3GPP TSG RAN Meeting #27   **RP-050003**
Tokyo, Japan, 9 - 11 March 2005

Title:	**Revised Draft Report of the 26th 3GPP TSG RAN meeting (Vouliagmeni Athens, Greece, 8th – 10th December 2004)**
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Executive summary

TSG RAN meeting #26 took place in Astir Palace Hotel, Vouliagmeni Athens, Greece. The meeting started at 9:00 on Wednesday 8th December 2004 and finished at Friday 10th at 12:45. 109 participants were registered and 161 documents were submitted.

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

Release	WG1	WG2	WG3	WG4	Total
Release 99		4			4
Rel-4 CRs (Rel-4 excluding Cat A)		5 (2)			5 (2)
Rel-5 CRs (Rel-5 excluding Cat A)	1 (1)	34 (30)	9 (9)	4 (4)	48 (44)
Rel-6 CRs (Rel-6 excluding Cat A)	18 (17)	60 (30)	58 (49)	20 (16)	156 (112)
Total CRs (Total excluding Cat A)	19 (18)	103 (66)	67 (58)	24 (20)	213 (162)

Organization issues

The re-organization of 3GPP TSGs had been approved at 3GPP PCG meeting #13 (RP-040513). A new TSG CT (Core network & Terminals) is created, inheriting the WGs from TSG CN and WG2 & WG3 from TSG T. A new TSG RAN (the name is preserved) is created, inheriting the WGs from TSG RAN and WG1 from TSG T.

3GPP PCG had also approved that TSG can have up to 3 vice-chairmen. It also tasked TSG RAN and GERAN chairmen to look at ways for a future merge of these two TSGs, with the goal of overall cost reduction.

RAN WGs had reviewed their Terms of Reference in the last meeting. As a result, revisions are proposed for WG1 and WG3. In the first case, the proposal (RP-040523) was shortly debated due to a possible overlap with WG4 scope, and finally postponed for March. The latter was approved without comments (RP-040503).

A joint TSG T/TSG RAN meeting took place the afternoon of Thursday 9th, to handle organization and Terms of Reference of the new TSG RAN. The following issues were discussed:
- It was agreed that current TSG T WG1 will be renamed TSG RAN WG5
- After a long on-line drafting, the new Terms of Reference were endorsed (RP-040547). Approval will take place at 3GPP OP.
- It was agreed that WG elections for chairmen will be postponed after March TSGs, where TSG RAN elections will take place. In particular, the new RAN WG5 will have its elections in April, and the collocated May meeting will be the place for the rest of RAN WGs.

The chairman informed that 3GPP PCG had accorded MCC support for additional meetings only within the constraints of MCC budget; this means that support for the agreed additional WG1 and WG2 meetings that do not take place in ETSI cannot be guaranteed (RP-040400)

TSG RAN Long Term Evolution

The results of the Long Term Evolution Work Shop (2 – 3 November, Toronto) were presented (RP-04015). Operators and manufacturers had debated the requirements and technical proposals for the Future RAN, and a set of requirements were compiled as a conclusion.

The work on Evolution will start as a Study Item (RP-040461), where proposals for a new radio interface and network architecture will be presented and compared. As a conclusion of this Study, a number of Work Items will be created to implement the agreed proposals. The Study will be jointly led by all WGs and the completion is expected for June 2006.

The organizative frame of work was extensively discussed. Some companies believed that it was preferable to have a separate Ad Hoc group to deal with evolution. A large group of companies presented a proposal where no new structures are created, the Study phase will be carried out in joint meetings with participants from all the WGs. These joint meetings will ensure coordination and allocate tasks to the WGs. Once the Study phase is achieved, work will continue as usual with Work Items in the WGs. This was the way forward finally agreed

Received LSs

A LS was received from ETSI MSG on the topic of GSM service operated onboard commercial aircrafts (RP-040463). Such systems may interfere terrestrial UMTS networks, WG4 is tasked to study the impacts. TSG GERAN had also reviewed the issue and had already produced a LS with some observations.

A LS on the definition of 3GPP RAT was received from SA WG1 (RP-040465). Having sent it to many groups, SA WG1 had already received objections to the proposed definitions, which don't align either with TSG RAN terminology.

SA WG4 has asked for guidance on the error patterns to be expected in the MBMS streaming (RP-040469). It is a difficult issue, involving various RAN WGs, so SA WG4 experts are invited to joint the collocated meetings in February to jointly discuss the issue.

ITU-R matters

The schedule for the Update 6 of ITU-R Recommendation M.1457, as approved in ITU-R WP8F, was presented. Technical inputs are to be submitted by October 2005. It is difficult for TSG RAN to estimate today what items will be finished by that date, but it is agreed to go for a "complete" submission, including a revision of the prose descriptions in the Recommendation and a revised list of references (sec. 7.1)

Release 99, Release-4 & Release-5

A LS from RAN WG4 was received proposing the removal of TGPL2 (Transmission Gap Length 2) for compress mode from all RAN specifications. There are no specified performance requirements that networks could rely and studies in WG4 show that it doesn't bring benefits, but it is mandatory in the UE. WG4 proposes to delete from Rel99 onwards. There was some debate on the Release, and since some of the CRs presented have technical aspects unclear, it was agreed to postpone the approval and to task the WGs to review the CRs (sec. 7.5.6)

Release 6 and beyond

See Annex D for the summary of Work Items under TSG RAN responsibility.

The work on HSDPA UE receiver performance requirements is progressing normally, completion by June 2005, it is proposed to be kept as part of Rel-6 (sec. 8.1.1).

The WI Description Sheet of UMTS 2.6 GHz was revised (RP-040397)

ROHC for IMS is mandatory for Rel-6 IMS, under the RAB enhancements WI. It was discussed if a particular ROHC implementation/parameters should be mandated in 3GPP and how to ensure a given performance of the compressor. WG2 is asked to continue to look at this, with an expected completion in March 2005. The feature is to be kept in Rel-6. (sec 7.3.1)

Optimization of downlink channelization code utilization for FDD is to be completed in March 2005 but proposed to be kept in Rel-6.

Optimization of downlink channelization code utilization for TDD is splitted in two WIs, 3.84 Mcps and 1.28 Mcps. The first is to be completed by June and proposed for Rel-6, the second by September.

The HS-DPCCH ACK/NACK enhancement feature is completed, the CRs are presented and approved (sec. 8.2.1.3)

The parts in WG1, WG2 & WG3 of MBMS are completed and the CRs approved. WG4 WI on MBMS UE performance is to be completed by September, but the requirements arising will be kept in Rel-6 (sec. 8.4)

The way forward in the MIMO Work Item was discussed. MIMO is clearly going to be part of the Long Term Evolution, but it is also an active Work Item. Alternatives are to continue with MIMO apart of the LTE, or to close the WI and move the work to LTE. For the time being, it is agreed to stop MIMO work in WG1 for 6 months, and the situation will be revised then (sec. 8.5).

FDD Enhanced Uplink Stage 2 is concluded and the work in WG1 is almost finished. WG2 and WG3 will need 3 additional months. WG4 is progressing fast on the performance requirements, expected for June 2005. The feature is to be kept in Rel-6.

The Study on Evolution of UTRAN Architecture, which was kept on hold for the last 9 months, is closed and the activity is moved under the Long Term Evolution frame (sec. 8.11.1)

The completion date of the Study on Uplink enhancements for UTRA TDD is delayed to March 2005.

Under the TEI6 basket, two alternatives were presented for the introduction of Network-initiated Scudif (sec. 8.9). Since CN still has to conclude on the issue, it was preferred to delay the decision in RAN also.

A proposal for a new network measurement 'DL Transmission Branch Load' was presented, also under TEI6. Although some companies raised concerns about its usefulness, the principle was agreed. WG3 CRs need to be revised, and the full set will be presented in March (sec. 8.9).

The following new Work Items were approved:
- Study Item on Evolved UTRA and UTRAN (RP-040461)
- UE Antenna Performance Evaluation Method and Requirements (RP-040521)
- UMTS 2600 MHz TDD (RP-040553)
- UMTS 900 MHz (RP-040541)
- Optimization of Channelisation Code Utilisation for 3.84 Mcps TDD (RP-040551)
- Optimization of Channelisation Code Utilisation for 1.28 Mcps TDD (RP-040552)

1 Opening of the Meeting

TSG RAN chairman, Francois Courau, opened the meeting at 9:00 on Wednesday 8th. He explained the meeting arrangement and gave the floor to Alex Vesely (Siemens), who welcome the participants on behalf of the European Friends of 3GPP and wished a successful meeting to all.

2 Approval of the Agenda

RP-040395 Draft agenda meeting #26 (Chairman)
The chairman presented the agenda and explained the arrangement to deal with the RAN Future Evolution issues: the outcome of the Work Shop and the contributions will be presented on the first morning, so the way forward can be discussed extensively during the week.
The chairman mentioned that Thursday evening a joint meeting from RAN and T will take place to approve the new terms of reference for after the re-organization due to take place in March 2005. The election of the chairs and vice chairs will be done by members of TSG RAN and TSG T.
The agenda is approved.

3 Approval of the meeting report of TSG RAN #24

RP-040396 Revised draft report meeting #25 (3GPP Support)
No comments, the report is approved

4 Reminder for IPR declaration

The chairman made the following call for IPRs:

> The attention of the delegates to the meeting of this Technical Specification Group was 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 delegates were asked to take note that they were thereby invited:
> - to investigate whether their organization or any other organization owns IPRs which were, or were likely to become Essential in respect of the work of 3GPP.
> - to notify their respective Organizational Partners of all potential IPRs, e.g., for ETSI, by means of the IPR Statement and the Licensing declaration forms (http://webapp.etsi.org/Ipr/).

5 Report of meetings

5.1 TSG SA#25

The chairman explained that SA has been informed that MBMS and EDCH are to be part of Rel-6, regardless of the date of completion. SA had approved this procedure.

5.2 3GPP PCG #13

5.2.1 Report of 3GPP PCG#13

RP-040513   Draft Summary minutes, decisions and actions from 3GPP PCG Meeting#13, Seoul, 6 October 2004 (Chairman, 3GPP Support)

The chairman informed of the forthcoming arrangement of 3GPP TSGs and WGs: TSG T will formally disappear and its WGs will be put under two new TSGs, descendants of TSG RAN and TSG CN. A new TSG named CT (Core network & Terminals) is created as the merge of WG2 & WG3 from TSG T and current TSG CN. A new TSG named RAN is created as the merge of existing RAN (the TSG doesn't change name in this case) and TSG T WG1.

3GPP PCG had also approved to have up to 3 vice-chairmen per TSG.

Another proposal considered at 3GPP PCG to reduce overall cost is to merge TSG RAN and TSG GERAN. The respective chairmen were tasked to study together how this can be done and the timeframe.

5.2.2 New Terms of reference for RAN and its WGs after TSG RAN Re-organization in March

RP-040503   Update of RAN WG3 Terms of Reference (RAN WG3)

No comments, the proposal is approved

RP-040523   Review of RAN1 ToR (RAN WG1)

Edgar Fernandes (Motorola) objected that the new line for the specification of parameters in UE conformance testing conflicts with WG4 scope. Also, the last bullet of the current ToRs, seems also to be more in line with WG4 work. This sound like a suggestion to move 25.215 under WG4 responsibility.

Given the comments raised, it is agreed that WG1 ToR will be discussed by interested parties and re-presented in the RAN meeting in March.

A joint session with TSG T took place the afternoon of Thursday 9th, the following issues were discussed:

Renaming of TSG T WG1 as TSG RAN WG5

It was agreed that TSG T WG1 will become TSG RAN WG5. However, for some time, the group will be dubbed "RAN WG5 (formerly know as T WG1)".

Giovanni Romano (TIM) asked if WG5 and WG4 could be merged. This wasn't found feasible for the time being, given the work load of these groups. Giovanni also asked about the merging of WG1 and WG4. This is a point for long term evolution in RAN and has to be discussed carefully.

Niels Andersen (Motorola) reminded also of the long term goal of merging RAN and GERAN, explaining that the current GERAN structure has one single group equivalent to RAN WG1 and WG4, but has a separate group for terminal testing. Having this is mind, the second proposal will help to align RAN and GERAN, but not the second. Also, experts in the WG1 & WG4 areas tend to be the same in the companies. Testing is a different field, where some of the companies do not participate in the rest of the WGs.

However, no reorganization can be precluded. Today, only the joining of TSG RAN/TSG T is to be discussed.

In principle, the new TSG RAN will have its first meeting in June. It is however proposed that at the end of the next RAN meeting a short meeting of the "new" RAN is hold to discuss the organizational issues. This was agreed.

A long debate took place on how to discuss this re-organization and to what aspects can be solved before and after June, but no agreement wasn't reached on any other issue. It was found preferable to delay to March any further debate on re-organization.

3 vice-chairmen per TSG
No discussions, it was agreed to go for 3 vice chairs for the new RAN.

New TSG RAN Terms of Reference
RP-040532   New TSG RAN Terms of Reference (TSG RAN/TSG T Officials)
RP-040533   Draft New TSG RAN Terms of Reference (TIM)
Both documents were presented and discussed. The final revision of the Terms of Reference was produced on line.

It is suggested to remove the background section, it was useful at the beginning of the project but it is not useful now. This was supported, but it is noted also that the other TSGs also have a Background section.

It is proposed to remove the list of UTRAN interfaces, given that in the future new interfaces can be defined.

The section on the specific responsibility is to be left as it was, but FDD and TDD are to be removed. Concerning the UE testing, after a long debate it is preferred not to specify what aspects of UTRA UEs are in the scope, the following expression should be used: "Conformance test specification for aspects of UTRA UEs".

Editorial corrections were accepted also. The final version is available in the document below.

RP-040547   TSG RAN Terms of Reference (TSG RAN/TSG T)
ToR produced and endorsed by the joint TSG T/TSG RAN meeting, its approval will take place in 3GPP OP.

Elections in the WGs
It is agreed that they are postponed after the new TSG RAN elections have taken place. For RAN WG5, they will take place in April; for the current 4 RAN WGs, elections will take place in the collocated meetings in May. At this point, it is not clear if the WGs can be considered new or not. This depends on the discussions to take place in the plenaries in March about current RAN organization.

5.3   Report of the workshop on Radio long term evolution

5.3.1   Presentation of the summary of the requirements

RP-040415   Summary of Requirements identified during 3GPP RAN long term evolution workshop (TSG RAN Chairman)

The chairman presented this summary.

The Long Term Evolution WS was held in Toronto, the 2-3 November. More than 40 contributions were presented, introducing requirements for the future of UTRA from operators and manufacturers, and a number of technical proposals on how to implement these requirements. This document collects the main requirements points that were agreed during the WorkShop.

RP-040496   Report of the 3GPP TSG RAN Long Term Evolution Work Shop (3GPP Support)

This report is for information

5.3.2   Introduction of additional documentation

RP-040458   Proposals on RAN evolution work (CMCC, Cingular, Huawei)

Zhigang Yan (China Mobile) presented this document.

The chairman thanked the proponents for this contribution and commented that it will certainly be useful when the work starts in the WGs.

RP-040461   Proposed Study Item on Evolved UTRA and UTRAN (NTT DoCoMo and others)

Takehiro Nakamura (NTT DoCoMo) presented this proposal

The chairman remarked that this is a TSG RAN Study, but TSG SA needs to be consulted and involved, in particular SA WG1 and WG2. A proposal for the timeframe and organization is presented in RP-040502.

Derek Richards (IPWireless) reminded that, although the list of supporting companies is long, there were other companies that presented contributions in the WS whose requirements are not included in this proposal. In his view, a comprehensive set of objectives, covering all requirements expressed in the WS, would be preferable.

Derek asked also if this activity will stop or hold back the approval of other Work Items in the Rel-7 frame. The chairman clarified that this is long term evolution, work in Rel-7 will continue normally and proposals for new Items will be considered as usual.

RP-040502   Proposal for the RAN Evolution Process (Alcatel, Cingular, DoCoMo, Ericsson, Fujitsu, LG, Motorola, NEC, Nokia, Nortel, Orange, Qualcomm, Samsung, Siemens, T-mobile, Telefonica, TeliaSonera and Vodafone)

Per Beming (Ericsson) presented this proposal

Giovanni Romano (TIM) clarified that TIM supports the Study Item but not the roadmap proposed in this document. He asked for clarification on the chairing process, is it going to be the 4 WG chairs at the same time or rotating? Per didn't have a strong opinion on this. Giovanni argued that it would be preferable to have a single chair, probably RAN chairman or vice-chairman.

There was some discussion on the advantages of having a separate Ad Hoc group, as a TSG RAN Ad Hoc, or a group that would meet at the same time as the WGs. Per clarified that the main goals of the proposed organization is to minimise the number of travel for the experts and to keep the work in the Ad Hoc aligned and in close contact with the existing WGs; that is, to avoid having a diverging group standardizing a new radio technology.

Derek Richards (IPWireless) commented that a general, open ended study item should not be passed to the working groups, that may spend time divagating. The chairman clarified that the Study will have a phase at RAN level where the Study will be focused. Only then it will be passed to the WGs. Per further reminded that TSG RAN is always in charge, will review the reports, and will steer the work.

Per noted that this is the Long Term schedule, but if during the Study it seems feasible that some of the requirements or proposals can be implemented earlier, in Rel-7 for example, and if companies present the corresponding Work Item, then the resulting feature could be included in Rel-7.

Kevin Holley (mmO2) asked to make clear that it is TSG RAN who assigns tasks to the WGs, and not this Ad Hoc that could be seen as an intermediate step. Kevin also noted that the TSG will re-organize after March with the arrival of T WG1, and this WG may also have a role to play on the Study. He asked that the schedule of implementation of the joint meetings is delayed until that. It was generally believed that T WG1 will not be heavily involved at the beginning, and it is noted also that the schedule can be reviewed at any time in the future.

Matthew Baker (Philips) commented that a first stage of the Study should focus on the requirements, but coming from the perspective of the applications. It is unclear how the current list of requirements in the proposal has been derived. The chairman reminded that one of the outputs of the WS was the need of close collaboration with SA WG1 & WG2. Matthew noted that a clear deadline for application requirements should be set, and only after that specific technical proposal would be discussed. This would be to avoid discussing technologies before the requirements from higher layers are agreed. The chairman commented that this shouldn't be a problem, given that delegates in SA WG1 & WG2 belong to the same companies that will participate in the Ad Hoc in RAN; at least some level of coordination inside companies is to be expected.

RP-040416   Contribution on Aspects of a Study Item on Future Evolution (Cingular)
Don Zelmer (Cingular) presented this document
This document, and in particular the summary table included, are to be used as part of the work.

RP-040529   3GPP TSG RAN process for evolved UTRA & UTRAN (TIM)
Giovanni Romano (TIM) presented this document
In this document, TIM raises the concerns on the process proposed in RP-040502. An alternate procedure is suggested, with the creation of a dedicated Ad Hoc group that will interface with the WGs, instead of joint WG1/WG2/WG3/WG4 meetings. mmO2 supported this approach.

Per Beming (Ericsson) observed that the WG coordination should take place in TSG RAN, and that the interface to CT and SA is also to take place in TSG RAN.

Denis Fauconnier (Nortel) brought further clarification to the joint meetings approach in RP-040502, explaining that it is not different from the current working practice. The intention is not to have a new group, joint of all WGs, meeting regularly to discuss evolution; it should be a flexible structure that will allow joint meetings to discuss a given topic, with only the WGs involved participating. The work will take place inside the WGs and, when needed, they will hold joint meetings.

