Introduction of Multimedia Broadcast/Multicast Service (MBMS) in the Radio Access Network (Stage-2)" (Nokia)**

Following the discussion above, this TS is not approved

**RP-030310 3GPP TR 25.992 v2.0.0: "Multimedia Broadcast/Multicast Service (MBMS); UTRAN/GERAN requirements" (Nokia)**

Han van Bussel (T-Mobile) noted that GERAN had reviewed this TR in its MBMS Ad Hoc and, although there is no formal LS with comments, there were some objections. Nokia agreed to bring the TR to GERAN again and to collect the comments.

The report is not approved

## 8.7 Evolution of the transport in the UTRAN

No contributions

## 8.8 MIMO

**RP-030236 Status Report for WI "Multiple Input Multiple Output antennas (MIMO)" (Rapporteur)**

Said Tatesh (Lucent) presented this report

Dirk Gerstenberger (Ericsson) questioned if the joint activity with 3GPP2 should be kept or the work should now continue on 3GPP only. The TR is presented for approval and goes into 3GPP-only change control. It is preferred to close the Ad Hoc so that the work will be coordinated by the officials in both PPs and by companies, which in any case are the same in both PPs. There is no further need for a dedicate group.

The completion date is changed to March 2004, the work in WG4 is delayed also to December 2004.

Panasonic commented that the work on advanced receivers that could take place in WG4 should be aligned with MIMO in that group. Said explained that in principle a separate WI is preferred, although he agreed that there will be some interaction. This was supported by the meeting.

**RP-030311 3GPP TR 25.996: Spatial Channel Model for Multiple-Input Multiple Output Simulations v 2.0.0 (Lucent)**

Said Tatesh (Lucent) presented this TR

There was some discussion on the Release for the TR. MCC had recommended to keep the Stage 1, 2 and 3 documents in the same release (see section 11), and there is a risk that MIMO ends up out of Rel-6 even though the TR is included in Rel-6. Howard Benn (Motorola) point out that this TR is not actually a stage 2 for MIMO, it is the study and definition of a Spatial Channel Model.

It is agreed that for this case, the TR can be approved now regardless of the Release of MIMO. However, for future cases, it is agreed to follow the procedure adopted by SA WG1: if the stage 2 & 3 go into a later release that stage 1, the TR for stage one will be discontinued in the previous release and kept in the same release as the stage 2 & 3.

**RP-030237 Status Report for WI "Multiple Input Multiple Output Antennas – Physical Layer" (Rapporteur)**

Noted

**RP-030238 Status Report for WI "Multiple Input Multiple Output Antennas – Layer 2,3 aspects" (Rapporteur)**

No progress. Noted

**RP-030239 Status Report for WI "Multiple Input Multiple Output Antennas- Iub/Iur Protocol Aspects" (Rapporteur)**

No progress. Noted

~~**RP-030240 Status Report for WI "Multiple Input Multiple Output Antennas – RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing" (Rapporteur)**~~

~~Noted~~

## 8.9 Technical Small Enhancements and Improvements

**RP-030220 CRs (Rel-6) under WI "Technical Enhancements and Improvements" (RAN WG4)**

The CRs are approved

**RP-030223 CRs (Rel-6) to TS 25.123, TS 25.225, TS 25.423 & TS25.433 on "Interference measurement in UpPTS for 1.28Mcps TDD" (3GPP support)**

Since the WG3 CRs have not been agreed by the group, the package cannot be approved. WG4 and WG1 CRs are kept on hold and will be represented in TSG RAN when WG3 has agreed on its own.

The CRs are not approved

## 8.10 Closed Release-6 Work Items

**RP-030221 CRs (Rel-6) for WI "FDD BS Classification" (RAN WG4)**



The CRs are approved

## 8.11 Study Items

### 8.11.1 Feasibility study on Radio link performance enhancements

#### **RP-030245 Status Report for SI "Radio link performance enhancements" (Rapporteur)**

Antti Toskala (Nokia) presented this report

The list contains the proposals under study, it doesn't mean that they will get into the standard.

The completion date, for all the items under study, is March 2004

The report is noted

### 8.11.2 Feasibility study on UTRA Wideband Distribution System (WDS)

#### **RP-030246 Status Report for SI "UTRA Wideband Distribution System" (Rapporteur)**

Carlo Mataraso (Tekmar) presented this report

Carlo proposed to change the completion date to March 2004, due to the pending issues listed in the report.

The report is noted

### 8.11.3 Feasibility Study considering the viable deployment of UTRA in additional and diverse spectrum arrangements

#### **RP-030247 Status Report for SI "Viable deployment of UTRA in additional and diverse spectrum arrangements" (Rapporteur)**

Thomas Unshelm (Ericsson) presented this report

The Study is now completed and closed. No comments. The report is noted

#### **RP-030343 TR 25.889 v2.0.0 "Feasibility Study considering the viable deployment of UTRA in additional and diverse spectrum arrangements" (Ericsson)**

Thomas Unshelm (Ericsson) presented this TR

Jussi Numminen (Nokia) explained that the end of this activity will be to send the "conclusions" section to the ITU.

The TR is approved and will be brought under Change Control

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

#### **RP-030248 Status Report for SI "Improvement of inter-frequency and inter-system measurement for 1.28 Mcps TDD" (Rapporteur)**

Xiaoqiang Li (Samsung) presented this report

The completion date was contested, given that WG2 and WG3 work hasn't advanced. It is however conserved.

The report is noted

### 8.11.5 Analysis of OFDM for UTRAN evolution

#### **RP-030249 Status Report for SI "Analysis of OFDM for UTRAN enhancement" (Rapporteur)**

Evelyne LeStrat (Nortel) presented this report

Howard Benn (WG4 chairman) questioned the reference to the emission mask. Evelyne explained that the work done is a very simple evaluation, the intention is to fit the existing mask. She clarified that there will not be any conclusion on that field without consultation with WG4.

The report is noted

### 8.11.6 Uplink Enhancements for Dedicated Transport Channels

#### **RP-030250 Status Report for SI "Uplink Enhancements for Dedicated Transport Channels" (Rapporteur)**

Karri Ranta-aho (Nokia) presented this report

Evelyne LeStrat (Nortel) commented that the fast-DCH set up was objected as a part of this SI, since most of the delay is not due to layer 1 procedures, but to higher layers under the scope of other groups. Antti Toskala (Nokia) explained that WG2 has to be contacted at a later stage.

Dirk Gerstenberger (WG1 chairman) noted that this part of the SI shouldn't be stopped, the goal is to reduce the delay and any possibility must be studied. Eventually the conclusion might be that the layer 1 cannot be further optimized, but at this stage it cannot be precluded. Denis Fauconnier (Nortel) further argued that the potential gain in layer 1 is about 20 ms, whereas the delay at upper layers is much higher. He asked that WG2 reviews the TR before it is presented for information in TSG RAN.

Seung-June Yi (LG) and others remarked that the techniques under study, such HybridARQ and scheduling must be studied by WG2. It was suggested that companies present their contributions there, but WG1 chairman and delegates remarked that so far the study is looking at the layer 1, other WGs will be contacted at a later stage.

The report is noted

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

#### **RP-030251 Status Report for SI "Analysis of higher chip rates for UTRA TDD evolution" (Rapporteur)**

Dirk Gerstenberger (WG1 chairman) presented this report

Some concerns about the completion date were raised. Howard Benn (WG4 chairman) noted that from WG4 perspective the date is achievable. The report is noted

### 8.11.8 Evolution of UTRAN Architecture

#### **RP-030257 Status Report for SI "Evolution of UTRAN Architecture" (Rapporteur)**

Sami Kekki (Nokia) presented the report

The completion date is changed to December 2003.

The report is noted

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

### **RP-030260 Status Report for SI "Improved Access to UE Measurement Data for CRNC to support TDD RRM" (Rapporteur)**

Jim Miller (Interdigital) presented this report

It is suggested that the rest of the WGs should be contacted before taking the final decision on the option, if the option preferred by RAN WG3 has an impact in the UEs. Jim reckoned that it is the expected way to go.

The expected completion date was June, it is delayed to September.

The report is noted

### **RP-030342 TR 25.801 v1.0.0 'Feasibility study for improved access to User Equipment (UE) measurement data for Controlling Radio Network Controller (CRNC) to support Time Division Duplex (TDD) Radio Resource Management (RRM)' (RAN WG3)**

The TR is noted. The final version is expected for the next TSG RAN.

## 8.11.10 FS on Enhancements to OTDOA Positioning using advanced blanking methods

### **RP-030264 Status Report for SI "Enhancements to OTDOA Positioning using advanced blanking methods" (Rapporteur)**

Dirk Gerstenberger (WG1 chairman) presented this report

It seems that the rapporteur has not been present for a number of meetings, which was felt inconvenient by some companies who had brought to the meeting their experts in the area and then the discussions couldn't take place. The chairman proposed to close the study if the situation continues for another 3 months.

Considering the completion date, due for June 2003, it is proposed to move it to September 2003.

The report is noted

## 8.11.11 Low Output Powers for general purpose FDD BS

### **RP-030252 Status Report for SI "Low Output Powers for general purpose FDD BSs" (Rapporteur)**

Juan Antonio Moreno (Telefónica) presented this report

It is questioned how the TR can be approved by both WG4 and WG3 groups in the reflectors. Anyway, the chairman clarified that it should be presented for comments to WG3 and the approval will take place in WG4. The chairman also clarified that the objective of the Study is not to approve the changes, as stated in the list of open issues, but to identify the necessary changes.

Antti Toskala (Nokia) questioned what the impact on WG2 specifications could be, in particular related to power control. Juan Antonio replied that WG2 will be contacted for that issue.

The report is noted

## 8.12 New Work Items/Study Items

### **RP-030308 Proposed WID for AGPS minimum performance specification. (ATT)**

Dongling Shen (ATT) presented this document

"3" noted that some comments had been raised, which are not captured in the document. "3" noted that multiple performance classes shall be considered for the WI to be acceptable. It was observed that the WI itself will study the need and possibility of various classes, that is the outcome of the WI but cannot be mandated at the beginning of the work.

Denis Fauconnier (Nortel) commented also that the different requirements might be linked to the application and not the terminal, depending on the state of the terminal or the application demanding the positioning, the performance requirements might be different. In his view, the first task for WG4 is to agree on the test cases, and then the performance requirements and the classes would be set somewhere else, in regulatory bodies for the case of emergency services.

Howard Benn (WG4 chairman) foresaw that the work in WG4 will be to be difficult, WG4 cannot be requested at this point to have or not to have different classes at the end of the work, it is something to be studied. Nothing can be precluded in WG4 concerning the classes.

"3" objected the approval of the WI as is now, Mony Kochupillai ("3") requested that a note about multiple classes is added to the coversheet, he also noted that currently there is no demand from SA WG1 for performance requirements. "3" strongly opposed the creation of the WI if no mention to the different performance classes is added

NEC noted that it has some concerns on the current text of the WI, but doesn't object the WI itself.

Finally, the following agreement was reached: As part of the work description, WG4 should consider the need for different performance classes and revise the Work Item accordingly.

The WI is approved

#### **RP-030355 Proposed WI on Subscriber equipment trace (Nortel, Nokia, Motorola, Lucent, Telefónica, Orange, O2, Vodafone)**

Denis Fauconnier (Nortel) presented this proposal

Per Ernström (Telia) generally supports the WI, but objected having the implementation restricted with the sentence: "Another objective of the Work Item is to avoid mechanisms systematically providing the IMEI(SV) for each Iu signaling connection." However, Nokia explained that this sentence was the basis of the agreement by the proponents. There was some discussion on the possibility to evaluate different implementations that do not exactly fit the WI description, in this sense it was reminded that the WIDS can always be modified to follow the actual work done.

The WI is approved

#### **RP-030359 Proposed Feasibility Study on Uplink Enhancements for UTRA TDD (IP Wireless)**

Jim Miller (Interdigital) presented this proposal

Antti Toskala (Nokia) objected the tight timing schedule, that anticipates conclusion by December 2003. He noted that the FDD part has been ongoing for 9 months and still is not finished. Said Tatesh (Lucent) noted that the existing SI doesn't preclude TDD, ~~and objected creating a separate item for TDD~~. Antti noted that most of the work cannot be reused, notably some simulations need to be redone. He agreed that some parts of the work done could be applied for TDD, but rejected merging the SIs. Siemens agreed with this view. It is clarified that the SI will cover both TDD rates.

It is agreed that the completion date will be March 2004

The rapporteur is missing, the [WI-SI](#) will be withdrawn if no person is appointed before next meeting.

The [WI-SI](#) is approved

## 9 Technical co-ordination among WGs

Co-ordination among WGs was discussed during the meeting when necessary

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

The action points were covered in the chairmen's reports of the WGs work.

### 9.2 Other needs

No discussions

## 10 Outputs to other groups

No liaisons approved to other groups

## 11 Project management

### **RP-030226 On features and releases (3GPP support)**

John Meredith (3GPP support) presented this document

It contains some recommendations to align RAN part of the Work Plan with the practices common to the other TSGs. In particular, John reminded the definition of "feature" 3GPP parlance ("new or substantially enhanced functionality which represents added value to the existing system") and noted that RAN features do not embrace this definition. He recommended not to use the "generic" feature approach which is effectively hiding the work done in RAN down a level compared to other groups.

Another recommendation was to keep stage1 or stage 2 documents, generally the TRs out coming from feasibility studies, in the same Release as the stage 3 specifications or changes to the specifications.

The first suggestion triggered a heated debate, generic features like "RAN improvements" or "Radio Interface improvements" encompass most of the work done in RAN. The chairman argued that RAN work is based in a continuous improvement of the Radio Access Network, which generally takes the form of small enhancements, rather than introduction of "features" that provide a new functionality to the end user. The mentioned generic features exists since the introduction of the Work Plan, and serve to group these small enhancements in two, those that affect the radio, related normally to RF layer and layer 1, and those that affect the network, normally higher layers and interfaces between RAN nodes.

No conclusion was reached, and for the time being TSG RAN will continue to use the generic features. A solution to get a more detailed view of RAN work can be to look at building block level rather than feature level.

Concerning the stage 1 & 2 TRs, it was agreed to keep them together with stage 3 specifications by means of changing its release if necessary. See section 8.8

**RP-030224 CRs to 41.001 and 01.01 to create various spec lists (3GPP support)**

**RP-030225 CRs to 01.01, 41.102, 41.103, 21.101, 21.102, 21.103 (3GPP support)**

**RP-030227 Status list before plenary (3GPP support)**

**RP-030230 Renumbering of 21.102, 21.103, 41.102, 41.103 (3GPP support)**

**RP-030228 Friendly databases (3GPP support)**

John Meredith (3GPP support) presented these documents

The documents are presented for information, no action required from TSG RAN. The CRs will be approved in TSG SA.

#### **RP-030229 Specs not yet under change control (3GPP support)**

Some corrections to this list were presented:

- 30.504 is stopped as of now
- 25.876 the HSDPA reference has to be removed from the title
- 25.869 is to be moved to Rel-6 as of now
- 25.893 is to be moved to Rel-6 as of now, but expect it to be stopped in Sept 03, and contents transferred to 25.993
- 25.994 and 25.995 are under responsibility of WG2 not TSG RAN

#### **RP-030373 Work Plan presentation (3GPP Support)**

César Gutiérrez (Secretary) provided this presentation

This PowerPoint presentation summarizes all the active Work Items in 3GPP. TSG RAN delegates were asked to comment particularly on the RAN Items.

