UNITED STATES PATENT AND TRADEMARK OFFICE
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BEFORE THE PATENT TRIAL AND APPEAL BOARD
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In re Patent Of: Godo Kaisha IP Bridge 1
U.S. Patent No.:   8,077,594 B2
Issue Date: December 13, 2011
Appl. Serial No.:   12/853,582
Filing Date: August 10, 2010
Title: RADIO COMMUNICATION BASE STATION DEVICE
                    AND CORRELATION SETTING METHOD

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DECLARATION OF ANTTI TOSKALA

1.	I have been asked by Nokia of America Corp. ("Nokia") to provide this declaration to describe how certain documents that were drafted and adopted by the Third Generation Partnership project ("3GPP") were disseminated and made available to the general public. I understand that this declaration is in support of an *inter partes* review ("IPR") of U.S. Patent No. 8,077,594 ("the '594 patent").

2.	In preparation of this declaration, I reviewed Exhibits 1003, 1004, 1005, 1012, 1013, 1016, and Appendices A-L below.

   a.	Exhibit 1003: 3GPP TR 25.814 V7.1.0 (2006-09) Technical Report, 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Physical Layer Aspects for Evolved Universal Terrestrial Radio Access (UTRA) (Release 7)

   b.	Exhibit 1004: R1-072296, TSG-RAN Working Group 1 Meeting #49; Agenda Item 7.11.2; *UL Sounding*

   c.	Exhibit 1005: TS 36.300 V8.0.0, 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Overall description; Stage 2 (Release 8)

d. Exhibit 1012: R1-073172, TS 36.211 V1.2.0, 3rd Generation Partnership Project; Technical Specification Group; Radio Access Network; Physical Channels and Modulation (Release 8)

e. Exhibit 1013: 3GPP TS 36.213 V1.2.0 (2007-05) Technical Specification, 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Physical Layer Procedures (Release 8)

f. Exhibit 1016: TS 36.211 V1.2.0, 3rd Generation Partnership Project; Technical Specification Group; Radio Access Network; Physical Channels and Modulation (Release 8)

g. Appendix A: Linkedin Profile Page of Antti Toskala

h. Appendix B: Archive of email discussing TS 36.211 v1.2.0, available at:

https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_RAN_WG1;59a4e81f.0707&S=

i. Appendix C: Archive of email discussing TS 36.211 v1.2.1, available at:

https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_RAN_WG1;947e7e9.0707&S=

j. Appendix D: Archive of email attaching Report from TSG RAN WG1 #49, available at:

https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_RAN_WG1;9a709 85d.0705C&S=

k. Appendix E: Report from TSG RAN WG1 #49, available to download at:

https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_RAN_WG1;9a709 85d.0705C&S=

l. Appendix F: Report from TSG RAN #35, available to download at:

https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_RAN;4ec5b51c.07 03&S=

m. Appendix G: Archive of email attaching Report from TSG RAN #35, available at:

https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_RAN;4ec5b51c.07 03&S=

n. Appendix H: Report from TSG RAN #33, available to download at:

https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_RAN;d51f031a.06 09&S=

o. Appendix I: Archive of email attaching Report from TSG RAN #33, available at:

https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_RAN;d51f031a.06 09&S=

p. Appendix J: Report from TSG RAN1 #49bis, available to download at: https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_RAN_WG1;bce28 24f.0707&S=

q. Appendix K: Archive of email attaching Report from TSG RAN1 #49bis, available at: https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_RAN_WG1;bce28 24f.0707&S=

r. Appendix L: Archive of email attaching R1-072296, available at: https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_RAN_WG1;30b3d 570.0705A&S=

3. In forming the opinions expressed within this declaration, I have considered:

a. The exhibits listed above;

b. My own academic background, knowledge, and professional experiences in the field of wireless communications and 3GPP standards-development, as described below.

I. PROFESSIONAL BACKGROUND

4.   My qualifications and professional experience are described in my LinkedIn page, a copy of which has been submitted as Appendix A. The following is a more extensive summary of my relevant qualifications and professional experience.

5.   I graduated from the Tampere University of Technology, Finland with a Masters in Electrical Engineering in 1995. I initially joined Nokia while completing my master's thesis on CDMA technology in 1994. I was hired as a master's thesis worker, before joining full-time in 1995 upon graduation.

6.   Since I joined Nokia, I have held a number of positions relating to the Nokia's standardization efforts from 1997 to present. I headed Nokia's 3GPP RAN standardization efforts during the standardization of 4G & 5G, and am still employed by Nokia in Espoo as a Bell Labs Fellow, now heading all of their 3GPP standardization efforts.

7.   During my career of over twenty years working with 3GPP standards, I have co-authored several 3GPP technical documents and other related references, including dozens of Tdocs, and hundreds of RAN WG1 listserv emails. Throughout my career and to this day, I continuously visit(ed) the 3GPP and ETSI document servers and have remained familiar with 3GPP and ETSI document handling practices.

8.   Over more than two decades, I have experience working as a 3GPP delegate, as the head of Nokia's 3GPP RAN standardization efforts during the standardization of 4G & 5G, and now as head of all Nokia's 3GPP standardization. I was also the 3GPP TSG RAN1 Chairman from 1998-2003, and was responsible for development of the 3GPP physical layer standards. Based on my experience, I am knowledgeable about how the 3GPP standards are developed across the working groups and how 3GPP documents are drafted, distributed, stored and made available to the public without restriction.

9.   By working extensively with 3GPP standardization, I have become very familiar with 3GPP's processes for drafting and publishing final specifications, draft standards, and standards-related contributions that are publicly available – including from 1998 to the present, when I was overseeing Nokia employees attending or monitoring various 3GPP Working Groups, including RAN WG1 throughout 2006-2007. In the 2006-2007 I personally was also monitoring various 3GPP Working Groups, including RAN WG1.

10.   For purposes of my analysis in this declaration, I have been informed by counsel that a person of ordinary skill in the art ("POSITA") in the field of the '594 Patent in the 2006-2007 timeframe, would include someone who had the equivalent of an undergraduate degree in Electrical Engineering, Computer Science, or Computer Engineering; and (2) at least two years of experience in design,

development, and/or testing of cellular networks. I have been informed by counsel that such a person would have been familiar with the public discussion and proposals made as part of the 3GPP LTE standards-setting body. Moreover, I recognize that additional education may substitute for some of the experience, and experience may substitute for some of the educational background.

11.   Based on my years of experience working in various capacities with 3GPP and 3GPP standards issues, I am familiar with the regular business practices of 3GPP relating to technical documents including specifications, draft standards and proposals, and standards-related technical contributions – including the business practices through which 3GPP makes these documents public, as set forth below.

II.   3GPP Experience

12.   In the 2006-2007 timeframe, 3GPP consisted of four Technical Specifications Groups ("TSGs"), also called "plenary groups." One of those plenary groups being the Radio Access Network (RAN) TSG.

13.   Each of the plenary groups, in turn, consisted of a number of working groups. For example, TSG-RAN had five working groups: Working Group 1 – Radio Layer 1 ("RAN-1" or "R1"); Working Group 2 – Radio Layer 2 ("RAN-2" or "R2"); Working Group 3 – Radio Resource Control ("RAN-3" or "R3"); Working Group 4 – Radio performance and Protocol Aspects ("RAN-4" or "R4"); and Working Group 5 – Mobile Terminal Conformance Testing ("RAN-5" or "R5").

14.   In my experience, the working groups met approximately every month and had primary responsibility for drafting and editing reports, specifications, and change requests. The reports, specifications, and change requests then had to be approved by the plenary group, which met roughly every three months. Meetings for each plenary and working group were numbered sequentially (*e.g.*, TSG-RAN, Meeting #14 ("RAN-14"); R2, Meeting #22 ("R2-22")). The members of the plenary and working groups were typically employees of various companies in the telecommunications industry.

15.   My work with standardization began in 1997 when I was named the Nokia representative for 3G technology standardization with the European Telecommunications Standards Institute (ETSI). Then, in early 1998 I became the chairman of ETSI Special Mobile Group 2 UMTS Layer 1, which dealt with the then current 3G physical layer specifications.

16.   3GPP was then formed in 1998, and I became the 3GPP liaison for Nokia, along with being selected as the 3GPP Radio Access Network Working Group 1 Chairman. I held this role until 2003, in which time I oversaw the development of 3GPP physical layer standard Release '99, Release 4, Release 5, and the start of Release 6. In the 2006-2007 timeframe, I was overseeing Nokia's 3GPP RAN standardization efforts, and continued to do so throughout the standardization of 4G & 5G, and now head all Nokia's 3GPP standardization.

III. 3GPP Documents

17. The development of technical specifications and the documentation relevant to that development has always been a very structured process at 3GPP.

18. As explained earlier, each 3GPP working group met roughly every month and was responsible for drafting and editing specifications and proposing change requests. The drafts and proposed change requests were approved by the relevant plenary group, which met approximately every three months.

A. Technical Reports

19. When there were new concepts to discuss, the working group would start a technical report ("TR") (*e.g.*, "TR 25.825") to further develop those ideas. Technical reports follow specific procedures for naming and changing 3GPP documents, and for naming files on 3GPP's publicly available servers. These procedures are followed because it is very important that the changes that are brought into the standard, from the past, at present, and in the future, are well documented and controlled, so that technical consistency and backwards tracing are ensured. As such, the title of a TR document follows a structured numbering system that provides details regarding the subject matter and technology to which the TR document pertains. The number system is ***3GPP TR aa.bbb Vx.y.z (yyyy-mm)***:

- ***aa*** is the "series" number to which the specification belongs (*e.g.*, "23 Series" corresponds to Technical realization ("stage 2")).

- ***bbb*** is the "report" number; if the number begins with an "8" that indicates that it is not intended to be transposed into publications by 3GPP's Organizational Partners; if the number begins with a "9" that indicates that it is to be further disseminated by 3GPP's Organizational Partners.

- V$x.y.z$ is Version $x.y.z$ where x is 1 if the document is presented to TSG for information; x is 2 if the document is presented to TSG for approval; and x is 3 or greater to indicate that it is a TSG approved document under change control (at this stage the number corresponds to the 3GPP release number); y is incremented every time a change of substance occurs (*i.e.*, technical enhancements, corrections, updates, etc.) and when the TSG approves one or more Change Requests (y is reset to zero every time the x field is incremented); and z is incremented when purely editorial changes have been incorporated in the document (z is also reset to zero every time the y field is incremented or reset to zero).

- ***yyyy*** is the year that the relevant TSG or Working Group approved the document.

- ***mm*** is the month that the relevant TSG or Working Group approved the document.

20.   The format for the filename of a TR document on the 3GPP server at least includes aabbb_xyz, which provides information regarding the contents and stage of development of the contents of the document (e.g., "TR-25.858").

B. Technical Specifications

21.   When there was sufficient consensus on a TR, the working group moves the concepts of the TR into a normative or technical specification (TS) (*e.g.*, "TS-36.211"). Exhibit 1012 is a true and accurate copy of 3GPP TS 36.211 V1.2.0 (June 2007), *3rd Generation Partnership Project; Technical Specification Group; Radio Access Network; Physical Channels and Modulation (Release 8)*. The title of a TS document follows the same structured numbering system to that of the TR documents that provides details regarding the subject matter and technology to which the TS document pertains. The number system is ***3GPP TS aa.bbb Vx.y.z (yyyy-mm)***:

- ***aa*** is the "series" number to which the specification belongs (*e.g.*, "23 Series" corresponds to Technical realization ("stage 2")).

- ***bbb*** is the "specification" number.

- V***x.y.z*** is Version *x.y.z* where *x* is 1 if the document is presented to TSG for information; *x* is 2 if the document is presented to TSG for approval; and *x* is 3 or greater to indicate that it is a TSG approved document under change control (at this stage the number corresponds to the 3GPP

release number); y is incremented every time a change of substance occurs (*i.e.*, technical enhancements, corrections, updates, etc.) and when the TSG approves one or more Change Requests (y is reset to zero every time the x field is incremented); and z is incremented when purely editorial changes have been incorporated in the document (z is also reset to zero every time the y field is incremented or reset to zero).

- ***yyyy*** is the year that the relevant TSG or Working Group approved the document.

- ***mm*** is the month that the relevant TSG or Working Group approved the document.

22.   Like TR documents, the format for the filename of a TS document on the 3GPP server at least includes aabbb_xyz, which provides information regarding the contents and stage of development of the contents of the document.

C. Temporary Documents ("TDocs")

23.   In the ordinary course of 3GPP's regularly conducted business activities and pursuant to its standard business practices, all members may make contributions for consideration by the Technical Specification Group or Working Group. Such documents are referred to as "temporary documents," and are commonly referred to as "TDocs." Before, during, and after meetings, all TDocs are distributed to all of the members of the TSG or WG to which they pertain, and all T-

docs are made publicly available on 3GPP's servers. Exhibit 1004 is a true and accurate copy of TSG-RAN Working Group 1, Meeting Number 49, TDoc R1-072296, *UL Sounding*, prepared by contributing members Nokia and Nokia Siemens Networks for Meeting Number 49 held on or between May 7-11, 2007 in Kobe, Japan ("R1-072296").

24.   Each TSG or WG selects a structured numbering system for the documents associated with their meetings, and those systems typically follow a consistent numbering system as shown in the following example: ***xminnzzzz.*** This numbering system has six logical elements: (1) **x**: a single letter corresponding to the TSG; where x is one of **R** (Radio Access Network), **N** (Core Network), **S** (Service and System Aspects), **T** (Terminals), **G** (GSM/EDGE Radio Access Network), **C** (Core network and Terminals); (2) **m:** A single character corresponding to the Working Group identity (typically 1, 2, 3, etc.) or, in the case of the TSG itself, the letter "**P**"; (3) **i**: Normally the hyphen character "-", although it may take on other values depending on the nature of the meeting at which the document is presented, *e.g.* the identity of a subgroup, or an "h" to indicate an ad hoc meeting; (4) **nn**: two digits to indicate the year, *i.e.* 99, 00, 01, etc; and (5) **zzzz**: A unique number of the document.

25.   In the 2006-2007 timeframe, if a 3GPP delegate wanted to contribute, for example, a change request to a TR or TS document, the member first requested

a document number from the secretary of the TSG or WG. A unique number was then created based on a format for that TSG or WG, like the example disclosed in the preceding paragraph, and assigned to that member. At that point, the number and title for that contribution is fixed, and the filename for the document that is stored on the publicly available 3GPP server is that fixed number.
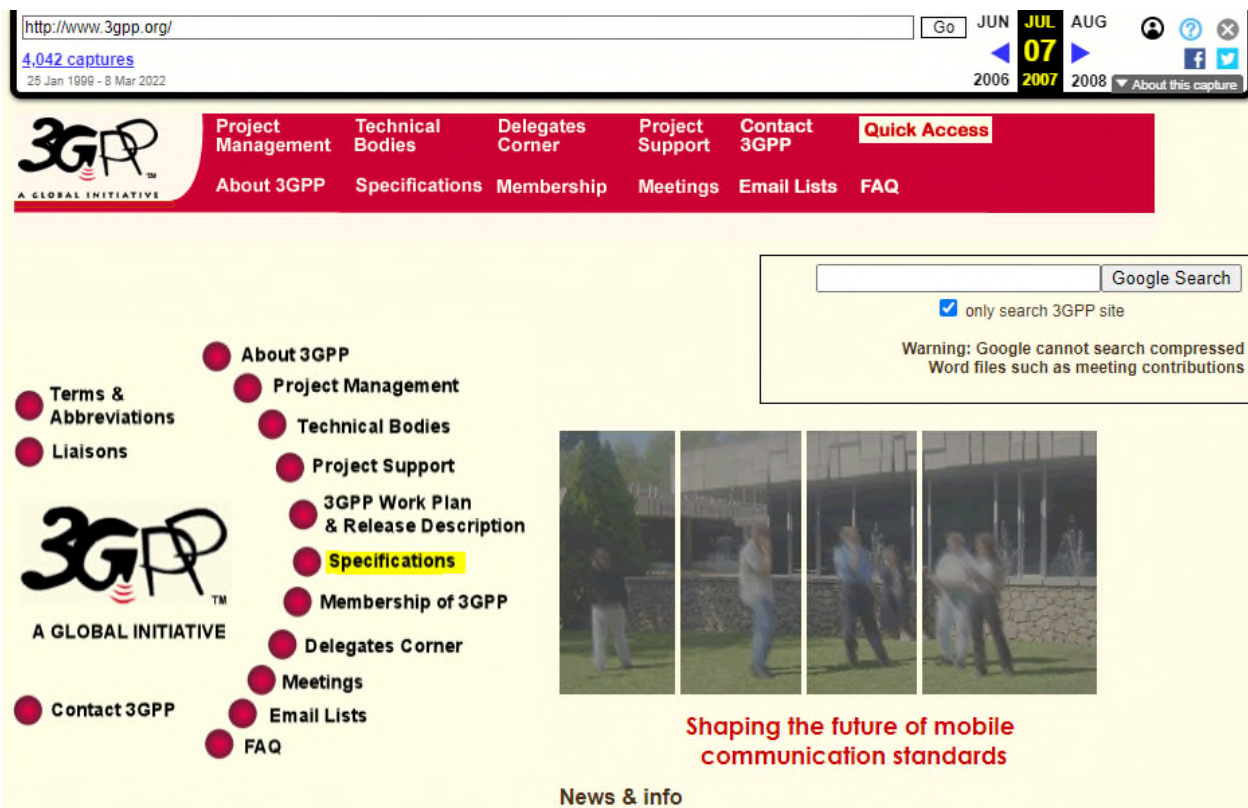
D. **Email Exploder**

26.   In the ordinary course of 3GPP's regularly conducted business activities and pursuant to its standard business practices, TDocs and discussion documents were also often distributed using 3GPP's public email exploders both before, during, and after meetings. In my experience, when an email was sent to the exploder list, the email and any attachments were immediately available to (1) any members of the public who subscribed to the list; and (2) any members of the public who navigated to the email exploder's online archive that is maintained by one of 3GPP's Organizational Partners, the European Telecommunications Standards Institute (ETSI): http://list.etsi.org/scripts/wa.exe?INDEX. Emails and documents uploaded to 3GPP's publicly-available, unrestricted, online email exploder archive would receive a time and date stamp. In my experience, all emails and documents are retained on the 3GPP's email exploder archive indefinitely, and the date and time stamp for each email and document can be relied upon to indicate when the upload occurred.

IV.   3GPP Document Submissions / Retention

A. <u>3GPP Specifications Page</u>

27.   In the ordinary course of 3GPP's regularly conducted business activities and pursuant to its standard business practices, documents uploaded to the publicly-available, unrestricted, online FTP server would receive a date and time stamp. Take, for example, TS-36.211 V1.2.0 (Exhibit 1016). In 2007, any member of the public could navigate to this TDoc through the "Specifications" link:

Available at: https://web.archive.org/web/20070707102325/http://www.3gpp.org/ (highlighting added).

28. An interested member of the public could locate specifications by navigating to the Specifications page, which provided direct access to the various 3GPP specifications through the 3GPP file repository or FTP.

Available at:

https://web.archive.org/web/20070707102958/http://www.3gpp.org/specs/specs.htm

29. In 2007, the specifications were organized by release date, which was listed on the left hand side on the chart in the column titled "year-month." The Status

List within the "latest status column" included a chart of all Technical Specifications ("TS") and Technical Reports ("TR") in that particular Release, including the TR or TS number, the title, the version number, and the Working Group responsible for that specification or report. The "specs directory" column provided access to the FTP for the corresponding release date.

30.   Any interested member of the public would know which specification to look at based on the subject matter they were interested in. The public would know to follow updates from the particular Working Group responsible for the specific technology of interest, and could narrow the set of specifications that were relevant to their search based on the series number of the specification, for example "LTE Radio Technology" for series ID "36." With this understanding, interested members of the public were able to search through the titles and descriptions of a narrowed set of specifications to identify which particular specification they were interested in. These 3GPP specifications were searchable and indexed by public search engines such as Google.

B. 3GPP File Transfer Protocol ("FTP")

31.   In the ordinary course of 3GPP's regularly-conducted business activities and pursuant to its standard business practices, 3GPP also published all proposals, technical reports, technical specifications and other documents related to the development of cellular telecommunications standards to 3GPP's publicly-

available, unrestricted, online FTP server: http://www.3gpp.org/FTP/. Draft proposals, technical reports, technical specifications, change requests, and other documents ("TDocs") were assigned a document number ("TDoc number") and uploaded to 3GPP's public FTP server before, during, and after meetings. Making the documents publicly available encouraged discussion and promoted establishment of industry standards for cellular telecommunications. All TDocs, technical reports, and technical specifications were also indexed, and searchable, with interested members of the public knowing about the 3GPP website, and the 3GPP documents that were available through the 3GPP website and FTP.

32.   It is my recollection that during the 2006-2007 timeframe, when I was overseeing Nokia's Radio Access Network standardization efforts, any interested member of the public could locate particular TDocs or other 3GPP documents using reasonable diligence in conjunction with the TDoc's naming convention and the 3GPP FTP's indexing scheme. The 3GPP FTP is organized such that documents are grouped according to the relevant specification groups, then further split up by relevant working group, then further split up again by the chronological meetings at which documents were presented. Interested members of the public would have known where to find working groups they would be interested in based on the subject matter of their query, and would be able to further limit their search to the relevant time frame they were interested in.

33.   For example, interested members of the public that wanted to know more about radio access networks could look at the documents available on the 3GPP FTP related to the TSG RAN working group.

Available at:

https://web.archive.org/web/20070707103137/http://www.3gpp.org/FTP/

(highlighting added).

34.   If interested members of the public wanted to more particularly look at documents related to Layer 1 or Physical Layer protocols of Radio Access Networks, they would know to search the WG1_RL1 a.k.a. RAN WG1 or RAN1 group.

www.3gpp.org - /ftp/tsg_ran/

[To Parent Directory]

```
     29 March 2007    21:44    <dir>  AHG1_ITU_Coord
     10 May 2007      11:42    <dir>  TSG_RAN
     05 June 2007     13:55    <dir>  WG1_RL1
     05 April 2007    13:29    <dir>  WG2_RL2
     12 June 2007     12:39    <dir>  WG3_Iu
     13 June 2007     09:11    <dir>  WG4_Radio
     13 June 2007     09:09    <dir>  WG5_Test_ex-T1
     29 March 2007    23:10    <dir>  WGs_LongTermEvolution
```

Available at:

https://web.archive.org/web/20070702022045/http://www.3gpp.org/FTP/tsg_ran/

(highlighting added).

35.   Once an interested member of the public had located the RAN WG1 documents, they could further refine their search by looking at specific meetings based on the relevant timeframe:

```
29 March 2007    22:01    <dir>  TSGR1_08
29 March 2007    22:01    <dir>  TSGR1_09
29 March 2007    22:02    <dir>  TSGR1_10
29 March 2007    22:02    <dir>  TSGR1_11
29 March 2007    22:02    <dir>  TSGR1_12
29 March 2007    22:02    <dir>  TSGR1_13
29 March 2007    22:03    <dir>  TSGR1_14
29 March 2007    22:03    <dir>  TSGR1_15
29 March 2007    22:03    <dir>  TSGR1_16
29 March 2007    22:03    <dir>  TSGR1_17
29 March 2007    22:04    <dir>  TSGR1_18
29 March 2007    22:04    <dir>  TSGR1_19
29 March 2007    22:04    <dir>  TSGR1_20
29 March 2007    22:05    <dir>  TSGR1_21
29 March 2007    22:05    <dir>  TSGR1_22
29 March 2007    22:05    <dir>  TSGR1_23
29 March 2007    22:05    <dir>  TSGR1_24
29 March 2007    22:05    <dir>  TSGR1_25
29 March 2007    22:06    <dir>  TSGR1_26
29 March 2007    22:06    <dir>  TSGR1_27
29 March 2007    22:06    <dir>  TSGR1_28
29 March 2007    22:06    <dir>  TSGR1_28b
29 March 2007    22:06    <dir>  TSGR1_29
29 March 2007    22:06    <dir>  TSGR1_30
29 March 2007    22:06    <dir>  TSGR1_31
29 March 2007    22:07    <dir>  TSGR1_32
29 March 2007    22:07    <dir>  TSGR1_33
29 March 2007    22:07    <dir>  TSGR1_34
29 March 2007    22:08    <dir>  TSGR1_35
29 March 2007    22:08    <dir>  TSGR1_36
29 March 2007    22:08    <dir>  TSGR1_37
29 March 2007    22:08    <dir>  TSGR1_38
29 March 2007    22:09    <dir>  TSGR1_38bis
29 March 2007    22:09    <dir>  TSGR1_39
29 March 2007    22:09    <dir>  TSGR1_40
29 March 2007    22:09    <dir>  TSGR1_40bis
29 March 2007    22:09    <dir>  TSGR1_41
29 March 2007    22:10    <dir>  TSGR1_42
29 March 2007    22:10    <dir>  TSGR1_42bis
29 March 2007    22:11    <dir>  TSGR1_43
29 March 2007    22:11    <dir>  TSGR1_44
29 March 2007    22:11    <dir>  TSGR1_44bis
29 March 2007    22:12    <dir>  TSGR1_45
29 March 2007    22:13    <dir>  TSGR1_46
29 March 2007    22:13    <dir>  TSGR1_46bis
29 March 2007    22:14    <dir>  TSGR1_47
29 March 2007    22:15    <dir>  TSGR1_47bis
29 March 2007    22:16    <dir>  TSGR1_48
29 March 2007    22:16    <dir>  TSGR1_48b
21 May 2007      16:04    <dir>  TSGR1_49
19 June 2007     14:05    <dir>  TSGR1_49b
```

Available at:

https://web.archive.org/web/20070701153949/http://www.3gpp.org/FTP/tsg_ran/

WG1_RL1/ (highlighting added).

36.   Within meeting 49, for example, an interested member of the public

could look to the meeting report for a summary of the documents presented in that

meeting, and any related discussion.

Available at:

https://web.archive.org/web/20071116150832/http://www.3gpp.org/FTP/tsg_ran/

WG1_RL1/TSGR1_49/ (highlighting added).

37.   If any documents or discussion were noteworthy, an interested

member of the public could navigate to the list of documents, which included

every document submitted and / or presented at the meeting.

Available at:

https://web.archive.org/web/20071116150832/http://www.3gpp.org/FTP/tsg_ran/

WG1_RL1/TSGR1_49/ (highlighting added).

38.   An interested member of the public could then choose whichever

document they were interested in.

```
02 May 2007    15:10        13184  R1-072274.zip
02 May 2007    21:36        47956  R1-072275.zip
14 May 2007    10:04        17088  R1-072276.zip
02 May 2007    21:36        57920  R1-072277.zip
02 May 2007    21:36        17763  R1-072278.zip
02 May 2007    21:36        19434  R1-072279.zip
02 May 2007    21:36        22452  R1-072280.zip
02 May 2007    21:36        21086  R1-072281.zip
02 May 2007    14:38        76060  R1-072282.zip
02 May 2007    21:36       124542  R1-072283.zip
02 May 2007    21:36        69267  R1-072284.zip
02 May 2007    21:36        23376  R1-072285.zip
02 May 2007    21:36        21517  R1-072286.zip
02 May 2007    21:36       251396  R1-072287.zip
02 May 2007    21:36      1890861  R1-072288.zip
02 May 2007    21:35        22713  R1-072289.zip
02 May 2007    21:35        34117  R1-072290.zip
02 May 2007    21:35        79902  R1-072291.zip
02 May 2007    21:35        27094  R1-072292.zip
02 May 2007    21:35        18041  R1-072293.zip
02 May 2007    21:35        46389  R1-072294.zip
02 May 2007    21:35        46088  R1-072295.zip
02 May 2007    21:35        30438  R1-072296.zip
04 May 2007    13:13       684497  R1-072297.zip
02 May 2007    21:35        18954  R1-072298.zip
02 May 2007    21:35        34185  R1-072299.zip
02 May 2007    21:35        40325  R1-072300.zip
02 May 2007    21:35        32982  R1-072301.zip
02 May 2007    21:35       971565  R1-072302.zip
02 May 2007    21:35        22638  R1-072303.zip
```

Available at:

https://web.archive.org/web/20070717162051/http://www.3gpp.org/FTP/tsg_ran/

WG1_RL1/TSGR1_49/Docs/ (highlighting added).

39.   Documents uploaded to the publicly-available, unrestricted, 3GPP FTP

server would receive a date and time stamp. In my experience, all documents are

retained on the public 3GPP server indefinitely, and the date and time stamp can be

relied upon to indicate when the upload occurred. Here, R1-072296 was uploaded to

the FTP site no later than May 2, 2007.

40.   In the ordinary course of 3GPP's regularly conducted business

activities and pursuant to its standard business practices, the TSGs would also

formally approve incremental versions of the standards (*e.g.*, V1.0.0, V1.1.0, *etc.*).

These formally-approved versions were made available on the 3GPP specifications page discussed previously. For example, in 2007, TS 36.300 V8.0.0 (Ex. 1005) was available to any member of the public through navigating to the 3GPP specifications page and selecting the March, 2007 (2007-03) release.

http://www.3gpp.org/specs/specs.htm [Go] JUN **JUL** AUG

557 captures
8 Jun 2002 – 4 Jan 2022   2006 **2007** 2008 ▼ About this capture

◄ **07** ►

[Google Search]
☑ only search 3GPP site

Warning: Google cannot search compressed
Word files such as meeting contributions

3GPP Specifications Home Page

Spec download | Titles and spec numbers | Current version | Releases | Numbering scheme | Change Requests
Published specifications | Historical information | Work plan | TSG Working methods | Drafting rules | Delegates corner| ASN.1

Quick link to the **specifications file server area** (http) for those who know where they are going!

To find a particular spec quickly, **go here** and click on the links in the spec-series in the table or use the links in the "further information" section.

The term "*3GPP specification*" covers all GSM (including GPRS and EDGE) and W-CDMA specifications. The following terms are also used to describe networks using the 3G specifications: UTRAN, UMTS (in Europe) and FOMA (in Japan). Revised versions of many of these specifications are produced up to four times a year following the quarterly TSG plenary meetings. (TSG GERAN meets five times a year.) See the table below which gives links to lists of specifications arising from each plenary TSG meeting since the freezing of Release 1999. The month of the meeting and the meeting number are shown in each case. Note that **the tables show only those specifications newly approved or modified at the meeting concerned**; they do *not* contain a complete list of all specifications current following the meeting. For such a list, consult the "status list" - see below.

Following each TSG SA plenary meeting, a complete set of specifications is produced. This set includes not only the new specifications generated at that meeting, but also the latest versions of each specification that was not changed at that meeting. i.e. each directory holds a complete set of specifications. Each set has an associated **status list** as detailed in the table below. Each set (and corresponding status list) includes the specs arising from the TSG GERAN meetings held since the preceding SA meeting. (GERAN meets asynchronously from the other TSGs.)

The **Status List** (ZIPped RTF or Word format) summarizes the current version number for every release of every 3GPP specification following each TSG plenary meeting. Also listed for each specifications are:

- the 3GPP working group and rapporteur responsible for the specification
- the Project Manager in MCC (Mobile Competence Centre) responsible for the specification
- the meeting at which it was, or is expected to be, "frozen" (i.e. the point after which only corrections are allowed)

Full details of the Specifications, their history and current status can be found in the 3GPP Specifications Status database.

year-month	remark	latest status	specs directory	TSG CN meeting number	TSG RAN* meeting number	TSG T meeting number	TSG SA meeting number	TSG GERAN meeting number	TSG CT meeting number
2007-06		StatusList	ftp://ftp.3gpp.org/specs/2007-06		36		36	34	36
2007-03	GERAN#33 specs have no separate delta directory since meeting was just before other TSGs#35.	StatusList	ftp://ftp.3gpp.org/specs/2007-03		35		35	33	35

Available at

https://web.archive.org/web/20070707102958/http://www.3gpp.org/specs/specs.ht

m (highlighting added).

41.   In July of 2007, selecting the March 2007 release took the interested

member of the public to that particular release on the FTP.

Available at

https://web.archive.org/web/20070701035643/http://www.3gpp.org/FTP/specs

(Highlighting added).

42.   From there, an interested member of the public could select Release 8,

for example, to see all specifications available in release 8.

Available at

https://web.archive.org/web/20070704004126/http://www.3gpp.org/FTP/specs/200

7-03/ (Highlighting added).

43.   An interested member of the public could then select the 36 series, to

see all 36 series technical specifications available within release 8 at that time.

www.3gpp.org - /ftp/Specs/2007-03/Rel-8/

[To Parent Directory]

```
26 March 2007    14:47    <dir> 21_series
26 March 2007    14:47    <dir> 22_series
20 March 2007    11:57    <dir> 23_series
04 March 2007    15:50    <dir> 24_series
04 March 2007    15:50    <dir> 25_series
04 March 2007    15:50    <dir> 26_series
04 March 2007    15:50    <dir> 27_series
04 March 2007    15:50    <dir> 28_series
21 March 2007    09:55    <dir> 29_series
04 March 2007    15:50    <dir> 30_series
04 March 2007    15:50    <dir> 31_series
04 March 2007    15:50    <dir> 32_series
06 April 2007    21:08    <dir> 33_series
04 March 2007    15:50    <dir> 34_series
04 March 2007    15:50    <dir> 35_series
06 April 2007    20:56    <dir> 36_series
04 March 2007    15:50    <dir> 41_series
26 March 2007    14:47    <dir> 42_series
19 March 2007    11:38    <dir> 43_series
04 March 2007    15:50    <dir> 44_series
04 March 2007    15:50    <dir> 45_series
04 March 2007    15:50    <dir> 46_series
04 March 2007    15:50    <dir> 47_series
04 March 2007    15:50    <dir> 48_series
04 March 2007    15:50    <dir> 49_series
04 March 2007    15:50    <dir> 50_series
04 March 2007    15:50    <dir> 51_series
04 March 2007    15:50    <dir> 52_series
04 March 2007    15:50    <dir> 55_series
```

Available at

https://web.archive.org/web/20070510021407/http://www.3gpp.org:80/FTP/Specs/

2007-03/Rel-8/ (Highlighting added).

44.   An interested member of the public could then select 36300-800.zip,

which contains 3GPP TS 36.300 V8.0.0.

www.3gpp.org - /ftp/Specs/2007-03/Rel-8/36_series/

[To Parent Directory]

```
06 April 2007    14:35    1406738  36300-800.zip
```

Available at

https://web.archive.org/web/20070505103228/http://www.3gpp.org/FTP/Specs/20

07-03/Rel-8/36_series/

45.   Documents uploaded to the publicly-available, unrestricted, online

3GPP specifications page would receive a time and date stamp. In my experience,

all standards are retained on the 3GPP specifications page indefinitely, and the date

stamp for each standard can be relied upon to indicate when the upload occurred.

Here, TS 36.300 V8.0.0 was uploaded to the FTP site no later than April 6, 2007,

and therefore was available to any interested member of the public from that day

onward.

46.   In addition to the logical document storage mechanism offered by

3GPP and ETSI, because each of the (1) 3GPP FTP server, (2) 3GPP Specifications

Page, and (3) email exploder's online archive were freely available on the internet

in 2006 and 2007, the documents stored on each of those servers were and are fully

searchable and available to users via conventional search engines like, for example,

the Google search engine.

V.   SPECIFIC REFERENCES

47.   In the following paragraphs, I identify specific 3GPP documents that I

reviewed in connection with this IPR.

48.   For each document available on the public 3GPP FTP server, I navigated to the relevant file, as described above. Further, I reviewed the publicly-available file in order to confirm that it had been correctly uploaded to the public 3GPP FTP server. Based on my experience, the date and time stamp for each file can be relied upon to indicate when the upload occurred.

49.   For each technical standard available on the 3GPP specifications page, I navigated to the relevant technical standard and version number, as described above. I reviewed the publicly-available technical standard in order to confirm that it had been correctly uploaded to 3GPP's specifications page. In my experience, the date stamp for each technical standard can be relied upon to indicate when the upload occurred.

50.   For each email and document available on 3GPP's email exploder archive, I navigated to the relevant email, as described above. I reviewed the publicly-available email and its attachments in order to confirm that they had been correctly uploaded to 3GPP's email exploder archive. In my experience, the date and time stamp for each email and document available on 3GPP's email exploder archive can be relied upon to indicate when the upload occurred.

A. 3GPP TR 25.814 V7.1.0 (2006-09) Technical Report, 3rd Generation Partnership Project; Technical Specification Group Radio Access

Network; Physical Layer Aspects for Evolved Universal Terrestrial

Radio Access (UTRA) (Release 7) (Ex. 1003)

51.   TR 25.814 V7.1.0 is a 3GPP Technical Report titled "3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Physical layer aspects for evolved Universal Terrestrial Radio Access (UTRA) (Release 7)" (Ex. 1003). TR 25.814 V7.1.0 on its cover page lists a date of ("2006-09") which notes the date the RAN working group approved this particular version of the specification. "2006-09" listed as the date denotes that TR 25.814 V7.1.0 was approved in September of 2006.

52.   As I mentioned above in paragraph 40, 3GPP's normal business practice was to incrementally increase version numbers of technical specifications as they are amended such that the approval of TR 25.814 V7.1.0 necessarily came after the approval of TR 25.814 V7.0.0 and a subsequent approved change request. In this instance, TR 25.814 V7.1.0 was generated after TSG RAN #33 approved a change request to TR 25.814 V7.0.0. The approval is reflected on page 78 of the meeting report for TSG RAN meeting number 33 taking place in Palm Springs, USA, from September 19-22, 2006 (Appendix H). This meeting report was distributed to the TSG RAN listserv on September 25, 2006 (Appendix I).

53.   As I discuss in greater detail in Section III, the 3GPP website and FTP have always been publicly available to all interested parties. I was able to confirm

that TR 25.814 V7.1.0 was publicly available at least by October 2, 2006, by accessing the 3GPP FTP.

54.   I first directed my web browser to http://www.3gpp.org/, where I selected the Specifications tab, and then further selected the Specification Numbering tab from the drop down menu. I then selected the 25 series specifications, and searched for specification number "25.814" in the search bar. I then select the glasses icon for the 25.814 specification, which takes me to the available version of TR 25.814.

Available   at:

https://portal.3gpp.org/Specifications.aspx?q=1&series=19&releases=all&draft=Fa

lse&underCC=False&withACC=False&withBCC=False&numberNYA=False

(Highlighting added).

55.   I then select "click to see all versions of the specification, and scroll down to version 7.1.0, which shows an upload date of October 2, 2006 ("2006-10-02").

Available   at:

https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?s
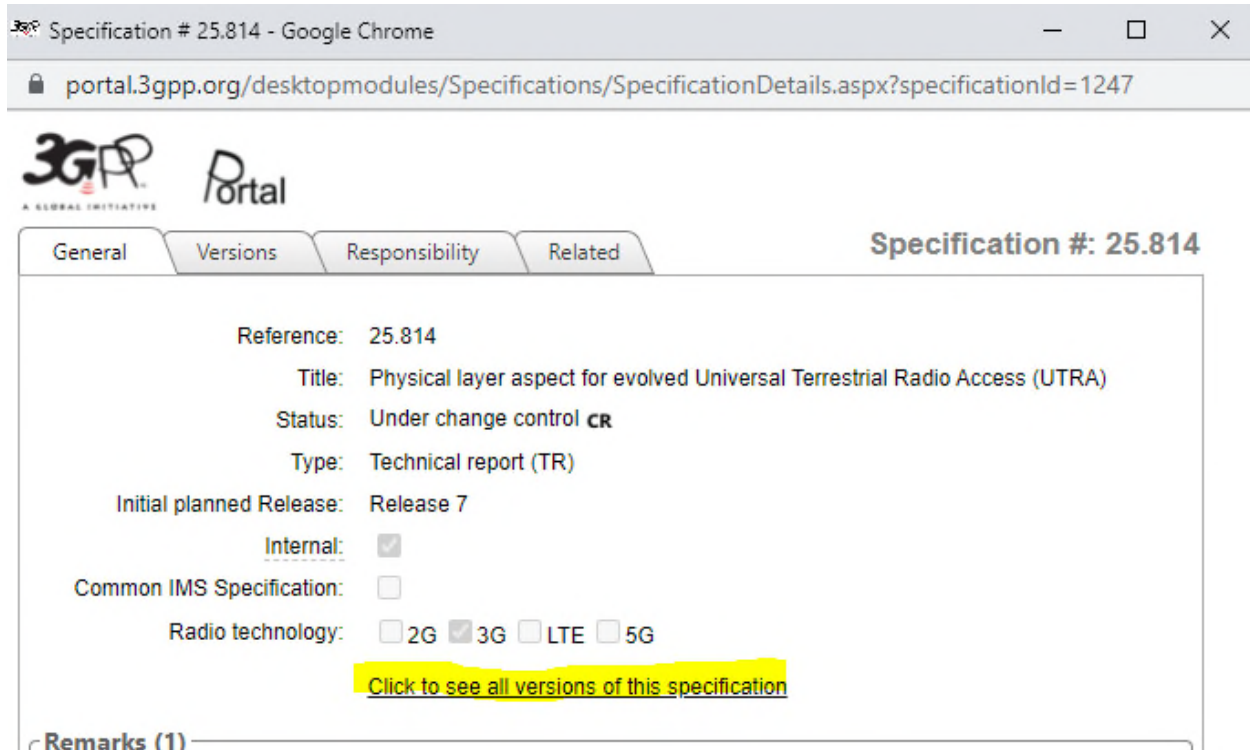
pecificationId=1247 (Highlighting added).

