Draft Report of the 24<sup>th</sup> 3GPP TSG RAN meeting (Seoul, South Korea, 2 - 4 June 2004) Title:

**Document for:** 

Please send your comments before 8<sup>th</sup> July

Source: **3GPP support** 



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

## Contents

Exec	utive summary	4
1	Opening of the Meeting	7
2	Approval of the Agenda	7
3	Approval of the meeting report of TSG RAN #23	7
4	Reminder for IPR declaration	7
5	Chairman Report of meetings	7
6	Liaisons from other groups	8
7	Status Report and Approval of contributions on Release 99, Release 4 and Release 5	8
7.1	ITU-R Ad Hoc	
7.2	RAN WG1	
7.2.1	Report from WG1 including report on actions required from the previous meeting	
7.2.2 7.2.3	Approval of CRs to Release '99 with linked CRs to Release 4 and Release 5	
7.2.3	Approval of CRs to Release 99 with linked CRs to Release 4 and Release 5	
7.2.5	Approval of independent CRs to Release 5	
7.2.6	Approval of linked CRs where the leading one originated from WG1	
7.3	RAN WG2	
7.3.1	Report from WG2 including report on actions required from the previous meeting	
7.3.2	Discussions on decisions from WG2	12
7.3.3	Approval of CRs to Release '99 with linked CRs to Release 4 and Release 5	
7.3.4	Approval of independent CRs to Release 4 with linked CRs to Release 5	12
7.3.5	Approval of independent CRs to Release 5	
7.3.6	Approval of linked CRs where the leading one originated from WG2	
7.4	RAN WG3	
7.4.1	Report from WG3 including report on actions required from the previous meeting	
7.4.2	Discussions on decisions from WG3	
7.4.3	Approval of CRs to Release '99 with linked CRs to Release 4 and Release 5	
7.4.4	Approval of independent CRs to Release 4 with linked CRs to Release 5	
7.4.5	Approval of independent CRs to Release 5	
7.4.6 7.5	Approval of linked CRs where the leading one originated from WG3RAN WG4	
7.5 7.5.1	Report from WG4 including report on actions required from the previous meeting	
7.5.1	Discussions on decisions from WG4	
7.5.2	Approval of CRs to Release '99 with linked CRs to Release 4 and Release 5	
7.5.4	Approval of independent CRs to Release 4 with linked CRs to Release 5	
7.5.5	Approval of independent CRs to Release 5	
7.5.6	Approval of linked CRs where the leading one originated from WG4	
8	Dalacce 6 and bayond, Status undata and annuaval of CDs, vanants	10
o 8.1	Release 6 and beyond: Status update and approval of CRs, reports	
8.1.1	Radio Interface Improvement Feature  Improvement of inter-frequency and inter-system measurements	
8.1.2	Improved Receiver Performance Requirements for HSDPA	
8.1.2.		
8.2	RAN Improvement Feature	
8.2.1	Radio access bearer support enhancement	
8.2.1.	**	
8.2.1.		
8.2.1.	3 Optimisation of channelisation code utilisation for TDD	20
8.2.2	Release 6 RRM optimizations for Iur and Iub	20
8.2.3	Remote Control of Electrical Tilting Antennas	
8.2.4	Network Assisted Cell Change (NACC) from UTRAN to GERAN - network-side aspects	
x 3	Evolution of the transport in the LITRAN	21

#### **Draft Meeting Report 3GPP TSG RAN #24**

8.3.1	IP/ATM Inter-working: Vote	21
8.4	UE Positioning	22
8.4.1	UE positioning enhancements	22
8.4.2	A-GPS minimum Performance Specification	22
8.5	Introduction of the Multimedia Broadcast Multicast Service (MBMS) in RAN	
8.6	Multiple Input Multiple Output Antennas	
8.7	Subscriber and Equipment Trace Support in UTRAN	
8.8	Enhancement of the support of network sharing in the UTRAN	
	FDD Enhanced Uplink	
8.10	Technical Small Enhancements and Improvements	
8.11	Closed Release-6 Work Items	
8.12	Study Items	
8.12.1	Radio link performance enhancements	
8.12.2		
8.12.3	. J	
8.12.4	5 - F	
8.12.5		
8.12.6	1	
8.13	New Work Items/Study Items	
9	Technical co-ordination among WGs	
10	Outputs to other groups	
11	Project management	
12	Any other business	
13	Closing of the meeting	30
Anne	x A: List of participants	31
Anne	x B: List of documents	34
Anne	x C: List of CRs presented at TSG RAN #24	38
Anne	x D: Summary of TSG RAN Work Items	46
Anne	x E: Meeting schedule	49
Anne	x F: List of actions	50

## **Executive summary**

TSG RAN meeting #24 took place in Lotte Hotel, Seoul, Korea. The meeting started at 9:00 on Wednesday 2<sup>nd</sup> June 2004 and finished at 13:30 on Friday 4<sup>th</sup>. 91 participants were registered and 121 documents were presented.

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

Release	WG1	WG2	WG3	WG4	Total
Release 99		8		2	10
Rel-4 CRs (Rel-4 excluding Cat A)		14 (7)		7 (7)	21 (14)
Rel-5 CRs (Rel-5 excluding Cat A)	2 (2)	39 (30)	23 (23)	15 (8)	79 (63)
Rel-6 CRs (Rel-6 excluding Cat A)	6 (4)	45 (9)	39 (16)	28 (19)	118 (48)
Total CRs (Total excluding Cat A)	8 (6)	106 (54)	62 (39)	52 (36)	228 (135)

The Work Shop on RAN future evolution was discussed and a preliminary agreement on date and location was reached: 2 -3 November in Toronto, Canada. (sec. 12)

The revision of the new WI Description Form (RP-040242), to be presented to TSG SA for approval, was endorsed in TSG RAN.

A submission paper for ITU-R WP8F for the Revision 5 of M.1457 was approved (RP-040219)

WG meetings for year 2005 were discussed. It was observed that the reduction of the number of official meetings has spawned a number of Ad Hocs and bis meetings, which in fact maintains the number of travels but complicates the year planning for the participants. Upon request, WG1 chairman noted that 6 would be the right number of meetings for his group in 2005, 4 in the case of WG4 and WG3. The prospect for WG2 couldn't be provided at this time. (sec. 7.2.1)

### Release 99, Release 4 & Release 5

A problem related to UEs in the market that seem not support the CELL/URA\_PCH states was presented (RP-040250). TSG RAN is asked if it could be solved with the Early UE handling procedure, but TSG RAN found very difficult to analyse the issue given the limited information disclosed. However, on a first approach, the problem doesn't seem to fall into the Early UE category; it seems rather the case of equipment not compliant with the specifications as support for those states is mandatory in R99.

WG1 had been requested to study the HSPDA reconfiguration issue discussed in the last TSG RAN. WG1 concluded that the infrequency of occurrence of the problem identified does not justify the complexity required (sec. 7.2.1)

It is confirmed that Rel-5 ASN.1 is frozen from June 2004 (sec. 7.3.1)

WG4 had agreed on a requirement for the UE power back off when HS-DPCCH is transmitted. The CRs were presented to TSG RAN for Rel-5 and Rel-6. Rel-5 was approved without further comments, but many companies objected to agree on requirement for Rel-6; the introduction of Enhanced Uplink in that Release would need to modify the requirement again in the future, to take into account that a

new channelization code is sent. It was finally agreed that WG4, together with WG1, will analyse the implications of having R99 channels + HS-DPCCH + EDCH in Rel-6 (RP-040251).

The IP-ATM interworking debate was solved without the need of a vote (sec. 8.3.1). A set of CRs had been agreed off line by the companies involved in the discussion and was approved without objections.

### Release 6 and beyond

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

The following WIs/SIs were closed at the meeting:

- The WI "Network Assisted Cell Change (NACC) is completed (sec.8.2.4), the necessary CRs were approved in the meeting.
  - The associated TR 25.901 "Network Assisted Cell Change (NACC) from UTRAN to GERAN Network side aspects" was approved and will be put under change control (RP-040186)
- The WI for Trace Support in UTRAN is completed, the CRs are presented and approved (sec. 8.7).
- The Analysis on OFDM for UTRAN evolution was finished and the Study closed. The objectives of the study are fulfilled, further work in the area is postponed until the conclusion of Release 6. A new Study, with a broader scope, will be started in the future (sec. 8.12.3). TR 25.892 "Feasibility study for Orthogonal Frequency Division Multiplexing (OFDM) for UTRAN enhancement" is approved and put under change control (RP-040221).
- The WI "Iu enhancements for IMS support in RAN" was closed, progress in the future was unlikely (sec. 8.2.1.1).
- The WI "UE positioning enhancements other methods" was closed (sec. 8.4.1), for further work in the area, WI or SI with precise terms will have to be created.
- The Study on Wideband Distribution Systems was closed due to the lack of activity (sec. 8.12.2)

Under WI "Performance Requirements of Receive Diversity for HSDPA", it was long debated the need to signal the enhanced performance as a UE capability. This was analysed in last WG4 meeting and the conclusion was that it is not necessary, but several companies requested in RAN that the admission control aspects are taken into consideration in the analysis. WG4 is asked to look the issue again, with the help of WG2 expertise in the area (sec. 8.1.2.1).

The WI Description Sheet of "Optimisation of downlink channelisation code utilisation" had been revised by WG1 and it is approved (RP-040237).

TR 25.802 "Remote Control of Electrical Tilting Antennas" was presented for information (RP-040185).

For the AGPS performance work, a conference call is scheduled for Tuesday 22<sup>nd</sup> June (sec. 8.4.2)

It was raised that WG4 may need to produce requirements for the particular combination of channels and parameters that MBMS uses, although the existing MBMS WI Description & schedule doesn't take this into account. Additionally, it was clarified that September is the completion date for WG1 work, but WG2 & WG3 will need at least 3 additional months (sec. 8.5).

On the WI for Network Sharing, there was disagreement on the requirement to have the feature mandatory for Rel-6 UEs. It was clear that it is a service requirement issue, so the discussion should take place in TSG SA (sec. 8.8)

The Study on Radio link performance enhancements, which focus on HSDPA enhancements, was consider completed by WG1 and its rapporteur (sec. 8.12.1). Two WI proposals based on the Study were presented, for CQI enhancements (RP-040238) and for ACK/NACK enhancements (RP-040239).

Some companies believed that the gains found in WG1 with the first technique didn't justify the additional complexity and the proposal was rejected. On the second case, it was argued that the coverage improvement claimed hadn't bee proved in WG1.

It was agreed finally that the Study phase would be kept open for 3 additional months in order to clarify in WG1 the benefits of the ACK/NACK enhancement.

The related TR 25.899 "HSDPA enhancements" was approved and put under change control (RP-040222).

A new WI for "Inclusion of Uplink TDOA UE positioning method in the UTRAN specifications" was proposed. It was agreed that a Study phase should precede, and WG1 & WG2 are required to produce a Description Sheet for approval at next RAN (RP-040164).

## 1 Opening of the Meeting

Francois Courau (Chairman) opened the meeting the 2<sup>nd</sup> June at 9:00 and gave the floor to Mr. Jung, who welcomed the delegates to Seoul.

## 2 Approval of the Agenda

#### RP-040139 Draft agenda meeting #24 (Chairman)

No objections, the agenda is approved. The chairman noted after off line discussions, a vote will very likely not be needed for the IP-ATM interworking issue.

## 3 Approval of the meeting report of TSG RAN #23

RP-040140 Revised draft report meeting #23 (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 (<a href="http://webapp.etsi.org/Ipr/">http://webapp.etsi.org/Ipr/</a>).

## 5 Chairman Report of meetings

The chairman had provided the report by email. It had been discussed before the possibility to hold a "long term evolution" WorkShop. Dates proposed are October, after ITU WP8F meeting in Shanghai or November, in other place. This is reviewed under agenda item 12.

The chairman reported that a GSMA paper had been presented in last 3GPP PCG proposing not to hurry on the approval of Release 6, on the basis that existing networks lay much behind in terms of Release. This proposal/request is to be taken into consideration when deciding the date of freezing of Release 6.

## 6 Liaisons from other groups

No liaisons were received before the meeting, this one below was sent from TSG CN #24 that took place at the same time.

#### **RP-040255** LS on Input to Q.1741.4 (TSG CN, NP-040290)

This LS is sent to ITU-T SSG, cc TSG RAN, TSG SA

TSG CN informs that it will use 3GPP specifications from December 2004 for the update 4 of ITU-T recommendation Q.1741. This aligns with the update to equivalent Radio recommendation M.1457 to be provided by TSG RAN, which will also be proposed to the PCG to be based on specifications from December 2004.

# 7 Status Report and Approval of contributions on Release 99, Release 4 and Release 5

## RP-040250 RAN Guidance for handling of problematic UEs with early UE solution (Nokia) Antti Toskala (Nokia) presented this document

Han van Bussel (TMobile) reminded the requirements from the Kyoto meeting for early UEs: "The vendor would have implemented their UE trying to be compliant with the specifications", and "the vendor should provide all the full picture in order to solve the problem". As the paper goes, this doesn't seem to be the case so far. He therefore suggested that any vendor having this or similar problems provides the relevant information. Vodafone supported this view.

At this point in time, and given the information available, the only thing that can be done is wait for the concerned manufacturer to provide further information. Antti clarified that, Nokia not being the manufacturer with the problem, he cannot disclose further information and the number of mobiles in the field showing this behaviour.

Said Tatesh (Lucent) noted that with the information available this doesn't seem a standard's problem, it is rather a case of equipment not compliant with the specifications. The chairman agreed on the basis of the information disclosed, but warned that further revelations could show that the problem does affect the standard.

#### 7.1 ITU-R Ad Hoc

#### RP-040218 Status Report of the 3GPP RAN ITU-R Ad Hoc (ITU-R Ad Hoc Contact Person)

Giovanni Romano (TIM) presented this report

No comments, the report is noted

## RP-040219 Update submission for UTRA FDD and TDD toward Rev. 5 of Rec. ITU-R M.145 (ITU-R Ad Hoc)

Giovanni Romano (TIM) presented this report

It is commented that the text to for the AGPS performance work is unnecessarily detailed, in particular considering the descriptions of the other items. It is revised on line as follows:

A-GPS minimum performance specification. This WI is to develop A-GPS minimum performance specification for both UE based and UE assisted A-GPS to limit the inconsistency of UEs' location performance in the same operational environment, which is potentially caused by different implementations from various UE vendors. The minimum performance specification and the test cases shall take into account of variety operational scenarios of an A-GPS receiver to prevent

significant performance inconsistency from different UE vendors after a UE has passed the defined test cases, when they are operating in a different environment rather than an ideal open air condition

A revision of the document is provided in RP-040246.

#### RP-040220 Updated information on the Roadmap (ITU-R Ad Hoc)

Giovanni Romano (TIM) presented this report No comments, the document is approved

## RP-040246 Update submission for UTRA FDD and TDD toward Rev. 5 of Rec. ITU-R M.145 (ITU-R Ad Hoc)

The document is approved

RP-040220 & RP-040246 were sent to 3GPP PCG and TSG SA for email approval by Friday 4<sup>th</sup>, since they need to be presented in ITU WP8F the following week.

#### 7.2 RAN WG1

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

#### **RP-040165** Status Report WG1 (RAN WG1 Chairman)

Dirk Gerstenberger (RAN WG1 chairman) presented this report

RAN WG1 work can be summarized as follows:

- One meeting since last TSG RAN, 210 contributions submitted, around 95 delegates attended
- Agreed change requests
  - 1 CR for Rel5 FDD
  - 2 CRs for Rel6 FDD, 2 CR Rel6 TDD (pending RAN3 CR approval)
- HSDPA reconfigurations no change request agreed
- OFDM Study Item concluded
  - Good progress on FDD Enhanced Uplink WI
  - Joint day with RAN2 on Enhanced Uplink
  - Most parts of L1/L2 interface architecture and HARQ agreed
  - Focus on Hybrid ARQ and E-DCH structure
- Approach for MBMS UE capability definition agreed
- Maintenance issues:
  - HSDPA reconfigurations
    - Joint meeting with RAN2 concluded to leave the UE behaviour unspecified (no CR needed)
    - Contents of CR in RP-040123 was rejected in RAN1
  - UE behaviour at HHO failure (GSM/Inter/Intra HO failure)
    - UE behaviour similar to the one described in L1 sync procedure A
    - Rel5 CR currently under discussion (company input to RAN)
  - Timing maintained HHO
    - Joint meeting with RAN2 concluded that L1 sync procedure A applies, UL/DL timing is 1024 chip
  - HSDPA RAB configurations
    - Joint meeting with RAN2 agreed email discussion until RAN1#38

Looking at the meeting calendar, Antti Toskala (Nokia) noted that the intention to reduce the number of meetings has not been not achieved, given the number of Ad Hoc scheduled. He asked the community to be honest and acknowledge that the amount of work is not falling hence the number of meetings cannot be reduced. It is easier for everyone, in particular for WG delegates, if a proper meeting calendar is set up at the beginning of the year.

Dirk acknowledged that the right number of WG1 meetings for next year would be 6, but warned that agreeing more meetings in advance may not avoid the spawning of Ad Hocs.

The chairmen of other WGs were asked for the meetings in 2005. WG4 is clearly not going to need more than 4, but WG2 chairman could not give a clear indication. WG3 also seems to head to 4 meetings per year.

Howard Benn (WG4 chairman) proposed that instead of increasing the number of meetings, WG1 could prioritise the work and push to the future items with less interest. He also noted that the way RAN approves new WIs, every 3 months, has the side effect of overloading WG1. He reminded also of the GSMA request to slow down the pace. Other companies also supported the approach to prioritise WI.

On HSDPA reconfiguration (slide 7), an issue that WG1 was requested by TSG RAN #23 to review, Dirk explained that not many companies had participated in the debate in WG1. It was believed that the situation doesn't happen often enough to work on the fix, and the system impact hasn't been identified. Denis Fauconnier (Nortel) clarified that the transition period identified was only a few TTIs, so a few packets would be lost. Having this and the complexity of the solution in mind, it was preferred to leave it unspecified.

#### RP-040166 List of CRs from RAN WG1 (RAN WG1)

This list is presented for information

#### 7.2.2 Discussions on decisions from WG1

RP-040248 CR (Rel-5) to 25.133 on "Clarification on UE procedure in case of HHO failure" (Nortel)

This CR is revised to RP-040252 before presentation due to comments received on WG4 reflector

RP-040247 CRs (Rel-5 & Rel-6 Cat.A) to TS25.214 on "Clarification on UE procedure in case of HHO failure" (Qualcomm, Ericsson, Nortel, Panasonic, Vodafone)

Revised in RP-040257 before presentation due to comments received on WG1 reflector.