On slide 27, Beamforming enhancements, it is agreed that the completion date will be September 2003

On slide 24, Improvements of inter-freq and inter-sys measurement, the completion date is left open.

Some comments to slide 36, "Radio optimisation impacts on PS domain architecture", which is an SA WI that appears to have some impact on RAN work. Alex Vesely (WG3 chairman), explained that WG3 has been contacted by SA WG2 and is already following the work. It was commented that RAN WG2 should also get involved.

After review of all the WIs, it seems that March 2004 is the most convenient date for production of Release 6.

#### **RP-030375 Overview of Release 5 (3GPP Support)**

César Gutiérrez (Secretary) presented this document

The document, produced by the 3GPP support (Mobile Competence Center), contains descriptions of all WI in Release 5. These descriptions are taken from the WI description sheet, the TRs and TSs. It is intended for general distribution, and TSG RAN delegates are invited to review it and comment.

#### **RP-030347 Feature vs Release (Nortel)**

Denis Fauconnier (Nortel) presented this document

Denis presented this document for discussion and forward thinking. Motorola noted that the paper had been presented in WG2 and the arguments are the same, he believes that the current system grouping features by Release is correct and, apart of the particular case of frequency bands, there is no need to handle features independently. Nokia noted that on other particular cases the approach could be used, but not as a general rule the system should be kept as is. Other companies also stressed that there is no apparent advantage on changing the current procedure. [Due to the limited time available for discussion on this subject, the chairman suggested to continue the discussion in the email reflector.](#)

The document is noted

#### **RP-030348 Freezing of Rel5 RAN specifications (Nortel)**

Denis Fauconnier (Nortel) presented this document

Debate took place on the meaning of freezing, since Rel-5 is already functionally frozen. The biggest concern is the ASN.1, which is difficult to modify in a backwards compatible manner. The suggestion of including an

isolated impact analysis for Rel-5 CRs was welcome, but the date to introduce this freezing was not easy to agree. The chairman suggested to postpone it to December, to let the WGs review the particular situations. The conclusion is that all CRs presented to TSG RAN in September shall have an Isolated Impact Analysis, and eventually, from December onwards, Isolated Impact will have to be ensured.  
The document is noted

## 12 Any other business

No discussions

## 13 Closing of the meeting

The chairman closed the meeting on Friday 6<sup>th</sup> at 13:00. He thanked the host for the organization and the delegates for their participation.

## Annex A: List of participants

	Title	Surname	First name	E-mail address	Organization	Partner	Country	Role
1	Ms.	Chelo	Abarca	chelo.abarca@alcatel.fr	ALCATEL S.A.	ETSI	FR	
2	Dr.	Joon-Kui	Ahn	jkan@lge.com	LG Electronics Inc.	TTA	KR	
3	Mr.	Matti	Alkula	matti.alkula@nokia.com	NOKIA Corporation	ETSI	FI	
4	Mr.	Niels	Andersen	NPA001@MOTOROLA.COM	MOTOROLA A/S	ETSI	DK	
5	Dr.	Arun	Arunachalam	arun.arunachalam@skyworksinc.com	Skyworks Solutions Inc.	T1	US	
6	Mr.	Claude	Arzelier	claudio.arzelier@etsi.org	ETSI Secretariat	ETSI	FR	
7	Mr.	Per	Beming	per.beming@era.ericsson.se	ERICSSON L.M.	ETSI	SE	
8	Dr.	Howard	Benn	howard.benn@motorola.com	MOTOROLA Ltd	ETSI	GB	
9	Mr.	Joakim	Bergström	joakim.bergstrom@era.ericsson.se	Ericsson Korea	TTA	KR	
10	Mr.	Stephan	Castagnet	stephan.castagnet@mdc.nec.fr	NEC Technologies (UK) LTD	ETSI	GB	
11	Mr.	Dong	Chen	dong.chen@siemens.com	SIEMENS AG	ETSI	DE	
12	Mr.	Sungho	Choi	schoi@samsung.com	Samsung Electronics Co., Ltd	TTA	KR	
13	Mr.	François	Courau	francois.courau@alcatel.fr	ALCATEL S.A.	ETSI	FR	Chairman
14	Mr.	Luca	D'Antonio	ldantonio@mail.tim.it	TELECOM ITALIA S.p.A.	ETSI	IT	
15	Mr.	Jean-Jacques	Davidian	davidian@docomo.fr	NTT DoCoMo	ETSI	JP	
16	Mr.	Guillaume	Decarreau	guillaume.decarreau@francetelecom.com	ORANGE FRANCE	ETSI	FR	
17	Mr.	Kenny	Ding	ext-kenny.ding@nokia.com	NOKIA Corporation	ETSI	FI	
18	Mr.	Ian	Doig	ian.doig@motorola.com	MOTOROLA S.A.S	ETSI	FR	
19	Mr.	Jan	Ellsberger	jan.ellsberger@era.ericsson.se	Nippon Ericsson K.K.	TTC	JP	
20	Ms.	Ingela	Ericsson	ingela.ericsson@era.ericsson.se	Nippon Ericsson K.K.	TTC	JP	
21	Mr.	Per	Ernström	per.v.ernstrom@telia.se	TeliaSonera AB	ETSI	SE	
22	Mr.	Denis	Fauconnier	dfauconn@nortelnetworks.com	NORTEL NETWORKS (EUROPE)	ETSI	GB	
23	Mr.	John B	Fenn	johnbfenn@aol.com	SAMSUNG Electronics	ETSI	GB	
24	Mr.	Edgar	Fernandes	edgar.fernandes@motorola.com	MOTOROLA Ltd	ETSI	GB	
25	Mr.	Eisuke	Fukuda	efukuda@jp.fujitsu.com	Fujitsu Limited	ARIB	JP	ViceChairman
26	Mr.	Dirk	Gerstenberger	dirk.gerstenberger@era.ericsson.se	Ericsson Inc.	T1	US	



	<b>Title</b>	<b>Surname</b>	<b>First name</b>	<b>E-mail address</b>	<b>Organization</b>	<b>Partner</b>	<b>Country</b>	<b>Role</b>
27	Mr.	Gerhard	Gerz	gerhard.gerz@regtp.de	BMW	ETSI	DE	
28	Mr.	Alessandr	Gola		Vodafone Omnitel N.V	ETSI	IT	
29	Mr.	Steve	Green	steve.green@ties.itu.int	DTI	ETSI	GB	
30	Mr.	Francesco	Grilli	fgrilli@qualcomm.com	QUALCOMM EUROPE S.A.R.L.	ETSI	FR	
31	Dr.	Joerg	Gustrau	joerg.gustrau@siemens.com	SIEMENS AG	ETSI	DE	
32	Mr.	Cesar	Gutierrez Miguelez	cesar.gutierrez@etsi.org	ETSI Secretariat	ETSI	FR	Secretary
33	Mr.	Rizwan	Hassan		SAMSUNG Electronics	ETSI	GB	
34	Dr.	Volker	Hoehn	volker.hoehn@vodafone.com	Vodafone D2 GmbH	ETSI	DE	
35	Mr.	Kevin	Holley	kevin.holley@o2.com	mmO2 plc	ETSI	GB	
36	Mr.	Andrew	Howell	andrew.howell@motorola.com	MOTOROLA GmbH	ETSI	DE	
37	Ms.	Jinling	Hu	hujl@catt.ac.cn	CATT	CWTS	CN	
38	Mrs.	Karen	Hughes	karen.hughes@etsi.org	ETSI Secretariat	ETSI	FR	Support Assistant
39	Mr.	Yoshihide	Ishida	ishida@arib.or.jp	ARIB	ARIB	JP	
40	Mr.	Gary	Jones	gary.jones@t-mobile.com	T-Mobile USA Inc.	T1	US	
41	Mr.	Andreas	Kainz	a.kainz@mobilkom.at	Telekom Austria AG	ETSI	AT	
42	Mr.	Sami	Kekki	sami.kekki@nokia.com	Nokia Japan Co, Ltd	ARIB	JP	
43	Mr.	Mony	Kochupillai	mony.kochupillai@three.co.uk	3	ETSI	GB	
44	Mr.	Hiroshi	Komatsu	hiroshi.komatsu@j-phone.com	J-Phone Co., Ltd.	ARIB	JP	
45	Mr.	Meik	Kottkamp	meik.kottkamp@siemens.com	SIEMENS AG	ETSI	DE	
46	Mr.	Waldemar	Krassowski	w.krassowski@urtip.gov.pl	URTIP	ETSI	PL	
47	Dr.	Joern	Krause	joern.krause@etsi.org	ETSI Secretariat	ETSI	FR	
48	Mr.	Timo	Kumpumaki	timo.kumpumaki@teliasonera.com	TeliaSonera AB	ETSI	SE	
49	Mr.	Kari	Lang	kari.j.lang@nokia.com	NOKIA Corporation	ETSI	FI	
50	Mr.	Yannick	Le Pezenec	Yannick.LePezenec@vodafone.co.uk	VODAFONE LTD	ETSI	GB	
51	Ms.	Evelyne	Le Strat	elestrat@nortelnetworks.com	Nortel Networks	T1	US	
52	Mr.	Xiaoqiang	Li	xqli@samsung.com	SAMSUNG Electronics	ETSI	GB	
53	Mr.	Pertti	Lukander	pertti.lukander@nokia.com	NOKIA Corporation	ETSI	FI	
54	Dr.	Carlo	Luschi	carlo.luschi@ubinetics.com	UbiNetics Ltd	ETSI	GB	
55	Dr.	Tsuneichi	Makihira	Tsuneichi.Makihira@hq.melco.co.jp	Mitsubishi Electric Co.	ARIB	JP	
56	Dr.	Carlo	Matarasso	carlo.matarasso@tekmar.it	TEKMAR Sistemi Srl	ETSI	IT	
57	Mr.	Steve	Mecrow	steve.mecrow@o2.com	mmO2 plc	ETSI	GB	
58	Mr.	John M	Meredith	john.meredith@etsi.org	ETSI Secretariat	ETSI	FR	
59	Mr.	Juha	Mikola	juha.mikola@nokia.com	Nokia Korea	TTA	KR	
60	Mr.	James	Miller	jim.miller@interdigital.com	INTERDIGITAL	ETSI	US	

	Title	Surname	First name	E-mail address	Organization	Partner	Country	Role
					COMMUNICATIONS			
61	Mr.	Nozomi	Miura	miura@arib.or.jp	ARIB	ARIB	JP	
62	Mr.	Takaharu	Nakamura	n.takaharu@jp.fujitsu.com	Fujitsu Limited	ARIB	JP	
63	Mr.	Takehiro	Nakamura	takehiro@wsp.yrp.nttdocomo.co.jp	NTT DoCoMo	ETSI	JP	
64	Mr.	Jussi	Numminen	jussi.numminen@nokia.com	Nokia Telecommunications Inc.	T1	US	
65	Mr.	Juha	Nykopp	juha.nykopp@radiolinja.fi	Elisa Communications Corp.	ETSI	FI	
66	Dr.	Min-Seok	Oh	minoh@lge.com	LG Electronics Inc.	TTA	KR	
67	Mr.	Lars	Olsson	lars.olsson@trafficsystems.com	ERICSSON L.M.	ETSI	SE	
68	Dr.	Sudeep	Palat	spalat@lucent.com	Lucent Technologies	T1	US	
69	Dr.	Sang-Keun	Park	skpark@samsung.com	Samsung Electronics Co., Ltd	TTA	KR	
70	Mr.	Matti	Passoja	matti.passoja@sonera.com	TeliaSonera AB	ETSI	SE	
71	Mr.	Maurice	Pope	maurice.pope@etsi.org	ETSI Secretariat	ETSI	FR	
72	Mr.	Marijn	Rijken	m.rijken@telecom.tno.nl	KPN N.V.	ETSI	NL	
73	Mr.	Michael	Roberts	michael.roberts@mdc.nec.fr	NEC Technologies (UK) LTD	ETSI	GB	
74	Mr.	Giovanni	Romano	giovanni.romano@telecomitalia.it	TELECOM ITALIA S.p.A.	ETSI	IT	
75	Mr.	Tsukasa	Sasaki	tsukasa.sasaki@etsi.org	ETSI Secretariat	ETSI	FR	
76	Mr.	Philippe	Sehier	philippe.sehier@alcatel.fr	ALCATEL S.A.	ETSI	FR	
77	Mr.	Donglin	Shen	donglin.shen@attws.com	AT&T Wireless Services, Inc.	T1	US	
78	Mr.	Prem	Sood	pls@sharplabs.com	SHARP Corporation	ARIB	JP	
79	Mr.	Hidetoshi	Suzuki	Suzuki.Hidetoshi@jp.panasonic.com	Panasonic Mobile Comm.	ARIB	JP	
80	Mr.	Toshiyuki	Tamura	tamurato@aj.jp.nec.com	NEC Corporation	TTC	JP	
81	Dr.	Said	Tatesh	statesh@lucent.com	Lucent Technologies N. S. UK	ETSI	GB	
82	Mr.	Bryan	Taylor	btaylor@rim.net	RIM	ETSI	CA	
83	Mr.	Antti	Toskala	Antti.Toskala@nokia.com	NOKIA Corporation	ETSI	FI	
84	Dr.	Thomas	Unshelm	Thomas.Unshelm@era.ericsson.se	Nanjing Ericsson Panda Com Ltd	CWTS	CN	
85	Mr.	Paolino	Usai	paolo.usai@etsi.org	ETSI Secretariat	ETSI	FR	
86	Mr.	Akihisa	Ushirokawa	a-ushirokawa@aj.jp.nec.com	NEC Electronics (Europe) GmbH	ETSI	DE	

	<b>Title</b>	<b>Surname</b>	<b>First name</b>	<b>E-mail address</b>	<b>Organization</b>	<b>Partner</b>	<b>Country</b>	<b>Role</b>
87	Mr.	Han	van Bussel	han.van.bussel@t-mobile.de	T-MOBILE DEUTSCHLAND	ETSI	DE	
88	Mr.	Hans	van der Veen	Hans.vanderVeen@ccrle.nec.de	NEC EUROPE LTD	ETSI	GB	
89	Mr.	Alexander	Vesely	alexander.vesely@siemens.com	SIEMENS ATEA NV	ETSI	BE	
90	Mr.	Tak Wing	Wan	twwan@rci.rogers.com	Rogers Wireless Inc.	T1	CA	
91	Miss	Yanhong	Wang	Wangyanhong@huawei.com	HuaWei Technologies Co., Ltd	CWTS	CN	
92	Dr.	Andreas	Wilde	andreas.wilde@emp.ericsson.se	Nippon Ericsson K.K.	ARIB	JP	
93	Mr.	Serge	Willenegger	sergew@qualcomm.com	QUALCOMM EUROPE S.A.R.L.	ETSI	FR	
94	Mr.	Seung June	Yi	seungjune@lge.com	LG Electronics Inc.	TTA	KR	
95	Mr.	Do-Hyon	Yim	ydhyon@samsung.com	Samsung Electronics Co., Ltd	TTA	KR	
96	Mr.	Yukio	Yoshimura	y-yoshimura@ax.jp.nec.com	NEC Corporation	ARIB	JP	
97	Dr.	Yanbin	Yu	yanbin.yu@utstar.com	UTStarcom	ETSI	US	
98	Mr.	Donald E.	Zelmer	don.zelmer@cingular.com	Cingular Wireless LLC	T1	US	Vice Chairman