56.   Clicking on version 7.1.0 downloads a zip file titled 25814-710.zip, which contains TR 25.814 V7.1.0. The downloaded zip file contains a word document titled "25814-710.doc" with a date stamp saying it was last modified on October 2, 2006 ("10/2/2006"). After opening the document titled "25814-710.doc," I confirmed that the technical contents are the same as those provided in TR 25.814

V7.1.0. A true and correct copy of the document titled "25814-710.doc" is provided as Ex. 1003.

57. Based on my experience chairing RAN1 and participating in 3GPP standardization efforts, I recognize that the date stamps associated with 25814-710.zip show that it was uploaded to 3GPP's publicly available website on October 2, 2006. At that time, and in order to stay up-to-date on the current state of standardization, I was in the practice of regularly downloading and reviewing 3GPP specifications and submissions that were related to the work of RAN1 and that were uploaded to the 3GPP public file server, so I would have actually received a copy 25814-710.zip. Additionally, as I mentioned above in paragraphs 30 and 46, 3GPP documents (including TR 25.814) were freely available on the internet in the 2006-2007 timeframe, and the documents stored on 3GPP servers were and are fully searchable and available to interested members of the public via google or other popular search engines. A POSITA would have been able to and would have known to look for and download 25814-710.zip from the 3GPP FTP website no later than October 2, 2006, which is when it was uploaded and available for download. At any point on or after October 2, 2006, the date 25814-710.zip was uploaded, any interested member of the public could have downloaded the zip file, extracted the Word document enclosed, viewed the contents of the Word document, and further disseminated said document without any limitations or restrictions. Thus, Ex. 1003

was actually distributed and publicly available to POSITAs on 3GPP's publicly available website no later than October 2, 2006.

B. **3GPP TS 36.213 V1.2.0 (2007-05) Technical Specification, 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Physical Layer Procedures (Release 8), (Ex. 1013)**

58.	TS 36.213 V1.2.0 is a 3GPP Technical Report titled "3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Physical Layer Procedures (Release 8)" (Ex. 1013). TS 36.213 V1.2.0 on its cover page lists a date of ("2007-05") which notes the date the RAN working group approved this particular version of the specification. "2007-05" listed as the date denotes that TS 36.213 V1.2.0 was approved in May of 2007.

59.	As I mentioned above in paragraph 40, 3GPP's normal business practice was to incrementally increase version numbers of technical specifications as they are amended such that the approval of TS 36.213 V1.2.0 necessarily came after the approval of TS 36.213 V1.0.0 through one or several subsequent approved change requests. In this instance, TS 36.213 V1.2.0 was approved at TSG RAN1 meeting #49. The approval is reflected in the meeting report for TSG RAN1 meeting number 49 taking place in Kobe, Japan, from May 7-11, 2007 (Appendix E, pp. 18-

19). This meeting report was distributed to the TSG RAN listserv on May 21, 2007 (Appendix D).

Available at:

https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_RAN_WG1;9a70985d.0705C&S=

60.   As I discuss in greater detail in Section III, the 3GPP website and FTP have always been publicly available to all interested parties. I was able to confirm that TS 36.213 V1.2.0 was publicly available at least by June 13, 2007, by accessing the 3GPP FTP.

61.   I first directed my web browser to http://www.3gpp.org/, where I selected the Specifications tab, and then further selected the Specification

Numbering tab from the drop down menu. I then selected the 36 series specifications, and searched for specification number "36.213" in the search bar. I then select the glasses icon for the 36.213 specification, which takes me to the available version of TS 36.213.

Available at: https://portal.3gpp.org/Specifications.aspx?q=1&series=30&releases=all&draft=False&underCC=False&withACC=False&withBCC=False&numberNYA=False (Highlighting added).

62. I then select "click to see all versions of the specification, and scroll down to version 1.2.0, which shows an upload date of June 13, 2007 ("2007-06-13").

Available   at:

https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?s

pecificationId=2427 (Highlighting added).

Available at: https://www.3gpp.org/ftp/Specs/archive/36_series/36.213/ (Highlighting added).

63.   Clicking on version 1.2.0 downloads a zip file titled 36213-120.zip, which contains TS 36.213 V1.2.0. The downloaded zip file contains a word document titled "36213-120.doc" with a date stamp saying it was last modified on June 13, 2007 ("6/13/2007"). After opening the document titled "36213-120.doc," I confirmed that the technical contents are the same as those provided in TS 36.213 V1.2.0. A true and correct copy of the document titled "36213-120.doc" is provided as Ex. 1013.

64.   Based on my experience chairing RAN1, participating in 3GPP standardization efforts, and leading Nokia's 3GPP Radio Access Network standardization efforts, I recognize that the date stamps associated with 36213-120.zip show that it was uploaded to 3GPP's publicly available website on June 13, 2007. At that time, and in order to stay up-to-date on the current state of standardization, I was in the practice of regularly downloading and reviewing 3GPP specifications and submissions that were related to the work of RAN1 and that were uploaded to the 3GPP public file server, so I would have actually received a copy 36213-120.zip. Additionally, as I mentioned above in paragraphs 30 and 46, 3GPP documents (including TS 36.213) were freely available on the internet in 2007, and the documents stored on 3GPP servers were and are fully searchable and available

to interested members of the public via google or other popular search engines. A POSITA would have been able to and would have known to look for and download 36213-120.zip from the 3GPP FTP website no later than June 13, 2007, which is when it was uploaded and available for download. At any point on or after June 13, 2007, the date 36213-120.zip was uploaded, any interested member of the public could have downloaded the zip file, extracted the Word document enclosed, viewed the contents of the Word document, and further disseminated said document without any limitations or restrictions. Thus, Ex. 1013 was actually distributed and publicly available to POSITAs on 3GPP's publicly available website no later than June 13, 2007.

C. **TS 36.300 V8.0.0, 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Overal description; Stage 2 (Release 8) (Ex. 1005)**

65.   TS 36.300 V8.0.0 is a 3GPP Technical Report titled "3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Overall description; Stage 2 (Release 8)" (Ex. 1005). TS 36.300 V8.0.0 on its cover page lists a date of ("2007-03") which notes

the date the RAN working group approved this particular version of the specification. "2007-03" listed as the date denotes that TS 36.300 V8.0.0 was approved in March of 2007.

66.   As I mentioned above in paragraph 40, 3GPP's normal business practice was to incrementally increase version numbers of technical specifications as they are amended such that the approval of TS 36.300 V8.0.0 necessarily came after the approval of TS 36.300 V1.0.0 through one or several subsequent approved change requests. In this instance, TS 36.300 V8.0.0 was generated after TSG RAN #35 approved a change request to TS 36.300 V1.0.0. The approval is reflected in the meeting report for TSG RAN meeting number 35 taking place in Lemesos, Cyprus, from March 6-9, 2007 (Appendix F, p. 36). This meeting report was distributed to the TSG RAN listserv on March 15, 2007 (Appendix G).

3GPP_TSG_RAN Archives
March 2007

3GPP_TSG_RAN@LIST.ETSI.ORG   ☰

Options: Use Monospaced Font
         Show Text Part by Default
         Show All Mail Headers

Message: [<< First] [< Prev] [Next >] [Last >>]
Topic: [<< First] [< Prev] [Next >] [Last >>]
Author: [<< First] [< Prev] [Next >] [Last >>]

Subject:	Minutes of RAN-35.
From:	Claude Arzelier <[log in to unmask]>
Reply To:	Claude Arzelier <[log in to unmask]>
Date:	Thu, 15 Mar 2007 17:48:22 +0100
Content-Type:	multipart/mixed
Parts/Attachments:	text/plain (286 bytes) , text/html (1868 bytes) , Draft1_Minutes_RAN-35.zip (341 kB)

Dear All,

Hope you went back safely. Please find enclosed the minutes (draft1) of the meeting held last week (06-09 March) in Lemesos, Cyprus.

Please try to send your last comments by the 29th March 2007.

Thanks and Regards,

Claude.

Claude Arzelier
ETSI MCC
+33 4 92 94 42 61

Available   at:

https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_RAN;4ec5b51c.0703&S=

67.   As I discuss in greater detail in Section III, the 3GPP website and FTP have always been publicly available to all interested parties. I was able to confirm that TS 36.300 V8.0.0 was publicly available at least by April 6, 2007, by accessing the 3GPP FTP.

68.   I first directed my web browser to http://www.3gpp.org/, where I selected the Specifications tab, and then further selected the Specification

Numbering tab from the drop down menu. I then selected the 36 series specifications, and searched for specification number "36.300" in the search bar. I then select the glasses icon for the 36.300 specification, which takes me to the available version of TS 36.300.

Available at:

https://portal.3gpp.org/Specifications.aspx?q=1&series=30&releases=all&draft=False&underCC=False&withACC=False&withBCC=False&numberNYA=False (Highlighting added).

69.   I then select the versions tab, and scroll down to version 8.0.0, which shows an upload date of April 6, 2007 ("2007-04-06").

Available at:

https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?s

pecificationId=2430 (Highlighting added).

70.   Clicking on version 8.0.0 downloads a zip file titled 36300-800.zip, which contains TS 36.300 V8.0.0. The downloaded zip file contains a word document titled "36300-800.doc" with a date stamp saying it was last modified on April 6, 2007 ("4/6/2007"). After opening the document titled "36300-800.doc," I confirmed that the technical contents are the same as those provided in TS 36.300 V8.0.0. A true and correct copy of the document titled "36300-800.doc" is provided as Ex. 1005. I have also confirmed in sections III and IV above that TS 36.300 V8.0.0 was publicly available on the 3GPP FTP in 2007 as well using the Wayback machine.

71.   Based on my experience chairing RAN1, participating in 3GPP standardization efforts, and leading Nokia's 3GPP Radio Access Network standardization efforts, I recognize that the date stamps associated with 36300-800.zip show that it was uploaded to 3GPP's publicly available website on April 6, 2007. At that time, and in order to stay up-to-date on the current state of standardization, I was in the practice of regularly downloading and reviewing 3GPP specifications and submissions that were related to the work of RAN1 and that were uploaded to the 3GPP public file server, so I would have actually received a copy 36300-800.zip. Additionally, as I mentioned above in paragraphs 30 and 46, 3GPP documents (including TS 36.300) were freely available on the internet in 2007, and the documents stored on 3GPP servers were and are fully searchable and available

to interested members of the public via google or other popular search engines. A POSITA would have been able to and would have known to look for and download 36300-800.zip from the 3GPP FTP website no later than April 6, 2007, which is when it was uploaded and available for download. At any point on or after April 6, 2007, the date 36300-800.zip was uploaded, any interested member of the public could have downloaded the zip file, extracted the Word document enclosed, viewed the contents of the Word document, and further disseminated said document without any limitations or restrictions. Thus, Ex. 1005 was actually distributed and publicly available to POSITAs on 3GPP's publicly available website no later than April 6, 2007.

D. R1-072296, TSG-RAN Working Group 1 Meeting #49; Agenda Item 7.11.2; *UL Sounding* ("the Nokia SRS Contribution") (Ex. 1004)

72.   R1-072296 is a 3GPP technical contribution, or TDoc, titled "UL sounding" (Ex. 1004). R1-072296 was submitted to TSG RAN WG1 for the RAN WG1 meeting number 49, which took place in Kobe, Japan from May 7-11, 2007. R1-072296 follows the naming convention for TDocs discussed above in section III.B, where "R1" notes that the TDoc was submitted to RAN working group 1, "07" indicates the last two digits of the year the submission was made (2007), and "2296" is the specific TDoc number assigned to the submission by the 3GPP RAN WG1 secretary.

73.   As mentioned above in Section III.D, it was common practice to submit TDocs to the RAN WG1 listserv before a meeting for review and discussion. The submitter of R1-072296 would have circulated R1-072296 or an earlier version of R1-072296 to the RAN WG1 listserv in the days or weeks before the meeting. An interested member of the public could subscribe to the RAN WG1 email list at any time. On October 6 of 2006, the RAN WG1 listserv had 1,117 subscribers.
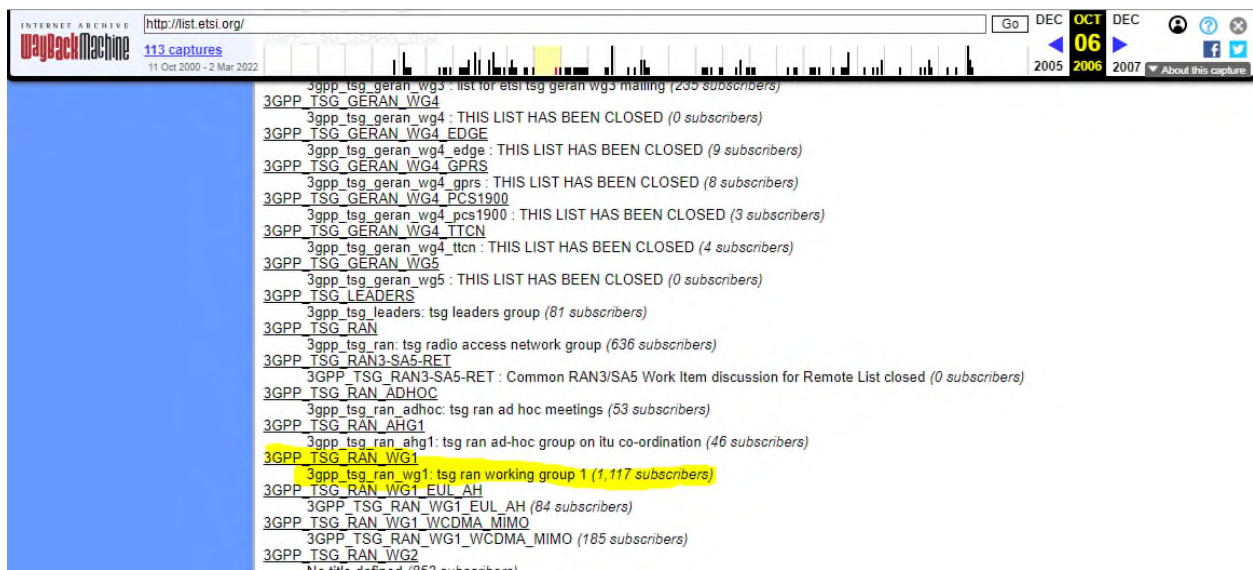
Available at: https://web.archive.org/web/20061006105911/http://list.etsi.org/ (highlighting added).

74.   On May 2, 2007, interested members of the public that subscribed to the 3GPP RAN WG1 email reflector, received an email that included as an attachment R1-072296 (Appendix L). On May 21, 2007, interested members of the public that subscribed to the 3GPP RAN WG1 email reflector, received an email that included as an attachment the meeting report from RAN1 meeting #49

discussing R1-072296 (Appendix D), (Appendix E, p. 37). As the leader of Nokia's RAN1 standardization efforts, I oversaw Nokia employees that attended the meeting in Kobe, Japan from May 7-11, 2007. At that time, I was in the practice of regularly downloading and reviewing meeting reports uploaded to the 3GPP public file server to stay up-to-date on the current state of standardization. Therefore, I would have actually received a copy of the RAN1 meeting #49 meeting report, which discusses R1-072296.

75.   As I discuss in greater detail in Section III, the 3GPP website and FTP have always been publicly available to all interested parties. I was able to confirm that R1-072296 was publicly available at least by May 2, 2007, by accessing the 3GPP FTP.

76.   I first directed my web browser to http://www.3gpp.org/, where I selected the Specification Groups tab, and then further selected the TSG RAN tab from the drop down menu, and selected RAN 1 – Radio Layer 1 (Physical Layer) from that drop down menu, before finally selecting the Documents tab within that drop down menu (see below).

Available at: https://www.3gpp.org/ (Highlighting added).

77.   Selecting this documents tab directs to the 3GPP RAN WG1 FTP, where I selected meeting number 49 ("TSGR1_49"). I then selected the Docs folder, to view the documents submitted to meeting number 49, and further selected the Zips folder to view the zipped submissions. I then scrolled down to R1-072296, which shows R1-072296 has a submission date of May 2, 2007 ("2007/05/02").

www.3gpp.org / ftp / tsg_ran / WG1_RL1 / TSGR1_49 / Docs

sort by name/desc	sort by date/desc	sort by size/desc
R1-072000.zip	2007/05/03 10:59	10,8 KB
R1-072001.zip	2007/05/02 13:23	202,4 KB
R1-072002.zip	2007/05/03 8:06	101,3 KB
R1-072003.zip	2007/05/02 13:23	102,7 KB
R1-072004.zip	2007/05/04 11:34	11,4 KB

. . .

R1-072291.zip	2007/05/02 20:35	78 KB
R1-072292.zip	2007/05/02 20:35	26,4 KB
R1-072293.zip	2007/05/02 20:35	17,6 KB
R1-072294.zip	2007/05/02 20:35	45,3 KB
R1-072295.zip	2007/05/02 20:35	45 KB
R1-072296.zip	2007/05/02 20:35	29,7 KB
R1-072297.zip	2007/05/04 12:13	668,4 KB
R1-072298.zip	2007/05/02 20:35	18,5 KB
R1-072299.zip	2007/05/02 20:35	33,3 KB
R1-072300.zip	2007/05/02 20:35	39,3 KB
R1-072301.zip	2007/05/02 20:35	32,2 KB

Available at: https://www.3gpp.org/FTP/tsg_ran/WG1_RL1/TSGR1_49/Docs/ (Highlighting added).

78. Clicking on the zip file titled "R1-072296" downloads a zip file titled R1-072296.zip, which contains R1-072296. The downloaded zip file contains a word document titled "R1-072296.doc" with a date stamp saying it was last modified on May 2, 2007 ("5/2/2007"). After opening the document titled "R1-072296.doc,"

49

I confirmed that the technical contents are the same as those provided in R1-072296.

A true and correct copy of the document titled "R1-072296.doc" is provided as Ex. 1004.

79. Based on my experience chairing RAN1, participating in 3GPP standardization efforts, and leading Nokia's 3GPP Radio Access Network standardization efforts, I recognize that the date stamps associated with R1-072296.zip and R1-072296.doc show that it was uploaded to 3GPP's publicly available website on May 2, 2007. At that time, and in order to stay up-to-date on the current state of standardization, I was in the practice of regularly downloading and reviewing 3GPP specifications and submissions that were related to the work of RAN1 and that were uploaded to the 3GPP public file server, so I would have actually received copies of R1-072296.zip and R1-072296.doc. At any point after May 2, 2007, when the R1-072296.zip was uploaded, any interested member of the public could have downloaded the zip file, extracted the Word document enclosed, viewed the contents of the Word document, and further disseminated said document without any limitations or restrictions. Additionally, as I mentioned above in paragraphs 30 and 46, 3GPP documents (including R1-072296) were freely available on the internet in 2007, and the documents stored on 3GPP servers were and are fully searchable and available to interested members of the public via google or other popular search engines.
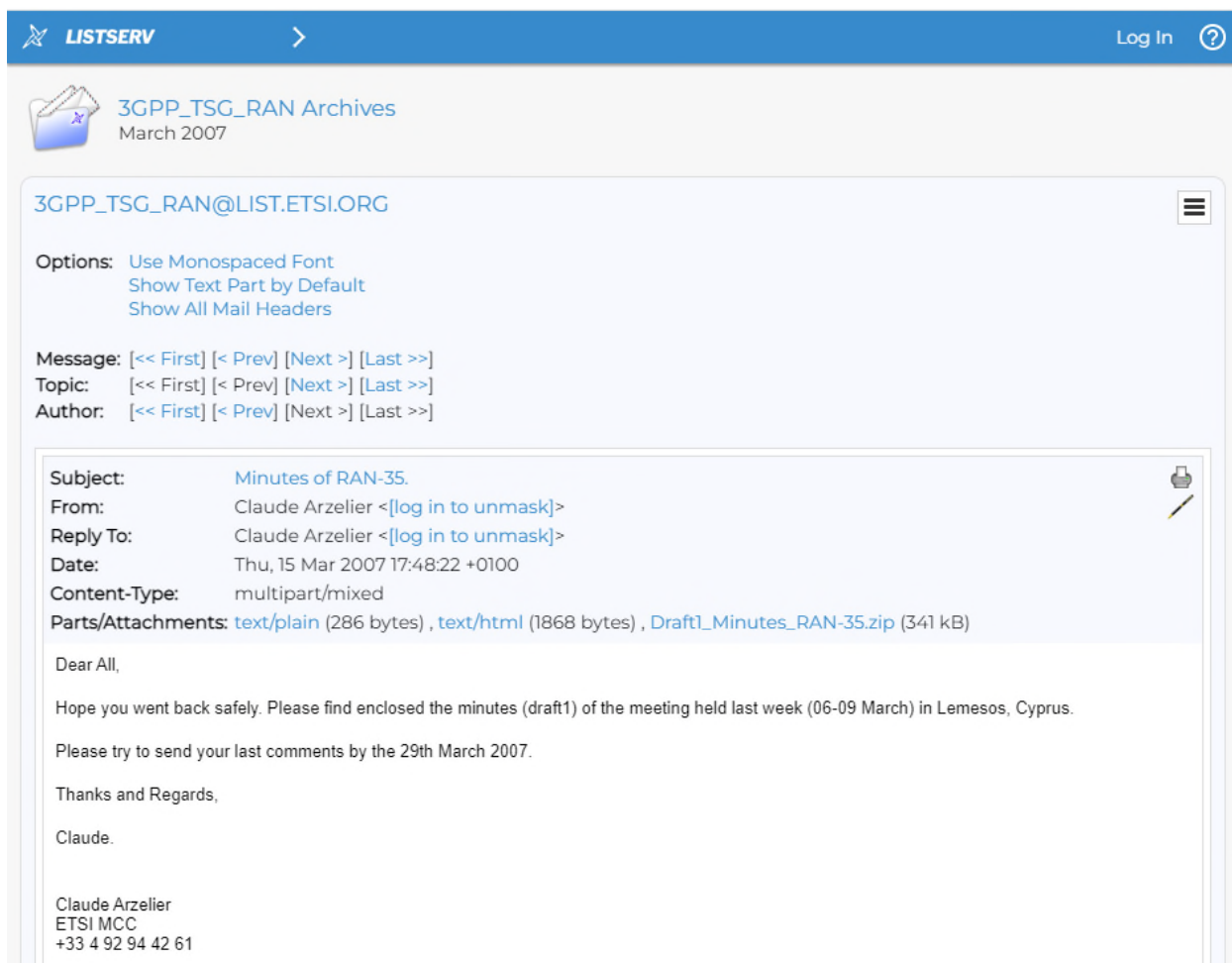
80.   R1-072296 being available on the 3GPP FTP on May 2, 2007 is consistent with the email dated May 2,2007 attaching R1-072296 (Appendix L). R1-072296 being available on the 3GPP FTP on May 2, 2007 is also consistent with the email dated May 21, 2007 attaching the RAN1 meeting #49 report, showing that R1-072296 was distributed and discussed at the meeting occurring from May 7-11, 2007. The RAN1 meeting #49 report indicates that R1-072296 was presented and discussed at the meeting (Appendix E, p. 37). The RAN1 meeting #49 report confirms my understanding that R1-072296 was publicly available by May 2, 2007.

81.   Further, it was my personal experience with RAN WG1 during the relevant timeframe that all of the documents to be discussed at the meeting – including R1-072296 (Ex. 1004) – were, at each meeting, available to those present at the meeting through the 3GPP FTP. I have knowledge of this procedure because I personally attended the RAN WG1 meetings until 2003, and in 2007 oversaw Nokia representatives that attended RAN WG1 meeting #49. Based on my experience regarding the distribution of TDocs by electronic means at each RAN WG1 meeting during the relevant timeframe, I am able to conclude that R1-072296 was actually distributed to the members of TSG RAN WG1. Additionally, a POSITA would have been able to and would have known to look for and download R1-072296 from the 3GPP FTP website no later than May 2, 2007, which is when it was uploaded and available for download. Thus, Ex. 1004 was actually distributed and

publicly available to POSITAs on 3GPP's publicly available website no later than May 2, 2007.

E. **R1-073172, TSG-RAN Working Group 1 Meeting #49B; 5.1 Updated Physical Layer Specifications, (Ex. 1012)**

82.   R1-073172 is a 3GPP technical contribution, or TDoc, titled "3rd Generation Partnership Project; Technical Specification Group; Radio Access Network; Physical Channels and Modulation (Release 8)" (Ex. 1012). R1-073172 was submitted to TSG RAN WG1 for the RAN WG1 meeting number 49bis, which took place in Orlando, USA, from June 25-29, 2007 (Appendix J). R1-073172 follows the naming convention for TDocs discussed above in section III.B, where "R1" notes that the TDoc was submitted to RAN working group 1, "07" indicates the last two digits of the year the submission was made (2007), and "3172" is the specific TDoc number assigned to the submission by the 3GPP RAN WG1 secretary.

83.   On July 5, 2007, interested members of the public that subscribed to the 3GPP RAN WG1 email reflector, received an email that included as an attachment the meeting report from RAN1 meeting #49bis discussing R1-073172, and noting that R1-073172 was endorsed as the revised version 1.2.0 of TS 36.211 (Appendix J, p. 6), (Appendix K). As the leader of Nokia's RAN1 standardization efforts, I oversaw Nokia employees that attended the meeting in Orlando, USA, from June 25-29, 2007. At that time, I was in the practice of regularly downloading and

reviewing meeting reports uploaded to the 3GPP public file server to stay up-to-date on the current state of standardization. Therefore, I would have actually received a copy of the RAN1 meeting #49bis meeting report, which discusses R1-073172.

84. As I discuss in greater detail in Section III, the 3GPP website and FTP have always been publicly available to all interested parties. I was able to affirm that R1-072296 was publicly available at least by July 2, 2007, by accessing the 3GPP FTP.

85. I first directed my web browser to http://www.3gpp.org/, where I selected the Specification Groups tab, and then further selected the TSG RAN tab from the drop down menu, and selected RAN 1 – Radio Layer 1 (Physical Layer) from that drop down menu, before finally selecting the Documents tab within that drop down menu (see below).

Available at: https://www.3gpp.org/ (Highlighting added).

86.   Selecting this documents tab directs to the 3GPP RAN WG1 FTP, where I selected meeting number 49b ("TSGR1_49b"). I then selected the Docs folder, to view the documents submitted to meeting number 49b, and further selected the Zips folder to view the zipped submissions. I then scrolled down to R1-073172, which shows R1-073172 has a submission date of July 2, 2007 ("2007/07/02").

Available at: https://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_49b/Docs/ (Highlighting added).

87.   Clicking on the zip file titled "R1-073172" downloads a zip file titled R1-073172.zip, which contains R1-073172. The downloaded zip file contains a word document titled "36.211 v1.2.0.doc" with a date stamp saying it was last modified on June 25, 2007 ("6/25/2007"). After opening the document titled "36.211 v1.2.0.doc," I confirmed that the technical contents are the same as those provided in R1-073172. A true and correct copy of the document titled "36.211 v1.2.0.doc" is provided as Ex. 1012.

88. Based on my experience chairing RAN1, participating in 3GPP standardization efforts, and leading Nokia's 3GPP Radio Access Network standardization efforts, I recognize that the date stamps associated with R1-073172.zip and 36.211 v1.2.0.doc show that it was uploaded to 3GPP's publicly available website on July 2, 2007. At that time, and in order to stay up-to-date on the current state of standardization, I was in the practice of regularly downloading and reviewing 3GPP specifications and submissions that were related to the work of RAN1 and that were uploaded to the 3GPP public file server, so I would have actually received copies of R1-073172.zip and 36.211 v1.2.0.doc. At any point after July 2, 2007, when the R1-073172.zip was uploaded, any interested member of the public could have downloaded the zip file, extracted the Word document enclosed, viewed the contents of the Word document, and further disseminated said document without any limitations or restrictions. Additionally, as I mentioned above in paragraphs 30 and 46, 3GPP documents (including R1-073172) were freely available on the internet in 2007, and the documents stored on 3GPP servers were and are fully searchable and available to interested members of the public via google or other popular search engines.

89. R1-073172 being available on the 3GPP FTP on July 2, 2007 is consistent with the email dated July 5, 2007 attaching the RAN1 meeting #49bis report, showing that R1-073172 was distributed and discussed at the meeting

occurring from June 25-29, 2007. The RAN1 meeting #49bis report indicates that R1-073172 was presented and discussed at the meeting (Appendix J, p. 6). The RAN1 meeting #49bis report confirms my understanding that R1-073172 was publicly available by July 2, 2007.

90.   Further, it was my personal experience with RAN WG1 during the relevant timeframe that all of the documents to be discussed at the meeting – including R1-073172 (Ex. 1012) – were, at each meeting, available to those present at the meeting through the 3GPP FTP. I have knowledge of this procedure because I personally attended the RAN WG1 meetings until 2003, and in 2007 oversaw Nokia representatives that attended RAN WG1 meeting #49bis. Based on my experience regarding the distribution of TDocs by electronic means at each RAN WG1 meeting during the relevant timeframe, I am able to conclude that R1-073172 was actually distributed to the members of TSG RAN WG1. Additionally, a POSITA would have been able to and would have known to look for and download R1-073172 from the 3GPP FTP website no later than July 2, 2007, which is when it was uploaded and available for download. Thus, Ex. 1012 was actually distributed and publicly available to POSITAs on 3GPP's publicly available website no later than July 2, 2007.

F. TS 36.211 V1.2.0, 3rd Generation Partnership Project; Technical Specification Group; Radio Access Network; Physical Channels and Modulation (Release 8) (Ex. 1016)

91.   TS 36.211 V1.2.0 is a 3GPP Technical Report titled "3rd Generation Partnership Project; Technical Specification Group; Radio Access Network; Physical Channels and Modulation (Release 8)" (Ex. 1016). TS 36.211 V1.2.0 on its cover page lists a date of ("2007-06") which notes the date the RAN working group approved this particular version of the specification. "2007-06" listed as the date denotes that TS 36.211 V1.2.0 was approved in June of 2007.

92.   As I mentioned above in paragraph 40, 3GPP's normal business practice was to incrementally increase version numbers of technical specifications as they are amended such that the approval of TS 36.211 V1.2.0 necessarily came after the approval of TS 36.211 V1.0.0.

93.   3GPP TS 36.211 V1.2.0 being a draft version of the LTE (E-UTRA) physical channel and modulation specification, was generated in response to the approval of the contents of R1-073172 at RAN WG1 #49b. An interested member of the public would know that the latest draft version of a given Radio Aspects specification would be available following the TSG RAN working group meeting responsible for said specification, in accordance with 3GPP standard practice. The approval is reflected in the meeting report for TSG RAN WG1 meeting number 49b,

taking place in Orlando, USA, from June 25-29, 2007 (Appendix J, p. 6). This meeting report was distributed to the TSG RAN1 listserv on July 5, 2007 (Appendix K).

94.   As I discuss in greater detail in Section III, the 3GPP website and FTP have always been publicly available to all interested parties. I was able to confirm that TS 36.211 V1.2.0 was publicly available at least by July 30, 2007, by accessing the 3GPP FTP.

95.   I first directed my web browser to http://www.3gpp.org/, where I selected the Specifications tab, and then further selected the Specification Numbering tab from the drop down menu. I then selected the 36 series specifications, and searched for specification number "36.211" in the search bar. I then select the glasses icon for the 36.211 specification, which takes me to the available version of TS 36.211.

Available   at:

https://portal.3gpp.org/Specifications.aspx?q=1&series=30&releases=all&draft=Fa

lse&underCC=False&withACC=False&withBCC=False&numberNYA=False

(Highlighting added).

96.   I then select the versions tab, and scroll down to version 1.2.0, which

shows an upload date of July 30, 2007.

Available   at:

https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?s

pecificationId=2425 (Highlighting added).

97.   Clicking on version 1.2.0 downloads a zip file titled 36211-120.zip, which contains TS 36.211 V1.2.0. The downloaded zip file contains a word document titled "36211-120.doc" with a date stamp saying it was last modified on July 5, 2007 ("7/5/2007"). After opening the document titled "36211-120.doc," I confirmed that the technical contents are the same as those provided in TS 36.211 V1.2.0. A true and correct copy of the document titled "36211-120.doc" is provided as Ex. 1016. I have also confirmed in Section III above that TS 36.211 V1.2.0 was publicly available on the 3GPP FTP in 2007 as well by using the Wayback machine.

98.   After comparing the document "36211-120.doc" (Ex. 1016) with the document "36.211 v1.2.0.doc" in the file "R1-073172.zip" (Ex. 1012), I can confirm the contents are identical with the exception of the copyright date on page two being corrected from 2006 to 2007, and a few formatting changes within the table of contents.

99.   Based on my experience chairing RAN1, participating in 3GPP standardization efforts, and leading Nokia's 3GPP Radio Access Network standardization efforts, I recognize that the date stamps associated with 36211-120.zip show that it was uploaded to 3GPP's publicly available website on July 30, 2007. At that time, and in order to stay up-to-date on the current state of standardization, I was in the practice of regularly downloading and reviewing 3GPP specifications and submissions that were related to the work of RAN1 and that were

uploaded to the 3GPP public file server, so I would have actually received a copy 36211-120.zip. Additionally, as I mentioned above in paragraphs 30 and 46, 3GPP documents (including TS 36.211) were freely available on the internet in 2007, and the documents stored on 3GPP servers were and are fully searchable and available to interested members of the public via google or other popular search engines. A POSITA would have been able to and would have known to look for and download 36211-120.zip from the 3GPP FTP website no later than July 30, 2007, which is when it was uploaded and available for download. At any point on or after July 30, 2007, the date 36211-120.zip was uploaded, any interested member of the public could have downloaded the zip file, extracted the Word document enclosed, viewed the contents of the Word document, and further disseminated said document without any limitations or restrictions. Thus, Ex. 1016 was actually distributed and publicly available to POSITAs on 3GPP's publicly available website no later than after July 30, 2007.

VI.   CONCLUSION

100.   As described above in section V, it is my opinion that TR 25.814 V7.1.0 titled, "3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Physical Layer Aspects for Evolved Universal Terrestrial Radio Access (UTRA) (Release 7)" (Ex. 1003) was publicly available on the 3GPP file server no later than October 2, 2006, and could have been downloaded by any

interested member of the public and freely distributed on October 2, 2006, and any day thereafter.

101. As described above in section V, it is my opinion that TS 36.213 V1.2.0, titled "Technical Specification, 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Physical Layer Procedures (Release 8)" (Ex. 1013) was publicly available on the 3GPP file server no later than June 13, 2007, and could have been downloaded by any interested member of the public and freely distributed on June 13, 2007, and any day thereafter.

102. As described above in section V, it is my opinion that TS 36.300 V8.0.0 (2007-03) Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Overall description; Stage 2 (Release 8) (Ex. 1005) was publicly available on the 3GPP file server no later than April 6, 2007, and could have been downloaded by any interested member of the public and freely distributed on April 6, 2007, and any day thereafter.

103. As described above in section V, it is my opinion that R1-072296 (Ex. 1004) was publicly available on the 3GPP file server no later than May 2, 2007, and could have been downloaded by any interested member of the public and freely distributed on May 2, 2007 and any day thereafter.

104. As described above in section V, it is my opinion that R1-073172 (Ex. 1012) was publicly available on the 3GPP file server no later than July 2, 2007, and could have been downloaded by any interested member of the public and freely distributed on July 2, 2007 and any day thereafter.

105. As described above in section V, it is my opinion that TS 36.211 V1.2.0, titled "Technical Specification Group; Radio Access Network; Physical Channels and Modulation (Release 8)" (Ex. 1016) was publicly available on the 3GPP file server no later than July 30, 2007, and could have been downloaded by any interested member of the public and freely distributed on July 30, 2007, and any day thereafter.

I hereby declare that all statements made of my own knowledge are true and that all statements made on information and belief are believed to be true. I further declare that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of the Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this proceeding.

Executed this 30 day of March, 2022 in Espoo, Finland by:

_____

Antti Toskala

APPENDIX A

Antti Toskala · 3rd

Bell Labs Fellow at Nokia

Talks about #5g, #3gpp, and #5gtechnology

- **NOKIA** Nokia Bell Labs
- Tampere University of Technology 1965-2018

Espoo, Uusimaa, Finland · **Contact info**

2,357 followers · **500+** connections

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Is AI/ML your passion? Would you like to learn how that will shape the mobile communications towards 5G-Advanced and 6G? We have now opening just for you!

NOKIA **Senior Standardization Specialist (AI/ML) in Espoo, Finland, Finland**
careers.nokia.com • 1 min read

👍 91

Antti Toskala posted this • 1mo

New career opportunities with Nokia.

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NOKIA **Senior Standardization Specialist (Radio Physical Layer) in Espoo, Finl...**
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About

Over 20 years wireless access experience with GSM, WCDMA/HSPA, LTE, CIoT and 5G. Covering R&D, standardisation, research and technology support for IPR/legal and marketing activities + 5 years as chairman in 3GPP/ETSI (WCDMA/HSPA). Co-editor of "WCDMA for UMTS", "HSDPA/HSUPA for UMTS" "Voice over LTE, VOLTE",   ...see more

Experience

Bell Labs Fellow
Nokia Bell Labs · Full-time
Jan 2017 - Present · 5 yrs 3 mos
Espoo

Bell Labs fellows with 5G Radio & Cellular IoT standardization in 3GPP, related research and customer/university/partner co-operation. Leading

Nokia Networks
22 yrs 9 mos

- **Nokia Fellow**
  Dec 2015 - Jan 2017 · 1 yr 2 mos
  Espoo, Finland

  3GPP 4G LTE and 5G related standardization activity+ related projects with R&D and customers

- **Head of Radio Standardization**
  Aug 2013 - Dec 2015 · 2 yrs 5 mos
  Espoo, Finland

  2G/3G/4G radio related standardizatationm in 3GPP (LTE, HSPA) as well as outside 3GPP activity for NSN (Nokia Solutions and Networks)

- **Head of 3GPP Radio Standardization**
  Apr 2007 - Aug 2013 · 6 yrs 5 mos

  Responsible of 3GPP Radio (LTE, WCDMA/HSPA, GSM/EDGE) Standardization for Nokia Siemens Networks

  Show all 5 experiences →

TSG RAN WG1 Chairman
3GPP
1999 - 2003 · 4 yrs

Thesis worker
Nokia
1994 · Less than a year

WCDMA BTS interference cancellation studies

Education

Tampere University of Technology 1965-2018
MSc, Telecommunications, DSP, Economics
1989 - 1995

Jyväskylän Lyseo (highschool)
1986 - 1989

Skills

LTE · 99+

Endorsed by Francois Courau and 65 others who are highly skilled at this

Endorsed by 11 colleagues at Nokia Bell Labs

3GPP · 99+

Endorsed by Hannu Hietalahti and 25 others who are highly skilled at this

Endorsed by 8 colleagues at Nokia Bell Labs

UMTS · 89

Fabiano Chaves has given an endorsement for this skill

Show all 46 skills →

Recommendations

Received   Given

Nothing to see for now
Recommendations that Antti receives will appear here.