Prem Sood (Sharp) agreed with Denis and objected the creation of full parallel structure, starting at WGs level and up to over TSG level, as proposed by TIM on slide 4. The current structure should be enough to coordinate and to do the actual work. Ericsson and Orange also supported this view.

Per Beming emphasized the importance of the rapporteur role for the coordination, of the WGs but also with SA WGs or other external organizations.

An Ad Hoc session was hold the evening of the 8th to reach agreement on the a proposal for the way forward.

RP-040531   Proposal for the RAN Evolution Process (Ericsson and others)
This revision of RP-040502 had been agreed in the Ad Hoc session
TIM proposed to small modification to slide 6. A revision in produced on line in RP-040554.

RP-040554   Proposal for the RAN Evolution Process (TSG RAN)
This document is the final version of the process, agreed by the group
The Study Phase will take place in the existing WGs, with an initial 6 months requirements phase at TSG RAN level. After RAN#28, joint WG1, WG2, WG3 & WG4 meetings will take place. SA WG2 and CT WGs would be invited to participate for some issues.
The joint meetings will discuss cross WG issues and ensure consistency. A first task of the joint meetings will be to further break down requirements and allocate tasks to WGs for more thorough studies. The individual WGs will start with the study within the WG itself once appropriate work tasks are defined and sufficient meeting time is available
TSG RAN is still responsible for the steering, planning and follow up of the work. The joint meetings are only a tool to achieve better cross WG technical discussion and coordination.
The joint meetings will take place during the WG meeting week, for one or two days at the beginning or the end of the week. However, for the first half of 2005, they will be same week and location as the RAN plenary, in order not to jeopardize the progress of the finalization of Rel6 features
The joint meetings are chaired by the RAN Chair, RAN WG Chair or Vice Chairs. The joint meeting structure will be terminated at the end of the study item phase.

As a final remark on the approved Study Item in RP-040461, IPWireless maintained the concern of TDD not being covered. He reminded of the many discussions that have been held for WIs where it wasn't clear if they were FDD only TDD also. The chairman reassured that the TDD evolution is well covered, as a matter of fact it is explicitly mentioned as the FDD-TDD convergence. Any proposal for evolution falls inside the scope of this Study, and certainly TDD has a role to play in the Long Term RAN evolution.

6   Liaisons from other groups

6.1   Groups outside 3GPP

RP-040463   LS on considerations to avoid interference for terrestrial networks for onboard GSM networks (ETSI MSG)
The chairman presented this LS
There is an ongoing activity with the goal of delivering GSM service onboard commercial aircrafts. The regulatory framework for Europe is under discussion in ECC, and one of the requirements on this framework will be to ensure that there is no interference to GSM systems on the ground. ETSI MSG asks 3GPP GERAN for help on understanding the aspects of harmful interference to the GERAN Node B and UEs. Additionally, and although the system doesn't envisage to provide UTRA service on the planes, the interference to UTRA networks has to be examined, taking into account that dual mode (GSM/UTRAN) terminal are to expected soon and that some of the bands that may be used for onboard GSM may be used for terrestrial UMTS is certain regions.

Hashem Madadi (Three) noted that ETSI MSG has a short list of participants and questioned that 3GPP TSG RAN dedicates time and effort to the request to a small group, when there are so many important issues with agreed priority. Vodafone noted that there is of primary importance for land operators to ensure that there is no interference to ground systems.

RP-040464   Reply LS on considerations to avoid interference for terrestrial networks for onboard GSM networks (TSG GERAN)

Paolo Usai (3GPP Support) presented this LS

TSG GERAN provides some answers to the issues raised in the LS above, but additional information from SITA is needed to achieve a conclusion. It was further clarified that the screening of radio signals emitted inside the plane is achieved with a jammer device, and that the big concerns come from the potential interference of this jammer to the ground networks.

The LSs are noted and will be transferred to RAN WG4.

6.2   TSG SA, TSG T, TSG CN, TSG GERAN

RP-040465   LS on definition of RAT (TSG SA WG1)

SA WG1 is proposing the following definitions for 3GPP RAT and Non-3GPP RAT and asks other groups for their views:
- 3GPP RAT: UTRAN, GERAN
- Non-3GPP RAT: Radio Access Technologies except UTRAN and GERAN (e.g. IEEE 802.11b, DECT).

RP-040466   Reply LS on Definition of RAT (TSG CN WG1)

CN WG1 answers that the definitions of '3GPP RAT' and 'Non-3GPP RAT' are not relevant for the group, and see unfeasible to change its specifications to include them. For Rel6, it is CN WG1 understanding that WLAN is not a considered radio technology. CN WG1 uses its own definition of 'Access technology' specified by TS 23.122.

RP-040467   Reply to LS on definition of RAT (TSG T WG3)

T WG3 proposes to use slightly different definitions for the 3GPP and Non-3GPP RAT

Howard Benn (Motorola) reminded that currently RAN specifications only consider UMTS and GERAN radio technologies, only these exists for RAN. However, looking at the future, it seems clear that other technologies will have to be taken in somehow.

Denis Fauconnier (Nortel) explained that from a signalling perspective, handovers to cdam2000 are possible. Also, he reminded of the GAN feature, that will allow GSM over a generic transport. In that case, it could be claimed that WLAN is also a possible RAT. So far, in RAN there is the inter-RAT possibility, but there is no easy differentiation of 3GPP RAT and Non-3GPP RAT.

The chairman noted that from a RAN perspective, a generic approach to Non-3GPP systems cannot be taken, as handovers and measurements need to be specified differently for each technology.

The chairman agreed to write a draft answer to be approved by correspondence shortly after the meeting.

RP-040468   LS on evolution of network architecture (TSG SA WG2)

Alan Law (Vodafone) presented this LS

SA WG2 reminds that it is the group charged with overall coordination and architecture issues in 3GPP, asks TSG RAN to keep this into account for the Evolution work.

It is asked why GERAN is not put in copy of the LS, as it also mentions the GAN feature being standardized there. It is reminded that the GAN feature re-uses the current A/G interfaces as they are, there is not change in architecture required for it.

RP-040469   LS on guidance and error patterns for MBMS streaming simulations (TSG SA WG4)

SA WG4 asks for help from the RAN WGs for the characterisation of the MBMS audio codecs, on the error patterns that are to be expected. WG chairmen warned that the exercise is not easy, similar requests from SA WG4 had been received in the past and the had ended in a closed loop without exit. RAN WGs need first an input from SA WG4in terms of target BLER and requirements from the upper layers to determine the air interface and UTRAN parameters to be used.

In any case, it is noted that the point to insert the error pattern should be the input of the codec and not any lower level like the proposed "radio transmission block level", as there are many correction mechanisms in the middle that influence the error rate and, again, need to be parameterized.

It is also noted that all RAN WGs should be involved, the proposed way forward is to hold a small meeting with SA WG4 and RAN experts. A LS will be drafted along these lines (RP-040546)

6.3   TSG RAN WGs

RP-040470   LS on the TSG RAN WG 3 Review of TR 32.804 v6.0.0 (RAN WG3)

Alex Vesely (Siemens) presented this LS

WG3 had been tasked by TSG SA to review the TR 32.804 produced by SA WG5 on O&M requirements for RET. Attached to the LS are the results of the review.

The LS is for information to TSG RAN, no comments.

RP-040471   LS on Radio Requirements for Remote Electrical Tilt (RET) equipment (RAN WG4)

Thomas Unshelm (Ericsson) presented this LS

WG4 informs TSG GERAN that radio requirements are being developed for the new RET equipment. Some of these requirements may have an impact on GSM equipment sharing the site.

The LS is for information to TSG RAN, no comments.

RP-040472   LS on compatibility studies of terrestrial and satellite UMTS/IMT2000 (RAN WG4)

Howard Benn (Motorola) presented this LS

WG4 provides some feedback to ETSI SES on the co-existence issues of satellite and terrestrial UMTS. WG4 had been asked to help ETSI SES who is the group in charge of these studies.

The LS is for information to TSG RAN, no comments.

RP-040473   LS on remove of TGPL2 (RAN WG4)

Howard Benn (WG4 chairman) presented this LS

WG4 notes that there are no performance requirements for the cases when TGPL2 is not equal TGPL1 (that his, the cases when two different pattern lengths are used). The network cannot use that configuration then because there no requirements defined, but the UEs have to implement it. Studies in WG4 have shown that there is no gain in having a second pattern with different length. WG4 proposes the other WGs to remove TGPL2 from their specifications.

The corresponding CRs to all the involved specifications are in RP-040524.
Hashem Madaddi (Three) objected removing this feature for R99 at this stage. The chairman noted that the CRs, if any, should be category C and not a pure correction, cat F. The discussion was delayed to the presentation of the CRs.

RP-040528   Reply LS (to N1-042069) on Selected PLMN and Network Sharing (TSG RAN WG2)
Gert-Jan van Lieshout (Samsung) presented this LS
The LS is noted. There is dedicated discussion in TSG CN this week, however the agreement is that the CRs will be brought for approval to the next plenary.

The following table summarizes the received LSs:

Tdoc	Title	Source	Source File
RP-040462	LS on the schedule for updating Rec. ITU-R M.1457 Rev6	ITU-R WP8F	146Rev1e
RP-040463	LS on considerations to avoid interference for terrestrial networks for onboard GSM networks	ETSI MSG	M-04-021
RP-040464	Reply LS on considerations to avoid interference for terrestrial networks for onboard GSM networks	TSG GERAN	GP-042906
RP-040465	LS on definition of RAT	TSG SA WG1	S1-040940
RP-040466	Reply LS on Definition of RAT	TSG CN WG1	N1-042097
RP-040467	Reply to LS on definition of RAT	TSG T WG3	T3-040740
RP-040468	LS on evolution of network architecture	TSG SA WG2	S2-043891
RP-040469	LS on guidance and error patterns for MBMS streaming simulations	TSG SA WG4	S4-040861
RP-040470	LS on the TSG RAN WG 3 Review of TR 32.804 v6.0.0	RAN WG3	R3-041655
RP-040471	LS on Radio Requirements for Remote Electrical Tilt (RET) equipment	RAN WG4	R4-040782
RP-040472	LS on compatibility studies of terrestrial and satellite UMTS/IMT2000	RAN WG4	R4-040735
RP-040473	LS on remove of TGPL2	RAN WG4	R4-040781
RP-040528	Reply LS (to N1-042069) on Selected PLMN and Network Sharing	RAN WG2	R2-042741

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

7.1   ITU-R Ad Hoc

Giovanni Romano (TIM) presented the documents on ITU-R matters.

RP-040462   LS on the schedule for updating Rec. ITU-R M.1457 Rev6 (ITU-R WP8F)
ITU-R WP8F informs the standardization bodies of the schedule for the Update #6 of M.1457. Technical inputs are to be submitted by 3rd October 2005, final references by May 2006. The documents below are the proposals from 3GPP TSG RAN ITU-R Ad Hoc group for the roadmap in 3GPP for this update.

RP-040456   Status Report ITU-R Ad Hoc (ITU-R Ad Hoc Contact Person)
RP-040508   Proposed initial submission for 'minimal' update of UTRA FDD and TDD in Rev6 of Rec ITU-R M.1457 (ITU-R Ad Hoc Contact Person)
RP-040509   Proposed action plan toward M.1457-6 in case of 'minimal' update (ITU-R Ad Hoc Contact Person)
RP-040510   Proposed initial submission for 'complete' update of UTRA FDD and TDD in Rev6 of Rec ITU-R M.1457 (ITU-R Ad Hoc Contact Person)

RP-040511   Proposed action plan toward M.1457-6 in case of 'complete' update (ITU-R Ad Hoc Contact Person)

RP-040512   Updated information on the Roadmap (ITU-R Ad Hoc Contact Person)

There are two proposals for dealing with 6th revision of ITU M.1457, a minimal update which will contain just an updated list of specifications (RP-040508, RP-040509); and a complete update with a revision of the prose sections on FDD and TDD in the Recommendation plus the updated list of specs (RP-040510, RP-040511). The cut off date will be October 2005.

The problem for TSG RAN at this moment is that it is very unclear what Rel-7 Work Items will be finished for the October deadline, so it is difficult to decide to go either for the minimal or the complete update. The WI most likely to be finished are those related to the new frequency bands, which anyway are of great interest for M.1457 updates. It must be noted that this update will imply the creation of the Rel-7 specification, albeit only those affected by the finished Work Items.

It is agreed to go for the complete submission (RP-040510, RP-040511), which involves an intermediate submission in May. The timing for this step is demanding, WG will be requested to contribute in their meetings in May and then the document to be submitted will be approved by correspondence.

For the initial submission, the documents to be sent are RP-040510 and RP-040512. Looking at the contents, it seems that they need to be revised and updated, notably to mention the Long Term Evolution activity. WG chairmen and Giovanni will produce revisions of these two documents.

RP-040536   Proposed initial submission for 'complete' update of UTRA FDD and TDD in Rev6 of Rec ITU-R M.1457 (ITU-R Ad Hoc Contact Person)

RP-040537   Updated information on the Roadmap (ITU-R Ad Hoc Contact Person)

The documents are approved without comments. The chairman will send them to 3GPP PCG and TSG SA for final approval.

7.2   TSG RAN WG1

7.2.1   Report from WG1 including report on actions required from the previous meeting

RP-040398   Status Report WG1 (RAN WG1 Chairman)

Dirk Gerstenberger (RAN WG1 chairman) presented this report. WG1 activity can be summarized as follows:

- Agreed change requests
    - 1 CR for Rel5 FDD
    - 12 CRs for Rel6 FDD (incl. Enhanced UL and MBMS)
    - 5 CRs for Rel6 TDD (incl. MBMS)
- Set of CRs agreed for FDD Enhanced Uplink
    - Major progress at RAN1#38bis, during intensive email ad hocs and at RAN1#39
    - Good cooperation between the experts across WG borders, co-location of WG meetings is showing positive results.
    - Completion level 80-90%.
- Set of CRs agreed for MBMS (FDD & TDD)
    - MICH and combining techniques completed and covered by CRs
    - FDD UE capability requirements agreed, but no CR available yet

- HS-DPCCH ACK/NACK Enhancements (See RP-040423)
    - RAN1 CRs technically endorsed
    - No consensus reached in RAN1 for including the scheme in Rel'6, the issue is raised to the RAN plenary for decision
- MIMO (See RP-040427)
    - No discussion (in line with guidance from RAN#25)
    - Parallel MIMO session planned during RAN1#40
- 7.68Mcps TDD option (See RP-040430)
    - No discussion (in line with guidance from RAN#25)
- Uplink enhancements for UTRA TDD (See RP-040431)
    - Latest TR 25.804 (v1.0.0) presented to RAN for information
    - No discussion (in line with guidance from RAN#25)
- Optimisation of channelisation code utilisation for TDD (See RP-040422)
    - Two contributions were discussed (1.28Mcps & 3.84Mcps)
- Optimisation of channelisation code utilisation for FDD (See RP-040421)
    - Set of five CRs (25.211-25.215) reviewed for F-DPCH
        - Taken as basis for CRs in other WGs
        - One slot format with 2 TPC and 2 Pilot bits, Allowing up to 4 users sharing one code
        - Closed loop power control for F-DPCH with TPC error rate as outer loop target
        - Set of CRs updated and circulated on RAN1 reflector
    - Until RAN1#40, a more optimised F-DPCH solution without pilot bits will be studied, which may then replace the current assumption
- FDD Enhanced Uplink (See RP-040429)
    - Set of L1 CRs ready for RAN approval, covering the essential L1 aspects of FDD Enhanced Uplink: Code mapping, channel structures, signalling channels, channel coding, HARQ functionality, TX diversity and beamforming, ...
    - Vital progress was made at RAN1#38bis & RAN1#39: very intensive email discussion phase between the meetings contributed significantly to the progress (450 mails in 30 days). Joint session with RAN2 and coordination of experts across WG borders did also help a lot
    - Issues to be addressed in the correction phase: mainly the exact timing relations for the UL/DL signaling and UE capabilities
- MBMS (See also RP-040425)
    - CRs for MICH agreed (FDD/TDD)
    - CRs for macro-diversity combining aspects agreed (FDD/TDD)
    - UE capability requirements
        - TDD CR agreed
        - FDD UE requirements for macro-diversity combining agreed, but no CR was provided yet
    - No agreement reached on TTI reordering

Giovanni Romano (TIM) asked about the future of MIMO. He noted that the Evolution WS agreed that MIMO will play an important role in the Long Term, but it seems also that the topic will be considered in next WG1 meeting. Dirk noted that from his point of view as chairman, and also his company's view, is to put MIMO inside the Evolution work and to avoid discussing MIMO two times, first for Rel-7 and then for the Future Evolution.

Derek Richards (IPWireless) noted that this approach contradicts the statement made above for the "normal" evolution of the UTRAN. David Pinkard (Lucent) preferred to keep it in its current form and do not delay it to the Long Term Evolution.

Evelyn Lestrat (Nortel) preferred that the MIMO for WCDMA and the MIMO in the future evolution align as much as possible, and hence the MIMO is not hurried but rather considered part of the Evolution. On the scheduled MIMO parallel session in the next WG1 meeting, she noted that it is acknowledged now that there are more aspects to MIMO than the purely physical layer. Experts on system aspects should be involved also, and so she was reluctant to hold this parallel WG1 meeting.

Antti Toskala (Nokia) expected that all the work on MIMO already carried out, in particular the channel models developed in the past, can be reused even if the modulation is different.

Dirk reminded that when dealing with topic, WG1 receives about 20 contributions from different companies each with its own flavour of MIMO. Achieving agreement in these conditions has proven very difficult so far.

Concerning the ACK/NACK Enhancement CRs, where the plenary will be requested to decide, it is asked that WG1 chairman provides some feedback of the situation in WG1. Dirk clarified that the views of companies ranged from very useful to not worth, and views were expressed to make it mandatory or optional. There was a broad range of opinions on this subject in WG1.

Most of the contributions in the last two meetings dealt with EDCH and MBMS, it may be implied that once that these two items are finished, WG1 will have spare time for the Future Evolution work. Dirk reminded that many contributions haven't been treated due to the lack of time, it can be expected that all those issues come back now that EDCH and MBMS workload diminishes.

RP-040399   List of CRs from RAN WG1 (RAN WG1)
This list is provided for information

7.2.2   Discussions on decisions from WG1

No discussions.

7.2.3   Approval of CRs to Rel'99 with linked CRs to Rel-4, Rel-5 & Rel-6

No documents.

7.2.4   Approval of independent CRs to Rel-4 with linked CRs to Rel-5 & Rel-6

No documents.

7.2.5   Approval of independent CRs to Rel-5 with linked CRs to Rel-6

RP-040447   CRs (Rel-5 Category F and Rel-6 Category A) to TS25.214 for Correction of downlink transmit power control in compressed mode (RAN WG1)
No comments, the CR is approved.

7.2.6   Approval of linked CRs where the leading one originated from WG1

No documents.