## Annex B: List of documents

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

All documents can be found at: [ftp://ftp.3gpp.org/tsg\\_ran/TSG\\_RAN/TSGR\\_20/](ftp://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_20/)

Tdoc	Title	Source	Decision
RP-030203	Draft Agenda Meeting #20	Chairman	Approved
RP-030204	Revised Draft Report of the 19th TSG-RAN meeting (Birmingham, UK, 11 -14 March, 2003)	3GPP support	Approved
RP-030205	Status report WG4	RAN WG4 Chairman	Noted
RP-030206	List of agreed CRs	RAN WG4	Noted
RP-030207	CRs (R'99 and Rel-4/Rel-5/Rel-6 Category A) to TS 25.101	RAN WG4	Approved
RP-030208	CRs (R'99 and Rel-4/Rel-5 Category A) to TS 25.123 on "Applicability of Timer T-reselection for 2G cell reselection"	RAN WG4	Approved
RP-030209	CRs (R'99 and Rel-4/Rel-5/Rel-6 Category A) to TS 25.133 (1/2)	RAN WG4	Approved
RP-030210	CRs (R'99 and Rel-4/Rel-5/Rel-6 Category A) to TS 25.133 (2/2)	RAN WG4	Approved
RP-030211	CRs (Rel-4 and Rel-5 Category A) to TS 25.106 & TS 25.143 (Repeaters specifications) on "Spurious emissions: co-existence with FDD in the same geographic area"	RAN WG4	Approved
RP-030212	CRs (Rel-4 and Rel-5 Category A) to TS 25.143 on "Removal of square brackets in test uncertainty of output intermodulation"	RAN WG4	Approved
RP-030213	CRs (Rel-5 and Rel-6 Category A) to TS 25.101	RAN WG4	Approved
RP-030214	CRs (Rel-5 and Rel-6 Category A) to TS 25.104	RAN WG4	Approved
RP-030215	CRs (Rel-5 and Rel-6 Category A) to TS 25.141	RAN WG4	Approved
RP-030216	CR (Rel-5) to TS 25.142	RAN WG4	Approved
RP-030217	CRs (Rel-5 and Rel-6 Category A) to TS 25.101 under WI "High Speed Downlink Packet Access" (FDD)	RAN WG4	Approved
RP-030218	CRs (Rel-5) to TS 25.102 & TS 25.123 under WI "High Speed Downlink Packet Access" (TDD)	RAN WG4	Approved
RP-030219	CRs (Rel-5 and Rel-6 Category A) to TS 25.133	RAN WG4	Approved
RP-030220	CRs (Rel-6) under WI "Technical Enhancements and Improvements"	RAN WG4	Approved
RP-030221	CRs (Rel-6) for WI "FDD BS Classification"	RAN WG4	Approved
RP-030222	CR (Rel-5) to TS 25.123	RAN WG4	Approved
RP-030223	CRs (Rel-6) to TS 25.123, TS 25.225, TS 25.423 & TS25.433 on "Interference measurement in UpPTS for 1.28Mcps TDD"	3GPP support	Not approved
RP-030224	CRs to 41.001 and 01.01 to create various spec lists	3GPP support	Noted
RP-030225	CRs to 01.01, 41.102, 41.103, 21.101, 21.102, 21.103	3GPP support	Noted
RP-030226	On features and releases	3GPP support	Noted
RP-030227	Status list before plenary	3GPP support	Noted
RP-030228	Friendly databases	3GPP support	Noted

Tdoc	Title	Source	Decision
RP-030229	Specs not yet under change control	3GPP support	Noted
RP-030230	Renumbering of 21.102, 21.103, 41.102, 41.103	3GPP support	Noted
RP-030231	Delay Values in UTRAN for Conversational PS RAB	RAN WG3	Noted
RP-030232	Answer to the LS on Antenna Interface Standards Group (AISG)	RAN WG4	Noted
RP-030233	LS on review of TR "Study into Applicability of GALILEO in LCS"	SA WG2	Noted
RP-030234	LS on Stage 3 work for Early UE handling	GERAN WG2	Noted
RP-030235	Status Report for WI "Improvement of inter-frequency and inter-system measurements"	Rapporteur	Noted
RP-030236	Status Report for WI "Multiple Input Multiple Output antennas (MIMO)"	Rapporteur	Noted
RP-030237	Status Report for WI "Multiple Input Multiple Output Antennas – Physical Layer"	Rapporteur	Noted
RP-030238	Status Report for WI "Multiple Input Multiple Output Antennas – Layer 2,3 aspects"	Rapporteur	Noted
RP-030239	Status Report for WI "Multiple Input Multiple Output Antennas- Iub/Iur Protocol Aspects"	Rapporteur	Noted
RP-030240	Status Report for WI "Multiple Input Multiple Output Antennas - RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing"	Rapporteur	<del>Noted</del> Withdraw n
RP-030241	Status Report for WI "Improving Receiver Performance Requirements for the FDD UE"	Rapporteur	Noted
RP-030242	Status Report for WI "UMTS 850"	Rapporteur	Noted
RP-030243	Status Report for WI "DS-CDMA Introduction in the 800 MHz Band"	Rapporteur	Noted
RP-030244	Status Report for WI "UMTS 1.7/2.1 GHz"	Rapporteur	Noted
RP-030245	Status Report for SI "Radio link performance enhancements"	Rapporteur	Noted
RP-030246	Status Report for SI "UTRA Wideband Distribution System"	Rapporteur	Noted
RP-030247	Status Report for SI "Viable deployment of UTRA in additional and diverse spectrum arrangements"	Rapporteur	Noted
RP-030248	Status Report for SI "Improvement of inter-frequency and inter-system measurement for 1.28 Mcps TDD"	Rapporteur	Noted
RP-030249	Status Report for SI "Analysis of OFDM for UTRAN enhancement"	Rapporteur	Noted
RP-030250	Status Report for SI "Uplink Enhancements for Dedicated Transport Channels"	Rapporteur	Noted
RP-030251	Status Report for SI "Analysis of higher chip rates for UTRA TDD evolution"	Rapporteur	Noted
RP-030252	Status Report for SI "Low Output Powers for general purpose FDD BSs"	Rapporteur	Noted
RP-030253	Status Report for WI "Radio access bearer support enhancement"	Rapporteur	Noted
RP-030254	Status Report for WI "Iu enhancements for IMS support in the RAN"	Rapporteur	Noted
RP-030255	Status Report for WI "Improvement of RRM across RNS and RNS/BSS"	Rapporteur	Noted
RP-030256	Status Report for WI "Beamforming Enhancements"	Rapporteur	Noted
RP-030257	Status Report for SI "Evolution of UTRAN Architecture"	Rapporteur	Noted
RP-030258	Status Report for SI "Early Mobile Handling in UTRAN"	Rapporteur	Noted
RP-030259	LS from ITU-R WP8F on Preliminary Draft New Report on Mitigating Techniques to Address Coexistence Between IMT-2000 TDD and FDD Radio Interface Technologies Within the Frequency Range 2 500-2 690 MHz	ITU-R WP8F	Noted
RP-030260	Status Report for SI "Improved Access to UE Measurement Data for CRNC to support TDD RRM"	Rapporteur	Noted
RP-030261	Status Report for WI "Remote Control of Electrical Tilting Antennas"	Rapporteur	Noted
RP-030262	Status Report for WI "Network Assisted Cell Change (NACC) from UTRAN to GERAN – network-	Rapporteur	Noted

Tdoc	Title	Source	Decision
	side aspects"		
RP-030263	Status Report for WI "Open interface between the SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods"	Rapporteur	Noted
RP-030264	Status Report for SI "Enhancements to OTDOA Positioning using advanced blanking methods"	Rapporteur	Noted
RP-030265	Status Report for WI "HSDPA - RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing"	Rapporteur	Noted
RP-030266	Status Report for WI "Introduction of the Multimedia Broadcast Multicast Service (MBMS) in RAN"	Rapporteur	Noted
RP-030267	Status Report for WI "Evolution of the transport in the UTRAN"	Rapporteur	Withdrawn
RP-030268	Status Report WG1	RAN WG1 Chairman	Noted
RP-030269	Supplement (List of agreed CRs) to Report from WG1 chairman to TSG-RAN	RAN WG1	Noted
RP-030270	CRs (R'99 and Rel4/Rel5 category A) to TS 25.215	RAN WG1	Approved
RP-030271	CRs (Rel-5) to TS 25.211	RAN WG1	Approved
RP-030272	CRs (Rel-5) to TS 25.212	RAN WG1	Approved
RP-030273	CRs (Rel-5) to TS 25.214	RAN WG1	Approved
RP-030274	CRs (Rel-5) to TS 25.215	RAN WG1	Approved
RP-030275	CRs (Rel-5) to TS 25.221	RAN WG1	Approved
RP-030276	CRs (Rel-5) to TS 25.222	RAN WG1	Approved
RP-030277	CRs (Rel-5) to TS 25.224	RAN WG1	Approved
RP-030278	Linked CRs (Rel-5) to TS 25.123, TS 25.225, TS 25.302 and TS 25.433 on non HS-DSCH power measurement	RAN WG1	Approved *)
RP-030279	Clarification for the handling of the HS-DSCH (CR837r2 to 25.423)	NEC	Approved
RP-030280	Status Report	ITU-R Ad Hoc Contact Person	Endorsed
RP-030281	3GPP-OMA overlap	TSG-T vice chair	Noted
RP-030282	Report from WG2 chairman to TSG-RAN	RAN WG2 Chairman	Revised in 356
RP-030283	Supplement (List of all agreed/technically endorsed CRs) to Report from WG2 chairman to TSG-RAN	RAN WG2	Noted
RP-030284	Out of service behaviour' CRs (technically endorsed) - Option 1, for decision (R'99 and Rel-4/Rel-5 category A to TS 25.331)	RAN WG2	Not approved
RP-030285	Out of service behaviour' CRs (technically endorsed) - Option 2, for decision (R'99 and Rel-4/Rel-5 category A to TS 25.331)	RAN WG2	Not approved
RP-030286	Out of service behaviour' CRs (technically endorsed) - Option 3, for decision (R'99 and Rel-4/Rel-5 category A to TS 25.331)	RAN WG2	Not approved
RP-030287	Out of service behaviour' CRs (technically endorsed) - Option 4, for decision (R'99 and Rel-4/Rel-5 category A to TS 25.331)	RAN WG2	Revised in 371
RP-030288	CRs on TR 25.993 version 6.1.0 affecting earlier releases	RAN WG2	Approved
RP-030289	CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.304	RAN WG2	Approved
RP-030290	CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.305	RAN WG2	Approved

Tdoc	Title	Source	Decision
RP-030291	CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.306	RAN WG2	Approved
RP-030292	CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.322	RAN WG2	Approved
RP-030293	CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.331 (1)	RAN WG2	Approved
RP-030294	CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.331 (2)	RAN WG2	Approved
RP-030295	CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.331 (3)	RAN WG2	Approved
RP-030296	CRs on stopping RLC entities at relocation (Release '99 and Rel-4/Rel-5 category A) to TS 25.331	RAN WG2	Revised in 374
RP-030297	CRs (Rel-4 and Rel-5 category A) to TS 25.322	RAN WG2	Approved
RP-030298	CRs (Rel-4 and Rel-5 category A) to TS 25.331	RAN WG2	Approved
RP-030299	CRs (Rel-5) to TS 25.302	RAN WG2	Approved
RP-030300	CRs (Rel-5) to TS 25.305	RAN WG2	Approved
RP-030301	CRs (Rel-5) to TS 25.306	RAN WG2	Approved
RP-030302	CRs (Rel-5) to TS 25.321	RAN WG2	Approved *)
RP-030303	CRs (Rel-5) to TS 25.331	RAN WG2	Approved
RP-030304	CRs (Rel-5) to TS 25.922	RAN WG2	Not approved
RP-030305	Linked CRs on variable duplex within the band to TS 25.306 and 25.331 (R99 and Rel-4, Rel-5 CRs on 25.307)	RAN WG2	Rejected
RP-030306	CRs (Release'99 and Rel-4/Rel-5 category A) to TS 25.331 on the Ciphering Mode info IE in 2G-3G Handover	RAN WG2	Revised in 349
RP-030307	CRs (Release'99 and Rel-4/Rel-5 category A) to TS 25.331 on Corrections to security procedures in case of SRNS Relocation	RAN WG2	Revised in 350
RP-030308	Proposed WID for AGPS minimum performance specification.	ATT	Revised in 370
RP-030309	3GPP TS 25.346 v2.0.0: "Introduction of Multimedia Broadcast/Multicast Service (MBMS) in the Radio Access Network (Stage-2)"	Nokia	Not approved
RP-030310	3GPP TR 25.992 v2.0.0: "Multimedia Broadcast/Multicast Service (MBMS); UTRAN/GERAN requirements"	Nokia	Not approved
RP-030311	3GPP TR 25.996: Spatial Channel Model for Multiple-Input Multiple Output Simulations v 2.0.0	Lucent	Approved
RP-030312	Report from WG3 chairman to TSG-RAN	RAN WG3 chairman	Noted
RP-030313	Supplement (List of all agreed/technically correct CRs) to Report from WG3 chairman to TSG-RAN	RAN WG3	Noted
RP-030314	CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.413 on Essential Correction of Iu Release Issue	RAN WG3	Approved
RP-030315	CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.419 on Correction of Kill Unsuccessful Outcome	RAN WG3	Approved
RP-030316	CRs (Rel-4 and Rel-5 Category A) to TS 25.413 on Iu UP Initialisation during RAB modification	RAN WG3	Approved
RP-030317	CRs (Rel-5 and Rel-6 Category A) to TS 25.401 on Correction to HS-DSCH transport in case of SRNC not coincident with DRNC and without flow control in the DRNC	RAN WG3	Approved
RP-030318	CR (Rel-5 only) to 25.402 on Removal of the Frequency Acquisition for Late-Entrant Cells for 1.28Mcps TDD	RAN WG3	Approved