Wiley · Jan 1, 2020

Show publication ⬈

5G brings new technology solutions to the 5G mobile networks including new spectrum options, new antenna structures, new physical layer and protocols designs

Other authors

LTE Small Cell Optimization: 3GPP Evolution to Release 13

Wiley · Jan 1, 2016

Show publication ⬈

LTE network capabilities are enhanced with small cell deployment, with optimization and with new 3GPP features. LTE networks are getting high loaded which calls for

Other authors

LTE-Advanced

Wiley · Aug 1, 2012

Show publication ⬈

From the editors of the highly successful LTE for UMTS: Evolution to LTE-Advanced, this new book examines the main technical enhancements brought by LTE-Advanced,

Other authors

Show all 6 publications →

Languages

German

Interests

Companies   Groups   Schools

APPENDIX B

3GPP_TSG_RAN_WG1@LIST.ETSI.ORG

Options: Use Monospaced Font
Show Text Part by Default
Show All Mail Headers

Subject:	Re: 36.211 v1.2.0
From:	"Kowalski, John" <kowalskj@SHARPLABS.COM>
Reply To:	Kowalski, John
Date:	Mon, 9 Jul 2007 17:38:17 -0700
Content-Type:	multipart/alternative
Parts/Attachments:	text/plain (1676 bytes) , text/html (6 kB)

Dear Stefan,
I've been reading with great interest the aforementioned document, especially section 6, and I have some questions/comments. I hope I'm not wasting your time, but hopefully my questions will help everyone's (especially my own) understanding. So, here are the questions:

1. From 6.3.3's equation it is implied that a RB's quantum in time is one subframe, but Figure 15 & 16 denote an RB's quantum as one slot; based on earlier decisions shouldn't it be the former (i.e., one subframe)?

2. In 6.2.3 a "resource block number" n_p is denoted but doesn't seem to be used anywhere else (at least as far as SC-FDMA signal generation is concerned), and there's no dependency on the "l" part of the resource element (SC-FDMA symbol index); did I miss something?

3. In 6.3.3, transform precoding is mentioned which maps modulation symbols into transform symbols; to which allusion is made in 6.3.4 for mapping to physical resource elements (which seems implicit in the equation from 6.3.3 to me) but the connection between that and the "a's" in 6.6 doesn't exist. Then again the "k" in the equation in 6.3.4 shouldn't really be the "k" in the equation in 6.6, because of the implied hopping pattern, right?

For my own purposes I can make some obvious assumptions, of course, and I know this may not be the most important issues of the day, but I appreciate the group's time on this.

Best regards,
John

John M. Kowalski, Ph.D.
Sharp Laboratories of America
5750 NW Pacific Rim Blvd
Camas WA 98607
http://www.sharplabs.com
email: kowalskj@sharplabs.com
Phone: +1 (360) 817-7520
Fax: +1 (360) 817-8436

APPENDIX C

3GPP_TSG_RAN_WG1@LIST.ETSI.ORG

Options: Use Monospaced Font
Show Text Part by Default
Show All Mail Headers

Message: [<< First] [< Prev] [Next >] [Last >>]
Topic: [<< First] [< Prev] [Next >] [Last >>]
Author: [<< First] [< Prev] [Next >] [Last >>]

Subject:	TS 36.211 v1.2.1, editor's cut
From:	"Stefan Parkvall (KI/EAB)" <stefan.parkvall@ERICSSON.COM>
Reply To:	Stefan Parkvall (KI/EAB)
Date:	Mon, 23 Jul 2007 23:40:55 +0200
Content-Type:	multipart/mixed
Parts/Attachments:	text/plain (384 bytes) , text/html (966 bytes) , 36.211 v1.2.1.zip (2 MB)

Dear all,

attached please find the editor's cut of 36.211, incorporating the decisions from Orlando. Let's try to resolve any typos etc before Athens so we can spend the meeting on closing the open issues in the specifications. I will be on vacation the upcoming weeks so e-mail response may be a bit delayed from my side, but I will check e-mails regularly.

BR,
Stefan

<<36.211 v1.2.1.zip>>

ATOM   RSS1   RSS2

APPENDIX D

New in LISTSERV 17.0 ✕

3GPP_TSG_RAN_WG1@LIST.ETSI.ORG

≡

Options: Use Monospaced Font
Show Text Part by Default
Show All Mail Headers

Subject:	Draft report of RAN1#49 Kobe meeting
From:	Patrick Merias <Patrick.Merias@ETSI.ORG>
Reply To:	Patrick Merias <Patrick.Merias@ETSI.ORG>
Date:	Mon, 21 May 2007 17:05:09 +0200
Content-Type:	multipart/mixed
Parts/Attachments:	text/plain (431 bytes) , text/html (2108 bytes) , Draft_ReportWG1#49_v020.zip (287 kB)

Dear all,

Please find attached the Draft report from Kobe with the latest updates for your review.
You may also get it from 3GPP server as uploading is now completed

Br,

Patrick

Patrick Mérias
European Telecommunication Standards Institute
Mobile Competence Centre
Tel: +33492944206
email: patrick.merias@etsi.org
www.etsi.org
www.3GPP.org

ATOM   RSS1   RSS2

APPENDIX E

Agenda item

Title:	**Draft Report of 3GPP TSG RAN WG1 #49 v0.2.0 (Kobe, Japan, 7 – 11 May, 2007)**
Document for:	**Comment**
Source:	**MCC Support**
	==**Please send your comments before 31/05/2007**==

A GLOBAL INITIATIVE

Fact Summary

Meeting:	**3GPP TSG RAN WG1 #49**
Dates:	**7th through 11th May, 2007**
Venue:	**Kobe International Conference Center, Kobe, JAPAN**
Host:	**Japanese Friends of 3GPP**
Attendees:	==**xxx**== **delegates**
Documents:	==**xxx**== **(including some withdrawn and post-meeting artefacts)**

Patrick Mérias
ETSI Mobile Competence Center
F-06921 Sophia Antipolis Cedex
Tel: +33 4 92 94 42 06

Patrick.merias@etsi.org

Table of contents

Executive summary

3GPP TSG WG RAN1 #49 meeting took place in Kobe International Conference Center, Kobe, JAPAN.

The meeting started at 9:10 on Monday 7th May and finished at 17:05 on Friday 11th May 2007.

The number of contribution documents for this meeting was 638, and those documents were categorized as followed.

Agenda Item	Input Document	Discussed Document
Liaison statement handling	42	41
Maintenance of R99, Rel4, Rel5, Rel6, Rel7	29	29
HSPA Evolution	43	43
Evolved UTRA and UTRAN	494	133

The following set of documents is missing. The corresponding contributions have not been handed over by companies.

R1-072024	Dedicated RS for beamforming	Qualcomm Europe
R1-072221	DL VoIP Support	Samsung
R1-072223	UL VoIP support:	Samsung
R1-072228	On-off keying based signaling in uplink	Samsung
R1-072253	Random access for E-UTRA TDD	Samsung
R1-072398	Distributed Transmissions in E-UTRA Downlink Control Signalling	Philips
R1-072428	Power Control Method of Downlink Reference Signal in E-UTRA	NTT DoCoMo
R1-072433	Downlink L1/L2 Control Channel Structure in E-UTRA - Multiplexing of Control Channel Element	NTT DoCoMo
R1-072434	Downlink L1/L2 Control Channel Structure in E-UTRA - Mapping	NTT DoCoMo
R1-072435	Downlink L1/L2 Control Channel Structure in E-UTRA - Bits and Coding	NTT DoCoMo
R1-072529	Aspects of UL Control Signalling	Freescale Semiconductor
R1-072530	Aspects of DL Control Signalling	Freescale Semiconductor
R1-072603	Way Forward on TxD for 4-Tx System	Nortel, Ericsson, NTT DoCoMo

RAN1 delegates have done hard working hours all along the week providing good progress on the different agenda items.

The group also have had hot topic discussions, particularly under agenda item 6.2 regarding the treatment of the Ericsson CRs (Tdocs R1-072507 to R1-072512).

IPWireless requested that the following factual events to be recorded within the minutes of RAN1#49. Therefore, the following (10) comments were provided after the meeting to summarize their concerns stated during the discussion in RAN1#49.

<u>On presentation of the Ericsson proposal:</u>

1.   IPWireless and two other companies stated that they consider the Ericsson proposal to be outside of the scope of the TDD MBMS enhancements work item.

2.   IPWireless stated that they considered the Ericsson proposal to also be outside of the scope of the FDD MBMS enhancements work item.

3.   IPWireless stated that the proposed CRs are technically equivalent to deploying the FDD downlink-only MBSFN solution in the unpaired spectrum currently used by UTRA TDD.   This technical similarity was confirmed by the proponents.

4.   IPWireless stated that such a change in spectral assignment would not have any impact on the FDD DL-only physical layer design and hence the proposed CRs in WG1 would not be required.

5.   IPWireless stated that incorporation of the proposal in WG1 TDD specifications would effectively bypass the normal regulatory processes for such a considered band reassignment and noted that neither regulatory bodies nor RAN plenary nor RAN WG4 had been consulted on the proposal.

6.   IPWireless stated that the proposal had not been discussed in previous WG1 meetings during the course of the work on MBSFN for Release 7 and that the proposal was announced for the first time via posting of the CRs and overview document on the RAN WG1 email reflector beyond the submission deadline set by the chairman for RAN WG1#49.   This was contested by the chairman but has since been verified to be correct.   IPWireless stated that this had provided companies with only 1 or 2 full working days prior to RAN WG1#49 to consider such a major proposal and that this was unreasonable considering that WG1#49 is the last WG meeting before scheduled WI completion.

7.   IPWireless stated that considering 1,2,3,4,5,6 above, it was not correct procedure for RAN WG1 to discuss the proposal.

8.   Two other companies stated that considering 1 above, it was not correct procedure for RAN WG1 to discuss the proposal.

9.   Notwithstanding the above objections, the RAN WG1 chairman requested technical comments on the Ericsson CRs.   A long discussion prevailed on the technical merits and demerits of the proposed solution.   The technical concerns were not resolved by the interested parties and the CRs were not updated based upon the concerns.

10. Further notwithstanding the procedural objections of 1,2,3,4,5,6 above, the RAN WG1 chairman assigned the CRs "technically endorsed".   IPWireless and two other companies objected to technical endorsement considering 9 above.

<u>The list of action points is given in Annex F.</u>

1 Opening of the meeting

Mr. Dirk Gerstenberger (RAN1 Chairman) welcomed the participants to the 49th RAN WG1 meeting and opened the meeting at 09:10.

As per Monday's morning coffee break, Mr. Yoshinori Tanaka from Fujitsu welcomed the delegates on behalf of the Japanese Friends of 3GPP.

1.1 Call for IPR

The Chairman drew attention to Members' obligations under the 3GPP Partner Organizations' IPR policies. Every Individual Member organization is obliged to declare to the Partner Organization or Organizations of which it is a member any IPR owned by the Individual Member or any other organization which is or is likely to become essential to the work of 3GPP.

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

The members take note that they are hereby invited:

- to investigate in their company whether their company does own IPRs which are, or are likely to become Essential in respect of the work of the Technical Specification Group.

- to notify the Director-General, or the Chairman of their **respective** Organizational Partners, of all potential IPRs that their company may own, by means of the IPR Statement and the Licensing declaration forms (e.g. see the ETSI IPR forms http://webapp.etsi.org/lpr/).

2 Approval of the agenda

R1-072000	Draft Agenda for RAN1#49 meeting	RAN1 Chairman

Dirk Gerstenberger (Chairman) proposed the agenda for the meeting.

Discussion (Question / Comment):
Decision: The agenda was approved.

3 Approval of the minutes from previous meetings

R1-072001	Draft report of RAN1#48b meeting	MCC Support

The document was presented by Patrick Mérias

Discussion (Question / Comment):
Decision: The document is approved.

R1-072002	Draft report of RAN1_LTE_TDD meeting	MCC Support

The document was presented by Patrick Mérias

Discussion (Question / Comment):
Decision: The document is approved.

4 Liaison statement handling

R1-072003	LS on CELL_PCH/URA_PCH operation in Enhanced CELL_FACH	RAN2, Qualcomm

The document was presented by Juan Montojo from Qualcomm.

Discussion (Question / Comment):
Decision: Document is noted. Proposed answer to LS is R1-072089.

R1-072089	Draft LS reply on CELL_PCH/URA_PCH operation in Enhanced CELL_FACH	Qualcomm Europe

The document was presented by Juan Montojo from Qualcomm.

Discussion (Question / Comment): RAN1 has not discussed the proposed scheme in detail, and can thus not make a recommendation on the benefits.
Decision: Document is noted and amended following above comment. Revised version of the reply LS is in R1-072547.

R1-072006	LS on MBSFN cluster selection and reselection, and suitability criteria	RAN2, LGE

The document was presented by (…) from LGE.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072004	LS on maintenance of UL Synchronisation	RAN2, Samsung

The document was presented by (…) from Samsung.

Discussion (Question / Comment):
Decision: Document is noted. Decision is postponed until documents related to Timing Control have been discussed. To be revisited by end of the week.

Friday 11th May: Response from RAN4 is provided in R1-072614 (see section 4.1)

R1-072005	LS on CQI feedback	RAN2, Huawei

The document was presented by (…) from Huawei.

Discussion (Question / Comment):
Decision: Document is noted. Proposed answer to LS is R1-072390.

R1-072390	Draft reply to LS on CQI feedback [R1-072005]	Philips

The document was presented by Matthew Baker from Philips.

Discussion (Question / Comment):
Decision: Document is noted. More discussion on CQI shall follow in the course of the week. New Tdoc (R1-072548) is allocated for revision.

Friday 11th may: Revision R1-072548 is presented by Matthew Baker. (see section 4.1)

R1-072537	LS on Uplink VoIP Scheduling	RAN2, NEC

The document was presented by (…) from NEC.

Discussion (Question / Comment):
Decision: Document is noted. Proposed reply is in R1-072108.

R1-072108	Propose Response to LS on Uplink VoIP Scheduling	NEC Group

The document was presented by (…) from NEC.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072532	Uplink grant capacity in response to RAN2 LS	NTT DoCoMo

The document was presented by (…) from NTT DoCoMo and suggests RAN1 to recommend RAN2 to study optimized UL scheduling schemes in order to to handle VoIP from the performance point of view when replying to the R2 LS R2-071606 (R1-072537).

Discussion (Question / Comment): No comment
Decision: Document is noted.

R1-072533	Draft LS to RAN2 on uplink VoIP scheduling	NTT DoCoMo

The document was presented by (…) from NTT DoCoMo.

Discussion (Question / Comment):
Decision: Document is noted and agreed in R1-072549 as the reply LS.

R1-072222	The need for the uplink optimization for VoIP	Samsung

The document was presented by (…) from Samsung.

The analysis clearly shows that optimizing the uplink will reduce the number of OFDM symbols for control signaling at least by one with quite good probability, with very little additional complexity.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072073	Use of L1/L2 control channel for Uplink VoIP scheduling	Panasonic

The document was presented by (…) from Panasonic.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072540	Reply LS to GERAN - LTE interworking	SA2, Chinamobile

The document was presented by (…) from Chinamobile.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072541	LS on the continuity of voice calls between LTE and GERAN/UTRAN	G2, Ericsson

The document was presented by Stefan Parkvall from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072144	Further Results on EMBMS Transmitter Configurations	Motorola

The document has been revised in R1-072544

R1-072544	Further Results on EMBMS Transmitter Configurations	Motorola

The document was presented by Eoin Buckley from Motorola.

Discussion (Question / Comment):
Decision: Document is noted. Motorola shall prepare an LS in R1-072558, summarizing the performance aspects and add preference for PTM scheme for non-synchronized case, if agreeable.

Friday 11th May : R1-072558 was presented by Eoin Buckley. (See section 4.1)

4.1   New incoming LS

The next set of incoming LS came along the week:

R1-072586	LS from R4 on LTE measurements	RAN4, Nokia Siemens Networks

The document was presented by (…) from NSN.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072605	Response LS on UE measurement definitions for RX diversity	RAN4, Nokia

The document was presented by Arto Lethi from Nokia.

Discussion (Question / Comment): Appropriate CR is issued in R1-072617.
Decision: Document is noted.

R1-072622	System information	RAN2, Samsung

The document was presented by (…) from Samsung.

Discussion (Question / Comment):
Decision: Document is noted. Email discussion should be set-up to attempt preparing the response to RAN2.

R1-072628	LS on introduction of additional DCH RAB combinations into 25.993	RAN2, Siemens

The document was presented by Joern Krause from NSN.

Discussion (Question / Comment):
Decision: Document is noted. Email discussion should go on until May 21st and response expected in R1-072630.

R1-072614	Response to LS on maintenance of UL synchronisation	RAN4, Motorola

The document was presented by Robert Love from Motorola.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072548	Reply to LS on CQI feedback [R1-072005]	Philips

The document was presented by Matthew Baker from Philips.

Discussion (Question / Comment):
Decision: Document is noted. Decision is to wait for email approval until May 21st before sending it out.

R1-072558	Draft reply to LS on Radio Efficiency for delivery of Broadcast/Multicast services	Motorola

The document was presented by Eoin Buckley from Motorola.

Discussion (Question / Comment):
Decision: Document is noted and agreed in R1-072637.

The following LS has not been treated.

R1-072634	LS on neighbour cell lists and reading neighbour cell P-BCH	RAN2, NTT DoCoMo

5　　　Maintenance of R99, Rel4, Rel5, Rel6, Rel-7

R1-072231	Release-7 dependencies	Samsung, Ericsson, Motorola, Nokia, Nokia Siemens Networks

The document was presented by Juho Lee from Samsung.

Clarification of RAN1understanding w.r.t the feature dependencies and the resulting possibilities for mandatory /optional status of Rel-7 features. Decision shall be made by TSG-RAN.

Discussion (Question / Comment):
Decision: Document is noted. Draft LS to RAN2 prepared by Samsung in R1-072560, further revised in R1-072569.

R1-072569	LS on Release-7 dependencies	RAN1, Samsung

The document was presented by Juho Lee from Samsung.

Discussion (Question / Comment):
Decision: Document is noted and agreed in R1-072589.

R1-072617	25.215 CR172r5 (Rel-7, F) "Clarification of UE measurement definitions for RX diversity"	Nokia

The document was presented by Arto Lehti from Nokia.

Discussion (Question / Comment):
Decision: Document is noted and approved.

MIMO, CPC

R1-072387	25.212CR248r1 (Rel-7, F) "Correction to coding of HS-SCCH to support FDD MIMO"	Philips, Ericsson

The document was presented by Matthew Baker from Philips.

Discussion (Question / Comment):
Decision: Document is noted and approved.

R1-072491	25.212 CR0251 (Rel-7, F) "HS-SCCH orders in MIMO mode"	Ericsson

The document was presented by Johan Bergman from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted. Revision is required to clean-up some TBC in R1-072559.

R1-072494	25.215 CR174 (Rel-7, F) "Clarification of UE and UTRAN measurement definitions for MIMO"	Ericsson

The document was presented by Johan Bergman from Ericsson.

Discussion (Question / Comment): RX diversity topic should be removed from that CR and kept separately
Decision: Document is noted. Revision is required to clean-up in R1-072561.

Friday 11th May : R1-072561 is withdrawn

R1-072495	HS-SCCH-less operation in MIMO mode	Ericsson

The document was presented by Johan Bergman from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072066	25211CR0241 (Rel-7 D) "Clarification for CPC feature"	Nokia Siemens Networks, Nokia

The document was presented by Karri Ranta-aho from Nokia Siemens

Discussion (Question / Comment): Terminology change is presented. Category should be changed to F.
Decision: Document is noted and agreed.

R1-072042	25214CR0438r3 Clarifications for CPC feature	Qualcomm Europe, Philips, Nokia, Ericsson

The document was presented by Aziz Gholmich from Qualcomm.

Some issues for discontinuous uplink transmission and discontinuous downlink reception operations are clarified.

Discussion (Question / Comment):
Decision: Document is noted and shall be merged with other revision of the CR438 (see below)

R1-072067	25214CR0438r4 (Rel-7 F) "Clarification for CPC feature"	Nokia Siemens Networks, Nokia

The document was presented by Karri Ranta-aho from Nokia Siemens.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072492	25.214 CR438r5 (Rel-7, F) "Clarifications for CPC feature"	Ericsson

The document was presented by Johan Bergman from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted.

So according to previous documents, 3 CRs relate to same TS and need to be merged in one. Nokia (Karri Ranta-aho) shall prepare this CR in R1-072562.

Friday 11th May : R1-072562 is agreed.

R1-072388	25.214CR447 CQI reporting when MIMO and CPC are both configured	Philips

The document was revised in R1-072553.

R1-072553	25.214 CR447r1- CQI reporting when MIMO and CPC are both configured - simplified proposal	Philips

The document was presented by Matthew Baker from Philips.

Discussion (Question / Comment):
Decision: Document is noted. According to the information laid down in both documents, it's time for companies to review it during the week. The CR shall be revisited during the preparation of R1-072562.

R1-072496	On UL DPCCH slot format 4	Ericsson

The document was presented by Johan Bergman from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted. According to the proposed ways forward, option "allowing UL DPCCH slot format #4 to be used also when DTX_DRX_STATUS is FALSE" is agreed. LS to let other groups (RAN2 and RAN3) informed about RAN1 decision shall be prepared in R1-072563. LS agreed in R1-072588

Enhanced F-DPCH

R1-072068	25214CR0446 (Rel-7 C) "Enhanced F-DPCH and CPC DL PC timing"	Nokia, Nokia Siemens Networks
R1-072069	DL PC timing in case of Enhanced F-DPCH and UL DPCCH slot format #4	Nokia, Nokia Siemens Networks

Both documents were presented by (…) from Nokia Siemens. R1-072069 is the discussion document related to CR in R1-072068.

Discussion (Question / Comment):
Decision: Document were noted. The CR may required further off line discussion during the week and shall be revisited.

Newest version of the CR has been presented by Friday 11th.

R1-072594	25214CR0446r1 (Rel-7 C) "Enhanced F-DPCH and CPC DL PC timing"	Nokia, Nokia Siemens Networks

The document was presented by Arto Lehti from Nokia Siemens.

Discussion (Question / Comment):
Decision: Document is noted and agreed.

R1-072232	Clarification on power control operation for F-DPCH enhancement	Samsung

The document was presented by Pradeep Dwarakanath from Samsung.

Discussion (Question / Comment):
Decision: Document is noted. Option 1 is agreed and related CR number is provided (CR number 450).

R1-072565	25.214 CR450 (Rel-7, F) "Clarification on power control operation for F-DPCH enhancement"	Samsung

The document was presented by Pradeep Dwarakanath from Samsung.

Discussion (Question / Comment):
Decision: Document is noted and agreed.

Enhanced Cell FACH

R1-072070	25.211CR0239r2 (Rel7 B) "Introduction of PICH to HS-SCCH timing relation and Tx diversity definition for HS-DSCH without associated DL dedicated channel"	Nokia Siemens Networks, Nokia
R1-072071	Paging DRX scheme for enhanced CELL FACH state	Nokia Siemens Networks, Nokia

Both documents were presented by Karri Ranta-aho from Nokia Siemens. R1-072071 is the discussion document related to CR in R1-072070.

Discussion (Question / Comment):
Decision: Document were noted. CR is agreed in R1-072566

R1-072539	Interaction between Quality Reporting on enhanced Cell_FACH and enhanced receivers	Alcatel-Lucent

The document was presented by Sarah Boumendil from Alcatel-Lucent. Based on both alternatives presented in this document, RAN2 shall be asked to discuss this issue.

Discussion (Question / Comment): Due to late submission, extra time is given for off line discussion.
Decision: Document is noted.

R1-072631	25.214 CR451 (Rel-7, B) "Enhanced CELL-FACH procedure"	Qualcomm Europe, Philips, Nokia, Ericsson, NSN

The document was presented by Juan Montojo from Qualcomm.

Discussion (Question / Comment):
Decision: Document is noted. <mark>Email approval until May 24th</mark>.

LCR TDD Enhanced UL

R1-072100	25.222CR0133 (Rel-7, F) "Modification on HARQ process ID signalling for 1,28Mcps TDD	ZTE

The document has been revised in R1-072551

R1-072551	25.222CR0133r1 (Rel-7, F) "Modification on HARQ process ID signalling for 1,28Mcps TDD	ZTE

The document was presented by (…) from ZTE.

Discussion (Question / Comment):
Decision: Document is noted and approved.

R1-072260	TR25.827 CR0001 for LCR TDD EUL	CATT, ZTE, TD-TECH

The document was presented by Ke Wang from CATT.

Discussion (Question / Comment): No comment
Decision: Document is noted and approved.

R1-072389	Remaining aspect of LCR TDD E-HICH	Philips, NXP Semiconductors

The document was presented by Matthew Baker from Philips and proposes to other companies to comment on given consideration to whether the currently-assumed higher-layer allocation of E-HICH signature sequences is sufficiently flexible, and provide a useful improvement.

Discussion (Question / Comment): No comment
Decision: Document is noted as only as information at this point.

6 HSPA Evolution

R1-072090	Rel-7 performance evaluations – DL VoIP and Full buffer Traffic	Qualcomm Europe
R1-072091	Rel-7 performance evaluations – UL VoIP and Full buffer Traffic	Qualcomm Europe

Both documents were briefly presented by Juan Montojo from Qualcomm.

Discussion (Question / Comment):
Decision: Documents are noted.

6.1 16QAM for HSUPA (FDD)

R1-072039	Computation of Beta_ed	Qualcomm Europe

The document was presented by Juan Montojo from Qualcomm.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072040	Number of reference points for Beta_ed computation	Qualcomm Europe

The document was presented by Juan Montojo from Qualcomm.

Discussion (Question / Comment):
Decision: Document is noted.

6.2 MBMS Physical Layer Enhancements

MBSFN LCR TDD

R1-072055	Supporting broadcast services on dedicated carrier for LCR TDD MBMS Physical Layer Enhancements	China Mobile

The document was presented by Tin Lin Lee from China Mobile.

Deploying the MBSFN on the dedicated carrier in existing UTRAN LCR TDD, looks like an attractive improvement on the spectrum efficiency seems to be reachable.

Discussion (Question / Comment):
Decision: Document is noted. General agreement is reached to have MBSFN on dedicated carrier including LCR TDD.

R1-072360	Enhanced multi-cell transmission for LCR TDD MBMS	Huawei

The document was presented by (…) from Huawei.

Discussion (Question / Comment): This new scheme proposal came a bit late. Discussion with others proponents is required to check their willingness for such an introduction. Huawei agreed to proceed in that way.
Decision: Document is noted.

R1-072482	1.28Mcps TDD MBMS Physical Layer Improvements: Deployment of dedicated MBSFN carrier and draft CR to 25.905	CMCC, RITT, TD Tech, CATT, ZTE, Spreadtrum Communications

The document was presented by (…) from (...)

Discussion (Question / Comment): They are similar proposal in discussion in the other groups.
Decision: Document is noted and agreed in principle.

R1-072488	25.221 CR143 (Rel-7, B) 1.28Mcps TDD MBMS Physical Layer Improvements: Addition of DL SF1 and SF2 spreading factor	TD Tech, Spreadtrum Communications

The document was presented by Rakesh Tamrakar from TD Tech. Document includes proposal for CR

Discussion (Question / Comment):

Decision: Document is noted. There is an agreement to extend current S-CCPCH spreading factor from SF=16 to SF={1,2,16} for MBSFN operation. Therefore proposed CR is agreed.

R1-072615	25.905 : 1.28Mcps TDD MBMS physical layer enhancement text proposal for TR 25.905	Huawei
R1-072616	25.222 : Support of Physical layer HARQ and possible constellation re-arragement for MBMS FACH operation	Huawei

Both documents were presented by (…) from Huawei.

Discussion (Question / Comment):

Decision: Documents are noted.

R1-072483	25.201 CR034 (Rel-7, B) LCR TDD MBSFN	CMCC, RITT, TD Tech, CATT, ZTE, Spreadtrum Communications

The document was presented by Rakesh Tamrakar from TD Tech.

Discussion (Question / Comment):
Decision: Document is noted and CR agreed.

R1-072484	25.221 CR142 (Rel-7, B) LCR TDD MBSFN	CMCC, RITT, TD Tech, CATT, ZTE, Spreadtrum Communications

The document was presented by Rakesh Tamrakar from TD Tech.

Discussion (Question / Comment):
Decision: Document is noted and CR agreed.

R1-072485	25.222 CR135 (Rel-7, B) LCR TDD MBSFN	CMCC, RITT, TD Tech, CATT, ZTE, Spreadtrum Communications

The document was presented by by Rakesh Tamrakar from TD Tech.

Discussion (Question / Comment):
Decision: Document is noted and CR agreed.

R1-072486	25.223 CR045 (Rel-7, B) LCR TDD MBSFN	CMCC, RITT, TD Tech, CATT, ZTE, Spreadtrum Communications

The document was presented by Rakesh Tamrakar from TD Tech.

Discussion (Question / Comment):
Decision: Document is noted and CR agreed.

R1-072487	25.224 CR162 (Rel-7, B) LCR TDD MBSFN	CMCC, RITT, TD Tech, CATT, ZTE, Spreadtrum Communications

The document was presented by Rakesh Tamrakar from TD Tech.

Discussion (Question / Comment): LGE requested the modified section to be cleaned-up due to redundant information.
Decision: Document is noted and revised CR is expected in R1-072567. Second added paragraph in 5.3.1 must be deleted in Revision 1 of the CR.

Friday 11th May: R1-072567 is agreed.

MBSFN FDD

R1-072497	MBSFN performance impact of the TTI length	Ericsson

The document was presented by Lars Lindbom from Ericsson and concludes that performance degradation by shortening the TTI from 80 ms to 40 ms is around 0.2 dB and should be an acceptable loss for significantly reduce the buffering demands.

Discussion (Question / Comment):
Decision: Document is noted

R1-072498	Signaling of power offset between CPICH and S-CCPCH: Ranges and granularity	Ericsson

The document was presented by Lars Lindbom from Ericsson and proposes that the power offset between CPICH and S-CCPCH with 16QAM is signalled with value ranges that cover service bit rates between 64 kbps and 512 kbps as well as adding a few dB to also include some QoS and cell geometry ranges.

Discussion (Question / Comment):
Decision: Document is noted

R1-072499	TFCI mapping for S-CCPCH and 16QAM for MBSFN	Ericsson

The document was presented by Lars Lindbom from Ericsson and proposes a modification to the mapping of TFCI slot bits on 16QAM.

Discussion (Question / Comment):
Decision: Document is noted

R1-072500	MBSFN with CDM pilot vs TDM pilot	Ericsson

The document was presented by Lars Lindbom from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted. Off line discussion is required to come up with conclusion in the course of the week.

R1-072502	25.201 CR0030r1 (Rel-7, B) "Support for DL-only SFN operation for MBMS FDD"	Ericsson

The document was presented by Lars Lindbom from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted and agreed.

R1-072503	25.211 CR0237r2 (Rel-7, B) "Support for DL-only SFN operation for MBMS FDD"	Ericsson

The document was presented by Lars Lindbom from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted and will be revisited based on CDM / TDM pilots discussion results.

Friday 11th May: CR revision is in R1-072618 and agreed.

R1-072504	25.212 CR0247r1 (Rel-7, B) "Support for DL-only SFN operation for MBMS FDD"	Ericsson

The document was presented by Lars Lindbom from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted and agreed.

R1-072505	25.213 CR0087r1 (Rel-7, B) "Support for DL-only SFN operation for MBMS FDD"	Ericsson

The document was presented by Lars Lindbom from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted and agreed.

R1-072506	25.214 CR0449 (Rel-7, B) "Support for DL-only SFN operation for MBMS FDD"	Ericsson

The document was presented by Lars Lindbom from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted and agreed.

MBSFN HCR TDD

R1-072501	MBMS performance comparison for full carrier SFN operation	Ericsson

The document was presented by Lars Lindbom from Ericsson. MBSFN WCDMA DL system simulation conducted by Ericsson indicates for LTE scenario III some performance improvements for full carrier SFN operations.

Discussion (Question / Comment): Level of improvement shall be précised more accurately.
Decision: Document is noted.

R1-072507	Support for optimized TDD DL-only MBSFN operation: An overview	Ericsson

The document was presented by Lars Lindbom from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072508	25.201 CR0033 (Rel-7, B) "Support for optimized TDD DL-only MBSFN operation"	Ericsson

The document was presented by Lars Lindbom from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted and technically endorsed. Concerns were raised on Work item code. (Please refer to factual event reported in the early Executive summary)

R1-072509	25.221 CR0141 (Rel-7, B) "Support for optimized TDD DL-only MBSFN operation"	Ericsson

The document was presented by Lars Lindbom from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted. Shall be revisited based on CDM / TDM pilots discussion results. Revision 1 is in R1-072624.

Document R1-072624 is noted and technically endorsed. Concerns were raised that the performance could be improved by introduction of SF1, on the impact if not approved and on the work item code. (Please refer to factual event reported in the early Executive summary)

R1-072510	25.222 CR0134 (Rel-7, B) "Support for optimized TDD DL-only MBSFN operation"	Ericsson

The document was presented by Lars Lindbom from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted and technically endorsed. Concerns were raised that the performance could be improved by introduction of SF1, on the impact if not approved and on the work item code. There was no agreement whether the use of TC for BCH would be beneficial. (Please refer to factual event reported in the early Executive summary)

R1-072511	25.223 CR0044 (Rel-7, B) "Support for optimized TDD DL-only MBSFN operation"	Ericsson

The document was presented by Lars Lindbom from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted and technically endorsed. Concerns were raised that the performance could be improved by introduction of SF1, on the impact if not approved and on the work item code. (Please refer to factual event reported in the early Executive summary)

R1-072512	25.224 CR0161 (Rel-7, B) "Support for optimized TDD DL-only MBSFN operation"	Ericsson

The document was presented by Lars Lindbom from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted. No CR needed for TS 25.224.

R1-072516	MBSFN: Analysis of burst type 5	IPWireless

The document was presented by Nicholas Anderson from IPWireless and investigates the possible use of burst type 5 (no guard period) in a downlink only TDD MBSFN deployment.

Discussion (Question / Comment): No comment
Decision: Document is noted.

R1-072517	UE capabilities for TDD MBSFN	IPWireless

The document was presented by Nicholas Anderson from IPWireless This papers discusses on the potential increase of the number of physical channel bits per 10ms for TDD MBSFN and concludes that there no need to modify the current proposal.

Discussion (Question / Comment): Discussion to verify whether RAN2 should be informed.
Decision: Document is noted and agreed from RAN1 perspective. The enclosed LS is not needed.

R1-072518	Spreading factors for TDD MBSFN	IPWireless

The document was presented by Nicholas Anderson from IPWireless.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072519	25.201CR0029r1(Rel-7,B) "Support for MBSFN operation"	IPWireless

The document was presented by Nicholas Anderson from IPWireless.

Discussion (Question / Comment):
Decision: Document is agreed, this does not preclude the introduction of a broadcast-only optimized proposal.

R1-072520	25.221CR0140r2(Rel-7,B) "Support for MBSFN operation"	IPWireless

The document was presented by Nicholas Anderson from IPWireless.

Discussion (Question / Comment):
Decision: Document is agreed, this does not preclude the introduction of a broadcast-only optimized proposal.

R1-072521	25.222CR0132r1(Rel-7,B) "Support for MBSFN operation"	IPWireless

The document was presented by Nicholas Anderson from IPWireless.

Discussion (Question / Comment):
Decision: Document is agreed, this does not preclude the introduction of a broadcast-only optimized proposal.

| R1-072522 | 25.223CR0043r1(Rel-7,B) "Support for MBSFN operation" | IPWireless |

The document was presented by Nicholas Anderson from IPWireless.

Discussion (Question / Comment):
Decision: Document is agreed, this does not preclude the introduction of a broadcast-only optimized proposal.

| R1-072523 | 25.224CR0160r1(Rel-7,B) "Support for MBSFN operation" | IPWireless |

The document was presented by Nicholas Anderson from IPWireless.

Discussion (Question / Comment):
Decision: Document is agreed, this does not preclude the introduction of a broadcast-only optimized proposal.

| R1-072524 | Draft CRs for TDD MBSFN including burst type 5 | IPWireless |

The document was withdrawn by Nicholas Anderson from IPWireless.

Discussion (Question / Comment):
Decision: Withdrawn

7   Evolved UTRA and UTRAN

R1-072444	Summary of Downlink Performance Evaluation	Ericsson

The document was presented by Stefan Parkvall from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted and agreed in R1-072578.

R1-072261	LTE Performance Evaluation – Uplink Summary	Nokia

The document was presented by Asbjörn Grovlen from Nokia.

Summary of the uplink results for the LTE performance evaluation. The achievable UL peak data rates are calculated and the results for spectrum efficiency, average user throughput and cell edge user throughput are presented.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072536	Summary of MBSFN evaluation	Qualcomm Europe

The document was presented by Juan Montojo from Qualcomm.

Summary of the MBSFN evaluation that was discussed in the RAN1 ad-hoc conference call on April 23rd. Based on the performance results from 6 different companies, requirements are met.

Discussion (Question / Comment):
Decision: Document is noted and agreed in R1-072579.

R1-072188	Performance Evaluation Checkpoint: VoIP Summary	Motorola

The document has been revised in R1-072570.

R1-072570	Performance Evaluation Checkpoint: VoIP Summary	Motorola

The document was presented by Robert Love from Motorola.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072543	LTE Performance – Review and Way Forward	Vodafone,…

The document was presented by Prakash Bhat from Vodafone.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072534	Draft LS to RAN on LTE performance verification	NTT DoCoMo

The document was presented by Sadayuki Abeta from NTT DoCoMo.

According to last two documents, it can be concluded that the performance results show that the physical layer design choices and specifications are on the right track. However there are still areas that RAN1 needs to address to ensure that the initial LTE specification delivers the best possible performance.

Therefore, conclusion on the performance verification in RAN1 can be summarized below:

- Acknowledges that the performance shows that the physical layer design choices and specifications are on the right track.

- RAN1 expects that further performance improvements could be possible and will be considering in particular: MIMO, VoIP and control channels.

- Final performance verification based on stage 3 Specification should be scheduled in the future with specific attention to the above mentioned techniques.

Discussion (Question / Comment): Averaged statistical results on 1x2 MU-MIMO should be removed from the LS
Decision: Document is noted. Revised and final LS agreed in <mark>R1-072580</mark>.

Following document has not been treated.

R1-072564	E-UTRA Performance Verification : VoIP	Samsung

7.1 Updated Physical Layer Specifications

R1-072446	TS 36.201 v1.0.1	Ericsson

The document was presented by Dirk Gerstenberger from Ericsson.

Discussion (Question / Comment): Time domain should be added.
Decision: Document is noted. Revision is in R1-072572.

Friday 11th May: revision is reviewed and endorsed to v.1.1.0 in <mark>R1-072632</mark>

R1-072445	TS 36.211 v1.0.1	Ericsson

The document has been revised in R1-072546

R1-072546	TS 36.211 v1.0.2	Ericsson

The document was presented by Stefan Parkvall from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted. Revision is in R1-072574.

Friday 11th May: R1-072574 (v1.0.3) is reviewed. Some ambiguity with respect to the level of agreement in RAN1 and the description in the precoding equation for CDD in section 5.3.4.1 does exist.

Update in R1-072629 (v1.0.4) to keep the current content in a subsection for no delay or low delay and to keep a subsection for high delay empty.

Finally, the document is endorsed to v1.1.0 in <mark>R1-072633</mark>.

Add timeslot interval in figure 2 for the next revision.

R1-072007	New version of 36.212	Qualcomm Europe

The document was presented by Juan Montojo from Qualcomm.

Discussion (Question / Comment):
Decision: Document is noted. Revision is in R1-072575.