7.3   TSG RAN WG2

7.3.1   Report from WG2 including report on actions required from the previous meeting

RP-040400   Status Report WG2 (RAN WG2 Chairman)
Denis Fauconnier (RAN WG2 chairman) presented this report. WG2 activity can be summarized as follows:
- Release 99 corrections
    - Occupied 1 day of last Quarter only.
- Release 4 corrections
    - Very minor
- Release 5
    - Biggest part of the correction activities
- Release 6
    - MBMS
    - HSUPA
    - IMS
    - UTRAN sharing
- Two RAN2 meetings
    - Each time at least 3 days parallel sessions on MBMS and HSUPA
    - 1 day joint meeting with RAN1 on HSUPA in November
- On HSUPA, 6 conference calls prior to the November meeting, 3 conference calls after the November meeting. Wide involvement of RAN2 but also RAN1 experts. Showed very useful to review implementation of past agreements.
- Many e-mail reflector activities to progress MBMS and HSUPA
- Release 99 CRs:
    - Set of CRs to correct SMS CB optional functionality
    - One RRC CR to refer to the correct ITU version of ASN.1
    - 3 RABs/RBs examples added in 25.993
    - Agreement to remove the use of TGPL2 as recommended by RAN WG4
- Release 4: Two RRC CRs
- Release 5
    - HSDPA corrections
    - Some of it being the removal of some features felt not useful
    - Optimisations. Correction of some R99 functions not corrected in R99 specifications
    - Some Rel-5 clean-up
    - One addition of feature already discussed in RAN #24. Separate cell selection and re-reselection parameters for X_PCH and CELL_FACH
    - Several revisions (was agreed in meeting, then revised) of company submitted CRs in RP-040520
- MBMS
    - Two RAN2 meetings spent at least 3 full days each meeting on MBMS
    - Very big activitiy in between meetings, a lot of e-mail discussions

- Important commitment of resources from some companies, and attendance from all companies
- Several stage 2 discussions and modifications
- Stage 3 CRs provided to RAN Plenary for approval
- EDCH
    - Two RAN2 meetings spent at least 3 full days on E-DCH each time
    - Very big activitiy in between meetings
    - One day joint meeting with RAN WG1
    - Important commitment of resources from most companies
    - Work has been first focusing on progress of the Stage 2, and capturing of Stage 2 decisions in Stage 3
    - 4 CRs presented to RAN Plenary on stage 2, two technically endorsed and alternate.
    - Stage 3 CRs provided to RAN Plenary for approval
    - A few subjects will be completed by March 05, mainly finalisation of:
        - E-TFC selection/Scheduler and associated signalling
        - UE capability (with RAN WG1)
        - Mobility optimisations, if needed
- Enhancement of the support of network sharing
    - CRs on UTRAN sharing have been agreed, but part relevant to PLMN selection has been on purpose left open, leaving time for resolution of within CN
    - Agreed CRs consistent with RAN WG3 CRs
- ROHC for IMS
    - RAN WG2 decided to make ROHC mandatory in Release 6 for IMS. ROHC performance is essential for capacity/voice quality, ROHC has never been tested in 3GPP. In Release 4, it was answered that this is an IETF issue
    - ROHC used only in WB-AMR simulations in SA4. RAN WG2 decided to take the ROHC RFC, and to make the key parameters operator controlled in RRC.
    - At the last meeting, Ericsson brought a paper stating that the state machine described in ROHC RFC was only implementation guidelines, and should not constrain an implementation.
    - Question to RAN Plenary:
        - What the level of control operators need on ROHC behaviour/performance?
        - Should 3GPP specify ROHC implementation? Should 3GPP test ROHC and ROHC performance?

Concerning the bis meetings, for WG1 and WG2, TSG RAN chairman clarified that the PCG had only accorded MCC support if the meetings take place in ETSI, i.e. there is not additional budget requirement. Quoting from the report of PCG meeting #13:

> **Decision PCG13/3:** Request for MCC support of additional RAN WG meetings approved, within the constraints of the MCC budget.

This means that the bis meetings scheduled may not be supported by MCC, depending on the budget availability.

It is noted that the modification to refer to the latest ITU specification was also considered in WG3 time ago, but the group decided to introduce the correction in the current Release and not to go back to R99. WG2 has agreed to start on R99, Denis clarified that the other choice was to modify the ASN.1.

On the impact on the RAN specifications of the PS Handover under development in GERAN (slide 29), companies are request to contact their GERAN colleagues and discuss internally so that the impact of the work carried over within WG2 can be identified.

On the ROHC discussion, Denis asked the group for guidance for WG2. Should WG2 specify a implementation? The view of a few operators was the need to analyse and confirm the performance improvement achieved with ROHC. To arrive to conclusions, it will be necessary to precise the ROHC parameters and to specify an implementation.

Joachim Bergstrom (Ericsson) noted that specifying certain ROHC parameters in the RRC is not going to ensure a given performance.

Jussi Numminen (Nokia) recommended to keep separated the discussion on behaviour/parameters and performance. As ROHC is on a high layer, its performance is not easy to measure by in RAN usual methods. The behaviour depends on the different implementations of companies and interoperability should be ensured by the usual method, IOT testing.

A proposal is to set up a normative annex including parameters for behaviour, but the performance needs to be handled separately. Jussi noted that ROHC performance and testing is somehow linked to the request from SA WG4 for error patterns. RAN WGs shouldn't define performance requirements of modules on higher layer.

Finally, it is agreed that WG2 will continue to look at the behaviour/parameters issues and performance requirements for ROHC.

Related to error patterns and performance issues, close liaison with SA WG4 should be maintained.

Rel-5 implementations are now left in the void, Jussi and Denis preferred that Rel-5 terminals are consistent with whatever behaviour is agreed for Rel-6. Alan Law (Vodafone) expected that operators would request their providers to implement the Rel-6 solution also for Rel-5 terminals, once that that solution is agreed.

RP-040525   List of CRs from RAN WG2 (RAN WG2)
This list is provided for information

7.3.2   Discussions on decisions from WG2

No discussions

7.3.3   Approval of CRs to Rel'99 with linked CRs to Rel-4 , Re-5 & Rel-6

The 3 documents in the table below contain CRs agreed by WG2 and were approved without comments

Document	Title
RP-040474	CR to 25.331 R'99 (with linked Rel-4/Rel-5/Rel-6) on reference to ITU-T Recommendations on ASN.1
RP-040475	CRs to 25.993 (R'99 affected, Rel-6 Version)
RP-040476	CRs to 25.925, 25.324 and 25.331 R'99 (with linked Rel-4/Rel-5/Rel-6) on CBS related Corrections

7.3.4   Approval of independent CRs to Rel-4 with linked CRs to Rel-5 & Rel-6

RP-040477   CRs to 25.331 Rel-4 (with linked Rel-5/Rel-6) (RAN WG2)
The CRs are approved without comments

7.3.5 Approval of independent CRs to Rel-5 with linked CRs to Rel-6

The 8 documents in the table below contain CRs agreed by WG2 and were approved without comments

Document	Title
RP-040478	CRs to 25.303 Rel-5 (with linked Rel-6) (RAN WG2)
RP-040479	CRs to 25.306 Rel-5 (with linked Rel-6) on Alignment of MaxHcContextSpace (RAN WG2)
RP-040480	CRs to 25.321 Rel-5 (with linked Rel-6) (RAN WG2)
RP-040481	CRs to 25.331 Rel-5 (1) (with linked Rel-6) (RAN WG2)
RP-040483	CRs to 25.993 (Rel-5 affected, Rel-6 Version) on HSDPA RABs (RAN WG2)
RP-040504	CRs to 25.322 Rel-5 (with linked Rel-6) (RAN WG2)
RP-040515	CRs to 25.308 Rel-5 (and Rel-6) (RAN WG2)

RP-040482   CRs to 25.331 Rel-5 (2) (with linked Rel-6) (RAN WG2)
CRs 2456, 2457 are revised in RP-040526, the category is incorrect.
CRs 2471, 2472 are revised by RIM in RP-040520 after comments in WG2 reflector.
The rest of the CRs in the document are approved

RP-040505   CRs to 25.331 Rel-5 (3) (with linked Rel-6) (RAN WG2)
CRs 2479, 2480 are revised by Qualcomm in RP-040522 after discussion in WG2 reflector
The rest of the CRs in the document are approved

RP-040506   CRs to 25.304 Rel-5 (with linked Rel-6) (RAN WG2)
CRs 120, 121 are revised in RP-040526, the category is incorrect.
The two other CRs in the document are approved

RP-040526   CRs to 25.304 and 25.331 on cell selection and reselection parameters (RAN WG2)
The CRs are approved without comments.

RP-040520   Correction to Rel-5 TS25.331 CR2471r2/2472r2 on TFC Subset Variable Usage and Application of Transport Format Combination Subset (RIM)
The CRs are approved without comments.

RP-040522   CRs to TS25.331 (Rel-5 & Rel-6 Cat A) on Criteria for initiating cell update on receiving "Frequency info" IE in CELL UPDATE CONFIRM message (Qualcomm)
Francesco Grilli (Qualcomm) noted that comments had been received on the Rel-6 CR on WG2 reflector, requesting that additional changes, not simply a shadow Cat-A, should be included as well for that Release 6.
The group agreed to go ahead with the current Cat-A and, if needed in the future, the additional changes will be included with another CR. WG2 is tasked to look at the issue, both CRs in RP-040522 are approved.

7.3.6 Approval of linked CRs where the leading one originated from WG2

No documents

7.4 TSG RAN WG3

7.4.1 Report from WG3 including report on actions required from the previous meeting

RP-040402   Status Report WG3 (RAN WG3 Chairman)

Alexander Vesely (RAN WG3 chairman) presented this report. WG3 activity can be summarized as follows:
- RAN3 agreed CRs:
    - no R99 / Rel-4 CRs
    - 9 Rel-5 CRs (9 cat. F)
    - 61 Rel-6 CRs (9 cat.A, 28 cat.F, 24 cat.B), ncluding CRs for MBMS (8), E-DCH (6), NetSharing (5), F-DPCH (5), RET (23)
    - 1+1 technically endorsed CRs Cat.B R6 (TEI-6, SCUDIF)
- correction of SIB encoding on Iub agreed
- MBMS: stage 3 finalised
- E-DCH: stage 3 sufficiently completed (ASN.1 missing)
- Network Sharing: stage 3 finalised
- fractional DPCH: stage 3 finalised
- RET: correction work agreed, only few topics left
- TEI-6 work on network initiated SCUDIF (technically endorsed CRs available)
- Rel-5 issues:
    - Encoding of SIB over Iub
    - both interpretations allowed in NBAP
    - configurable via O&M
    - normative Annex section describing both alternatives
    - small corrections for RNSAP and NBAP
    - Handling of NAS messages during multiple relocations
    - inherited from RAN2 discussions
    - RANAP related discussion ongoing
    - NAS Service Change Indicator for Rel-5 SCUDIF support
    - on request from CN1
    - not agreed in RAN2, related activities stopped
- FDD Enhanced Uplink: UTRAN Iub/Iur Protocol Aspects
    - principles of control and frame protocol aspects were discussed @RAN3#44
    - CRs containing basic E-DCH functionality agreed
    - open issues: RNL measurements, Iub/Iur congestion control, detailed Frame Protocol handling
- Enhancement of Broadcast and Introduction of Multicast Capabilities in RAN
    - CRs ready for approval (with ASN.1)
- Enhancement of the support of network sharing in the UTRAN
    - one final issue on providing of to-be-indicated PLMN Id closed
    - *stable* CRs available covering complete functionality
- Optimisation of downlink channelisation code utilisation FDD
    - Iur/Iub principles introduced @ #44, complete set of CRs provided @ #45
    - agreed CRs based on latest discussion status in RAN1 / 2
- Remote Electrical Tilting Antennas
    - was handled mainly in parallel sessions
    - activities on RET can be regarded as „normal" specification clean-up, making TSs consistent, removing FFSs, etc.

- parallel session with RAN4

Of interest for the RET work, the chairman informed that the AISG has been finally established as a legal entity. It is now possible to introduce references to their specifications in 3GPP specifications.

RP-040403   List of CRs from RAN WG3 (RAN WG3)
This list is provided for information

7.4.2   Discussions on decisions from WG3

No discussions

7.4.3   Approval of CRs to Rel'99 with linked CRs to Rel-4 , Rel-5 & Rel-6

No documents

7.4.4   Approval of independent CRs to Rel-4 with linked CRs to Rel-5 & Rel-6

No documents

7.4.5   Approval of independent CRs to Rel-5 with linked CRs to Rel-6

The 4 documents in the table below contain CRs agreed by WG3 and were approved without comments.

Document	Title
RP-040432	CRs (Rel-5 and Rel-6 category A) to TS 25.412 ip-transport
RP-040433	CRs (Rel-5 and Rel-6 category A) to TS 25.423
RP-040434	CRs (Rel-5 and Rel-6 category A) to TS 25.433
RP-040435	CRs (Rel-5 and Rel-6 category A) to TS 25.423 and TS 25.433

7.4.6   Approval of linked CRs where the leading one originated from WG3

No documents

7.5   TSG RAN WG4

7.5.1   Report from WG4 including report on actions required from the previous meeting

RP-040404   Status Report WG4 (RAN WG4 Chairman)

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

- 1 RAN WG4 meeting after the last RAN meeting
- Joint adhoc held with RAN 3 on RET
- Usual number of delegates (around 80)
- ~200 input contributions
- Corrections to the specification (cat B & F numbers)
    - Release 99 -   0 CRs
    - Release 4 -   0 CRs
    - Release 5 -   5 CRs
    - Release 6 –   12 CRs
- There will be one WG meeting before the next plenary.
- Release 99 – Rel-5:
    - Continue to see a number of issues raised by T1 on RAN 4 specifications
    - Proposal to remove "test cases" from 25.133: CR to be discussed at next RAN 4 meeting. However, guidance on test cases will continue to be given to T1 from RAN 4
- Release 6:
    - Request to study UE receiver blocking specifications for the US region
    - RET – some work transferred from RAN 3
    - TEI
        - Further discussions on cell search requirements – no CR yet.
        - TGPL2 – agree to remove. LS sent to other WGs
        - UE antenna testing – COST work completed, recommend work started again in RAN 4
        - Discussion on outer loop power control continue
        - CR on Windup test to be completed at next RAN 4 meeting
- UE Receive Diversity for HSDPA
    - Simulation work near completion, excellent participation, 8 sets of results. 10 code implement margin under consideration.
- Improved Minimum Performance Requirements for HSDPA UE categories 7 and 8
    - Simulation assumptions agreed
    - Work progressing via email
- Enhanced uplink
    - Work underway but slow progress
    - Conference calls started to speed things up
- 2.6 GHz
    - Work underway
    - disagreements over scope of work
- MBMS performance requirements
    - Work underway
    - Concerns over progress in other working group
    - Completion date moved out to Sept 05
- 7.68 mcps TDD
    - TR skeleton presented
    - Concerns over links with 2.6 GHz WI raised

It was requested that the work on MBMS UE performance is speeded in order to conclude by June and not by September, the new completion date estimated in WG4. Howard explained that the problem with MBMS, which has already been solved for EDCH, is that the simulation assumptions haven't been agreed yet and it seems that it is going to take more than expected. It is reminded that the work is

contribution driven, and noted that WG4 has not the heavy load of the other groups. Companies are asked to contribute if their interest is to progress faster.

On Annex A in 25.133 (slide 3), Per Beming (Ericsson) asked if the deletion of the annex means that the responsibility of the test conditions is also removed and sent to T WG1. Edgar Fernandes (Motorola) explained that many proposals for CRs to that Annex are editorials coming from T WG1 and intended for R99. These are clarification that T WG1 needs for their tests. There are two unnecessary steps that can be avoided, it doesn't mean that WG4 gives up his responsibility in producing a first guideline of what parameters have to be used in the tests.
Jussi Numminen (Nokia) noted that it cannot be a sharp and full transfer of responsibility of the annex. It has to be taken case by case, and only those test cases that are mature from WG4's perspective will be passed to T WG1.
It was noted that this may have an impact on the Terms of Reference of the groups, which may need to be clarified.

It is clarified that there are two issues on the Outer Loop PC: The PC convergence test case, and the Wind Up effect test case.

RP-040535   List of CRs from RAN WG4 (RAN WG4)
This list is provided for information

7.5.2   Discussions on decisions from WG4

No discussions

7.5.3   Approval of CRs to Rel'99 with linked CRs to Rel-4 , Rel-5 & Rel-6

No documents

7.5.4   Approval of independent CRs to Rel-4 with linked CRs to Rel-5 & Rel-6

No documents

7.5.5   Approval of independent CRs to Rel-5 with linked CRs to Rel-6

The 3 documents in the table below contain CRs agreed by WG4 and were approved without comments

Document	Title
RP-040406	CRs (Rel-5 and Rel-6 Category A) to TS25.101 on Omissions in sec. 7.6 (Blocking)
RP-040407	CR (Rel-5) to TS25.101 for the modification of section 9.3 for HSDPA requirements
RP-040408	CRs (Rel-5 and Rel-6 Category A) to TS25.133 under TEI

7.5.6 Approval of linked CRs where the leading one originated from WG4

RP-040524 **Proposed CRs (R99 Cat F and Rel-4, Rel-5, Rel-6 Cat A) to 25.101, 25.133, 25.215, 25.331, 25.423 and 25.433 for Removal of TGPL2 (Ericsson, Nokia)**

This document contains linked CRs related to the LS in RP-040473.

Francesco Grilli (Qualcomm) explained that the removal of features in WG2 takes the form of leaving the UE behaviour unspecified. A note can be added to underline this.

Similarly, Alex Vesely (Siemens) preferred that the WG3 CRs do not delete the IE but the semantics description is changed according to the CR. This is the usual approach in WG3.

Michael Roberts (NEC) noted that a similar problem will arise in T WG1 test specifications, which have several occurrences of TGPL2.

Edgar Fernandes (Motorola) raised a serious concern on how this issues has been handled. These CRs pose a burden on UE manufacturers who have already implemented the second pattern length and now end up having to revise their implementations. He asked for a full revision of these kind of features followed by a broad agreement on what features are not needed, even if each removal is opposed by a company, the overall gains will compensate the losses on a specific issue. He asked for operators to be clear on this and then manufacturers to accept the conclusions.

Howard Benn (WG4 chairman) explained that WG4 had studied this issue for long time and come to the conclusion that TGPL2 didn't bring a benefit. The feature was introduced long time ago in WG1 and unfortunately, it is only now that WG4 has looked at the performance aspects to discover that it is useless. Howard remarked that this is an ongoing problem due to the working procedures, WG4 can only start looking at the real performance only when WG1 and WG2 have completed their specification.

Antti Toskala (Nokia) reminded that GERAN is very often removing features when the operation in the field comes to show that they are not useful, this is a common and accepted procedure there.

Motorola, Three and RAN vice-chair supported the CRs for Rel-4 onwards, but not for R99.

After a show of hands on the approval of the R99 CRs, there wasn't a clear majority. The discussion is taken off line, but it is noted that in any case, some CRs have technical issues that will need to be solved in the WGs.

The CRs in RP-040524 are not approved.

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8 Release 6 and beyond: Status update and approval of CRs, reports

8.1 Radio Interface Improvement Feature

8.1.1 Improved Receiver Performance Requirements for HSDPA

8.1.1.1 Performance Requirements of Receive Diversity for HSDPA

RP-040417 **Status Report for WI Performance Requirements of Receive Diversity for HSDPA (NTT DoCoMo)**

Takehiro Nakamura (NTT DoCoMo) presented this report
No comments, the report is noted. The completion date remains March 2005

RP-040534   CR (Rel-6) to TS25.101 for the introduction of requirements for FRC for PA3 cases (RAN WG4)
The CR is approved

8.1.1.2 Improved Minimum Performance Requirements for HSDPA UE categories 7 & 8

RP-040418   Status Report for WI Improved minimum performance requirements for HSDPA UE categories 7 & 8 (Nokia)
Jussi Numminen (Nokia) presented this report
Completion date is June 2005. Jussi commented that this WI should remain inside Rel-6.

8.1.2   UMTS2600

RP-040419   Status Report for WI UMTS 2.6GHz (Nokia)
Antti Toskala (Nokia) presented this report
Interdigital objected that the WI Sheet had been endorsed in WG4. In its view it only contains a fraction of the work that should be performed under this WI.