Tdoc	Title	Source	Decision
RP-030319	CRs (Rel-5 only) to TS 25.423	RAN WG3	Approved
RP-030320	CRs (Rel-5 only) to TS 25.433	RAN WG3	Approved
RP-030321	CRs (Rel-5 only) to TS 25.435	RAN WG3	Approved
RP-030322	CRs (Rel-5 only) to TS 25.453	RAN WG3	Approved
RP-030323	CR (Rel-5 only) to TR 25.933 on Corrections to ATM-IP interworking	RAN WG3	Approved
RP-030324	CRs (Rel-4 and Rel-5 Category A) to TS 25.423, 25.433 and 25.453 ( Rel-5 and Rel-6 Category A) on Alignment of the Requested Data Value Information IE description	RAN WG3	Approved
RP-030325	CRs (Rel-4 and Rel-5 Category A) to TS 25.423, 25.433 and 25.453 ( Rel-5 and Rel-6 Category A) on GPS trigger condition	RAN WG3	Approved
RP-030326	CRs (Rel-4 and Rel-5 Category A) to TS 25.413, 25.419, 25.423, 25.433 and 25.453 ( Rel-5 and Rel-6 Category A) on Correction of Failure message used for logical errors	RAN WG3	Approved
RP-030327	CRs (Rel-5 only) to TS 25.425 and 25.435 on Clarification of Capacity Allocation Interval Definition	RAN WG3	Approved
RP-030328	CRs (Rel-5 only) to TS 25.423 and 25.433 on Resource handling of HS-DSCH Guaranteed Bit Rate	RAN WG3	Approved
RP-030329	CRs (Rel-5 only) to TS 25.423 and 25.433 on HS-SCCH Change Indicator	RAN WG3	Approved
RP-030330	CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.423 and 25.433 on Corrections to Tx Diversity	RAN WG3	Not approved
RP-030331	CR (Rel-5 only) to TS 25.425 and 25.435 on Correction for the HS-DSCH frame structure	RAN WG3	Approved
RP-030332	CR (Rel-5 only) to TS 25.423 and 25.433 on Alignment of TDD HSDPA parameters to RAN2 and RAN 1	RAN WG3	Approved
RP-030333	CR (Rel-5 only) to TS 25.423 and 25.433 on HSDPA General Corrections	RAN WG3	Approved
RP-030334	CR (Rel-5 only) to TS 25.423 and 25.433 on TDD Channelisation Code LCR correction for HSDPA	RAN WG3	Approved
RP-030335	CR (Rel-5 only) to TS 25.423 and 25.433 on Correction to HARQ Memory Partitioning	RAN WG3	Approved
RP-030336	CR (Rel-5 only) to TS 25.423 and 25.433 on Clarification for the handling of the HS-DSCH	RAN WG3	Approved *)
RP-030337	CR (Rel-5 only) to TS 25.423 and 25.433 on Correction for the value range of "CQI Feedback cycle, k"	RAN WG3	Approved
RP-030338	CR (Rel-5 only) to TS 25.423 linked to RAN2 CR of RAN #19 (25.331) on Group reset	RAN WG3	Revised in 358
RP-030339	CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.413 on Introduction of Early UE Handling – Bitmap Option	RAN WG3	Approved
RP-030340	CRs (R99 and Rel-4/Rel-5 Category A) to TS 25.413 on Introduction of Early UE Handling – IMEISV Option	RAN WG3	Rejected
RP-030341	CRs (Rel-6 only) to TS 25.453 for WI 'Open interface between SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods'	RAN WG3	Approved *)
RP-030342	TR 25.801 v1.0.0 'Feasibility study for improved access to User Equipment (UE) measurement data for Controlling Radio Network Controller (CRNC) to support Time Division Duplex (TDD) Radio Resource Management (RRM)'	RAN WG3	Noted
RP-030343	TR 25.889 v2.0.0 Feasibility Study considering the viable deployment of UTRA in additional and diverse spectrum arrangements	Ericsson	Approved
RP-030344	CRs (Rel-5 only) to TS 25.423 and 25.433 linked to RAN1 (25.215 Rel-6) on Phase Reference Signalling Support	RAN WG3	Revised in 353



Tdoc	Title	Source	Decision
RP-030345	Draft Summary minutes, decisions and actions from 3GPP PCG Meeting#10, Ottawa, 2 May 2003	Chairman	Noted
RP-030346	Recommendations and Considerations on 3GPP Cost Savings	Chairman	Noted
RP-030347	Feature vs Release	Nortel	Noted
RP-030348	Freezing of Rel5 RAN specifications	Nortel	Noted
RP-030349	Revision of CR1976 to 25.331 in RP-030306	Ericsson	Revised in 369
RP-030350	CRs (Release'99 and Rel-4/Rel-5 category A) to TS 25.331 on Corrections to security procedures in case of SRNS Relocation	Ericsson, Motorola	Approved
RP-030351	CR177 to 25.211 "Removal of the combination of TxAA Mode 1 with HS-SCCH"	Nokia	Not approved
RP-030352	Discussion on single transport format detection	Nokia	Noted
RP-030353	CRs (Rel-5 only) to TS 25.423 and 25.433 linked to RAN1 (25.215 Rel-6) on Phase Reference Signalling Support	Nokia	Revised in 367
RP-030354	Comments to CR173r1 to 25.321 on "UE procedure for TB size signalling" in RP-030302	Panasonic	Noted
RP-030355	Proposed WI on Subscriber equipment trace	Nortel, Nokia, Motorola, Lucent, Telefonica, Orange, O2, Vodafone	Approved
RP-030356	Report from WG2 chairman to TSG-RAN	RAN WG2 Chairman	Noted
RP-030357	SFN - SFN type II measurement	Motorola	Noted
RP-030358	CR (Rel-5 only) to TS 25.423 linked to RAN2 CR of RAN #19 (25.331) on Group reset	Ericsson	Approved
RP-030359	Proposed Feasibility Study on Uplink Enhancements for UTRA TDD	IP Wireless	Approved
RP-030360	RAN WIs and SIs, active and historic	3GPP Support	Noted
RP-030361	CR817r2 to 25.423 v5.5.0, "Phase Signalling Support"	Nokia	Withdrawn
RP-030362	CR114r2, CR115 to 25.419 "Correction of finite number of broadcast"	Nokia	Withdrawn
RP-030363	Early UE session Report in SA WG2	3GPP support	Noted
RP-030364	TS 23.195	3GPP support	Noted
RP-030365	CRs on TX Diversity correction (R99 and Rel-4/Rel-5 cat A) to TS25.225	Siemens	Approved
RP-030366	Power Meas in non HSDPA codes for TDD, CR070r1 to 25.225 (rev of CR in RP-030278)	Siemens	Approved
RP-030367	CRs (Rel-5 only) to TS 25.423 and 25.433 linked to RAN1 (25.215 Rel-6) on Phase Reference Signalling Support	Nokia	Revised in 368
RP-030368	CRs (Rel-5 only) to TS 25.423 and 25.433 linked to RAN1 (25.215 Rel-6) on Phase Reference Signalling Support	Nokia	Not approved
RP-030369	Revision of CR1976 to 25.331 in RP-030306	Ericsson	Approved
RP-030370	Proposed WID for AGPS minimum performance specification.	ATT	Withdrawn
RP-030371	Out of service behaviour' CRs (technically endorsed) - Option 4, for decision (R'99 and Rel-4/Rel-5 category A to TS 25.331)	RAN WG2	Approved
RP-030372	CR 863r1 to 25.433 and CR839r1 to 25.423 on "correction of TX diversity" (revision of CRs in	Nortel	Not approved

<b>Tdoc</b>	<b>Title</b>	<b>Source</b>	<b>Decision</b>
	RP-030330)		
RP-030373	Work Plan presentation	3GPP Support	Noted
RP-030374	CRs on stopping RLC entities at relocation (Release '99 and Rel-4/Rel-5 category A) to TS 25.331	Motorola	Approved
RP-030375	Overview of Release 5	3GPP Support	Noted

## Annex C: List of CRs presented at TSG RAN #20

The table below lists all the CRs presented at RAN#20, regardless of their final status.

Spec	CR	Rev	Phase	Cat	Plenary doc	WG doc	TSG status	Subject	CR to version	Resulting version	WG	Workitem
25.225	069	-	Rel-6	B	RP-030223	R1-030418	withdrawn	Interference measurement in UpPTS for 1.28Mcps TDD	5.4.0		R1	TEI6
25.215	140	-	R99	F	RP-030270	R1-030601	approved	Correction of transmitted carrier power definition in case of Tx diversity	3.11.0	3.12.0	R1	
25.215	141	-	Rel-4	A	RP-030270	R1-030601	approved	Correction of transmitted carrier power definition in case of Tx diversity	4.6.0	4.7.0	R1	
25.215	142	-	Rel-5	A	RP-030270	R1-030601	approved	Correction of transmitted carrier power definition in case of Tx diversity	5.3.0	5.4.0	R1	
25.211	178	-	Rel-5	F	RP-030271	R1-030464	approved	Alignment of the terminology, "subframe"	5.3.0	5.4.0	R1	HSDPA-Phys
25.211	179	-	Rel-5	F	RP-030271	R1-030465	approved	Correction of AICH description	5.3.0	5.4.0	R1	TEI-5
25.211	180	-	Rel-5	F	RP-030271	R1-030486	approved	Correction of description of TTX_diff	5.3.0	5.4.0	R1	HSDPA-Phys
25.212	172	1	Rel-5	F	RP-030272	R1-030579	approved	Clarification of TPC and Pilot transmission with STTD in compressed mode	5.4.0	5.5.0	R1	TEI-5
25.212	173	2	Rel-5	F	RP-030272	R1-030624	approved	Correction on the flexible TFCI coding in the DSCH hard split mode for Rel5	5.4.0	5.5.0	R1	RInImp-DSCHhsp
25.214	314	1	Rel-5	F	RP-030273	R1-030438	approved	Correction of TPC command combining in SHO	5.4.0	5.5.0	R1	TEI-5
25.214	319	-	Rel-5	F	RP-030273	R1-030466	approved	Correction for HS-DPCCH gain factor in compressed frame	5.4.0	5.5.0	R1	HSDPA-Phys
25.214	320	1	Rel-5	F	RP-030273	R1-030590	approved	Clarification of HS-SCCH reception in case of minimum interTTI interval is not 1	5.4.0	5.5.0	R1	HSDPA-Phys
25.214	321	-	Rel-5	F	RP-030273	R1-030487	approved	Correction of description of CQI transmission timing calculation	5.4.0	5.5.0	R1	HSDPA-Phys
25.214	322	1	Rel-5	F	RP-030273	R1-030591	approved	Clarification of the reference power for HS-DPCCH	5.4.0	5.5.0	R1	HSDPA-Phys
25.215	143	-	Rel-5	F	RP-030274	R1-030602	approved	Correction of transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission definition in case of Tx diversity:	5.3.0	5.4.0	R1	HSDPA-Phys
25.221	114	1	Rel-5	F	RP-030275	R1-030582	approved	Corrections to field coding of TPC for support of HS-SICH (3.84Mcps TDD)	5.4.0	5.5.0	R1	HSDPA-Phys
25.222	111	-	Rel-5	F	RP-030276	R1-030504	approved	Corrections to field coding of CQI for HS-SICH (3.84Mcps TDD)	5.4.0	5.5.0	R1	HSDPA-Phys
25.222	112	-	Rel-5	F	RP-030276	R1-030505	approved	Correction to definition of number of bits available to HS-DSCH in one TTI.	5.4.0	5.5.0	R1	HSDPA-Phys
25.224	120	-	Rel-5	F	RP-030277	R1-030417	approved	Clarifications for the 1.28Mcps TDD power control procedure	5.4.0	5.5.0	R1	LCRTDD
25.225	070	-	Rel-5	F	RP-030278	R1-030419	revised	Power Measurement in non HSDPA codes for TDD	5.4.0		R1	HSDPA-Phys
25.211	177	-	Rel-5	F	RP-030351		rejected	Removal of the combination of TxAA Mode 1 with HS-SCCH	5.3.0		R1	HSDPA-Phys
25.215	138	3	Rel-5	B	RP-030353		revised	Beamforming Enhancement related measurements	5.3.0		R1	RANimp-BFE
25.225	072	-	R99	F	RP-030365	RP-030365	approved	Correction of transmitted carrier power definition in case of Tx	3.11.0	3.12.0	R1	-

Spec	CR	Rev	Phase	Cat	Plenary doc	WG doc	TSG status	Subject	CR to version	Resulting version	WG	Workitem
								diversity				
25.225	073	-	Rel-4	A	RP-030365	RP-030365	approved	Correction of transmitted carrier power definition in case of Tx diversity	4.6.0	4.7.0	R1	-
25.225	074	-	Rel-5	A	RP-030365	RP-030365	approved	Correction of transmitted carrier power definition in case of Tx diversity	5.4.0	5.5.0	R1	-
25.225	070	1	Rel-5	F	RP-030366		approved	Power Measurement in non HSDPA codes for TDD	5.4.0	5.5.0	R1	HSDPA-Phys
25.215	138	4	Rel-5	F	RP-030367		revised	Beamforming Enhancement related measurements	5.3.0		R1	TEI5
25.215	138	5	Rel-5	F	RP-030368		<del>approved</del> ejected	Beamforming Enhancement related measurements	5.3.0	5.4.0	R1	TEI5
25.302	139	-	Rel-5	F	RP-030278	R2-031382	approved	Power Measurement in non HSDPA codes	5.4.0	5.5.0	R2	HSDPA-L23
25.331	1964	1	R99	F	RP-030284	R2-031449	rejected	Setting of T317 to infinity	3.14.0		R2	TEI
25.331	1965	1	Rel-4	A	RP-030284	R2-031450	rejected	Setting of T317 to infinity	4.9.0		R2	TEI
25.331	1966	1	Rel-5	F	RP-030284	R2-031451	rejected	Setting of T317 to infinity	5.4.0		R2	TEI5
25.331	1967	3	R99	F	RP-030285	R2-031484	rejected	UE behaviour when out of service (RRC connection released on emergency camping)	3.14.0		R2	TEI
25.331	1968	3	Rel-4	A	RP-030285	R2-031485	rejected	UE behaviour when out of service (RRC connection released on emergency camping)	4.9.0		R2	TEI
25.331	1969	3	Rel-5	F	RP-030285	R2-031486	rejected	UE behaviour when out of service (RRC connection released on emergency camping)	5.4.0		R2	TEI5
25.331	1970	4	R99	F	RP-030286	R2-031487	rejected	RRC connection kept on emergency camping	3.14.0		R2	TEI
25.331	1971	4	Rel-4	A	RP-030286	R2-031488	rejected	RRC connection kept on emergency camping	4.9.0		R2	TEI
25.331	1972	4	Rel-5	F	RP-030286	R2-031489	rejected	RRC connection kept on emergency camping	5.4.0		R2	TEI5
25.331	1973	1	R99	F	RP-030287	R2-031490	rejected	Keep connection during OOS or perform RAU on return to coverage	3.14.0		R2	TEI
25.331	1974	1	Rel-4	A	RP-030287	R2-031491	rejected	Keep connection during OOS or perform RAU on return to coverage	4.9.0		R2	TEI
25.331	1975	1	Rel-5	F	RP-030287	R2-031492	rejected	Keep connection during OOS or perform RAU on return to coverage	5.4.0		R2	TEI5
25.993	004	-	Rel-6	F	RP-030288	R2-031352	approved	Corrections to the UE capabilities and editorial changes	6.1.0	6.2.0	R2	TEI6
25.993	005	-	Rel-6	F	RP-030288	R2-031375	approved	New configuration for CBS: CTCH, PCCH, 32kbps RAB and SRBs on 1 S-CCPCH	6.1.0	6.2.0	R2	TEI6
25.993	006	-	Rel-6	F	RP-030288	R2-031376	approved	New SCCPCH Configurations	6.1.0	6.2.0	R2	TEI6
25.993	008	-	Rel-6	F	RP-030288	R2-031421	approved	PS streaming and CS speech RAB combinations	6.1.0	6.2.0	R2	TEI6
25.993	009	-	Rel-6	F	RP-030288	R2-031428	approved	RB configuration for the support of wideband AMR speech telephony services	6.1.0	6.2.0	R2	TEI6
25.993	010	-	Rel-6	F	RP-030288	R2-031432	approved	Corrections on TDD RAB's	6.1.0	6.2.0	R2	TEI6
25.304	105	-	R99	F	RP-030289	R2-031346	approved	Correction to cell selection process to include RRC connected mode	3.12.0	3.13.0	R2	TEI
25.304	106	-	Rel-4	A	RP-030289	R2-031347	approved	Correction to cell selection process to include RRC connected	4.6.0	4.7.0	R2	TEI