Friday 11th May: revision is reviewed and endorsed to v.1.2.0 in <mark>R1-072635</mark>

R1-072129	Update of 36.213 Physical Layer Procedure for E-UTRA	Motorola

The document was presented by Robert Love from Motorola.

Discussion (Question / Comment): Alcatel-Lucent pointed out some discrepancies in section 5.2 compared to RAN1#48b meeting conclusions.
Decision: Document is noted. Better text on DL Power allocation requires off line discussion. Revision is in R1-072576.

Friday 11th May: revision is reviewed and endorsed to v.1.2.0 in <mark>R1-072636</mark>

R1-072262	TS 36.214 v 0.2.1	Nokia

The document was presented by Asbjörn Grovlen from Nokia.

Discussion (Question / Comment):
Decision: Document is noted. Revision 0.3.0 in <mark>R1-072577</mark> is endorsed.

7.2 SCH and Cell Search

R1-072131	Cell Search E-mail Reflector Summary	Motorola

The document was presented by Amitabha Ghosh from Motorola.

Discussion (Question / Comment):
Decision: Document is noted. Discussion on way forward shall continue on reflector with particular focus on SSC.

The following set of documents has not been treated.

R1-072189	Views on Remaining Issues on SCH Design	Texas Instruments
R1-072415	Neighboring Cell Search Time Performance in E-UTRA	NTT DoCoMo

PSC

R1-072538	Primary-Synchronization Channel Design	LGE

The document was presented by (…) from LGE.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072009	Details on PSC sequence design	Qualcomm Europe

The document was presented by Juan Montojo from Qualcomm.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072092	Issues with ZC-based PSC design	Qualcomm Europe

The document was presented by Juan Montojo from Qualcomm.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072321	P-SCH sequences	Huawei

The document was presented by Branislav Popovic from Huawei.

Discussion (Question / Comment):
Decision: Document is noted.

PSC Length:

- 64 (LGE, Qualcomm)
- 71 or 73

PSC sequence and generation domain:

- Time domain
    - o TD ZC modulated by Hadamard sequence (LGE)
- Frequency domain
    - o FD ZC (Qualcomm if TDD issue resolved)
        - ▪ TDD issue could be resolved by selecting the sequences properly
    - o FD Interleaved ZC (Motorola)
    - o Centrally punctured FD ZC (modulated with central-symmetrical binary sequence) (Huawei)

Working assumption:

- FD ZC sequence occupying up to 64 subcarriers including the DC subcarrier
- No bits are mapped to the DC subcarrier
- ZC sequence length before mapping to subcarriers can be 64 +/- 1 (one sequence length to be selected)
- Root sequence indexes selected to resolve the time/frequency ambiguity.
- Decide the actual sequences and root indexes over the reflector.

R1-072107	On ZC-based PSC and Frequency Offset	Marvell Semiconductors

The document was presented by Adoram Erell from Marvell.

Discussion (Question / Comment):
Decision: Document is noted.

The following set of documents has not been treated.

R1-072049	Comparison of P-SCH and S-SCH sequence design options	SHARP
R1-072109	Primary Synchronisation Codes for LTE cell search	NEC Group
R1-072130	ZC Sequence Based P-SCH Design Using Non-Repetitive Structure	Motorola
R1-072190	Primary SCH Design and Performance	Texas Instruments
R1-072252	CP length of P-SCH for TDD frame structure type 2	Samsung
R1-072447	Primary Synchronization Signal	Ericsson

SSC

The following set of documents has not been treated

R1-072008	Details on SSC hypotheses	Qualcomm Europe
R1-072093	Details on SSC sequence design	Qualcomm Europe
R1-072103	CP Detection in the Initial Cell Search for the TDD Frame Structure Type 2	ZTE
R1-072110	Secondary Synchronisation Codes for LTE cell search	NEC Group

R1-072124	Performance evaluation of two types of concatenated S-SCH structure	ETRI
R1-072326	S-SCH sequences based on concatenated Golay-Hadamard codes	Huawei
R1-072328	Secondary-Synchronization Channel Design	LGE
R1-072368	Mapping of Short Sequences for S-SCH	Nortel
R1-072414	S-SCH Structure for E-UTRA Downlink	NTT DoCoMo
R1-072448	Secondary Synchronization Signal Design	Ericsson
R1-072598	S-SCH Structure for E-UTRA Downlink	NTT DoCoMo

7.3   BCH

Tx diversity for BCH

R1-072011	Open Loop TxDiv for CCPCH	Qualcomm Europe

The document was presented by Juan Montojo from Qualcomm.

V-TSTD and SFBC for the TxD scheme for CCPCH are compared. V-TSTD with constant modulus virtual antenna matrix outperforms SFBC due to the improved channel estimation utilizing the PSC and SSC signals in addition to the CPICH.

V-TSTD enables a transparent decoding of CCPCH regardless of number of Tx antennas.

Therefore, the paper recommends using the V-TSTD as the TxD scheme for CCPCH.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072583	Performance Comparison of Transmit Diversity Schemes for P-BCH	ETRI

The document is a revision of R1-072126 and was presented by (…) from ETRI.

Discussion (Question / Comment): There has been some confusion due to 2 documents with 2 different conclusions under the same Tdoc number
Decision: Document is rejected and should be registered with new Tdoc R1-072600.

R1-072267	Transmit diversity for primary BCH	Nokia Siemens Networks, Nokia

The document was presented by (…) from Nokia.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072369	Further evaluation of Tx diversity schemes for P-BCH	Nortel

The document was presented by Jianglei Ma from Nortel.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072416	Transmit Diversity Scheme for P-BCH in E-UTRA Downlink	NTT DoCoMo

The document was presented by (…) from NTT DoCoMo.

Comparison of the transmit diversity schemes for the P-SCH in the E-UTRA. According to the simulation results, NTT DoCoMo recommends employing the $N = 2$-option non-transparent transmit diversity mode for the P-BCH rather than

antenna transparent PVS from the viewpoint of PER performance regardless of the application of temporal soft-combining to the P-BCH.

Discussion (Question / Comment):
Decision: Document is noted.

As a conclusion of the above contributions and discussions:

Consequences from 40ms TTI for P-BCH

- Number of P-BCH Transmission bursts within 40ms
  - o FFS: 2, 4
- Mapping of P-BCH bits onto transmission bursts
  - o FFS: all bits in each burst (each burst is self decodable, soft combining of bursts possible), or all bits spread over all bursts
- Choice of TX diversity scheme
  - o FFS

RAN1 is awaiting RAN2 information for further clarification.

The following set of documents has not been treated.

R1-072010	Capacity of CCPCH	Qualcomm Europe
R1-072050	SFN Synchronization without BCH bits for LTE	SHARP
R1-072056	Multiple CCPCH reception for system robustness	Toshiba
R1-072057	Soft-Combining for P-BCH	Toshiba
R1-072111	Maximizing radio efficiency of BCCH transmission on DL-SCH	NEC Group
R1-072112	One bit info in Network Maintain Neighbour List	NEC Group
R1-072125	System level evaluation of BCH performances with soft-combining	ETRI
R1-072132	LTE TDD split signalling on D-BCH	Motorola
R1-072264	Primary BCH Performance; Coverage and Detection	Nokia Siemens Networks, Nokia
R1-072265	On the structure of the primary broadcast channel	Nokia Siemens Networks, Nokia
R1-072266	Signalling of MBSFN resource allocation on D-BCH	Nokia Siemens Networks, Nokia
R1-072449	Transmission of BCH	Ericsson
R1-072526	Frame configurations for TDD frame structure 1	IPWireless

7.4　RACH

R1-072133	Random Access E-mail Reflector Summary	Motorola	

The document was presented by Amitabha Ghosh from Motorola and summarizes email reflector discussion on non-synchronized random access.

Summary:

1. Most participating companies agreed to Zadoff-Chu sequence length of Nzc = 839 with guard bands on both sides of the preamble [R1-072191 from TI]. However, there was no clear consensus on Zadoff-Chu root sequence selection and cyclic shift values.

2. For preamble structure for large cells, Nokia-Siemens, Ericsson, and LGE indicated that preamble repetition is needed, but at most one preamble repetition (0.8 + 0.8 ms) is necessary.

3. There was no consensus on scheduling request mechanism.

Discussion (Question / Comment):
Decision: Document is noted.

Conclusion: Zadoff-Chu sequence length of Nzc = 839 with guard bands on both sides of the preamble

Following attempts were made by raised hand voting:

- One or two preamble repetitions: LGE, Alcatel-Lucent, NTT DoCoMo, NSN, Ericsson, Sharp, Panasonic

- No preamble repetitions: IPWireless

Conclusion: In addition to the working assumption, one repetition of the preamble is supported (0.8ms + 0.8ms)

| R1-072450 | Summary of e-mail discussion on timing alignment for random access in TDD | Ericsson | |

The document was presented by David Astely from Ericsson.

Summary:

1. The majority does *not* seem to have a strong preference for explicitly signaling a timing advance for RACH.

2. Part of the DL-UL guard period (GP, GP+UpPTS, or GP+UpPTS+TS1) may be used for RACH reception for frame structure 2.

3. The RACH transmission timing and its relation to the total idle period or DL-UL guard period needs to be further discussed considering interference between UL and DL.

4. Support of cell radius of 100km needs further discussion, considering interference between UL and DL.

Discussion (Question / Comment):
Decision: Document is noted.

Proposed conclusions:

- No explicit signalling of timing advance for RACH.

- Part of the DL-UL guard period (GP, GP+UpPTS, or GP+UpPTS+TS1) shall be used for RACH reception for frame structure 2.

The below set of documents has not been treated.

R1-072012	Details on RACH sequence design	Qualcomm Europe	
R1-072013	Scheduling requests using CQI	Qualcomm Europe	
R1-072079	RACH sequence allocation and indication method on BCH	Panasonic	
R1-072080	Limitation of RACH sequence allocation for high mobility cell	Panasonic	
R1-072081	RACH sequence allocation for efficient matched filter implementation	Panasonic	
R1-072134	Performance of Scheduling Request using Contention Free Channel	Motorola	

R1-072135	Random Access Preamble Structure for Large Cells	Motorola	
R1-072191	Random Access Preamble Sequence Length for E-UTRA	Texas Instruments	
R1-072192	Random Access Preamble L1 Parameters in E-UTRA	Texas Instruments	
R1-072193	Preamble Based Scheduling Request: a Generic Structure	Texas Instruments	
R1-072194	Scheduling Request and DRX in E-UTRA	Texas Instruments	
R1-072215	Random Access Preamble signatures allocation	LG Electronics Inc.	
R1-072216	Transport Format in RACH signature	LG Electronics Inc.	
R1-072233	RACH Design Parameters	Samsung	
R1-072234	Use Restricted Preamble Set for RACH in High Mobility Environments	Samsung	
R1-072253	Random access for E-UTRA TDD	Samsung	
R1-072268	On construction and signalling of RACH preambles	Nokia Siemens Networks, Nokia	
R1-072324	Specification of restricted set of cyclic shifts of root Zadoff-Chu sequences	Huawei, Panasonic	
R1-072325	Multiple values of cyclic shift increment NCS	Huawei	
R1-072329	Necessity of Preamble Repetition	LGE	
R1-072330	Preamble Allocation for Non-Synchronized RACH	LGE	
R1-072331	Formula for Restricted Cyclic Shift Set	LGE	
R1-072361	Non-synchronized RACH range extension	Alcatel-Lucent	
R1-072362	Link-budget balance between RACH and PUSCH	Alcatel-Lucent	R1-072625
R1-072417	Minimum Data Rate in E-UTRA Uplink	NTT DoCoMo	
R1-072525	RACH for TDD frame structure 1	IPWireless	
R1-072625	Link-budget balance between RACH and PUSCH	Alcatel-Lucent	(R1-072362)
R1-072626	On the specification of restricted set of cyclic shifts of root Zadoff-Chu sequences	Huawei, Panasonic, LGE, NSN, Nokia	

7.5　　Channel coding

R1-072535	Summary of the e-mail discussion on channel coding	NTT DoCoMo	

The document was presented by Sadayuki Abeta from NTT DoCoMo.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072273	Way Forward on LTE Rate Matching	Nokia Siemens Networks, Nokia

The document was presented by (…) from Nokia.

Discussion (Question / Comment): The way forward as presented was also supported by InterDigital.
Decision: Document is noted.

R1-072604	Way forward on HARQ rate matching for LTE	Ericsson, ETRI, Freescale, ITRI, LGE, Motorola, Qualcomm, Samsung, ZTE

The document was presented by Zhouyue Pi from Samsung.

Discussion (Question / Comment): The way forward as presented was also supported by Panasonic and TI.
Decision: Document is noted and agreed.

Conclusion: Further optimization of the following CB algorithm details for FFS.

- Threshold selection guideline for switching between RV=0 and 7

- Number of RVs

- Subblock interleaver optimization

R1-072621	LTE Rate Matching Conclusion	Nokia Siemens Networks, Nokia, Motorola, Qualcomm, ZTE, Ericsson, LGE, Samsung, TI, ETRI, InterDigital

The document was presented by (…) from NSN and proposes modifying the conclusion to agreed R1-072604 as follows:

Further optimization of the following CB algorithm details for FFS.

- Threshold selection guideline for switching between RV=0 and 7

- Number of RVs

- Subblock interleaver optimization, for example, P2 offset optimization.

Discussion (Question / Comment):
Decision: Document is noted and conclusion is changed accordingly. It is clarified that P2 offset optimization is understood as one possible way of subblock interleaver optimization.

R1-072452	Performance Evaluation of Rate Matching Algorithms	Ericsson

The document was presented by (…) from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072406	Comparing rate matching puncturing to optimal period puncturing	Broadcom
R1-072542	Rate matching proposal based on 15 period 8 optimal puncturing patterns	Broadcom

Both documents were presented by Bazhong Shen from Broadcom.

Discussion (Question / Comment):
Decision: Document are noted.

R1-072272	LTE Rate Matching Simulation Results	Nokia Siemens Networks, Nokia

The document was presented by (…) from NSN.

Discussion (Question / Comment):
Decision: Document is noted.

Below set of documents has not been treated.

R1-072015	Channel interlevar for E-UTRA	Qualcomm Europe
R1-072014	Analysis of circular buffer based rate matching	Qualcomm Europe
R1-072016	Performance of tail-biting Convolutional Code	Qualcomm Europe
R1-072046	Flexible-size segmentation for E-UTRA channel interleaving	Alcatel-Lucent
R1-072087	Parameter combinations in LTE	Panasonic
R1-072101	Rate matching improvement for turbo coding	ZTE
R1-072106	On Channel Interleaving and rate matching structure	ZTE
R1-072136	UE Capabilities	Motorola
R1-072137	Turbo rate-matching in LTE	Motorola
R1-072138	Redundancy Version Definition for Circular Buffer Rate Matching	Motorola
R1-072139	Convolutional code rate matching in LTE	Motorola
R1-072140	On enabling pipelining of channel coding operations in LTE	Motorola
R1-072141	Removing rate ½ convolutional code for control channels	Motorola
R1-072245	Circular buffer rate matching for LTE	Samsung
R1-072246	LTE channel interleaver design	Samsung
R1-072269	Discussion of Parallel Implementation of UTRAN Rate Matching	Nokia Siemens Networks, Nokia
R1-072270	Bit Priority Mapping for LTE Shared TrCH Processing Chain	Nokia Siemens Networks, Nokia
R1-072271	Description of the Dithering Algorithm for LTE Rate Matching	Nokia Siemens Networks, Nokia
R1-072274	LTE TrCH Processing Processing Chain	Nokia Siemens Networks, Nokia
R1-072332	Circular buffer based rate matching for E-UTRAN	LGE
R1-072333	Performance of tailbiting Convolutional code with rate matching	LGE
R1-072364	Performance evaluation of rate matching schemes for E-UTRA	InterDigital
R1-072451	Complexity and Performance Improvement for Convolutional Coding	Ericsson
R1-072453	ID-specific CRC on DL-SCH/UL-SCH	Ericsson
R1-072531	Performance comparison of circular buffer RM and Rel'6 RM	Samsung
R1-072545	Complexity and Performance Improvement for Convolutional Coding	Ericsson
R1-072552	Implementation consideration for Circular buffer rate matching	Samsung

7.6   UL/DL Power Control

R1-072276	Summary of Power Control E-mail Discussion	Nokia Siemens Networks	

The document was presented (…) from NSN.

Discussion (Question / Comment):

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Decision: Document is noted, but NO conclusion could be reached on Power Control.

The group was also running out of time to go forward with further discussion. Mr Chairman recommends to go on and discuss through the email reflector.

The following set of documents has not been treated.

R1-072017	PUCCH power control - link level analysis	Qualcomm Europe	
R1-072018	PUCCH power control - system level analysis	Qualcomm Europe	
R1-072142	Uplink Power Control: Details	Motorola	
R1-072195	On Uplink Power Control in EUTRA	Texas Instruments	
R1-072217	Power adjustment relative to RACH OLPC	LG Electronics Inc.	
R1-072230	Discussion on uplink power control	Samsung	
R1-072275	Uplink Power Control	Nokia Siemens Networks, Nokia	
R1-072334	Intra-cell power control and link adaptation for uplink in E-UTRA system	LGE	
R1-072335	Uplink power control scheme for scheduled data in E-UTRA system	LGE	
R1-072365	E-UTRA Uplink Power Control Proposal and Evaluation	InterDigital	
R1-072373	UL Power Control with Fractional Frequency Reuse for E-UTRA	Nortel	
R1-072400	On the UL power control rule for the UE	Alcatel-Lucent	
R1-072410	Impact of Uplink Inter-cell Interference Coordination on Uplink Power Control	Alcatel-Lucent	R1-072587
R1-072418	Influence of Transmission Interval of Overload Indicator in E-UTRA Uplink	NTT DoCoMo	
R1-072419	Transmission Power Control Method for Non-scheduled Data in E-UTRA Uplink	NTT DoCoMo	
R1-072454	Intra-cell Uplink Power Control for E-UTRA – Comments on Open Issues and Proposed Mechanism	Ericsson	
R1-072455	Intercell Uplink Power Control – Overload Indicator	Ericsson	
R1-072457	Downlink power settings	Ericsson	
R1-072587	Impact of Uplink Inter-cell Interference Coordination on Uplink Power Control	Alcatel-Lucent	(R1-072410)
R1-072151	Resource element energy settings for data, control, and RS	Motorola	

7.7   Inter-cell Interference Coordination

This agenda item has not been treated.

R1-072051	Uplink Inter-cell Interference Management for LTE	SHARP	
R1-072196	Fractional Time Re-Use Interference Co-Ordination in E-UTRA DL	Texas Instruments	
R1-072251	Improving Efficiency of MBMS by Inter-Cell Interference Coordination	Samsung	

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R1-072277	Downlink interference coordination	Nokia, Nokia Siemens Networks	
R1-072376	Further Discussion on Adaptive Fractional Frequency Reuse	Nortel	
R1-072411	Voice over IP resource allocation benefiting from Interference Coordination	Alcatel-Lucent	R1-072568
R1-072456	On Intercell Interference Coordination Schemes without/with Load Indication	Ericsson	
R1-072568	Voice over IP resource allocation benefiting from Interference Coordination	Alcatel-Lucent	(R1-072411)

7.8   UL Timing Control

R1-072113	Uplink Synchronization Maintenance	NEC Group

The document was presented by (…) from NEC.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072143	Uplink Synchronization Maintenance and Timing Advance	Motorola

The document was presented by Amitabha Ghosh from Motorola.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072198	UL Synchronization Management and Maintenance in E-UTRA	Texas Instruments

The document was presented by Pierre Bertrand from TI.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072278	Uplink Timing Control	Nokia Siemens Networks, Nokia

The document was presented by (…) from Nokia.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072327	Maintenance of uplink synchronization	Huawei

The document was presented by (…) from Huawei.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072420	Timing Alignment Method for E-UTRA Uplink	NTT DoCoMo

The document was presented by (…) from NTT DoCoMo.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072489	Resolution of Timing Error Alignment	Ericsson

The document was presented by Stefan Parkvall from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072363	Considerations for frequency control in E-UTRA uplink	Alcatel-Lucent

The document was presented by Jungah Lee from Alcatel-Lucent.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072279	On Maintenance of UL Synchronization	Nokia Siemens Networks, Nokia

The document was presented by (…) from Nokia.

Discussion (Question / Comment):
Decision: Document is noted and should be used as the basis for answering to LS from RAN2. Discussion shall continue over email and hopefully agreement on LS shall be reached before the next RAN2 meeting.

The following set of documents has not been treated.

R1-072197	Transmission of Uplink Timing Advance Command in E-UTRA	Texas Instruments

7.9 Physical Layer Measurements

The following set of documents has not been treated.

R1-072094	Measurements bandwidth and filtering	Qualcomm Europe
R1-072145	Measurement Period and Implication of DRX	Motorola
R1-072280	LTE measurement definitions	Nokia Siemens Networks, Nokia
R1-072281	Node B measurements for LTE	Nokia Siemens Networks
R1-072458	Additional UE Measurements for RRM in E-UTRAN	Ericsson
R1-072459	Significance of RSRP/E-UTRA carrier RSSI in E-UTRAN	Ericsson

MBMS Measurements

R1-072146	Physical Layer Measurements for MBSFN	Motorola
R1-072147	Multicell E-MBMS CQI Feedback	Motorola

Both documents were presented by Eoin Buckley from Motorola.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072282	Mobility and CQI Measurements in Mixed Unicast/MBSFN Carriers	Nokia Siemens Networks, Nokia

The document was presented by (…) from Nokia.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072460	Measurements and MBMS subframes	Ericsson

The document was presented by Erik Dahlman from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072115	Some issues related to MBSFN	NEC Group

The document was presented by (…) from NEC and provides a summary of email discussion on RAN1 reflector under subject "**Some issues related to MBSFN**".

Discussion (Question / Comment):
Decision: Document is noted.

R1-072481	Consideration on some issues related to MBSFN sub-frame	Fujitsu

The document was presented by Yoshihiro Kawasaki from Fujitsu.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072152	Unicast and MBSFN Subframe structure indication	Motorola

The document was presented by Eoin Buckley from Motorola.

Discussion (Question / Comment):
Decision: Document is noted.

Conclusion:

- UE is informed by higher layers of the serving cell about which subframes in the serving cell are used for MBSFN transmission
  - Details of the signalling are FFS. This information is not on the P-BCH.
- For the neighbouring cells, two solutions are considered further:
  - UE is informed by the serving cell whether UE can assume that no MBSFN subframes are present in all neighbouring cells.
  - UE is informed by the serving cell whether UE can assume that all neighbouring cells have the same MBSFN subframe allocation as the serving cell.
    - Details of the signalling are FFS. This information is not required by RAN1 to be on the P-BCH.

Outgoing LS

R1-072619	Draft LS on Updated information on Layer 1 related system information	Ericsson

 The document was presented by Erik Dahlman from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted. Agreed final LS is being issued in R1-072623.

7.10   MIMO, Transmit Diversity and Beamforming

Decision was agreed in the agenda of the week to conduct parallel session on MIMO topics. Results of this session have been reported in following document:

R1-072620	MIMO Ad Hoc Summary	Ad Hoc Chairman

The document was presented by Juho Lee from Samsung.

Discussion (Question / Comment):
Decision: Document is noted and agreed. Typo in SFBC definition table is corrected below.

Next WG meeting in Orlando will also have parallel session on MIMO.

7.10.1   DL Precoding Details, 4 antenna Codebook

4TX precoding

Way forward:

- Design criteria:
    - Alphabet: 8PSK at max
    - # of codebooks: 2 at max
    - … (email discussion until May 18th)
- Deadline for submission of the final proposals for 4 tx antenna precoding: June 8th.

CDD precoding

The contributions related to this topic have not been treated.

Feedback

The contributions related to this topic have not been treated.

7.10.2   DL MU-MIMO

Precoding (NodeB and UE)

Way forward for MU-MIMO design

Proposal:

- Adopt the UE codebook in Table-1 for 2-Tx antennas and in Table-2 for 4-Tx antennas MU-MIMO as the working assumption.

- The NB can semi-statically restrict the codebook size per UE.

- The NB can semi-statically on a per UE bases decide if vectors or unitary matrices are used for CQI calculation

- Do not introduce additional dedicated reference signals purely for MU-MIMO.

Way forward on size of UE feedback codebook

- 2 tx antenna: at max 3 bits
- 4 tx antenna: at max 4 bits

Downlink support

The contributions related to this topic have not been treated.

Interference suppression and UE feedback

The contributions related to this topic have not been treated.

7.10.3   DL Transmit diversity with 4 TX Antennas

Way forward for TxD scheme for 4 Tx

Alternatives

- Alt1: QO-SFBC-CR

- Alt2: SFBC+ Balanced FSTD

- Alt3: SFBC + FSTD with (1,3), (2,4) pairing (antenna mapping - uniform RS)

- Alt4: SFBC + FSTD with (1,2), (3,4) pairing (antenna mapping - non-uniform RS)

- Alt5: SFBC + PSD

- Alt6: Unbalanced SFBC+FSTD (only for PDSCH)

Way forward:

- SFBC + FSTD structure with (1,2) & (3,4) pairing (common for control and data)

- SFBC definition (only f1 and f2 should be on the top of the columns below)

	t1 or f1	t2 or f2
Tx1	s1	- s2*
Tx2	s2	s1*

FFS:

- Revised SFBC definition

	f1	f2
Tx1	s1	s2
Tx2	- s2*	s1*

- SFBC + FSTD with (1,3) & (2,4) pairing (uniform RS mapping)

- Need for having different TxD scheme for control and data

  o Unbalanced SFBC+FSTD (only for PDSCH, R1-**072338)**

- SFBC+ Balanced FSTD (R1-**072571)**

7.10.4   DL Beamforming

The contributions related to this topic have not been treated.

7.10.5   UL Antenna Switching

The contributions related to this topic have not been treated.

7.11   Reference signal structure

7.11.1   Downlink reference signals

R1-072202	Summary of Reflector Discussions on EUTRA DL RS	Texas Instruments

The document was presented by Aris Papasakellariou from TI.

This document summarizes the DL RS design issues outlined in reflector discussions from April 19 until May 2. Opinions are included in the accompanying Table.

Discussion (Question / Comment):
Decision: Document is noted.

As a conclusion:

- RS scrambling code: Binary PN sequence
- No additional unicast RS in MBSFN subframe
- FH or FS: Yes (further decision needed whether one of them or both)

Frequency Hopping/Shifting

R1-072027	Details on hopping of DL RS	Qualcomm Europe

The document was presented by Juan Montojo from Qualcomm.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072154	Effect of RS hopping ON or OFF on the number of cell group IDs and SCH performance	Motorola

The document was presented by Brian Classon from Motorola.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072292	Construction of Frequency Hopping Sequences	Nokia, Nokia Siemens Network

The document was presented by (…) from Nokia.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072320	Cell Specific DL RS FH sequences	Huawei

The document was presented by (…) from Huawei.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072427	Frequency Hopping/Shifting of Downlink Reference Signal in E-UTRA	NTT DoCoMo

The document was presented by Yoshihisa Kishiyama from NTT DoCoMo.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072319	Influence of cell-specific frequency hopping on DL CQI	Huawei

The document was presented by (…) from Huawei.

Document's conclusion: when CQI estimation is performed by taking frequency hopping into account, the benefits of using frequency hopping over no hopping persists. The cell throughput is about 5% higher when hopping is used and the cell edge user throughput up to 10% higher, depending on the load.

Discussion (Question / Comment):
Decision: Document is noted.

Dedicated RS

The next set of documents has not been treated.

R1-072025	Dedicated pilots for E-UTRA	Qualcomm Europe
R1-072257	Downlink Dedicated Reference Symbols Structure for TDD with Frame Structure Type 2	CATT

R1-072385	Dedicated RS Arrangements for E-UTRA Downlink	Nortel
R1-072402	Dedicated reference signals for precoding in E-UTRA downlink	Alcatel-Lucent, Philips
R1-072155	Proposal for dedicated pilots in downlink precoding for EUTRA MIMO	Motorola

Misc

The next set of documents has not been treated.

R1-072026	RS density for long CP numerology for unicast transmissions	Qualcomm Europe
R1-072291	On Timing Estimation with Orthogonal Reference Signal Sequences	Nokia, Nokia Siemens Network
R1-072426	Performance of Orthogonal Reference Signal for Sectored Beams in E-UTRA Downlink	NTT DoCoMo

Others

The next set of documents has not been treated.

R1-072028	Sequence design for DL RS	Qualcomm Europe
R1-072045	E-UTRA DL RS aspects of narrowband interference combating	Alcatel-Lucent
R1-072048	Reference Signal Scrambling in MBSFN	ITRI
R1-072052	Proposal for 2RS and 4RS structure application in LTE Downlink	SHARP
R1-072153	MIMO RS Structure for Unicast/MBMS-Mixed Scenarios	Motorola
R1-072156	Simulation Results for GCL based DL Reference Signals	Motorola
R1-072157	Text proposal on pseudo-random sequence generation of DL cell-specific RS	Motorola
R1-072203	Orthogonal RS for Different MBSFN Zones in E-UTRA	Texas Instruments
R1-072204	Unicast RS Requirements in MBSFN Sub-Frames	Texas Instruments
R1-072254	Downlink reference signal structure for TDD frame structure type 2	Samsung
R1-072381	RS for Two Stream MBSFN	Nortel

7.11.2   Uplink reference signals

R1-072205	Summary of Reflector Discussions on EUTRA UL RS	Texas Instruments

The document was presented by (…) from TI.

Discussion (Question / Comment):
Decision: Document is noted.

<mark>R1-072584</mark>	Way Forward for PUSCH RS	Alcatel-Lucent, Ericsson, Freescale, Huawei, LGE, Motorola, Nokia, Nokia-Siemens Networks, NTT DoCoMo, Nortel, Panasonic, Qualcomm, TI
R1-072585	Way Forward for PUCCH RS	Alcatel-Lucent, Ericsson, Huawei, LGE, Motorola, NTT DoCoMo, Nortel, Panasonic, Qualcomm, TI

Way forward for PUCCH DM RS:

- **For each RB that carries PUCCH**
    – **10/12 base sequences (more than 12 base sequences FFS)**
    – **One base sequence per "group" – 10/12 groups (more than 12 groups FFS)**
- **Group (semi-)statically assigned to a cell or possibility for a cell to hop (on slot/subframe basis) between groups**
    – **No dynamic (PDCCH) signaling of sequence assignment**

- **Shifts are needed and used for CDM multiplexing of different users in a given cell**
    – **Shift for a UE can be signaled implicitly or explicitly by higher layers (FFS)**

- **FFS whether for a system bandwidth with an odd number of RBs can use 18-subcarrier wide PUCCH resource block**

- **Cyclic shift hopping is supported**

TDD LB vs SB

R1-072105	Performance evaluation of uplink transmission with SB vs LB RS structure for LTE TDD with frame structure type 2	ZTE

The document was presented by (…) from ZTE.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072259	LB vs. SB Simulations for TDD with Frame Structure Type 2	CATT

The document was presented by Tang Hai from CATT.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072297	Demodulation reference signal for EUTRA TDD type 2 frame structure	Nokia, Nokia Siemens Network

The document was presented by Xiangguang Che from Nokia.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072468	On uplink reference signals for frame structure type 2	Ericsson

The document was presented by David Astely from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted.

Further to intense discussion during the week, following document has been prepared.

R1-072627	Way forward on uplink reference signals for frame structure type 2	Ericsson, CATT, Huawei, Nokia, Nokia Siemens Networks, Samsung, ZTE

The document was presented by David Astely from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted and agreed.

DM RS

The following set of documents has not been treated.

R1-072293	Uplink DM reference signal structure – open issues	Nokia Siemens Networks, Nokia
R1-072160	Uplink Reference Signal Planning Aspects	Motorola
R1-072342	Uplink reference signal coordination	LGE

The document has been revised in R1-072550

R1-072550	Uplink reference signal coordination	LGE
R1-072053	Optimized UL RS Design - OZCL Sequences	SHARP
R1-072082	RS sequence hopping for E-UTRA uplink	Panasonic
R1-072083	Reference signal generation and selection for E-UTRA uplink	Panasonic
R1-072116	Discussion on Uplink Reference Signal	NEC Group
R1-072158	Selection between Truncation and Cyclic Extension for UL RS Generation	Motorola
R1-072206	Design of CAZAC Sequences for Small RB Allocations in E-UTRA UL	Texas Instruments
R1-072294	Cyclic Shift Hopping and DM RS Signalling	Nokia Siemens Networks, Nokia
R1-072295	DM RS sequence hopping and coordination	Nokia Siemens Networks, Nokia
R1-072467	UL reference-signal (DM) structure	Ericsson

Sounding RS

R1-072161	Way forward for UL sounding RS	Motorola

The document was presented by (…) from Motorola and proposes a way forward on some of the UL sounding RS issues for configuring and specifying the characteristics of the sounding blocks used for carrying the UL sounding RS.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072296	UL sounding	Nokia Siemens Networks, Nokia

The document was presented by (…) from Nokia and discusses open items related to UL sounding.

Preferred scheme is based on sounding with pre-defined sounding groups. UEs in the same group have a pre-defined frequency allocation supporting FH of sounding RS. UL sounding should be fully configured by the eNode-B.

Discussion (Question / Comment):
Decision: Document is noted.

The following set of documents has not been treated.

R1-072029	RS structure for UL ACK transmission	Qualcomm Europe
R1-072030	RS structure for CQI transmission	Qualcomm Europe
R1-072031	Sounding Reference Signals	Qualcomm Europe
R1-072095	Multiplexing of E-UTRA Uplink Sounding Reference Signals	Huawei
R1-072159	Considerations and Recommendations for UL Sounding RS	Motorola
R1-072162	Improving UL Data Frequency Hoping Performance with Sounding and Frequency Semi-Selective Scheduling	Motorola
R1-072207	Sounding Reference Signal Assignments in E-UTRA Uplink	Texas Instruments
R1-072208	Impact of Reference Signal CM on the Link – Level Performance	Texas Instruments
R1-072229	Uplink channel sounding RS structure	Samsung
R1-072298	UL sounding reference signal for EUTRA TDD	Nokia, Nokia Siemens Network
R1-072341	Further considerations on UL sounding RS	LGE
R1-072429	Necessity of Multiple Bandwidth for Sounding Reference Signals	NTT DoCoMo
R1-072430	Assignment Scheme of Sounding Reference Signals in E-UTRA Uplink	NTT DoCoMo
R1-072466	RS Sounding structure	Ericsson
R1-072490	Using sounding reference signal for adaptive antenna switching	Mitsubishi Electric
R1-072528	Uplink channel sounding	Freescale Semiconductor

7.12   Mapping of Virtual resource blocks to Physical resource blocks

R1-072163	Way forward for mapping of DL distributed transmissions to physical resource blocks	Motorola

The document was presented by Brian Classon from Motorola.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072164	E-UTRA DL Distributed Multiplexing and Mapping Rules	Motorola

The document has been revised in R1-072555

R1-072555	E-UTRA DL Distributed Multiplexing and Mapping Rules	Motorola

The document was presented by Brian Classon from Motorola.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072165	E-UTRA DL Distributed Multiplexing and Mapping Rules: Performance	Motorola

The document was presented by Brian Classon from Motorola.

Discussion (Question / Comment):
Decision: Document is noted.

Conclusion as per the end of the day (Wednesday 9th):

- A PRB only contains data for either localised or distributed transmission.

- The size of a distributed virtual resource block (DVRB) equals a physical resource block (PRB).

- DVRBs for a user are distributed over 2 or more PRBs.

Discussion followed after the day session gets closed. A large number of companies agreed on next way forward

R1-072609	Distributed DL Transmission　Way Forward	Alcatel-Lucent, Huawei, Mitsubishi, Motorola, NEC, Nortel, NTT doCoMo, Philips, Samsung, TI, Qualcomm, LGE	7.12	Discussion/Decision

The document was presented by Brian Classon from Motorola.

Discussion (Question / Comment): Good synthesis which should be used as basis to come up with decisions until the next RAN1 meeting.
Decision: Document is revised in R1-072610 for further email discussions.

The following set of documents has not been treated.

R1-072032	Frequency Diverse transmissions for E-UTRA DL	Qualcomm Europe
R1-072033	Impact of constrained resource signalling in PDCCH	Qualcomm Europe
R1-072064	Resource block mapping for EUTRA downlink distributed transmissions	Mitsubishi Electric, Philips
R1-072065	UE-specific idle period for half-duplex FDD	Mitsubishi Electric
R1-072117	Downlink Distributed Resource Block Mapping	NEC Group
R1-072226	Downlink frequency diversity transmission	Samsung
R1-072255	Uplink time domain hopping for E-UTRA TDD	Samsung
R1-072299	Distributed transmission for LTE downlink	Nokia, Nokia Siemens Networks
R1-072322	Description and numerology of the Physical Downlink Shared Channel	Huawei
R1-072323	Distributed transmission – scenarios and benefits	Huawei

R1-072343	DL DVRB structure	LGE
R1-072377	The Multiplexing scheme for downlink resource block: distributed transmission and localized transmission	Nortel
R1-072378	UL RB hopping	Nortel
R1-072392	Principles for mapping Virtual Resource Blocks to Physical Resource Blocks in E-UTRA Downlink	Philips, Mitsubishi Electric
R1-072393	Further discussion of Resource Block Mapping for E-UTRA Downlink	Philips
R1-072431	Comparison Between RB-level and Sub-carrier-level Distributed Transmission for Shared Data Channel in E-UTRA Downlink	NTT DoCoMo
R1-072432	Control Signaling for Uplink Frequency Hopping in E-UTRA	NTT DoCoMo

7.13   Control Signaling

7.13.1   Downlink Control Signalling

R1-072469	Summary of e-mail discussion on downlink control signaling	Ericsson

The document was presented by Stefan Parkvall from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072612	Way forward on CCE-to-RE mapping	Ericsson, Motorola, Samsung, Nokia, Nokia-Siemens Networks, Mitsubishi, Alcatel-Lucent, Texas Instruments, Nortel, NTT DoCoMo, Huawei, Qualcomm, Panasonic, LG Electronics

The document was presented by Stefan Parkvall from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted and agreed in revision R1-072613.

CCE to RE Mapping:

- Randomization only, power setting on the RE for control channel signalling is up to the eNB and should not preclude interference coordination for the data
  - Preference should be given to schemes that also support interference coordination on control signalling without adding complexity. Any coordination scheme for control signalling should be transparent to the UE operation.

Cat0 Mapping

R1-072209	Cat0 Transmission in E-UTRA DL	Texas Instruments	

The document was presented by (…) from TI.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072300	Transmission of Cat0 in the DL control channel	Nokia, Nokia Siemens Networks	

The document was presented by Lars Lindh from Nokia.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072352	Cat0 Signaling Design	LGE	

The document was presented by (…) from LGE.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072601	Cat0 transmission structure	Samsung	(R1-072248)

The document was presented by Joonyoung Cho from Samsung and describes two approaches:

- Approach for the resource mapping and transmit diversity of the Cat0 bits, assuming a 2-bit dynamic Cat0 payload is transmitted separately every subframe.

- Alternative approach where the Cat0 bits are included in the PDCCH channel intended for the worst UE within the subframe. We note that both approaches are feasible, and more study is needed before the final choice between these two approaches can be made.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072034	"Cat 0" information structure and multiplexing	Qualcomm Europe	

The document was presented by (…) from Qualcomm.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072304	Utilization of Cat0 Signalling information in LTE downlink	Nokia, Nokia Siemens Networks	

The document was presented by Lars Lindh from Nokia.

Discussion (Question / Comment):
Decision: Document is noted.

Cat0:

- The first n OFDM symbols in a DL subframe are used for control signalling
  - No mix of control signalling and DL-SCH in an OFDM symbol
  - n=1,2 or 3
  - Cat0 indicates the value of n
    - Interpretation of Cat0 is non-configurable: fixed mapping of Cat0 to values of n (1,2,3) in the specification. The use of the fourth value in Cat0 is FFS.
  - Cat0 is transmitted in the first OFDM symbol
  - Coding: the 2 bits are mapped onto 4 sequences of length 16 QPSK symbols (to be defined later)
  - Spread over the whole system bandwidth
    - Cell specific frequency domain mapping.
    - Cell specific hopping FFS.
  - Cell specific scrambling, tied to the cell ID
  - Same TX diversity scheme as for PDCCH
  - New name: Control Channel Format Indicator (CCFI)

The following set of documents has not been treated.