Howard Benn (WG4 chairman) remarked that the discussion on the endorsement is pointless, the issue to be discussed here is whether the TDD part should be included in the WI or a separate WI should be created.

Volker Hoehn (Vodafone) commented that the ECC Decision is so far a draft, to be finalised by December, and recommended to update the WI sheet when this is concluded in the ECC.

On the issue of the TDD WI, a few companies preferred a separate WI Sheet. IPWireless is presenting a proposal for such WI in RP-040454

RP-040397   UMTS 2.6 GHz WI sheet update (Ericsson)
Thomas Unshelm (Ericsson) presented this revised WIDS
No comments, the proposed revised WI Sheet is approved.

8.2   RAN Improvement Feature

8.2.1   Radio access bearer support enhancement

RP-040420   Status Report for WI RAB support enhancement (Nokia)
Antti Toskala (Nokia) presented this report
It is noted that so far WG4 is not aware of the issue it is supposed to investigate. It seems that a LS was sent to WG1 to WG4 after WG4 meeting had finished.
The timescale in WG4 seems challenging, there is an interference issue when having two scrambling codes that hasn't been studied before.
Volker Breuer (Siemens) noted that the LS fromWG1 only points to the power control / SIR behaviour, but doesn't mention the interference issue.

There was debate on the completion date, now that WG4 has also to look at the issue. It was found preferable to delay that discussion to March, and then if needed, the secondary scrambling code functionality will be kept out of Rel-6.

It is clarified that the secondary scrambling code work is FDD only, the ROHC part is common to both modes. Antti clarified that for TDD it is possible to achieve the same functionality by other means.

It was asked what would happen if it is shown that the secondary scrambling code doesn't work. Would that mean that the whole feature of optimisations for IMS is withdrawn? Denis Fauconnier (WG2 chairman) explained that the sec. scrambling code is just a possibility for the case of overflow, there is also the ROHC feature and other mechanisms can be found in the future. Concerning the WI itself, it is a basket that exists on every Release. It can be closed for Rel-6 in March, and further enhancements will be input to Rel-7.

TR 25.862 v1.3.0 can be found in R2-042366.

8.2.1.1 Optimization of downlink channelization code utilization

RP-040421   Status Report for WI Optimisation of downlink channelisation code utilisation (Nortel)
Evelyne Lestrat (Nortel) presented this report
It is proposed to move the completion date to March 2005, there is general belief that this is achievable in all WGs. The CRs from WG3 below are postponed and will be presented again together with the full bundle. It will be proposed to TSG SA to be kept this feature in Release 6.

RP-040436   CRs (Rel-6 category B) for the introduction of Fractional DPCH in RAN3 specifications (RAN WG3)
The CRs are withdrawn

8.2.1.2 Optimization of channelization code utilization for TDD

RP-040422   Status Report for WI Optimisation of channelisation code utilisation for TDD (IPWireless)
Derek Richards (IPWireless) presented this report
The 3.84 Mcps TDD part can be completed by March, the Low Chip Rate part is lagging behind and it is doubtful it can be finished ~~by then~~at the same time. In this situation, a solution can be to make this WI for 3.84 Mcps only and to create a second to be completed for a later release.

8.2.1.3 HS-DPCCH ACK/NACK enhancement

RP-040423   Status Report for WI HS-DPCCH ACK/NACK Enhancement (Nokia)
Antti Toskala (Nokia) presented this report
Antti noted that this report is already outdated after the extensive discussions that have taken place in the email reflectors and off line in this meeting.
It was commented that some of the CRs below were approved by email, which given the criticality of the issue, is probably not the best procedure. Antti clarified that the critical CRs were anyway discussed live in the meetings.

RP-040543   CR to 25.331 Rel-6 on HS-DPCCH transmit power reduction (RAN WG2)
No comments, the CR is approved

RP-040518   CR to 25.433: HS-DPCCH ACK/NACK preamble and postamble (Nokia, Philips, Siemens)
RP-040519   CR to 25.423: HS-DPCCH ACK/NACK preamble and postamble (Nokia, Philips, Siemens)
RP-040527   RAN1 CRs on Preamble and Postamble to Reduce HS-DPCCH transmit power (Nokia, Philips, Siemens)
No comments, the CRs in RP-040518, RP-040519 & RP-040527 are approved

Hans van der Veen (NEC) didn't oppose the approval but commented on the situation for this item, where only the proponents have a strong favourable view on the benefits. Many companies had expressed strong doubts on these benefits, but were not willing to dedicate effort to the work. Other UE manufacturers were not convinced of the benefits, operators were mildly in favour, and network manufacturers didn't get involved in the discussion as the feature is defined as optional for the network. Hans expressed disappointment on how the whole item has been carried out.

The Work Item is completed.

8.2.2   RRM optimizations for Iur and Iub

No contributions

8.3   UE Positioning

8.3.1   Inclusion of Uplink TDOA UE positioning method in the UTRAN specifications

RP-040424   Status Report for WI Inclusion of Uplink TDOA UE positioning method in the UTRAN specifications (TruePosition)
Rhys Robinson (TruePosition) presented this report
Howard Benn (WG4 chairman) asked for confirmation that the WI as is includes the WG4 part of the work for the LMU. This was confirmed by the group.

8.4   Introduction of the Multimedia Broadcast Multicast Service (MBMS) in RAN

RP-040425   Status Report for WI Introduction of MBMS in RAN (physical & upper layers, access network interfaces) (Nokia)
Antti Toskala (Nokia) presented this report
Antti reported that the work can now be considered finished, including the ASN.1. Only WG4 part remains.
Giovanni Romano (TIM) thanked the companies for their long effort on this item, and hoped that now WG4 can work having the specifications in the other groups ready.

The documents below contain the MBMS CRs agreed by the WGs and were approved without comments:

Document	Title	Source
RP-040446	CR (Rel-6 Category B) to TS25.212 for Introduction of MBMS Soft Combining	RAN WG1
RP-040448	CR(Rel-6 Category B) to TS25.214 for Introduction of MBMS Soft Combining	RAN WG1
RP-040450	Linked CRs (Rel-6 Category B) to TS25.211 & TS.25.213 & TS 25.214 for Introduction of MICH	RAN WG1
RP-040451	Linked CRs (Rel-6 Category B) to TS25.221 & TS25.222 & TS25.224 for Introduction of MICH	RAN WG1
RP-040452	CR (Rel-6 Category B) to TS25.224 for Introduction of MBMS soft combining for TDD	RAN WG1
RP-040488	CR to 25.304 Rel-6 on the introduction of MBMS	RAN WG2
RP-040489	CRs to 25.321 Rel-6 on the introduction of MBMS	RAN WG2
RP-040490	CRs to 25.322 Rel-6 on the introduction of MBMS	RAN WG2
RP-040491	CRs to 25.331 Rel-6 on the introduction of MBMS	RAN WG2
RP-040492	CRs to 25.346 Rel-6 on MBMS Stage 2	RAN WG2
RP-040437	CRs (Rel-6 category B) for the introduction of MBMS in RAN3 specifications	RAN WG3

Note: The cover page of CR007r1 to 25.346 in RP-040492 is incorrect; the spec number appears as 25.436 when it should be 25.346.

RP-040438   for information - draft MBMS changes for TS 25.402 (RAN WG3)
These CRs need to be revised and a new version will be discussed in February in WG3 and re-presented for approval. The document is noted

8.4.1   MBMS performance requirements

RP-040426   Status Report for WI UE Performance Requirements for MBMS (Ericsson)
Thomas Unshelm (Ericsson) presented this report
The completion date is delayed to September 2005, but the item remains in Rel-6

Howard Benn (WG4 chairman) explained that the situation now is that WG4 will start looking at performance issues and as a result of this work it may be needed to introduce substantial changes to MBMS in WG1. However, WG1 work item (common WG1/WG2/WG3 in this case) is closed, such changes would be not allowed. Howard suggested to keep the MBMS work item open until WG4 finishes its performance evaluation in order to allow these changes which cannot be categorized as simple corrections.
A solution to this problem is that WG4 collaborates closer with WG1 in the simulations and in the specification of the new features, so the problem issues are identified earlier.

Concerning the status of MBMS now, it is clarified that the Building Block "Introduction of MBMS in RAN" remains open, the Work Task "Introduction of MBMS in RAN (physical & upper layers, access network interfaces)" has reached the 100% completion, and the WG4 Work Task "UE Performance Requirements for MBMS" is open, 10% completed, and to be finished by September 2005.

Status Report will only be required for the WG4 Task. Reporting of MBMS issues in the other groups will be done via the Chairman's Reports. If an issue affecting other groups is discovered in WG4, it can be reported in the Work Task Status Report as well.

8.5   Multiple Input Multiple Output Antennas

RP-040427   Status Report for WI Multiple Input Multiple Output antennas (MIMO) (Lucent)

David Pinkard (Lucent) presented this report
No progress on MIMO in the last 3 months on any of the groups.

RP-040538   Way forward with MIMO Work Item (RAN WG1 Chairman)
Dirk Gerstenberger (Ericsson) presented this document
This paper shows that there is a strong relation between MIMO as defined now and the Long Term
Evolution work. Ericsson proposes 3 options as a way forward:
1) Decide to move MIMO (at least FDD) to LTE Study Item
2) Decide that RAN1 shall continue work on stand-alone MIMO at RAN1#40 in February ignoring relation to LTE
3) Decide to put RAN1 work on MIMO on hold for one more quarter and review the situation at RAN#27

A majority of companies preferred option 3), but the hold period was debated. Dirk reassured that the delay doesn't mean that MIMO has no future in 3GPP, he reminded that most of the contributions seen in the Evolution WS included MIMO in one form or another.

Siemens expected that this approach is an exception and doesn't become a rule where proposals and features for the normal enhancement of WCDMA get blocked due to the LTE activity.

The situation for TDD was more controversial. IPWireless preferred to continue the work in WG1 in order to be able to have MIMO for TDD in Rel-7.

Orange raised concern on the fact that TSG RAN forbids WG1 to work on MIMO.

The final agreement is that companies interested in MIMO can continue working outside the 3GPP meeting time, an email reflector can be set for it if required. Any conclusion can be presented in TSG RAN when the MIMO topic is taken back to the agendas, which is agreed to be meeting#28. This applies to both FDD and TDD MIMO.

8.6   Enhancement of the support of network sharing in the UTRAN

RP-040428   Status Report for WI Enhancement of the support of network sharing in the UTRAN (TeliaSonera)
Per Ernstrom (TeliaSonera) presented this report
The WI is completed and closed with the CRs below.
It was asked what was the status of the CN discussion on PLMN selection. Per clarified that it doesn't affect the WI directly, the correction will be included later when CN agrees on a solution.

The documents below contain the CRs agreed by the WGs for the introduction of this feature and were approved without comments:

Document	Title	Source
RP-040439	CRs (Rel-6 category B) for the introduction of "enhancement of the support of network sharing" in RAN3 specifications	RAN WG3
RP-040494	CR to 25.304 Rel-6 on Network Sharing and multiple PLMN identities	RAN WG2
RP-040495	CRs to 25.331 Rel-6 on Network Sharing and multiple PLMN identities	RAN WG2

8.7   FDD Enhanced Uplink

RP-040429   Status Report for WI FDD Enhanced Uplink (Ericsson)

Joachim Bergstrom (Ericsson) presented this report

Antti Toskala (Nokia) clarified that the amount of open issues is more or less the same in WG1 and WG2, despite the impression that the report gives.

Concerning the pending issue on compress mode, Dirk Gersternberger (WG1 chairman) clarified that there is no problem with a 2ms TTI.

The documents in the table below contain the CRs agreed by the WGs for the introduction of Enhanced Uplink. All CRs were approved without comments:

Document	Title	Source
RP-040440	CRs (Rel-6 category B) for the introduction of Enhanced uplink in RAN3 specifications	RAN WG3
RP-040484	CR to 25.301 Rel-6 on the introduction of Enhanced Uplink	RAN WG2
RP-040497	CR to 25.321 Rel-6 on the introduction of Enhanced Uplink	RAN WG2
RP-040507	CR to 25.331 [Rel-6] on the introduction of Enhanced Uplink	RAN WG2
RP-040486	CRs to 25.309 Rel-6 on Enhanced Uplink Stage 2 (Agreed)	RAN WG2

RP-040487   CRs to 25.309 Rel-6 on Enhanced Uplink Stage 2 (Technically endorsed) (RAN WG2)

These two CRs are exclusive and due to the fact that after agreement of the principle in the meeting, there was divergence on the interpretation after the meeting. CR002 was favoured by most of the companies in the discussion in the email reflector. CR002 is approved and CR004 is rejected.

RP-040449   Linked CRs (Rel-6 Category B) to TS25.201 & TS25.211 & TS25.212 & TS.25.213 & TS 25.214 & TS25.215 for Introduction of E-DCH (RAN WG1)

All CRs are approved except CR071r2 to 25.213.

RP-040539   CR071r3 to 25.213, Introduction of E-DCH (Motorola et al)

LG and Lucent requested time to analyse this CR in house, as it hasn't been sufficiently discussed in WG1. Edgar Fernandes (Motorola) noted that this CR is essential for the introduction of EDCH in WG1, and also for WG4 to start the simulation work. He proposed that the CR is approved and if companies have concerns, they are studied in WG1.

The changes are based on simulations performed by Motorola and Qualcomm, later confirmed by Nokia and Samsung, that show that the revision is a better solution than the original CR.

After off line discussions, it is agreed to approve and implement the CR and to give a 2 weeks period for objections. If there are any, WG1 chairman agreed that the item would be included in the WG1 agenda so that a corrective CR can be presented in the next WG1 meeting. The corrections will deal only with the changes made by Motorola to the previous WG1-agreed CR. The rest of the CR is completely approved and shall not be debated in the 2 weeks period.

The CR is approved

RP-040485   CR to 25.302 Rel-6 on the introduction of Enhanced Uplink (RAN WG2)

This CR is revised in the document below.

RP-040540   CR to 25.302 Rel-6 on the introduction of Enhanced Uplink (Nortel)

The rationale for this revision is to remove the Fractional DPCH which had been included in the previous CR. It shouldn't be there as it is part of another WI which is in fact delayed to March.

The CR is agreed, but a revision will be produced to remove the changes over changes and leave a clean CR.

RP-040550   CR to 25.302 Rel-6 on the introduction of Enhanced Uplink (Nortel)
No comments, the CR is approved.

RP-040530   TR 25.808 FDD Enhanced Uplink physical layer aspects v1.0.0 (Nokia)
The TR is noted.

On the status of the WI, companies preferred to keep the WI s open, noting that in WG1 it is almost finished but in WG2 and WG3 is clear that 3 additional months are necessary. For consistency, the completion date of the three WGs is moved to March, WG4 part is kept for June.

8.8   7.68 Mcps TDD Option

RP-040430   Status Report for WI 7.68 Mcps TDD (IPWireless)
Derek Richards (IPWireless) presented this report.
It is clarified that the WI is intended for the existing bands, the WI for the extension bands is separate and unrelated.

8.9   Technical Small Enhancements and Improvements

The documents in the table below contain the CRs under the TEI feature agreed by the WGs. All CRs were approved without comments:

Document	Title	Source
RP-040410	CRs (Rel-6) to TS25.104/TS25.141 on Power Control step test requirements for 1.5 dB and 2 dB	RAN WG4
RP-040411	CRs (Rel-6) to TS25.105/TS25.142 on Clarification to note on spurious emissions	RAN WG4
RP-040412	CRs (Rel-6) to TS25.101/ TS25.105/ TS25.113/ TS25.133/ TS25.141 under TEI6	RAN WG4
RP-040441	CRs (Rel-6 category F) for correction of outdated ITU-T references in RAN3 specifications	RAN WG3

RP-040442   CR (Rel-6 category B) to TS 25.413 on Network-initiated Scudif in Release 6 - proposal 1 (RAN WG3)
RP-040443   CR (Rel-6 category B) to TS 25.413 on Network-initiated Scudif in Release 6 - proposal 2 (RAN WG3)
These documents present alternate solutions. It was noted that the CN part is not ready and the CRs have not been presented there. To resolve the issue in RAN, the conclusion in CN is required. Once this is clear, the discussion in WG3 will be straightforward. The chairman will report the issue to TSG SA. The CRs are not approved.
Giovanni Romano (TIM) preferred that at least RAN decides on one of the options, in order to advance the work. It was clarified that if this is followed, it may happen that CN goes for the other option. In any case, it is agreed that this should be part of Rel-6.
The CRs in RP-040442 and RP-040443 are not approved.

RP-040455   CR (Rel-6 Category B) to TS25.215 for Introduction of 'DL Transmission Branch Load' measurement (RAN WG1)
RP-040460   CRs to 25.133, 25.302, 25.433 for the Introduction of 'DL Transmission Branch Load' measurement (Siemens)
Howard Benn (Motorola) noted that this measurements was discussed in WG4 and it wasn't clear there its usefulness. It was briefly explained that this will avoid congestion when only one of the TX diversity branches is overloaded. Currently, there is only one total indication of the load. Howard

acknowledged this fact, but still wondered what can the RNC do with the new information. Dirk Gerstenberger (WG1 chairman) explained that having the information in the RNC will allow for a better allocation of power to the branches hence a more efficient use of the power amplifiers.

The accompanying CRs to WG2, WG3 and WG4 specifications haven't been formally agreed by the WGs and are presented as company contributions. They have been circulated in the corresponding reflectors, where only the some of the details in the protocols in 25.433 have been disagreed.

The principle of the new measurement is approved, and the WG1, WG2, WG4 CRs can be approved, but the WG3 needs further elaboration. In this situation, it was found preferable to wait until the full set of CRs is agreed in the WGs. The feature however is to be included in Rel-6.
The CRs in RP-040455 and RP-040460 are not approved.

RP-040459   CR (Rel-6 Category C) to TS25.224 for Improvements to uplink closed-loop power control for 1.28Mcps TDD (RAN WG1) (RAN WG1)
CRs for WG2 specifications are required, but haven't been produced yet. It is preferred to have the full set together, like in the case above, the CR is not approved

There was a short debate on what can still be presented under TEI6, where WGs would like to have some CRs in March. The chairman argued that if WGs need to keep TEI6 open for 3 additional months it should be clear what is going to be introduced under its umbrella. WG chairmen noted that it is difficult to produce a list of potential TEI6 issues, the request from their side is simply to have 3 months to deal with all the small issues that have been postponed because the WGs have been busy with other, more important, Rel-6 items. It is finally agreed that TEI6 is open until March.

8.10   Closed Release-6 Work Items and Rel-6 CRs under old Work Items

The documents in the table below contain CRs agreed by the WGs for Rel-6 features already completed. All CRs were approved without comments:

Document	Title	Source
RP-040413	CR (Rel-6) to TS25.171 under the AGPS performance WI for the removal of inconsistencies	RAN WG4
RP-040414	CRs (Rel-6) to TS25.101 under HSDPA	RAN WG4
RP-040444	CRs (Rel-6 category F) to TS 25.460, TS 25.461 and TS 25.462	RAN WG3
RP-040445	CRs (Rel-6 category F) to TS 25.463	RAN WG3

8.11   Study Items

8.11.1 Evolution of UTRAN Architecture ~~(On Hold)~~

Alex Vesely (WG3 chairman) proposed to close this Study and to continue the work under the Long Term Evolution. It is noted that there is a TR to cover the work, TR25.897 "FS on the Evolution of the UTRAN architecture" currently available in version 0.5.0.~~currently in v0.x.x~~.
Alex proposal is agreed, the Study is closed and that the TR is stopped

8.11.2   Uplink Enhancements for UTRA TDD

RP-040431   Status Report for FS on Uplink enhancements for UTRA TDD (Interdigital)
Jim Miller (Interdigital) presented this report
No comments, completion date moved to March 2005

RP-040516   TR 25.804 v1.0.0 Feasibility Study on Uplink Enhancements for UTRA TDD (Interdigital)
For information, noted.