Spec	CR	Rev	Phase	Cat	Plenary doc	WG doc	TSG status	Subject	CR to version	Resulting version	WG	Workitem
								mode				
25.304	107	-	Rel-5	A	RP-030289	R2-031348	approved	Correction to cell selection process to include RRC connected mode	5.2.0	5.3.0	R2	TEI
25.305	086	-	R99	F	RP-030290	R2-031294	approved	Handling of UP Assistance Data	3.8.0	3.9.0	R2	TEI
25.305	087	-	Rel-4	A	RP-030290	R2-031295	approved	Handling of UP Assistance Data	4.4.0	4.5.0	R2	TEI
25.305	088	-	Rel-5	A	RP-030290	R2-031296	approved	Handling of UP Assistance Data	5.5.0	5.6.0	R2	TEI
25.306	065	-	R99	F	RP-030291	R2-031370	approved	Extension of 32 kbps UE capability class	3.7.0	3.8.0	R2	TEI
25.306	066	-	Rel-4	A	RP-030291	R2-031371	approved	Extension of 32 kbps UE capability class	4.6.0	4.7.0	R2	TEI
25.306	067	-	Rel-5	A	RP-030291	R2-031372	approved	Extension of 32 kbps UE capability class	5.4.0	5.5.0	R2	TEI
25.322	218	2	R99	F	RP-030292	R2-031362	approved	Handling of erroneous PDUs	3.14.0	3.15.0	R2	TEI
25.322	219	2	Rel-4	A	RP-030292	R2-031363	approved	Handling of erroneous PDUs	4.8.0	4.9.0	R2	TEI
25.322	220	2	Rel-5	A	RP-030292	R2-031364	approved	Handling of erroneous PDUs	5.4.0	5.5.0	R2	TEI
25.322	223	-	R99	F	RP-030292	R2-031455	approved	Setting of the "Polling bit" in the "Every Poll_SDU SDU" function	3.14.0	3.15.0	R2	TEI
25.322	224	-	Rel-4	A	RP-030292	R2-031456	approved	Setting of the "Polling bit" in the "Every Poll_SDU SDU" function	4.8.0	4.9.0	R2	TEI
25.322	225	-	Rel-5	A	RP-030292	R2-031457	approved	Setting of the "Polling bit" in the "Every Poll_SDU SDU" function	5.4.0	5.5.0	R2	TEI
25.331	1911	-	R99	F	RP-030293	R2-031291	approved	Handling of UP Assistance Data	3.14.0	3.15.0	R2	TEI
25.331	1912	-	Rel-4	A	RP-030293	R2-031292	approved	Handling of UP Assistance Data	4.9.0	4.10.0	R2	TEI
25.331	1913	-	Rel-5	A	RP-030293	R2-031293	approved	Handling of UP Assistance Data	5.4.0	5.4.0	R2	TEI
25.331	1914	1	R99	F	RP-030293	R2-031433	approved	Concerns on Procedures for Cell-ID Positioning Method	3.14.0	3.15.0	R2	TEI
25.331	1915	1	Rel-4	A	RP-030293	R2-031434	approved	Concerns on Procedures for Cell-ID Positioning Method	4.9.0	4.9.0	R2	TEI
25.331	1916	1	Rel-5	A	RP-030293	R2-031435	approved	Concerns on Procedures for Cell-ID Positioning Method	5.4.0	5.4.0	R2	TEI
25.331	1917	-	R99	F	RP-030293	R2-031300	approved	Inconsistency between Procedural, ASN.1, and Tabular Aspects of UE Positioning Error	3.14.0	3.15.0	R2	TEI
25.331	1918	-	Rel-4	A	RP-030293	R2-031301	approved	Inconsistency between Procedural, ASN.1, and Tabular Aspects of UE Positioning Error	4.9.0	4.9.0	R2	TEI
25.331	1919	-	Rel-5	A	RP-030293	R2-031302	approved	Inconsistency between Procedural, ASN.1, and Tabular Aspects of UE Positioning Error	5.4.0	5.4.0	R2	TEI
25.331	1920	-	R99	F	RP-030293	R2-031303	approved	Removal of FFS (For further Study) and references to other working groups	3.14.0	3.15.0	R2	TEI
25.331	1921	-	Rel-4	A	RP-030293	R2-031304	approved	Removal of FFS (For further Study) and references to other working groups	4.9.0	4.9.0	R2	TEI
25.331	1922	-	Rel-5	A	RP-030293	R2-031305	approved	Removal of FFS (For further Study) and references to other working groups	5.4.0	5.4.0	R2	TEI
25.331	1924	-	R99	F	RP-030293	R2-031308	approved	Key handling when entering idle mode and coding of security capabilities	3.14.0	3.15.0	R2	TEI
25.331	1925	-	Rel-4	A	RP-030293	R2-031309	approved	Key handling when entering idle mode and coding of security capabilities	4.9.0	4.9.0	R2	TEI
25.331	1926	-	Rel-5	A	RP-030293	R2-031310	approved	Key handling when entering idle mode and coding of security capabilities	5.4.0	5.4.0	R2	TEI

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25.331	1927	-	R99	F	RP-030293	R2-031311	approved	Security actions when SIM is present on RRC Connection Request	3.14.0	3.15.0	R2	TEI
25.331	1928	-	Rel-4	A	RP-030293	R2-031312	approved	Security actions when SIM is present on RRC Connection Request	4.9.0	4.9.0	R2	TEI
25.331	1929	-	Rel-5	A	RP-030293	R2-031313	approved	Security actions when SIM is present on RRC Connection Request	5.4.0	5.4.0	R2	TEI
25.331	1930	-	R99	F	RP-030294	R2-031316	approved	Update of interfrequency measurement cell info list, reading of SIB11/12, inclusion of Measured Results on RACH	3.14.0	3.15.0	R2	TEI
25.331	1931	-	Rel-4	A	RP-030294	R2-031317	approved	Update of interfrequency measurement cell info list, reading of SIB11/12, inclusion of Measured Results on RACH	4.9.0	4.9.0	R2	TEI
25.331	1932	-	Rel-5	A	RP-030294	R2-031318	approved	Update of interfrequency measurement cell info list, reading of SIB11/12, inclusion of Measured Results on RACH	5.4.0	5.4.0	R2	TEI
25.331	1933	-	R99	F	RP-030294	R2-031319	approved	L3 filtering	3.14.0	3.15.0	R2	TEI
25.331	1934	-	Rel-4	A	RP-030294	R2-031320	approved	L3 filtering	4.9.0	4.9.0	R2	TEI
25.331	1935	-	R99	F	RP-030294	R2-031321	approved	Additional measurements without measurement validity	3.14.0	3.15.0	R2	TEI
25.331	1936	-	Rel-4	F	RP-030294	R2-031322	approved	Additional measurements without measurement validity	4.9.0	4.9.0	R2	TEI4
25.331	1937	-	Rel-5	A	RP-030294	R2-031323	approved	Additional measurements without measurement validity	5.4.0	5.4.0	R2	TEI4
25.331	1938	-	R99	F	RP-030294	R2-031324	approved	Handover to UTRAN in macrodiversity	3.14.0	3.15.0	R2	TEI
25.331	1939	-	Rel-4	A	RP-030294	R2-031325	approved	Handover to UTRAN in macrodiversity	4.9.0	4.9.0	R2	TEI
25.331	1940	-	Rel-5	A	RP-030294	R2-031326	approved	Handover to UTRAN in macrodiversity	5.4.0	5.4.0	R2	TEI
25.331	1941	1	R99	F	RP-030294	R2-031412	approved	TVM Reporting in CELL_PCH state	3.14.0	3.15.0	R2	TEI
25.331	1942	1	Rel-4	F	RP-030294	R2-031413	approved	TVM Reporting in CELL_PCH state	4.9.0	4.9.0	R2	TEI4
25.331	1943	1	Rel-5	A	RP-030294	R2-031414	approved	TVM Reporting in CELL_PCH state	5.4.0	5.4.0	R2	TEI4
25.331	1944	1	R99	F	RP-030294	R2-031415	approved	Initialisation of the Virtual Active Set	3.14.0	3.15.0	R2	TEI
25.331	1945	1	Rel-4	A	RP-030294	R2-031416	approved	Initialisation of the Virtual Active Set	4.9.0	4.9.0	R2	TEI
25.331	1946	1	Rel-5	A	RP-030294	R2-031417	approved	Initialisation of the Virtual Active Set	5.4.0	5.4.0	R2	TEI
25.331	1947	-	R99	F	RP-030295	R2-031334	approved	IE "Tx diversity mode" in ACTIVE SET UPDATE message	3.14.0	3.15.0	R2	TEI
25.331	1948	-	Rel-4	A	RP-030295	R2-031335	approved	IE "Tx diversity mode" in ACTIVE SET UPDATE message	4.9.0	4.9.0	R2	TEI
25.331	1949	-	Rel-5	A	RP-030295	R2-031336	approved	IE "Tx diversity mode" in ACTIVE SET UPDATE message	5.4.0	5.4.0	R2	TEI
25.331	1950	1	R99	F	RP-030295	R2-031397	approved	Correction to transport channel traffic volume measurement events 4a and 4b	3.14.0	3.15.0	R2	TEI
25.331	1951	1	Rel-4	A	RP-030295	R2-031398	approved	Correction to transport channel traffic volume measurement events 4a and 4b	4.9.0	4.9.0	R2	TEI
25.331	1952	1	Rel-5	A	RP-030295	R2-031399	approved	Correction to transport channel traffic volume measurement events 4a and 4b	5.4.0	5.4.0	R2	TEI
25.331	1953	-	R99	F	RP-030295	R2-031340	approved	Maximum Number of GPS Almanac Messages to be Stored in UE_POSITIONING_GPS_DATA	3.14.0	3.15.0	R2	TEI
25.331	1954	-	Rel-4	A	RP-030295	R2-031341	approved	Maximum Number of GPS Almanac Messages to be Stored in UE_POSITIONING_GPS_DATA	4.9.0	4.9.0	R2	TEI
25.331	1955	-	Rel-5	A	RP-030295	R2-031342	approved	Maximum Number of GPS Almanac Messages to be Stored in UE_POSITIONING_GPS_DATA	5.4.0	5.4.0	R2	TEI
25.331	1979	-	R99	F	RP-030295	R2-031429	approved	START values on 2G-3G handover	3.14.0	3.15.0	R2	TEI

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25.331	1980	-	Rel-4	A	RP-030295	R2-031430	approved	START values on 2G-3G handover	4.9.0	4.9.0	R2	TEI
25.331	1981	-	Rel-5	A	RP-030295	R2-031431	approved	START values on 2G-3G handover	5.4.0	5.4.0	R2	TEI
25.331	1956	1	R99	F	RP-030296	R2-031466	revised	Stopping of RLC entities at relocation	3.14.0	3.15.0	R2	TEI
25.331	1957	1	Rel-4	A	RP-030296	R2-031467	revised	Stopping of RLC entities at relocation	4.9.0	4.10.0	R2	TEI
25.331	1958	1	Rel-5	A	RP-030296	R2-031468	revised	Stopping of RLC entities at relocation	5.4.0	5.5.0	R2	TEI
25.322	221	-	Rel-4	F	RP-030297	R2-031355	approved	Receiver behaviour when detecting an AMD PDU duplicate	4.8.0	4.9.0	R2	TEI4
25.322	222	-	Rel-5	A	RP-030297	R2-031356	approved	Receiver behaviour when detecting an AMD PDU duplicate	5.4.0	5.5.0	R2	TEI4
25.322	226	-	Rel-4	F	RP-030297	R2-031469	approved	RLC window size reconfigurations	4.8.0	4.9.0	R2	TEI4
25.322	227	-	Rel-5	A	RP-030297	R2-031470	approved	RLC window size reconfigurations	5.4.0	5.5.0	R2	TEI4
25.331	1959	1	Rel-5	C	RP-030298	R2-031442	approved	Optimisation of the INTER RAT HANDOVER INFO message	5.4.0	5.5.0	R2	TEI5
25.331	1982	-	Rel-4	F	RP-030298	R2-031439	approved	ROHC profile signalling	4.9.0	4.10.0	R2	TEI4
25.331	1983	-	Rel-5	A	RP-030298	R2-031440	approved	ROHC profile signalling	5.4.0	5.5.0	R2	TEI4
25.331	1984	-	Rel-4	C	RP-030298	R2-031461	approved	Optimisation of the INTER RAT HANDOVER INFO message	4.9.0	4.10.0	R2	TEI4
25.302	138	-	Rel-5	F	RP-030299	R2-031381	approved	Measurements on HS-SICH for UTRA TDD	5.4.0	5.5.0	R2	HSDPA-L23
25.305	089	-	Rel-5	F	RP-030300	R2-031472	approved	Addition of Position Method Used, to attributes returned with position estimate.	5.5.0	5.6.0	R2	TEI5
25.306	068	-	Rel-5	F	RP-030301	R2-031374	approved	Correction of maximum transport block sizes for UE categories	5.4.0	5.5.0	R2	HSDPA-L23
25.306	069	-	Rel-5	F	RP-030301	R2-031383	approved	SF1 corrections for TDD	5.4.0	5.5.0	R2	TEI5
25.321	171	-	Rel-5	F	RP-030302	R2-031385	approved	Text clean up of the description of the reordering entity	5.4.0	5.5.0	R2	TEI5
25.321	172	-	Rel-5	F	RP-030302	R2-031387	approved	MAC header for DTCH and DCCH mapped to HS-DSCH	5.4.0	5.5.0	R2	HSDPA-L23
25.321	173	-	Rel-5	F	RP-030302	R2-031388	rejected	UE procedure for TB Size signaling	5.4.0	5.5.0	R2	HSDPA-L23
25.331	1960	-	Rel-5	F	RP-030303	R2-031389	approved	Correction to the IE 'HS-DSCH capability class'	5.4.0	5.5.0	R2	HSDPA-L23
25.331	1961	-	Rel-5	F	RP-030303	R2-031390	approved	Correction of "RB mapping info" in case HS-DSCH + DCH	5.4.0	5.5.0	R2	HSDPA-L23
25.331	1963	-	Rel-5	F	RP-030303	R2-031392	approved	Explanation of CV-UE for the IE MidambleShift in the tabular	5.4.0	5.5.0	R2	HSDPA-L23
25.922	023	-	Rel-5	F	RP-030304	R2-031396	rejected	UTRAN-GERAN handovers	5.0.0		R2	TEI5
25.306	071	-	Rel-5	F	RP-030305	R2-031418	rejected	Variable Tx/Rx frequency separation	5.4.0		R2	TEI5
25.307	005	-	R99	F	RP-030305	R2-031419	rejected	Variable Tx/Rx frequency separation	3.1.0		R2	TEI
25.307	006	-	Rel-4	A	RP-030305	R2-031420	rejected	Variable Tx/Rx frequency separation	4.1.0		R2	TEI
25.331	1962	-	Rel-5	F	RP-030305	R2-031391	rejected	Variable Tx/Rx frequency separation	5.4.0		R2	TEI5
25.331	1976	1	R99	F	RP-030306	R2-031493	revised	Ciphering Mode info IE in 2G-3G Handover	3.14.0		R2	TEI
25.331	1976	2	R99	F	RP-030306	R2-031493	revised	Ciphering Mode info IE in 2G-3G Handover	3.14.0		R2	TEI
25.331	1977	1	Rel-4	A	RP-030306	R2-031494	revised	Ciphering Mode info IE in 2G-3G Handover	4.9.0		R2	TEI
25.331	1978	1	Rel-5	A	RP-030306	R2-031495	revised	Ciphering Mode info IE in 2G-3G Handover	5.4.0		R2	TEI
25.331	1985	1	R99	F	RP-030307	R2-031496	revised	Corrections to security procedures in case of pending security configurations at SRNS Relocation	3.14.0		R2	TEI
25.331	1986	1	Rel-4	A	RP-030307	R2-031497	revised	Corrections to security procedures in case of pending security configurations at SRNS Relocation	4.9.0		R2	TEI
25.331	1987	1	Rel-5	A	RP-030307	R2-031498	revised	Corrections to security procedures in case of pending security configurations at SRNS Relocation	5.4.0		R2	TEI