RP-040249 CRs (Rel-5 & Rel-6 Cat.A) to 25.331 on "Clarification on UE procedure in case of HHO failure" (Qualcomm, Ericsson, Nortel, Panasonic, Vodafone)

Revised in RP-040256 before presentation due to comments in WG2 reflector.

- RP-040257 CRs (Rel-5 & Rel-6 Cat.A) to TS25.214 on "Clarification on UE procedure in case of HHO failure" (Qualcomm, Ericsson, Nortel, Panasonic, Vodafone)
- RP-040256 CRs (Rel-5 & Rel-6 Cat.A) to 25.331 on "Clarification on UE procedure in case of HHO failure" (Qualcomm, Ericsson, Nortel, Panasonic, Vodafone)
- RP-040252 CR (Rel-5) to 25.133 on "Clarification on UE procedure in case of HHO failure" (Nortel)
- RP-040253 CR (Rel-6) to 25.133 on "Clarification on UE procedure in case of HHO failure" (Nortel)

CRs in RP-040257, RP-040256, RP-040252, RP-040253 are approved

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

No R99 CRs.

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

No Rel-4 CRs.

#### 7.2.5 Approval of independent CRs to Release 5

## RP-040230 Independent Release 5 CR to TS 25.212 and the shadow CR to Release 6 (RAN WG1)

No comments, the CRs are approved.

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

## RP-040235 CRs (Rel-6) to 25.221, 25.224, 25.433 on "Addition of TSTD for S-CCPCH in 3.84Mcps TDD" (IPWireless)

Derek Richards (IPWireless) presented these CRs.

Derek explained that the CRs have been circulated in WG1 and WG3 reflectors without comments. The CRs are approved

#### 7.3 RAN WG2

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

#### **RP-040167** Status Report WG2 (RAN WG2 Chairman)

Denis Fauconier (RAN WG2 chairman) presented this report

RAN WG2 activity can be summarized as follows:

- One ad-hoc meeting on MBMS
- One RAN2 meeting
- One day joint meeting with RAN1 on HSUPA and HSDPA
- Release 99 corrections: Occupied 1 day of last Quarter only!!!
- Release 4 corrections: Very few
- Release 5: Status of ASN.1
  - One last corrective radio CR. Shall be frozen in June 04 as requested by RAN.
  - Correction of SRNS relocation info
- Release 6
  - MBMS
    - Dedicated 3 days ad-hoc meeting, mostly progress on stage 2 issues
    - Stage 3 is now starting
  - Joint meting on enhanced uplink with RAN WG1
    - Good progress on a number of items. WI on schedule.

Denis clarified that RAB support enhancement WI is looking at IMS support in the RAN. Per Beming (Ericsson) noted that WG1 should be involved in the discussion, as WG2 is performing simulations and the options currently under study in WG2 could require changes in WG1 also. Denis clarified that for the time being the solution evaluated re-uses current WG1 functionality.

Dirk Gerstenberger (WG1 chairman) objected that this solution using the secondary scrambling code, although based on existing layer 1 functionality, needs to be studied in WG1, in particular in terms of interference. The chairman proposed to solve this issue by using the next collocated meeting to handle a joint session.

It was reasserted the previous decision of freezing the Rel-5 ASN.1.

It was highlighted that TSG SA shall be consulted on the discussion to make mandatory or not the support of UTRAN sharing on Rel-6 UEs, this is discussed further in agenda item 8.8.

#### RP-040168 List of CRs from RAN WG2 (RAN WG2)

This list is presented for information

#### 7.3.2 Discussions on decisions from WG2

- RP-040201 CRs (R'99 and associated Rel-4) to 25.322 and 25.331 on Downlink RLC Size handling (RAN WG2)
- RP-040214 CRs (Rel-5 and associated Rel-6) to 25.322 and 25.331 on Downlink RLC size handling (RAN WG2)
- RP-040224 CRs (Rel-5 and associated Rel-6) to 25.322 and 25.331 on RLC size handling and re-establishment (RAN WG2)

RP-040214 and RP-040224 are alternative. RP-040214 introduces the Cat A changes corresponding to RP-040201, RP-040224 introduces further enhancements to Rel-5.

Finally, RP-040201 is approved together with RP-040224. RP-040214 is withdrawn.

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

The following documents contain CRs agreed by WG2:

Tdoc	Title
RP-040200	CRs (R'99 and associated Rel-4/Rel-5/Rel-6) to 25.321 on Use of U-RNTI in downlink
RP-040202	CRs (R'99 and associated Rel-4/Rel-5/Rel-6) to 25.324
RP-040203	CRs (R'99 and associated Rel-4/Rel-5/Rel-6) to 25.331
RP-040204	CRs (R'99 and associated Rel-4/Rel-5) to 25.921
RP-040205	CRs (R'99 affected, Rel-6 version) to 25.993

All the CRs in the documents above are approved without comments

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

The following documents contain CRs agreed by WG2:

Tdoc	Title
RP-040206	CRs (Rel-4 and associated Rel-5/Rel-6) to 25.331 (1)
RP-040207	CRs (Rel-4 and associated Rel-5/Rel-6) to 25.331 (2)

All the CRs in the documents above are approved without comments

### 7.3.5 Approval of independent CRs to Release 5

The following documents contain CRs agreed by WG2:

Tdoc	Title
RP-040209	CR (Rel-5 and associated Rel-6) to 25.305
RP-040210	CRs (Rel-5 and associated Rel-6) to 25.331 (1)
RP-040211	CRs (Rel-5 and associated Rel-6) to 25.331 (2)
RP-040212	CRs (Rel-5 and associated Rel-6) to 25.331 on Restrict operation of the virtual active set
RP-040213	CRs (Rel-5 and associated Rel-6) to 25.331 on Usage of different RB mapping info
RP-040234	CR (Rel-5 and associated Rel-6) to 25.321
RP-040236	CRs (Rel-5 and associated Rel-6) to 25.331 (3)

All the CRs in the documents above are approved without comments

#### **RP-040208** CRs (Rel-5 and associated Rel-6) to 25.304 (RAN WG2)

CRs 115 & 116 are linked to RP-040243 and were discussed together; the rest of the CRs were immediately approved. Finally, after discussion, CRs 115 & 116 are also approved.

#### **RP-040243** Measurement rules (Nokia)

Jussi Numminen (Nokia) presented this document

It was asked why the CRs would require a change in the UE requirements in 25.133 as stated in the paper. Jussi clarified that in the CELL\_FACH case, there is a relaxation in the measurement requirement. Jussi simply highlighted that there might be the need to change 25.133, Nokia is currently analysing this impact, but WG4 should look at it as well.

There were some objections to the proposed wording for the HCS rules, which is rather unclear "... at least on all...". This was clarified and then the objection was ruled out. However, Per Ernstrom (TeliaSonera) encouraged the support for the HCS case and the coherence with the non-HCS. Overall, it was found that there are separate issues that need to be studied: the impact on WG4's 25.133, the alignment of the behaviour for the HCS case, and the usage of Sintrasearch. Finally, it is requested that the arguments in RP-040243 are brought to WG2 for further consideration. It is agreed sufficient time for this issue shall be reserved in the next WG2 meeting.

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

#### 7.4 RAN WG3

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

#### **RP-040169** Status Report WG3 (RAN WG3 Chairman)

Alexander Vesely (Siemens) presented this report RAN WG3 activity can be summarized as follows:

- Meetings:
  - RAN WG3#41bis, 30 March 1 April, Budapest, Hungary, for Rel-6 WIs only
  - RAN WG3#42, 10 14 May 2004, Montréal, Canada
- Agreed CRs:
  - no R99 CRs
  - no Rel-4 CRs
  - 17 Rel-5 CRs (cat. F) (12 CRs on HSDPA)
  - 32 Rel-6 CRs (2 cat.F, 17 cat.A, 11 cat.B, 2 cat.A)
- Rel-5 correction ongoing (mainly HSDPA)
- WIs on Trace and NACC finalised
- basic agreements on RET WI
- MBMS: stage 3 work started (current status of discussions reflected in a "RAN WG3 internal" TR)
- work on network sharing continued
- work on EUDCH WI not yet started (waiting for basic RAN1/2 agreements)
- especially at RAN3#42 the progress on Rel-6 topics was excellent

Alex further clarified that no Rel99 or Rel-4 documents were presented in WG3. Alex clarified that no LS has been sent to WG1 on the Beamforming discussion, WG3 relies on individual companies to transmit the information (slide 23).

On slide 22, Alex clarified that SA WG2 would like to have the information of the degradation in quality to trigger the change from voice&video to voice. The RAN specifics are not needed by SA WG2 and no mechanism is yet place for this. Per Beming (Ericsson) found this request somewhat surprising, as the bearer re-negotiation procedures are in place, and the RAN is expected to report when it cannot maintain the requested bearer. It is clarified that the request from SA is to have the information before, not when RAB cannot be maintained anymore. And it seems that SA in now looking at the particular case of this service, not the generic bearer change.

Sammi Kekki (Nokia) clarified further that the issue is not about RAB renegotiation, but about an information to the exchanged that may (or may not) trigger later the RAB change.

Howard Benn (WG4 chairman) highlighted that, looking at SA work on WLAN, sooner or later some of the RRM procedures will have to be taken out of the RAN, or instead RR Management for other technologies will have to be taken INTO RAN.

On the topic of IMS support, the urgency of input from SA WG2 was debated. It was highlighted that it is a Rel-6 item, expected for conclusion by December in the worst case, SA WG2 input is required before September if the deadlines are to be preserved.

#### RP-040170 List of CRs from RAN WG3 (RAN WG3)

This list is presented for information

#### 7.4.2 Discussions on decisions from WG3

No discussions

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

No CRs

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

No CRs

#### 7.4.5 Approval of independent CRs to Release 5

The following documents contain CRs agreed by WG3:

Tdoc	Title
RP-040173	CRs (Rel-5 and Rel-6 Category A) to TS 25.430 on Node B Communication Contexts
RP-040174	CRs (Rel-5 and Rel-6 Category A) to TS 25.413
RP-040175	CRs (Rel-5 and Rel-6 Category A) to TS 25.423
RP-040176	CRs (Rel-5 and Rel-6 Category A) to TS 25.433
RP-040177	CRs (Rel-5 and Rel-6 Category A) to TS 29.108

All the CRs in the documents above are approved without comments

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

The following documents contain CRs agreed by WG3:

Tdoc	Title
RP-040178	CRs (Rel-5 and Rel-6 Category A) to TS 25.423 and TS 25.433 on Node B usage of the MAC-hs re-ordering buffer size
RP-040179	CRs (Rel-5 and Rel-6 Category A) to TS 25.423 and TS 25.433 on Clarification on number of and capacity reporting of Priority Queues
RP-040180	CRs (Rel-5 and Rel-6 Category A) to TS 25.423 and TS 25.433 on Unsuccessful Operation of RL Setup Procedure for HSDPA
RP-040181	CRs (Rel-5 and Rel-6 Category A) to TS 25.423 and TS 25.433 on Power Balancing Corrections

All the CRs in the documents above are approved without comments

Note: There is an error on the cover sheet of CRs 992 & 993 to 25.433 in RP-040178, the specification field contains 25.423 instead of 25.433.

It was preferred that this agenda item includes CRs linked to different WGs, not linked CRs to different specifications under WG3 responsibility. Such CRs should be handled under the previous agenda item to keep a consistent approach between the different working groups.

#### 7.5 RAN WG4

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

#### **RP-040171** Status Report WG4 (RAN WG4 Chairman)

Howard Benn (WG4 chairman) presented this report.

- 1 RAN WG4 meeting after the last RAN meeting
- ½ day joint adhoc held with T1/RF
- Usual number of delegates (around 80)
- ~200 input contributions
- Corrections to the specification (cat B & F numbers)

- Release 99 2 CRs (inc implementation error)
- Release 4 7 CRs
- Release 5 7 CRs
- Release 6 18 CRs
- There will be one WG meeting before the next plenary.

Howard clarified that the CRs for PAR back off have been approved for Rel-5 and Rel-6 (slide 4). Bernd Haberland (Alcatel) argued that the co-existence and impact of Rel-6 EDCH should be taken into account. This view was also supported by Three. It was noted that as of today, the only Rel-6 CR that can be produced are the Cat A of the Rel-5 presented. Only when EDCH is studied in WG4, and the simulations done, it would be possible to evaluate the changes related to EDCH. It was reminded that during the last meeting discussion the focus was made for Release 5 only.

On the impact of MBMS on measurement occurrences (slide 5), Denis Fauconnier (Nortel) clarified that the assumption is that MBMS doesn't affect the dedicated mode measurements, MBMS reception should take place when the measurements don't. Howard further clarified that the document presented in WG4 showed that MBMS BLER cannot be met together with measurement performance requirements in CELL\_FACH.

On the DL Outer Loop PC issue (slide 5), Howard clarified that contributions are expected before next WG4 meeting, in order to get a clearer picture in the meeting.

#### RP-040225 List of CRs from RAN WG4 (RAN WG4)

This list is presented for information

#### 7.5.2 Discussions on decisions from WG4

No discussions

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

RP-040226 CRs (R'99 and Rel-4/Rel-5/Rel-6 Category A) to TS 25.133 (RAN WG4) No comments, the CRs are approved

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

The following documents contain CRs agreed by WG4:

Tdoc	Title
RP-040189	CRs (Rel-4 and Rel-5/Rel-6 Category A) to TS 25.105 & TS 25.142 on "Clarification of measurement filter of spurious emission"
RP-040190	CRs (Rel-4 and Rel-5/Rel-6 Category A) to TS 25.123 for correction of Test case for SFN-SFN observed time difference type 2 for 3.84Mcps TDD
RP-040191	CRs (Rel-4 and Rel-5/Rel-6 Category A) to TS 25.104 & TS 25.141 for "Spurious emissions: Co-existence with services in adjacent frequency bands"
RP-040192	CRs (Rel-4 and Rel-5/Rel-6 Category A) to TS 25.104 & TS 25.141 for the introduction of new requirement: Adjacent Channel Rejection Ratio for Repeaters

All the CRs in the documents above are approved without comments

Note: The titles of RP-040191 & RP-040192 are incorrect, the CRs apply to 25.106 & 25.143, the Repeaters specifications, and not 25.104 & 25.141

#### 7.5.5 Approval of independent CRs to Release 5

RP-040227 CRs (Rel-5 and Rel-6 Category A) to TS 25.942 for the introduction of Rational on test parameters for UE adjacent channel selectivity (RAN WG4)

No comments, the CRs are approved

RP-040193 CRs (Rel-5 and Corresponding Rel-6) to TS 25.101 for "Correction of maximum allowed power and range in TFC selection with HS-DPCCH and other clarifications" (RAN WG4)

RP-040199 CRs (Rel-5 and Rel-6 Category A) to TS 25.101 for "UE maximum output power with HS-DPCCH" (RAN WG4)

The CRs in these document are all related to the HS-DPCCH issue, this needs to be reflected in the cover sheet. All the CRs are revised in RP-040251.

#### RP-040194 CRs (Rel-5 and Corresponding Rel-6) to TS 25.133 (RAN WG4)

CR660 and CR661 to 25.133 are related to the HS-DPCCH and TFC selection CRs in RP-040193. They are revised to reflect this and included in RP-040251. The rest of the CRs in RP-040194 are approved

## RP-040251 CRs (Rel-5 & Rel-6) to 25.101 & 25.133 for corrections to UE output power and TFC selection with HS-DPCCH (RAN WG4)

Howard Benn (WG4 chairman) presented this document. He noted that the document coversheet reflects wrong revisions, all CRs are one revision more; and all of them are under the HSDPA-RF Work Item. However the CR files are correct.

On CR341 to 25.101, the deletion of the last paragraph in section 6.1 "All the parameters in clause 6 are defined using the UL reference measurement channel (12.2 kbps) specified in subclause A.2.1 and unless stated with the UL power control ON" is not explained on the cover sheet. Howard reported that it is a clarification text and its presence/absence doesn't change the requirements, it is removed now because it is incompatible with the new requirements in 6.2.2. Howard agreed however that the removal should have been explained in the CR coversheet. It was pointed out that the text is still present in the receiver section (sec. 7) in 25.101 and should have been removed for consistency. Howard complained that so far that note in section 7 is not incorrect hence there is no need to remove it.

The Rel-6 CRs for the power back off were contested by various companies, as the impact of EDCH should be considered before allowing for this relaxation. Motorola and Nokia objected that at this moment, EDCH hasn't been evaluated in WG4, only the back off for certain values of Bc/Bd/Bhs for HSDPA is agreed. Hence, as usual, Cat A Rel-6 should be produced together with the Rel-5 CRs. If in the future, if new requirements are identified, the specification can be changed.

Dirk Gerstenberger (Ericsson) objected that the relaxation approach is having the effect of setting the requirements for Rel-5, and eventually Rel-6, on the characteristics of a R99 power amplifier. If a UE is to support HSDPA, it should be able to cope with the new requirements. Unfortunately, this hasn't been the decision for Rel-5, but it is even less acceptable to keep the same relaxation for Rel-6. Dirk also noted that the leap from 2 to 3 codes in the UE for Rel-6 is less demanding that the change from 1 to 2 in Rel-5.

Edgar Fernandes (Motorola) remarked that this is incorrect as HSDPA Rel-5 cannot be implemented using a Rel99 implementation. Also, the CRs were agreed in WG4 by all companies without comments, for both Rel-5 & Rel6, he found surprising that companies object now in the plenary.

After off line discussions, objections remained to the approval of the Rel-6 CR for power back off. WG4 and WG1 are tasked to have a joint session and discuss the implications for Rel-6. It is reminded however that the concerned specification, 25.101, is under the responsibility of WG4.

The Rel-6 CRs for TFC selection were proposed but not agreed as it was mentioned this is a combined solution. The technical change as presented here is not disagreed.

The 3 CRs to Rel-6, CR661 to 25.133, CR342 & CR344 to 25.101 are not approved. Rel-5 CRs, CR660 to 25.133, CR341 & CR343 to 25.101 are approved. It is noted that this makes the Rel-5 and Rel-6 specification incoherent.

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

No CRs

- 8 Release 6 and beyond: Status update and approval of CRs, reports
- 8.1 Radio Interface Improvement Feature
- 8.1.1 Improvement of inter-frequency and inter-system measurements

## RP-040141 Status Report for WI Improvement of inter-frequency and inter-system measurement (Nokia)

Antti Toskala (Nokia) presented this report

WG2 and WG3 have analysed the proposals under discussion and provided feedback to WG1. The actual CRs in WG1, if agreed, will be small, hence the completion date can be maintained. Antti reported that in his view there would be no impacts in WG4 unless it is decided to make a new test case for this. The completion date is maintained as September 2004.