8.12   New Work Items/Study Items

RP-040461   Proposed Study Item on Evolved UTRA and UTRAN (NTT DoCoMo and others)
This proposal for a frame to start the work on the Long Term Evolution was discussed in detail during the meeting (see section 5.3).
Supporting companies are: NTT DoCoMo, Alcatel, Cingular Wireless, CMCC, Ericsson, Fujitsu, Huawei, LG Electronics, Lucent Technologies, Mitsubishi Electric, Motorola, NEC, Nokia, Nortel Networks, Orange, Panasonic, Philips, Qualcomm Europe, Samsung, Sharp, Siemens, Telecom Italia, Telefonica, TeliaSonera, T-Mobile, Vodafone.
The new SI was finally approved without further revision

RP-040521   Proposed work item: UE Antenna Performance Evaluation Method and Requirements (TeliaSonera and others)
Per Ernstrom (TeliaSonera) presented this proposal
Companies supporting the WI: TeliaSonera, T-Mobile, NTT DoCoMo, Orange, Vodafone Group, Nokia, Ericsson, Motorola and Siemens
Expected completion date is September 2005.
No comments, the WI is approved.

RP-040453   WI Proposal for UMTS 2600 MHz TDD Option (IPWireless)
Derek Richards (IPWireless) presented this proposal
In the justification part, it is remarked that the work should proceed in conjunction with the FDD counterpart. This was debated and several companies objected having any linkage to the FDD WI. Work is contribution driven, and the WIs are independent. The proposal is revised in RP-040553.

RP-040454   UMTS 2600 MHz: Issues for Consideration and Decision FDD/TDD (IPWireless)
Derek Richards (IPWireless) presented this document
IPWireless asks that TSG RAN explicitly requires WG4 to take into account a few guidelines when producing the work for the new band in the two modes.
There was a long debate on the TDD-FDD co-existence and co-location. This is a complicated scenario that has already been handled in WG4 for the traditional bands. The case of collocated BSs, where transmitter and receiver on adjacent bands sit together, is very demanding from a radio perspective. Companies believe that this ~~and~~ can only be tackled at antenna level, with what WG4 calls site engineering, and that ~~There is nothing that~~this can be done with further specification requirements at the BS.

After off line discussions, it is agreed to consider the FDD and the TDD fully independent, the controversial section of the Sheet will be removed, and the issues raised in RP-040454 will be dealt with contributions that IPWireless will input to WG4. A revision of the Sheet is provided in the document below. WG4 is requested to study the issues raised in RP-040454. IPWireless is requested

to provide to the next WG4 meeting detailed proposals for changes to specifications etc. relating to issues raised in RP-040455.

RP-040553   WI Proposal for UMTS 2600 MHz TDD Option (IPWireless)
Supporting companies: IPWireless, Siemens AG, CATT, Huawei, UTStarcom
No comments, the WI is approved

RP-040541   Proposed WI on UMTS 900 (Orange)
Guillaume Decarreaux (Orange) presented this proposal
Companies supporting the WI: Orange, Nortel, Alcatel, SFR, Lucent, Telefonica, BouyguesTelecom, mmO2, Qualcomm Europe, Nokia, Sagem, TIM
The September deadline was found optimistic, but at this point agreed, it can be modified in the future.
The WI is approved

RP-040544   Optimization of Channelisation Code Utilisation for 3.84 Mcps TDD (IPWireless)
RP-040545   Optimization of Channelisation Code Utilisation for 1.28 Mcps TDD (IPWireless)
These WI proposals present the split of the current TDD Optimization Code Utilisation in a 3.84 Mcps part and a 1.28 Mcps part.
Small modifications needed, the principle is approved. Revisions are provided in the documents below.

RP-040551   Optimization of Channelisation Code Utilisation for 3.84 Mcps TDD (IPWireless)
Supporting companies: IPWireless, InterDigital, Softbank, Alcatel
No comments, the WI is approved

> Note: This Item will be introduced in 3GPP Work Plan as a revision of the current "Optimization of Channelisation Code Utilisation for TDD"
> Note: Completion date for this item is March 2005

RP-040552   Optimization of Channelisation Code Utilisation for 1.28 Mcps TDD (IPWireless)
Supporting companies: IPWireless, InterDigital, Softbank, Alcatel, CATT
No comments, the WI is approved

9   Technical co-ordination among WGs

No discussions

10   Outputs to other groups

RP-040546   Reply LS on guidance and error patterns for MBMS streaming simulations (Nortel)
Denis Fauconnier (Nortel) presented this LS
It is suggested to put TSG SA in copy. This is agreed.
The LS is approved.

11   Project management

RP-040542   RAN WIs & SIs (3GPP Support)
Presented for information, this document contains the WI Description Sheet of all RAN WIs/SIs, active and historic.

John Meredith (3GPP Support) presented the following documents, all for information.
RP-040498   CRs to lists of specs (3GPP Support)
Corrections to the lists of specs in each Release.

RP-040499   CR to 21.900 (3GPP Support)
Two small corrections to the TSG Working Procedures.

RP-040500   Specs per Release; a comparison (3GPP Support)
Excel spreadsheet showing the differences in the lists of specifications in each Release

RP-040501   Status list before TSGs #26 (3GPP Support)
Comprehensive status of all 3GPP specifications

The following documents were presented by Alain Sultan (3GPP Support).
RP-040548   Overview of 3GPP Release 4 - Summary of all Release 4 Features (3GPP Support)
This document contains the summary of 3GPP Rel-4, it will be available from 3GPP web site. TSG RAN participants are invited to review and to comment on the document.

RP-040549   Review of the Work Plan at Plenaries #26 (3GPP Support)
This document contains the slide overview of the situation of Rel-6 Work Items, it doesn't include the decision at the current RAN meeting.
It was questioned how can SA WG1, SA WG2 start the work in GALILEO since the specifications are not publicly available. It is noted that nothing can be started in RAN without those specifications, even if the SA groups are capable.
On the slide 43, it is noted that the PLMN selection issue is independent of Network Sharing. The comments should be removed.
On ACBOP (slide70), NTT DoCoMo mentioned that it should be a Rel-6 item. Alain clarified that the FS is within Rel-6 time, but the following WI would be later Release. However, NEC, Qualcomm and Samsung noted that WG2 has already produced CRs to implement ACBOP, but they are kept on hold pending on the approval of the Network Sharing CRs. They can now be approved straightforwardly, as confirmed by WG2 chairman. The understanding is that the WI belongs to Rel-6 unless decided otherwise.

12   Any other business

No discussions

13   Closing of the meeting

The chairman closed the meeting on Friday 10th at 12:45, thanking the participants for their work and the host for the organization and wishing everybody a safe trip and happy Christmas.

Annex A: List of participants

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Annex B: List of documents

See main body of the report for clarification on documents partially approved

Tdoc	Title	Source	Decision
RP-040395	Draft agenda meeting #26	Chairman	Approved
RP-040396	Revised draft report meeting #25	3GPP Support	Approved
RP-040397	UMTS 2.6 GHz WI sheet update	Ericsson	Approved
RP-040398	Status Report WG1	RAN WG1 Chairman	Noted
RP-040399	List of CRs from RAN WG1	RAN WG1	Noted
RP-040400	Status Report WG2	RAN WG2 Chairman	Noted
RP-040401	List of CRs from RAN WG2	RAN WG2	Revised in 525
RP-040402	Status Report WG3	RAN WG3 Chairman	Noted
RP-040403	List of CRs from RAN WG3	RAN WG3	Noted
RP-040404	Status Report WG4	RAN WG4 Chairman	Noted
RP-040405	List of CRs from RAN WG4	RAN WG4	Revised in 535
RP-040406	CRs (Rel-5 and Rel-6 Category A) to TS25.101 on Omissions in sec. 7.6 (Blocking)	RAN WG4	Approved
RP-040407	CR (Rel-5) to TS25.101 for the modification of section 9.3 for HSDPA requirements	RAN WG4	Approved
RP-040408	CRs (Rel-5 and Rel-6 Category A) to TS25.133 under TEI	RAN WG4	Approved
RP-040409	CR (Rel-6) to TS25.101 for the introduction of requirements for FRC for PA3 cases	RAN WG4	Withdrawn
RP-040410	CRs (Rel-6) to TS25.104/TS25.141 on Power Control step test requirements for 1.5 dB and 2 dB	RAN WG4	Approved
RP-040411	CRs (Rel-6) to TS25.105/TS25.142 on Clarification to note on spurious emissions	RAN WG4	Approved
RP-040412	CRs (Rel-6) to TS25.101/ TS25.105/ TS25.113/ TS25.133/ TS25.141 under TEI6	RAN WG4	Approved
RP-040413	CR (Rel-6) to TS25.171 under the AGPS performance WI for the removal of inconsistencies	RAN WG4	Approved
RP-040414	CRs (Rel-6) to TS25.101 under HSDPA	RAN WG4	Approved
RP-040415	Summary of Requirements identified during 3GPP RAN long term evolution workshop	TSG RAN Chairman	Noted
RP-040416	Contribution on Aspects of a Study Item on Future Evolution	Cingular	Noted
RP-040417	Status Report for WI Performance Requirements of Receive Diversity for HSDPA	NTT DoCoMo	Noted
RP-040418	Status Report for WI Improved minimum performance requirements for HSDPA UE categories 7 & 8	Nokia	Noted
RP-040419	Status Report for WI UMTS 2.6GHz	Nokia	Noted
RP-040420	Status Report for WI RAB support enhancement	Nokia	Noted
RP-040421	Status Report for WI Optimisation of downlink channelisation code utilisation	Nortel	Noted
RP-040422	Status Report for WI Optimisation of channelisation code utilisation for TDD	IPWireless	Noted
RP-040423	Status Report for WI HS-DPCCH ACK/NACK Enhancement	Nokia	Noted
RP-040424	Status Report for WI Inclusion of Uplink TDOA UE positioning method in the UTRAN specifications	TruePosition	Noted
RP-040425	Status Report for WI Introduction of MBMS in RAN (physical & upper layers, access network interfaces)	Nokia	Noted
RP-040426	Status Report for WI UE Performance Requirements for MBMS	Ericsson	Noted
RP-040427	Status Report for WI Multiple Input Multiple Output antennas (MIMO)	Lucent	Noted

Tdoc	Title	Source	Decision
RP-040428	Status Report for WI Enhancement of the support of network sharing in the UTRAN	TeliaSonera	Noted
RP-040429	Status Report for WI FDD Enhanced Uplink	Ericsson	Noted
RP-040430	Status Report for WI 7.68 Mcps TDD	IPWireless	Noted
RP-040431	Status Report for FS on Uplink enhancements for UTRA TDD	Interdigital	Noted
RP-040432	CRs (Rel-5 and Rel-6 category A) to TS 25.412 ip-transport	RAN WG3	Approved
RP-040433	CRs (Rel-5 and Rel-6 category A) to TS 25.423	RAN WG3	Approved
RP-040434	CRs (Rel-5 and Rel-6 category A) to TS 25.433	RAN WG3	Approved
RP-040435	CRs (Rel-5 and Rel-6 category A) to TS 25.423 and TS 25.433	RAN WG3	Approved
RP-040436	CRs (Rel-6 category B) for the introduction of Fractional DPCH in RAN3 specifications	RAN WG3	Withdrawn
RP-040437	CRs (Rel-6 category B) for the introduction of MBMS in RAN3 specifications	RAN WG3	Approved
RP-040438	for information - draft MBMS changes for TS 25.402	RAN WG3	Noted
RP-040439	CRs (Rel-6 category B) for the introduction of "enhancement of the support of network sharing" in RAN3 specifications	RAN WG3	Approved
RP-040440	CRs (Rel-6 category B) for the introduction of Enhanced uplink in RAN3 specifications	RAN WG3	Approved
RP-040441	CRs (Rel-6 category F) for correction of outdated ITU-T references in RAN3 specifications	RAN WG3	Approved
RP-040442	CR (Rel-6 category B) to TS 25.413 on Network-initiated Scudif in Release 6 - proposal 1	RAN WG3	Not approved
RP-040443	CR (Rel-6 category B) to TS 25.413 on Network-initiated Scudif in Release 6 - proposal 2	RAN WG3	Not approved
RP-040444	CRs (Rel-6 category F) to TS 25.460, TS 25.461 and TS 25.462	RAN WG3	Approved
RP-040445	CRs (Rel-6 category F) to TS 25.463	RAN WG3	Approved
RP-040446	CR (Rel-6 Category B) to TS25.212 for Introduction of MBMS Soft Combining	RAN WG1	Approved
RP-040447	CRs (Rel-5 Category F and Rel-6 Category A) to TS25.214 for Correction of downlink transmit power control in compressed mode	RAN WG1	Approved
RP-040448	CR(Rel-6 Category B) to TS25.214 for Introduction of MBMS Soft Combining	RAN WG1	Approved
RP-040449	Linked CRs (Rel-6 Category B) to TS25.201 & TS25.211 & TS25.212 & TS.25.213 & TS 25.214 & TS25.215 for Introduction of E-DCH	RAN WG1	Approved
RP-040450	Linked CRs (Rel-6 Category B) to TS25.211 & TS.25.213 & TS 25.214 for Introduction of MICH	RAN WG1	Approved
RP-040451	Linked CRs (Rel-6 Category B) to TS25.221 & TS25.222 & TS25.224 for Introduction of MICH	RAN WG1	Approved
RP-040452	CR (Rel-6 Category B) to TS25.224 for Introduction of MBMS soft combining for TDD	RAN WG1	Approved
RP-040453	WI Proposal for UMTS 2600 MHz TDD Option	IPWireless	Revised in 553
RP-040454	UMTS 2600 MHz: Issues for Consideration and Decision FDD/TDD	IPWireless	Noted
RP-040455	CR (Rel-6 Category B) to TS25.215 for Introduction of 'DL Transmission Branch Load' measurement	RAN WG1	Not approved
RP-040456	Status Report ITU-R Ad Hoc	ITU-R Ad Hoc Contact Person	Noted
RP-040457	Proposed Initial Submission for updated UTRA FDD and TDD toward Rev6 of Rec ITU-R M.1457	ITU-R Ad Hoc	Withdrawn
RP-040458	Proposals on RAN evolution work	CMCC, Cingular, Huawei	Noted
RP-040459	CR (Rel-6 Category C) to TS25.224 for Improvements to uplink closed-loop power control for 1.28Mcps TDD (RAN WG1)	RAN WG1	Not approved
RP-040460	CRs to 25.133, 25.302, 25.433 for the Introduction of 'DL Transmission Branch Load' measurement	Siemens	Not approved
RP-040461	Proposed Study Item on Evolved UTRA and UTRAN	NTT DoCoMo and others	Approved
RP-040462	LS on the schedule for updating Rec. ITU-R M.1457 Rev6	ITU-R WP8F	Noted

Tdoc	Title	Source	Decision
RP-040463	LS on considerations to avoid interference for terrestrial networks for onboard GSM networks	ETSI MSG	Noted
RP-040464	Reply LS on considerations to avoid interference for terrestrial networks for onboard GSM networks	TSG GERAN	Noted
RP-040465	LS on definition of RAT	TSG SA WG1	Noted
RP-040466	Reply LS on Definition of RAT	TSG CN WG1	Noted
RP-040467	Reply to LS on definition of RAT	TSG T WG3	Noted
RP-040468	LS on evolution of network architecture	TSG SA WG2	Noted
RP-040469	LS on guidance and error patterns for MBMS streaming simulations	TSG SA WG4	Noted
RP-040470	LS on the TSG RAN WG 3 Review of TR 32.804 v6.0.0	RAN WG3	Noted
RP-040471	LS on Radio Requirements for Remote Electrical Tilt (RET) equipment	RAN WG4	Noted
RP-040472	LS on compatibility studies of terrestrial and satellite UMTS/IMT2000	RAN WG4	Noted
RP-040473	LS on remove of TGPL2	RAN WG4	Noted
RP-040474	CR to 25.331 R'99 (with linked Rel-4/Rel-5/Rel-6) on reference to ITU-T Recommendations on ASN.1	RAN WG2	Approved
RP-040475	CRs to 25.993 (R'99 affected, Rel-6 Version)	RAN WG2	Approved
RP-040476	CRs to 25.925, 25.324 and 25.331 R'99 (with linked Rel-4/Rel-5/Rel-6) on CBS related Corrections	RAN WG2	Approved
RP-040477	CRs to 25.331 Rel-4 (with linked Rel-5/Rel-6)	RAN WG2	Approved
RP-040478	CRs to 25.303 Rel-5 (with linked Rel-6)	RAN WG2	Approved
RP-040479	CRs to 25.306 Rel-5 (with linked Rel-6) on Alignment of MaxHcContextSpace	RAN WG2	Approved
RP-040480	CRs to 25.321 Rel-5 (with linked Rel-6)	RAN WG2	Approved
RP-040481	CRs to 25.331 Rel-5 (1) (with linked Rel-6)	RAN WG2	Approved
RP-040482	CRs to 25.331 Rel-5 (2) (with linked Rel-6)	RAN WG2	Partially approved
RP-040483	CRs to 25.993 (Rel-5 affected, Rel-6 Version) on HSDPA RABs	RAN WG2	Approved
RP-040484	CR to 25.301 Rel-6 on the introduction of Enhanced Uplink	RAN WG2	Approved
RP-040485	CR to 25.302 Rel-6 on the introduction of Enhanced Uplink	RAN WG2	Revised in 540
RP-040486	CRs to 25.309 Rel-6 on Enhanced Uplink Stage 2 (Agreed)	RAN WG2	Approved
RP-040487	CRs to 25.309 Rel-6 on Enhanced Uplink Stage 2 (Technically endorsed)	RAN WG2	Partially approved
RP-040488	CR to 25.304 Rel-6 on the introduction of MBMS	RAN WG2	Approved
RP-040489	CRs to 25.321 Rel-6 on the introduction of MBMS	RAN WG2	Not agreed
RP-040490	CRs to 25.322 Rel-6 on the introduction of MBMS	RAN WG2	Approved
RP-040491	CRs to 25.331 Rel-6 on the introduction of MBMS	RAN WG2	Approved
RP-040492	CRs to 25.346 Rel-6 on MBMS Stage 2	RAN WG2	Approved
RP-040493	CR to 25.331 Rel-6 on HS-DPCCH transmit power reduction	RAN WG2	Revised in 543
RP-040494	CR to 25.304 Rel-6 on Network Sharing and multiple PLMN identities	RAN WG2	Approved
RP-040495	CRs to 25.331 Rel-6 on Network Sharing and multiple PLMN identities	RAN WG2	Approved
RP-040496	Report of the 3GPP TSG RAN Long Term Evolution Work Shop	3GPP Support	Noted
RP-040497	CR to 25.321 Rel-6 on the introduction of Enhanced Uplink	RAN WG2	Approved
RP-040498	CRs to lists of specs	3GPP Support	Noted
RP-040499	CR to 21.900	3GPP Support	Noted
RP-040500	Specs per Release; a comparison	3GPP Support	Noted
RP-040501	Status list before TSGs #26	3GPP Support	Noted
RP-040502	Proposal for the RAN Evolution Process	Ericsson and others	Revised in 531
RP-040503	Update of RAN WG3 Terms of Reference	RAN WG3	Approved