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25.331	1976	3	R99	F	RP-030349	RP-030349	revised	Ciphering Mode info IE in 2G-3G Handover	3.14.0		R2	TEI
25.331	1977	3	Rel-4	A	RP-030349	RP-030349	revised	Ciphering Mode info IE in 2G-3G Handover	4.9.0		R2	TEI
25.331	1978	3	Rel-5	A	RP-030349	RP-030349	revised	Ciphering Mode info IE in 2G-3G Handover	5.4.0		R2	TEI
25.331	1985	1	R99	F	RP-030350	R2-031496	approved	Corrections to security procedures in case of pending security configurations at SRNS Relocation	3.14.0	3.15.0	R2	TEI
25.331	1986	1	Rel-4	A	RP-030350	R2-031497	approved	Corrections to security procedures in case of pending security configurations at SRNS Relocation	4.9.0	4.9.0	R2	TEI
25.331	1987	2	Rel-5	A	RP-030350	R2-031498	approved	Corrections to security procedures in case of pending security configurations at SRNS Relocation	5.4.0	5.4.0	R2	TEI
25.331	1976	4	R99	F	RP-030369	RP-030369	approved	Ciphering Mode info IE in 2G-3G Handover	3.14.0	3.15.0	R2	TEI
25.331	1977	4	Rel-4	A	RP-030369	RP-030369	approved	Ciphering Mode info IE in 2G-3G Handover	4.9.0	4.10.0	R2	TEI
25.331	1978	4	Rel-5	A	RP-030369	RP-030369	approved	Ciphering Mode info IE in 2G-3G Handover	5.4.0	5.5.0	R2	TEI
25.331	1988	-	R99	F	RP-030371	RP-030371	approved	Setting of T317 to infinity and out of service behaviour	3.14.0	3.15.0	R2	TEI
25.331	1989	-	Rel-4	A	RP-030371	RP-030371	approved	Setting of T317 to infinity and out of service behaviour	4.9.0	4.10.0	R2	TEI
25.331	1990	-	Rel-5	F	RP-030371	RP-030371	approved	Setting of T317 to infinity and out of service behaviour	5.4.0	5.5.0	R2	TEI
25.331	1956	2	R99	F	RP-030374	R2-031466	approved	Stopping of RLC entities at relocation	3.14.0	3.15.0	R2	TEI
25.331	1956	2	R99	F	RP-030374	R2-031466	approved	Stopping of RLC entities at relocation	3.14.0	3.15.0	R2	TEI
25.331	1957	2	Rel-4	A	RP-030374	R2-031467	approved	Stopping of RLC entities at relocation	4.9.0	4.10.0	R2	TEI
25.331	1957	2	Rel-4	A	RP-030374	R2-031467	approved	Stopping of RLC entities at relocation	4.9.0	4.10.0	R2	TEI
25.331	1958	2	Rel-5	A	RP-030374	R2-031468	approved	Stopping of RLC entities at relocation	5.4.0	5.5.0	R2	TEI
25.331	1958	2	Rel-5	A	RP-030374	R2-031468	approved	Stopping of RLC entities at relocation	5.4.0	5.5.0	R2	TEI
25.423	828	-	Rel-6	B	RP-030223	R3-030654	withdrawn	Interference measurement in UpPTS for 1.28Mcps TDD	5.5.0		R3	TEI6
25.433	846	-	Rel-6	B	RP-030223	R3-030655	withdrawn	Interference measurement in UpPTS for 1.28Mcps TDD	5.4.0		R3	TEI6
25.433	834	-	Rel-5	F	RP-030278	R3-030559	approved	HS-DSCH: Addition of non HS-DSCH power measurement for TDD.	5.4.0	5.5.0	R3	HSDPA-IubIur
25.423	837	2	Rel-5	F	RP-030279		approved	Clarification for the handling of the HS-DSCH	5.5.0	5.6.0	R3	HSDPA-IubIur
25.413	568	2	R99	F	RP-030314	R3-030835	approved	Essential Correction of Iu Release Issue	3.12.0	3.13.0	R3	TEI
25.413	569	2	Rel-4	A	RP-030314	R3-030836	approved	Essential Correction of Iu Release Issue	4.8.0	4.9.0	R3	TEI
25.413	570	2	Rel-5	A	RP-030314	R3-030837	approved	Essential Correction of Iu Release Issue	5.4.0	5.5.0	R3	TEI
25.419	110	2	R99	F	RP-030315	R3-030885	approved	Correction of Kill Unsuccessful Outcome	3.10.0	3.11.0	R3	TEI
25.419	111	1	Rel-4	A	RP-030315	R3-030865	approved	Correction of Kill Unsuccessful Outcome	4.7.0	4.8.0	R3	TEI
25.419	112	1	Rel-5	A	RP-030315	R3-030866	approved	Correction of Kill Unsuccessful Outcome	5.3.0	5.4.0	R3	TEI
25.413	575	2	Rel-4	F	RP-030316	R3-030879	approved	Iu UP Initialisation during RAB modification	4.8.0	4.9.0	R3	TEI4
25.413	576	2	Rel-5	A	RP-030316	R3-030880	approved	Iu UP Initialisation during RAB modification	5.4.0	5.5.0	R3	TEI4
25.401	067	1	Rel-5	F	RP-030317	R3-030785	approved	Correction to HS-DSCH transport in case of SRNC not coincident with CRNC and without flow control in the CRNC.	5.5.0	5.6.0	R3	HSDPA-IubIur
25.401	068	1	Rel-6	A	RP-030317	R3-030786	approved	Correction to HS-DSCH transport in case of SRNC not coincident with CRNC and without flow control in the CRNC.	6.0.0	6.1.0	R3	HSDPA-IubIur
25.402	039	-	Rel-5	F	RP-030318	R3-030630	approved	Removal of the Frequency Acquisition for Late-Entrant Cells for	5.1.0	5.2.0	R3	RANimp-NBSLCR



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								1.28Mcps TDD				
25.423	822	-	Rel-5	F	RP-030319	R3-030635	approved	Correction of the figure of the Information Exchange Failure procedure	5.5.0	5.6.0	R3	TEI5
25.423	827	-	Rel-5	F	RP-030319	R3-030652	approved	Alignment of tables in Information Exchange Initiation procedure description	5.5.0	5.6.0	R3	TEI5
25.433	840	-	Rel-5	F	RP-030320	R3-030598	approved	Alignment of maximum HS DSCH code numbers to 25.211	5.4.0	5.5.0	R3	HSDPA-IubIur
25.433	841	-	Rel-5	F	RP-030320	R3-030631	approved	Correction in the tabular format of the CELL SYNCHRONISATION REPORT [TDD] message	5.4.0	5.5.0	R3	RANimp-NBSLCR
25.433	842	-	Rel-5	F	RP-030320	R3-030632	approved	Clarification of optional IEs for Node B synchronisation for LCR TDD	5.4.0	5.5.0	R3	RANimp-NBSLCR
25.433	857	1	Rel-5	F	RP-030320	R3-030796	approved	Clarification of SCCPCH maximum power for TDD	5.4.0	5.5.0	R3	TEI5
25.433	865	-	Rel-5	F	RP-030320	R3-030828	approved	HS-SCCH Code deletion/replacement with Physical Shared Channel Reconfiguration	5.4.0	5.5.0	R3	HSDPA-IubIur
25.435	100	-	Rel-5	F	RP-030321	R3-030744	approved	Power setting for multiplexed DSCH data frames	5.4.0	5.5.0	R3	TEI5
25.435	102	1	Rel-5	F	RP-030321	R3-030850	approved	S-CCPCH power setting in case of no data transmission	5.4.0	5.5.0	R3	TEI5
25.453	036	1	Rel-5	F	RP-030322	R3-030799	approved	"On Modification" and "Periodic" reporting alignment for Information Exchange procedures	5.5.0	5.6.0	R3	TEI5
25.453	037	1	Rel-6	A	RP-030322	R3-030800	approved	"On Modification" and "Periodic" reporting alignment for Information Exchange procedures	6.0.0	6.1.0	R3	TEI5
25.453	039	-	Rel-5	F	RP-030322	R3-030720	approved	Criticality Aspects	5.5.0	5.6.0	R3	TEI5
25.453	040	-	Rel-5	F	RP-030322	R3-030721	approved	Information Exchange Initiation Request for GPS Navigation Model	5.5.0	5.6.0	R3	TEI5
25.453	041	-	Rel-5	F	RP-030322	R3-030722	approved	DGPS Parameters	5.5.0	5.6.0	R3	TEI5
25.453	042	1	Rel-5	F	RP-030322	R3-030846	approved	Removal of Information Exchange Object Type	5.5.0	5.6.0	R3	TEI5
25.453	043	-	Rel-5	F	RP-030322	R3-030724	approved	Information Report of GPS Almanac and Satellite Health	5.5.0	5.6.0	R3	TEI5
25.453	044	-	Rel-6	A	RP-030322	R3-030797	approved	Criticality Aspects	6.0.0	6.1.0	R3	TEI5
25.453	045	-	Rel-6	A	RP-030322	R3-030844	approved	Information Exchange Initiation Request for GPS Navigation Model	6.0.0	6.1.0	R3	TEI5
25.453	046	-	Rel-6	A	RP-030322	R3-030845	approved	DGPS Parameters	6.0.0	6.1.0	R3	TEI5
25.453	047	-	Rel-6	A	RP-030322	R3-030847	approved	Removal of Information Exchange Object Type	6.0.0	6.1.0	R3	TEI5
25.453	048	-	Rel-6	A	RP-030322	R3-030848	approved	Information Report of GPS Almanac and Satellite Health	6.0.0	6.1.0	R3	TEI5
25.933	003	2	Rel-5	F	RP-030323	R3-030915	approved	Corrections to ATM-IP interworking	5.2.0	5.3.0	R3	ETRAN-IPtrans
25.423	823	1	Rel-4	F	RP-030324	R3-030790	approved	Alignment of the Requested Data Value Information IE description	4.8.0	4.9.0	R3	TEI4
25.423	824	1	Rel-5	A	RP-030324	R3-030791	approved	Alignment of the Requested Data Value Information IE description	5.5.0	5.6.0	R3	TEI4
25.433	861	-	Rel-4	F	RP-030324	R3-030792	approved	Alignment of the Requested Data Value Information IE description	4.8.0	4.9.0	R3	TEI4
25.433	862	-	Rel-5	A	RP-030324	R3-030793	approved	Alignment of the Requested Data Value Information IE description	5.4.0	5.5.0	R3	TEI4
25.453	031	1	Rel-5	F	RP-030324	R3-030794	approved	Alignment of the Requested Data Value Information IE description	5.5.0	5.6.0	R3	TEI4
25.453	032	1	Rel-6	A	RP-030324	R3-030795	approved	Alignment of the Requested Data Value Information IE description	6.0.0	6.1.0	R3	TEI4
25.423	825	-	Rel-4	F	RP-030325	R3-030646	approved	GPS trigger condition	4.8.0	4.9.0	R3	TEI4
25.423	826	-	Rel-5	A	RP-030325	R3-030647	approved	GPS trigger condition	5.5.0	5.6.0	R3	TEI4
25.433	844	-	Rel-4	F	RP-030325	R3-030648	approved	GPS trigger condition	4.8.0	4.9.0	R3	TEI4

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25.433	845	-	Rel-5	A	RP-030325	R3-030649	approved	GPS trigger condition	5.4.0	5.5.0	R3	TEI4
25.453	033	-	Rel-5	F	RP-030325	R3-030650	approved	GPS trigger condition	5.5.0	5.6.0	R3	TEI4
25.453	034	-	Rel-6	A	RP-030325	R3-030651	approved	GPS trigger condition	6.0.0	6.1.0	R3	TEI4
25.413	571	1	Rel-4	F	RP-030326	R3-030869	approved	Correction of failure message used for logical errors	4.8.0	4.9.0	R3	TEI4
25.413	572	1	Rel-5	A	RP-030326	R3-030870	approved	Correction of failure message used for logical errors	5.4.0	5.5.0	R3	TEI4
25.419	116	-	Rel-4	F	RP-030326	R3-030888	approved	Correction of failure message used for logical errors	4.7.0	4.8.0	R3	TEI4
25.419	117	-	Rel-5	A	RP-030326	R3-030889	approved	Correction of failure message used for logical errors	5.3.0	5.4.0	R3	TEI4
25.423	841	-	Rel-4	F	RP-030326	R3-030890	approved	Correction of failure message used for logical errors	4.8.0	4.9.0	R3	TEI4
25.423	842	-	Rel-5	A	RP-030326	R3-030891	approved	Correction of failure message used for logical errors	5.5.0	5.6.0	R3	TEI4
25.433	866	-	Rel-4	F	RP-030326	R3-030892	approved	Correction of failure message used for logical errors	4.8.0	4.9.0	R3	TEI4
25.433	867	-	Rel-5	A	RP-030326	R3-030893	approved	Correction of failure message used for logical errors	5.4.0	5.5.0	R3	TEI4
25.453	049	-	Rel-5	F	RP-030326	R3-030894	approved	Correction of failure message used for logical errors	5.5.0	5.6.0	R3	TEI5
25.453	050	-	Rel-6	A	RP-030326	R3-030895	approved	Correction of failure message used for logical errors	6.0.0	6.1.0	R3	TEI5
25.425	062	1	Rel-5	F	RP-030327	R3-030916	approved	Clarification of Capacity Allocation Interval Definition	5.4.0	5.5.0	R3	HSDPA-lublur
25.435	101	1	Rel-5	F	RP-030327	R3-030917	approved	Clarification of Capacity Allocation Interval Definition	5.4.0	5.5.0	R3	HSDPA-lublur
25.423	838	2	Rel-5	F	RP-030328	R3-030905	approved	Resource handling of HS-DSCH Guaranteed Bit Rate	5.5.0	5.6.0	R3	HSDPA-lublur
25.433	859	2	Rel-5	F	RP-030328	R3-030904	approved	Resource handling of HS-DSCH Guaranteed Bit Rate	5.4.0	5.5.0	R3	HSDPA-lublur
25.423	832	2	Rel-5	F	RP-030329	R3-030842	approved	HS-SCCH Change Indicator	5.5.0	5.6.0	R3	HSDPA-lublur
25.433	850	1	Rel-5	F	RP-030329	R3-030843	approved	HS-SCCH Change Indicator	5.4.0	5.5.0	R3	HSDPA-lublur
25.423	833	2	Rel-5	A	RP-030330	R3-030861	rejected	Corrections to Tx Diversity	5.5.0		R3	TEI
25.423	839	1	R99	F	RP-030330	R3-030859	revised	Corrections to Tx Diversity	3.13.0		R3	TEI
25.423	840	1	Rel-4	A	RP-030330	R3-030860	rejected	Corrections to Tx Diversity	4.8.0		R3	TEI
25.433	851	1	Rel-5	A	RP-030330	R3-030823	rejected	Corrections to Tx Diversity	5.4.0		R3	TEI
25.433	863	-	R99	F	RP-030330	R3-030821	revised	Corrections to Tx Diversity	3.13.0		R3	TEI
25.433	864	-	Rel-4	A	RP-030330	R3-030822	rejected	Corrections to Tx Diversity	4.8.0		R3	TEI
25.425	061	2	Rel-5	F	RP-030331	R3-030907	approved	Correction for the HS-DSCH frame structure	5.4.0	5.5.0	R3	HSDPA-lublur
25.435	099	2	Rel-5	F	RP-030331	R3-030908	approved	Correction for the HS-DSCH frame structure	5.4.0	5.5.0	R3	HSDPA-lublur
25.423	815	-	Rel-5	F	RP-030332	R3-030558	approved	Alignment of TDD HSDPA parameters to RAN2 and RAN 1.	5.5.0	5.6.0	R3	HSDPA-lublur
25.433	833	-	Rel-5	F	RP-030332	R3-030557	approved	Alignment of TDD HSDPA parameters to RAN2 and RAN 1.	5.4.0	5.5.0	R3	HSDPA-lublur
25.433	835	-	Rel-5	F	RP-030333	R3-030560	approved	HSPDA General Corrections	5.4.0	5.5.0	R3	HSDPA-lublur
25.433	835	-	Rel-5	F	RP-030333	R3-030560	approved	HSPDA General Corrections	5.4.0	5.5.0	R3	HSDPA-lublur
25.423	821	-	Rel-5	F	RP-030334	R3-030633	approved	TDD Channelisation Code LCR correction for HSDPA	5.5.0	5.6.0	R3	HSDPA-lublur
25.433	843	-	Rel-5	F	RP-030334	R3-030634	approved	TDD Channelisation Code LCR correction for HSDPA	5.4.0	5.5.0	R3	HSDPA-lublur
25.423	835	-	Rel-5	F	RP-030335	R3-030732	approved	Correction to HARQ Memory Partitioning	5.5.0	5.6.0	R3	HSDPA-lublur
25.433	854	-	Rel-5	F	RP-030335	R3-030733	approved	Correction to HARQ Memory Partitioning	5.4.0	5.5.0	R3	HSDPA-lublur
25.423	837	1	Rel-5	F	RP-030336	R3-030811	revised	Clarification for the handling of the HS-DSCH	5.5.0		R3	HSDPA-lublur
25.433	856	1	Rel-5	F	RP-030336	R3-030812	approved	Clarification for the handling of the HS-DSCH	5.4.0	5.5.0	R3	HSDPA-lublur
25.423	836	-	Rel-5	F	RP-030337	R3-030734	approved	Correction for the value range of "CQI Feedback cycle, k"	5.5.0	5.6.0	R3	HSDPA-lublur
25.433	855	-	Rel-5	F	RP-030337	R3-030735	approved	Correction for the value range of "CQI Feedback cycle, k"	5.4.0	5.5.0	R3	HSDPA-lublur