### 8.1.2 Improved Receiver Performance Requirements for HSDPA

Activity under this building block is under way only for the Work Item below.

### 8.1.2.1 Performance Requirements of Receive Diversity for HSDPA

## RP-040142 Status Report for WI Performance Requirements of Receive Diversity for HSDPA (NTT DoCoMo)

Takehiro Nakamura (NTT DoCoMo) presented this report

Takehiro clarified that the 15 code category of UE hasn't been discussed so far in WG4.

It was asked why this improvement exercise focuses on HSDPA only. It is noted that the WI was approved this way after long discussions. However, nothing stops companies to present a proposal for a WI to produce requirements for UE diversity or any other receiver improvement for other channels.

It was asked if the signalling of the capability, reported for further study, would be discussed with WG2. Howard clarified that the agreement in last WG4 was that at this moment, the signalling is not necessary. A debate took place on this need to signal to the network the Diversity capability. Denis Fauconnier (Nortel) noted that the network should be aware of the performance of the UE, for example for admission control to prioritise capable UEs under certain difficult circumstances. Otherwise, it is not clear how the system can benefit of the improved performance.

On the other side, it was noted that the understanding in WG4 after the paper presented in the last meeting (R4-040286) is that the signalling is not needed. The network would know indirectly, based on a better CQI reported by the mobile, that its receiver performance is improved. Howard Benn (Motorola) commented that Motorola agreed with the current WG4 conclusion that signalling was not required, however he welcomed papers that presented the technical benefits of adding extra signalling.

Denis noted that the RRM takes into account the performance requirements as specified in 25.101 in its operation; so if new requirements are specified, the RRM should be aware of compliant mobiles to take advantage of that information for system optimization. Edgar Fernandes (Motorola) commented that CQI was designed to take improved receiver performance into account and this was discussed in WG1 and WG4 when a performance requirement for advanced receivers for HSDPA was proposed.

Finally, considering that the admission control was not considered in WG4, WG4 and WG2 are tasked to study the issue together and determine if the signalling is necessary.

Concerning the WI schedule, it is noted that the work currently on-going covers the requirements for UE capability categories 1 to 6 would be finished by September 2004, but for categories 7 & 8 the completion would be March 2005.

### 8.2 RAN Improvement Feature

### 8.2.1 Radio access bearer support enhancement

#### RP-040143 Status Report for WI RAB support enhancement (Nokia)

Juha Mikola (Nokia) presented this report

It was noted that the report is far from being comprehensive. The WI deals with the support of Voice optimization over IMS in the UTRAN.

It is clarified that a decision would be adopted in September, the CRs are expected for December, completion 60%.

It was asked if the WI would be closed once the work on Voice over IMS work is finished. Denis Fauconnier (Nortel) acknowledged that the correct procedure would have been to open a different WI when the Voice over IMS work was started. In general, it was found preferable to have a clear frame for ANY piece of work. In this case, one option would be to create a WI Description Sheet to cover this work, but since the CRs would be ready in 6 months, the bureaucratic load was found unnecessary.

### 8.2.1.1 lu enhancements for IMS support in the RAN

#### **RP-040144** Status Report for WI Iu enhancements for IMS support in RAN (Nortel)

Denis Fauconnier (Nortel) presented this report

From SA WG2/CN, it seems that there is no confirmation on the possibility to differentiate user and signalling traffic. Denis explained that at the beginning of the work, the WI was expected to study many improvements but since, not much proposals have been presented. Given that companies have not put interest on work in the area, and the feedback received from SA/CN so far, it is agreed to close the Work Item.

### 8.2.1.2 Optimisation of downlink channelisation code utilization

## RP-040145 Status Report for WI Optimisation of downlink channelisation code utilisation (Nortel)

Evelyn Lestrat (Nortel) presented this report

Evelyn clarified that no agreement has been reached yet, only a few proposals have been presented. The WI Description Sheet has been revised in WG1 and is presented in the document below.

## RP-040237 Revised WI Description Sheet for "Optimisation of downlink channelisation code utilisation" (Nortel)

Evelyn Lestrat (Nortel) presented this WIDS

Evelyn clarified that the changes apply to the justification section only.

The WI DS is approved

### 8.2.1.3 Optimisation of channelisation code utilisation for TDD

## RP-040146 Status Report for WI Optimisation of channelisation code utilisation for TDD (IPWireless)

Derek Richards (IPWireless) presented this report.

No progress, the WI has been circulated in WG1 reflector without comments. It is however clarified that it was not presented during the meeting of WG1.

### 8.2.2 Release 6 RRM optimizations for lur and lub

Generic building block, no report produced. Work on this area was finished in the last meeting.

### 8.2.3 Remote Control of Electrical Tilting Antennas

## RP-040147 Status Report for WI Remote Control of Electrical Tilting Antennas (Vodafone) Volker Hoehn (Vodafone) presented this report

Per Beming (Ericsson) noted that the reason why the agreement on the modulation scheme was reached so fast is because Ericsson withdrew sustained opposition once a vote was announced in WG3. Per objected the procedure followed, in Ericsson's view the decision was taken too fast, the discussion should have been brought to RAN and the decision taken here.

Howard Benn (WG4 chairman) reminded of the concerns raised by WG4 via a LS to WG3 at WG4 #29 on the possible interference produced by a new modulated signal present at the antenna port.

Volker reminded that based on the proposal R4-030888 in meeting #29, WG4 had concluded then that no modifications to WG4 specifications were required, RET should be considered either ancillary equipment or part of the BS.

Sammi Kekki (Nokia) further noted that the modulation scheme that has been selected is the proposal from AISG, On-Off Keying, which seems to have the worse spectral characteristics. It was agreed that WG4 will check the effects of the new signal on the antenna port. The fact of having another signal on top of the radio carriers may produce additional intermodulation products that on the existing test might not be properly tested.

#### RP-040185 TR 25.802 Remote Control of Electrical Tilting Antennas (RAN WG3)

Volker Hoehn (Vodafone) presented this TR

No comments, the TR is presented for information and it is noted

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

## RP-040148 Status Report for WI Network Assisted Cell Change (NACC) from UTRAN to GERAN - network-side aspects (Vodafone)

Alan Law (Vodafone) presented this report

With the presentation of the TR and the CRs below, the Work Item is finished.

## RP-040186 TR 25.901 Network Assisted Cell Change (NACC) from UTRAN to GERAN - Network side aspects (RAN WG3)

Alan Law (Vodafone) presented this report

It is presented for approval, although it hasn't been presented to RAN before for information.

The TR is approved without comments

## RP-040182 CRs (Rel-6 Category B) to TS 25.401, TS 25.410, TS 25.413, TS 25.420, TS 25.423 for Network Assisted Cell Change (NACC) (RAN WG3)

The CRs are approved without comments.

### 8.3 Evolution of the transport in the UTRAN

### 8.3.1 IP/ATM Inter-working: Vote

#### RP-040244 CRs (Rel-5 & Rel-6) to 25.414Completion of IP Transport Option (Nortel)

This document is withdrawn

#### RP-040254 Completion of Rel-5 transport WI (Nokia, Nortel,...)

Sammi Kekki (Nokia) presented these CRs

These CRs represent the agreement reached off line by a number of companies on the open aspects:

- the ATM connectivity over an IP transport network and the tunnelling protocol to be used (interworking option 1). Any reference to the Pseudo Wire Emulation protocol (PWE3) is removed; an informative section is added in Annex B of 25.414 to report that any ATM emulation over IP protocol from IETF could be used
- the interworking function, either internal or external to the nodes (interworking options 2 & 3). The proposal is to remove the explicit reference to a logically separated unit (option 3), and to modify option 2 in order to allow for both.

- IP ALCAP to be used for the interface between the node and the external interworking unit. The agreement is that IP ALCAP is not mandatory, it is however shown as an example of implementation in Annex B of 25.414.

No comments to these CRs. This closes the IP/ATM discussion; as it can be seen in the CR cover pages the CRs have bee agreed by most companies involved in the discussion. The CRs are approved.

### 8.4 UE Positioning

### 8.4.1 UE positioning enhancements

#### RP-040149 Status Report for WI UE positioning enhancements - other methods (Siemens)

Joerg Gustrau (Siemens) presented this report

Antti Toskala (Nokia) noted that all the WG have at one point or another looked at the enhancement for OTDOA-IPDL without a clear conclusion yet, Antti asked if companies expected any conclusion in the future.

It was observed also that this is a basket-generic item, under which for a long time the OTDOA-IPDL technique has been studied. It is preferred to approve a dedicate Work Item and to close this generic item. Cambridge Positioning Systems, although not present at the meeting, had clearly expressed in RAN email reflector its opposition to close the WI, but the proposal of a majority of companies in the meeting was on the opposite sense. It is therefore approved to close the WI.

## RP-040216 CRs (Rel-6) on 25.305 and 25.413 on Indication of achieved accuracy in position estimate (RAN WG2)

No comments, the CRs are approved.

### 8.4.2 A-GPS minimum Performance Specification

#### **RP-040150** Status Report for WI A-GPS minimum performance specification (AWS)

Donglin Shen (AWS) presented this report

In order to achieve the proposed completion date of September, Donglin proposes to hold a dedicated Ad Hoc. Howard Benn (WG4 chairman) reported that the delegates involved in AGPS discussions had informally expressed preference for not holding a physical Ad Hoc; a series of conference calls was found more convenient. This approach was agreed, but the possibility of an Ad Hoc remains, in case the issues are unsolved after the conference call. If needed, the Ad Hoc will have to be announced before 29<sup>th</sup> June.

Tim Moulsley (Philips) asked if it could be possible to finish some of the items under discussion by the completion date, leaving others for a latter stage. Howard clarified that the status of most items is similar, in fact, the pending aspect is to reach agreement between the different proposals.

The first conference call will take place on Tuesday 22<sup>nd</sup> June, at 15:00 CET.

The completion date is preserved as September 2004.

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

#### **RP-040151** Status Report for WI Introduction of MBMS in RAN (Nokia)

Juha Mikola (Nokia) presented this report

It is corrected that the discussion on having soft combining mandatory or not only applies to FDD mode.

The work and impact on WG4 is not reported. Although MBMS reuses current physical channels, there are two issues related to WG4 that need to be considered: the impact of MBMS on the measurement requirements on dedicated channels and the fact that WG4 may need to define new performance requirements to cover the particular characteristics of MBMS. Dirk Gerstenberger (WG1 chairman) remarked that there is an actual need for performance analysis to evaluate the benefits of the MAC diversity and the soft combining techniques. This will surely end up in defining new performance requirements.

However, Howard Benn (WG4 chairman) noted that the WI Description doesn't cover any WG4 work, so it seems that the performance requirements were not in the scope of the MBMS. An important point is that if there is agreement that requirements are needed, they should be together with the rest of MBMS in Rel-6. They can be however presented later, not delaying the freezing of Rel-6.

Considering the current completion date, September 2004, RAN WG2 and WG3 chairmen noted that the status of the work in the protocol side is still unmatured, and although CRs could be presented for September, its quality will certainly be very poor and will need to be revised in the future. Work in WG1 seems to be in a better situation. Hashem Madadi (Three) preferred to keep the date of September to avoid further delays of MBMS and the freezing of the whole Rel-6. The chairman, on the opposite, preferred to have realistic dates to help on for the Release planning. He will report to TSG SA that the only part of RAN that can be completed by September is the physical layer, the signalling is more likely December, and the performance aspects will come after.

#### **RP-040217** CRs (Rel-6) on 25.346 (MBMS) (RAN WG2)

No comments, the CRs are approved.

### 8.6 Multiple Input Multiple Output Antennas

## RP-040152 Status Report for WI Multiple Input Multiple Output antennas (MIMO) (Lucent) Said Tatesh (Lucent) presented this report

The methodology for evaluation hasn't been agreed yet, Dirk Gerstenberger (WG1 chairman) clarified that any proposal could be presented once the methodology is agreed. A window will be opened for a meeting cycle. This was agreed in last RAN meeting.

The completion dates are clarified as follows, December 2004 applies to WG1, WG2, WG3 and March 2005 to WG4. This dates and completion level are however objected, given that WG1 has not yet agreed the simulation conditions and the proposals to be put in, given also that WG2, WG3, WG4 have not started the work. Dirk clarified that although it may seem that most of the work is still pending, the actual level of work in WG1 is close to 50% as stated. His estimate for completion would be March 2005. For the other groups, it seems impossible to evaluate at this time, December 2005 would be entered in the work plan.

It was required that the completion dates and completion level is detailed for each WG in future status reports.

### 8.7 Subscriber and Equipment Trace Support in UTRAN

#### **RP-040153** Status Report for WI Subscriber and equipment trace in UTRAN (Nortel)

Denis Fauconnier (Nortel) presented this report

No comments, the Work Item is completed and the required CRs presented below

## RP-040183 CRs (Rel-6 Category B) to TS 25.413, TS 25.420, TS 25.423 for Subscriber and Equipment Trace Support in UTRAN (RAN WG3)

No comments, the CRs are approved

# 8.8 Enhancement of the support of network sharing in the UTRAN

## RP-040154 Status Report for WI Enhancement of the support of network sharing in the UTRAN (TeliaSonera)

Per Ernstrom (TeliaSonera) presented this report

It couldn't be agreed in the WG whether the support for network sharing should be a mandatory feature for UEs. Hashem Madadi (Three) found surprising that the discussion even took place, as the service requirements in stage 1 do require it. Han van Bussel (TMobile) noted that internal analysis based on the various TMobile networks show that the feature as specified doesn't solve all the scenarios hence its use would be limited. He noted that the terminal complexity concerns that had been raised were very valid, and recommended to revise the Stage 1 requirement now that the Stage 3 work has shown the complexity issues.

Per Beming (Ericsson) objected this argument, and noted that the complexity on the UE is very minor compared to the complexity in the network. Han remarked that TMobile's position is that the feature is not beneficial, although he acknowledged that for other operators it could be useful. He reminded that R99 to Rel-5 terminals don't support.

Hashem remarked that leaving the feature optional will make it completely useless, forcing each operator to implement its own solution.

Vodafone and TMobile aligned in not seeing benefit of the feature. Three, TeliaSonera, Ericsson, Nortel, Orange preferred to have it mandatory. Vodafone and TMobile however turned to the UE manufacturers for the cost of addition of the feature.

Francesco Grilli (Qualcomm) noted that implementing the mandatory feature or implementing the capability to signal the option brings more or less the same complexity. And given that an optional feature seems useless, he requested a clear decision, it is mandatory or it is removed. Jussi Numminen (Nokia) objected this view for the need for capability signaling, since the network could determine if the UE supports the feature by looking at its behavior.

Finally, it is agreed that the problem is linked to Services rather than Radio. The chairman will report to SA, and the discussion will take place there. Per requested that the complexity issue is not raised in SA, and reminded that anyway the current service requirement is to have it mandatory.

### 8.9 FDD Enhanced Uplink

## RP-040155 Status Report for WI FDD Enhanced Uplink - Stage 2 & layer 2 and 3 Protocol Aspects (Ericsson)

Joakim Bergstrom (Ericsson) presented this report

#### RP-040156 Status Report for WI FDD Enhanced Uplink - Physical Layer (Nokia)

Antti Toskala (Nokia) presented this report

Antti clarified that the level of completion is around 30%

## RP-040157 Status Report for WI FDD Enhanced Uplink - UTRAN Iub/Iur Protocol Aspects (Nortel)

Denis Fauconnier (Nortel) presented the report

It is expected that WG3 will be able to start the work in August, after the joint WG1-WG2 Ad Hoc in June has agreed on some Handover aspects.

## RP-040158 Status Report for WI FDD Enhanced Uplink - RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing (Ericsson)

Joakim Bergstrom (Ericsson) presented this report

It was requested for the future that only one status report be presented at the plenary giving the summary of the work in all WGs. Completion levels and dates should be provided for the work in each WG.

### 8.10 Technical Small Enhancements and Improvements

The following documents contain CRs under the TEI6 Work Item:

Tdoc	Title	Source
RP-040184	CRs (Rel-6 category B) to TS 25.423, (category C) to 25.433, (category F) to TS 25. 453	RAN WG3
RP-040215	CRs (Rel-6) on 25.331 (TEl6) (The ASN.1 definition of IE "SysInfoType5bis")	RAN WG2
RP-040223	CRs (Rel-6) on 25.306 (Correction to memory handling in the UE)	RAN WG2
RP-040228	CRs (Rel-6) for WI "Technical Enhancements and Improvements"	RAN WG4
RP-040231	Independent Release 6 CR to TS 25.211	RAN WG1

All the CRs in the documents above are approved without comments

#### 8.11 Closed Release-6 Work Items

The following documents contain CRs agreed in WG4:

Tdoc	Title
RP-040197	CR (Rel-6) to TS 25.141 for "High Speed Downlink Packet Access"
RP-040198	CR (Rel-6) for WI "FDD BS Classification

All the CRs in the documents above are approved without comments

### 8.12 Study Items

### 8.12.1 Radio link performance enhancements

**RP-040159** Status Report for FS on Radio link performance enhancements (Nokia Networks) Antti Toskala (Nokia) presented this report

Dirk Gerstenberger (Ericsson) noted that the TX diversity work has been moved to MIMO, but a TR had been allocated for this work. Dirk proposed to close that TR now. Concerns were raised against this proposal, since the information that the TR contains would be lost. It is clarified that the TR will not appear in the 3GPP list anymore, but it will not disappear as it will always be available in the archives in its latest version and in WG1 tdocs.

The remaining work done under this Study fell under HSDPA enhancements, and it is finished with the TR below. It is proposed then to close this study.

Antti noted that two WI proposals, for CQI enhancement and ACK/NACK transmit power reduction, based on the conclusions of the study are presented

#### RP-040222 TR 25.899 v1.0.0 HSDPA Enhancements (Release 6) (Mitsubishi)

Antti Toskala (Nokia) presented this TR

Antti clarified that the TR is presented for approval, even though the version, 1.0.0, and the cover page, indicates for information.

Edgar Fernandes (Motorola) had concerns on the results shown for CQI enhancements and objected the conclusions on this area. However, Edgar agreed to approve the TR. The TR is approved.

On the proposal to close the Study, it is noted that concerns remain although the TR is approved. This would be a reason to keep it open for a short time, solve the disagreement, and produce a CR for the TR. However, it was found preferable to formally close the Study, and if a CR is needed, it will be processed as normal Rel-6 activity in WG1. Finally, after the discussions on the new WI proposals in RP-040238 & RP-040239 (see sec. 8.13), it is decided to keep the study open to address the concerns on the coverage gains of the ACK/NACK enhancement technique proposed.