Tdoc	Title	Source	Decision
RP-040504	CRs to 25.322 Rel-5 (with linked Rel-6)	RAN WG2	Approved
RP-040505	CRs to 25.331 Rel-5 (3) (with linked Rel-6)	RAN WG2	Partially approved
RP-040506	CRs to 25.304 Rel-5 (with linked Rel-6)	RAN WG2	Partially approved
RP-040507	CR to 25.331 [Rel-6] on the introduction of Enhanced Uplink	RAN WG2	Approved
RP-040508	Proposed initial submission for 'minimal' update of UTRA FDD and TDD in Rev6 of Rec ITU-R M.1457	ITU-R Ad Hoc Contact Person	Rejected
RP-040509	Proposed action plan toward M.1457-6 in case of 'minimal' update	ITU-R Ad Hoc Contact Person	Rejected
RP-040510	Proposed initial submission for 'complete' update of UTRA FDD and TDD in Rev6 of Rec ITU-R M.1457	ITU-R Ad Hoc Contact Person	Revised in 536
RP-040511	Proposed action plan toward M.1457-6 in case of 'complete' update	ITU-R Ad Hoc Contact Person	Approved
RP-040512	Updated information on the Roadmap	ITU-R Ad Hoc Contact Person	Revised in 537
RP-040513	Draft Summary minutes, decisions and actions from 3GPP PCG Meeting#13, Seoul, 6 October 2004	Chairman, 3GPP Support	Noted
RP-040514	Proposed WI on UMTS 900	Orange	Revised in 541
RP-040515	CRs to 25.308 Rel-5 (and Rel-6)	RAN WG2	Approved
RP-040516	TR 25.804 v1.0.0 Feasibility Study on Uplink Enhancements for UTRA TDD	Interdigital	Noted
RP-040517	Introduction of HS-DPCCH ACK/NACK Enhanced Scheme in RAN3 specification	Nokia	Withdrawn
RP-040518	CR to 25.433: HS-DPCCH ACK/NACK preamble and postamble	Nokia, Philips, Siemens	Approved
RP-040519	CR to 25.423: HS-DPCCH ACK/NACK preamble and postamble	Nokia, Philips, Siemens	Approved
RP-040520	Correction to Rel-5 TS25.331 CR2471r2/2472r2 on TFC Subset Variable Usage and Application of Transport Format Combination Subset	RIM	Approved
RP-040521	Proposed work item: UE Antenna Performance Evaluation Method and Requirements	TeliaSonera and others	Approved
RP-040522	CRs to TS25.331 (Rel-5 & Rel-6 Cat A) on Criteria for initiating cell update on receiving "Frequency info" IE in CELL UPDATE CONFIRM message	Qualcomm	Approved
RP-040523	Review of RAN1 ToRs	RAN WG1	Not approved
RP-040524	Proposed CRs (R99 Cat F and Rel-4, Rel-5, Rel-6 Cat A) to 25.101, 25.133, 25.215, 25.331, 25.423 and 25.433 for Removal of TGPL2	Ericsson, Nokia	Withdrawn
RP-040525	List of CRs from RAN WG2	RAN WG2	Noted
RP-040526	CRs to 25.304 and 25.331 on cell selection and reselection parameters	RAN WG2	Approved
RP-040527	RAN1 CRs on Preamble and Postamble to Reduce HS-DPCCH transmit power	Nokia, Philips, Siemens	Approved
RP-040528	Reply LS (to N1-042069) on Selected PLMN and Network Sharing	TSG RAN WG2	Noted
RP-040529	3GPP TSG RAN process for evolved UTRA & UTRAN	TIM	Noted
RP-040530	TR 25.808 FDD Enhanced Uplink physical layer aspects v1.0.0	Nokia	Noted
RP-040531	Proposal for the RAN Evolution Process	Ericsson and others	Revised in 554
RP-040532	New TSG RAN Terms of Reference	TSG RAN/TSG T Officials	Revised in 547
RP-040533	Draft New TSG RAN Terms of Reference	TIM	Noted
RP-040534	CR (Rel-6) to TS25.101 for the introduction of requirements for FRC for PA3 cases	RAN WG4	Approved
RP-040535	List of CRs from RAN WG4	RAN WG4	Noted
RP-040536	Proposed initial submission for 'complete' update of UTRA FDD and TDD in Rev6 of Rec ITU-R M.1457	ITU-R Ad Hoc Contact Person	Approved

Tdoc	Title	Source	Decision
RP-040537	Updated information on the Roadmap	ITU-R Ad Hoc Contact Person	Approved
RP-040538	Way forward with MIMO Work Item	RAN WG1 Chairman	Noted
RP-040539	CR071r3 to 25.213, Introduction of E-DCH	Motorola et al	Approved
RP-040540	CR to 25.302 Rel-6 on the introduction of Enhanced Uplink	Nortel	Revised in 550
RP-040541	Proposed WI on UMTS 900	Orange	Approved
RP-040542	RAN WIs & SIs	3GPP Support	Noted
RP-040543	CR to 25.331 Rel-6 on HS-DPCCH transmit power reduction	RAN WG2	Approved
RP-040544	Optimization of Channelisation Code Utilisation for 3.84 Mcps TDD	IPWireless	Revised in 551
RP-040545	Optimization of Channelisation Code Utilisation for 1.28 Mcps TDD	IPWireless	Revised in 552
RP-040546	Reply LS on guidance and error patterns for MBMS streaming simulations	Nortel	Approved
RP-040547	TSG RAN Terms of Reference	TSG RAN/TSG T	Endorsed
RP-040548	Overview of 3GPP Release 4 - Summary of all Release 4 Features	3GPP Support	Noted
RP-040549	Review of the Work Plan at Plenaries #26	3GPP Support	Noted
RP-040550	CR to 25.302 Rel-6 on the introduction of Enhanced Uplink	Nortel	Approved
RP-040551	Optimization of Channelisation Code Utilisation for 3.84 Mcps TDD	IPWireless	Approved
RP-040552	Optimization of Channelisation Code Utilisation for 1.28 Mcps TDD	IPWireless	Approved
RP-040553	WI Proposal for UMTS 2600 MHz TDD Option	IPWireless	Approved
RP-040554	Proposal for the RAN Evolution Process	TSG RAN	Approved
RP-040555	Notes of the joint TSG T/TSG RAN session	3GPP Support	

Annex C: List of CRs presented at TSG RAN #26

The table below lists all the CRs presented at RAN#26.

Spec	CR	R	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	WG	Doc 2nd-Level
25.101	368	1	Rel-6	6.5.0	F	RP-040412	Approved	Correction to Windup testcase	TEI6	R4	R4-040779
25.101	369		Rel-5	5.12.0	F	RP-040407	Approved	Modification of Section 9.3 of HSDPA requirements	HSDPA-RF	R4	R4-040693
25.101	373	2	Rel-6	6.5.0	F	RP-040414	Approved	Corrections to 7.4.2 maximum input level for HS-PDSCH reception	HSDPA-RF	R4	R4-040771
25.101	377	1	Rel-6	6.5.0	F	RP-040414	Approved	Corrections to 9.3 reporting of CQI	HSDPA-RF	R4	R4-040752
25.101	379	2	Rel-6	6.5.0	F	RP-040414	Approved	Corrections to 9.4 detection of HS-SCCH	HSDPA-RF	R4	R4-040772
25.101	383	3	Rel-6	6.5.0	F	RP-040414	Approved	H Set-4/5 pattern length	HSDPA-RF	R4	R4-040769
25.101	384	1	Rel-5	5.12.0	F	RP-040406	Approved	Omissions in 7.6 (Blocking)	TEI5	R4	R4-040777
25.101	385	1	Rel-6	6.5.0	A	RP-040406	Approved	Omissions in 7.6 (Blocking)	TEI5	R4	R4-040778
25.101	386		Rel-6	6.5.0	B	RP-040534	Approved	Enhanced performance requirement on FRC throughput for PA3 cases	RInImp-HSPerf-RxDiv	R4	R4-040787
25.101	387	-	R99	3.17.0	F	RP-040524	Withdrawn	Removal of TGPL2	TEI	R4	
25.101	388	-	Rel-4	4.11.0	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R4	
25.101	389	-	Rel-4	5.12.0	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R4	
25.101	390	-	Rel-6	6.5.0	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R4	
25.104	230		Rel-6	6.7.0	F	RP-040410	Approved	Power Control step requirements for 1.5dB and 2.0dB	TEI6	R4	R4-040604
25.105	155		Rel-6	6.1.0	F	RP-040411	Approved	Clarification to note of spurious emission in case co-existence with UTRA-FDD	TEI6	R4	R4-040640
25.105	156		Rel-6	6.1.0	F	RP-040412	Approved	Addition of Co-existence with unsynchronized TDD item in regional requirement list	TEI6	R4	R4-040642
25.113	023		Rel-6	6.0.0	F	RP-040412	Approved	Requirement for surge for outdoor telecommunication cable	TEI6	R4	R4-040590
25.113	024	1	Rel-6	6.0.0	F	RP-040412	Approved	Transmitter and receiver exclusions bands for Bands IV, V and VI	TEI6	R4	R4-040745
25.133	698		Rel-6	6.7.0	F	RP-040412	Approved	Clarification of Inter-RAT hand over test parameters.	TEI6	R4	R4-040660
25.133	702		Rel-6	6.7.0	F	RP-040412	Approved	Correction to UE transmitted power measurement	TEI6	R4	R4-040686
25.133	703		Rel-5	5.12.0	F	RP-040408	Approved	Target Quality on DTCH	TEI5	R4	R4-040723
25.133	704		Rel-6	6.7.0	A	RP-040408	Approved	Target Quality on DTCH	TEI5	R4	R4-040724
25.133	705		Rel-5	5.12.0	F	RP-040408	Approved	Harmonisation of TS25.133 and TS34.108	TEI5	R4	R4-040726
25.133	706		Rel-6	6.7.0	A	RP-040408	Approved	Harmonisation of TS25.133 and TS34.108	TEI5	R4	R4-040727
25.133	707	-	Rel-6	6.7.0	B	RP-040460	Rejected	Introduction of DL Transmission Branch Load Measurement	TEI6	R4	
25.133	708	-	R99	3.19.0	F	RP-040524	Withdrawn	Removal of TGPL2	TEI	R4	

Spec	CR	R	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	WG	Doc 2nd-Level
25.133	709	-	Rel-4	4.13.0	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R4	
25.133	710	-	Rel-5	5.12.0	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R4	
25.133	711	-	Rel-6	6.7.0	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R4	
25.141	356		Rel-6	6.7.0	F	RP-040410	Approved	Power Control step test requirements for 1.5dB and 2.0dB	TEI6	R4	R4-040605
25.141	357		Rel-6	6.7.0	F	RP-040412	Approved	Correction to RACH message demodulation test	TEI6	R4	R4-040606
25.142	172		Rel-6	6.1.0	A	RP-040411	Approved	Clarification to note of spurious emission in case co-existence with UTRA-FDD	TEI6	R4	R4-040641
25.171	001	2	Rel-6	6.0.0	F	RP-040413	Approved	Removal of inconsistencies in TS 25.171	LCS-UEPos-AGPSPerf	R4	R4-040746
25.201	019	-	Rel-6	6.0.0	B	RP-040449	Approved	Introduction of E-DCH	EDCH-Phys	R1	R1-041517
25.211	193	1	Rel-6	6.2.0	B	RP-040450	Approved	Introduction of MICH	MBMS-RAN	R1	R1-041506
25.211	195	1	Rel-6	6.2.0	B	RP-040449	Approved	Introduction of E-DCH	EDCH-Phys	R1	R1-041512
25.212	192	2	Rel-6	6.2.0	B	RP-040446	Approved	Introduction of MBMS Soft Combining	MBMS-RAN	R1	R1-041509
25.212	196	2	Rel-6	6.2.0	B	RP-040449	Approved	Introduction of E-DCH	EDCH-Phys	R1	R1-041520
25.213	069	-	Rel-6	6.0.0	B	RP-040450	Approved	Introduction of MICH	MBMS-RAN	R1	R1-041100
25.213	071	2	Rel-6	6.0.0	B	RP-040449	Revised	Introduction of E-DCH	EDCH-Phys	R1	R1-041516
25.213	071	3	Rel-6	6.0.0	B	RP-040539	Approved	Introduction of E-DCH	EDCH-Phys	R1	
25.214	351	-	Rel-6	6.3.0	B	RP-040450	Approved	Introduction of MICH	MBMS-RAN	R1	R1-041101
25.214	356	1	Rel-6	6.3.0	B	RP-040448	Approved	Introduction of MBMS Soft Combining	MBMS-RAN	R1	R1-041496
25.214	359	-	Rel-5	5.9.0	F	RP-040447	Approved	Correction of downlink transmit power control in compressed mode	TEI-5	R1	R1-041320
25.214	360	-	Rel-6	6.3.0	A	RP-040447	Approved	Correction of downlink transmit power control in compressed mode	TEI-6	R1	R1-041320
25.214	361	1	Rel-6	6.3.0	B	RP-040449	Approved	Introduction of E-DCH	EDCH-Phys	R1	R1-041521
25.215	147	3	Rel-6	6.0.0	B	RP-040455	Rejected	Introduction of 'DL Transmission Branch Load' measurement	TEI-6	R1	R1-041494
25.215	149	1	Rel-6	6.0.0	B	RP-040449	Approved	Introduction of E-DCH	EDCH-Phys	R1	R1-041514
25.215	150	-	R99	3.12.0	F	RP-040524	Withdrawn	Removal of TGPL2	TEI	R1	
25.215	151	-	Rel-4	4.7.0	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R1	
25.215	152	-	Rel-5	5.5.0	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R1	
25.215	153	-	Rel-6	6.0.0	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R1	
25.221	117	-	Rel-6	6.1.0	B	RP-040451	Approved	Introduction of MICH	MBMS-RAN	R1	R1-041464
25.222	125	-	Rel-6	6.1.0	B	RP-040451	Approved	Introduction of MICH	MBMS-RAN	R1	R1-041465
25.224	138	-	Rel-6	6.2.0	B	RP-040451	Approved	Introduction of MICH	MBMS-RAN	R1	R1-041466
25.224	139	-	Rel-6	6.2.0	B	RP-040452	Approved	Introduction of MBMS soft combining for TDD	MBMS-RAN	R1	R1-041467
25.224	140	1	Rel-6	6.2.0	C	RP-040459	Rejected	Improvements to uplink closed-loop power control for 1.28Mcps TDD	TEI6	R1	R1-041507
25.301	071	-	Rel-6	6.0.0	B	RP-040484	Approved	Introduction of Enhanced Uplink	EDCH-L23	R2	R2-042735
25.302	146	-	Rel-6	6.1.0	B	RP-040485	Revised	Introduction of Enhanced Uplink	EDCH-L23	R2	R2-042545
25.302	146	1	Rel-6	6.1.0	B	RP-040540	Revised	Introduction of Enhanced Uplink	EDCH-L23	R2	
25.302	146	2	Rel-6	6.1.0	B	RP-040550	Approved	Introduction of Enhanced Uplink	EDCH-L23	R2	
25.302	147	-	Rel-6	6.1.0	B	RP-040460	Rejected	Introduction of 'DL Transmission Branch Load'	TEI6	R2	

Spec	CR	R	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	WG	Doc 2nd-Level
								measurement			
25.303	075	-	Rel-5	5.1.0	F	RP-040478	Approved	Clarification of inter-layer dependencies	TEI5	R2	R2-042620
25.303	076	-	Rel-6	6.1.0	A	RP-040478	Approved	Clarification of inter-layer dependencies	TEI5	R2	R2-042621
25.304	120	1	Rel-5	5.6.0	F	RP-040506	Revised	Correction to cell selection and reselection parameters	TEI5	R2	R2-042636
25.304	120	2	Rel-5	5.6.0	B	RP-040526	Approved	Cell selection and reselection parameters	TEI5	R2	
25.304	121	1	Rel-6	6.3.0	A	RP-040506	Revised	Correction to cell selection and reselection parameters	TEI5	R2	R2-042637
25.304	121	2	Rel-6	6.3.0	B	RP-040526	Approved	Cell selection and reselection parameters	TEI5	R2	
25.304	122	-	Rel-5	5.6.0	F	RP-040506	Approved	Use of access class restrictions at Inter-RAT cell change	TEI5	R2	R2-042622
25.304	123	-	Rel-6	6.3.0	A	RP-040506	Approved	Use of access class restrictions at Inter-RAT cell change	TEI5	R2	R2-042623
25.304	124	-	Rel-6	6.3.0	B	RP-040494	Approved	Network Sharing and multiple PLMN identities	NTShar-UTRANEnh	R2	R2-042665
25.304	126	-	Rel-6	6.3.0	B	RP-040488	Approved	TS 25.304 Introduction of MBMS	MBMS-RAN	R2	R2-042710
25.304	127	-	Rel-6	6.3.0	B	RP-040488	Approved	Addition of MBMS Frequency Layer Convergence to 25.304	MBMS-RAN	R2	R2-042711
25.306	097	-	Rel-5	5.8.0	F	RP-040479	Approved	Alignment of MaxHcContextSpace	TEI5	R2	R2-042617
25.306	098	-	Rel-6	6.2.0	A	RP-040479	Approved	Alignment of MaxHcContextSpace	TEI5	R2	R2-042618
25.308	011	-	Rel-5	5.10.0	F	RP-040515	Approved	Removal of sentences into brackets	HSDPA-L23	R2	R2-042597
25.308	012	-	Rel-6	6.3.0	A	RP-040515	Approved	Removal of sentences into brackets	HSDPA-L23	R2	R2-042598
25.309	001	3	Rel-6	6.0.0	F	RP-040486	Approved	Inclusion of e.g. physical layer model, MAC architecture, detail Node B scheduler mechanism and QoS Control principles	EDCH-Stage2	R2	R2-042730
25.309	002	2	Rel-6	6.0.0	F	RP-040487	Approved	Scheduling Grants as E-DPDCH/DPCCH power ratio	EDCH-Stage2	R2	R2-042733
25.309	003	1	Rel-6	6.0.0	F	RP-040486	Approved	Proposed rewording on scheduler sections compared to CR 001r3	EDCH-Stage2	R2	R2-042728
25.309	004	-	Rel-6	6.0.0	F	RP-040487	Rejected	Scheduling Grants as (E-DPDCH+DPDCH/DPCCH) power ratio	EDCH-Stage2	R2	R2-042731
25.321	197	-	Rel-5	5.9.0	F	RP-040480	Approved	MAC-hs header extension	HSDPA-L23	R2	R2-042258
25.321	198	-	Rel-6	6.2.0	A	RP-040480	Approved	MAC-hs header extension	HSDPA-L23	R2	R2-042259
25.321	199	-	Rel-5	5.9.0	F	RP-040480	Approved	Clarification on the C/T field use in the HSDPA Mac-d header	HSDPA-L23	R2	R2-042603
25.321	200	-	Rel-6	6.2.0	A	RP-040480	Approved	Clarification on the C/T field use in the HSDPA Mac-d header	HSDPA-L23	R2	R2-042604
25.321	201	1	Rel-6	6.2.0	B	RP-040489	Approved	Introduction of MBMS MAC header	MBMS-RAN	R2	R2-042740
25.321	202	-	Rel-6	6.2.0	B	RP-040489	Approved	Introduction of MBMS	MBMS-RAN	R2	R2-042713
25.321	203	-	Rel-6	6.2.0	B	RP-040497	Approved	Introduction of EUL in MAC specification	EDCH-L23	R2	R2-042739
25.322	261	1	Rel-5	5.8.0	F	RP-040504	Approved	Correction of MRW SUFI content setting rule	TEI5	R2	R2-042251
25.322	262	1	Rel-6	6.1.0	A	RP-040504	Approved	Correction of MRW SUFI content setting rule	TEI5	R2	R2-042252
25.322	263	1	Rel-5	5.8.0	F	RP-040504	Approved	Correction of Poll Prohibit function	TEI5	R2	R2-042255