R1-072374	DL/UL signalling channel supporting DL adaptive MIMO	Nortel	
R1-072035	PDCCH structure and multiplexing	Qualcomm Europe	
R1-072058	CDM-based structure for low-rate PDCCH	Toshiba	
R1-072060	Scheduling Policy and Signaling Way on DL Resource Allocation	Mitsubishi Electric	
R1-072061	Performance Evaluation of RB Group Scheduling	Mitsubishi Electric	
R1-072063	UE and CCE specific scrambling codes for low complexity blind detection of downlink control signalling	Mitsubishi Electric	
R1-072072	Semi-static vs. dynamic CCE aggregation	Panasonic	
R1-072073	Use of L1/L2 control channel for Uplink VoIP scheduling	Panasonic	
R1-072074	Comparison between FDM and CDM+FDM for control channel multiplexing	Panasonic	
R1-072075	Assignment of Downlink ACK/NACK channel	Panasonic	
R1-072088	Mapping of PDCCH, ACK/NACK and Cat0	Panasonic	
R1-072097	E-UTRA Downlink CCE to RE Mapping Scheme	Huawei	
R1-072118	DL Control Channel Structure	NEC Group	
R1-072119	DL Unicast Resource Allocation Signalling	NEC Group	
R1-072120	Downlink ACK/NACK signalling for E-UTRA	NEC Group	
R1-072127	Downlink Ack/Nack Transmission Method for CDM/FDM structure	ETRI	
R1-072166	Downlink Acknowledgement and Group Transmit Indicator Channels	Motorola	
R1-072167	Support of Precoding for E-UTRA DL L1/L2 Control Channel	Motorola	
R1-072168	Efficient structure for aggregating 1,2,[3],4,8 DL control channel elements	Motorola	R1-072607
R1-072169	E-UTRA DL L1/L2 Control Channel Design	Motorola	R1-072556
R1-072170	E-UTRA DL L1/L2 Control Channel Information & MIMO/Precoding details	Motorola	R1-072557
R1-072171	DPCCH performance in E-UTRA for different reference symbol formats	Motorola	
R1-072172	Channel Estimation Performance for DL Control Channel in E-UTRA	Motorola	
R1-072173	E-UTRA DL L1/L2 Control Channel Design - PICH/AICH	Motorola	
R1-072174	L1/L2 Control Channel Coverage for E-UTRA	Motorola	
R1-072218	Performance of DL ACK/NACK transmission	Samsung	
R1-072219	Resource Indication Scheme for Downlink Packet Scheduling	Samsung	
R1-072220	Restriction on PDCCH monitoring set	Samsung	
R1-072225	CCE to RE mapping	Samsung	
R1-072241	Downlink Link Adaptation and Related Control Signaling	Samsung	

R1-072243	LTE ACK channel assignment	Samsung	
R1-072247	DL ACK/NACK transmission structure	Samsung	
R1-072249	Downlink Hybrid ARQ Signaling	Samsung	
R1-072250	Downlink signaling for support of single-user MIMO	Samsung	
R1-072256	Downlink control channel structure for TDD with type II frame structure	CATT	
R1-072301	PDCCH UL and DL signaling entity payloads	Nokia, Nokia Siemens Networks	
R1-072302	Mapping of Control Channel Elements to the Resource Elements	Nokia, Nokia Siemens Networks	
R1-072303	Signalling of PRB allocations for LTE downlink	Nokia, Nokia Siemens Networks	
R1-072305	Further discussions on the False Positive Probability for the DL Shared Control Channel	Nokia, Nokia Siemens Networks	
R1-072306	Implicit ACK/NAK for LTE DL	Nokia, Nokia Siemens Networks	
R1-072318	DL control signaling of MIMO PMI information for SU-MIMO	Huawei	
R1-072344	On the consideration of DL L1/L2 control channel design for MIMO	LGE	
R1-072345	Mapping of Control Channel Elements to Resource Elements	LGE	R1-072606
R1-072346	Signaling of DL resource allocation	LGE	
R1-072347	Allocation of DL ACK/NACK index	LGE	
R1-072349	UL frequency hopping	LGE	
R1-072350	Effects on limitation of the number of scheduled UEs in uplink	LGE	
R1-072351	ACK/NACK transmission in E-UTRA downlink	LGE	
R1-072353	Consideration on the amount of control channel overhead in downlink	LGE	
R1-072354	Link adaptation for downlink control channel	LGE	
R1-072355	Further considerations on UL synchronous HARQ and its modification	LGE	
R1-072356	Performance Evaluation of MIMO-related Dedicated Control Signaling	LGE	
R1-072382	The resource element mapping of the control channel elements	Nortel	
R1-072391	Control of CQI feedback signalling in E-UTRA	Philips	
R1-072398	Distributed Transmissions in E-UTRA Downlink Control Signalling	Philips	
R1-072412	Signaling Resource Allocations in DL Control Channel	Alcatel-Lucent	
R1-072433	Downlink L1/L2 Control Channel Structure in E-UTRA - Multiplexing of Control Channel Element	NTT DoCoMo	
R1-072434	Downlink L1/L2 Control Channel Structure in E-UTRA - Mapping	NTT DoCoMo	
R1-072435	Downlink L1/L2 Control Channel Structure in E-UTRA - Bits and Coding	NTT DoCoMo	
R1-072436	ACK/NACK Signaling Method in E-UTRA Downlink	NTT DoCoMo	
R1-072470	CCE-to-RE mapping	Ericsson	

R1-072471	Signaling of resource assignment	Ericsson	
R1-072476	L1/L2 Control Channel Structure with CDM Based Multiplexing in E-UTRA Downlink	KDDI	
R1-072477	An Evaluation of the Rotational CDM for L1/L2 Control Channel	KDDI	
R1-072478	System-Level Evaluation of the Rotational CDM for L1/L2 Control Channel	KDDI	
R1-072479	Scrambling Code for L1/L2 Control Channel with CDM Based Multiplexing in E-UTRA Downlink	KDDI	
R1-072529	Aspects of UL Control Signalling	Freescale Semiconductor	
R1-072556	E-UTRA DL L1/L2 Control Channel Design	Motorola	(R1-072169)
R1-072557	E-UTRA DL L1/L2 Control Channel Information & MIMO/Precoding details	Motorola	(R1-072170)
R1-072606	Mapping of Control Channel Elements to Resource Elements	LGE	(R1-072345)
R1-072607	Efficient structure for aggregating 1,2,[3],4,8 DL control channel elements	Motorola	(R1-072168)

7.13.2   Uplink Control Signalling

R1-072472	Summary of e-mail discussion on uplink control signaling	Ericsson	

The document was presented by Stefan Parkvall from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted and following conclusion is drawn:

- For non-persistent scheduling the ACK/NAK resource is linked to the index of the control channel used for scheduling

R1-072473	Summary of e-mail discussion on CQI reporting	Ericsson	

The document was presented by Stefan Parkvall from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted. Long debate occurred to define the best structure for CQI.

Structure for CQI (and CQI + ACK/NACK) reporting

- CAZAC : Qualcomm, NTT Docomo, Motorola, Samsung, Ericsson, Nortel, Alcatel-Lucent (with slight modification), Toshiba, NEC, Fujitsu, ETRI, Sharp, Philips, Panasonic

- DFT-S-OFDM : Texas Instruments, Nokia, Nokia Siemens Networks, Huawei, Freescale Semiconductor Inc

Working assumption:

According to voting results, CAZAC based structure (similar to below structure A) is chosen. For the further design, operation in e.g. multi-cell environments, with high speeds and in combination with ACK/NACK shall be considered.

Structure A

(Placement of reference signals for illustrative purposes only)

Only one slot is illustrated

Structure B

Structure modified compared to Nokia's original proposal in order to allow coexistence with the ACK/NAK structure from Malta

Only one slot is illustrated
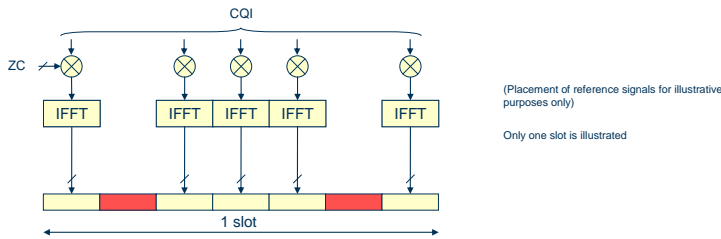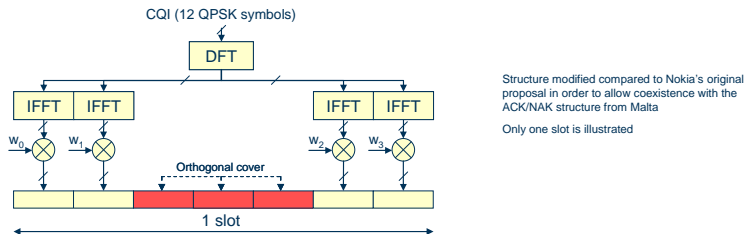
| R1-072036 | PUCCH (CQI) structure and multiplexing | Qualcomm Europe | |

The document was presented Xiaoxia Zhang from Qualcomm.

Discussion (Question / Comment):
Decision: Document is noted.

| R1-072399 | Multiplexing method for uplink non-data-associated control signals | Alcatel-Lucent | |

The document was presented Jungah Lee from Alcatel-Lucent.

Proposal to use a CDM structure for non-data-associated control signal allowing transmission of different number of CQI and ACK/NAK bits in the same time-frequency resource.

Discussion (Question / Comment): No simulation results yet available but Alcatel-Lucent plans FFS
Decision: Document is noted.

| R1-072438 | CDMA-based Multiplexing Method for Multiple ACK/NACK and CQI in E-UTRA Uplink | NTT DoCoMo | |

The document was presented by (…) from NTT DoCoMo.

Discussion (Question / Comment):
Decision: Document is noted.

| R1-072608 | Performance Comparison of CAZAC sequence modulation and DFT-S-OFDM methods | Nokia Siemens Networks, Nokia | (R1-072308) |

The document was presented by (…) from Nokia.

Discussion (Question / Comment):
Decision: Document is noted.

| R1-072098 | Comparison between Different CQI Transmission Structures | Huawei | |

The document was presented by (…) from Huawei.

Discussion (Question / Comment): No comment
Decision: Document is noted.

| R1-072210 | ACK/NAK and CQI Multiplexing Capacity and Performance in E-UTRA UL | Texas Instruments | |

The document was presented by Aris Papasakellariou from TI.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072591	CQI Transmission in Multiple Subframes	Panasonic	

The document was presented by Alexander Golitschek from Panasonic.

Discussion (Question / Comment):
Decision: Document is noted.

CQI reporting

R1-072038	UL control signalling in support of DL SIMO and SU-MIMO users	Qualcomm Europe	

The document was presented Xiaoxia Zhang from Qualcomm and proposes 5-bit CQI (DL SIMO) to 10-bit CQI (2x2 SU-MIMO).

Discussion (Question / Comment):
Decision: Document is noted.

R1-072077	CQI Feedback Control and Content in E-UTRA	Panasonic	

The document was presented by Alexander Golitschek from Panasonic.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072177	CQI Feedback Overhead with CDM Uplink Control Channel Design	Motorola	

The document was presented by (…) from Motorola.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072590	Proposed way forward for CQI Feedback Control and Content in E-UTRA	Panasonic, Mitsubishi Electric, Philips, NTT DoCoMo, Huawei	(R1-072076)

The document was presented by Alexander Golitschek from Panasonic.

Discussion (Question / Comment):
Decision: Document is noted.

Way forward:

- The time and frequency resources that can be used by the UE to report CQI are controlled by the eNB
- Baseline is periodic CQI reporting. The possibility of linking the configuration of a periodic reporting cycle to a persistent scheduling cycle should be considered. Trigger-based CQI reporting, in addition to periodic CQI reporting, is FFS.

- Types of CQI reporting:

  o Wideband CQI report: up to 5 bits (assuming SIMO)

  o Multi-band CQI report: equivalent resolution up to 5 bits per sub-band (assuming SIMO)

    ▪ Sub-band is defined as the band to which a CQI value is related

  o CQI reports for applicable MIMO schemes

  o Combination of the above types of CQI reporting is FFS

  o Overhead is added, e.g. from compression schemes or due to combination of different CQI reports

- Total number of CQI bits (including overhead) in a PUCCH subframe per UE shall not exceed approximately 10 bits (independently from the system bandwidth) assuming QPSK and an approximate code rate of up to 1/2, actual modulation and coding FFS

The following set of documents has not been treated.

R1-072037	Coding structure for CQI + ACK	Qualcomm Europe	
R1-072054	Consideration on CQI reporting	SHARP	
R1-072059	PUCCH consideration from implementation perspective	Toshiba	
R1-072062	CQI feedback Evaluation with Measurement Error	Mitsubishi Electric	
R1-072076	Proposed way forward for CQI Feedback Control and Content in E-UTRA	Panasonic	R1-072590
R1-072078	DCT Partitioning for CQI Reporting	Panasonic	
R1-072099	System level evaluation of CQI compression schemes for E-UTRA	Huawei	
R1-072121	Multiplexing of uplink data-non-associated control signal with data	NEC Group	
R1-072122	Multiplexing of uplink data-non-associated control signal without data	NEC Group	
R1-072123	Frequency Hopping Pattern for EUTRA Uplink	NEC Group	
R1-072128	CQI transmission in the absence of uplink data	ETRI	
R1-072175	E-UTRA Precoding Feedback Overhead	Motorola	
R1-072176	Joint feedback for E-UTRA downlink precoding and CQI	Motorola	
R1-072178	CQI Feedback Schemes for E-UTRA	Motorola	
R1-072179	CQI Coding Schemes	Motorola	
R1-072180	Performance of CQI Feedback Schemes	Motorola	
R1-072181	Uplink Feedback for E-MBMS	Motorola	
R1-072182	Uplink Common Control Channel	Motorola	
R1-072183	Precoding Matrix Feedback BER Requirements	Motorola	
R1-072184	Data non-associated control signalling with odd number of RBs	Motorola	
R1-072185	Multiplexing of UL L1/L2 control signals in the absence of data	Motorola	
R1-072186	UL L1/L2 control signals with data Multiplexing Details	Motorola	
R1-072187	Reference Signal Structure for Uplink ACK/NACK	Motorola	
R1-072211	Uplink ACK/NAK Transmission for Persistently Scheduled Downlink Packets	Texas Instruments	
R1-072212	Transmission of Downlink CQI in Uplink	Texas Instruments	
R1-072213	Design Aspects of MIMO Related UE Feedback	Texas Instruments	
R1-072214	CQI Feedback Reduction Scheme for E-UTRA	Texas Instruments	

R1-072224	UL control signaling in presence of data	Samsung	
R1-072227	Implicit resource allocation for uplink ACK/NACK signaling	Samsung	
R1-072242	Performance of single CQI feedback for 2CW SU-MIMO	Samsung	R1-072611
R1-072244	Uplink control channel design	Samsung	
R1-072258	Uplink control channel structure for TDD with type II frame structure	CATT	
R1-072307	Uplink Scheduling Request for LTE	Nokia Siemens Networks, Nokia	
R1-072308	Performance Comparison of CAZAC sequence modulation and DFT-S-OFDM methods	Nokia Siemens Networks, Nokia	R1-072608
R1-072309	CQI capacity and coverage of PUCCH	Nokia Siemens Networks, Nokia	
R1-072310	ACK/NACK modulation with UL data	Nokia Siemens Networks, Nokia	
R1-072311	Multiplexing of ACK/NACK and CQI from the same UE	Nokia Siemens Networks, Nokia	
R1-072312	UL/DL resource allocation signaling errors and their impact to UL multiplexing design	Nokia Siemens Networks, Nokia	R1-071678
R1-072313	ACK/NACK transmission with UL data	Nokia Siemens Networks, Nokia	R1-071679
R1-072314	CQI Design and its Impact to DL Performance	Nokia Siemens Networks, Nokia	R1-071682
R1-072315	Multiplexing capability of CQIs and ACK/NACKs form different UEs	Nokia Siemens Networks, Nokia	
R1-072348	Allocation of UL ACK/NACK index	LGE	
R1-072357	Link-level performance evaluation of MIMO CQI overhead reduction in spatial domain	LGE	
R1-072358	Consideration on control channel multiplexing structure with/without Sounding RS	LGE	
R1-072367	Performance Evaluation of Haar-Based Compression for CQI Feedback for E-UTRA	InterDigital	R1-072554
R1-072413	Incremental CQI Feedback Scheme and Simulation Results	Alcatel-Lucent	
R1-072437	Persistent Scheduling in E-UTRA	NTT DoCoMo	
R1-072439	Implicit Resource Allocation of ACK/NACK Signal in E-UTRA Uplink	NTT DoCoMo	
R1-072440	Performance Enhancement Techniques for ACK/NACK in E-UTRA Uplink	NTT DoCoMo	
R1-072441	Basic Method for CQI Feedback in E-UTRA	NTT DoCoMo	
R1-072442	Feedback Control for MBMS in E-UTRA	NTT DoCoMo	
R1-072475	Allocation of uplink control resources	Ericsson	
R1-072480	CDMA based Multiplexing of ACK/NACK and CQI Control Information in E-UTRA Uplink	KDDI	
R1-072554	Performance Evaluation of Haar-Based Compression for CQI Feedback for E-UTRA	InterDigital	(R1-072367)
R1-072611	Performance of single CQI feedback for 2CW SU-MIMO	Samsung	(R1-072242)
R1-072474	Uplink CQI reporting	Ericsson	

8.   Closing of the meeting

RAN1 Chairman, Mr. Dirk Gerstenberger expressed his appreciation to the delegates and the host, the Japanese Friends of 3GPP for their supports.

The meeting was closed at 17:05.

Annex A: List of participants at RAN1 #49

Please see excel file attached to this report

Annex B: TSG RAN WG1 meetings in 2007

TITLE	TYPE	DATES	LOCATION	CTRY
3GPPRAN1#47bis	WG	15 - 19 Jan 2007	Sorrento	IT
3GPPRAN1#48	WG	12 - 16 Feb 2007	St Louis	US
3GPPRAN1#48bis	WG	26 - 30 March 2007	St Julians	Malta
3GPPRAN1 LTE TDD AH	AH	17-20 April 2007	Beijing	China
3GPPRAN1#49	WG	07-11 May 2007	Kobe	JP
3GPPRAN1#49bis	WG	25 - 29 June 2007	Orlando	USA
3GPPRAN1#50	WG	20-24 Aug 2007	Athens	Greece
3GPPRAN1#50bis	WG	Oct 2007	TBD	China
3GPPRAN1#51	WG	05 - 09 Nov 2007	Jeju	KR

MEETING TYPES	
AH = Ad Hoc	CM = Chairmen's meeting
JM = Joint	OR = Ordinary
PM = Preparatory Meeting	RG = Rapporteurs Group
RM = Resolution Meeting	SG = Steering Group
ST = Startup Meeting	TG = Task Group
WG = Working Group	XO = Extraordinary

Annex C: List of CRs agreed at RAN1#49

Spec	CR	R	Cat	Rel	R1 Tdoc	Title	Work Item
25.215	172	5	F	7	R1-072617	Clarification of UE measurement definitions for RX diversity	RlnImp-RxDiv
25.212	248	1	F	7	R1-072387	Correction to coding of HS-SCCH to support FDD MIMO	MIMO-Phys
25.211	241	-	F	7	R1-072066	Clarification for CPC feature	RANimp-CPC
25.214	438	6	F	7	R1-072562	Clarification for CPC feature	RANimp-CPC
25.214	450	-	F	7	R1-072565	Clarification on power control operation for F-DPCH enhancement	TEI7
25.211	239	3	B	7	R1-072566	Introduction of PICH to HS-SCCH timing relation and Tx diversity definition for HS-DSCH without associated DL dedicated channel	RANimp-Enhstate
25.222	133	1	F	7	R1-072551	Modification on HARQ process ID signalling for 1.28Mcps TDD	LCRTDD-EDCH-Phys
25.827	001	-	F	7	R1-072260	Corrections to TR25.827 for LCR TDD EUL	LCRTDD-EDCH-Phys
25.221	143	-	B	7	R1-072488	Addition of spreading factor 2 for MBSFN time slot for 1.28Mcps	MBMSE-RANPhysLCRTDD
25.201	34	-	B	7	R1-072483	Support for 1.28Mcps TDD MBSFN operation	MBMSE-RANPhysLCRTDD
25.221	142	-	B	7	R1-072484	Support for 1.28Mcps TDD MBSFN operation	MBMSE-RANPhysLCRTDD
25.222	135	-	B	7	R1-072485	Support for 1.28Mcps TDD MBSFN operation	MBMSE-RANPhysLCRTDD
25.223	045	-	B	7	R1-072486	Support for 1.28Mcps TDD MBSFN operation	MBMSE-RANPhysLCRTDD
25.224	162	1	B	7	R1-072567	Support for 1.28Mcps TDD MBSFN operation	MBMSE-RANPhysLCRTDD
25.201	030	1	B	7	R1-072502	Support for DL-only SFN operation for MBMS FDD	MBMSE-RANPhysFDD
25.211	237	3	B	7	R1-072618	Support for DL-only SFN operation for MBMS FDD	MBMSE-RANPhysFDD
25.212	247	1	B	7	R1-072504	Support for DL-only SFN operation for MBMS FDD	MBMSE-RANPhysFDD
25.213	087	1	B	7	R1-072505	Support for DL-only SFN operation for MBMS FDD	MBMSE-RANPhysFDD
25.214	449	-	B	7	R1-072506	Support for DL-only SFN operation for MBMS FDD	MBMSE-RANPhysFDD
25.201	029	1	B	7	R1-072519	Support for MBSFN operation	MBMSE-

Spec	CR	R	Cat	Rel	R1 Tdoc	Title	Work Item
							RANPhysTDD
25.221	140	2	B	7	R1-072520	Support for MBSFN operation	MBMSE-RANPhysTDD
25.222	132	1	B	7	R1-072521	Support for MBSFN operation	MBMSE-RANPhysTDD
25.223	043	1	B	7	R1-072522	Support for MBSFN operation	MBMSE-RANPhysTDD
25.224	160	1	B	7	R1-072523	Support for MBSFN operation	MBMSE-RANPhysTDD
25.214	446	1	C	7	R1-072594	Enhanced F-DPCH and CPC DL PC timing	TEI7

Annex D: List of Outgoing LSs from RAN1#49

R1	Response to (Ic LS)	To	Cc	Title	Contact	Ref'd /Attachd Tdoc	Release	WI
R1-072547	R1-072003 (R2-071596)	R2		Reply LS on CELL_PCH/URA_PCH operation in Enhanced CELL_FACH	Qualcomm		Rel-7	Enhanced CELL-FACH state in FDD
R1-072549	R1-072537 (R2-071606)	R2		Reply LS on uplink VoIP scheduling	NTT DoCoMo		Rel-8	LTE
R1-072580		RAN		LS on LTE performance verification work	NTT DoCoMo	R1-072578, R1-072261, R1-072579, R1-072570	Rel-9	LTE
R1-072588		R2, R3		LS on UL DPCCH slot format#4	Ericsson	R1-072496	Rel-7	RANimp-CPC
R1-072589		RAN, R2		LS on Release-7 dependencies	Samsung		Rel-7	Rel-7 features
R1-072548	R1-072005 (R2-071603)	R2		DRAFT Reply LS on CQI feedback	Philips, Freescale, LGE, Mitsubishi, Nortel, Panasonic, Samsung		Rel-8	LTE
R1-072637		R2	R3	Reply to LS on Radio Efficiency for delivery of Broadcast/Multicast services	Motorola		Rel-8	LTE
R1-072630		R2		Draft Reply LS on Introduction of Additional DCH RAB Combinations into 25,993	Nokia Siemens Networks		Rel-5	TEI7
R1-072623		R2	R4, R3	LS on Updated information on Layer-1-related system information	Ericsson		Rel-8	LTE

Annex E: List of Tdocs at RAN1 #49

Please see excel file attached to this report

Annex F: List of actions

1. Outgoing LS.

- R1-072548 Draft reply LS on CQI feedback (Philips) – Deadline is until 21st of May.

- Further to Incoming LS from RAN2 (R1-072622) on System information, email discussion should be set-up to attempt preparing the response to RAN2.

- R1-072630 Draft reply LS on introduction of additional DCH RAB combinations into 25.993 (NSN) – Deadline is until 21st of May.

- Discussion "on maintenance of UL synchronization" shall continue over email and hopefully agreement on LS shall be reached before the next RAN2 meeting. R1-072279 must be used as basis for discussion.

-

2. Text proposal for TS and TR

None

3. Email approval of CRs.

- R1-072559 25.212 CR0251 (Rel-7, F) "HS-SCCH orders in MIMO mode" (Ericsson) – Deadline is until 21st of May.

- R1-072631 25.214 CR451 (Rel-7, B) "Enhanced CELL-FACH procedure" (Qualcomm) – Deadline is until 24th of May.

-

APPENDIX F

Title: **(Draft1) Report of the 35th 3GPP TSG RAN meeting (Lemesos, Cyprus, 06-09 March 2007)**

Document for: **Comments**

Source: **3GPP support**

==**Please send you last comments by the 29h March 2007**==

15h March 2007
Claude Arzelier
ETSI Mobile Competence Center
Claude.arzelier@etsi.org

Contents

Executive summary

TSG RAN meeting #35 took place in Lemesos, Cyprus. The meeting started at 9:00 on Tuesday 06th March 2007 and finished on the Friday 09th March 2007. 129 participants attended the meeting and 268 documents were submitted.

Change Requests

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

Release	WG1	WG2	WG3	WG4	WG5	TSG RAN	Total
Release 99	0	1	0	2	42	0	45
Rel-4 CRs (Rel-4 excluding Cat A)	0	1 (0)	0	4 (2)	9	0	14 (11)
Rel-5 CRs (Rel-5 excluding Cat A)	0	3 (2)	1	4 (0)	27	0	35 (30)
Rel-6 CRs (Rel-6 excluding Cat A)	3 (3)	16 (13)	12 (11)	6 (2)	121	0	158 (150)
Rel-7 CRs (Rel-7 excluding Cat A)	37 (34)	53 (37)	55 (43)	11 (5)	25	2	183 (146)
Total CRs (Total excluding Cat A)	40 (37)	74 (53)	68 (55)	25 (11)	224	2 (2)	462 (382)
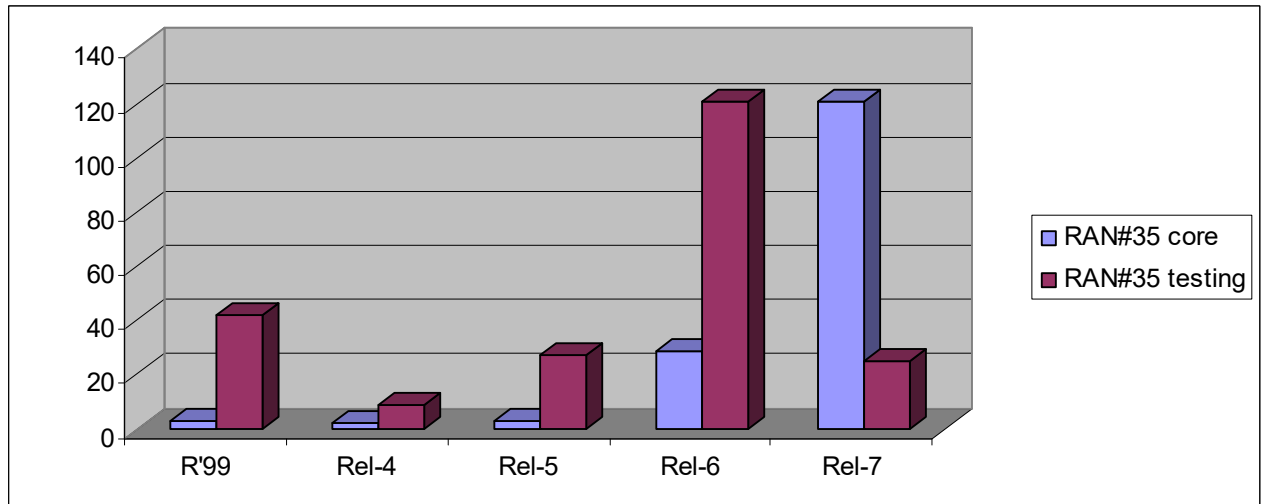
(Number of approved CRs. Corresponding CRs to later releases excluded).

In RAN WG1/WG2/WG3/WG4, Release 7 Change Requests were mainly dedicated to the introduction of 1.28 Mcps TDD Enhanced Uplink, MIMO and continuous connectivity for packet data users, and TEI7. Some of the Release 6 Change Requests deal with MBMS corrections.

Incoming Liaisons

Liaison Statements from CT (and RAN WG4) were received on the subject of New High Speed Protocol for the UICC. RAN WG4 will pursue investigation on this.

One LS on LS on GERAN – LTE interworking was received from GERAN, following the earlier workshop (10-11 January 2007) on the subject. Scenarios are pursued and inputs from network operators is welcome.

Liaison Statements fro SA1 and SA4 were received on Service Requirement for MBMS LTE, indicating switching time requirements. This will be further investigated by the RAN WGs.

An LS from SA5 on working relationship for production of SAE/LTE O&M Specifications was discussed, a joint meeting mat be organised between SA5 and RAN3.

ITU-R Issues

The main outcome of the work in conjunction with ITU-R ad-hoc is the approval of the documents relevant to the submission towards ITU-R WP8F of revision 7 of Rec. M.1457. In particular, LTE Stage 2 description and relevant specification were included in the submission paper.
In addition, a new update submission toward revision 8 of Rec. M.1457 was approved, with the inclusion of new Work Items approved at this meeting.

Release 7 Work Items and Study Items

Work Items completed at this meeting:
ROHC Performance Conformance: Test Aspects
1.28 Mcps TDD Enhanced Uplink: Physical Layer
1.28 Mcps TDD Enhanced Uplink: Layer 2 and 3 Protocol Aspects
1.28 Mcps TDD Enhanced Uplink: UTRAN Iub/Iur Protocol Aspects
MIMO - Physical layer
MIMO - Layer 2,3 aspects
MIMO - Iub/Iur Protocol Aspects
Interface to Control Tower Mounted Amplifiers (TMAs) – (however extension provided for SA5 part)
Continuous connectivity for packet data users.

Work Items still open for which an exception form for inclusion in the Rel-7 was provided at this meeting:
UE Antenna Performance Evaluation Method and Requirements
Inclusion of Uplink TDOA UE positioning method in the UTRAN specifications
Global Navigation Satellite System (GNSS) in UTRAN
MIMO - RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing
1.28 Mcps TDD Enhanced Uplink - RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing
64QAM for HSDPA
Higher Order Modulation in HSUPA
MBMS FDD Physical Layer Enhancements
MBMS TDD Physical layer Enhancements
L2 support for high data rates
Enhanced CELL_FACH state in FDD
TEI7 (for one more cycle - no exception form provided).

Long Term Evolution

RAN WG1 stage 2 work was almost completed, RAN WG2 and RAN WG3 have some remaining issues to be covered in the Stage 2 specification. This radio Stage 2 specification TS 36.300 was approved and placed under change control. TTCN3 will be used for the validation testing side (RAN WG5). RAN WG3 will further discuss the issue of Tamper resistant notion with SA3 (e.g. at the RAN WG3 Kobe meeting in May 2007).

Project management - Elections

Results of the elections are:

Chairman by acclamation:
Mr Francois Courau, Alcatel-Lucent, Organisational Partner ETSI.

Vice-Chairmen by acclamation:
Samsung, TTA.
Mr Takehiro Nakamura-san, NTT DoCoMo, ARIB.
Mr Don Zelmer, Cingular/AT&T, ATIS.

New Work Items and Study Items

New Work Items:
  Conformance test aspects – 64QAM for HSDPA (FDD)
  Conformance test aspects – Improved L2 support for high data rates
  Conformance test aspects – Multiple Input Multiple Output antennas (MIMO) for FDD
  Conformance test aspects – Introduction of 16QAM in HSUPA (FDD)
  Conformance test aspects – Continuous connectivity for packet data users
  UMTS in 1500 MHz Bands
  UMTS in 700 MHz Bands
  UMTS in 2300 MHz Bands
  MBMS LCR TDD physical layer enhancements
  Further Improved Minimum Performance Requirements for HSDPA UE (FDD) - Two-Branch Interference Cancellation
  Creation approved in principle: Conformance test aspects - Enhanced Cell_FACH State in FDD

New Study Item:
  3G Home NodeB.

A RAN Workshop will be held on the Monday 28th May 2007 (the Monday before RAN-36) in Busan, on the subject of radio mobility with non-3GPP radio technologies, in order to clarify the scope of proposed the Study Item in RP-070133.

The Study Item on HSPA evolution was kept open, next plenary will assess if a new Work Item is needed (see RP-070258).

1 Opening of the Meeting

Francois Courau, chairman of TSG RAN, opened the meeting the 06th March 2007 at 9:00. Per Beming from Ericsson welcomed the participants on behalf of the European Friends of 3GPP and explained the meeting arrangements.

2 Approval of the Agenda

RP-070001   Draft agenda TSG RAN #35   Chairman

This document was revised before the meeting in RP-070143:

RP-070143   Revised agenda TSG RAN #35   Chairman

The agenda was approved without comments.

3 Approval of the meeting report on TSG-RAN #34

RP-070203   Revised Report of TSG RAN-34, Budapest, Hungary, 28 Nov -
             01 Dec 2006 (updates indicated with change bars)   ETSI MCC

The approved version of this report (RP-070203, with change bars accepted) is available in RP-070204:

RP-070204   Revised Report of TSG RAN-34, Budapest, Hungary, 28 Nov -
             01 Dec 2006   ETSI MCC

(This is the version of the report with change bars accepted).

4 Reminder for IPR declaration

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

5 Chairman Report of meetings

5.1 Workshop GSM/EDGE LTE Handover

There is an LS from GERAN on the subject (RP-070190).

RP-070205   Minutes of the workshop on LTE-GSM handovers, Sophia-
             Antipolis, France, 10-11 January 2007   ETSI MCC

The minutes were approved from the RAN viewpoint (conditional to CT and SA approval).

6 Liaisons from other groups

6.1 Groups outside 3GPP

The following incoming LSs were received. They will be treated under agenda item 8.1.2:

RP-070186   (COM 2 - LS 67, to TSG RAN). LS from ITU-R SG2 on Cell Broadcast Message   ITU-R SG2
             Identifiers

Giovanni Romano (Telecom Italia) presented this document.

Denis Fauconnier (RAN WG2 Chairman) clarified that Cell broadcast in LTE will be supported via MBMS. Nakamura-san (NTT DoCoMo) commented that emergency notification is needed within LTE. Francois Courau commented that definition of the requirement is expected from TSG SA.

Han van Bussel (T-Mobile) and Tim Mousley (Philips) commented that if the feature becomes mandatory from a regulator perspective, then not requiring the full MBMS implementation (in both network and mobile) would be useful.

This will be discussed with the SA1 chairman the following weeks during the TSG SA.

Denis Fauconnier (RAN WG2 Chairman) commented that it would be useful to clarify which minimum cell broadcast solution is needed exactly, in order to assess the simplest solution.

The TSG RAN Chairman will elaborate some text and report this to the SA.

RP-070187   (281 v2(8F/TEMP/281-E), to TSG RAN0. LS from ITU-R WP8F on the schedule for   ITU-R WP8F
             updating recommendation ITU-R M.1457 to revision 7

Giovanni Romano (Telecom Italia) presented this document.

The document was noted as the elements were reviewed when dealing with the discussion on the ITU-R Ad Hoc Group.

RP-070188   8F/TEMP/479(Rev.3), to RAN). LS from ITU-R WP 8F on the preliminary draft new   ITU-R WP8F
             Report ITU-R M.[IP CHAR] "Key technical and operational characteristics for access
             technologies to support IP applications over land mobile systems" in response to
             Question ITU-R 223-1/8

Giovanni Romano (Telecom Italia) presented this document. The document was noted.

RP-070202   ITU-T FG IdM
             Report of ITU-T FG IdM meeting, Geneva, Switzerland, 13-16 February 2007   Chairmanship

The document was noted.

RP-070212   (LSituCT, Cc TSG RAN). LS to TSG CT on the documents to be considered for the   ITU-R

Revision 7 of Recommendation ITU-R M.1457

Giovanni Romano (Telecom Italia) presented this document. The document was noted.

| RP-070125 | LS from GSMNA CTO AG on User Equipment (UE) and Mobile Station (MS) Over the Air Performance Requirements | GSMNA |

The document was presented by Marc Grant from AT&T.
This was handled with the approval of TS 25.144.
The LS was noted.

| RP-070247 | LS from TFES on IMT-2000/UTRA Category B spurious emission limits | TFES |

Elements covering the Base Station part were presented in the CRs to be approved from RAN WG4. Klas Sjerling from Ericsson commented that update for the repeater is still open. RAN WG4 was tasked to look into the repeater issue.

6.2 TSG SA, TSG CT, TSG GERAN

| RP-070189 | (CP-060742, Cc TSG RAN). LS on New High Speed Protocol for the UICC | CT |
| RP-070193 | (R4-070329, Cc TSG RAN). Reply LS to CT on New High Speed Protocol for the UICC | RAN WG4 |

Howard Benn (Motorola) presented those documents. Further input papers are expected at the next RAN WG4 meeting. Kevin Holley (Telefonica O2) and Giovanni Romano (Telecom Italia) enquired/complained about the lack of progress of the work since December, adding that if issues are raised, this should be accompanied with contributions.
Han van Bussel (T-Mobile) and Jussi Numminen (Nokia) commented that this needs to be assessed within RAN WG4.
Per Ernström (Teliasonera) commented that this issue is not new.
Howard Benn (RAN WG4 Chairman) reported that document R4-070237 (Nokia) within RAN WG4 listed a number of potential technical issues.
Edgar Fernandes (Motorola) commented that the SMP requirements are not guaranteed today. Who should develop EMC requirements: SMP, or another group? Francois courau (Chairman) commented that this may be an EMC issue, which may be outside of RAN WG4 mandate.
Further company contributions are invited within RAN WG4.

| RP-070190 | (GP-070549, to TSG RAN). LS on GERAN – LTE interworking | GERAN |

Jacques Achard (GERAN1 Chairman) presented this document.
Han van Bussel (T-Mobile) welcomed the reduction of options, but reminded the comment from network operators at the workshop that investment at the GERAN side should be minimised.
Jacques Achard commented that the initial aim of the LS was to try to reduce the number of scenarios and that feedback from Network operators is needed.

| RP-070197 | (S1-070283, to RAN). Reply LS to RAN, SA4 on Service Requirement for MBMS LTE | SA WG1 |
| RP-070199 | (S4-070224, to RAN). Reply LS (to SA1 and RAN) on Service Requirement for MBMS LTE | SA WG4 |

Francois Courau (Chairman) and Paolo Usai (ETSI MCC) presented those documents.

A consequence is that there may be a 3 seconds delay before the switch, but no interruption (thanks to the buffering) from the service perspective.

SA1 refers to the switching time between lower layers (1 sec), whereas SA4 speaks of 3-4 seconds of codec switch.

RAN WGs will pursue the work, taking into account the one second maximum duration.

| RP-070201 | (S5-070085, Cc RAN). LS on requirement for Trace in SAE/LTE | SA WG5 |

Alexander Vesely (RAN WG3 Chairman) presented this document.