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

### RP-040160 Status Report for FS on UTRA WideBand Distribution Systems (3GPP Support)

Howard Benn (WG4 chairman) presented this report

Since no progress has been made for almost a year, and companies will not contribute further, WG4 proposed to close the Study. This is agreed

### 8.12.3 Analysis of OFDM for UTRAN evolution

#### **RP-040161** Status Report for FS for the analysis of OFDM for UTRAN enhancement (Nortel)

Evelyne Lestrat (Nortel) presented this report

Evelyne reported that the study is finished and WG1 proposes to close it.

#### **RP-040187** Considerations on the feasibility of OFDM in UTRAN downlink (Vodafone)

Volker Hoehn (Vodafone) presented this document

Vodafone agrees with the conclusions of the SI and that OFDM brings advantages over WCDMA, but at present stage it is preferable to focus on ongoing work on Enhanced Uplink and MBMS. Vodafone proposes to delay to the future further work on OFDM and the creation of a WI. Volker clarified that it should be delayed after Release 6.

#### **RP-040229 OFDM for UTRAN enhancement - further proceeding (Alcatel)**

Bernd Haberland (Alcatel) presented this document

This paper aligns with Vodafone, proposing to continue the work on OFDM in 9-12 months. Hashem Madadi (Three) asked what would be the scope of the new work. Bernd noted that wider scope would be adopted, and that the work shouldn't start from scratch again. Alan Law (Vodafone) highlighted that one of the interesting points would be to compare OFDM and HSDPA with advanced receivers. Evelyne Lestrat (Nortel) noted that the scope of the current study was quite restricted, focusing on "textbook" OFDM. She expected that future studies allow for a larger number of variations of OFDM. Per Beming (Ericsson) reminded however that it is a bit useless to discuss now the scope of a WI that would be created months from now.

Hashem Madadi (Three) requested that the OFDM is not delayed too much and warned that other organizations could take advantage over 3GPP on the evolution beyond 3G. To wait for one year before starting again seems unnecessary, this was agreed by other companies. In this sense, it was found preferable to wait for the conclusion of Rel-6 and to reconsider the issue. It is finally agreed to review the issue in the Evolution Work Shop proposed for the fall of 2004 and then, in RAN meeting #26 in December.

## RP-040221 TR 25.892 v2.0.0 Feasibility study for Orthogonal Frequency Division Multiplexing (OFDM) for UTRAN enhancement (Nortel)

Evelyne Lestrat (Nortel) presented this TR

Evelyne clarified that it is presented for approval.

The TR is approved without further comments, it will be put under Change Control

The Study Item is currently closed meaning no work to be done on this issue by the different WGs, the objectives required in the Description Sheet are fulfilled even though no firm conclusion could be reached. The frame of future work will be decided in due time. Work on the area in TSG RAN & its WGs is postponed until a new item is agreed in RAN.

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

## RP-040162 Status Report for FS on Analysis on Higher Chip Rates for UTRA TDD evolutions (IPWireless)

Derek Richards (IPWireless) presented this report

The completion date is moved to September 2004, the work is now 90% completed.

#### 8.12.5 Evolution of UTRAN Architecture

This Study is kept on hold until WG3 finishes its part of the MBMS feature.

### 8.12.6 Uplink Enhancements for UTRA TDD

#### RP-040163 Status Report for FS on Uplink enhancements for UTRA TDD (Interdigital)

Jim Miller (Interdigital) presented this report

The completion date is delayed from September to December 2004.

### 8.13 New Work Items/Study Items

## RP-040164 Inclusion of Uplink TDOA UE positioning method in the UTRAN specifications (TruePosition)

Bob Gross (TruePosition) presented this proposal

Antti Toskala (Nokia) supported to go forward with this WI, and reminded that it had been presented already in Kyoto almost 3 years ago.

Bob clarified that the impact on 25.331 relates the need to request the UE to transmit, for a short period of time, when it is in idle mode. He also clarified that the proposed WI focuses on enhancing the Iupc interface to support the signalling between the LMU and SAS to support

The chairman proposed to start with a feasibility study to show the incremental gains compared to existing techniques. Such study might may be short as it seems that much material is already available. WG1 would proceed with the study, later and if the WI is approved, WG2 and WG3 would be in charge of implementing the signalling and the changes to the architecture and interfaces.

Vodafone and Three warned against spending time in WG1 in a new work/study item, which may delay the progress on important Rel-6 items like Enhanced Uplink or MBMS. As a way to improve efficiency, Antti suggested to post in WG1 reflector the results attached to RP-040164 to raise comments before WG1 meeting.

It finally agreed that WG1 & WG2 will review the subject and produce a Description Sheet for the Study Item. WG1 shall start reviewing simulation and field measurements to analyse the incremental gains of new method and WG2 shall analyse the impact on the architecture and signalling.

## RP-040238 Proposed Work Item for HS-DPCCH CQI enhancement (Philips, Nokia, Mitsubishi)

Tim Moulsley (Philips) presented this proposal

Hans van der Veen (NEC) asked if WG1 had agreed that the gains justify the inclusion of the new techniques. Tim noted that the value of 10% was found acceptable in WG1, it is however debatable if this value is acceptable for all companies. Vodafone was also concerned by the amount of work needed and by the need to produce new performance requirements. Qualcomm objected also that the 10% gain doesn't justify the standardization effort, and noted that it can be achieved also by improving the implementations without changes to the specification.

Ericsson noted that the gains do not justify the complexity. Tim responded that this enhancement is not a particularly heavy addition in terms of complexity. Ericsson also warned against adding variants to the specification that later on no manufacturer implements but simply add complexity. This had been discussed in the past, notably in the meeting in Kyoto for Release 99, and it was agreed there that it should be avoided in the future.

Bernd Haberland (Alcatel) noted that the Study covered several variants for the CQI enhancement and asked if all the variants will be kept. He expressed concern on the complexity of implementing all variants. Tim noted that the 2 variants will be active at the same time.

Given the number of companies opposing and expressing doubts on the gains, the Work Item cannot be approved.

## RP-040239 Proposed Work Item for HS-DPCCH ACK/NACK enhancement (Philips, Nokia, Mitsubishi)

Antti Toskala (Nokia) presented this proposal

Antti clarified that the work in terms of CRs will not be long, so the completion could be achieved by December.

Samsung raised some objection on the complexity of the solution. Dirk Gerstenberger (Ericsson) noted also that the Study phase hasn't shown the improvements in cell coverage claimed in the cover

sheet, it has simply shown a power reduction in one out of four uplink channels of 3-4 dB. Edgar Fernandes (Motorola) noted that the results show that the UE power can be reduced, and anything that improves UE consumption should be welcomed. Dirk didn't object this, and suggested that the study phase is extended to cover the concerns raised and to come with a clearer result.

Antti was surprised to see that companies that had contributed to the study in WG1 and didn't argue its results in the TR are now opposing the resulting WIs here. The concept of study item seems then useless.

Dirk noted that Ericsson had never expressed commitment to the HSDPA enhancements studied, but independent of that, in his view simply the gains shown are not enough to continue with the WI phase.

It is noted that no impact on performance specification is listed. Antti agreed that new performance requirements can be discussed.

It is proposed to continue the study phase to address the specific concerns raised against this and the previous WI proposal, complexity against gains in the first case and unclear coverage improvement in the second. Francesco Grilli (Qualcomm) argued that he didn't believe further work in WG1 will change the views on the CQI reporting improvement, but agreed that it can be the case for ACK/NACK enhancement.

Finally, it is agreed that WG1 will continue to work only in the ACK/NACK enhancements, in order to agree on the coverage improvement. The Study Item is kept open for this purpose only.

This discussion showed that it might be preferable to provide all information on what could be agreed or not agreed in the Study Item report in order to provide a clear picture to the plenary.

The WI proposal in RP-040239 is not agreed.

## 9 Technical co-ordination among WGs

No discussions

### 10 Outputs to other groups

No outputs

### 11 Project management

RP-040233 TSG RAN Work Items & Study Items, Active & Closed (3GPP Support) Provided for information

RP-040240 CRs to lists of specs (3GPP Support)

**RP-040241** Status list before (3GPP Support)

John Meredith (3GPP Support) presented these documents, for information

#### **RP-040242** Revised WID form (3GPP Support)

John Meredith (3GPP Support) presented this document.

John clarified that the table in 6.2 should be filled in both cases the WI is a Feature and Study Item. He also clarified that the WI code in sec.1 is filled by MCC once the WI is approved.

The WIDS form is endorsed, it will be presented for approval in SA#24

#### RP-040258 Review of the Work Plan at Plenaries #24 (3GPP Support)

Alain Sultan (3GPP Support) gave this presentation

#### **RP-040259** Draft summary of Release 4 features (3GPP Support)

Alain Sultan (3GPP Support) presented this document

### 12 Any other business

Concerning the Workshop on UTRAN evolution, the chairman presented two alternative dates & locations:

- 21<sup>st</sup> 22<sup>nd</sup> October Shanghai
- 4<sup>th</sup> 5<sup>th</sup> November Europe

Three noted that a OMA meeting takes place the week after the proposal for Shanghai Samsung noted that the second proposal overlaps with the IWC forum, and proposed to move to  $2^{nd}$   $3^{rd}$  November

Motorola, Samsung, Vodafone Ericsson preferred the second option.

The final preference is for 2<sup>nd</sup> 3<sup>rd</sup> November in Toronto.

### 13 Closing of the meeting

The chairman closed the meeting at 13:30 on Friday 4<sup>th</sup> June. He thanked the host for the facilities and the delegates for their work, and wished a safe trip home for everybody.

## Annex A: List of participants

Name	Organization	Partner	Status	Phone	Fax	e-mail address
ALI-HACKL Markus	SIEMENS AG	ETSI	3GPPMEMBER	Ph: +49 89 722 61916	Fax: +49 89 722 46489	markus.ali-hackl@siemens.com
ANDERSEN Niels Peter Skov	MOTOROLA A/S	ETSI	3GPPMEMBER	Ph: +45 43 48 81 10	Fax: +45 43 48 80 01	npa001@motorola.com
ARZELIER Claude	ETSI SECRETARIAT	ETSI	3GPPORG_REP	Ph: +33 4 92 94 42 61	Fax: +33 4 93 65 28 17	claude.arzelier@etsi.org
BARNES Nigel	MOTOROLA LTD	ETSI	3GPPMEMBER	Ph: +44 1 256 790 169	Fax: +44 1 256 790 190	nigel.barnes@motorola.com
BEMING Per	ERICSSON LM	ETSI	3GPPMEMBER	Ph: +46 8 404 4681	Fax: +46 8 757 5720	per.beming@ericsson.com
BENN Howard	MOTOROLA LTD	ETSI	3GPPMEMBER	Ph: +44 7802 361 664	Fax: +44 1 793 566225	howard.benn@motorola.com
BERGSTRÖM Joakim	ERICSSON KOREA	TTA	3GPPMEMBER	Ph: +4684047396	Fax: +4687575720	joakim.ko.bergstrom@ericsson.com
BÖJERYD Nils	TIETO ENATOR TECHNICAL CONS.	ETSI	3GPPMEMBER	Ph: +46 54 29 43 77	Fax: +46 54 29 40 01	nils.bojeryd@tietoenator.com
CALDENHOVEN Juergen	ETSI SECRETARIAT	ETSI	3GPPORG_REP	Ph: +33 4 92 94 43 52	Fax:	juergen.caldenhoven@etsi.org
CASTELLANI Andrea	TELECOM ITALIA S.P.A.	ETSI	3GPPMEMBER	Ph: +39 06 39 00 90 42	Fax: +39 06 3900 9315	acastellani@mail.tim.it
CHO Joonyoung	SAMSUNG ELECTRONICS CO.	, TTA	3GPPMEMBER	Ph: +82 31 279 5881	Fax: +82 342 779 6829	joonyoung.cho@samsung.com
CHUN Sungduck	LG ELECTRONICS INC.	TTA	3GPPMEMBER	Ph: +82-31-450-7859	Fax: +82-31-450-7912	duckychun@lge.com
CHUNG Yong-jun	TTA	TTA	3GPPORG_REP			
COURAU François	ALCATEL S.A.	ETSI	3GPPMEMBER	Ph: +33 6 08 82 20 22	Fax: +33 1 30 77 24 99	francois.courau@alcatel.fr
DE JONG Gjalt	RESEARCH IN MOTION LIMITED	ETSI	3GPPMEMBER	Ph: +1 519 888 7465	Fax: +1 519 883 4914	gdejong@rim.net
DECARREAU Guillaume	ORANGE SA	ETSI	3GPPMEMBER	Ph: +33 1 45 29 58 99	Fax: +33 1 45 29 41 94	guillaume.decarreau@francetelecom.com
DOIG lan	MOTOROLA S.A.S	ETSI	3GPPMEMBER	Ph: +33 4 92 94 48 64	Fax: +33 4 93 95 80 52	ian.doig@motorola.com
ELLSBERGER Jan	ERICSSON KOREA	TTA	3GPPMEMBER	Ph: +46 8 508 77965	Fax: +46 8 508 77 300	jan.ellsberger@ericsson.com
ERNSTRÖM Per	TELIASONERA AB	ETSI	3GPPMEMBER	Ph: +46 8 713 8134	Fax: +46 8 713 8149	per.ernstrom@teliasonera.com
FAUCONNIER Denis	NORTEL NETWORKS (EUROPE)	ETSI	3GPPMEMBER	Ph: +33 1 39 44 52 87	Fax: +33 1 39 44 50 12	dfauconn@nortelnetworks.com
FERNANDES Edgar	MOTOROLA LTD	ETSI	3GPPMEMBER	Ph: +44 1256 790 168	Fax: +44 1256 790 190	edgar.fernandes@motorola.com
FISCHER Patrick	LG ELECTRONICS INC.	TTA	3GPPMEMBER	Ph: +33 1 48 17 71 51	Fax: +33 1 30 77 54 52	pfischer@lge.com
FUKUDA Eisuke	FUJITSU LIMITED	ARIB	3GPPMEMBER	Ph: +81 44 754 8511	Fax: +81 44 754 8540	efukuda@jp.fujitsu.com
FUKUI Noriyuki	MITSUBISHI ELECTRIC CO.	ARIB	3GPPMEMBER	Ph: +81 467 41 2885	Fax: +81 467 41 2419	n-fukui@isl.melco.co.jp
GABIN Frederic	TELECOM MODUS LTD.	ETSI	3GPPMEMBER	Ph: +33 1 49 07 28 21	Fax: +33 1 49 07 20 01	frederic.gabin@nectech.fr
GERSTENBERGER Dirk	NIPPON ERICSSON K.K.	ARIB	3GPPMEMBER	Ph: +46 8 585 33901	Fax: +46 8 404 3700	dirk.gerstenberger@ericsson.com
GREEN Steve	OFCOM (U.K.)	ETSI	3GPPMEMBER	Ph: +44 20 7783 4384	Fax: +44 20 7783 4303	steve.green@ofcom.org.uk
GRILLI Francesco	QUALCOMM EUROPE S.A.R.L.	ETSI	3GPPMEMBER	Ph: +1 858 845 3742	Fax: +1858 658 2113	fgrilli@qualcomm.com
GROSS Robert	TRUEPOSITION INC.	ETSI	3GPPMEMBER	Ph: +1610 680 1119	Fax: +1 610 680 1199	rlgross@trueposition.com
GUSTRAU Joerg	SIEMENS MOBILE Communications	ETSI	3GPPMEMBER	Ph: +49 30 386 23467	Fax: +49 30 386 25548	joerg.gustrau@siemens.com