Spec	CR	R	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	WG	Doc 2nd-Level
25.322	264	1	Rel-6	6.1.0	A	RP-040504	Approved	Correction of Poll Prohibit function	TEI5	R2	R2-042256
25.322	265	1	Rel-6	6.1.0	B	RP-040490	Approved	Inclusion of out of sequence SDU delivery	MBMS-RAN	R2	R2-042737
25.322	266	-	Rel-6	6.1.0	B	RP-040490	Approved	Addition of MBMS Logical Channels and UM functionality for 'duplicate avoidance and reordering'.	MBMS-RAN	R2	R2-042712
25.324	021	1	R99	3.8.0	F	RP-040476	Approved	Correction of BMC message bit order and IE coding	TEI	R2	R2-042678
25.324	022	1	Rel-4	4.4.0	A	RP-040476	Approved	Correction of BMC message bit order and IE coding	TEI	R2	R2-042679
25.324	023	1	Rel-5	5.4.0	A	RP-040476	Approved	Correction of BMC message bit order and IE coding	TEI	R2	R2-042680
25.324	024	1	Rel-6	6.1.0	A	RP-040476	Approved	Correction of BMC message bit order and IE coding	TEI	R2	R2-042681
~~25.331~~	~~2479~~	~~2~~	~~Rel-5~~	~~5.10.0~~	~~F~~	~~RP-040522~~	~~Approved~~	~~Criteria for initiating cell update on receiving "Frequency info" IE in CELL UPDATE CONFIRM message~~	~~TEI5~~	~~R2~~	
~~25.331~~	~~2480~~	~~2~~	~~Rel-6~~	~~6.3.0~~	~~A~~	~~RP-040522~~	~~Approved~~	~~Criteria for initiating cell update on receiving "Frequency info" IE in CELL UPDATE CONFIRM message~~	~~TEI5~~	~~R2~~	
25.331	2433	-	Rel-5	5.10.0	F	RP-040481	Approved	Correction to measured results on RACH	TEI5	R2	R2-042214
25.331	2434	-	Rel-6	6.3.0	A	RP-040481	Approved	Correction to measured results on RACH	TEI5	R2	R2-042215
25.331	2435	-	Rel-5	5.10.0	F	RP-040481	Approved	T305 handling upon a state transition	TEI5	R2	R2-042253
25.331	2436	-	Rel-6	6.3.0	A	RP-040481	Approved	T305 handling upon a state transition	TEI5	R2	R2-042254
25.331	2437	-	Rel-5	5.10.0	F	RP-040481	Approved	Handling of pending AM RLC unrecoverable errors signalled by cell update	TEI5	R2	R2-042268
25.331	2438	-	Rel-6	6.3.0	A	RP-040481	Approved	Handling of pending AM RLC unrecoverable errors signalled by cell update	TEI5	R2	R2-042269
25.331	2439	-	R99	3.20.0	F	RP-040476	Approved	Correction to maximum length of CTCH period	TEI	R2	R2-042577
25.331	2440	-	Rel-4	4.15.0	A	RP-040476	Approved	Correction to maximum length of CTCH period	TEI	R2	R2-042578
25.331	2441	-	Rel-5	5.10.0	A	RP-040476	Approved	Correction to maximum length of CTCH period	TEI	R2	R2-042579
25.331	2442	-	Rel-6	6.3.0	A	RP-040476	Approved	Correction to maximum length of CTCH period	TEI	R2	R2-042580
25.331	2443	-	Rel-5	5.10.0	F	RP-040481	Approved	TPC step size in default configurations	TEI5	R2	R2-042585
25.331	2444	-	Rel-6	6.3.0	A	RP-040481	Approved	TPC step size in default configurations	TEI5	R2	R2-042586
25.331	2445	-	R99	3.20.0	F	RP-040474	Approved	References to ITU-T Recommendations on ASN.1	TEI	R2	R2-042587
25.331	2446	-	Rel-4	4.15.0	A	RP-040474	Approved	References to ITU-T Recommendations on ASN.1	TEI	R2	R2-042588
25.331	2447	-	Rel-5	5.10.0	A	RP-040474	Approved	References to ITU-T Recommendations on ASN.1	TEI	R2	R2-042589
25.331	2448	-	Rel-6	6.3.0	A	RP-040474	Approved	References to ITU-T Recommendations on ASN.1	TEI	R2	R2-042590
25.331	2449	-	Rel-4	4.15.0	F	RP-040477	Approved	ASN.1 clarification on Measurement Report for 1.28 Mcps TDD	LCRTDD-L23	R2	R2-042592
25.331	2450	-	Rel-5	5.10.0	A	RP-040477	Approved	ASN.1 clarification on Measurement Report for 1.28 Mcps TDD	LCRTDD-L23	R2	R2-042593
25.331	2451	-	Rel-6	6.3.0	A	RP-040477	Approved	ASN.1 clarification on Measurement Report for 1.28 Mcps TDD	LCRTDD-L23	R2	R2-042594
25.331	2452	-	Rel-5	5.10.0	F	RP-040481	Approved	Correction to HS-DSCH reception conditions	HSDPA-L23	R2	R2-042595

Spec	CR	R	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	WG	Doc 2nd-Level
25.331	2453	-	Rel-6	6.3.0	A	RP-040481	Approved	Correction to HS-DSCH reception conditions	HSDPA-L23	R2	R2-042596
25.331	2454	1	Rel-5	5.10.0	F	RP-040481	Approved	MAC-hs Reset procedure	HSDPA-L23	R2	R2-042685
25.331	2455	1	Rel-6	6.3.0	A	RP-040481	Approved	MAC-hs Reset procedure	HSDPA-L23	R2	R2-042686
25.331	2456	1	Rel-5	5.10.0	F	RP-040482	Revised	Correction to cell selection and reselection parameters	TEI5	R2	R2-042634
25.331	2456	2	Rel-5	5.10.0	B	RP-040526	Approved	Cell selection and reselection parameters	TEI5	R2	
25.331	2457	1	Rel-6	6.3.0	A	RP-040482	Revised	Correction to cell selection and reselection parameters	TEI5	R2	R2-042635
25.331	2457	2	Rel-6	6.3.0	B	RP-040526	Approved	Cell selection and reselection parameters	TEI5	R2	
25.331	2458	1	Rel-5	5.10.0	F	RP-040482	Approved	Clarification the PDCP capability- Max HC context space	TEI5	R2	R2-042683
25.331	2459	1	Rel-6	6.3.0	A	RP-040482	Approved	Clarification the PDCP capability- Max HC context space	TEI5	R2	R2-042684
25.331	2460	-	Rel-5	5.10.0	F	RP-040482	Approved	Corrections to IE "WAIT TIME" = 0	TEI5	R2	R2-042624
25.331	2461	-	Rel-6	6.3.0	A	RP-040482	Approved	Corrections to IE "WAIT TIME" = 0	TEI5	R2	R2-042625
25.331	2462	1	Rel-5	5.10.0	F	RP-040482	Approved	RRC transaction identifier in the MEASUREMENT CONTROL message	TEI5	R2	R2-042699
25.331	2463	1	Rel-6	6.3.0	A	RP-040482	Approved	RRC transaction identifier in the MEASUREMENT CONTROL message	TEI5	R2	R2-042690
25.331	2464	-	Rel-5	5.10.0	F	RP-040482	Approved	Correction to intra-frequency measurement handling in SIB11	TEI5	R2	R2-042628
25.331	2465	-	Rel-6	6.3.0	A	RP-040482	Approved	Correction to intra-frequency measurement handling in SIB11	TEI5	R2	R2-042629
25.331	2466	1	Rel-4	4.15.0	F	RP-040477	Approved	Missing OTDOA TDD related v4b0 extension in MEASUREMENT CONTROL	TEI4	R2	R2-042693
25.331	2467	1	Rel-5	5.10.0	F	RP-040477	Approved	Missing OTDOA TDD related v4b0 extension in MEASUREMENT CONTROL	TEI5	R2	R2-042694
25.331	2468	1	Rel-6	6.3.0	F	RP-040477	Approved	Missing OTDOA TDD related v4b0 extension in MEASUREMENT CONTROL	TEI6	R2	R2-042695
25.331	2469	1	Rel-5	5.10.0	F	RP-040482	Approved	Clarification of Radio Bearer Downlink Ciphering Activation Time Info	TEI5	R2	R2-042721
25.331	2470	2	Rel-6	6.3.0	F	RP-040482	Approved	Clarification of Radio Bearer Downlink Ciphering Activation Time Info	TEI6	R2	R2-042727
25.331	2471	1	Rel-5	5.10.0	F	RP-040482	Revised	TFC Subset Variable Usage and Application of Transport Format Combination Subset	TEI5	R2	R2-042696
25.331	-2471	2	Rel-5	5.10.0	F	RP-040520	Approved	TFC Subset Variable Usage and Application of Transport Format Combination Subset	TEI5	R2	
25.331	2472	1	Rel-6	6.3.0	A	RP-040482	Revised	TFC Subset Variable Usage and Application of Transport Format Combination Subset	TEI5	R2	R2-042697
25.331	-2472	2	Rel-6	6.3.0	A	RP-040520	Approved	TFC Subset Variable Usage and Application of Transport Format Combination Subset	TEI5	R2	
25.331	2473	-	Rel-5	5.10.0	F	RP-040505	Approved	Use of preconfiguration in the RADIO BEARER RECONFIGURATION message	TEI5	R2	R2-042642
25.331	2474	-	Rel-6	6.3.0	A	RP-040505	Approved	Use of preconfiguration in the RADIO BEARER	TEI5	R2	R2-042643

Spec	CR	R	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	WG	Doc 2nd-Level
								RECONFIGURATION message			
25.331	2475	-	Rel-5	5.10.0	F	RP-040505	Approved	UTRAN setting of ciphering activation time for SRB2	TEI5	R2	R2-042644
25.331	2476	-	Rel-6	6.3.0	A	RP-040505	Approved	UTRAN setting of ciphering activation time for SRB2	TEI5	R2	R2-042645
25.331	2477	-	Rel-5	5.10.0	F	RP-040505	Approved	Correction to ASN1 IE "srb-SpecificIntegrityProtInfo"	TEI5	R2	R2-042647
25.331	2478	-	Rel-6	6.3.0	A	RP-040505	Approved	Correction to ASN1 IE "srb-SpecificIntegrityProtInfo"	TEI5	R2	R2-042648
25.331	2479	1	Rel-5	5.10.0	F	RP-040505	Revised	Criteria for initiating cell update on receiving "Frequency info" IE in CELL UPDATE CONFIRM message	TEI5	R2	R2-042691
25.331	2480	1	Rel-6	6.3.0	A	RP-040505	Revised	Criteria for initiating cell update on receiving "Frequency info" IE in CELL UPDATE CONFIRM message	TEI5	R2	R2-042692
25.331	2479	2	Rel-5	5.10.0	F	RP-040522	Approved	Criteria for initiating cell update on receiving "Frequency info" IE in CELL UPDATE CONFIRM message	TEI5	R2	
25.331	2480	2	Rel-6	6.3.0	A	RP-040522	Approved	Criteria for initiating cell update on receiving "Frequency info" IE in CELL UPDATE CONFIRM message	TEI5	R2	
25.331	2481	-	Rel-5	5.10.0	F	RP-040505	Approved	Traffic volume measurements in PCH states	TEI5	R2	R2-042655
25.331	2482	-	Rel-6	6.3.0	A	RP-040505	Approved	Traffic volume measurements in PCH states	TEI5	R2	R2-042656
25.331	2483	-	Rel-5	5.10.0	F	RP-040505	Approved	Failure cause indication on Cell Update	TEI5	R2	R2-042657
25.331	2484	-	Rel-6	6.3.0	A	RP-040505	Approved	Failure cause indication on Cell Update	TEI5	R2	R2-042658
25.331	2487	1	Rel-6	6.3.0	B	RP-040495	Approved	Network Sharing and multiple PLMN identities	NTShar-UTRANEnh	R2	R2-042736
25.331	2488	-	R99	3.20.0	F	RP-040524	Withdrawn	Removal of TGPL2	TEI	R2	
25.331	2489	-	Rel-4	4.15.0	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R2	
25.331	2490	-	Rel-5	5.10.0	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R2	
25.331	2491	-	Rel-6	6.3.0	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R2	
25.331	2492	-	Rel-5	5.10.0	F	RP-040505	Approved	Inter-RAT measurement control information used	TEI5	R2	R2-042687
25.331	2493	-	Rel-6	6.3.0	A	RP-040505	Approved	Inter-RAT measurement control information used	TEI5	R2	R2-042688
25.331	2494	-	Rel-6	6.3.0	B	RP-040491	Approved	ASN.1 update for the introduction of MBMS	MBMS-RAN	R2	R2-042707
25.331	2495	1	Rel-6	6.3.0	B	RP-040491	Approved	Introduction of MBMS	MBMS-RAN	R2	R2-042709
25.331	2496	1	Rel-6	6.3.0	B	RP-040493	Revised	Preamble and Postamble to reduce HS-DPCCH transmit power	RANimp-RABSE-ACKNACK	R2	R2-042724
25.331	2496	2	Rel-6	6.3.0	B	RP-040543	Approved	Preamble and Postamble to reduce HS-DPCCH transmit power	RANimp-RABSE-ACKNACK	R2	
25.331	2497	-	Rel-6	6.3.0	B	RP-040507	Approved	Introduction of E-DCH	EDCH-L23	R2	R2-042717
25.346	006	1	Rel-6	6.2.0	F	RP-040492	Approved	Actions due to MBMS session repetition and MBMS service prioritisation	MBMS-RAN	R2	R2-042700
25.346	007	1	Rel-6	6.2.0	F	RP-040492	Approved	Introduction of MSCH and soft combining and other general corrections	MBMS-RAN	R2	R2-042701

Spec	CR	R	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	WG	Doc 2nd-Level
25.346	008	-	Rel-6	6.2.0	F	RP-040492	Approved	Corrections to UE Linking, Session Start and addition of URA Linking and Information Exchange procedure	MBMS-RAN	R2	R2-042702
25.346	009	-	Rel-6	6.2.0	F	RP-040492	Approved	Update of Annex B	MBMS-RAN	R2	R2-042703
25.401	092		Rel-6	6.4.0	B	RP-040439	Approved	Support of MOCN and GWCN configurations in UTRAN	NTShar-UTRANEnh	R3	R3-041479
25.401	094	1	Rel-6	6.4.0	B	RP-040440	Approved	Introduction of E-DCH in 25.401	EDCH-IurIub	R3	R3-041733
25.401	095	1	Rel-6	6.4.0	B	RP-040437	Approved	CR for Introducing MBMS in 25.401	MBMS-RAN	R3	R3-041723
25.402	044	1	Rel-6	6.0.0	B	RP-040436	Withdrawn	Introduction to Fractional DPCH	RANimp-RABSE-CodeOptFDD	R3	R3-041689
25.402	045	3	Rel-6	6.0.0	B	RP-040437	Approved	MBMS related changes	MBMS-RAN	R3	R3-041724
25.410	058		Rel-6	6.1.0	B	RP-040439	Approved	MOCN rerouting function	NTShar-UTRANEnh	R3	R3-041478
25.410	059	2	Rel-6	6.1.0	B	RP-040437	Approved	Introduction of MBMS in TS25410	MBMS-RAN	R3	R3-041725
25.412	016	1	Rel-5	5.1.0	F	RP-040432	Approved	IP transport option correction	ETRAN-iptrans	R3	R3-041606
25.412	017	1	Rel-6	6.0.0	A	RP-040432	Approved	IP transport option correction	ETRAN-iptrans	R3	R3-041607
25.413	701		Rel-6	6.3.0	B	RP-040439	Approved	Indication of selected PLMN in shared networks	NTShar-UTRANEnh	R3	R3-041419
25.413	702	1	Rel-6	6.3.0	B	RP-040439	Approved	Rerouting in MOCN	NTShar-UTRANEnh	R3	R3-041621
25.413	706	2	Rel-6	6.3.0	B	RP-040437	Approved	MBMS stage 3 support over Iu	MBMS-RAN	R3	R3-041726
25.413	712	1	Rel-6	6.3.0	B	RP-040442	Rejected	Basic Support of Network-initiated Scudif in release 6	TEI6	R3	R3-041718
25.413	715	2	Rel-6	6.3.0	B	RP-040439	Approved	Support of full Mobility/Backwards Compatibility in Network Sharing	NTShar-UTRANEnh	R3	R3-041711
25.413	719		Rel-6	6.3.0	F	RP-040441	Approved	outdated ITU-T reference	TEI6	R3	R3-041615
25.413	720	1	Rel-6	6.3.0	B	RP-040443	Rejected	Support of Network-initiated Scudif in release 6	TEI6	R3	R3-041734
25.419	133		Rel-6	6.1.0	F	RP-040441	Approved	outdated ITU-T reference	TEI6	R3	R3-041616
25.420	044	2	Rel-6	6.1.0	B	RP-040437	Approved	Introduction of MBMS	MBMS-RAN	R3	R3-041727
25.420	045	2	Rel-6	6.1.0	B	RP-040440	Approved	Introduction of E-DCH	EDCH-IurIub	R3	R3-041732
25.420	046	1	Rel-6	6.1.0	B	RP-040436	Withdrawn	Introduction to Fractional DPCH	RANimp-RABSE-CodeOptFDD	R3	R3-041690
25.423	1000	2	Rel-6	6.3.0	B	RP-040436	Withdrawn	Introduction to Fractional DPCH	RANimp-RABSE-CodeOptFDD	R3	R3-041688
25.423	1001		Rel-5	5.11.0	F	RP-040433	Approved	Correction of reference to "MAC-hs Guaranteed Bit Rate"	HSDPA-IubIur	R3	R3-041493
25.423	1002		Rel-6	6.3.0	A	RP-040433	Approved	Correction of reference to "MAC-hs Guaranteed Bit Rate"	HSDPA-IubIur	R3	R3-041494
25.423	1003		Rel-5	5.11.0	F	RP-040433	Approved	Correction of duplicated and misplaced procedure text for RL Addition	TEI5	R3	R3-041495
25.423	1004		Rel-6	6.3.0	A	RP-040433	Approved	Correction of duplicated and misplaced procedure text for RL Addition	TEI5	R3	R3-041496
25.423	1005		Rel-5	5.11.0	F	RP-040433	Approved	Correction to not mention Flexible Hard Split Support Indicator IE in procedure text	TEI5	R3	R3-041497