The document was noted. RAN WG3 will keep pursuing the issue.

| RP-070198 | (S1-070297, Cc RAN). Reply LS to RAN2 on minimum number of supported SAE bearers in the UE | SA WG1 |

The document was presented by the Chairman and noted.

| RP-070200 | (S5-070083, Cc RAN). LS on working relationship for production of SAE/LTE O&M Specifications | SA WG5 |

The document was revised before presentation and replaced by RP-070206:

| RP-070206 | (S5-070083, Cc RAN). LS on working relationship for production of SAE/LTE O&M Specifications | SA WG5 |

Alexander Vesely (RAN WG3 Chairman) presented this document.

RAN WG3 will check with the SA5 Chairman on how to handle the potential joint meeting.

| RP-070261 | (CP-070245, Cc RAN). LS to TSG RAN ITU-R Ad-hoc on the documents to be considered for Revision 7 of Recommendation ITU-R M.1457 | CT |

Giovanni Romano (Telecom Italia) presented this LS.

The answer was provided by Telecom Italia (e.g. RP-070228).

6.3   TSG RAN WGs

RP-070195	(R2-070412, Cc RAN). LS on PingPong problem in case of search for higher priority PLMN	RAN WG2
RP-070194	(C1-070612, Cc RAN). Reply LS (to RAN2) on PingPong problem in case of search for higher priority PLMN	CT WG1
RP-070191	(R2-071101, Cc TSG RAN). LS on PingPong problem in case of search for higher priority PLMN	RAN WG2

Per Ernström (TeliaSonera) challenged the sentence in RP-070195 stating that the 3 minutes timer was causing the problem.

CT will be informed and asked to consider the issue. At the end of the meeting, RAN was informed that CT had taken a decision on this issue.

| RP-070192 | (R3-070486, to TSG RAN). LS on "HSPA Architecture Evolution" | RAN WG3 |

Will be treated under the HSPA evolution discussions.

| RP-070196 | (R2-070434, Cc RAN). LS to IETF RoHc (cc RAN) on questions regarding the RoHC Protocol | RAN WG2 |

Juho Pirskanen (Nokia) presented this document.

Francois Courau (Chairman) enquired about the backward compatibility of the solution. The issue is coming from the fact that the way of working of IETF is to elaborate a new RFC each

time modification are identified. The resulting RFC replaces the previous one but very seldom take into account the backward compatibility issues (TSG RAN Chairman).

7 Chairman and Vice Chairmen Elections

Result of elections:

Chairman by acclamation:
Francois Courau, Alcatel-Lucent, Organisational Partner ETSI.

Vice-Chairmen by acclamation:
HSamsung, TTA.
Tekehiro Nakamura-san, NTT DoCoMo, ARIB.
Don Zelmer, Cingular/AT&T, ATIS.

8 Status Report and Approval of contributions on Release '99, Release 4, Release 5 and Release 6

8.1 ITU-R Ad Hoc

8.1.1 Status report

RP-070176	ITU-R Ad Hoc Contact
Status Report	Person

Giovanni Romano (Telecom Italia) presented this document.
The report was noted.

8.1.2 Submission to ITU-R

RP-070177	Proposed Final Submission toward Rev 7 of M.1457	ITU-R Ad Hoc

Giovanni Romano (Telecom Italia) presented this document.
Annex 4 would need to be modified to incorporate LTE.
1.28 and 7.68 Mcps need to be added for TDD (Derek Richards, IPWireless).
The document was revised for annex 4 revision, in RP-070228:

RP-070228	Proposed Final Submission toward Rev 7 of M.1457	ITU-R Ad Hoc

Giovanni Romano (Telecom Italia) presented this document.
The document was approved (the document contains updates with changes bars and the previous version of the document).
This will be presented to TSG SA for approval before sending for further approval by the PCG.

RP-070178   Proposed update of UTRA FDD Overview (Section 5.1.1)   ITU-R Ad Hoc

Giovanni Romano (Telecom Italia) presented this document.

Some changes are expected, following changes for LTE.

The document was conditionally approved (conditional to the LTE discussions) in RP-070229:

RP-070229   Proposed update of UTRA FDD Overview (Section 5.1.1)   ITU-R Ad Hoc

Giovanni Romano (Telecom Italia) presented this document.

Howard Benn (Motorola) enquired if eUTRA or eUTRAN could be used instead of LTE.

The document was approved.

It will be presented for approval by TSG SA prior to sending it to the PCG for approval

RP-070179   Proposed update of UTRA TDD Overview (Section 5.3.1)   ITU-R Ad Hoc

Giovanni Romano (Telecom Italia) presented this document.

Some changes are expected, following changes for LTE.

Question on MBMS carriers: an update may be required for this (Anti Toskala, Nokia).

Additionally an update may be needed for RED.

The document was conditionally approved (conditional to the LTE discussions) in RP-070230:

RP-070230   Proposed update of UTRA TDD Overview (Section 5.3.1)   ITU-R Ad Hoc

Giovanni Romano (Telecom Italia) presented this document.

The document was revised in RP-070266,that was considered approved:

RP-070266   Proposed update of UTRA TDD Overview (Section 5.3.1)   ITU-R Ad Hoc

Approved version.

It will be presented for approval by TSG SA prior to sending it to the PCG for approval.

RP-070180   Proposed update of UTRA FDD list of Specs (Section 5.1.2)   ITU-R Ad Hoc

Giovanni Romano (Telecom Italia) presented this document.

Editorial update needed ('the present document' to change into 'this document') (CT need to revise the document anyway).

New specifications may have to be added in the list.

Should refer to the Rel-7 TS 25.319, rather than TS 24.309 (that is Rel-6).

The document was conditionally approved in RP-070231:

RP-070231   Proposed update of UTRA FDD list of Specs (Section 5.1.2)   ITU-R Ad Hoc

Giovanni Romano (Telecom Italia) presented this document.

The document was approved.

It will be presented for approval by TSG SA prior to sending it to the PCG for approval

RP-070181   Proposed update of UTRA TDD list of Specs (Section 5.3.2)   ITU-R Ad Hoc

Giovanni Romano (Telecom Italia) presented this document.

Depends on result of discussions at this meeting, hence the document was conditionally approved in RP-070232:

RP-070232   Proposed update of UTRA TDD list of Specs (Section 5.3.2)   ITU-R Ad Hoc

Giovanni Romano (Telecom Italia) presented this document.

TS 25.466 replaced TS 25.461, but TS 25.461 will still be stated in the document.

The document was approved.
It will be presented for approval by TSG SA prior to sending it to the PCG for approval

| RP-070182 | Draft accompanying letter for the submission of the updated Global Core Specifications (GCS) | ITU-R Ad Hoc |

Giovanni Romano (Telecom Italia) presented this document.
The document was approved.
It will be presented for approval by TSG SA prior to sending it to the PCG for approval

| RP-070183 | Draft Reminder for the OPs on the compliance with ITU-R procedures as it relates to Revision 7 of Recommendation ITU-R M.1457 | ITU-R Ad Hoc |

Giovanni Romano (Telecom Italia) presented this document.
The document was approved.
It will be presented for approval by TSG SA prior to sending it to the PCG for approval

| RP-070184 | Proposed LS to SA on the list of Specs | ITU-R Ad Hoc |

Giovanni Romano (Telecom Italia) presented this document.
Content will be reviewed, taking into account the outcome of the discussions of this meeting.
Revised in RP-070251.

| RP-070251 | LS to TSG SA on the documents to be considered for the Revision 7 of Recommendation ITU-R M.1457 | TSG RAN |

Giovanni Romano (Telecom Italia) presented this document.
RP-070231 and RP-070232 to be attached.
'To: SA" will be added.
The proposed LS was approved in RP-070265.

| RP-070265 | LS to TSG SA on the documents to be considered for the Revision 7 of Recommendation ITU-R M.1457 | TSG RAN |

Approved version.

| RP-070185 | Update Submission for UTRA FDD and TDD toward Revision 8 of Recommendation ITU-R M.1457 | ITU-R Ad Hoc |

Giovanni Romano (Telecom Italia) presented this document.
Inclusion of new WIs may affect the list. The document was revised in RP-070233.

| RP-070233 | Update Submission for UTRA FDD and TDD toward Revision 8 of Recommendation ITU-R M.1457 | ITU-R Ad Hoc |

Giovanni Romano (Telecom Italia) presented this document.
The document was revised (to include the LCR part on enhanced MBMS) in RP-070267:

| RP-070267 | Update Submission for UTRA FDD and TDD toward Revision 8 of Recommendation ITU-R M.1457 | ITU-R Ad Hoc |

Giovanni Romano (Telecom Italia) presented this document.
The document was approved.
It will be presented for approval by TSG SA prior to sending it to the PCG for approval

| RP-070079 | Updating of ITU-R Recommendations M.1580 and M.1581 on unwanted emission characteristics to include IMT-2000 expansion bands | Cingular Wireless/AT&T |

Marc Grant (Cingular Wireless) presented this document.

ITU-R ad-hoc is tasked to approve this documentation by correspondence. Giovanni Romano reminded that deadline for submission is 14th May. Deadline for PCG approval will be 04th May.
RAN deadline will be 27th April (for the ITU-R to send the latest version on the RAN reflector).

8.2 TSG RAN WG1

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

RP-070024	Status Report WG1	RAN WG1 Chairman

Dirk Gerstenberger (RAN WG1 Chairman presented this document.
RAN WG1 activity since last TSG RAN can be summarized as follows:

Maintenance, TEI:
   3 CRs agreed on HS-SICH for LCR TDD (Rel-6, Rel-7)
   2 CRs agreed on Enhanced F-DPCH (Rel-7)
   2 CRs agreed on Measurements FDD, TDD (Rel-7).
LTE:
   Progressing good overall
      Joint session with RAN2 on broadcast of system information
   Stage 2 completed, many stage 3 decisions taken already
   RAN1 specifications presented for information.
(Decisions on LTE):
   Numerology and basic transmission parameters
      UE TX bandwidth of 20MHz
         In addition to previous decision on 20MHz RX bandwidth
      DFT sizes of multiples of 2, 3 and 5
      7.5kHz sub-carrier spacing for MBMS on dedicated carrier
      TDM of MBSFN and non-MBSFN data on subframe basis
      Idle periods with TDD generic frame structure
      FDD Half Duplex
   Uplink modulation schemes
      QPSK, 16QAM and optional 64QAM for uplink
         No spectrum shaping
   Bit-level scrambling in UL and DL
   Channel coding
   SCH and Cell Search
   BCH, RACH
   Uplink Control
   Reference Signals
   MIMO downlink and uplink
   L1/L2 control signalling
   Power control
   Measurements
CPC, MIMO in UTRA, 64QAM for HSDPA (FDD):
   RAN1 sets of CRs presented for approval

Enhanced Cell FACH state in FDD:
> RAN1 CR presented for approval

16QAM for HSUPA (FDD):
> RAN1 set of CRs agreed as stable RAN1 baseline

MBMS L1 Enhancement (FDD/TDD):
> WIDs reviewed, sets of RAN1 CRs for TDD and FDD endorsed as RAN1 baseline

1.28 Mcps TDD Enhanced Uplink:
> RAN1 set of CRs agreed, TR 25.827 presented for approval.

Discussions: Kevin Holley (Telefonica O2) thanked the RAN WG1 Chairman for the progress achieved for LTE.
Dirk Gerstenberger (RAN WG1 chariman) clarified that for LTE MU-MIMO and SU-MIMO will be used in the downlink.
The report was noted.

RP-070025   List of CRs from RAN WG1   RAN WG1

This list of CRs is provided for information.

8.2.2   Discussions on decisions from WG1

No inputs.

8.2.3   Approval of CRs to R'99, Rel-4 , Rel-5, Rel-6 with linked CRs

RP-070113   CRs to 25.224 & 25.225 (Rel-6 & Rel-7) for corrections for LCR TDD   RAN WG1

25.224 CRs 0157rev2/0158rev2 were approved.
The other CRs in RP-070113 were:
> 0154rev1/0155rev1 were initially postponed, and then approved.
> CRs 0084rev1/0085rev1 were initially popstponed (linked with RAN4 CRs in RP-070084), and then approved.

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

No inputs.

8.3   TSG RAN WG2

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

RP-070026   Status Report WG2   RAN WG2
                                                               Chairman

Denis Fauconnier (RAN WG2 Chairman) presented this Status Report.
RAN WG2 activity since last TSG RAN can be summarized as follows:

> No R'99, no Rel-4 CR
> Only Release 5 corrections relate to 1.28 Mcps TDD (with 1 release 6 CR introducing new ROHC/PDCP test sequence applicable also in Release 5)
> MBMS corrections
> E-DCH corrections
> Stage 2 CR of Enhanced CELL_FACH for FDD completed
> Stage 2 CR of Enhanced Layer 2 completed
> Stage 3 CRs of CPC, MIMO, 64 QAM DL, 16 QAM UL
> TEI7.

LTE:
> UL & DL scheduling agreed
  • QoS architecture agreed
  • optimisations for VoIP under study
  • DRx principles agreed, final decision to make between two schemes
> RACH almost completed
> BCH basic structure agreed
  • ongoing work on definition of BCCH info and their mapping on BCH
  • means to reduce broadcast under study
> Mobility to be progressed in the next quarter
  • drivers already agreed
> Revisit of architecture (security & mobility) after recent decisions will be made in next meeting
> Documentation structure progressed
> See rapporteur report for details

Discussions: Juho Pirskanen (Nokia) highlighted that the 64QAM downlink WI, MIMO WI and Cell_FACH WI are all built on top of the L2 enhancement WI.
The report was noted.

RP-070027   List of CRs from RAN WG2   RAN WG2
This list of CRs is provided for information.

8.3.2   Discussions on decisions from WG2

No input.

8.3.3   Approval of CRs to Rel99, Rel-4, Rel-5 and Rel 6 with linked CRs

The documents in the table below contain CRs agreed by RAN WG2, together with their outcome at RAN-35:

Doc	Title	Source	Decision
RP-070148	25.307 CRs R'99/Rel-4/Rel-5 on Bands V/VI	RAN WG2	approved
RP-070149	25.323 CRs Rel-6/Rel-7 on RoHC performance testing	RAN WG2	approved
RP-070150	25.306 and 25.321 Rel-5/Rel-6/Rel-7 CRs on HSDPA for 1.28 Mcps TDD	RAN WG2	approved
RP-070151	25.306, 25.331, 25.346 and 25.922 Rel-6/Rel-7 CRs on MBMS	RAN WG2	approved
RP-070152	TR 25.993 CRs	RAN WG2	approved
RP-070153	25.331, 34.109 CRs Rel-6/Rel-7 on FDD Enhanced Uplink	RAN WG2	approved

RP-070154	25.331 Rel-6/Rel-7 CRs on PS Inter-RAT Handover	RAN WG2	approved
RP-070165	25.302, 25.308 Rel-6/Rel-7 CRs on HS-DSCH operation for TDD	RAN WG2	approved
RP-070173	25.922 CR on the introduction of GAN CS and PS Handover	RAN WG2	approved

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

No input.

8.4 TSG RAN WG3

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

RP-070028   Status Report WG3   RAN WG3 Chairman

Alexander Vesely (RAN WG3 Chairman) presented this Status Report.
RAN WG3 activity since last TSG RAN can be summarized as follows:

Release 6 activities:
> Still some CRs and discussions on Rel-6 MBMS functionality
> No CRs on Rel-6 HSPA functionality
> Other Iur/Iub
> > correction of usage of TNL Identifiers (ATM vs IP option) in case of combining
> corrections for RET
> > 6 out of 11 agreed Rel-6 cat F CRs against 25.463

Release 7 Work Items:
> (R1 WI) Continuous connectivity for packet data users
> > NBAP/RNSAP CRs agreed, RAN3 work finalised
> (R2 WI) Global Navigation Satellite System (GNSS) in UTRAN
> > no RAN3 activity
> (R2 WI) Enhanced CELL_FACH state in FDD
> > smooth finalisation of RAN3 CRs
> > linked with „improved L2" CRs
> (R3 WI) 1.28 Mcps TDD Enhanced Uplink: UTRAN Iub/Iur Protocol Aspects
> > all CRs apart from NBAP/RNSAP RAN3 agreed
> > NBAP/RNSAP CRs submitted company-wise, sufficiently checked on email reflector
> (R3 WI) Multiple Input Multiple Output Antennas Iub/Iur Protocol Aspects
> > NBAP/RNSAP CRs RAN3 agreed
> > work on extension of range of bit-rate related RAB Parameters
> > RANAP CR agreed, LS to relevant groups
> (R3 WI) Interface to Control Tower Mounted Amplifiers
> > specification work finalised
> > only one open issue (protocol version indication) □ postponed
> > TMA + RET application part in one specification 25.466
> > (intended to replace 25.463)

(R1 WI) 64QAM for HSDPA
   NBAP/RNSAP CRs agreed, RAN3 work finalised
(R1 WI) Higher Order Modulation for HSUPA
   technically endorsed NBAP/RNSAP CRs
(R2 WI) Improved L2 support for high data rates
   agreed CRs available for
   NBAP/RNSAP
   Iur/Iub UP protocols for CTrCHs (introduction of new frames)
   linked with Cell_Fach CRs.
(R1 WIs) MBMS FDD/TDD physical layer enhancements
   RAN1/RAN2 revised WIDs reviewed and target dates confirmed
   first draft CRs presented

HSPAEvolution:
   Matrix finalised.
   RNC Id Signalling Range Extension CRs available.
LTE (extract):
   Joint meeting RAN2-RAN3-SA2. UP ciphering & HC moved to the eNodeB.
   S1/X2 interface – signalling and user data transport:
      Control plane:
         SCTP based stack, not separate ptm stack for paging
         UE specific signalling reference will be part of AP message
      User plane:
         GTP-U based stack.
   S1/X2 Application Part - available Stage 2 description.
   Tracking area concept based on the feedack from CT1/RAN2
   S1 connectivity, pool area concepts: RAN trigger for inter-core node changes is for
   radio reasons only.
   LTE MBMS:
      Agreement to define broadcast/enhanced broadcast bearer services only.
      No MBMS related UE context data in nodes above eNodeB.

Discussions: It was reminded that November meeting in Korea will be hosted by Samsung.
The report was noted.

   RP-070029   List of CRs from RAN WG3   RAN WG3
This list of CRs is provided for information.

8.4.2   Discussions on decisions from WG3

No input.

8.4.3   Approval of CRs to Rel99, Rel-4, Rel-5 and Rel 6 with linked CRs

The documents in the table below contain CRs agreed by RAN WG3, together with their
outcome at RAN-35:

Doc	Title	Source	Decision
RP-070052	CRs (Rel-5 cat. F and Rel-6/Rel-7 cat. A) to TS 25.453	RAN WG3	approved

RP-070053	CRs (Rel-6 cat. F and Rel-7 cat. A) to TSs 25.423 and 25.433	RAN WG3	approved
RP-070054	CRs (Rel-6 cat. F and Rel-7 cat. A) to TSs 25.413	RAN WG3	approved
RP-070055	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.463	RAN WG3	approved
RP-070056	CRs (Rel-7 cat. F) on Rel-6 WIs	RAN WG3	approved

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

No input.

8.5 TSG RAN WG4

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

RP-070030   Status Report WG4   RAN WG4 Chairman

Howard Benn (RAN WG4 Chairman) presented this Status Report.
RAN WG4 activity since last TSG RAN can be summarized as follows:

R99, Category B spurious emission limits for UTRA BS reflecting new limits agreed with CEPT/ECC.
Rel-4, Modification to SEM for 1.28Mcps TDD
Rel-5, none.
TEI-6:
    FDD - Correction to Cell re-selection during an MBMS session
    TDD - Correction to UE measurement reporting requirements in Annex 8
    Introduction of HS-SICH detection performance for 1.28Mcps TDD
TEI-7:
    Discussion on high speed train requirements
        Work progress with agreement on simulation conditions
    Clarification on the deployment of UTRA TDD in Japan
        CRs to 25.102, 25.105
Corrections & clarifications on 7.68 Mcps TDD MTCH demodulation test case.
EMC updates from new IEC standards
Implementation error
    Performance requirements for 7.68 Mcps E-DCH associated downlink signalling channels: E-AGCH and E-HICH
MIMO
    NodeB and UE: progress (working assumptions, some simulation parameters).
UE Antenna Performance Evaluation Method and Requirements
    TS 25.144 presented for information, could not gain approval at RAN 4
LMU performance spec
    No progress in meeting, offline discussions continue
Further Improved Performance Requirements for UMTS/HSDPA UE (FDD),
Dynamic reconfigurable receivers: progress.
MBMS SFN
    Some concerns expressed over timing of the agreements in other working groups which will affect the RAN 4 work.

CPC, 16QAM, 64QAM: progressing.

LTE:
- Coexistence
  - Extensive simulation campaign finished
  - TR 36.942 presented for information
- UE
  - TR created to mirror specifications.
  - ACLR / spectrum mask agreed
  - UE spurious / unwanted emissions agreed
- Base Station
  - TR created to mirror spec
  - ACS agreed
  - EVM measurement method and requirement close to agreement
- Channel models
  - RAN4 #42
    - Models proposed, joint session with RAN 5 to get agreement at RAN 4 #43
  - RAN4 #43
    - Updated propagation conditions for BS/UE requirements
    - Approval
- Bands 'V' bandwidths
- Channel Raster
  - 100 kHz chosen
- Spectrum migration study started to show how to migrate from current systems to LTE

Discussions: Howard Benn called for companies to provide information on the planned inputs for the additional April meeting in Sophia-Antipolis, in order to plan the work accordingly. Per (TeliaSonera) enquired about the non-approval of the UE Antenna performance work in RAN WG4. This was for review at this meeting.
The report was noted.

RP-070031   List of CRs from RAN WG4   RAN WG4
This list of CRs is provided for information.

8.5.2   Discussions on decisions from WG4

No input.

8.5.3   Approval of CRs to Rel99, Rel-4, Rel-5 and Rel 6 with linked CRs

RP-070080   RAN4 CRs on TEI (set 1)   RAN WG4
The CRs were approved.

RP-070081   RAN4 CRs on TEI (set 2)   RAN WG4
The CRs were approved.

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

No input.

8.6 TSG RAN WG5

8.6.1 Report from WG5 including report on actions required from the previous meeting

RP-070002   Status Report WG5   RAN WG5 Chairman

Phil Brown (RAN WG5 Chairman) presented this document.
RAN WG4 activity since last TSG RAN can be summarized as follows:

FDD activities:
>   Based mainly on certification requirements
> - GCF WI-10/12/15/17 R99, Rel4 & Rel5, A-GPS, DTM   TEI_Test
> - GCF WI-13 Rel4 & Rel5   TEI4_Test & TEI5_Test
> - GCF WI-14 HSDPA   TEI5_Test
> - GCF WI-24, FDD Rel 6 Enhance   TEI6_Test
>   – 16 protocol (DSAC & Network Sharing)
>   – 3 RF, 4 RRM & 5 HSDPA RF performance
>   – Tx Diversity recently introduced
> - GCF WI-25, FDD Enhance U/L Rel-6   EDCH_Test
>   – 44 protocol, 6 RF & 1 RRM
> - GCF WI-30, A-GPS min perform (Rel-6)   TEI6_Test
>   – 7 RF tests
> - GCF WI-31, IMS CC Rel 5/ Rel6   IMS-CCR_Test
>   IMS2_CCR_Test
>   – Test selection not yet completed but…
>   – 31 Rel 5 & 9 Rel 6 sig tests now defined in TS 34.229
> - GCF WI-47 Inter Band Testing   RInImp-InterBand_Test
>   – 11 generic tests defined.

TDD related activities:
>   LCR TDD TTCN development   TEI4_Test & TEI5_Test
>   HCR TDD HSDPA   HSDPA_HCRTDD_Test
>   LCR TDD MBMS Sig   MBMS-UEConTest_SIGTDL
>   VHCR TDD   VHCRTDD-UEConTest
>   HCR & VHCR TDD MBMS MBMS-UEConTest_TDH
>   HCR & VHCR TDD Enh Uplink   RANimp-UEConTest_EDCHTDH

CRs for approval:
> - TS 34.108   16
> - TS 34.121-1   45
> - TS 34.121-2   3
> - TS 34.122   25
> - TS 34.123-1   85
> - TS 34.123-2   17

- TS 34.123-3 (Non TTCN)   5
- TS 34.123-3 (TTCN)   94
- TS 34.229-1   26
- TS 34.229-2   2
- In summary: 224 non TTCN CRs & 94 TTCN CRs
- Plus one CR submitted directly to RP#35 from TF160 for TS 34.123-3 (editorial update to annex to reflect the status) in RP-070100.

Discussions: For the UE antenna, a new TS 34.114 will be created.
The report was noted.

RP-070003   List of CRs from RAN WG5   RAN WG5

This list of CRs is provided for information.

RP-070004   Draft report of RAN5#34   3GPP Support

Provided for information.

RP-070005

MCC STF 160 report   STF 160 Leader

Phil Brown (RAN WG5 Chairman) presented this document.
63 men months allocated to RAN.
Rohde&Schwarz have increased their contributions from 3 to 6 man months.
TSG CT and TSG SA need to be informed about the TTCN3 choice. The RAN Chairman will include it in his report.
The document was revised (to include the LTE part) in RP-070235:

RP-070235   MCC STF 160 report   STF 160 Leader

Phil Brown (RAN WG5 Chairman) presented this document. The report was approved.
There is a plan for FDD and LCR TDD, but not for HCR TDD, so the RAN WG5 Chairman called for a plan of actions to be provided for the next RAN WG5 meeting. The report was approved.

8.6.2   Discussions on decisions from WG5

No input.

8.6.3   Approval of CRs to Rel99, Rel-4 , Rel-5 with linked CRs

RP-070010   34.229-3 v2.0.0 for approval to go under revision control as v5.0.0   Rapporteur (MCC STF 160)

The TS was approved and will be placed under change control, under version 5.0.0.

RP-070100   CR to 34.123-3: Add new verified and e-mail agreed TTCN test cases in the TC lists in 34.123-3 (prose), Annex A   MCC STF160

The CR was approved.

The documents in the table below contain CRs agreed by RAN WG5, together with their outcome at RAN-35:

Doc	Title	Source	Decision
RP-070101	RAN5 agreed non TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel 99 Conformance Testing (TEI_Test) Batch 1	RAN WG5	approved
RP-070102	RAN5 agreed non TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel 99 Conformance Testing (TEI_Test) Batch 2	RAN WG5	approved
RP-070103	RAN5 agreed non TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel 99 Conformance Testing (TEI_Test) Batch 3	RAN WG5	approved
RP-070104	RAN5 agreed non TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel-4 Conformance Testing (TEI4_Test)	RAN WG5	approved
RP-070105	RAN5 agreed non TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel-5 Conformance Testing (TEI5_Test)	RAN WG5	approved
RP-070106	RAN5 agreed TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel 99 Conformance Testing (TEI_Test) Batch 1	RAN WG5	approved
RP-070107	RAN5 agreed TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel 99 Conformance Testing (TEI_Test) Batch 2	RAN WG5	approved
RP-070108	RAN5 agreed TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel 99 Conformance Testing (TEI_Test) Batch 3	RAN WG5	approved
RP-070109	RAN5 agreed TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel 99 Conformance Testing (TEI_Test) Batch 4	RAN WG5	approved
RP-070110	RAN5 agreed TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel-5 Conformance Testing (TEI5_Test)	RAN WG5	approved

8.6.4   Approval of CRs for closed Rel-6 WIs

RP-070111	RAN5 agreed non TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel-6 Conformance Testing (TEI6_Test)	RAN WG5

The CRs were approved.

RP-070112	RAN5 agreed TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel-6 Conformance Testing (TEI6_Test)	RAN WG5

The CRs were approved.

8.6.5   Approval of linked CRs where the leading one originated from WG5

No input.

9   CRs to closed Release 7 Work items

RP-070119	CR to 25.215 (Rel-7) for corrections of UE measurement definitions for RX diversity	RAN WG1

(RP-070207 is a document related to this CR).

RP-070207	Concerns regarding the updated definition of RSSI and CPICH measurements with receive diversity	Nokia

Sari Nielsen (Nokia) presented this document.
Decision: RP-070119 will be re-discussed on the Friday. RP-070119 was revised in RP-070213:

RP-070213	CR to 25.215 (Rel-7) for corrections of UE measurement definitions for RX diversity	Nokia

Sari Nielsen (Nokia) presented this document.
The CR was postponed (not agreed). Discussion may happen at the WG levels.

RP-070120	CR to 25.225 (Rel-7) for corrections for UE power headroom measurement	RAN WG1

Dirk Gerstenberger (RAN WG1 Chairman) presented this document.
The CR was approved.

RP-070160	25.319, 25.321, 25.331 Rel-7 CRs on TDD 3.84/7.68 Mcps Enhanced Uplink	RAN WG2

The CRs were approved.

RP-070172	25.331 Rel-7 CR on 7.68 Mcps TDD	RAN WG2

The CR was approved.

RP-070082	RAN4 CRs on TEI7	RAN WG4

The CRs were approved.

10 Open Release 7 WIs and beyond: Status update and approval of CRs, reports

RP-070167	Release 7 mandatory features	Motorola, NEC, Samsung

Richard Burbidge (Motorola) presented this document.
Richard Burbidge (Motorola) commented that the use of optionality allows better interoperability scenarios.
Joakim Bergström (Ericsson) commented that clarifying the relation between the different Release 7 features would be useful.
Decision:
Relationship between the features will be clarified, together with which features need to have their support indicated in the RRC Connection Request, for June 2007.

10.1 Radio Interface Improvement Feature

10.1.1 UE Antenna Performance Evaluation Method and Requirements

RP-070032	Status Report for WI UE Antenna Performance Evaluation Method and Requirements	TeliaSonera

Per (TeliaSonera) presented this document.
Percentage of completion: 90%.
Completion date: June 2007.

Phil Brown enquired about the sentence on "the target performance will not be included in the conformance test specification TS 34.114". It was clarified that the test requirements will be linked with the minimum performance.

The report was noted.

RP-070123	Exception form for Rel-7 inclusion of WI UE Antenna Performance Evaluation Method and Requirements	TeliaSonera

Per (TeliaSonera) presented this document.

GSM should be included as part of the tasks not complete.

The exception form was revised in RP-070214, that was considered approved.

Additions for the extension bands may be included later if agreement can be found.

RP-070214	Exception form for Rel-7 inclusion of WI UE Antenna Performance Evaluation Method and Requirements	TeliaSonera

Approved version.

RP-070124	TS25.144 v1.0.0 (User Equipment (UE) and Mobile Station (MS) Over the Air Performance Requirements)	TeliaSonera

Per (TeliaSonera) presented this document.

The document was noted. After further discussion revision were agreed to be provided. Further discussion during the meeting took place see RP-070236.

RP-070175	TS25.144: approval of requirements and targets for the 2 GHz range	TeliaSonera

Per (TeliaSonera) presented this document.

Jacques Achard (GERAN1 Chairman) enquired about how to proceed with GERAN requirements.

Marc Grant (AT&T) commented that some numbers in this TS have not been agreed yet. Furthermore, there are two sets of values. Per clarified that the reason for this is the need for general requirements for all bands, together with some band specific additional requirements.

The document will be seen again. Revised in RP-070236.

RP-070236	TS 25.144 v1.0.1: Approval of requirements and targets for the 2GHz range	TeliaSonera, Orange, Telefonica, NTT DoCoMo, Telecom Italia

Per (TeliaSonera) presented this document.

Marc Grant (AT&T) commented that recommended values in annex Y would suit better in the body of the document.

Marc Grant commented that this should be further discussed in RAN WG4 and discussed in GERAN before approval.

Jussi Numminen (Nokia) commented that values have already been discussed in RAN WG4 and that open values for the 2GHz band are in line with what is stated in the Status Report.

The TS was approved and will be raised to change control, under version 7.0.0. The Specification number is TS 25.963.

10.2 RAN Improvement Feature

10.2.1 RRM optimizations for Iur and Iub

No input.

10.2.2   Continuous connectivity for packet data users

| RP-070033 | Status Report for WI Continuous connectivity for packet data users | Siemens |

Volker (Siemens) presented this document.
Remaining RAN4 CRs will be treated as corrections to Release 7.
The WI was closed, following the approval of the CRs.

| RP-070077 | TR 25.903 v2.0.0 Continuous Connectivity for Packet Data Users (Release 7) | Siemens |

Volker (Siemens) presented this document.
The TR was approved and will be raised under change control, as version 7.0.0.

| RP-070115 | CRs to 25.201, 25.211, 25.212 & 25.214 (Rel-7, category B) for introduction of CPC | RAN WG1 |

The CRs were approved.

| RP-070158 | 25.321, 25.331 Rel-7 CRs on the introduction of CPC | RAN WG2 |

The CRs were approved.

| RP-070057 | CRs for introduction of CPC | RAN WG3 |

The CRs were approved.

| RP-070084 | RAN4 CRs on RANimp-CPC | RAN WG4 |

The CRs were approved.

10.2.3   Interface to Control Tower Mounted Amplifiers (TMAs)

| RP-070034 | Status Report for WI Interface to control Tower Mounted Amplifiers | Vodafone |

The document was revised before presentation in RP-070140:

| RP-070140 | Status Report for WI Interface to control Tower Mounted Amplifiers | Vodafone |

Tim Frost (Vodafone) presented this document.
The WI was considered as completed (100%) from the RAN viewpoint following the approval of the CRs. The SA5 part still remains.

| RP-070210 | Exception form for Rel-7 inclusion of WI interface to control TMAs | Vodafone |

This deals with the SA5 part.
This exception sheet was approved.

| RP-070211 | Proposed LS on specification of TMA control interface within 3GPP | Vodafone |

Adrian Neal (Vodafone) presented this document.
The proposed LS was approved and will be presented to TSG SA next week meeting by the Chairman..

RP-070059   TS 25.466 for approval   RAN WG3

Alexander Vesely (RAN WG3 chairman) presented this document.
The TS (including RET and TMA) was approved and raised under change control as version 7.0.0.
This means that 25.463 (RET only) is now closed in the Rel-7.
This will be referenced in the ITU-R document.

RP-070058   CRs for introduction of interface to control TMAs   RAN WG3

The CRs are approved.

10.3   UE Positioning

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

RP-070036   Status Report for WI Inclusion of Uplink TDOA UE positioning method in the   TruePosition
              UTRAN specifications

Terri Brooks (TruePosition) presented this document.
Completion 85%.
Completion date June 2007.

RP-070073   Exception form for Rel-7 inclusion of WI Uplink TDOA UE positioning   TruePosition
              method in the UTRAN specifications

The form was initially revised in RP-070234 (to include some potential parts on a RAN2 CR):

RP-070234   Exception form for Rel-7 inclusion of WI Uplink TDOA UE positioning   TruePosition
              method in the UTRAN specifications

Later-on, the original form in RP-070073 was considered correct because there was no work
to be done by RAN WG2. So RP-070073 was approved, and RP-070234 was withdrawn (not
available).

10.4   Multiple Input Multiple Output Antennas

RP-070037   Status Report for WI MIMO   Alcatel-
                                                                                         Lucent

Said Tatesh (Alcatel-Lucent) presented this document.
Completion 100%, 90%, 100%, 35% (for RAN1, RAN2, RAN3, RAN4 respectively).
Completion dates: March 2007 for RAN1, RAN2, RAN3.
Exception will be asked for the RAN4 part. See RP-070216.
Completion date changed from September to June for RAN4.
MIMO rely on the L2 enhancement WI for RAN2, so the WID will be updated, in RP-070217
(Alcatel Lucent).
RAN3 WI was completed.
We will come-back on this for the RAN2 part. The Report was noted afterwards, following
the approval of the RAN2 CRs. The RAN2 closure depends on the L2 enhancements
outcome, later in the RAN meeting. RAN1/2/3 WIs were closed.

| RP-070216 | Exception form for Rel-7 inclusion of WI MIMO - RAN4 part | Alcatel-Lucent |

Was revised before presentation in RP-070243 (to tick the UE box):

| RP-070243 | Exception form for Rel-7 inclusion of WI MIMO - RAN4 part | Alcatel-Lucent |

Said Tatesh (Alcatel-Lucent) presented this document.
The form was approved.

| RP-070217 | Updated Work Item Description of MIMO | Alcatel-Lucent |

It was commented that the WID was already updated at the previous plenary to state that it it built upon the L2 enhancement WI. As a consequence, RP-070217 was then found unnecessary and was then withdrawn (not available).

| RP-070141 | TR 25.876, Multiple-Input Multiple Output in UTRA, version 2.0.0 | Alcatel-Lucent |

Said Tatesh (Alcatel-Lucent) presented this document.
The TR was approved and will be put under change control as version 7.0.0.

| RP-070114 | CRs to 25.201, 25.211, 25.212 & 25.214 (Rel-7, category B) for introduction of MIMO | RAN WG1 |

The CRs were approved.

| RP-070155 | 25.308 Rel-7 CR 0018rev2 on L2 Enhancements (and Cell_FACH and MIMO) | RAN WG2 |

Conditionally approved, we will come-back on the CR during the work items on L2 and Cell_FACH. See agenda Item 10.24b.

| RP-070161 | 25.308, 25.306, 25.321, 25.331 Rel-7 CRs on the introduction of MIMO | RAN WG2 |

The CRs were approved.

| RP-070061 | CRs for introduction of MIMO | RAN WG3 |

The CRs were approved.

10.5   1.28 Mcps TDD Enhanced Uplink

| RP-070038 | Status Report for WI 1.28 Mcps TDD Enhanced Uplink | CATT |

CHEN Xiaozhong (CATT) presented this Status report.
The RAN1-RAN2-RAN3 part was closed following the approval of the CRs.
RAN4 part open.

| RP-070144 | Exception form for Rel-7 inclusion of WI LCR TDD Enhanced Uplink | CATT |

CHEN Xiaozhong (CATT) presented this document.
The form was approved.

| RP-070145 | CR to 25.221 on introduction of LCR TDD Enhanced Uplink | CATT, ZTE, TD-TECH |

(Withdrawn before presentation as superseded by RP-070118) (not available).

| RP-070134 | TR 25.827 v2.0.0 1.28Mcps TDD Enhanced Uplink; Physical Layer Aspects | CATT |

The TR was approved and will be raised under change control as version 7.0.0.

| RP-070135 | TR 30.302 v2.0.0 1.28Mcps TDD Enhanced Uplink; RAN2 Stage 2 | CATT |

The TR was approved and will be raised under change control as version 7.0.0.

| RP-070118 | Introduction of E-DCH for 1.28Mcps TDD | RAN WG1 |

The CRs were approved.

| RP-070157 | 25.302, 25.306, 25.319, 25.321, 25.331 Rel-7 CRs on the introduction of 1.28 Mcps EDCH | RAN WG2 |

The CRs were approved.

| RP-070062 | CRs for introduction of 1.28 Mcps TDD Enhanced Uplink | RAN WG3 |

The CRs were approved.

| RP-070129 | CRs 25.423/25.433 (1269rev2/1344rev2) on Introduction of 1.28 Mcps TDD Enhanced Uplink | ZTE, CATT, TD-TECH |

The CRs were approved.

10.6   Global Navigation Satellite System (GNSS) in UTRAN

| RP-070039 | Status Report for WI Global Navigation Satellite System (GNSS) in UTRAN | France Telecom |

Marcin Bortnik (France Telecom) presented this document.
Completion 70%.
Completion date: June 2007.
Jacques Achard (GERAN1 chairman) reported that this is included in the Rel-7 as well in GERAN.

| RP-070071 | Exception form for Rel-7 inclusion of WI Global Navigation Satellite System (GNSS) in UTRAN | France Telecom |

Marcin Borstnik (France Telecom) presented this document.
The Exception form was approved.