#### **Draft Meeting Report 3GPP TSG RAN #24**

Name	Organization	Partner	Status	Phone	Fax	e-mail address
GUTIERREZ MIGUELEZ	ETSI SECRETARIAT	ETSI	3GPPORG_REP	Ph: +33 4 92 94 43 21	I ux	cesar.gutierrez@etsi.org
Cesar	E 101 OLONE TANIAT	LIGI	JOI I ONO_NEI	111. +33 + 32 34 +3 21		cesar.gutterrez@etsi.org
HANZAIKE Manabu	SOFTBANK BB CORP	TTC	3GPPMEMBER	Ph: +81-3-5641-3039	Fax: +81-3-3666-6786	mhanzaik@softbank.co.jp
HAYES Stephen	ERICSSON INC.	ATIS	3GPPMEMBER	Ph: +1 972 583 5773	Fax: +1 801 409 6319	stephen.hayes@ericsson.com
HEO Youn Hyoung	SAMSUNG ELECTRONICS CO., LTD		3GPPMEMBER	Ph: +82-31-279-5362	Fax: +82-31-279-5130	hush.heo@samsung.com
HOEHN Volker	VODAFONE D2 GMBH	ETSI	3GPPMEMBER	Ph: +49 211 533 3637	Fax: +49 211 533 2834	volker.hoehn@vodafone.com
HOWELL Andrew	MOTOROLA GMBH	ETSI	3GPPMEMBER	Ph: +44 1452 623967		andrew.howell@motorola.com
HU Jinling	CATT	CCSA	3GPPMEMBER		Fax: +86-10-62303127	hujinling@datangmobile.cn
HUGHES Karen	ETSI SECRETARIAT	ETSI	3GPPORG_REP	Ph: +33 4 92 94 43 53	Fax: +33 4 92 38 49 25	karen.hughes@etsi.org
HWANG Seongku	SAMSUNG ELECTRONICS	ETSI	3GPPMEMBER	Ph: +82 342 779 6731	Fax: +82 342 779 6709	skhwang@metro.telecom.samsung.co.kr
ISHIDA Yoshihide	ARIB	ARIB	3GPPORG_REP	Ph: +813 5510 8594	Fax: +813 3592 1103	ishida@arib.or.jp
JUNG Kyung-tae	TTA	TTA	3GPPORG_REP	Ph: +82-31-279-4783	Fax: +82-31-279-3219	kaist.jung@samsung.com
KEKKI Sami	NOKIA TELECOMMUNICATIONS INC	ATIS	3GPPMEMBER	Ph: +358718065058	Fax: +358 9 5116 5039	sami.j.kekki@nokia.com
KIM Bong Hoe	LG ELECTRONICS INC.	TTA	3GPPMEMBER	Ph: +82 343 450 4131	Fax: +82-31-450-7912	ofdm88@lge.com
KIM Hak-seong	LG ELECTRONICS INC.	TTA	3GPPMEMBER	Ph: +82 31 450 4127	Fax: +82 31 450 7912	bryankim@lge.com
KIM Hong-won	TTA	TTA	3GPPORG_REP	Ph: +82 2 723 7073	Fax: +82 2 736 0384	hwkim@tta.or.kr
KIM Min-jung	LG ELECTRONICS INC.	TTA	3GPPMEMBER	Ph: +82-31-450-7858	Fax: +82-31-450-7912	mjkim0@lge.com
KIM Soeng Hun	SAMSUNG ELECTRONICS CO., LTD	TTA	3GPPMEMBER	Ph: +82 31 279 5118	Fax: +82 31 279 5130	kimsh23@samsung.com
KIM Tai Suk	SAMSUNG ELECTRONICS CO., LTD	TTA	3GPPMEMBER	Ph: +82-31-279-3318	Fax: +82-31-279-4059	kts71@samsung.com
KIM Yoonjee	TTA	TTA	3GPPORG_REP	Ph: +82-31-279-4212	Fax: +82-31-279-4606	yoonjee.kim@samsung.com
KOO Hyounhee	LG ELECTRONICS INC.	TTA	3GPPMEMBER	Ph: +82-31-450-7923	Fax: +82-31-450-7912	hhkoo@lge.com
LAW Alan	VODAFONE LTD	ETSI	3GPPMEMBER	Ph: +44 1635 676470	Fax: +44 1635 234895	alan.law@vodafone.com
LE STRAT Evelyne	NORTEL NETWORKS	ATIS	3GPPMEMBER	Ph: + 33 1 39 44 53 39	Fax: + 33 1 39 44 52 52	elestrat@nortelnetworks.com
LEE Hyeon Woo	SAMSUNG ELECTRONICS	ETSI	3GPPMEMBER	Ph: +82 31 279 5120	Fax: +82 31 779 8003	woojaa@samsung.com
LEE Juho	SAMSUNG ELECTRONICS CO., LTD	TTA	3GPPMEMBER	Ph: +82-31-279-5115	Fax: +82-31-279-5130	juho95.lee@samsung.com
LEE Young Dae	LG ELECTRONICS INC.	TTA	3GPPMEMBER	Ph: +82 31 450 2920	Fax: +82-31-450-7912	leego@lge.com
MADADI Hashem	3	ETSI	3GPPMEMBER	Ph: +44.1628.765.000	Fax: +44.1628.765.001	hmadadi@attglobal.net
MAKIHIRA Tsuneichi	MITSUBISHI ELECTRIC CO.	ARIB	3GPPMEMBER	Ph: +81 6 6495 6597	Fax: +81 6 6495 6598	makihira@cew.melco.co.jp
MEREDITH John M	ETSI SECRETARIAT	ETSI	3GPPORG_REP	Ph: +33 4 92 94 42 37	Fax: +33 (0)4 92 38 52	john.meredith@etsi.org
MIKOLA Juha	NOKIA JAPAN CO, LTD	ARIB	3GPPMEMBER	Ph: +358 50 48 37412	Fax: +358 9 4376 6850	juha.mikola@nokia.com
MILLER James	INTERDIGITAL	ETSI	3GPPMEMBER	Ph: +1 631 622 4071	Fax: +1 631 622 0100	jim.miller@interdigital.com
MIURA Nozomi	ARIB	ARIB	3GPPORG_REP	Ph: +81-3-5510-8594	Fax: +81-3-3592-1103	miura@arib.or.jp
NAKAMURA Takehiro	NTT DOCOMO	ETSI	3GPPMEMBER	Ph: +81 468 40 3190	Fax: +81-46-840-3761	takehiro@wsp.yrp.nttdocomo.co.jp
NG Cheng Hock	NEC CORPORATION	ARIB	3GPPMEMBER	Ph: +81 45 939 2171	Fax: +81 45 939 2650	ngcheng@da.jp.nec.com
OKUMURA Yukihiko	NTT DOCOMO INC.	TTC	3GPPMEMBER	Ph: +81 468 40 3190	Fax: +81 468 40 3840	okumura@mlab.yrp.nttdocomo.co.jp
PALAT Sudeep	LUCENT TECHNOLOGIES	ATIS	3GPPMEMBER	Ph: +44 1793 736180	Fax: +44 1793 897414	spalat@lucent.com

#### **Draft Meeting Report 3GPP TSG RAN #24**

Name	Organization	Partner	Status	Phone	Fax	e-mail address
POPE Maurice	ETSI SECRETARIAT	ETSI	3GPPORG_REP	Ph: +33 4 92 94 42 59	Fax: +33 4 92 38 52 59	maurice.pope@etsi.org
ROBERTS Michael	NEC TECHNOLOGIES (UK) LTD	ETSI	3GPPMEMBER	Ph: +33 149072006	Fax: +33 1 4907 2001	michael.roberts@nectech.fr
ROH Dong Wook	LG ELECTRONICS INC.	TTA	3GPPMEMBER	Ph: +82 31 450 2906		dwroh@lge.com
ROMANO Giovanni	TELECOM ITALIA S.P.A.	ETSI	3GPPMEMBER	Ph: +39 011 228 7069	Fax: +39 011 228 7078	giovanni.romano@telecomitalia.it
SEO Dongyoun	LG ELECTRONICS INC.	TTA	3GPPMEMBER	Ph: +82-31-450-2931	Fax: +82-31-450-7912	dseo@lge.com
SHEN Donglin	AT&T WIRELESS SERVICES, INC.	ATIS	3GPPMEMBER	Ph: +1 425 580 7614	Fax: +1 208 977 1003	donglin.shen@attws.com
SIMMONS Paul	NORTEL NETWORKS GERMANY GMBH	ETSI	3GPPMEMBER	Ph: +33 1 39 44 55 95	Fax: +33 1 39 44 52 52	simmonsp@nortelnetworks.com
SOOD Prem	SHARP CORPORATION	ARIB	3GPPMEMBER	Ph: +1 360 834 8708	Fax: +1 360 834 8696	pls@sharplabs.com
SUZUKI Hidetoshi	PANASONIC MOBILE COMM.	ARIB	3GPPMEMBER	Ph: +81 468 40 5164	Fax: +81 468 40 5183	suzuki.hidetoshi@jp.panasonic.com
TAMURA Toshiyuki	NEC CORPORATION	TTC	3GPPMEMBER	Ph: +44 208 9938111	Fax: +44 208 752 3861	tamurato@aj.jp.nec.com
TANAKA Tetsu	ARIB	ARIB	3GPPORG_REP	Ph: +81-3-5510-8594	Fax: +81-3-3592-1103	t-tanaka@arib.or.jp
TATESH Said	LUCENT TECHNOLOGIES N. S. UK	ETSI	3GPPMEMBER	Ph: +44 1793 883 293	Fax: +44 1793 883 815	statesh@lucent.com
TOSKALA Antti	NOKIA UK LTD	ETSI	3GPPMEMBER	Ph: +358 0 718030746	Fax: +358 0 9 511	antti.toskala@nokia.com
USAI Paolino	ETSI SECRETARIAT	ETSI	3GPPORG_REP	Ph: +33 4 92 94 42 36	Fax: +33 4 92 38 52 06	paolo.usai@etsi.org
USHIROKAWA Akihisa	NEC CORPORATION	ARIB	3GPPMEMBER	Ph: +81-45-939-2672	Fax: +81-45-939-2713	a-ushirokawa@aj.jp.nec.com
VAN BUSSEL Han	T-MOBILE DEUTSCHLAND	ETSI	3GPPMEMBER	Ph: +49 228 936 18416	Fax: +49 228 936 3	han.van.bussel@t-mobile.de
VAN DER VEEN Hans	NEC EUROPE LTD	ETSI	3GPPMEMBER	Ph: +49 (0)6221 905	Fax: +49 (0)6221 905	hans.vanderveen@ccrle.nec.de
VAN LIESHOUT Gert-jan	SAMSUNG ELECTRONICS	ETSI	3GPPMEMBER	Ph: +31 570 615 651		gert.vanlieshout@samsung.com
WAN Tak Wing	ROGERS WIRELESS INC.	ATIS	3GPPMEMBER	Ph: +1 416 935 6029	Fax: +1 416 935 7502	takwing.wan@rci.rogers.com
WANG Wei (victoria)	NANJING ERICSSON PANDA COM LTD	CCSA	3GPPMEMBER			victoria.wang@ericsson.com
WANG Yanhong	HUAWEI TECHNOLOGIES CO., LTD	CCSA	3GPPMEMBER	Ph: +86-21-68644808	Fax: +86-21-50470076	wangyanhong@huawei.com
YI Seung June	LG ELECTRONICS INC.	TTA	3GPPMEMBER	Ph: +82 31 450 7859	Fax: +82-31-450-7912	seungjune@lge.com
YUN Yusuk	SAMSUNG ELECTRONICS CO., LTD	TTA	3GPPMEMBER	Ph: +81-31-279-3642	Fax: +81-31-279-3219	yusukyun@samsung.com
ZELMER Donald E.	CINGULAR WIRELESS LLC	ATIS	3GPPMEMBER	Ph: +1 404 236 5912	Fax: +1 404 236 5968	don.zelmer@cingular.com
ZHIGANG Yan	CCSA	CCSA	3GPPORG_REP	Ph: +86 10 6600 6688	Fax: +86 10 6600 3049	, <u>J</u>
ZHU Haobing		ETSI	3GPPMEMBER			

## Annex B: List of documents

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

Tdoc	Title	Source	Decision
RP-040139	Draft agenda meeting #24	Chairman	Approved
RP-040140	Revised draft report meeting #23	3GPP Support	Approved
RP-040141	Status Report for WI Improvement of inter-frequency and inter-system measurement	Nokia	Noted
RP-040142	Status Report for WI Performance Requirements of Receive Diversity for HSDPA	NTT DoCoMo	Noted
RP-040143	Status Report for WI RAB support enhancement	Nokia	Noted
RP-040144	Status Report for WI lu enhancements for IMS support in RAN	Nortel	Noted
RP-040145	Status Report for WI Optimisation of downlink channelisation code utilisation	Nortel	Noted
RP-040146	Status Report for WI Optimisation of channelisation code utilisation for TDD	IPWireless	Noted
RP-040147	Status Report for WI Remote Control of Electrical Tilting Antennas	Vodafone	Noted
RP-040148	Status Report for WI Network Assisted Cell Change (NACC) from UTRAN to GERAN -	Vodafone	Noted
	network-side aspects		
RP-040149	Status Report for WI UE positioning enhancements - other methods	Siemens	Noted
RP-040150	Status Report for WI A-GPS minimum performance specification	ATT	Noted
RP-040151	Status Report for WI Introduction of MBMS in RAN	Nokia	Noted
RP-040152	Status Report for WI Multiple Input Multiple Output antennas (MIMO)	Lucent	Noted
RP-040153	Status Report for WI Subscriber and equipment trace in UTRAN	Nortel	Noted
RP-040154	Status Report for WI Enhancement of the support of network sharing in the UTRAN	TeliaSonera	Noted
RP-040155	Status Report for WI FDD Enhanced Uplink - Stage 2 & layer 2 and 3 Protocol Aspects	Ericsson	Noted
RP-040156	Status Report for WI FDD Enhanced Uplink - Physical Layer	Nokia	Noted
RP-040157	Status Report for WI FDD Enhanced Uplink - UTRAN lub/lur Protocol Aspects	Nortel	Noted
RP-040158	Status Report for WI FDD Enhanced Uplink - RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing	Ericsson	Noted
RP-040159	Status Report for FS on Radio link performance enhancements	Nokia Networks	Noted
RP-040160	Status Report for FS on UTRA WideBand Distribution Systems	3GPP Support	Noted
RP-040161	Status Report for FS for the analysis of OFDM for UTRAN enhancement	Nortel	Noted
RP-040162	Status Report for FS on Analysis on Higher Chip Rates for UTRA TDD evolutions	IPWireless	Noted
RP-040163	Status Report for FS on Uplink enhancements for UTRA TDD	Interdigital	Noted
RP-040164	Inclusion of Uplink TDOA UE positioning method in the UTRAN specifications	TruePosition	Not approved
RP-040165	Status Report WG1	RAN WG1 Chairman	Noted
RP-040166	List of CRs from RAN WG1	RAN WG1	Noted
RP-040167	Status Report WG2	RAN WG2 Chairman	Noted
RP-040168	List of CRs from RAN WG2	RAN WG2	Noted
RP-040169	Status Report WG3	RAN WG3 Chairman	Noted
RP-040170	List of CRs from RAN WG3	RAN WG3	Noted
RP-040171	Status Report WG4	RAN WG4 Chairman	Noted
RP-040172	List of CRs from RAN WG4	RAN WG4	Withdrawn
RP-040173	CRs (Rel-5 and Rel-6 Category A) to TS 25.430 on Node B Communication Contexts	RAN WG3	Approved

#### **Draft Meeting Report 3GPP TSG RAN #24**

Tdoc	Title	Source	Decision
RP-040174	CRs (Rel-5 and Rel-6 Category A) to TS 25.413	RAN WG3	Approved
RP-040175	CRs (Rel-5 and Rel-6 Category A) to TS 25.423	RAN WG3	Approved
RP-040176	CRs (Rel-5 and Rel-6 Category A) to TS 25.433	RAN WG3	Approved
RP-040177	CRs (Rel-5 and Rel-6 Category A) to TS 29.108	RAN WG3	Approved
RP-040178	CRs (Rel-5 and Rel-6 Category A) to TS 25.423 and TS 25.433 on Node B usage of the MAChs re-ordering buffer size	RAN WG3	Approved
RP-040179	CRs (Rel-5 and Rel-6 Category A) to TS 25.423 and TS 25.433 on Clarification on number of and capacity reporting of Priority Queues	RAN WG3	Approved
RP-040180	CRs (Rel-5 and Rel-6 Category A) to TS 25.423 and TS 25.433 on Unsuccessful Operation of RL Setup Procedure for HSDPA	RAN WG3	Approved
RP-040181	CRs (Rel-5 and Rel-6 Category A) to TS 25.423 and TS 25.433 on Power Balancing Corrections	RAN WG3	Approved
RP-040182	CRs (Rel-6 Category B) to TS 25.401, TS 25.410, TS 25.413, TS 25.420, TS 25.423 for Network Assisted Cell Change (NACC)	RAN WG3	Approved
RP-040183	CRs (Rel-6 Category B) to TS 25.413, TS 25.420, TS 25.423 for Subscriber and Equipment Trace Support in UTRAN	RAN WG3	Approved
RP-040184	CRs (Rel-6 category B) to TS 25.423, (category C) to 25.433, (category F) to TS 25. 453	RAN WG3	Approved
RP-040185	TR 25.802 Remote Control of Electrical Tilting Antennas	RAN WG3	Noted
RP-040186	TR 25.901 Network Assisted Cell Change (NACC) from UTRAN to GERAN - Network side aspects	RAN WG3	Approved
RP-040187	Considerations on the feasibility of OFDM in UTRAN downlink	Vodafone	Noted
RP-040188	CRs (R'99 and Rel-4/Rel-5/Rel-6 Category A) to TS 25.133	RAN WG4	Withdrawn
RP-040189	CRs (Rel-4 and Rel-5/Rel-6 Category A) to TS 25.105 & TS 25.142 on "Clarification of measurement filter of spurious emission"	RAN WG4	Approved
RP-040190	CRs (Rel-4 and Rel-5/Rel-6 Category A) to TS 25.123 for correction of Test case for SFN-SFN observed time difference type 2 for 3.84Mcps TDD	RAN WG4	Approved
RP-040191	CRs (Rel-4 and Rel-5/Rel-6 Category A) to TS 25.104 & TS 25.141 for "Spurious emissions: Co-existence with services in adjacent frequency bands"	RAN WG4	Approved
RP-040192	CRs (Rel-4 and Rel-5/Rel-6 Category A) to TS 25.104 & TS 25.141 for the introduction of new requirement: Adjacent Channel Rejection Ratio for Repeaters	RAN WG4	Approved
RP-040193	CRs (Rel-5 and Corresponding Rel-6) to TS 25.101 for "Correction of maximum allowed power and range in TFC selection with HS-DPCCH and other clarifications"	RAN WG4	Revised in
RP-040194	CRs (Rel-5 and Corresponding Rel-6) to TS 25.133	RAN WG4	Partially approved
RP-040195	CRs (Rel-5 and Rel-6 Category A) to TS 25.942 for the introduction of Rational on test parameters for UE adjacent channel selectivity	RAN WG4	Withdrawn
RP-040196	CRs (Rel-6) for WI "Technical Enhancements and Improvements"	RAN WG4	Withdrawn
RP-040197	CR (Rel-6) to TS 25.141 for "High Speed Downlink Packet Access"	RAN WG4	Approved
RP-040198	CR (Rel-6) for WI "FDD BS Classification"	RAN WG4	Approved
RP-040199	CRs (Rel-5 and Rel-6 Category A) to TS 25.101 for "UE maximum output power with HS-DPCCH"	RAN WG4	Revised in
RP-040200	CRs (R'99 and associated Rel-4/Rel-5/Rel-6) to 25.321 on Use of U-RNTI in downlink	RAN WG2	Approved
RP-040201	CRs (R'99 and associated Rel-4) to 25.322 and 25.331 on Downlink RLC Size handling	RAN WG2	Approved
RP-040202	CRs (R'99 and associated Rel-4/Rel-5/Rel-6) to 25.324	RAN WG2	Approved
RP-040203	CRs (R'99 and associated Rel-4/Rel-5/Rel-6) to 25.331	RAN WG2	Approved