Spec	CR	R	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	WG	Doc 2nd-Level
25.423	1006		Rel-6	6.3.0	A	RP-040433	Approved	Correction to not mention Flexible Hard Split Support Indicator IE in procedure text	TEI5	R3	R3-041498
25.423	1007	2	Rel-6	6.3.0	B	RP-040440	Approved	Changes for Introducing EDCH	EDCH-IurIub	R3	R3-041729
25.423	1010		Rel-6	6.3.0	F	RP-040441	Approved	outdated ITU-T reference	TEi6	R3	R3-041617
25.423	1011	-	Rel-6	6.3.0	B	RP-040519	Approved	HS-DPCCH ACK/NACK preamble and postamble	RANimp-RABSE-ACKNACK	R3	
25.423	1012	-	R99	3.14.2	F	RP-040524	Withdrawn	Removal of TGPL2	TEI	R3	
25.423	1013	-	Rel-4	4.12.1	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R3	
25.423	1014	-	Rel-5	5.11.0	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R3	
25.423	1015	-	Rel-6	6.3.0	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R3	
25.423	997	1	Rel-5	5.11.0	F	RP-040435	Approved	Correction to the Assigned Criticality of UL Synchronisation Parameters LCR IE for 1.28Mcps TDD	TEI5	R3	R3-041611
25.423	998	1	Rel-6	6.3.0	A	RP-040435	Approved	Correction to the Assigned Criticality of UL Synchronisation Parameters LCR IE for 1.28Mcps TDD	TEI5	R3	R3-041612
25.423	999	2	Rel-6	6.3.0	B	RP-040437	Approved	MBMS changes for RNSAP	MBMS-RAN	R3	R3-041728
25.427	095	2	Rel-6	6.0.0	B	RP-040440	Approved	Changes on 25.427 due to the introduction of Enhanced Uplink	EDCH-IurIub	R3	R3-041731
25.430	056	2	Rel-6	6.2.0	B	RP-040440	Approved	Introduction of E-DCH in TS 25.430	EDCH-IurIub	R3	R3-041715
25.430	057	1	Rel-6	6.2.0	B	RP-040437	Approved	Introduction of MBMS in UTRAN	MBMS-RAN	R3	R3-041700
25.430	058	1	Rel-6	6.2.0	B	RP-040436	Withdrawn	Introduction to Fractional DPCH	RANimp-RABSE-CodeOptFDD	R3	R3-041691
25.433	1038		Rel-5	5.10.0	F	RP-040434	Approved	Removal of ASN ambiguity in TDD multiple RLs	TEI5	R3	R3-041413
25.433	1039		Rel-6	6.3.0	A	RP-040434	Approved	Removal of ASN ambiguity in TDD multiple RLs	TEI5	R3	R3-041414
25.433	1040		Rel-5	5.10.0	F	RP-040434	Approved	Alignment of TFCI2/Signaling Bearer Re-arrangement IEs criticality and procedure text	TEI5	R3	R3-041415
25.433	1041		Rel-6	6.3.0	A	RP-040434	Approved	Alignment of TFCI2/Signaling Bearer Re-arrangement IEs criticality and procedure text	TEI5	R3	R3-041416
25.433	1047	1	Rel-5	5.10.0	F	RP-040435	Approved	Correction to the Assigned Criticality of UL Synchronisation Parameters LCR IE for 1.28Mcps TDD	TEI5	R3	R3-041609
25.433	1048	1	Rel-6	6.3.0	A	RP-040435	Approved	Correction to the Assigned Criticality of UL Synchronisation Parameters LCR IE for 1.28Mcps TDD	TEI5	R3	R3-041610
25.433	1049	4	Rel-6	6.3.0	B	RP-040437	Approved	Introduction of MBMS	MBMS-RAN	R3	R3-041714
25.433	1050	2	Rel-6	6.3.0	B	RP-040436	Withdrawn	Introduction to Fractional DPCH	RANimp-RABSE-CodeOptFDD	R3	R3-041686
25.433	1056		Rel-6	6.3.0	F	RP-040441	Approved	outdated ITU-T reference	TEI6	R3	R3-041618
25.433	1057	3	Rel-5	5.10.0	F	RP-040434	Approved	Adaptive encoding of IB_SG_DATA	TEI5	R3	R3-041720
25.433	1058	3	Rel-6	6.3.0	A	RP-040434	Approved	Adaptive encoding of IB_SG_DATA	TEI5	R3	R3-041721
25.433	1059	1	Rel-6	6.3.0	B	RP-040440	Approved	CR for Introduction of E-DCH in NBAP	EDCH-IurIub	R3	R3-041730
25.433	1060		Rel-6	6.3.0	B	RP-040460	Rejected	Introduction of 'DL Transmission Branch Load' measurement	TEI6	R3	R3-041736

Spec	CR	R	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	WG	Doc 2nd-Level
25.433	1061	-	Rel-6	6.3.0	B	RP-040518	Approved	HS-DPCCH ACK/NACK preamble and postamble	RANimp-RABSE-ACKNACK	R3	
25.433	1062	-	R99	3.14.2	F	RP-040524	Withdrawn	Removal of TGPL2	TEI	R3	
25.433	1063	-	Rel-4	4.13.0	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R3	
25.433	1064	-	Rel-5	5.10.0	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R3	
25.433	1065	-	Rel-6	6.3.0	A	RP-040524	Withdrawn	Removal of TGPL2	TEI	R3	
25.453	076		Rel-6	6.6.0	F	RP-040441	Approved	outdated ITU-T reference	TEI6	R3	R3-041619
25.460	001	2	Rel-6	6.0.0	F	RP-040444	Approved	Minor Corrections and editorial changes to 25.460 according to RAN3#44	RANimp-TiltAnt	R3	R3-041641
25.460	002	2	Rel-6	6.0.0	F	RP-040444	Approved	Update of Software Download description	RANimp-TiltAnt	R3	R3-041644
25.461	001		Rel-6	6.0.0	F	RP-040444	Approved	DC power supply distribution	RANimp-TiltAnt	R3	R3-041421
25.461	002	1	Rel-6	6.0.0	F	RP-040444	Approved	Improved demodulator characteristics specification	RANimp-TiltAnt	R3	R3-041680
25.461	003		Rel-6	6.0.0	F	RP-040444	Approved	Requirements missing for when the RS485 bus shall not be driven by the secondary device	RANimp-TiltAnt	R3	R3-041509
25.461	004	1	Rel-6	6.0.0	F	RP-040444	Approved	RET DC power consumption modes	RANimp-TiltAnt	R3	R3-041672
25.461	005		Rel-6	6.0.0	F	RP-040444	Approved	Minor Corrections and editorial changes to 25.461	RANimp-TiltAnt	R3	R3-041534
25.462	001		Rel-6	6.0.0	F	RP-040444	Approved	Minor Corrections and editorial changes to 25.462 according to RAN3#44	RANimp-TiltAnt	R3	R3-041450
25.462	003	3	Rel-6	6.0.0	F	RP-040444	Approved	Maximum data payload size in the Transport Layer.	RANimp-TiltAnt	R3	R3-041678
25.463	001	2	Rel-6	6.0.0	F	RP-040445	Approved	Reduction of risk of accidentional erasure of Ret application SW	RANimp-TiltAnt	R3	R3-041626
25.463	002		Rel-6	6.0.0	F	RP-040445	Approved	Clarification of allowed tilt operation during self test	RANimp-TiltAnt	R3	R3-041423
25.463	003		Rel-6	6.0.0	F	RP-040445	Approved	State Model for RET device	RANimp-TiltAnt	R3	R3-041424
25.463	004		Rel-6	6.0.0	F	RP-040445	Approved	Corrections and editorial changes to 25.463 according to RAN3#44	RANimp-TiltAnt	R3	R3-041451
25.463	005	1	Rel-6	6.0.0	F	RP-040445	Approved	Antenna Send Configuration Data procedure missing	RANimp-TiltAnt	R3	R3-041642
25.463	007	1	Rel-6	6.0.0	F	RP-040445	Approved	Introduction of Software Download State model	RANimp-TiltAnt	R3	R3-041643
25.463	008	3	Rel-6	6.0.0	F	RP-040445	Approved	Alarm handling clarification	RANimp-TiltAnt	R3	R3-041671
25.463	009	2	Rel-6	6.0.0	F	RP-040445	Approved	RET DC power consumption clarification	RANimp-TiltAnt	R3	R3-041673
25.463	010	2	Rel-6	6.0.0	F	RP-040445	Approved	Response message format clarification	RANimp-TiltAnt	R3	R3-041674
25.463	012	2	Rel-6	6.0.0	F	RP-040445	Approved	Return code clean-up and clarification	RANimp-TiltAnt	R3	R3-041676
25.463	015	2	Rel-6	6.0.0	F	RP-040445	Approved	Clarification on the intention of the elementary procedures ReadUserData and WriteUserData	RANimp-TiltAnt	R3	R3-041677
25.463	016	2	Rel-6	6.0.0	F	RP-040445	Approved	Maximum data payload size in elementary procedures.	RANimp-TiltAnt	R3	R3-041675
25.463	017		Rel-6	6.0.0	F	RP-040445	Approved	Definition of response time in the appication layer.	RANimp-TiltAnt	R3	R3-041531
25.463	018	2	Rel-6	6.0.0	F	RP-040445	Approved	Redefinition of the Elementary Procedures GetDeviceData and SetDeviceData	RANimp-TiltAnt	R3	R3-041679
25.925	006	-	R99	3.4.0	F	RP-040476	Approved	UTRAN scheduling of CBS Schedule Periods	TEI	R2	R2-042576
25.993	031	3	Rel-6	6.7.0	F	RP-040483	Approved	Additions of HSDPA RABs	TEI6	R2	R2-042599
25.993	033	-	Rel-6	6.7.0	F	RP-040475	Approved	Addition RAB combinations for UL>DL PS rates	TEI6	R2	R2-042267

Spec	CR	R	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	WG	Doc 2nd-Level
25.993	034	-	Rel-6	6.7.0	F	RP-040475	Approved	Radio bearer combination for PS streaming in section 7.1.74	TEI6	R2	R2-042575
25.993	035	1	Rel-6	6.7.0	F	RP-040475	Approved	Correct TFCS used in 128DL RAB	TEI6	R2	R2-042682
TS25.212	195	-	Rel-6	6.2.0	B	RP-040527	Approved	Preamble and Postamble to reduce HS-DPCCH transmit power	RANimp-RABSE-ACKNACK	R1	
TS25.214	358	1	Rel-6	6.3.0	B	RP-040527	Approved	Preamble and Postamble to reduce HS-DPCCH transmit power	RANimp-RABSE-ACKNACK	R1	

Annex D: Summary of TSG RAN Work Items

RAN Work Items Update after meeting #26.

Abbreviations used:
%: Level of completion   WI: Work Item   SI: Study Item
Feat: Feature   BB: Building Block   FS: Feasibility Study
WT: Work Task

Type	WI Name	WI Code	Leading WG	%	Finish Date	Status Report at RP#26	Remarks
Feat	~~Rel-6~~ **Improvements of Radio Interface**	RInImp	RP		June 2005		This is a generic feature without particular end date
BB	Improved Receiver Performance Requirements for HSDPA	RInImp-HSPerf	R4		June 2005		
WT	Performance Requirements of Receive Diversity for HSDPA	RInImp-HSPerf-RxDiv	R4	85	March 2005	RP-040417	
WT	Improved Minimum Performance Requirements for HSDPA UE categories 7 and 8	RInImp-HSPerf-10code	R4	25	June 2005	RP-040418	
BB	UMTS 2.6 GHz	RInImp-UMTS2600	R4	15	June 2005	RP-040419	
New BB	UMTS 2.6 GHz TDD	RInImp-UMTS2600TDD	R4	0	Dec 2005		WIDS in RP-040553
New BB	UMTS 900	RInImp-UMTS900	R4	0	Sept 2005		WIDS in RP-040541
New BB	UE Antenna Performance Evaluation Method and Requirements		R4	0	Sept 2005		WIDS in RP-040521
Feat	~~Rel-6~~ **RAN improvements**	RANimp	RP		Dec 2004		Generic feature
BB	RAB support enhancement	RANimp-RABSE	R2	85	March 2005	RP-040420	Completion date moved from Dec 2004
WT	Optimisation of downlink channelisation code utilisation	RANimp-RABSE-CodeOptFDD	R1	90	March 2005	RP-040421	Completion date moved from Dec 2004
WT	Optimisation of channelisation code utilisation for 3.84 Mcps TDD	RANimp-RABSE-CodOptTDD	R1	9~~0~~	~~June~~ March 2005	RP-040422	WIDS modified in RP#26, RP-040551
New WT	Optimisation of channelisation code utilisation for 1.28 Mcps TDD	RANimp-RABSE-CodOptLCRTDD	R1	30	Sept 2005		WIDS in RP-040552
WT	HS-DPCCH ACK/NACK Enhancement	RANimp-RABSE-ACKNACK	R1	100	Dec 2004	RP-040423	WI completed at RP#26
BB	UE positioning Rel-7	~~LCS2~~ LCS3-UEpos	RP		~~Sept 2004~~		

WT	Inclusion of Uplink TDOA UE positioning method in the UTRAN specifications	LCS3-UEPos-UTDOA	R2	20	June 2006	RP-040424	
Feat	**Rel-6 Evolutions of the transport in the UTRAN**	ETRAN	RP	0	Dec 2003		Generic feature
BB	Introduction of MBMS in RAN	MBMS-RAN	RP		June 2005		
WT	Introduction of MBMS in RAN (physical & upper layers, access network interfaces)	MBMS-RAN	R2	100	Dec 2004	RP-040425	WI completed at RP#26
WT	UE Performance Requirements for MBMS	MBMS-RAN-RF	R4	10	Sept 2005	RP-040426	Completion date moved from June 2005
Feat	**Multiple Input Multiple Output antennas (MIMO)**	MIMO	R1		Dec 2005	RP-040427	
BB	MIMO - Physical layer	MIMO-Phys	R1	60	March 2005		
BB	MIMO - Layer 2,3 aspects	MIMO-L23	R2	0	Dec 2005		
BB	MIMO - Iub/Iur Protocol Aspects	MIMO-IurIub	R3	0	Dec 2005		
BB	MIMO - RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing	MIMO-RF	R4	5	Dec 2005		
BB	Enhancement of the support of network sharing in the UTRAN	NTShar-UTRANEnh	R2	100	Dec 2004	RP-040428	WI completed at RP#26
Feat	**FDD Enhanced Uplink**	EDCH	RP		June 2005	RP-040429	
BB	FDD Enhanced Uplink - Stage 2	EDCH-Stage2	R2	100	Dec 2004		BB completed
BB	FDD Enhanced Uplink - Physical Layer	EDCH-Phys	R1	85	March 2005		Completion date moved from Dec 2004
BB	FDD Enhanced Uplink - Layer 2 and 3 Protocol Aspects	EDCH-L23	R2	80	March 2005		Completion date moved from Dec 2004
BB	FDD Enhanced Uplink - UTRAN Iub/Iur Protocol Aspects	EDCH-IurIub	R3	80	March 2005		Completion date moved from Dec 2004
BB	FDD Enhanced Uplink - RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing	EDCH-RF	R4	20	June 2005		
Feat	**7.68Mcps TDD option**	VHCRTDD	RP	0	March 2006	RP-040430	
BB	7.68Mcps TDD option: Stage 2	VHCRTDD-Stage2	R1	0	Sept 2005		
BB	7.68Mcps TDD option: Physical Layer	VHCRTDD-Phys	R1	0	Sept 2005		
BB	7.68Mcps TDD option: Layer 2 and layer 3 protocol aspects	VHCRTDD-L23	R2	0	Sept 2005		
BB	7.68Mcps TDD option: UTRAN Iub/Iur Protocol Aspects	VHCRTDD-IurIub	R3	0	Sept 2005		
BB	7.68Mcps TDD option: RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing	VHCRTDD-RF	R4	5	March 2006		

SI	FS on the evolution of the UTRAN architecture	RANimp-FSEvo	R3	35	Dec 2004		Closed at RP#26
SI	FS on Uplink enhancements for UTRA TDD	RInImp-FSUpEnhTDD	R1	70	~~Dec 2004~~March 2005	RP-040431	Completion date moved from Dec 2004
New SI	Evolved UTRA and UTRAN		RP	0	June 200~~5~~6		WIDS in RP-040461

Annex E: Meeting schedule

TSG RAN meetings

Meeting #	Date	Host	Location
27	09 - 11 March 2005		Tokyo, Japan
28	1 - 3 June 2005		Quebec, Canada
29	21 - 23 September 2005	European Friends of 3GPP	Tallinn, Estonia
30	30 Nov. - 2 Dec. 2005		Europe (TBC)
31	08 – 10 March 2006		China

Ad Hoc on "Long term evolution for the UMTS Radio", 7 - 8 March 2005, Tokyo
(Monday & Tuesday before TSG RAN meeting #27)

TSG RAN WG1 meetings

Meeting #	Date	Host	Location
40	14-18 February 2005	North American Friends of 3GPP	Scottsdale, US
40bis	4-8 April 2005	Huawei	Beijing, China
41	09-13 May 2005	European Friends of 3GPP	
42	29 Aug – 02 Sept 2005	European Friends of 3GPP	
43	07-11 November 2005	Samsung	Korea

TSG RAN WG2 & WG3 meetings

Meeting #	Date	Host	Location
46	14-18 February 2005	North American Friends of 3GPP	Scottsdale, US
47	09-13 May 2005	European Friends of 3GPP	
48	29 Aug – 02 Sept 2005	European Friends of 3GPP	
49	07-11 November 2005	Samsung	Korea

RAN WG2 #45bis: 10-14 January 2005, Sophia-Antipolis.
RAN WG2 #46bis: 4-8 April 2005, Beijing, China, hosted by Huawei.

TSG RAN WG4 meetings

Meeting #	Date	Host	Location
34	14-18 February 2005	North American Friends of 3GPP	Scottsdale, US
35	09-13 May 2005	European Friends of 3GPP	
36	29 Aug – 02 Sept 2005	European Friends of 3GPP	
37	07-11 November 2005	Samsung	Korea

Annex F: List of actions

- WG1 and WG4 to review the proposed WG1 Terms of Reference (RP-040523) and to solve the overlapping areas.

- WG4 to review the documentation on GSM onboard aircrafts and to study the interference issues to terrestrial UTRAN networks (sec. 6.1)

- TSG RAN chairman to produce a response LS on the issue of 3GPP RAT definition (sec. 6.1).

- TSG RAN chairman to present RP-040536 and RP-040537 (contributions to ITU-R) in TSG SA and 3GPP PCG for final approval.

- WG2 to continue to look at the issue of ROHC behaviour and parameters and to maintain close contact with SA WG4 on error patterns and performance issues (RP-040400)

- WG2 to look at the additional changes proposed in the email reflector on top of RP-040522 and to produce an additional CR if required.

- All WGs to look at the proposed CRs for the removal of TGPL2 and to produce technically correct revision (RP-040524)

- TSG RAN chairman to report to TSG SA that WG3 is waiting for CN to conclude on the Network-initiated Scudif feature.

Annex G: Endorsed Terms of Reference of the new TSG RAN (RP-040547)

The technical specification development work within 3GPP is accomplished by Technical Specification Groups (TSGs) according to the principles and rules contained in the Project reference documentation (Partnership Project Description, Partnership Project Agreement, Partnership Project Working Procedures).

In particular the TSGs report to the Project coordination Group (PCG), and may organize their work in Working Groups and liaise with other groups as appropriate.

Each TSG has the responsibility to develop, approve and maintain the specifications within its terms of reference.

The TSG Radio Access Network (TSG RAN) is responsible for the UTRAN, including its internal architecture, of systems based on 3GPP specifications.

Specifically it has a responsibility for:

- Radio aspects of Terminal Equipment and UTRAN functions, requirements and interfaces.

More specifically, TSG RAN will address the following areas of work:

- Radio Layer 1 specification;

- Radio Layer 2 specification;

- Radio Layer 3 RR specification;

- UTRAN internal interfaces and interfaces to core network;

- UTRAN O&M requirements;

- Transport of implementation specific O&M between the Management System and Node B

- Conformance test specifications for all aspects of base stations;

- Specifications for radio performance and RF system aspects.

- Conformance test specifications for aspects of UTRA UEs

- Liaising with other TSGs, in particular TSG SA, to ensure overall co-ordination.