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25.423	820	2	Rel-5	F	RP-030338	R3-030903	revised	Group reset	5.5.0		R3	TEI5
25.413	565	2	R99	F	RP-030339	R3-030853	rejected	Introduction of Early UE Handling – Bitmap Option	3.12.0		R3	RANimp-FSEarlyUE
25.413	566	2	Rel-4	A	RP-030339	R3-030854	rejected	Introduction of Early UE Handling – Bitmap Option	4.8.0		R3	RANimp-FSEarlyUE
25.413	573	2	Rel-5	F	RP-030339	R3-030855	approved	Introduction of Early UE Handling – Bitmap Option	5.4.0	5.5.0	R3	RANimp-FSEarlyUE
25.413	563	3	R99	F	RP-030340	R3-030897	rejected	Introduction of early UE Handling – IMEISV Option	3.12.0		R3	RANimp-FSEarlyUE
25.413	564	3	Rel-4	A	RP-030340	R3-030898	rejected	Introduction of early UE Handling- IMEISV Option	4.8.0		R3	RANimp-FSEarlyUE
25.413	567	3	Rel-5	A	RP-030340	R3-030899	rejected	Introduction of Early UE Handling Functionality – IMEISV Option	5.4.0		R3	RANimp-FSEarlyUE
25.453	028	-	Rel-6	C	RP-030341	R3-030639	rejected	Improvement of position calculation with pathloss	6.0.0		R3	LCS-Rel4Pos
25.453	035	-	Rel-6	C	RP-030341	R3-030653	approved	Position Calculation Extension for TDD	6.0.0	6.1.0	R3	LCS-Rel4Pos
25.423	817	1	Rel-5	F	RP-030344	R3-030783	revised	Phase Reference Signalling Support	5.5.0		R3	TEI5
25.433	836	1	Rel-5	F	RP-030344	R3-030784	revised	Phase Reference Signalling Support	5.4.0		R3	TEI5
25.423	817	2	<?>	F	RP-030353		revised	Phase Reference Signalling Support	5.5.0		R3	TEIX
25.433	836	2	<?>	F	RP-030353		revised	Phase Reference Signalling Support	5.4.0		R3	TEIX
25.423	820	3	Rel-5	F	RP-030358	RP-030358	<del>rejected</del> approved	Group reset	5.5.0	5.6.0	R3	TEI5
25.419	114	2	Rel-4	F	RP-030362		withdrawn	Correction of Finite Number of Broadcast	4.7.0		R3	TEI4
25.419	115	2	Rel-5	A	RP-030362		withdrawn	Correction of Finite Number of Broadcast	5.3.0		R3	TEI4
25.423	817	2	Rel-5	F	RP-030367		revised	Phase Reference Signalling Support	5.5.0		R3	TEI5
25.433	836	3	Rel-5	F	RP-030367		revised	Phase Reference Signalling Support	5.4.0		R3	TEI5
25.423	817	2	Rel-5	F	RP-030368		rejected	Phase Reference Signalling Support	5.5.0		R3	TEI5
25.433	836	4	Rel-5	F	RP-030368		rejected	Phase Reference Signalling Support	5.4.0		R3	TEI5
25.423	839	2	R99	F	RP-030372	RP-030372	rejected	Corrections to Tx Diversity	3.13.0		R3	TEI
25.433	863	1	R99	F	RP-030372	RP-030372	rejected	Corrections to Tx Diversity	3.13.0		R3	TEI
25.101	235	1	R99	F	RP-030207	R4-030623	approved	Problems with "Out of sync" in Initial convergence test	3.13.0	3.14.0	R4	TEI
25.101	236	1	Rel-4	A	RP-030207	R4-030624	approved	Problems with "Out of sync" in Initial convergence test	4.7.0	4.8.0	R4	TEI
25.101	237	1	Rel-5	A	RP-030207	R4-030625	approved	Problems with "Out of sync" in Initial convergence test	5.6.0	5.7.0	R4	TEI
25.101	238	1	Rel-6	A	RP-030207	R4-030626	approved	Problems with "Out of sync" in Initial convergence test	6.0.0	6.1.0	R4	TEI
25.101	240	1	R99	F	RP-030207	R4-030580	approved	Correction of SSDT performance requirements	3.13.0	3.14.0	R4	TEI
25.101	241	1	Rel-4	A	RP-030207	R4-030581	approved	Correction of SSDT performance requirements	4.7.0	4.8.0	R4	TEI
25.101	242	1	Rel-5	A	RP-030207	R4-030582	approved	Correction of SSDT performance requirements	5.6.0	5.7.0	R4	TEI
25.101	243	1	Rel-6	A	RP-030207	R4-030583	approved	Correction of SSDT performance requirements	6.0.0	6.1.0	R4	TEI
25.123	299	-	Rel-4	F	RP-030208	R4-030408	approved	Applicability of Timer T-reselection for 2G cell reselection	4.8.0	4.9.0	R4	LCRTDD-RF
25.123	300	-	Rel-5	A	RP-030208	R4-030409	approved	Applicability of Timer T-reselection for 2G cell reselection	5.4.0	5.5.0	R4	LCRTDD-RF

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25.123	305	-	R99	F	RP-030208	R4-030585	approved	Applicability of Timer T-reselection for 2G cell reselection	3.12.0	3.13.0	R4	TEI
25.123	306	-	Rel-4	A	RP-030208	R4-030586	approved	Applicability of Timer T-reselection for 2G cell reselection	4.8.0	4.9.0	R4	TEI
25.123	307	-	Rel-5	A	RP-030208	R4-030587	approved	Applicability of Timer T-reselection for 2G cell reselection	5.4.0	5.5.0	R4	TEI
25.133	564	2	R99	F	RP-030209	R4-030651	approved	UE soft handover delay requirements	3.13.0	3.14.0	R4	TEI
25.133	565	2	Rel-4	A	RP-030209	R4-030652	approved	UE soft handover delay requirements	4.8.0	4.9.0	R4	TEI
25.133	566	2	Rel-5	A	RP-030209	R4-030653	approved	UE soft handover delay requirements	5.6.0	5.7.0	R4	TEI
25.133	567	2	Rel-6	A	RP-030209	R4-030654	approved	UE soft handover delay requirements	6.1.0	6.2.0	R4	TEI
25.133	570	1	R99	F	RP-030209	R4-030594	approved	Correction to CPICH Ec/Io in correct reporting of neighbours in AWGN propagation condition test case	3.13.0	3.14.0	R4	TEI
25.133	571	1	Rel-4	A	RP-030209	R4-030595	approved	Correction to CPICH Ec/Io in correct reporting of neighbours in AWGN propagation condition test case	4.8.0	4.9.0	R4	TEI
25.133	572	1	Rel-5	A	RP-030209	R4-030596	approved	Correction to CPICH Ec/Io in correct reporting of neighbours in AWGN propagation condition test case	5.6.0	5.7.0	R4	TEI
25.133	573	1	Rel-6	A	RP-030209	R4-030597	approved	Correction to CPICH Ec/Io in correct reporting of neighbours in AWGN propagation condition test case	6.1.0	6.2.0	R4	TEI
25.133	574	-	R99	F	RP-030209	R4-030422	approved	SFN-SFN observed time difference type 1	3.13.0	3.14.0	R4	TEI
25.133	575	-	Rel-4	A	RP-030209	R4-030423	approved	SFN-SFN observed time difference type 1	4.8.0	4.9.0	R4	TEI
25.133	576	-	Rel-5	A	RP-030209	R4-030424	approved	SFN-SFN observed time difference type 1	5.6.0	5.7.0	R4	TEI
25.133	577	-	R99	F	RP-030209	R4-030480	approved	Correction to CPCH RSCP Test case A.9.1.1	3.13.0	3.14.0	R4	TEI
25.133	578	-	Rel-4	A	RP-030209	R4-030481	approved	Correction to CPCH RSCP Test case A.9.1.1	4.8.0	4.9.0	R4	TEI
25.133	579	-	Rel-5	A	RP-030209	R4-030482	approved	Correction to CPCH RSCP Test case A.9.1.1	5.6.0	5.7.0	R4	TEI
25.133	580	-	Rel-6	A	RP-030209	R4-030483	approved	Correction to CPCH RSCP Test case A.9.1.1	6.1.0	6.2.0	R4	TEI
25.133	597	-	Rel-6	A	RP-030209	R4-030425	approved	SFN-SFN observed time difference type 1	6.1.0	6.2.0	R4	TEI
25.133	585	-	R99	F	RP-030210	R4-030524	approved	Correction to RRC Re-establishment delay test case in Section A.6.1	3.13.0	3.14.0	R4	TEI
25.133	586	-	Rel-4	A	RP-030210	R4-030525	approved	Correction to RRC Re-establishment delay test case in Section A.6.1	4.8.0	4.9.0	R4	TEI
25.133	587	-	Rel-5	A	RP-030210	R4-030526	approved	Correction to RRC Re-establishment delay test case in Section A.6.1	5.6.0	5.7.0	R4	TEI
25.133	588	-	Rel-6	A	RP-030210	R4-030527	approved	Correction to RRC Re-establishment delay test case in Section A.6.1	6.1.0	6.2.0	R4	TEI
25.133	589	1	R99	F	RP-030210	R4-030567	approved	TGPL limitations for inter-frequency measurements	3.13.0	3.14.0	R4	TEI
25.133	590	1	Rel-4	A	RP-030210	R4-030568	approved	TGPL limitations for inter-frequency measurements	4.8.0	4.9.0	R4	TEI
25.133	591	1	Rel-5	A	RP-030210	R4-030569	approved	TGPL limitations for inter-frequency measurements	5.6.0	5.7.0	R4	TEI
25.133	592	1	Rel-6	A	RP-030210	R4-030570	approved	TGPL limitations for inter-frequency measurements	6.1.0	6.2.0	R4	TEI
25.133	599	-	R99	F	RP-030210	R4-030614	approved	Correction to SFN-CFN observed time difference	3.13.0	3.14.0	R4	TEI
25.133	600	-	Rel-4	A	RP-030210	R4-030615	approved	Correction to SFN-CFN observed time difference	4.8.0	4.9.0	R4	TEI
25.133	601	-	Rel-5	A	RP-030210	R4-030616	approved	Correction to SFN-CFN observed time difference	5.6.0	5.7.0	R4	TEI
25.133	602	-	Rel-6	A	RP-030210	R4-030617	approved	Correction to SFN-CFN observed time difference	6.1.0	6.2.0	R4	TEI