#### **Draft Meeting Report 3GPP TSG RAN #24**

Tdoc	Title	Source	Decision
RP-040204	CRs (R'99 and associated Rel-4/Rel-5) to 25.921	RAN WG2	Approved
RP-040205	CRs (R'99 affected, Rel-6 version) to 25.993	RAN WG2	Approved
RP-040206	CRs (Rel-4 and associated Rel-5/Rel-6) to 25.331 (1)	RAN WG2	Approved
RP-040207	CRs (Rel-4 and associated Rel-5/Rel-6) to 25.331 (2)	RAN WG2	Approved
RP-040208	CRs (Rel-5 and associated Rel-6) to 25.304	RAN WG2	Approved
RP-040209	CR (Rel-5 and associated Rel-6) to 25.305	RAN WG2	Approved
RP-040210	CRs (Rel-5 and associated Rel-6) to 25.331 (1)	RAN WG2	Approved
RP-040211	CRs (Rel-5 and associated Rel-6) to 25.331 (2)	RAN WG2	Approved
RP-040212	CRs (Rel-5 and associated Rel-6) to 25.331 on Restrict operation of the virtual active set	RAN WG2	Approved
RP-040213	CRs (Rel-5 and associated Rel-6) to 25.331 on Usage of different RB mapping info	RAN WG2	Approved
RP-040214	CRs (Rel-5 and associated Rel-6) to 25.322 and 25.331 on Downlink RLC size handling	RAN WG2	Not approved
RP-040215	CRs (Rel-6) on 25.331 (TEI6) (The ASN.1 definition of IE "SysInfoType5bis")	RAN WG2	Approved
RP-040216	CRs (Rel-6) on 25.305 and 25.413 on Indication of achieved accuracy in position estimate	RAN WG2	Approved
RP-040217	CRs (Rel-6) on 25.346 (MBMS)	RAN WG2	Approved
RP-040218	Status Report of the 3GPP RAN ITU-R Ad Hoc	ITU-R Ad Hoc Contact Person	Noted
RP-040219	Update submission for UTRA FDD and TDD toward Rev. 5 of Rec. ITU-R M.145	ITU-R Ad Hoc	Revised in 246
RP-040220	Updated information on the Roadmap	ITU-R Ad Hoc	Approved
RP-040221	TR 25.892 v2.0.0 Feasibility study for Orthogonal Frequency Division Multiplexing (OFDM) for UTRAN enhancement	Nortel	Approved
RP-040222	TR 25.899 v1.0.0 HSDPA Enhancements (Release 6)	Mitsubishi	Approved
RP-040223	CRs (Rel-6) on 25.306 (Correction to memory handling in the UE)	RAN WG2	Approved
RP-040224	CRs (Rel-5 and associated Rel-6) to 25.322 and 25.331 on RLC size handling and reestablishment	RAN WG2	Approved
RP-040225	List of CRs from RAN WG4	RAN WG4	Noted
RP-040226	CRs (R'99 and Rel-4/Rel-5/Rel-6 Category A) to TS 25.133	RAN WG4	Approved
RP-040227	CRs (Rel-5 and Rel-6 Category A) to TS 25.942 for the introduction of Rational on test parameters for UE adjacent channel selectivity	RAN WG4	Approved
RP-040228	CRs (Rel-6) for WI "Technical Enhancements and Improvements"	RAN WG4	Approved
RP-040229	OFDM for UTRAN enhancement - further proceeding	Alcatel	Noted
RP-040230	Independent Release 5 CR to TS 25.212 and the shadow CR to Release 6	RAN WG1	Approved
RP-040231	Independent Release 6 CR to TS 25.211	RAN WG1	Approved
RP-040232	Release independent A-GPS minimum performance specification	AWS	Withdrawn
RP-040233	TSG RAN Work Items & Study Items, Active & Closed	3GPP Support	Noted
RP-040234	CR (Rel-5 and associated Rel-6) to 25.321	RAN WG2	Approved
RP-040235	CRs (Rel-6) to 25.221, 25.224, 25.433 on "Addition of TSTD for S-CCPCH in 3.84Mcps TDD"	IPWireless	Approved
RP-040236	CRs (Rel-5 and associated Rel-6) to 25.331 (3)	RAN WG2	Approved
RP-040237	Revised WI Description Sheet for "Optimisation of downlink channelisation code utilisation"	Nortel	Approved
RP-040238	Proposed Work Item for HS-DPCCH CQI enhancement	Philips, Nokia, Mitsubishi	Not approved
RP-040239	Proposed Work Item for HS-DPCCH ACK/NACK enhancement	Philips, Nokia, Mitsubishi	Not approved
RP-040240	CRs to lists of specs	3GPP Support	Noted
RP-040240	Status list before	3GPP Support	Noted
	Otatas list builtie	Judi i Guppuit	110160
RP-040241	Revised WID form	3GPP Support	Endorsed

Tdoc	Title	Source	Decision
RP-040244	CRs (Rel-5 &Rel-6) to 25.414 Completion of IP Transport Option	Nortel	Withdrawn
RP-040245	Review of the Work Plan at Plenaries #24	3GPP Support	Revised in 258
RP-040246	Update submission for UTRA FDD and TDD toward Rev. 5 of Rec. ITU-R M.145	ITU-R Ad Hoc	Approved
RP-040247	CRs (Rel-5 & Rel-6 Cat.A) to TS25.214 on "Clarification on UE procedure in case of HHO failure"	Qualcomm, Ericsson, Nortel, Panasonic, Vodafone	Revised in 257
RP-040248	CR (Rel-5) to 25.133 on "Clarification on UE procedure in case of HHO failure"	Nortel	Revised in 252
RP-040249	CRs (Rel-5 & Rel-6 Cat.A) to 25.331 on "Clarification on UE procedure in case of HHO failure"	Qualcomm, Ericsson, Nortel, Panasonic, Vodafone	Revised in 256
RP-040250	RAN Guidance for handling of problematic UEs with early UE solution	Nokia	Noted
RP-040251	CRs (Rel-5 & Rel-6) to 25.101 & 25.133 for corrections to UE output power and TFC selection with HS-DPCCH	RAN WG4	Partially approved
RP-040252	CR (Rel-5) to 25.133 on "Clarification on UE procedure in case of HHO failure"	Nortel	Approved
RP-040253	CR (Rel-6) to 25.133 on "Clarification on UE procedure in case of HHO failure"	Nortel	Approved
RP-040254	Completion of Rel-5 transport WI	Nokia, Nortel,	Approved
RP-040255	LS on Input to Q.1741.4	TSG CN	Noted
RP-040256	CRs (Rel-5 & Rel-6 Cat.A) to 25.331 on "Clarification on UE procedure in case of HHO failure"	Qualcomm, Ericsson, Nortel, Panasonic, Vodafone	Approved
RP-040257	CRs (Rel-5 & Rel-6 Cat.A) to TS25.214 on "Clarification on UE procedure in case of HHO failure"	Qualcomm, Ericsson, Nortel, Panasonic, Vodafone	Approved
RP-040258	Review of the Work Plan at Plenaries #24	3GPP Support	Noted
RP-040259	Draft summary of Release 4 features	3GPP Support	Noted

# Annex C: List of CRs presented at TSG RAN #24

The table below lists all the CRs presented at RAN#24, regardless of their final status.

Spec	CR	R	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	WG	Doc 2nd-Level
25.101	341		Rel-5	5.10.0	F	RP-040199	Revised	UE maximum output power with HS-DPCCH	HSDPA-RF	R4	R4-040231
25.101	341	1	Rel-5	5.10.0	F	RP-040251	Approved	UE maximum output power with HS-DPCCH	HSDPA-RF	R4	
25.101	342		Rel-6	6.4.0	Α	RP-040199	Revised	UE maximum output power with HS-DPCCH	HSDPA-RF	R4	R4-040232
25.101	342	1	Rel-6	6.4.0	Α	RP-040251	Rejected	UE maximum output power with HS-DPCCH	HSDPA-RF	R4	
25.101	343	1	Rel-5	5.10.0	F	RP-040193	Revised	Correction of maximum allowed power and range in TFC selection with HS-DPCCH and other clarifications	TEI5	R4	R4-040375
25.101	343	2	Rel-5	5.10.0	F	RP-040251	Approved	Correction of maximum alloved power and range in TFC selection with HS-DPCCH and other clarifications	HSDPA-RF	R4	
25.101	344	1	Rel-6	6.4.0	F	RP-040193	Revised	Correction of maximum allowed power and range in TFC selection with HS-DPCCH and other clarifications	TEI6	R4	R4-040376
25.101	344	2	Rel-6	6.4.0	F	RP-040251	Rejected	Correction of maximum alloved power and range in TFC selection with HS-DPCCH and other clarifications	HSDPA-RF	R4	
25.104	223	2	Rel-6	6.5.0	D	RP-040228	Approved	Redrafting of spurious emission tables for co-existence	TEI6	R4	R4-040356
25.104	224	2	Rel-6	6.5.0	F	RP-040228	Approved	Redrafting of blocking tables for co-location & Requirements for Medium Range BS and Local Area BS in case of co-location	TEI6	R4	R4-040358
25.104	225	1	Rel-6	6.5.0	В	RP-040228	Approved	DCH/RACH/CPCH performance requirement for BS without Rx diversity	TEI6	R4	R4-040342
25.104	226		Rel-6	6.5.0	F	RP-040228	Approved	Corrections on terminology	TEI6	R4	R4-040281
25.105	152		Rel-4	4.7.0	F	RP-040189	Approved	Clarification of measurement filter of spurious emission considering coexistence issue	TEI4	R4	R4-040332
25.105	153		Rel-5	5.5.0	Α	RP-040189	Approved	Clarification of measurement filter of spurious emission considering coexistence issue	TEI4	R4	R4-040333
25.105	154		Rel-6	6.0.0	Α	RP-040189	Approved	Clarification of measurement filter of spurious emission considering coexistence issue	TEI4	R4	R4-040334
25.106	030		Rel-4	4.7.0	F	RP-040191	Approved	Spurious emissions: Co-existence with services in adjacent frequency bands	RInImp-Rep	R4	R4-040262
25.106	031		Rel-5	5.7.0	А	RP-040191	Approved	Spurious emissions: Co-existence with services in adjacent frequency bands	RInImp-Rep	R4	R4-040263
25.106	032		Rel-6	6.0.0	Α	RP-040191	Approved	Spurious emissions: Co-existence with services in adjacent frequency bands	RInImp-Rep	R4	R4-040264
25.106	033	1	Rel-4	4.7.0	F	RP-040192	Approved	New Adjacent Channel Rejection Ratio for Repeaters	RInImp-Rep		R4-040380
25.106	034	1	Rel-5	5.7.0	Α	RP-040192	Approved	New Adjacent Channel Rejection Ratio for Repeaters			R4-040381
25.106	035	1	Rel-6	6.0.0	Α	RP-040192	Approved	New Adjacent Channel Rejection Ratio for Repeaters RInImp-Rep		R4	R4-040382
25.123	340		Rel-4	4.12.0	F	RP-040190	Approved	3.84Mcps TDD		R4	R4-040236
25.123	341		Rel-5	5.8.0	А	RP-040190	Approved	Test case for SFN-SFN observed time difference type 2 for 3.84Mcps TDD	TEI4	R4	R4-040237

Spec	CR	Ver 1st-Level 1st-Level		Subject	Work Item	WG	Doc 2nd-Level				
25.123	342		Rel-6	6.1.0	А	RP-040190	Approved	Test case for SFN-SFN observed time difference type 2 for 3.84Mcps TDD	TEI4	R4	R4-040238
25.123	343		Rel-6	6.1.0	F	RP-040228	Approved	Correction to GSM reselection in CELL_FACH for 3.84Mcps TDD	TEI6	R4	R4-040239
25.133	655	3	R99	3.17.0	F	RP-040226	Approved	Change of test cases using event triggered reporting with event 1B	TEI	R4	R4-040379
25.133	659	1	Rel-6	6.5.0	F	RP-040228	Approved	Removal of the 5s limitation of the identification time in interfrequency handovers	TEI6	R4	R4-040354
25.133	660	1	Rel-5	5.10.0	F	RP-040194	Revised	Clarification of HS-DPCCH in Transport format combination selection requirements	HSDPA-RF	R4	R4-040347
25.133	660	2	Rel-5	5.10.0	F	RP-040251	Approved	Clarification of HS-DPCCH in Transport format combination selection requirements	HSDPA-RF	R4	
25.133	661	1	Rel-6	6.5.0	А	RP-040194	Revised	Clarification of HS-DPCCH in Transport format combination selection requirements	HSDPA-RF	R4	R4-040348
25.133	661	2	Rel-6	6.5.0	А	RP-040251	Rejected	Clarification of HS-DPCCH in Transport format combination selection requirements	HSDPA-RF	R4	
25.133	662	1	Rel-5	5.10.0	F	RP-040194	Approved	Correction to UTRA Carrier RSSI measurement tables in test cases	TEI5	R4	R4-040314
25.133	663	1	Rel-6	6.5.0	F	RP-040194	Approved	Correction to UTRA Carrier RSSI measurement tables in test cases	TEI6	R4	R4-040315
25.133	664	1	Rel-5	5.10.0	F	RP-040194	Approved	Corrections to Io, Ioc and RSCP levels for testing different frequency bands	TEI5	R4	R4-040316
25.133	665	1	Rel-6	6.5.0	F	RP-040194	Approved	Corrections to Io, Ioc and RSCP levels for testing different frequency bands	TEI6	R4	R4-040317
25.133	666	1	Rel-5	5.10.0	F	RP-040194	Approved	Removal of square brackets and other corrections to support T1	TEI5	R4	R4-040318
25.133	667	1	Rel-6	6.5.0	Α	RP-040194	Approved	Removal of square brackets and other corrections to support T1	TEI5	R4	R4-040319
25.133	668	1	Rel-6	6.5.0	F	RP-040228	Approved	Clarification to BSIC verification	TEI6	R4	R4-040366
25.133	673		R99	3.17.0	F	RP-040226	Approved	Correction of erroneous implementation of CR#211	TEI	R4	R4-040351
25.133	674		Rel 5	5.10.0	F	RP-040248	Revised	Clarification of UE procedure in case of HHO failure	TEI5	R4	
25.133	674	1	Rel 5	5.10.0	F	RP-040252	Approved	Clarification of UE procedure in case of HHO failure	TEI5	R4	
25.133	675		Rel 6	6.5.0	F	RP-040253	Approved	Clarification of UE procedure in case of HHO failure	TEI6	R4	
25.141	343	2	Rel-6	6.5.0	D	RP-040228	Approved	Redrafting of spurious emission tables for co-existence	TEI6	R4	R4-040357
25.141	344	2	Rel-6	6.5.0	F	RP-040228	Approved	Redrafting of blocking tables for co-location & Requirements for Medium Range BS and Local Area BS in case of co-location	TEI6	R4	R4-040359
25.141	345		Rel-6	6.5.0	F	RP-040228	Approved	Spectrum mask test requirement for Band IV	TEI6	R4	R4-040192
25.141	346		Rel-6	6.5.0	F	RP-040228	Approved	Correction of AWGN level for MR and LA BS classes receiver performance verification		R4	R4-040193
25.141	347	1	Rel-6	6.5.0	В	RP-040228	Approved	Introduction of DCH/RACH/CPCH performance test requirement for BS without Rx diversity		R4	R4-040343
25.141	348	1	Rel-6	6.5.0	F	RP-040197	Approved	Clarifications of test procedures for HS-DPCCH signaling detection requirements  HSDPA-RF		R4	R4-040304
25.141	349	1	Rel-6	6.5.0	F	RP-040228	Approved	Corrections on terminology	TEI6	R4	R4-040283
25.141	350		Rel-6	6.5.0	F	RP-040228	Approved	class verification of internal BLER calculation		R4	R4-040349
25.142	169	1	Rel-4	4.8.0	F	RP-040189	Approved	Clarification of measurement filter of spurious emission	TEI4	R4	R4-040329

Spec	Spec CR R Phase		ase Curr Cat Ver		Doc 1st-Level	Status 1st-Level	Subject	Work Item	WG	Doc 2nd-Level	
								considering coexistence issue			
25.142	170	1	Rel-5	5.6.0	Α	RP-040189	Approved	Clarification of measurement filter of spurious emission considering coexistence issue	TEI4	R4	R4-040330
25.142	171	1	Rel-6	6.0.0	А	RP-040189	Approved	Clarification of measurement filter of spurious emission considering coexistence issue	TEI4	R4	R4-040331
25.143	041		Rel-4	4.9.0	F	RP-040191	Approved	Spurious emissions: Co-existence with services in adjacent frequency bands	RInImp-Rep	R4	R4-040265
25.143	042		Rel-5	5.7.0	Α	RP-040191	Approved	Spurious emissions: Co-existence with services in adjacent frequency bands	RInImp-Rep	R4	R4-040266
25.143	043		Rel-6	6.0.0	А	RP-040191	Approved	Spurious emissions: Co-existence with services in adjacent frequency bands	RInImp-Rep	R4	R4-040267
25.143	044	1	Rel-4	4.9.0	F	RP-040192	Approved	New Adjacent Channel Rejection Ratio for Repeaters	RInImp-Rep	R4	R4-040383
25.143	045	1	Rel-5	5.7.0	Α	RP-040192	Approved	New Adjacent Channel Rejection Ratio for Repeaters	RInImp-Rep	R4	R4-040384
25.143	046	1	Rel-6	6.0.0	Α	RP-040192	Approved	New Adjacent Channel Rejection Ratio for Repeaters	RInImp-Rep	R4	R4-040385
25.211	189	1	Rel-6	6.0.0	В	RP-040231	Approved	Re-Introduction of S-CPICH in combination with Closed Loop TxDiversity	TEI6	R1	R1-040423
25.211	190	-	Rel-6	6.0.0	F	RP-040231	Approved	Clarification of NTFCI field of DL-DPCCH power preamble for CPCH	TEI6	R1	R1-040428
25.212	190	1	Rel-5	5.8.0	F	RP-040230	Approved	Clarification of Channelization Code-Set Mapping	HSDPA-Phys	R1	R1-040621
25.212	191	1	Rel-6	6.1.0	Α	RP-040230	Approved	Clarification of Channelization Code-Set Mapping	HSDPA-Phys	R1	R1-040621
25.214	349	2	Rel-5	5.8.0	F	RP-040247	Revised	Clarification of UE procedure in case of HHO failure	TEI5	R1	
25.214	349	3	Rel-5	5.8.0	F	RP-040257	Approved	Clarification of UE procedure in case of HHO failure	TEI5	R1	
25.214	350	2	Rel-6	6.1.0	Α	RP-040247	Revised	Clarification of UE procedure in case of HHO failure	TEI5	R1	
25.214	350	3	Rel-6	6.1.0	Α	RP-040257	Approved	Clarification of UE procedure in case of HHO failure	TEI5	R1	
25.221	116	1	Rel-6	6.0.0	В	RP-040235	Approved	Addition of TSTD for S-CCPCH in 3.84Mcps TDD	TEI6	R1	R1-040461
25.224	131	1	Rel-6	6.0.0	В	RP-040235	Approved	Addition of TSTD for S-CCPCH in 3.84Mcps TDD	TEI6	R1	R1-040461
25.304	112	1	Rel-5	5.4.0	F	RP-040208	Approved	Correction to UE selection of reserved cells	TEI5	R2	R2-041255
25.304	113	1	Rel-6	6.1.0	Α	RP-040208	Approved	Correction to UE selection of reserved cells	TEI5	R2	R2-041256
25.304	114	3	Rel-6	6.1.0	Α	RP-040208	Approved	Selection of suitable cell	TEI5	R2	R2-041233
25.304	115	-	Rel-5	5.4.0	F	RP-040208	Approved	Modification of the Sintersearch and SsearchRAT,m behaviour	TEI5	R2	R2-041147
25.304	116	-	Rel-6	6.1.0	Α	RP-040208	Approved	Modification of the Sintersearch and SsearchRAT,m behaviour	TEI5	R2	R2-041148
25.304	117	1	Rel-5	5.4.0	F	RP-040208	Approved	Selection of suitable cell	TEI5	R2	R2-041232
25.305	102	-	Rel-5	5.8.0	F	RP-040209	Approved	Corrections to time stamp in position information report and to SRNC relocation	TEI5	R2	R2-041149
25.305	103	-	Rel-6	6.0.0	Α	RP-040209	Approved	Corrections to time stamp in position information report and to SRNC relocation	TEI5	R2	R2-041150
25.305	104	-	Rel-6	6.0.0	В	RP-040216	Approved	Indication of achieved accuracy in position estimate	LCS2-UEpos-enh	R2	R2-041209
25.306	096	-	Rel-6	6.1.0	F	RP-040223	Approved	Correction to memory handling in the UE	TEI6	R2	R2-041242
25.321	191	-	R99	3.16.0	F	RP-040200	Approved	Use of U-RNTI in downlink	TEI	R2	R2-041093
25.321	192	-	Rel-4	4.9.0	Α	RP-040200	Approved			R2	R2-041094
25.321	193	-	Rel-5	5.8.0	Α	RP-040200	Approved	Use of U-RNTI in downlink	TEI	R2	R2-041095
25.321	194	-	Rel-6	6.1.0	Α	RP-040200	Approved	Use of U-RNTI in downlink	TEI	R2	R2-041096
25.321	195	-	Rel-5	5.8.0	F	RP-040234	Approved	State variables arithmetic comparison	TEI5	R2	R2-041151