10.7   Technical Small Enhancements and Improvements

| RP-070060 | CR (cat F) on SAS-Centric A-GPS UE requesting additional Assistance Data | RAN WG3 |

The CR was initially presented under the U-TDOA WI, but it was commented that this was not linked with this work item and hence may better be considered under the TEI7 WI.
The CR was postponed for the next meeting owing to the lack of corresponding CRs from other Working Groups.

| RP-070121 | CRs to 25.211 & 25.214 (Rel-7, category C) for enhanced F-DPCH | RAN WG1 |

25.214CR0433rev3: Edgar Fernandes (Motorola) expressed concerns about the wording "the earliest possible TPC command".
25.211CR0232rev2: open.
Decision: The whole CRs (including linked RAN2 and RAN3 CRs) will be presented as company contributions, under RP-070218. Source: Qualcomm, Ericsson, Philips:

RP-070218		Qualcomm, Ericsson, Philips
	CRs (RAN1, RAN2, RAN3 specifications) on enhanced F-DPCH	

Serge Willenegger (Qualcomm) presented those documents.
Sari Nielsen (Nokia) and Richard Burdbidge (Motorola) asked for more time to review the CRs.
After the review, the CRs were not approved (postponed). RAN1 CR needs to be finalised, and the RAN4 specifications would need to be updated as well.
The release considered is the Release 7.

RP-070159	25.331 Rel-7 CRs on TEI7	RAN WG2

The CRs were approved.

RP-070063	CRs (Rel-7 cat. F) to TS25.413, TS 25.423, TS 25.433 and TS 25.432	RAN WG3

The CRs were approved.

RP-070064	CR (Rel-7 cat. B) for UE Rx-Tx Time Difference Type 1	RAN WG3

The CRs were approved.

RP-070065	CRs (Rel-7 cat. C) for Iub transport efficiency improvement for MBMS	RAN WG3

The CRs were approved.

RP-070066	CRs (Rel-7 cat. B) for Introduction of Extended RNC-ID	RAN WG3

(Endorsed CRs). The CRs were presented by Alexander Vesely (RAN WG3 Chairman). RP-070131 is a related discussion document.
This appears more as a correction than a category 'B' CR.
The CRs were postponed (not approved).

RP-070131	Removal of limitation of SRNC identity	Ericsson

Martin Israelsson (Ericsson) presented this document.
Sami (Nokia) enquired about any proposed alternatives in order to solve the identifies issue.
RAN2 and SA2 will look into the issue. An LS will be drafted, in RP-070221 (Ericsson).
Information on RAN3 discussions (e.g. consideration examples) will also be added in the LS.

RP-070221	LS to RAN2, SA2, CT4, GERAN2 on Removal of limitation of SRNC identity	Ericsson

Martin Israelsson (Ericsson) presented this document.
TSG SA and GERAN will be added in copy.
Actions to CT4/GERAN2: the second sentence needs to be corrected (action is to CT4 and GERAN2). The LS was revised in RP-070263:

RP-070263	LS to RAN2, SA2, CT4, GERAN2 on Removal of limitation of SRNC identity	Ericsson

MartinIsraelsson (Ericsson) presented this document.
The LS was approved. A number was allocated for an update after the meeting in RP-070268, in order to approve the change bars in the document and change the source to 'TSG RAN'.
(Approved version).

RP-070268   LS to RAN2, SA2, CT4, GERAN2 on Removal of limitation of SRNC identity   TSG RAN
Approved version.

TEI7 will be allowed for one more cycle.

10.8   Testing of ROHC performance

RP-070006

Status report for WI Testing of ROHC performance   Nokia

Jussi Numminen (Nokia) presented this document.
The WI was closed.

RP-070095   RAN5 agreed non TTCN CR(s) under WI Testing of ROHC performance
(RANimp-RABSE5_Test)   RAN WG5

Phil Brown (RAN WG5 Chairman) presented this document.
The CRs were approved.

10.9   FDD Enhanced Uplink (Testing)

RP-070007

Status report for WI Conformance Test Aspects – FDD Enhanced Uplink   Ericsson

Joakim Bergström (Ericsson) presented this document.
Completion: 95%. Moved to June 2007.
The Status Report was noted.

RP-070096   RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects –   RAN WG5
FDD Enhanced Uplink (EDCH_Test) Batch 1

The CRs were approved.

RP-070097   RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects –   RAN WG5
FDD Enhanced Uplink (EDCH_Test) Batch 2

The CRs were approved.

RP-070098   RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects –
FDD Enhanced Uplink (EDCH_Test) Batch 3   RAN WG5

The CRs were approved.

RP-070099   RAN5 agreed TTCN CR(s) under WI Conformance Test Aspects – FDD
Enhanced Uplink (EDCH_Test)   RAN WG5

The CRs were approved.

10.10   Conformance Test Aspects – MBMS

RP-070008

Status report for WI Conformance Test Aspects – MBMS   Qualcomm

Serge Willenegger (Qualcomm) presented this document.
Percentage of completion: 85%.
Completion date: June 2007.
The Status Report was noted.

| RP-070086 | RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects – MBMS (MBMS_Test) Batch 1 | RAN WG5 |

The CRs were approved.

| RP-070087 | RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects – MBMS (MBMS_Test) Batch 2 | RAN WG5 |

The CRs were approved.

10.11   Conformance Test Aspects – IMS Call Control Rel-6 enhancements

| RP-070009 | Status report for WI Conformance Test Aspects – IMS Call Control Rel-6 enhancements | Motorola, Ericsson |

Richard Burbidge (Motorola) presented this document.
Completion date: September 2007 (was March 2007).
Completion: 50%.
The Status Report was noted.

| RP-070088 | RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects – IMS Call Control Rel-6 enhancements (IMS2_CCR_Test) Batch 1 | RAN WG5 |

The CRs were approved.

| RP-070089 | RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects – IMS Call Control Rel-6 enhancements (IMS2_CCR_Test) Batch 2 | RAN WG5 |

The CRs were approved.

10.12   RF/RRM Conformance Test aspects FDD MBMS

| RP-070011 | Status report for WI RF/RRM Conformance Test Aspects – MBMS (FDD) | Ericsson |

Joakim Bergström Bergström (Ericsson) presented this document.
Target date: September 2007 (was March).
Completion: 60%.
The Status Report was noted.

| RP-070090 | RAN5 agreed non TTCN CR(s) under WI RF/RRM Conformance Test Aspects – MBMS (FDD) (MBMS-RAN-RF_Test) | RAN WG5 |

The CRs were approved.

10.13   Conformance Test Aspects - 7.68 Mcps TDD

RP-070012

Status report for WI Conformance Test Aspects - 7.68 Mcps TDD   IPWireless

Derek Richards (IPWireless) presented this document.
Completion date: September 2007.
Completion: 65%.
The Status Report was noted.

RP-070091   RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects - 7.68
              Mcps TDD (VHCRTDD-UEConTest)   RAN WG5

The CRs were approved.

10.14 Conformance Test Aspects - MBMS for 3.84 / 7.68 Mcps TDD

RP-070013   Status report for WI Conformance Test Aspects - MBMS for 3.84 Mcps and
              7.68 Mcps TDD   IPWireless

Derek Richards (IPWireless) presented this document.
Completion date: September 2007.
Completion: 7%.
The Status Report was noted.

RP-070092   RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects -
              MBMS for 3.84 Mcps and 7.68 Mcps TDD (MBMS-UEConTest_TDH)   RAN WG5

The CRs were approved.

10.15 Conformance Test Aspects - 3.84 Mcps and 7.68 Mcps TDD Enhanced Uplink

RP-070014   Status report for WI Conformance Test Aspects - 3.84 Mcps and 7.68 Mcps
              TDD Enhanced Uplink   IPWireless

Derek Richards (IPWireless) presented this document.
Completion date: March 2008.
Completion: 7%.
The Status Report was noted.

RP-070093   RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects - 3.84
              Mcps and 7.68 Mcps TDD Enhanced Uplink (RANimp-
              UEConTest_EDCHTDH)   RAN WG5

The CRs were approved.

10.16 LCR TDD MBMS SIG testing of Rel-6

RP-070015   Status report for WI Signalling Conformance Test Aspects – MBMS for LCR
              TDD   CATT

CHEN Xiaozhong (CATT) presented this document.
Completion 30%.

Completion date September 2007.
The Status Report was noted.

10.17 UE antenna over the air conformance testing

RP-070016
                        Status report for WI UE antenna over the air conformance testing   Nokia
Jussi Numminen (Nokia) presented this document.
Completion 15%.
Completion date September 2007.
The Status Report was noted.

10.18 Conformance Test Aspects - Extended UMTS 1.7/2.1 GHz

RP-070017   Status Report for WI Conformance Test Aspects – Extended UMTS 1.7/2.1
                GHz   Motorola
Edgar Fernandes (Motorola) presented this document.
Completion 60%.
Completion date: June 2007.
The Status Report was noted.

RP-070083   RAN4 CRs on RInImp-UMTS1721Ext   RAN WG4
The CRs were approved.

RP-070094
                RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects –
                Extended UMTS 1.7/2.1 GHz (RInImp-UEConTest_UMTS1721Ext)   RAN WG5
The CRs were approved.

10.19 3G Long Term Evolution

RP-070209   Orange, Telecom
                                                                                 Italia, T-Mobile,
                                                                                 Vodafone

                        Requirements for LTE Home eNodeBs
Tim Frost (Vodafone) presented this document.
Jussi Numminen commented that more time/study is needed in order to differentiate solutions from requirements in the document. Besides, there may be other solutions than the one suggested, in order to fulfill those requirements.
Sharat Chander (Cingular) and Sami Kekki (Nokia) commented that it was high time that the term "Home" in "Home eNodeB" should be changed to something more appropriate such as "Private eNodeB", since "Home" could be confused with "Home System" (ie. Home versus Visited systems).
Howard Benn (RAN WG4 Chairman) commented that the "separate carrier or mainly separate carrier to macro-cellular network" was quite challenging.

Han van Bussel (T-Mobile) and Marc Grant (AT&T) commented that a study focusing on interference scenarios and potential issues would be needed first.

RP-070262   Way forward on LTE Home eNodeB   Vodafone etAll

Tim frost (Vodafone) presented this document.

Takehiro Nakamura (NTT DoCoMo) supported this document.

Edgar Fernandes (Motorola) commented that freezing of requirements is needed before achieving the work.

Jussi Numminen enquired about the CT1 impacts/feedbacks.

This will be evaluated by the WGs based on a high level document to be provided by the submitter of this contribution, the work will be co-ordinated by RAN WG2.

10.19.1 Status report of LTE

RP-070044   Rapporteur (NTT DoCoMo)

Status report for WI: 3G Long Term Evolution

Takehiro Nakamura-san (NTT DoCoMo) presented this document.

Slide 13, T-Mobile have a document expressing their concerns on some previous architecture decisions, in RP-070174.

Tim Frost (Vodafone) commented that in slide 17, the ACLR value of 30dB is only a working assumption.

Han van Bussel (T-Mobile) raised the point on whether some WG completion dates are realistic.

Giovanni Romano commented that ITU-R submission deadline is for January 2009 for the update 8 of M.1457.

The Status Report was noted.

RP-070136   TS 36.300 version 1.0.0   Nokia

Juho Pirskanen (Nokia) presented this document.

The TS was approved, it will be raised as version 8.0.0 and placed under change control.

RP-070174   T-Mobile position on outcome of SA2/RAN2/RAN3 joint on architecture   T-Mobile Intl.

Han van Bussel (T-Mobile) presented this document.

Denis Fauconnier (RAN WG2 Chairman) commented that an email discussion will happen on the RAN2 reflector (rapporteur: NTT DoCoMo). (goal is to list the pros/cons of having ciphering in RLC or PDCP).

Antti Toskala (Nokia) commented that a final decision should be taken soon. Denis commented that the intention is to have a final decision before the Malta RAN2 meeting (26/30 March 2007).

RP-070215   Updated LTE Work Plan   LTE Rapporteur (NTT DoCoMo)

Takehiro Makamura-san (NTT DoCoMo) presented this document.

The document was approved.

10.19.2   CRs to LTE TRs

10.19.3   3G Long Term Evolution: Physical Layer

RP-070168   TS 36.201 v1.0.0   RAN1

RP-070169	TS 36.211 v1.0.0	RAN1
RP-070170	TS 36.212 v1.0.0	RAN1
RP-070171	TS 36.213 v1.0.0	RAN1

Dirk Gertensberger (RAN WG1 Chairman) presented those documents. They were noted.

10.19.4   3G Long Term Evolution: Radio Interface Layer 2 and 3 Protocol Aspects

10.19.5   3G Long Term Evolution: eUTRAN interfaces

10.19.6   3G Long Term Evolution: RF radio transmission / Reception, System Performance Requirements and Conformance Testing

10.19.7   3G Long Term Evolution Testing

RP-070018

             Status report for WI 3G Long-Term Evolution Testing   NEC

Hans van der Veen (NEC) presented this document.
Completion 2%.
Completion date: March 2008.
The Status Report was noted.

10.20   64QAM for HSDPA

RP-070045   Status Report for WI: 64QAM for HSDPA   Ericsson

Dirk Gerstenberger (Ericsson) presented this document.
Completions: 100%, 95%, 100%, 25%.
Completion dates: March 2007 for RAN1-RAN2-RAN3. September 2007 for RAN4.
This WI is linked with the WI on L2 enhancement (relying of it), so the WI Description needs to be updated. In RP-070223 (Ericsson):
The Status Report was noted.

RP-070223   Updated WID on 64QAM for HSDPA   Ericsson
The updated WID was approved.

RP-070146   Exception form for Rel-7 inclusion of WI: 64QAM for HSDPA (FDD)   Ericsson
Dirk Gerstenberger (Ericsson) presented this document.
Antti Toskala (Nokia) mentioned that 3 months may be enough (not 6 months).
The form was approved.
The form was revised in RP-070224. Completion date will be changed to June 2007 (Ericsson). Considered approved.

RP-070224   Exception form for Rel-7 inclusion of WI: 64QAM for HSDPA (FDD)   Ericsson
Approved version.

RP-070116   Introduction of 64QAM for HSDPA   RAN WG1

The CRs were approved.

RP-070163   25.306, 25.308, 25.321, 25.331 Rel-7 CRs on the introduction of downlink 64Qam   RAN WG2

The CRs were approved.

RP-070067   CRs (Rel-7 cat. B) for introduction of 64QAM for HSDPA   RAN WG3

The CRs were approved.

10.21   Higher Order Modulation in HSUPA

RP-070046   Status Report for WI: Higher Order Modulation in HSUPA   Nokia

Antti Toskala (Nokia) presented this document.
Completions 90%, 85%, 100%, 15%.
Completion dates June 2007 for RAN1, RAN2, RAN3. September 2007 for RAN4.
The Status Report was noted.

RP-070074   Exception form for Rel-7 inclusion of WI Higher Order Modulation in HSUPA   Nokia

Antti Toskala (Nokia) presented this document.
The form was approved.

RP-070117   Introduction of 16QAM for HSUPA   RAN WG1

The CRs were postponed (not approved) as CRs from other Working Groups were not available (those CRs were submitted for information only at this meeting as baseline).

RP-070162   25.306, 25.319, 25.321, 25.331 Rel-7 CRs on the introduction of uplink 16Qam   RAN WG2

25.319 CR0005 was approved. The other CRs in RP-070162 are not approved (postponed) as CRs from other Working Groups are not available.

RP-070068   CRs (Rel-7 cat. B) for introduction of 16QAM for HSUPA   RAN WG3

The CRs were postponed (not approved) as CRs from other Working Groups were not available.

10.22   MBMS FDD Physical layer Enhancements

RP-070047   Status Report for WI: MBMS FDD Physical layer Enhancements   Ericsson

Dirk Gertenserberger (Ericsson) presented this document.
Completions 80, 70, 95, 5%.
Completion dates: June 2007 RAN1-RAN2-RAN3. November 2007 RAN4.
Volker (Siemens) challenged the sentence on channel models for TDD. As a consequence, it was decided that RAN4 will not be bound to this decision.
After extensive discussion, RAN4 completion date was changed to September 2007.
The Status Report was noted.

RP-070225   WID on WI: MBMS FDD Physical layer Enhancements   Ericsson

MBMS Protocol Enhancement needs to be removed.
25.402 target date should be TSG RAN-36 (not RAN-38).
The WID was approved in RP-070226 (Ericsson). RAN4 dates will be changed to RAN-37 (MCC).

| RP-070226 | WID on WI: MBMS FDD Physical layer Enhancements | TSG RAN |

Approved version.

| RP-070147 | Exception form for Rel-7 inclusion of WI: MBMS FDD Physical Layer Enhancements | Ericsson |

Dirk Gertenserberger (Ericsson) presented this document.
Jussi Numminen (Nokia) expressed concerns that features asking nine months delay, which have not reached proper maturity will delay the availability of the rel-7 specifications.
Revised following off-line discussions in RP-070237:

| RP-070237 | Exception form for Rel-7 inclusion of WI: MBMS FDD Physical Layer Enhancements | Ericsson |

The form was approved.

| RP-070166 | 25.346 Rel-7 CR on MBMS TDD and FDD Physical layer improvements | RAN WG2 |

Discussions on whether or not it would be wise to (possibly) have the stage 2 / stage 3 in different releases.
The CR was postponed (not approved). If MBMS TDD Physical layer improvement is finished and MBMS FDD Physical layer improvement is not, or the other way around, this CR will need to be split.
A joint session RAN1-RAN4 will be hold in Kobe to proceed on MBMS.

10.23 MBMS TDD Physical layer Enhancements

| RP-070048 | Status Report for WI: MBMS TDD Physical layer Enhancements | IPWireless |

Derek Richards (IPWireless) presented this document.
Proposed completions 95, 70, 95, 70.
Proposed completion date: June 2007 (RAN1-RAN2-RAN3-RAN4).
Volker (Siemens) challenged the 70%/June 2007 for RAN4, reminding that the RAN4 chairman's report was initially indicating December 2006 as completion date. Channel models may be insufficient.
Also, revision of the WID is needed.
The Status Report was noted.

| RP-070072 | Exception form for Rel-7 inclusion of WI MBMS TDD Physical layer Enhancements | IPWireless |

Derek Richards (IPWireless) presented this document. Expected completed dates need to be changed. The exception form is revised in RP-070239:

| RP-070239 | Exception form for Rel-7 inclusion of WI MBMS TDD Physical layer Enhancements | IPWireless |

Volker commented that propagation models should be agreed in RAN WG4 (as an open issue). The form was approved in RP-070240.

| RP-070240 | Exception form for Rel-7 inclusion of WI MBMS TDD Physical layer Enhancements | IPWireless |

Approved version.

    RP-070238   Updated WID on MBMS TDD Physical layer Enhancements   IPWireless

Link with the MBMS Protocol Enhancements WI needs to be removed. Approved in RP-070241:

    RP-070241   Updated WID on MBMS TDD Physical layer Enhancements   IPWireless

Approved version.

    RP-070085   RAN4 CRs on MBMS TDD Physical layer enhancements   RAN WG4

The fact that this is fully reflecting multipath propagations and alignment with RAN1 was challenged (Volker, Siemens).
The CRs were postponed.

10.24   Improved L2 support for high data rates

    RP-070049   Status Report for WI: L2 support for high data rates   Ericsson

Janne Peisa (Ericsson) presented this document.
Completion 70% for RAN2, 100% for RAN4.
Completion date June 2007.
Update of the WID is needed (to reflect link/hierarchy between Work Items).
The Status Report was noted.

    RP-070242   Updated WID on L2 support for high data rates   Ericsson

The document was approved.

    RP-070075   Exception form for Rel-7 inclusion of WI L2 support for high data rates   Ericsson

The form was approved.

    RP-070069   CRs (Rel-7 cat. B) for Introduction of Improved L2 support for high data rates   RAN WG3

The CRs were postponed (not approved).

    RP-070156   RAN WG2
           25.308 Rel-7 CR 0019rev2 on Cell_FACH (and L2 Enhancements)

The CR was conditionally approved (to be finally approved under agenda item 10.24b, Cell_FACH).
Derek Richards (IPWireless) commented that he believes that the principle of delaying formal approval of Stage 2 CRs without accompanying Stage 3 CRs should be applied equally to all Rel-7 WIs (with agreed Rel-7 WI exception sheet). IPWireless argues that this principle should apply irrespective of certain minority company views expressing doubts about the accuracy of the Rel-7 WI exception sheet. The Chairman reminded that decisons were based on concensus, or if not, on majority within 3GPP (71% majority).

    RP-070155   RAN WG2
           25.308 Rel-7 CR 0018rev2 on L2 Enhancements (and Cell_FACH and MIMO)

(This CRs impacts the 3 WIs L2 enh., Cell_FACH and MIMO). This CR was already conditionally approved under agenda item 10.4 (MIMO).
This CR is conditionally approved again, and will be finally approved under agenda item 10.24b (Cell_FACH).

| RP-070164 | 25.301 Rel-7 CR on the introduction of Layer 2 Enhancements | RAN WG2 |

The CR was approved.

10.24b Enhancement of the Cell_FACH State in FDD

| RP-070035 | Status Report for WI Enhanced CELL_FACH state in FDD | Nokia |

Juho Pirskanen (Nokia) presented this document.
Completion 70%.
Completion date June 2007.
The Status Report was noted.

| RP-070219 | Updated WID on WI Enhanced CELL_FACH state in FDD | Nokia |

Juho Pirskanen (Nokia) presented this document.
Needs to be updated. (34->35, 35->36)
25.211 needs to be added in the list.
The document was revised to modify the completion dates, in RP-070245. Considered approved.

| RP-070245 | Updated WID on WI Enhanced CELL_FACH state in FDD | Nokia |

Approved version.

| RP-070130 | Exception form for Rel-7 inclusion of WI Enhanced CELL_FACH state in FDD | Nokia |

Juho Pirskanen (Nokia) presented this document.
The form was approved.

| RP-070156 | | RAN WG2 |

25.308 Rel-7 CR 0019rev2 on Cell_FACH (and L2 Enhancements)
(This CRs impacts the 2 WIs L2 enh. and Cell_FACH. This CR has been already conditionally approved under agenda item 10.24 (L2 enh).
The CR was finally approved.

| RP-070155 | | RAN WG2 |

25.308 Rel-7 CR 0018rev2 on L2 Enhancements (and Cell_FACH and MIMO)
(This CRs impacts the 3 WIs L2 enh., Cell_FACH and MIMO). The CR was already conditionally approved under agenda item 10.4 (MIMO) and 10.24 (Cell_FACH).
The CR was finally approved.

| RP-070122 | CR to 25.211 (Rel-7) for introduction of Enhanced CELL_FACH in FDD | RAN WG1 |

The CR was postponed (not approved).

RP-070070   CRs (Rel-7 cat. B) for Introduction of Enhanced Cell_FACH state in FDD   RAN WG3

The CR was postponed (not approved).

10.25   Study Items

10.25.1 Void

10.25.2 Further Improved Performance Requirements for UMTS/HSDPA UE Further Improved Performance Requirements for UMTS/HSDPA UE

RP-070041   Status Report for FS Further Improved Performance Requirements for UMTS/HSDPA UE   Cingular

The document was withdrawn before presentation (not available), superseded by RP-070138.

RP-070138   Status Report for FS Further Improved Performance Requirements for UMTS/HSDPA UE   Cingular

Marc Grant (AT&T) presented this document.
Completion: 100% for the two-branch IC receiver for HSDPA.
The Study item will remain open for one more meeting awaiting for the one branch option feasibility completion.
The Status Report was noted.

RP-070142   Feasibility Study on Interference Cancellation for UTRA FDD UE   Cingular

Marc Grant (AT&T) presented this document.
Howard Benn (RAN WG4 Chairman) commented that the TR was mature enough for approval.
The TR will be reviewed under version 2.0.0:

RP-070264   Feasibility Study on Interference Cancellation for UTRA FDD UE   Cingular

This version was approved and will be brought under change control.
The history has not been updated, this will be done.

10.25.3 HSPA Evolution

RP-070042   Status Report for FS Scope of future FDD HSPA Evolution   Cingular

Marc Grant (AT&T) presented this document.
Completion 75%.
Completion date: June 2007.
The Status Report was noted.

| RP-070126 | Technical Report, "Scope of future FDD HSPA Evolution" | Cingular |

The document was revised before presentation (following an off-line evening discussion) in RP-070244:

| RP-070244 | Technical Report, "Scope of future FDD HSPA Evolution" | Cingular |

Marc Grant (AT&T) presented this document.
This version is 1.2.0.
Document revised in RP-070246.

| RP-070246 | Technical Report, "Scope of future FDD HSPA Evolution" version 1.2.0 | Cingular |

(Version 1.2.0 of the document, provided for information).

10.25.4 Dynamically reconfiguring a FDD UE receiver to reduce power consumption when desired QoS is met

| RP-070043 | Status Report for FS Dynamically reconfiguring a FDD UE receiver to reduce power consumption when desired Quality of Service is met | Nokia |

Jussi Numminen (Nokia) presented this document.
Completion 90%.
Completion date June 2007.
The Status Report was noted.

10.26 New Work Items/Study Items

| RP-070019 | New work item Proposal: Conformance test aspects – 64QAM for HSDPA (FDD) | Ericsson |

Joakim Bergström (Ericsson) presented this document.
The creation of this Work Item was approved.

| RP-070020 | New work item Proposal: Conformance test aspects – Improved L2 support for high data rates | Ericsson |

Joakim Bergström (Ericsson) presented this document.
NEC co-signed this proposal.
The creation of this Work Item was approved.

| RP-070021 | New work item Proposal: Conformance test aspects – Multiple Input Multiple Output antennas (MIMO) for FDD | Anite, Cingular Wireless, Ericsson, Nokia, Qualcomm, Rohde and Schwarz, Telecom Italia, Texas Instruments, ZTE Corporation |

Serge Willenegger (Qualcomm) presented this proposal.
The creation of this Work Item was approved.

| RP-070022 | New work item Proposal: Conformance test aspects – Introduction of 16QAM in HSUPA (FDD) | Motorola |

Edgar Fernandes (Motorola) presented this document.
Ericsson, Cingular, Motorola and Nokia are supporting companies.
The creation of this Work Item was approved.

| RP-070023 | New work item Proposal: Conformance test aspects – Continuous connectivity for packet data users | Nokia |

Jussi Numminen (Nokia) presented this document.

The creation of this Work Item was approved.

Phil Brown (RAN WG5 chairman) commented that companies should ensure resource availability in order to progress all new and existing work items within RAN WG5.

| RP-070076 | Study on technical conditions of IMT-2000 FDD systems using a new frequency band of 1.5 GHz in Japan | ARIB |

Yabe-san (ARIB) presented this document.

(No comments were received. See RP-070078).

| RP-070078 | Work Item proposal for 1500 MHz band in Japan | eAccess, Fujitsu, Mitsubishi, NEC, NTT DoCoMo, Panasonic, SOFTBANK MOBILE |

Takehiro Nakamuro-san from NTT DoCoMo presented this document.

The creation of this Work Item was approved.

| RP-070127 | Proposed WI on UMTS in 700 MHz Bands | Cingular/ATT |

Don Zelmer (Cingular/AT&T) presented this document.

The creation of this Work Item was approved.

| RP-070128 | Proposed WI on UMTS in 2300 MHz Bands | Cingular/ATT |

Don Zelmer (Cingular/AT&T) presented this document.

Jussi Numminen (Nokia) and Edgar Fernandes (Motorola) highlighted that a pre-study period may be useful.

As already done for the other new introduced bands, it was agreed to have a short preliminary study phase as part of the WI.

The creation of this Work Item was approved.

| RP-070133 | New study item Proposal "Improved network controlled mobility with non-3GPP radio technologies" | Motorola, Intel, Telecom Italia, Spring, Samsung, NEC, Alcatel-Lucent |

Howard Benn (Motorola) presented this document.

It was clarified that this applies to both UMTS and LTE.

Ronan Le Bras (France Telecom) enquired about any mobility requirements between UMTS and non-3GPP (e.g. from the TSG SA).

Kevin Holley (Telefonica O2) and Richard Brook (3)asked for any associated delay on the general work (created by this Study Item). Howard Benn (Motorola) reminded that thoses aspects are already studied in 3GPP TS 23.234.

Joakim Bergström Bergström (Ericsson) and Richard Brook (3) commented that guidance/scenarios would be needed first.

Serge Willenegger (Qualcomm) enquired about the non-impact on service, charging and security indicated in the form. Howard Benn clarified that the focus here, as a preliminary part, is on the RAN part only.

Giovanni Romano (Telecom Italia) commented that identifying the RAT, or more generally scenarios, would be useful in order to define the scope first.

Howard Benn (Motorola) commented that a two days workshop would be useful (before the next plenary), in order to clarify the scope of the SI and/or provide background information.
Decision: A workshop will be held on the Monday before the next RAN meeting. It is radio aspects-oriented. The goal is to clarify the SI. The workshop agenda would be provided in RP-070252. The SI was **postponed**.

An agenda for a temptative RAN workshop will be available on the Friday. Source: Motorola. In RP-070252.

RP-070252	Proposed agenda for non-3GPP handover workshop	Motorola

Howard Benn (Motorola) presented this document.
Stephen Hayes (TSG SA Chairman, Ericsson) commented that the overall solution should be considered. Howard Benn highlighted that the intention of the workshop is only to come on an agreement on a RAN SI sheet. Alexander Vesely (RAN WG3 Chairman) reminded that architecture assumptions are to be handled in agenda item 3.3.
The RAN Chairman clarified that the intention is simply to report some issues to the RAN. In this sense, agenda item 6 should be deleted. The issue will be presented to the SA by the RAN Chairman in his report. Resulting agenda will be annexed to those minutes.

RP-070137		RITT, CMCC, CATT, ZTE, TD-TECH, Huawei, Spreadtrum Communication
	Proposed WI for MBMS LCR TDD physical layer enhancements	

Mr. Yan Qin (RITT) presented this document.
Derek Richards (IPWireless) commented that there has been no study phase for this case. Besides, changes to 25.905 would be needed.
This WID needs to be modified to correct some justifications/assumptions (Derek Richards, IPWireless). The link with the MBMS Protocol Enhancements WI (that does not exist) needs to be removed.
IPWireless commented that they believe that the principle of requiring studies to be completed before approving related WIs should be applied generally and consistently and added that 3GPP procedures/rules seem to be applied unfairly and fair treatment is requested.

Antti Toskala enquired on the release of the results (Rel-7 or Rel-8). Answer that it will be included in the Rel-7 only if it can be completed within one TSG meeting cycle.
The proposed Work Item Description was revised in RP-070253:

RP-070253		RITT, CMCC, CATT, ZTE, TD-TECH, Huawei, Spreadtrum Communication
	Proposed WI for MBMS LCR TDD physical layer enhancements	

Mr. Yan Qin (RITT) presented this document.
The creation of the WI was approved.

RP-070139	New Work Item Proposal: Further Improved Minimum Performance Requirements for HSDPA UE (FDD) - Two-Branch Interference Cancellation	Cingular

Marc Grant (AT&T) presented this document.
The conformance test part should be treated separately (as a different WI).
Exception form is needed, in RP-070255.
Revised WID in RP-070254.

| RP-070254 | New Work Item Proposal: Further Improved Minimum Performance Requirements for HSDPA UE (FDD) - Two-Branch Interference Cancellation | Cingular |

Marc Grant (AT&T) presented this document.
The creation of the WI was approved.

| RP-070255 | Exception form for Rel-7 inclusion of WI: Further Improved Minimum Performance Requirements for HSDPA UE (FDD) - Two-Branch Interference Cancellation | Cingular |

The document was withdrawn before presentation (not available). The WI may be included in the Rel-8.

| RP-070220 | New WI proposal: Conformance test aspects - Enhanced Cell_FACH State in FDD | Nokia, Cingular Wireless, Ericsson, Motorola, Qualcomm, Rohde&Schwartz, Vodafone |

Juho Pirskanen (Nokia) presented this document.
NEC co-signed this document.
Phil Brown (RAN WG5 Chairman) commented that this was not discussed within RAN WG5.
The creation of the Work Item was approved in principle, i.e. endorsed by the RAN Plenary. The WI proposal still needs to be presented to RAN5 as no-one in RAN5 has seen this document as it was a very late entry (RAN WG5 Chairman). The wording and completion dates will be reviewed and the WI Description will be re-presented at the next TSG meeting for final approval.

| RP-070222 | Proposed WI on FDD HSPA Evolution | Nokia, Siemens Networks, Vodafone, Telecom Italia, Huawei, Motorola |

Semi Kekki (Nokia) presented this document.
Some of the wordings still reflect a Study Item, whereas this is a Work Item.
Work Item Description was revised in RP-070256:

| RP-070256 | Proposed WI on FDD HSPA Evolution | Nokia, Siemens Networks, Vodafone, Telecom Italia, Huawei, Motorola |

The document was withdrawn before presentation (not available).

| RP-070258 | Proposed text on the way forward on the WI on HSPA evolution | Nokia |

Semi (Nokia) presented this document.
This way forward was approved.

| RP-070132 | | Huawei, Motorola, NEC, Orange, T-mobile Intl. |

New Work Item Proposal: Small Basestation Performance Requirements

The document was revised before presentation in RP-070227:

| RP-070227 | Proposed Study Item on 3G Home NodeB | Nokia, Siemens Networks, Ericsson, Motorola, Alcatel-Lucent, Samsung, Huawei, NEC |

Antti Toskala (Nokia) presented this document.
It was clarified that "legacy terminals" start at the R'99.
The intention is that scenarios are defined only once (covering LTE and WCDMA). Hence, the document was revised in RP-07257:

| RP-070257 | Proposed Study Item on 3G Home NodeB | Nokia, Siemens Networks, Ericsson, Motorola, Alcatel-Lucent, Samsung, Huawei, NEC |

Antti Toskala (Nokia) presented this document.
The creation of the SI was approved.

11   Technical co-ordination among WGs

11.1   CR numbering conclusion

No inputs.

12   Outputs to other groups

Approved LSs:

Tdoc	Title	LS To	LS Cc	Attachment
RP-070211	LS on specification of TMA control interface within 3GPP	SA5	TSG SA, RAN3	None
RP-070265	LS to TSG SA on the documents to be considered for the Revision 7 of Recommendation ITU-R M.1457	TSG SA		RP-070231, RP-070232
RP-070268	LS on Removal of limitation of SRNC identity	RAN2, SA2, CT4, GERAN2	RAN3, GERAN, SA	RP-070131, R3-070280

13   Project management

| RP-070208 | TSG RAN Work Item & Study Item Description Sheets (ETSI MCC) | ETSI MCC |

(Provided for information).

RP-070248   Specs lists per Release; a comparison   3GPP Support

The document was noted.

RP-070249   Specs status list prior to TSG meeting   3GPP Support

The document was noted.

RP-070250   3GPP Support Team report   3GPP Support

John Meredith (MCC Support) presented this document.

Howard Benn noted that RAN WG4 and GERAN2 have same MCC support, and enquired of any potential issue here. John Meredith asked the RAN WG Chairmen to provide as much as notice as possible when planning additional meetings and reminded them to make early contact with John Meredith if they envisage problems.

Phil Brown (RAN WG5 chairman) commented that avoiding clash when planning RAN WGs/GERAN meetings should be possible, since normal meetings are planned very long time in advance.

John Meredith added that budget was available to recruit additional support personnel, but the exercise was, by experience, lengthy, so early notice of need is essential. He also urged companies to consider carefully whether they could offer suitable staff for advertised positions on a secondment basis; the offers from the previous recruitment exercise having been nill.The document was noted.

RP-070259   3GPP Workplan version 08 March   ETSI MCC

The document was noted.

RP-070260   Slide review of the Work Plan   ETSI MCC

Alain Sultan (ETSI MCC) presented this document.
The document was noted.

14   Any other business

No input.