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25.106	022	1	Rel-4	F	RP-030211	R4-030590	approved	Spurious emissions: Co-existence with UTRA-FDD BS, Operation in the same geographic area	4.5.0	4.6.0	R4	RInImp-REP
25.106	023	1	Rel-5	A	RP-030211	R4-030591	approved	Spurious emissions: Co-existence with UTRA-FDD BS, Operation in the same geographic area	5.4.0	5.5.0	R4	RInImp-REP
25.143	031	1	Rel-4	F	RP-030211	R4-030592	approved	Spurious emissions: Co-existence with UTRA-FDD BS, Operation in the same geographic area	4.7.0	4.8.0	R4	RInImp-REP
25.143	032	1	Rel-5	A	RP-030211	R4-030593	approved	Spurious emissions: Co-existence with UTRA-FDD BS, Operation in the same geographic area	5.4.0	5.5.0	R4	RInImp-REP
25.143	033	-	Rel-4	F	RP-030212	R4-030436	approved	Removal of square brackets in the test uncertainty section regarding output intermodulation	4.7.0	4.8.0	R4	RInImp-REP
25.143	034	-	Rel-5	A	RP-030212	R4-030437	approved	Removal of square brackets in the test uncertainty section regarding output intermodulation	5.4.0	5.5.0	R4	RInImp-REP
25.101	244	-	Rel-5	F	RP-030213	R4-030451	approved	Correction of TPC dynamic range in tests using DPCCH as a phase reference	5.6.0	5.7.0	R4	TEI5
25.101	245	-	Rel-6	A	RP-030213	R4-030452	approved	Correction of TPC dynamic range in tests using DPCCH as a phase reference	6.0.0	6.1.0	R4	TEI5
25.104	191	1	Rel-5	F	RP-030214	R4-030641	approved	General corrections on co-existence and co-location requirements for UTRA-FDD BS	5.6.0	5.7.0	R4	TEI5
25.104	192	1	Rel-6	A	RP-030214	R4-030642	approved	General corrections on co-existence and co-location requirements for UTRA-FDD BS	6.1.0	6.2.0	R4	TEI5
25.141	299	1	Rel-5	F	RP-030215	R4-030643	approved	Correction and alignment on the test requirements for UTRA-FDD BS in co-existence and co-location with GSM/UTRA	5.6.0	5.7.0	R4	TEI5
25.141	300	1	Rel-6	A	RP-030215	R4-030644	approved	Correction and alignment on the test requirements for UTRA-FDD BS in co-existence and co-location with GSM/UTRA	6.1.0	6.2.0	R4	TEI5
25.142	167	1	Rel-5	F	RP-030216	R4-030589	approved	Statistical approach for BER BLER tests for TDD	5.4.0	5.5.0	R4	TEI5
25.101	231	-	Rel-5	F	RP-030217	R4-030375	approved	Maximum input power for the UE	5.6.0	5.7.0	R4	HSDPA-RF
25.101	232	-	Rel-6	A	RP-030217	R4-030376	approved	Maximum input power for the UE	6.0.0	6.1.0	R4	HSDPA-RF
25.101	248	-	Rel-5	F	RP-030217	R4-030465	approved	Removal of some of the FRC test cases with PA3 channel	5.6.0	5.7.0	R4	HSDPA-RF
25.101	249	1	Rel-5	F	RP-030217	R4-030575	approved	Specification of HSDPA CQI test	5.6.0	5.7.0	R4	HSDPA-RF
25.101	252	-	Rel-6	A	RP-030217	R4-030564	approved	Removal of some of the FRC test cases with PA3 channel	6.0.0	6.1.0	R4	HSDPA-RF
25.101	253	-	Rel-6	A	RP-030217	R4-030576	approved	Specification of HSDPA CQI test	6.0.0	6.1.0	R4	HSDPA-RF
25.101	255	-	Rel-5	F	RP-030217	R4-030607	approved	Specification of HSDPA FRC Performance with Closed Loop Transmit Diversity	5.6.0	5.7.0	R4	HSDPA-RF
25.101	256	-	Rel-6	A	RP-030217	R4-030608	approved	Specification of HSDPA FRC Performance with Closed Loop Transmit Diversity	6.0.0	6.1.0	R4	HSDPA-RF
25.101	257	-	Rel-5	F	RP-030217	R4-030609	approved	Specification of HS-SCCH Performance	5.6.0	5.7.0	R4	HSDPA-RF
25.101	258	-	Rel-6	A	RP-030217	R4-030610	approved	Specification of HS-SCCH Performance	6.0.0	6.1.0	R4	HSDPA-RF
25.101	259	-	Rel-5	F	RP-030217	R4-030611	approved	Specification of HSDPA CQI test in fading	5.6.0	5.7.0	R4	HSDPA-RF
25.101	260	-	Rel-6	A	RP-030217	R4-030612	approved	Specification of HSDPA CQI test in fading	6.0.0	6.1.0	R4	HSDPA-RF
25.102	137	1	Rel-5	F	RP-030218	R4-030588	approved	Specification of HSDPA CQI test for 3.84 Mcps	5.4.0	5.5.0	R4	HSDPA-RF

Spec	CR	Rev	Phase	Cat	Plenary doc	WG doc	TSG status	Subject	CR to version	Resulting version	WG	Workitem
25.102	138	-	Rel-5	B	RP-030218	R4-030601	approved	CQI performance requirements for 1.28 Mcps TDD option	5.4.0	5.5.0	R4	HSDPA-RF
25.102	139	-	Rel-5	B	RP-030218	R4-030605	approved	Addition of VRC performance requirements with low resource units for 1.28 Mcps TDD option	5.4.0	5.5.0	R4	HSDPA-RF
25.102	140	-	Rel-5	B	RP-030218	R4-030613	approved	Specification of HS-SCCH performance for 1.28 Mcps TDD option	5.4.0	5.5.0	R4	HSDPA-RF
25.123	304	-	Rel-5	F	RP-030218	R4-030516	approved	HS-SICH measurements for UTRA TDD (1.28 and 3.84 Mcps option)	5.4.0	5.5.0	R4	HSDPA-RF
25.133	583	-	Rel-5	F	RP-030219	R4-030486	approved	Correction to Observed time difference to GSM cell requirement	5.6.0	5.7.0	R4	TEI5
25.133	584	-	Rel-6	A	RP-030219	R4-030487	approved	Correction to Observed time difference to GSM cell requirement	6.1.0	6.2.0	R4	TEI5
25.101	234	1	Rel-6	F	RP-030220	R4-030622	approved	Requirements on common channels with TX diversity	6.0.0	6.1.0	R4	TEI6
25.104	185	-	Rel-6	F	RP-030220	R4-030371	approved	Frequency error requirement correction	6.1.0	6.2.0	R4	TEI6
25.133	596	1	Rel-6	F	RP-030220	R4-030562	approved	Correction to CPICH_RSCP test case A.9.1.1.1	6.1.0	6.2.0	R4	TEI6
25.104	186	-	Rel-6	F	RP-030221	R4-030402	approved	Correction to DCH demodulation performance requirement in multipath fading case 4	6.1.0	6.2.0	R4	RInImp-BSCClass-FDD
25.141	291	-	Rel-6	F	RP-030221	R4-030403	approved	Correction to DCH demodulation performance test in multipath fading case 4	6.1.0	6.2.0	R4	RInImp-BSCClass-FDD
25.141	292	-	Rel-6	F	RP-030221	R4-030404	approved	Correction of applicability of requirements to BS classes	6.1.0	6.2.0	R4	RInImp-BSCClass-FDD
25.951	001	1	Rel-6	F	RP-030221	R4-030606	approved	Radio network planning considerations	6.0.0	6.1.0	R4	RInImp-BSCClass-FDD
25.123	301	1	Rel-5	F	RP-030222	R4-030584	approved	Correction of measurement and reporting capability requirements in CELL_DCH state in case of parallel measurements	5.4.0	5.5.0	R4	TEI5
25.123	303	-	Rel-6	B	RP-030223	R4-030413	withdrawn	Interference measurement in UpPTS for 1.28Mcps TDD	5.4.0		R4	TEI6
25.123	302	-	Rel-5	F	RP-030278	R4-030411	approved	Power Measurement in non HSDPA codes for TDD	5.4.0	5.5.0	R4	HSPDA-RF

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## Annex D: List of actions

### **TSG RAN chairman:**

- To report in TSG SA of the possible impact of OMA application specifications in RAN work (RP-030281)
- To report in TSG SA that Galileo simulations and performance evaluation for LCS should take place in RAN WG4, where the expertise resides. (RP-030233)

### **TSG RAN WG2:**

- To review and comment on the Study on the Applicability of Galileo for LCS (RP-030233)
- To specify bearers for the voice over PS domain service (RP-030231)
- WG2 is requested to investigate the existing UE capabilities bits related to positioning and to provide a clear solution covering SFN-SFN measurement and IPDL on the various RRM states (RP-030357)

### **TSG RAN WG3:**

- To produce the CR for the Iu interface to support the CR to 25.305 in RP-~~030399~~030300

### **TSG RAN WG4:**

- To review and comment on the Study on the Applicability of Galileo for LCS (RP-030233)
- To review the current MIMO-RF WI description sheet and to study if the work on advanced receivers can be overtaken under that WI. (sec. 8.4.1)

### **All TSG RAN WGs:**

- WGs were tasked to fill the isolated impact analysis for each of the CR for Release 5 on each of the CRs provided for approval at the next plenary meeting. The Isolated impact shall provide backward compatibility issues. This also implies that forward compatibility is reviewed when CRs are provided for approval on previous Releases. However impact on ASN.1 coding requires more in depth studies and this will be re-opened at the next meeting.

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## Annex E: Meeting schedule

TSG RAN WG1 meetings:

Meeting #	Date	Host	Location
<a href="#">33</a> <del>4</del>	25-29 August 2003	North American Friends of 3GPP	New York, USA
<a href="#">34</a> <del>5</del>	6-10 October 2003	Samsung	Seoul, Korea
<a href="#">36</a> <del>5</del>	17-21 November 2003	European Friends of 3GPP	Lisbon, Portugal
<a href="#">36</a>	<a href="#">16-20 February 2004</a>		<a href="#">Europe/US</a>
37	10-14 May 2004		Europe
38	23-27 August 2004		Europe/US
39	15-19 November 2004		Asia/US

TSG RAN WG2 & WG3 meetings:

Meeting #	Date	Host	Location
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
40	12 - 16 January 2004	ETSI	Sophia Antipolis, France
41	16 - 20 February 2004		Europe
42	10 - 14 May 2004		USA
43	16 - 20 August 2004		Europe
44	4 - 8 October 2004	ETSI	Sophia Antipolis, France
45	15 - 19 November 2004		Asia

TSG RAN WG4 meetings:



Meeting #	Date	Host	Location
28	18-22 August 2003	ETSI	Sophia Antipolis, France
29	17 - 21 November 2003	Qualcomm	San Diego, US
30	9 - 13 February 2004	Rohde & Schwarz	Munich, Germany
31	<del>17-10</del> - <del>21</del> 14 May 2004		China
32	16 -20 August 2004		Europe (co located WG2)
33	15 - 19 November 2004		USA

TSG RAN meetings:

Meeting #	Date	Host	Location
21	16 - 19 September 2003	Siemens	Frankfurt, Germany
22	09 - 12 December 2003	ARIB/TTC/NA Friends of 3GPP	Hawaii, US
23	09 - 12 March 2004		
24	01 - 04 June 2004		Korea
25	07 - 10 September 2004		USA
26	07 - 10 December 2004		

## Annex F: Summary of RAN Work Items

This table lists RAN Work Items, existing and new, discussed at meeting #20. 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

Type	WI name	WI acronym	Leading WG	%	Finish date	Status report	Remarks
Feat	<b>Radio Interface Improvements</b>						
BB	Improvement of inter-frequency and inter-system measurements	RInImp-IfIsM	WG1	10%	Sep-03	RP-030235	
BB	Improving Receiver Performance Requirements for the FDD UE	RInImp -UERecPerf	WG4	-	Sep-03	RP-030241	
BB	UMTS 850	RInImp-UMTS850	WG4	40%	Mar-04	RP-030242	
BB	DS-CDMA Introduction in the 800 MHz Band	RInImp-UMTS800	WG4	25%	Sep-03	RP-030243	
BB	UMTS 1.7/2.1 GHz	RInImp-UMTS1721	WG4	10%	Dec-04	RP-030244	
Feat	<b>RAN Improvement Feature</b>						
BB	Radio access bearer support enhancement	RANimp-RABSE	WG2			RP-030253	Generic Block
WT	Iu enhancements for IMS support in the RAN	RANimp-RABSE-IuEnhIMS	WG3	5%	Mar-04	RP-030254	Completion date changed from Sept-03
BB	Improvement of RRM across RNS and RNS/BSS	RRM1	WG3	35%	Dec-03	RP-030255	
BB	Beamforming Enhancements	RANimp-BFE	WG1	80%	Sep-03	RP-030256	Completion date changed from June-03
BB	RRM optimizations for Iur and Iub	RANimp-RRMopt	WG3				Generic Block
BB	Remote Control of Electrical Tilting Antennas	RANimp-TiltAnt	WG3	5%	Dec-03	RP-030261	
BB	Network Assisted Cell Change (NACC) from UTRAN to GERAN – network-side aspects	RANimp-NACC	WG3	10%	Dec-03	RP-030262	Completion date changed from Sept-03

Type	WI name	WI acronym	Leading WG	%	Finish date	Status report	Remarks
Feat	<b>Multiple Input Multiple Output antennas (MIMO)</b>	RInImp-MIMO	WG1	35%	Mar-04	RP-030236	Completion date changed from Sept-03
BB	Multiple Input Multiple Output Antennas – Physical Layer	RInImp-MIMO-Phys	WG1	0%	Mar-04	RP-030237	Completion date changed from Sept-03
BB	Multiple Input Multiple Output Antennas – Layer 2,3 aspects	RInImp-MIMO-L23	WG2	0%	Mar-04	RP-030238	Completion date changed from Sept-03
BB	Multiple Input Multiple Output Antennas- lub/lur Protocol Aspects	RInImp-MIMO-lublur	WG3	0%	Mar-04	RP-030239	Completion date changed from Sept-03
BB	Multiple Input Multiple Output Antennas - RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing	RInImp-MIMO-RF	WG4	5%	Dec-04	RP-030240	Completion date changed from March-04
Feat	<b>High Speed Downlink Packet Access</b>	HSDPA	TSG RAN				
BB	HSDPA - RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing	HSDPA-RF	WG4	100%	Jun-03	RP-030096	HSDPA Feature finished
Feat	Evolution of the transport in the UTRAN	ETRAN	WG3				Generic Feature
BB	Introduction of the Multimedia Broadcast Multicast Service (MBMS) in RAN	MBMS-RAN	WG2	20%	Mar-04	RP-030266	Completion date changed from Sept-03. Block under SA Feature "MBMS"
BB	UE Positioning		TSG RAN				This is a building block under SA WG2 feature "Location Services"
WT	Open interface between the SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods	LCS-Rel4Pos	WG2	95%	Sep-03	RP-030263	Almost finished. Completion date changed from June-03
<b>New WI</b>	A-GPS minimum performance specification	LCS-UEPos-AGPSPerf	WG4		Mar-04		New WI. WIDS in RP-030308
<b>New WI</b>	Subscriber and Equipment Trace support in UTRAN	OEM-Trace-RAN	WG3		Sep-03		New WI under BB "Trace Management". WIDS in RP-030355
SI	FS on Radio link performance enhancements	RInImp-RIperf	WG1	40%	Mar-04	RP-030245	Completion date changed from Sept-03
SI	FS on UTRA Wideband Distribution System	RInImp-WDS	WG4	40%	Mar-04	RP-030246	Completion date changed from Sept-03

Type	WI name	WI acronym	Leading WG	%	Finish date	Status report	Remarks
SI	FS for the viable deployment of UTRA in additional and diverse spectrum arrangements	RInImp-UMTSBands	WG4	100%	Jun-03	RP-030247	Study finished
SI	FS on Improvement of inter-frequency and inter-system measurement for 1.28 Mcps TDD	RInImp-lflsMLCR	WG1	55%	Sep-03	RP-030248	
SI	FS for the Analysis of OFDM for UTRAN <a href="#">enhancement/evolution</a>	RInImp-FSOFD	WG1	35%	Dec-03	RP-030249	
SI	FS on Uplink Enhancements for Dedicated Transport Channels	RInImp-FSUpDTrCh	WG1	40%	Dec-03	RP-030250	
SI	FS on Analysis of higher chip rates for UTRA TDD evolution	RInImp-FSVHCR TDD	WG1	35%	Dec-03	RP-030251	
SI	FS on Low Output Powers for general purpose FDD BSs	RInImp-FSLoPw	WG4	10%	Dec-03	RP-030252	Completion date changed from Sept-03
SI	FS on the Evolution of UTRAN Architecture	RANimp-FSEvo	WG3	20%	Dec-03	RP-030257	Completion date changed from June-03
SI	FS for the Early Mobile Handling in UTRAN	RANimp-FSEarlyUE	WG2	100%	Jun-03	RP-030258	Study finished
SI	Improved Access to UE Measurement Data for CRNC to support TDD RRM	RANimp-impr	WG3	75%	Sep-03	RP-030260	Completion date changed from June-03
SI	FS on Enhancements to OTDOA Positioning using advanced blanking methods	LCS-otdoa	WG2	50%	Sep-03	RP-030264	Completion date changed from June-03
New SI	Uplink Enhancements for UTRA TDD	RInImp-FSUpEnhTDD	WG1		Mar-04		New SI. WIDS in RP-030359