Spec	CR	R	Phase	Curr Ver	Cat	Doc 1st-Level	1st-Level 1st-Level		Work Item	WG	Doc 2nd-Level
25.321	196	Ī-	Rel-6	6.1.0	Α	RP-040234	Approved	State variables arithmetic comparison	TEI5	R2	R2-041152
25.322	253	-	R99	3.17.0	F	RP-040201	Approved	DL RLC Size handling	TEI	R2	R2-041089
25.322	254	-	Rel-4	4.11.0	Α	RP-040201	Approved	DL RLC Size handling	TEI	R2	R2-041090
25.322	255	-	Rel-5	5.7.0	Α	RP-040214	Withdrawn	DL RLC Size handling	TEI	R2	R2-041091
25.322	256	-	Rel-6	6.0.0	Α	RP-040214	Withdrawn	DL RLC Size handling	TEI	R2	R2-041092
25.322	257	-	Rel-5	5.7.0	F	RP-040224	Approved	RLC size handling and RLC re-establishment	TEI5	R2	R2-041194
25.322	258	-	Rel-6	6.0.0	Α	RP-040224	Approved	RLC size handling and RLC re-establishment	TEI5	R2	R2-041195
25.324	017	-	R99	3.7.0	F	RP-040202	Approved	Corrections to BMC Schedule message	TEI	R2	R2-041101
25.324	018	-	Rel-4	4.3.0	Α	RP-040202	Approved	Corrections to BMC Schedule message	TEI	R2	R2-041102
25.324	019	-	Rel-5	5.3.0	Α	RP-040202	Approved	Corrections to BMC Schedule message	TEI	R2	R2-041103
25.324	020	-	Rel-6	6.0.0	Α	RP-040202	Approved	Corrections to BMC Schedule message	TEI	R2	R2-041104
25.331	2289	-	R99	3.18.0	F	RP-040203	Approved	Empty non-critical extensions	TEI	R2	R2-041118
25.331	2290	-	Rel-4	4.13.0	Α	RP-040203	Approved	Empty non-critical extensions	TEI	R2	R2-041119
25.331	2291	-	Rel-5	5.8.0	Α	RP-040203	Approved	Empty non-critical extensions	TEI	R2	R2-041120
25.331	2292	-	Rel-6	6.1.0	Α	RP-040203	Approved	Empty non-critical extensions	TEI	R2	R2-041121
25.331	2293	1	Rel-5	5.8.0	F	RP-040211	Approved	Missing "v3g0" extension in the UE CAPABILITY INFORMATION	TEI5	R2	R2-041183
25.331	2294	1	Rel-6	6.1.0	Α	RP-040211	Approved	Missing "v3g0" extension in the UE CAPABILITY INFORMATION	TEI5	R2	R2-041184
25.331	2295	-	R99	3.18.0	F	RP-040201	Approved	DL RLC Size handling	TEI	R2	R2-041085
25.331	2296	-	Rel-4	4.13.0	Α	RP-040201	Approved	DL RLC Size handling	TEI	R2	R2-041086
25.331	2297	2	Rel-5	5.8.0	F	RP-040214	Withdrawn	DL RLC Size handling	TEI5	R2	R2-041262
25.331	2298	2	Rel-6	6.1.0	Α	RP-040214	Withdrawn	DL RLC Size handling	TEI5	R2	R2-041263
25.331	2299	-	R99	3.18.0	F	RP-040203	Approved	RRC transaction identifier in the Handover from UTRAN message	TEI	R2	R2-041105
25.331	2300	-	R99	3.18.0	F	RP-040203	Approved	Correction on System Information in TDD	TEI	R2	R2-041106
25.331	2301	-	Rel-4	4.13.0	Α	RP-040203	Approved	Correction on System Information in TDD	TEI	R2	R2-041107
25.331	2302	-	Rel-5	5.8.0	Α	RP-040203	Approved	Correction on System Information in TDD	TEI	R2	R2-041108
25.331	2303	-	Rel-6	6.1.0	Α	RP-040203	Approved	Correction on System Information in TDD	TEI	R2	R2-041109
25.331	2304	-	Rel-5	5.8.0	F	RP-040236	Approved	Corrections to Cell Change Order from UTRAN procedure	TEI5	R2	R2-041110
25.331	2305	-	Rel-6	6.1.0	Α	RP-040236	Approved	Corrections to Cell Change Order from UTRAN procedure	TEI5	R2	R2-041111
25.331	2306	-	Rel-4	4.13.0	F	RP-040206	Approved	Correction on SFN-SFN time difference misalignment in 1.28 Mcps TDD	LCRTDD-L23	R2	R2-041113
25.331	2307	-	Rel-5	5.8.0	А	RP-040206	Approved	Correction on SFN-SFN time difference misalignment in 1.28 Mcps TDD	LCRTDD-L23	R2	R2-041114
25.331	2308	-	Rel-6	6.1.0	A	RP-040206	Approved	Correction on SFN-SFN time difference misalignment in 1.28 Mcps TDD	LCRTDD-L23	R2	R2-041115
25.331	2309	-	Rel-4	4.13.0	F	RP-040207	Approved	ASN.1 correction leftovers	TEI4	R2	R2-041128
25.331	2310	-	Rel-5	5.8.0	F	RP-040207	Approved	ASN.1 correction leftovers	TEI5	R2	R2-041129
25.331	2311	-	Rel-6	6.1.0	Α	RP-040207	Approved	ASN.1 correction leftovers	TEI5	R2	R2-041130
25.331	2312	-	Rel-5	5.8.0	F	RP-040210	Approved	Closing the REL-5 extensions in the ASN.1	TEI5	R2	R2-041132
25.331	2313	-	Rel-6	6.1.0	Α	RP-040210	Approved	Closing the REL-5 extensions in the ASN.1	TEI5	R2	R2-041133
25.331	2315	-	Rel-5	5.8.0	F	RP-040207	Approved			R2	R2-041135
25.331	2316	-	Rel-6	6.1.0	Α	RP-040207	Approved	Incorrect presence of UE-RadioAccessCapability extension in	TEI5	R2	R2-041136

Spec			Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	WG	Doc 2nd-Level	
								RRC CONNECTION SETUP COMPLETE			
25.331	2317	-	Rel-5	5.8.0	F	RP-040210	Approved	Unnecessary MAC-d flow identity in the IE "DL-TrCH-Type-r5"	HSDPA-L23	R2	R2-041137
25.331	2318	-	Rel-6	6.1.0	Α	RP-040210	Approved	Unnecessary MAC-d flow identity in the IE "DL-TrCH-Type-r5"	HSDPA-L23	R2	R2-041138
25.331	2319	1	Rel-5	5.8.0	F	RP-040211	Approved	UE capability enquiry for GERAN lu mode	TEI5	R2	R2-041227
25.331	2320	1	Rel-6	6.1.0	Α	RP-040211	Approved	UE capability enquiry for GERAN lu mode	TEI5	R2	R2-041228
25.331	2321	-	Rel-4	4.13.0	F	RP-040207	Approved	Clean up of SRNS Relocation Info REL-4 version	TEI4	R2	R2-041141
25.331	2322	-	Rel-5	5.8.0	F	RP-040207	Approved	Clean up of SRNS Relocation Info REL-5 version	TEI5	R2	R2-041142
25.331	2323	-	Rel-6	6.1.0	Α	RP-040207	Approved	Clean up of SRNS Relocation Info REL-5 version	TEI5	R2	R2-041143
25.331	2324	-	Rel-5	5.8.0	F	RP-040210	Approved	Tabular correction for RADIO BEARER RELEASE message	TEI5	R2	R2-041144
25.331	2325	-	Rel-6	6.1.0	F	RP-040210	Approved	Tabular correction for RADIO BEARER RELEASE message	TEI5	R2	R2-041145
25.331	2326	-	Rel-5	5.8.0	F	RP-040210	Approved	Misalignments between R'99 and Rel-5 procedures	TEI5	R2	R2-041157
25.331	2327	-	Rel-6	6.1.0	Α	RP-040210	Approved	Misalignments between R'99 and Rel-5 procedures	TEI5	R2	R2-041158
25.331	2328	-	Rel-5	5.8.0	F	RP-040210	Approved	Erroneous setting of Re-establish Indicator in case of SRNS relocation	TEI5	R2	R2-041159
25.331	2329	-	Rel-6	6.1.0	А	RP-040210	Approved	Erroneous setting of Re-establish Indicator in case of SRNS relocation	TEI5	R2	R2-041160
25.331	2330	-	Rel-4	4.13.0	F	RP-040207	Approved	Correction to IE "Cell Info"	TEI4	R2	R2-041161
25.331	2331	-	Rel-5	5.8.0	Α	RP-040207	Approved	Correction to IE "Cell Info"	TEI4	R2	R2-041162
25.331	2332	-	Rel-6	6.1.0	Α	RP-040207	Approved	Correction to IE "Cell Info"	TEI4	R2	R2-041163
25.331	2333	-	Rel-5	5.8.0	F	RP-040210	Approved	Correction Concerning UE Positioning Measurement	TEI5	R2	R2-041164
25.331	2334	-	Rel-6	6.1.0	Α	RP-040210	Approved	Correction Concerning UE Positioning Measurement	TEI5	R2	R2-041165
25.331	2335	-	Rel-5	5.8.0	F	RP-040236	Approved	Pending compressed mode reconfigurations	TEI5	R2	R2-041166
25.331	2336	-	Rel-6	6.1.0	Α	RP-040236	Approved	Pending compressed mode reconfigurations	TEI5	R2	R2-041167
25.331	2337	-	Rel-5	5.8.0	F	RP-040236	Approved	Active compressed mode patterns with same measurement purpose	TEI5	R2	R2-041168
25.331	2338	-	Rel-6	6.1.0	А	RP-040236	Approved	Active compressed mode patterns with same measurement purpose	TEI5	R2	R2-041169
25.331	2339	-	Rel-5	5.8.0	F	RP-040211	Approved	Correction to Information Elements for UE Rx-Tx time difference	TEI5	R2	R2-041170
25.331	2340	-	Rel-6	6.1.0	Α	RP-040211	Approved	Correction to Information Elements for UE Rx-Tx time difference	TEI5	R2	R2-041171
25.331	2341	-	Rel-5	5.8.0	F	RP-040210	Approved	Naming correction in the HS-DSCH IE Measurement Feedback Information	HSDPA-L23	R2	R2-041176
25.331	2342	-	Rel-6	6.1.0	А	RP-040210	Approved	Naming correction in the HS-DSCH IE Measurement Feedback Information	HSDPA-L23	R2	R2-041177
25.331	2343	-	Rel-4	4.13.0	F	RP-040206	Approved	Clarification about open loop power control in 1.28Mcps TDD	LCRTDD-L23	R2	R2-041185
25.331	2344	-	Rel-5	5.8.0	Α	RP-040206	Approved	Clarification about open loop power control in 1.28Mcps TDD	LCRTDD-L23	R2	R2-041186
25.331	2345	-	Rel-6	6.1.0	Α	RP-040206	Approved	Clarification about open loop power control in 1.28Mcps TDD	LCRTDD-L23	R2	R2-041187
25.331	2346	-	Rel-4	4.13.0	F	RP-040206	Approved	Clarification about measurement control system information in TEI4 TDD mode		R2	R2-041188
25.331	2347	-	Rel-5	5.8.0	А	RP-040206	Approved	Clarification about measurement control system information in TEI4 TDD mode		R2	R2-041189
25.331	2348	-	Rel-6	6.1.0	А	RP-040206	Approved	Clarification about measurement control system information in TDD mode	TEI4	R2	R2-041190
25.331	2349	-	Rel-5	5.8.0	F	RP-040211	Approved	Correction to timing-maintained hard handover regarding the UL	TEI5	R2	R2-041196

Spec	CR	R	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	WG	Doc 2nd-Level
								transmission timing			
25.331	2350	-	Rel-6	6.1.0	А	RP-040211	Approved	Correction to timing-maintained hard handover regarding the UL transmission timing	TEI5	R2	R2-041197
25.331	2352	-	Rel-4	4.13.0	F	RP-040207	Approved	Incorrect presence of UE-RadioAccessCapability extension in RRC CONNECTION SETUP COMPLETE	TEI4	R2	R2-041134
25.331	2353	3	Rel-5	5.8.0	F	RP-040236	Approved	Selection of suitable cell	TEI5	R2	R2-041267
25.331	2354	2	Rel-6	6.1.0	Α	RP-040236	Approved	Selection of suitable cell	TEI5	R2	R2-041268
25.331	2355	-	Rel-5	5.8.0	F	RP-040236	Approved	Check of the PLMN identity in the MIB when selecting a new cell	TEI5	R2	R2-041213
25.331	2356	-	Rel-6	6.1.0	Α	RP-040236	Approved	Check of the PLMN identity in the MIB when selecting a new cell	TEI5	R2	R2-041214
25.331	2357	-	Rel-5	5.8.0	F	RP-040211	Approved	Compressed INTER RAT HANDOVER INFO message modifications/corrections	TEI5	R2	R2-041237
25.331	2358	-	Rel-6	6.1.0	А	RP-040211	Approved	Compressed INTER RAT HANDOVER INFO message modifications/corrections	TEI5	R2	R2-041238
25.331	2359	-	Rel-6	6.1.0	F	RP-040215	Approved	The ASN.1 definition of IE "SysInfoType5bis"	TEI6	R2	R2-041253
25.331	2360	-	Rel-5	5.8.0	С	RP-040224	Approved	RLC size handling and re-establishment	TEI5	R2	R2-041259
25.331	2361	-	Rel-6	6.1.0	С	RP-040224	Approved	RLC size handling and re-establishment	TEI5	R2	R2-041260
25.331	2362	-	Rel-5	5.8.0	F	RP-040212	Approved	Restrict operation of the virtual active set	TEI5	R2	R2-041265
25.331	2363	-	Rel-6	6.1.0	Α	RP-040212	Approved	Restrict operation of the virtual active set	TEI5	R2	R2-041266
25.331	2364	-	Rel-5	5.8.0	F	RP-040213	Approved	Usage of different RB mapping info	TEI5	R2	R2-041269
25.331	2365	-	Rel-6	6.1.0	Α	RP-040213	Approved	Usage of different RB mapping info	TEI5	R2	R2-041270
25.331	2366	-	Rel-5	5.8.0	F	RP-040249	Revised	Clarification on UE procedure in case of HHO failure	TEI5	R2	
25.331	2366	1	Rel-5	5.8.0	F	RP-040256	Approved	Clarification on UE procedure in case of HHO failure	TEI5	R2	
25.331	2367	-	Rel-6	6.1.0	Α	RP-040249	Revised	Clarification on UE procedure in case of HHO failure	TEI5	R2	
25.331	2367	1	Rel-6	6.1.0	Α	RP-040256	Approved	Clarification on UE procedure in case of HHO failure	TEI5	R2	
25.346	001	-	Rel-6	6.0.0	F	RP-040217	Approved	Updates based on the MBMS ad-hoc, Budapest, 20-22 April 2004	MBMS-RAN	R2	R2-041251
25.346	002	-	Rel-6	6.0.0	F	RP-040217	Approved	Updates to TS25.346 from the RAN3#42 meeting in Montreal, Canada, 10-14 May 2004	MBMS-RAN	R2	R2-041252
25.401	085	-	Rel-5	5.7.0	F	RP-040254	Approved	Completion of the Rel-5 IP transport WI	ETRAN-iptrans	R3	
25.401	086	-	Rel-6	6.2.0	Α	RP-040254	Approved	Completion of the Rel-5 IP transport WI	ETRAN-iptrans	R3	
25.401	84	1	Rel-6	6.2.0	В	RP-040182	Approved	Introduction of Iu and Iur support of Network Assisted Cell Change from UTRAN to GERAN	RANimp-NACC	R3	R3-040904
25.410	053	-	Rel-5	5.3.0	F	RP-040254	Approved	Completion of the Rel-5 IP transport WI	ETRAN-iptrans	R3	
25.410	054	-	Rel-6	6.0.0	Α	RP-040254	Approved	Completion of the Rel-5 IP transport WI	ETRAN-iptrans	R3	
25.410	52	1	Rel-6	6.0.0	В	RP-040182	Approved	Introduction of Iu support of Network Assisted Cell Change from UTRAN to GERAN	RANimp-NACC	R3	R3-040901
25.413	658		Rel-6	6.1.0	В	RP-040216	Approved	Introduction of an indication of achieved accuracy in Location Report procedure over lu interface.	LCS2-UEpos-enh	R3	R3-040679
25.413	661	3	Rel-5	5.8.0	F	RP-040174	Approved	Data Volume Reporting Correction	TEI5	R3	R3-040928
25.413	662	3	Rel-6	6.1.0	Α	RP-040174	Approved	Data Volume Reporting Correction	TEI5	R3	R3-040929
25.413	666	1	Rel-5	5.8.0	F	RP-040174	Approved	d SNA Coding Correction TEI5		R3	R3-040930
25.413	667	1	Rel-6	6.1.0	Α	RP-040174	Approved	SNA Coding correction	TEI5	R3	R3-040931
25.413	668	2	Rel-6	6.1.0	В	RP-040182	Approved	Introduction of RIM mechanisms for NACC over the lu interface	RANimp-NACC	R3	R3-040917
25.413	671		Rel-5	5.8.0	F	RP-040174	Approved	Correction of Transport Layer Address and lu Transport	TEI5	R3	R3-040836

Spec	CR	R	Phase	Phase Curr Cat Ver		Doc	Status	Subject	Work Item	WG	Doc
				ver		1st-Level	1st-Level	Association handling in DAD Assignment			2nd-Level
25.413	672		Rel-6	6.1.0	Α	RP-040174	Approved	Association handling in RAB Assignment  Correction of Transport Layer Address and Iu Transport	TEI5	R3	R3-040837
0= 110	070	_	D 10	0.4.0	_	DD 040400		Association handling in RAB Assignment	0447 544		D0 0 10005
25.413	673	1	Rel-6	6.1.0	В	RP-040183	Approved	Management Based Activation in the UTRAN over the lu	OAM-Trace-RAN	R3	R3-040895
25.413	674	1	Rel-6	6.1.0	В	RP-040183	Approved	Enhancement of Trace handling during Relocation  OAM-Trace-RAI  Modification of CN Involve Trace for Subscriber and Equipment		R3	R3-040896
25.413	675	1	Rel-6	6.1.0	В	RP-040183	Approved	Modification of CN Invoke Trace for Subscriber and Equipment Trace support over Iu	OAM-Trace-RAN	R3	R3-040920
25.414	080	-	Rel-5	5.5.0	F	RP-040254	Approved	Completion of the Rel-5 IP transport WI	ETRAN-iptrans	R3	
25.414	081	-	Rel-6	6.0.0	Α	RP-040254	Approved	Completion of the Rel-5 IP transport WI	ETRAN-iptrans	R3	
25.414	78		Rel-5	5.5.0	F	RP-040244	Withdrawn	Completion of the Rel-5 IP Transport Option	ETRAN-iptrans	R3	
25.414	79		Rel-6	6.0.0	Α	RP-040244	Withdrawn	Completion of the Rel-5 IP Transport Option	ETRAN-iptrans	R3	
25.420	042	-	Rel-5	5.1.0	F	RP-040254	Approved	Completion of the Rel-5 IP transport WI	ETRAN-iptrans	R3	
25.420	043	-	Rel-6	6.0.0	Α	RP-040254	Approved	Completion of the Rel-5 IP transport WI	ETRAN-iptrans	R3	
25.420	40		Rel-6	6.0.0	В	RP-040182	Approved	Inclusion of Information Transfer as an Iur function	RANimp-NACC	R3	R3-040680
25.420	41	1	Rel-6	6.0.0	В	RP-040183	Approved	Trace Parameter Propagation over the lur	OAM-Trace-RAN	R3	R3-040897
25.423	954	1	Rel-5	5.9.0	F	RP-040175	Approved	Correction the presence of Traffic Class IE	TEI5	R3	R3-040882
25.423	955	1	Rel-6	6.1.0	Α	RP-040175	Approved	Correction the presence of Traffic Class IE	TEI5	R3	R3-040883
25.423	956	1	Rel-5	5.9.0	F	RP-040175	Approved	Inclusion of scrambling code information in HS-DSCH FDD Information Response IE	HSDPA-lublur	R3	R3-040884
25.423	957	1	Rel-6	6.1.0	А	RP-040175	Approved	Inclusion of scrambling code information in HS-DSCH FDD Information Response IE	HSDPA-lublur	R3	R3-040885
25.423	960	1	Rel-5	5.9.0	F	RP-040178	Approved	Node B usage of the MAC-hs re-ordering buffer size	HSDPA-lublur	R3	R3-040926
25.423	961		Rel-6	6.1.0	Α	RP-040178	Approved	Node B usage of the MAC-hs re-ordering buffer size	HSDPA-lublur	R3	R3-040761
25.423	962	1	Rel-5	5.9.0	F	RP-040180	Approved	Unsuccessful Operation of RL Setup Procedure for HSDPA	HSDPA-lublur	R3	R3-040877
25.423	963	1	Rel-6	6.1.0	Α	RP-040180	Approved	Unsuccessful Operation of RL Setup Procedure for HSDPA	HSDPA-lublur	R3	R3-040878
25.423	966	1	Rel-6	6.1.0	С	RP-040184	Approved	Measurement Recovery Behavior for Common and Dedicated Measurement Procedures	TEI6	R3	R3-040946
25.423	967	3	Rel-6	6.1.0	В	RP-040182	Approved	Introduction of support of NetworkAssisstedCellChange from UTRAN to GERAN	RANimp-NACC	R3	R3-040937
25.423	968		Rel-5	5.9.0	F	RP-040179	Approved	Clarification on number of and capacity reporting of Priority Queues	HSDPA-lublur	R3	R3-040796
25.423	969		Rel-6	6.1.0	А	RP-040179	Approved	Clarification on number of and capacity reporting of Priority Queues	HSDPA-lublur	R3	R3-040797
25.423	972		Rel-6	6.1.0	F	RP-040184	Approved	Correction of HS-SICH reception quality	TEI6	R3	R3-040845
25.423	975		Rel-5	5.9.0	F	RP-040181	Approved	Power Balancing Corrections	TEI5	R3	R3-040850
25.423	976		Rel-6	6.1.0	Α	RP-040181	Approved	Power Balancing Corrections	TEI5	R3	R3-040851
25.423	977		Rel-5	5.9.0	F	RP-040175	Approved	HSDPA Corrections in RL Reconfiguration	HSDPA-lublur	R3	R3-040854
25.423	978		Rel-6	6.1.0	Α	RP-040175	Approved	HSDPA Corrections in RL Reconfiguration	HSDPA-lublur	R3	R3-040855
25.423	979	1	Rel-6	6.1.0	В	RP-040183	Approved	Trace Parameter Propagation over the lur	OAM-Trace-RAN	R3	R3-040898
25.426	041	-	Rel-5	5.4.0	F	RP-040254	Approved	Completion of the Rel-5 IP transport WI	ETRAN-iptrans	R3	1
25.426	042	-	Rel-6	6.1.0	A	RP-040254	Approved	Completion of the Rel-5 IP transport WI	ETRAN-iptrans	R3	
25.430	051	-	Rel-5	5.2.0	F	RP-040254	Approved	Completion of the Rel-5 IP transport WI	ETRAN-iptrans	R3	
25.430	052	-	Rel-6	6.0.0	A	RP-040254	Approved	Completion of the Rel-5 IP transport WI	ETRAN-iptrans	R3	

Spec	Spec CR R Phase		Curr Cat Doc Status Ver 1st-Level 1st-Level			Subject	Work Item	WG	Doc 2nd-Level			
25.430	49		Rel-5	5.2.0	F	RP-040173	Approved	Clarification on Node B Communication Contexts	HSDPA-lublur	R3	R3-040774	
25.430	50		Rel-6	6.0.0	Α	RP-040173	Approved	Clarification on Node B Communication Contexts	HSDPA-lublur	R3	R3-040775	
25.433	1008		Rel-5	5.8.0	F	RP-040181	Approved	Power Balancing Corrections	TEI5	R3	R3-040852	
25.433	1009		Rel-6	6.1.0	A	RP-040181	Approved	Power Balancing Corrections	TEI5	R3	R3-040853	
25.433	1010	-	Rel-6	6.1.0	В	RP-040235	Approved	Addition of TSTD for S-CCPCH in 3.84 Mcps TDD	R3	110 0 10000		
25.433	990	1	Rel-5	5.8.0	F	RP-040176	Approved	Correction of PHYSICAL SHARED CHANNEL RECONFIGURATION message	Correction of PHYSICAL SHARED CHANNEL HSDPA-lublur			
25.433	991	1	Rel-6	6.1.0	А	RP-040176	Approved	Correction of PHYSICAL SHARED CHANNEL RECONFIGURATION message	HSDPA-lublur	R3	R3-040910	
25.433	992		Rel-5	5.8.0	F	RP-040178	Approved	Node B usage of the MAC-hs re-ordering buffer size	HSDPA-lublur	R3	R3-040762	
25.433	993		Rel-6	6.1.0	Α	RP-040178	Approved	Node B usage of the MAC-hs re-ordering buffer size	HSDPA-lublur	R3	R3-040763	
25.433	994	1	Rel-5	5.8.0	F	RP-040180	Approved	Unsuccessful Operation of RL Setup Procedure for HSDPA	HSDPA-lublur	R3	R3-040879	
25.433	995	1	Rel-6	6.1.0	Α	RP-040180	Approved	Unsuccessful Operation of RL Setup Procedure for HSDPA	HSDPA-lublur	R3	R3-040880	
25.433	997	1	Rel-6	6.1.0	С	RP-040184	Approved	Measurement Recovery Behavior for Common and Dedicated Measurement Procedures	TEI6	R3	R3-040947	
25.433	998		Rel-5	5.8.0	F	RP-040179	Approved	Clarification on number of and capacity reporting of Priority Queues	HSDPA-lublur	R3	R3-040794	
25.433	999		Rel-6	6.1.0	А	RP-040179	Approved	Clarification on number of and capacity reporting of Priority Queues	HSDPA-lublur	R3	R3-040795	
25.453	72	1	Rel-6	6.4.0	F	RP-040184	Approved	Correction to usage of INITIAL UE POSITION	TEI6	R3	R3-040948	
25.921	061	-	R99	3.10.0	F	RP-040204	Approved	Empty non-critical extensions	TEI	R2	R2-041080	
25.921	062	-	Rel-4	4.7.0	Α	RP-040204	Approved	Empty non-critical extensions	TEI	R2	R2-041081	
25.921	063	-	Rel-5	5.4.0	Α	RP-040204	Approved	Empty non-critical extensions	TEI	R2	R2-041082	
25.942	015		Rel-5	5.2.0	F	RP-040227	Approved	Rational on test parameters for UE adjacent channel selectivity	TEI5	R4	R4-040185	
25.942	016		Rel-6	6.2.0	Α	RP-040227	Approved	Rational on test parameters for UE adjacent channel selectivity	TEI5	R4	R4-040186	
25.942	017		Rel-6	6.2.0	F	RP-040198	Approved	Minimum Coupling Loss for co-siting of different BS classes	RInImp-BSClass- FDD	R4	R4-040215	
25.993	026	-	Rel-6	6.5.0	F	RP-040205	Approved	Corrections on required capabilities for 32kbps UE class and addition of the 12kbps class		R2	R2-041178	
25.993	027	-	Rel-6	6.5.0	F	RP-040205	Approved	Addition of RAB Parameters For RABs Removed From TS34.108 TEI But Retained In TS25.993		R2	R2-041179	
29.108	14		Rel-5	5.3.0	F	RP-040177	Approved	FSEarlyUE		R3	R3-040746	
29.108	15		Rel-6	6.0.0	А	RP-040177	Approved	PUESBINE support over E-interface	RANimp- FSEarlyUE	R3	R3-040747	

# Annex D: Summary of TSG RAN Work Items

This table lists RAN Work Items and its status after meeting #23.

Abbreviations used: %: Level of completion WI: Work Item SI: Study Item

Feat: Feature BB: Building Block FS: Feasibility Study

WT: Work Task

Туре	WI Name	Acronym	Leading WG	%	Finish Date	Status Report RAN #24	Remarks
Feat	Improvements of Radio Interface	RInImp	RP				Generic feature
BB	Improvement of inter-frequency and inter-system measurement	RInImp-IfIsM	R1	50	September 2004	RP-040141	
BB	Improved Receiver Performance Requirements for HSDPA	RInImp-HSPerf	R4	40	March 2005		
WT	Performance Requirements of Receive Diversity for HSDPA	RInImp-HSPerf-RxDiv	R4	40	March 2005	RP-040142	Completion date moved from Sept. 2004
Feat	RAN improvements	RANimp	RP				Generic feature
BB	RAB support enhancement	RANimp-RABSE	R2	60	December 2004	RP-040143	
WT	lu enhancements for IMS support in RAN	RANimp-RABSE- luEnhIMS	R3	25	June 2004	RP-040144	Closed due to the lack of progress
WT	Optimisation of downlink channelisation code utilisation	RANimp-RABSE- CodeOptFDD	R1	0	December 2004	RP-040145	WIDS revised in RP-040237
WT	Optimisation of channelisation code utilisation for TDD	RANimp-RABSE- CodeOptTDD	R1	0	December 2004	RP-040146	
BB	Rel6 RRM optimization for lur and lub	RANimp-RRMopt	R3	100			Generic BB, Rel6 Work completed in March 2004
BB	Remote Control of Electrical Tilting Antennas	RANimp-TiltAnt	R3	75	September 2004	RP-040147	·
BB	Network Assisted Cell Change (NACC) from UTRAN to GERAN - network-side aspects	RANimp-NACC	R3	100	June 2004	RP-040148	WI Finished
BB	UE positioning	LCS2-UEpos	RP				
WT	UE positioning enhancements - other methods	LCS2-UEpos-enh	R2	25	June 2004	RP-040149	Closed
WT	A-GPS minimum performance specification	LCS-UEPos-AGPSPerf		40	September 2004		
ВВ	Introduction of MBMS in RAN	MBMS-RAN	R2	80	December 2004	RP-040151	Completion date moved from March 2004
Feat	Evolutions of the transport in the UTRAN	ETRAN	RP				Generic feature

Type	WI Name	Acronym	Leading	%	Finish Date	Status Report	Remarks
			WG			RAN #24	
Feat	Multiple Input Multiple Output antennas (MIMO)	MIMO	R1		December 2005	RP-040152	Completion date moved from
BB	MIMO - Physical layer	MIMO-Phys	R1	50	March 2005		March 2005
BB	MIMO - Layer 2,3 aspects	MIMO-L23	R2	0	December 2005		
BB	MIMO - lub/lur Protocol Aspects	MIMO-lurlub	R3	0	December 2005		
BB	MIMO - RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing	MIMO-RF	R4	5	December 2005		
WT	Subscriber and equipment trace in UTRAN	OAM-Trace-RAN	R3	100	June 2004	RP-040153	WI Finished
ВВ	Enhancement of the support of network sharing in the UTRAN	NTShar-UTRANEnh	R2	50	September 2004	RP-040154	
Feat	FDD Enhanced Uplink	EDCH	RP		June 2005		
BB	FDD Enhanced Uplink - Stage 2	EDCH-Stage2	R2	30	September 2004	RP-040155	
BB	FDD Enhanced Uplink - Physical Layer	EDCH-Phys	R1	5	December 2004	RP-040156	
BB	FDD Enhanced Uplink - Layer 2 and 3 Protocol Aspects	EDCH-L23	R2	5	December 2004	RP-040155	
BB	FDD Enhanced Uplink - UTRAN lub/lur Protocol Aspects	EDCH-Iurlub	R3	0	December 2004	RP-040157	
ВВ	FDD Enhanced Uplink - RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing	EDCH-RF	R4	0	June 2005	RP-040158	

Туре	WI Name	Acronym	Leading WG	%	Finish Date	Status Report RAN #24	Remarks
SI	FS on Radio link performance enhancements	RInImp-Riperf	R1	95	September 2004	RP-040159	Almost completed, postponed from June 2004
SI	FS on UTRA WideBand Distribution Systems	RInImp-WDS	R4	60	June 2004	RP-040160	Closed RAN#24 due to the lack of progress
SI	FS for the analysis of OFDM for UTRAN enhancement	RInImp-FSOFDM	R1	100	June 2004	RP-040161	Study finished
SI	FS on Analysis on Higher Chip Rates for UTRA TDD evolutions	RInImp-FSVHCRTDD	R1	90	September 2004	RP-040162	Completion date moved from June 2004
SI	FS on the evolution of the UTRAN architecture	RANimp-FSEvo	R3	35		RP-040023	Work stopped until completion of MBMS in RAN3
SI	FS on Uplink enhancements for UTRA TDD	RInImp-FSUpEnhTDD	R1	20	December 2004	RP-040163	Completion date moved from September 2004

## Annex E: Meeting schedule

## TSG RAN meetings:

Meeting #	Date	Host	Location
25	08 - 10 September 2004	North American Friends of 3GPP	Palm Springs, US
26	08 - 10 December 2004	European Friends of 3GPP	Athens, Greece
27	09 - 11 March 2005		Tokyo, Japan
28	1 - 3 June 2005		Quebec, Canada
29	21 - 23 September 2005		Europe (TBC)
30	30 Nov 2 Dec. 2005		Europe (TBC)

Work Shop on "Long term evolution for the UMTS Radio", 2 - 3 November 2004, Toronto (Host to be confirmed)

### TSG RAN WG1 meetings:

Meeting #	Date	Host	Location
38	16 - 20 August 2004	European Friends of 3GPP	Prague, Czech Republic
39	15-19 November 2004	Japanese Friends of 3GPP	Shin Yokohama, Japan
40	14-18 February 2005	North American Friends of 3GPP	TBC

Joint WG1-WG2 Rel-6 Ad Hoc: 21 - 24 June 2004, Cannes, France

### TSG RAN WG2 & WG3 meetings:

Meeting #	Date	Host	Location
43	16 - 20 August 2004	European Friends of 3GPP	Prague, Czech Republic
44	4 - 8 October 2004	ETSI	Sophia Antipolis, France
45	15 - 19 November 2004	Japanese Friends of 3GPP	Shin Yokohama, Japan(TBC)
46	14-18 February 2005	North American Friends of 3GPP	TBC

### TSG RAN WG4 meetings:

Meeting #	Date	Host	Location
32	16 -20 August 2004	European Friends of 3GPP	Prague, Czech Republic
33	15 - 19 November 2004	Japanese Friends of 3GPP	Shin Yokohama, Japan
34	14-18 February 2005	North American Friends of 3GPP	TBC

## Annex F: List of actions

- WG2 to study the arguments raised in RP-040243 on the cell reselection rules.
- WG4 & WG1 to jointly study the PAR issue for Rel-6 (sec. 7.5.5)
- WG4 to review the need to signal UE Rx Diversity to the network, with the help of WG2 (sec. 8.1.2)
- WG4 to look at the need to correct the existing tests to cope with the RET signal at the antenna port (sec. 8.2.3)
- MIMO rapporteur to provide in the future detailed completion dates & percentages for the work in each WG (sec. 8.6)
- RAN chairman to report to TSG SA on the requirement to have the Network Sharing as a mandatory UE capability for Rel-6 terminals (sec. 8.8).
- FDD Enhanced Uplink rapporteur to merge the Status Reports of the 4 WGs in a single document in the future, in order to get the full picture. Completion dates & percentages still to be provided per Building Block (sec. 8.9)
- WG1 & WG2 to review the proposal for the new WI " Inclusion of Uplink TDOA UE positioning method in the UTRAN specifications" and the background information attached, and to produce a Description Sheet for the Feasibility Study (sec. 8.13)
- WG1 to continue the study phase on ACK/NACK enhancement technique to clarify the gains in terms of coverage (sec. 8.13)