15   Closing of the meeting

Annex A: List of participants

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Annex B: List of documents

Agenda	Type	Tdoc	Title	Source	Release	Work Item
2	Approval	RP-070001	Draft agenda TSG RAN #35	Chairman		
8.6.1	Discussion	RP-070002	Status Report WG5	RAN WG5 Chairman		
8.6.1	Information	RP-070003	List of CRs from RAN WG5	RAN WG5		
8.6.1	Information	RP-070004	Draft report of RAN5#34	3GPP Support		
8.6.1	Approval	RP-070005	MCC STF 160 report	STF 160 Leader		
10.8	WI/SI Status Report	RP-070006	Status report for WI Testing of ROHC performance	Nokia		
10.9	WI/SI Status Report	RP-070007	Status report for WI Conformance Test Aspects – FDD Enhanced Uplink	Ericsson		
10.10	WI/SI Status Report	RP-070008	Status report for WI Conformance Test Aspects – MBMS	Qualcomm		
10.11	WI/SI Status Report	RP-070009	Status report for WI Conformance Test Aspects – IMS Call Control Rel-6 enhancements	Motorola, Ericsson		
8.6.3	Approval	RP-070010	34.229-3 v2.0.0 for approval to go under revision control as v5.0.0	Rapporteur (MCC STF 160)		
10.12	WI/SI Status Report	RP-070011	Status report for WI RF/RRM Conformance Test Aspects – MBMS (FDD)	Ericsson		
10.13	WI/SI Status Report	RP-070012	Status report for WI Conformance Test Aspects - 7.68 Mcps TDD	IPWireless		
10.14	WI/SI Status Report	RP-070013	Status report for WI Conformance Test Aspects - MBMS for 3.84 Mcps and 7.68 Mcps TDD	IPWireless		
10.15	WI/SI Status Report	RP-070014	Status report for WI Conformance Test Aspects - 3.84 Mcps and 7.68 Mcps TDD Enhanced Uplink	IPWireless		
10.16	WI/SI Status Report	RP-070015	Status report for WI Signalling Conformance Test Aspects – MBMS for LCR TDD	CATT		

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10.17	WI/SI Status Report	RP-070016	Status report for WI UE antenna over the air conformance testing	Nokia
10.18	WI/SI Status Report	RP-070017	Status Report for WI Conformance Test Aspects – Extended UMTS 1.7/2.1 GHz	Motorola
10.19.7	WI/SI Status Report	RP-070018	Status report for WI 3G Long-Term Evolution Testing	NEC
10.26	Approval	RP-070019	New work item Proposal: Conformance test aspects – 64QAM for HSDPA (FDD)	Ericsson
10.26	Approval	RP-070020	New work item Proposal: Conformance test aspects – Improved L2 support for high data rates	Ericsson
10.26	Approval	RP-070021	New work item Proposal: Conformance test aspects – Multiple Input Multiple Output antennas (MIMO) for FDD	Anite, Cingular Wireless, Ericsson, Nokia, Qualcomm, Rohde and Schwarz, Telecom Italia, Texas Instruments, ZTE Corporation
10.26	Approval	RP-070022	New work item Proposal: Conformance test aspects – Introduction of 16QAM in HSUPA (FDD)	Motorola
10.26	Approval	RP-070023	New work item Proposal: Conformance test aspects – Continuous connectivity for packet data users	Nokia
8.2.1	Discussion	RP-070024	Status Report WG1	RAN WG1 Chairman
8.2.1	Information	RP-070025	List of CRs from RAN WG1	RAN WG1
8.3.1	Discussion	RP-070026	Status Report WG2	RAN WG2 Chairman
8.3.1	Information	RP-070027	List of CRs from RAN WG2	RAN WG2
8.4.1	Discussion	RP-070028	Status Report WG3	RAN WG3 Chairman
8.4.1	Information	RP-070029	List of CRs from RAN WG3	RAN WG3
8.5.1	Discussion	RP-070030	Status Report WG4	RAN WG4 Chairman
8.5.1	Information	RP-070031	List of CRs from RAN WG4	RAN WG4
10.1.1	WI/SI Status Report	RP-070032	Status Report for WI UE Antenna Performance Evaluation Method and Requirements	TeliaSonera
10.2.2	WI/SI Status Report	RP-070033	Status Report for WI Continuous connectivity for packet data users	Siemens

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10.2.3	WI/SI Status Report	RP-070034	Status Report for WI Interface to control Tower Mounted Amplifiers	Vodafone
10.24b	WI/SI Status Report	RP-070035	Status Report for WI Enhanced CELL_FACH state in FDD	Nokia
10.3.1	WI/SI Status Report	RP-070036	Status Report for WI Inclusion of Uplink TDOA UE positioning method in the UTRAN specifications	TruePosition
10.4	WI/SI Status Report	RP-070037	Status Report for WI MIMO	Alcatel-Lucent
10.5	WI/SI Status Report	RP-070038	Status Report for WI 1.28 Mcps TDD Enhanced Uplink	CATT
10.6	WI/SI Status Report	RP-070039	Status Report for WI Global Navigation Satellite System (GNSS) in UTRAN	France Telecom
	Void	RP-070040		
10.25.2	WI/SI Status Report	RP-070041	Status Report for FS Further Improved Performance Requirements for UMTS/HSDPA UE	Cingular
10.25.3	WI/SI Status Report	RP-070042	Status Report for FS Scope of future FDD HSPA Evolution	Cingular
10.25.4	WI/SI Status Report	RP-070043	Status Report for FS Dynamically reconfiguring a FDD UE receiver to reduce power consumption when desired Quality of Service is met	Nokia
10.19.1	WI/SI Status Report	RP-070044	Status report for WI: 3G Long Term Evolution	Rapporteur (NTT DoCoMo)
10.20	WI/SI Status Report	RP-070045	Status Report for WI: 64QAM for HSDPA	Ericsson
10.21	WI/SI Status Report	RP-070046	Status Report for WI: Higher Order Modulation in HSUPA	Nokia
10.22	WI/SI Status Report	RP-070047	Status Report for WI: MBMS FDD Physical layer Enhancements	Ericsson
10.23	WI/SI Status Report	RP-070048	Status Report for WI: MBMS TDD Physical layer Enhancements	IPWireless
10.24	WI/SI Status Report	RP-070049	Status Report for WI: L2 support for high data rates	Ericsson
	Void	RP-070050		
	Void	RP-070051		

8.4.3	Agreed CRs	RP-070052	CRs (Rel-5 cat. F and Rel-6/Rel-7 cat. A) to TS 25.453	RAN WG3	Rel-6	TEI5
8.4.3	Agreed CRs	RP-070053	CRs (Rel-6 cat. F and Rel-7 cat. A) to TSs 25.423 and 25.433	RAN WG3	Rel-6	TEI6
8.4.3	Agreed CRs	RP-070054	CRs (Rel-6 cat. F and Rel-7 cat. A) to TSs 25.413	RAN WG3	Rel-6	MBMS-RAN
8.4.3	Agreed CRs	RP-070055	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.463	RAN WG3	Rel-6	RANimp-TiltAnt
8.4.3	Agreed CRs	RP-070056	CRs (Rel-7 cat. F) on Rel-6 WIs	RAN WG3	Rel-6	MBMS-RAN, EDCH-IubIur, RANimp-TiltAnt
10.2.2	Agreed CRs	RP-070057	CRs for introduction of CPC	RAN WG3	Rel-7	RANimp-CPC
10.2.3	Agreed CRs	RP-070058	CRs for introduction of interface to control TMAs	RAN WG3	Rel-7	RANimp-TMA
10.2.3	TS	RP-070059	TS 25.466 for approval	RAN WG3	Rel-7	RANimp-TMA
10.3.1	Agreed CRs	RP-070060	CR (cat F) on SAS-Centric A-GPS UE requesting additional Assistance Data	RAN WG3	Rel-7	LCS3-UEPos-UTDOA
10.4	Agreed CRs	RP-070061	CRs for introduction of MIMO	RAN WG3	Rel-7	MIMO-IurIub
10.5	Agreed CRs	RP-070062	CRs for introduction of 1.28 Mcps TDD Enhanced Uplink	RAN WG3	Rel-7	LCRTDD-EDCH-IubIur
10.7	Agreed CRs	RP-070063	CRs (Rel-7 cat. F) to TS25.413, TS 25.423, TS 25.433 and TS 25.432	RAN WG3	Rel-7	TEI7
10.7	Agreed CRs	RP-070064	CR (Rel-7 cat. B) for UE Rx-Tx Time Difference Type 1	RAN WG3	Rel-7	TEI7
10.7	Agreed CRs	RP-070065	CRs (Rel-7 cat. C) for Iub transport efficiency improvement for MBMS	RAN WG3	Rel-7	TEI7
10.7	endorsed CRs	RP-070066	CRs (Rel-7 cat. B) for Introduction of Extended RNC-ID	RAN WG3	Rel-7	TEI7
10.20	Agreed CRs	RP-070067	CRs (Rel-7 cat. B) for introduction of 64QAM for HSDPA	RAN WG3	Rel-7	RANimp-64QamDownlink
10.21	endorsed CRs	RP-070068	CRs (Rel-7 cat. B) for introduction of 16QAM for HSUPA	RAN WG3	Rel-7	RANimp-16QamUplink
10.24	Agreed CRs	RP-070069	CRs (Rel-7 cat. B) for Introduction of Improved L2 support for high data rates	RAN WG3	Rel-7	RANimp-L2dataRates
10.24b	Agreed CRs	RP-070070	CRs (Rel-7 cat. B) for Introduction of Enhanced Cell_FACH state in FDD	RAN WG3	Rel-7	RANimp-EnhState
10.6	Approval	RP-070071	Exception form for Rel-7 inclusion of WI Global Navigation Satellite System (GNSS) in UTRAN	France Telecom		
10.23	Approval	RP-070072	Exception form for Rel-7 inclusion of WI MBMS TDD Physical layer Enhancements	IPWireless		
10.3.1	Approval	RP-070073	Exception form for Rel-7 inclusion of WI Uplink TDOA UE positioning method in the UTRAN specifications	TruePosition		
10.21	Approval	RP-070074	Exception form for Rel-7 inclusion of WI Higher Order Modulation in HSUPA	Nokia		
10.24	Approval	RP-070075	Exception form for Rel-7 inclusion of WI L2 support for high data rates	Ericsson		
10.26	Information	RP-070076	Study on technical conditions of IMT-2000 FDD systems using a new frequency band of 1.5 GHz in Japan	ARIB		
10.2.2	Approval	RP-070077	TR 25.903 v2.0.0 Continuous Connectivity for Packet Data Users (Release 7)	Siemens		

10.26	Approval	RP-070078	Work Item proposal for 1500 MHz band in Japan	eAccess, Fujitsu, Mitsubishi, NEC, NTT DoCoMo, Panasonic, SOFTBANK MOBILE		
8.1.2	Approval	RP-070079	Updating of ITU-R Recommendations M.1580 and M.1581 on unwanted emission characteristics to include IMT-2000 expansion bands	Cingular Wireless/AT&T		
8.5.3	Agreed CRs	RP-070080	RAN4 CRs on TEI (set 1)	RAN WG4	R'99	TEI
8.5.3	Agreed CRs	RP-070081	RAN4 CRs on TEI (set 2)	RAN WG4	Rel-4	TEI
9	Agreed CRs	RP-070082	RAN4 CRs on TEI7	RAN WG4	Rel-7	TEI7
10.18	Agreed CRs	RP-070083	RAN4 CRs on RInImp-UMTS1721Ext	RAN WG4	Rel-7	RInImp-UMTS1721Ext
10.2.2	Agreed CRs	RP-070084	RAN4 CRs on RANimp-CPC	RAN WG4	Rel-7	RANimp-CPC
10.23	Agreed CRs	RP-070085	RAN4 CRs on MBMS TDD Physical layer enhancements	RAN WG4	Rel-7	MBMSE-RANPhysTDD
10.10	Agreed CRs	RP-070086	RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects – MBMS (MBMS_Test) Batch 1	RAN WG5	Rel-6	MBMS_Test
10.10	Agreed CRs	RP-070087	RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects – MBMS (MBMS_Test) Batch 2	RAN WG5	Rel-6	MBMS_Test
10.11	Agreed CRs	RP-070088	RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects – IMS Call Control Rel-6 enhancements (IMS2_CCR_Test) Batch 1	RAN WG5	Rel-6	IMS2_CCR_Test
10.11	Agreed CRs	RP-070089	RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects – IMS Call Control Rel-6 enhancements (IMS2_CCR_Test) Batch 2	RAN WG5	Rel-6	IMS2_CCR_Test
10.12	Agreed CRs	RP-070090	RAN5 agreed non TTCN CR(s) under WI RF/RRM Conformance Test Aspects – MBMS (FDD) (MBMS-RAN-RF_Test)	RAN WG5	Rel-6	MBMS-RAN-RF_Test
10.13	Agreed CRs	RP-070091	RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects - 7.68 Mcps TDD (VHCRTDD-UEConTest)	RAN WG5	Rel-7	VHCRTDD-UEConTest
10.14	Agreed CRs	RP-070092	RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects - MBMS for 3.84 Mcps and 7.68 Mcps TDD (MBMS-UEConTest_TDH)	RAN WG5	Rel-6	MBMS-UEConTest_TDH
10.15	Agreed CRs	RP-070093	RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects - 3.84 Mcps and 7.68 Mcps TDD Enhanced Uplink (RANimp-UEConTest_EDCHTDH)	RAN WG5	Rel-7	RANimp-UEConTest_EDCHTDH
10.18	Agreed CRs	RP-070094	RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects – Extended UMTS 1.7/2.1 GHz (RInImp-UEConTest_UMTS1721Ext)	RAN WG5	Rel-7	RInImp-UEConTest_UMTS1721Ext
10.8	Agreed CRs	RP-070095	RAN5 agreed non TTCN CR(s) under WI Testing of ROHC performance (RANimp-RABSE5_Test)	RAN WG5	Rel-5	RANimp-RABSE5_Test

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10.9	Agreed CRs	RP-070096	RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects – FDD Enhanced Uplink (EDCH_Test) Batch 1	RAN WG5	Rel-6	EDCH_Test Batch 1
10.9	Agreed CRs	RP-070097	RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects – FDD Enhanced Uplink (EDCH_Test) Batch 2	RAN WG5	Rel-6	EDCH_Test Batch 2
10.9	Agreed CRs	RP-070098	RAN5 agreed non TTCN CR(s) under WI Conformance Test Aspects – FDD Enhanced Uplink (EDCH_Test) Batch 3	RAN WG5	Rel-6	EDCH_Test Batch 3
10.9	Agreed CRs	RP-070099	RAN5 agreed TTCN CR(s) under WI Conformance Test Aspects – FDD Enhanced Uplink (EDCH_Test)	RAN WG5	Rel-6	EDCH_Test
8.6.3	Not Agreed CR	RP-070100	CR to 34.123-3: Add new verified and e-mail agreed TTCN test cases in the TC lists in 34.123-3 (prose), Annex A	MCC STF160	R99	TEI_Test
8.6.3	Agreed CRs	RP-070101	RAN5 agreed non TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel 99 Conformance Testing (TEI_Test) Batch 1	RAN WG5	R99	TEI_Test
8.6.3	Agreed CRs	RP-070102	RAN5 agreed non TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel 99 Conformance Testing (TEI_Test) Batch 2	RAN WG5	R99	TEI_Test
8.6.3	Agreed CRs	RP-070103	RAN5 agreed non TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel 99 Conformance Testing (TEI_Test) Batch 3	RAN WG5	R99	TEI_Test
8.6.3	Agreed CRs	RP-070104	RAN5 agreed non TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel-4 Conformance Testing (TEI4_Test)	RAN WG5	Rel-4	TEI4_Test
8.6.3	Agreed CRs	RP-070105	RAN5 agreed non TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel-5 Conformance Testing (TEI5_Test)	RAN WG5	Rel-5	TEI5_Test
8.6.3	Agreed CRs	RP-070106	RAN5 agreed TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel 99 Conformance Testing (TEI_Test) Batch 1	RAN WG5	R99	TEI_Test
8.6.3	Agreed CRs	RP-070107	RAN5 agreed TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel 99 Conformance Testing (TEI_Test) Batch 2	RAN WG5	R99	TEI_Test
8.6.3	Agreed CRs	RP-070108	RAN5 agreed TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel 99 Conformance Testing (TEI_Test) Batch 3	RAN WG5	R99	TEI_Test
8.6.3	Agreed CRs	RP-070109	RAN5 agreed TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel 99 Conformance Testing (TEI_Test) Batch 4	RAN WG5	R99	TEI_Test
8.6.3	Agreed CRs	RP-070110	RAN5 agreed TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel-5 Conformance Testing (TEI5_Test)	RAN WG5	Rel-5	TEI5_Test
8.6.4	Agreed CRs	RP-070111	RAN5 agreed non TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel-6 Conformance Testing (TEI6_Test)	RAN WG5	Rel-6	TEI6_Test

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8.6.4	Agreed CRs	RP-070112	RAN5 agreed TTCN CR(s) under WI Small Technical Enhancements and Improvements for Rel-6 Conformance Testing (TEI6_Test)	RAN WG5	Rel-6	TEI6_Test
8.2.3	Agreed CRs	RP-070113	CRs to 25.224 & 25.225 (Rel-6 & Rel-7) for corrections for LCR TDD	RAN WG1	Rel-6 & 7	HSDPA-Phys
10.4	Agreed CRs	RP-070114	CRs to 25.201, 25.211, 25.212 & 25.214 (Rel-7, category B) for introduction of MIMO	RAN WG1	Rel-7	MIMO-Phys
10.2.2	Agreed CRs	RP-070115	CRs to 25.201, 25.211, 25.212 & 25.214 (Rel-7, category B) for introduction of CPC	RAN WG1	Rel-7	RANimp-CPC
10.20	Agreed CRs	RP-070116	Introduction of 64QAM for HSDPA	RAN WG1	Rel-7	RANimp-64QAMDownlink
10.21	For information	RP-070117	Introduction of 16QAM for HSUPA	RAN WG1	Rel-7	RANimp-16QAMUplink
10.5	Agreed CRs	RP-070118	Introduction of E-DCH for 1.28Mcps TDD	RAN WG1	Rel-7	LCRTDD-EDCH-Phys
9	Agreed CRs	RP-070119	CR to 25.215 (Rel-7) for corrections of UE measurement definitions for RX diversity	RAN WG1	Rel-7	RlnImp-RxDiv
9	Agreed CRs	RP-070120	CR to 25.225 (Rel-7) for corrections for UE power headroom measurement	RAN WG1	Rel-7	EDCHTDD-Phys, RANimp-VHCRTDD-EDCH
10.7	Agreed CRs	RP-070121	CRs to 25.211 & 25.214 (Rel-7, category C) for enhanced F-DPCH	RAN WG1	Rel-7	TEI 7
10.24b	Agreed CRs	RP-070122	CR to 25.211 (Rel-7) for introduction of Enhanced CELL_FACH in FDD	RAN WG1	Rel-7	RANimp-EnhState
10.1.1	For Approval	RP-070123	Exception form for Rel-7 inclusion of WI UE Antenna Performance Evaluation Method and Requirements	TeliaSonera		
10.1.1	Information	RP-070124	TS25.144 v1.0.0 (User Equipment (UE) and Mobile Station (MS) Over the Air Performance Requirements)	TeliaSonera		
6.1	LS	RP-070125	LS from GSMNA CTO AG on User Equipment (UE) and Mobile Station (MS) Over the Air Performance Requirements	GSMNA		
10.25.3	Approval	RP-070126	Technical Report, "Scope of future FDD HSPA Evolution"	Cingular		
10.26	Approval	RP-070127	Proposed WI on UMTS in 700 MHz Bands	Cingular/ATT		
10.26	Approval	RP-070128	Proposed WI on UMTS in 2300 MHz Bands	Cingular/ATT		
10.5	Approval	RP-070129	CRs 25.423/25.433 (1269rev2/1344rev2) on Introduction of 1.28 Mcps TDD Enhanced Uplink	ZTE, CATT, TD-TECH		
10.24b	Approval	RP-070130	Exception form for Rel-7 inclusion of WI Enhanced CELL_FACH state in FDD	Nokia		
10.7	Discussion	RP-070131	Removal of limitation of SRNC identity	Ericsson		

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10.26	Approval	RP-070132	New Work Item Proposal: Small Basestation Performance Requirements	Huawei, Motorola, NEC, Orange, T-mobile Intl.
10.26	Approval	RP-070133	New study item Proposal "Improved network controlled mobility with non-3GPP radio technologies"	Motorola, Intel, Telecom Italia, Spring, Samsung, NEC, Alcatel-Lucent
10.5	Approval	RP-070134	TR 25.827 v2.0.0 1.28Mcps TDD Enhanced Uplink; Physical Layer Aspects	CATT
10.5	Approval	RP-070135	TR 30.302 v2.0.0 1.28Mcps TDD Enhanced Uplink; RAN2 Stage 2	CATT
10.19.1	Information	RP-070136	TS 36.300 version 1.0.0	Nokia
10.26	Approval	RP-070137	Proposed WI for MBMS LCR TDD physical layer enhancements	RITT, CMCC, CATT, ZTE, TD-TECH, Huawei, Spreadtrum Communication
10.25.5	WI/SI Status Report	RP-070138	Status Report for FS Further Improved Performance Requirements for UMTS/HSDPA UE	Cingular
10.26	Approval	RP-070139	New Work Item Proposal: Further Improved Minimum Performance Requirements for HSDPA UE (FDD) - Two-Branch Interference Cancellation	Cingular
10.2.3	WI/SI Status Report	RP-070140	Status Report for WI Interface to control Tower Mounted Amplifiers	Vodafone
10.4	Approval	RP-070141	TR 25.876, Multiple-Input Multiple Output in UTRA, version 2.0.0	Alcatel-Lucent
10.25.5	Approval	RP-070142	Feasibility Study on Interference Cancellation for UTRA FDD UE	Cingular
2	Approval	RP-070143	Revised agenda TSG RAN #35	Chairman
10.5	Approval	RP-070144	Exception form for Rel-7 inclusion of WI LCR TDD Enhanced Uplink	CATT
10.5	Approval	RP-070145	CR to 25.221 on introduction of LCR TDD Enhanced Uplink	CATT, ZTE, TD-TECH
10.20	Approval	RP-070146	Exception form for Rel-7 inclusion of WI: 64QAM for HSDPA (FDD)	Ericsson
10.22	Approval	RP-070147	Exception form for Rel-7 inclusion of WI: MBMS FDD Physical Layer Enhancements	Ericsson
8.3.3	Agreed CRs	RP-070148	25.307 CRs R'99/Rel-4/Rel-5 on Bands V/VI	RAN WG2
8.3.3	Agreed CRs	RP-070149	25.323 CRs Rel-6/Rel-7 on RoHC performance testing	RAN WG2
8.3.3	Agreed CRs	RP-070150	25.306 and 25.321 Rel-5/Rel-6/Rel-7 CRs on HSDPA for 1.28 Mcps TDD	RAN WG2
8.3.3	Agreed CRs	RP-070151	25.306, 25.331, 25.346 and 25.922 Rel-6/Rel-7 CRs on MBMS	RAN WG2
8.3.3	Agreed CRs	RP-070152	TR 25.993 CRs	RAN WG2
8.3.3	Agreed CRs	RP-070153	25.331, 34.109 CRs Rel-6/Rel-7 on FDD Enhanced Uplink	RAN WG2
8.3.3	Agreed CRs	RP-070154	25.331 Rel-6/Rel-7 CRs on PS Inter-RAT Handover	RAN WG2

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10.4, 10.24, 10.24b	Agreed CRs	RP-070155	25.308 Rel-7 CR 0018rev2 on L2 Enhancements (and Cell_FACH and MIMO)	RAN WG2
10.24, 10.24b	Agreed CRs	RP-070156	25.308 Rel-7 CR 0019rev2 on Cell_FACH (and L2 Enhancements)	RAN WG2
10.5	Agreed CRs	RP-070157	25.302, 25.306, 25.319, 25.321, 25.331 Rel-7 CRs on the introduction of 1.28 Mcps EDCH	RAN WG2
10.2.2	Agreed CRs	RP-070158	25.321, 25.331 Rel-7 CRs on the introduction of CPC	RAN WG2
10.7	Agreed CRs	RP-070159	25.331 Rel-7 CRs on TEI7	RAN WG2
9	Agreed CRs	RP-070160	25.319, 25.321, 25.331 Rel-7 CRs on TDD 3.84/7.68 Mcps Enhanced Uplink	RAN WG2
10.4	Agreed CRs	RP-070161	25.308, 25.306, 25.321, 25.331 Rel-7 CRs on the introduction of MIMO	RAN WG2
10.21	Agreed CRs	RP-070162	25.306, 25.319, 25.321, 25.331 Rel-7 CRs on the introduction of uplink 16Qam	RAN WG2
10.20	Agreed CRs	RP-070163	25.306, 25.308, 25.321, 25.331 Rel-7 CRs on the introduction of downlink 64Qam	RAN WG2
10.24	Agreed CRs	RP-070164	25.301 Rel-7 CR on the introduction of Layer 2 Enhancements	RAN WG2
8.3.3	Agreed CRs	RP-070165	25.302, 25.308 Rel-6/Rel-7 CRs on HS-DSCH operation for TDD	RAN WG2
10.22, 10.23	Agreed CRs	RP-070166	25.346 Rel-7 CR on MBMS TDD and FDD Physical layer improvements	RAN WG2
10	Discussion	RP-070167	Release 7 mandatory features	Motorola, NEC, Samsung
10.19.3	Information	RP-070168	TS 36.201 v1.0.0	RAN1
10.19.3	Information	RP-070169	TS 36.211 v1.0.0	RAN1
10.19.3	Information	RP-070170	TS 36.212 v1.0.0	RAN1
10.19.3	Information	RP-070171	TS 36.213 v1.0.0	RAN1
9	Agreed CRs	RP-070172	25.331 Rel-7 CR on 7.68 Mcps TDD	RAN WG2
8.3.3	Agreed CRs	RP-070173	25.922 CR on the introduction of GAN CS and PS Handover	RAN WG2
10.19.1	Information	RP-070174	T-Mobile position on outcome of SA2/RAN2/RAN3 joint on architecture	T-Mobile Intl.
10.1.1	Approval	RP-070175	TS25.144: approval of requirements and targets for the 2 GHz range	TeliaSonera
8.1.1	Information	RP-070176	Status Report	ITU-R Ad Hoc Contact Person
8.1.2	Approval	RP-070177	Proposed Final Submission toward Rev 7 of M.1457	ITU-R Ad Hoc
8.1.2	Approval	RP-070178	Proposed update of UTRA FDD Overview (Section 5.1.1)	ITU-R Ad Hoc
8.1.2	Approval	RP-070179	Proposed update of UTRA TDD Overview (Section 5.3.1)	ITU-R Ad Hoc
8.1.2	Approval	RP-070180	Proposed update of UTRA FDD list of Specs (Section 5.1.2)	ITU-R Ad Hoc

8.1.2	Approval	RP-070181	Proposed update of UTRA TDD list of Specs (Section 5.3.2)	ITU-R Ad Hoc
8.1.2	Approval	RP-070182	Draft accompanying letter for the submission of the updated Global Core Specifications (GCS)	ITU-R Ad Hoc
8.1.2	Approval	RP-070183	Draft Reminder for the OPs on the compliance with ITU-R procedures as it relates to Revision 7 of Recommendation ITU-R M.1457	ITU-R Ad Hoc
8.1.2	Approval	RP-070184	Proposed LS to SA on the list of Specs	ITU-R Ad Hoc
8.1.2	Approval	RP-070185	Update Submission for UTRA FDD and TDD toward Revision 8 of Recommendation ITU-R M.1457	ITU-R Ad Hoc
6.1	LSs	RP-070186	(COM 2 - LS 67, to TSG RAN). LS from ITU-R SG2 on Cell Broadcast Message Identifiers	ITU-R SG2
6.1	LSs	RP-070187	(281 v2(8F/TEMP/281-E), to TSG RAN0. LS from ITU-R WP8F on the schedule for updating recommendation ITU-R M.1457 to revision 7	ITU-R WP8F
6.1	LSs	RP-070188	8F/TEMP/479(Rev.3), to RAN). LS from ITU-R WP 8F on the preliminary draft new Report ITU-R M.[IP CHAR] "Key technical and operational characteristics for access technologies to support IP applications over land mobile systems" in response to Question ITU-R 223-1/8	ITU-R WP8F
6.2	LSs	RP-070189	(CP-060742, Cc TSG RAN). LS on New High Speed Protocol for the UICC	CT
6.2	LSs	RP-070190	(GP-070549, to TSG RAN). LS on GERAN – LTE interworking	GERAN
6.3	LSs	RP-070191	(R2-071101, Cc TSG RAN). LS on PingPong problem in case of search for higher priority PLMN	RAN WG2
6.3	LSs	RP-070192	(R3-070486, to TSG RAN). LS on "HSPA Architecture Evolution"	RAN WG3
6.3	LSs	RP-070193	(R4-070329, Cc TSG RAN). Reply LS to CT on New High Speed Protocol for the UICC	RAN WG4
6.2	LSs	RP-070194	(C1-070612, Cc RAN). Reply LS (to RAN2) on PingPong problem in case of search for higher priority PLMN	CT WG1
6.3	LSs	RP-070195	(R2-070412, Cc RAN). LS on PingPong problem in case of search for higher priority PLMN	RAN WG2
6.3	LSs	RP-070196	(R2-070434, Cc RAN). LS to IETF RoHc (cc RAN) on questions regarding the RoHC Protocol	RAN WG2
6.2	LSs	RP-070197	(S1-070283, to RAN). Reply LS to RAN, SA4 on Service Requirement for MBMS LTE	SA WG1
6.2	LSs	RP-070198	(S1-070297, Cc RAN). Reply LS to RAN2 on minimum number of supported SAE bearers in the UE	SA WG1
6.2	LSs	RP-070199	(S4-070224, to RAN). Reply LS (to SA1 and RAN) on Service Requirement for MBMS LTE	SA WG4
6.2	LSs	RP-070200	(S5-070083, Cc RAN). LS on working relationship for production of SAE/LTE O&M Specifications	SA WG5

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6.2	LSs	RP-070201	(S5-070085, Cc RAN). LS on requirement for Trace in SAE/LTE	SA WG5
6.1	LSs	RP-070202	Report of ITU-T FG IdM meeting, Geneva, Switzerland, 13-16 February 2007	ITU-T FG IdM Chairmanship
3	Information	RP-070203	Revised Report of TSG RAN-34, Budapest, Hungary, 28 Nov - 01 Dec 2006 (updates indicated with change bars)	ETSI MCC
3	Approval	RP-070204	Revised Report of TSG RAN-34, Budapest, Hungary, 28 Nov - 01 Dec 2006	ETSI MCC
5.1	Information	RP-070205	Minutes of the workshop on LTE-GSM handovers, Sophia-Antipolis, France, 10-11 January 2007	ETSI MCC
6.2	LSs	RP-070206	(S5-070083, Cc RAN). LS on working relationship for production of SAE/LTE O&M Specifications	SA WG5
9	Discussion	RP-070207	Concerns regarding the updated definition of RSSI and CPICH measurements with receive diversity	Nokia
13	For information	RP-070208	TSG RAN Work Item & Study Item Description Sheets (ETSI MCC)	ETSI MCC
10.19	Discussion	RP-070209	Requirements for LTE Home eNodeBs	Orange, Telecom Italia, T-Mobile, Vodafone
10.2.3	Approval	RP-070210	Exception form for Rel-7 inclusion of WI interface to control TMAs	Vodafone
10.2.3	Approval	RP-070211	Proposed LS on specification of TMA control interface within 3GPP	Vodafone
8.1.2	Approval	RP-070212	(LSituCT, Cc TSG RAN). LS to TSG CT on the documents to be considered for the Revision 7 of Recommendation ITU-R M.1457	ITU-R
9	Approval	RP-070213	CR to 25.215 (Rel-7) for corrections of UE measurement definitions for RX diversity	Nokia	Rel-7	RInImp-RxDiv
10.1.1	For Approval	RP-070214	Exception form for Rel-7 inclusion of WI UE Antenna Performance Evaluation Method and Requirements	TeliaSonera
10.19.1	Discussions	RP-070215	Updated LTE Work Plan	LTE Rapporteur (NTT DoCoMo)
10.4	Approval	RP-070216	Exception form for Rel-7 inclusion of WI MIMO - RAN4 part	Alcatel-Lucent
10.4	Approval	RP-070217	Updated Work Item Description of MIMO	Alcatel-Lucent
	For approval	RP-070218	CRs (RAN1, RAN2, RAN3 specifications) on enhanced F-DPCH	Qualcomm, Ericsson, Philips
10.24b	For approval	RP-070219	Updated WID on WI Enhanced CELL_FACH state in FDD	Nokia
10.26	For approval	RP-070220	New WI proposal: Conformance test aspects - Enhanced Cell_FACH State in FDD	Nokia, Cingular Wireless, Ericsson, Motorola, Qualcomm, Rohde&Schwartz, Vodafone
10.7	For approval	RP-070221	LS to RAN2, SA2, CT4, GERAN2 on Removal of limitation of SRNC identity	Ericsson

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10.26	For approval	RP-070222	Proposed WI on FDD HSPA Evolution	Nokia, Siemens Networks, Vodafone, Telecom Italia, Huawei, Motorola
10.20	For approval	RP-070223	Updated WID on 64QAM for HSDPA	Ericsson
10.20	Approval	RP-070224	Exception form for Rel-7 inclusion of WI: 64QAM for HSDPA (FDD)	Ericsson
10.22	Approval	RP-070225	WID on WI: MBMS FDD Physical layer Enhancements	Ericsson
10.22	Approval	RP-070226	WID on WI: MBMS FDD Physical layer Enhancements	TSG RAN
10.26	Approval	RP-070227	Proposed Study Item on 3G Home NodeB	Nokia, Siemens Networks, Ericsson, Motorola, Alcatel-Lucent, Samsung, Huawei, NEC
8.1.2	Approval	RP-070228	Proposed Final Submission toward Rev 7 of M.1457	ITU-R Ad Hoc
8.1.2	Approval	RP-070229	Proposed update of UTRA FDD Overview (Section 5.1.1)	ITU-R Ad Hoc
8.1.2	Approval	RP-070230	Proposed update of UTRA TDD Overview (Section 5.3.1)	ITU-R Ad Hoc
8.1.2	Approval	RP-070231	Proposed update of UTRA FDD list of Specs (Section 5.1.2)	ITU-R Ad Hoc
8.1.2	Approval	RP-070232	Proposed update of UTRA TDD list of Specs (Section 5.3.2)	ITU-R Ad Hoc
8.1.2	Approval	RP-070233	Update Submission for UTRA FDD and TDD toward Revision 8 of Recommendation ITU-R M.1457	ITU-R Ad Hoc
10.3.1	Approval	RP-070234	Exception form for Rel-7 inclusion of WI Uplink TDOA UE positioning method in the UTRAN specifications	TruePosition
8.6.1	Approval	RP-070235	MCC STF 160 report	STF 160 Leader
10.1.1	Approval	RP-070236	TS 25.144 v1.0.1: Approval of requirements and targets for the 2GHz range	TeliaSonera, Orange, Telefonica, NTT DoCoMo, Telecom Italia
10.22	Approval	RP-070237	Exception form for Rel-7 inclusion of WI: MBMS FDD Physical Layer Enhancements	Ericsson
10.23	Approval	RP-070238	Updated WID on MBMS TDD Physical layer Enhancements	IPWireless
10.23	Approval	RP-070239	Exception form for Rel-7 inclusion of WI MBMS TDD Physical layer Enhancements	IPWireless

10.23	Approval	RP-070240	Exception form for Rel-7 inclusion of WI MBMS TDD Physical layer Enhancements	IPWireless
10.23	Approval	RP-070241	Updated WID on MBMS TDD Physical layer Enhancements	IPWireless
10.24	Approval	RP-070242	Updated WID on L2 support for high data rates	Ericsson
10.4	Approval	RP-070243	Exception form for Rel-7 inclusion of WI MIMO - RAN4 part	Alcatel-Lucent
10.25.3	Approval	RP-070244	Technical Report, "Scope of future FDD HSPA Evolution"	Cingular
10.24b	For approval	RP-070245	Updated WID on WI Enhanced CELL_FACH state in FDD	Nokia
10.25.3	Approval	RP-070246	Technical Report, "Scope of future FDD HSPA Evolution"	Cingular
6.1	Discussions	RP-070247	LS from TFES on IMT-2000/UTRA Category B spurious emission limits	TFES
13	Information	RP-070248	Specs lists per Release; a comparison	3GPP Support
13	Information	RP-070249	Specs status list prior to TSG meeting	3GPP Support
13	Information	RP-070250	3GPP Support Team report	3GPP Support
8.1.2	Approval	RP-070251	LS to TSG SA on the documents to be considered for the Revision 7 of Recommendation ITU-R M.1457	TSG RAN
10.26	Approval	RP-070252	Proposed agenda for non-3GPP handover workshop	Motorola
10.26	Approval	RP-070253	Proposed WI for MBMS LCR TDD physical layer enhancements	RITT, CMCC, CATT, ZTE, TD-TECH, Huawei, Spreadtrum Communication
10.26	Approval	RP-070254	New Work Item Proposal: Further Improved Minimum Performance Requirements for HSDPA UE (FDD) - Two-Branch Interference Cancellation	Cingular
10.26	Approval	RP-070255	Exception form for Rel-7 inclusion of WI: Further Improved Minimum Performance Requirements for HSDPA UE (FDD) - Two-Branch Interference Cancellation	Cingular
10.26	For approval	RP-070256	Proposed WI on FDD HSPA Evolution	Nokia, Siemens Networks, Vodafone, Telecom Italia, Huawei, Motorola
10.26	Approval	RP-070257	Proposed Study Item on 3G Home NodeB	Nokia, Siemens Networks, Ericsson, Motorola, Alcatel-Lucent, Samsung, Huawei, NEC
10.26	Approval	RP-070258	Proposed text on the way forward on the WI on HSPA evolution	Nokia
13	Information	RP-070259	3GPP Workplan version 08 March	ETSI MCC
13	Information	RP-070260	Slide review of the Work Plan	ETSI MCC

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6.2	Information	RP-070261	(CP-070245, Cc RAN). LS to TSG RAN ITU-R Ad-hoc on the documents to be considered for Revision 7 of Recommendation ITU-R M.1457	CT
10.19	Approval	RP-070262	Way forward on LTE Home eNodeB	Vodafone etAll
10.7	For approval	RP-070263	LS to RAN2, SA2, CT4, GERAN2 on Removal of limitation of SRNC identity	Ericsson
10.25.5	Approval	RP-070264	Feasibility Study on Interference Cancellation for UTRA FDD UE	Cingular
8.1.2	Approval	RP-070265	LS to TSG SA on the documents to be considered for the Revision 7 of Recommendation ITU-R M.1457	TSG RAN
8.1.2	Approval	RP-070266	Proposed update of UTRA TDD Overview (Section 5.3.1)	ITU-R Ad Hoc
8.1.2	Approval	RP-070267	Update Submission for UTRA FDD and TDD toward Revision 8 of Recommendation ITU-R M.1457	ITU-R Ad Hoc
10.7	Approval	RP-070268	LS to RAN2, SA2, CT4, GERAN2 on Removal of limitation of SRNC identity	TSG RAN
8.1.2	Approval	RP-070269	Proposed Final Submission toward Rev 7 of M.1457	ITU-R Ad Hoc

Annex C: List of CRs presented at TSG RAN #35

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070116	approved	25.201	026	2	Rel-7	Introduction of 64QAM for HSDPA	B	7.1.0	RANimp-64QamDownlink	R1-071232
RP-070117	postponed	25.201	027	1	Rel-7	Introduction of 16QAM for HSUPA	B	7.1.0	RANimp-16QamUplink	R1-070588
RP-070118	approved	25.201	028	-	Rel-7	Introduction of E-DCH for 1.28Mcps TDD	B	7.1.0	LCRTDD-EDCH-Phys	R1-070844
RP-070115	approved	25.201	031	-	Rel-7	Introduction of CPC features	B	7.1.0	RANimp-CPC	R1-071214
RP-070114	approved	25.201	032	-	Rel-7	Introduction of MIMO	B	7.1.0	MIMO-Phys	R1-071215
RP-070115	approved	25.211	230	2	Rel-7	Support of CPC feature	B	7.0.0	RANimp-CPC	R1-071097
RP-070115	approved	25.211	231	-	Rel-7	Support of CPC feature: addition of subframe numbering	B	7.0.0	RANimp-CPC	R1-063153
RP-070121	revised	25.211	232	2	Rel-7	Enhanced F-DPCH	C	7.0.0	TEI7	R1-070809
RP-070218	postponed	25.211	232	2	Rel-7	Enhanced F-DPCH	C	7.0.0	TEI7	
RP-070116	approved	25.211	234	2	Rel-7	Introduction of 64QAM for HSDPA	B	7.0.0	RANimp-64QamDownlink	R1-071178
RP-070117	postponed	25.211	235	1	Rel-7	Introduction of 16QAM for HSUPA	B	7.0.0	RANimp-16QamUplink	R1-070589
RP-070122	postponed	25.211	236	1	Rel-7	Introduction of Enhanced CELL_FACH State in FDD	B	7.0.0	RANimp-EnhState	R1-071190
RP-070114	approved	25.211	238	-	Rel-7	Transmit diversity operation in MIMO mode	B	7.0.0	MIMO-Phys	R1-071167
RP-070115	approved	25.212	238	5	Rel-7	Support of CPC feature	B	7.3.0	RANimp-CPC	R1-071173
RP-070114	approved	25.212	241	4	Rel-7	Coding of HS-SCCH to support FDD MIMO	B	7.3.0	MIMO-Phys	R1-071165
RP-070114	approved	25.212	242	7	Rel-7	Coding of HS-DPCCH to support operation of FDD MIMO	B	7.3.0	MIMO-Phys	R1-071096
RP-070116	approved	25.212	245	4	Rel-7	Introduction of 64QAM for HSDPA	B	7.3.0	RANimp-64QamDownlink	R1-071160
RP-070117	postponed	25.212	246	3	Rel-7	Introduction of 16QAM for HSUPA	B	7.3.0	RANimp-16QamUplink	R1-071183
RP-070116	approved	25.213	085	2	Rel-7	Introduction of 64QAM for HSDPA	B	7.0.0	RANimp-64QamDownlink	R1-071179
RP-070117	postponed	25.213	086	3	Rel-7	Introduction of 16QAM for HSUPA	B	7.0.0	RANimp-16QamUplink	R1-071184

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070115	approved	25.214	421	13	Rel-7	Support of CPC feature	B	7.3.0	RANimp-CPC	R1-071257
RP-070114	approved	25.214	430	10	Rel-7	Definition of MIMO operation on HS-PDSCH, preferred precoding and CQI reporting procedures, modified CQI tables	B	7.3.0	MIMO-Phys	R1-071229
RP-070121	revised	25.214	433	3	Rel-7	Enhanced F-DPCH	C	7.3.0	TEI7	R1-071143
RP-070218	postponed	25.214	433	4	Rel-7	Enhanced F-DPCH	C	7.3.0	TEI7	
RP-070116	approved	25.214	434	2	Rel-7	Introduction of 64QAM for HSDPA	B	7.3.0	RANimp-64QamDownlink	R1-071180
RP-070117	postponed	25.214	435	3	Rel-7	Introduction of 16QAM for HSUPA	B	7.3.0	RANimp-16QamUplink	R1-071185
RP-070119	revised	25.215	172	1	Rel-7	Clarification of UE measurement definitions for RX diversity	F	7.1.0	RlnImp-RxDiv	R1-071141
RP-070213	postponed	25.215	172	2	Rel-7	Clarification of UE measurement definitions for RX diversity	A	7.1.0	RlnImp-RxDiv	
RP-070118	approved	25.221	139	2	Rel-7	Introduction of E-DCH for 1.28Mcps TDD	B	7.1.0	LCRTDD-EDCH-Phys	R1-071263
RP-070118	approved	25.222	131	2	Rel-7	Introduction of E-DCH for 1.28Mcps TDD	B	7.1.0	LCRTDD-EDCH-Phys	R1-071264
RP-070118	approved	25.223	042	1	Rel-7	Introduction of E-DCH for 1.28Mcps TDD	B	7.2.0	LCRTDD-EDCH-Phys	R1-071265
RP-070113	approved	25.224	154	1	Rel-6	Modification on the power control function of HS-SICH and HS-SCCH for LCR TDD	F	6.6.1	HSDPA-Phys	R1-070550
RP-070113	approved	25.224	155	1	Rel-7	Modification on the power control function of HS-SICH and HS-SCCH for LCR TDD	A	7.1.0	HSDPA-Phys	R1-070551
RP-070113	approved	25.224	157	2	Rel-6	Clarification of Closed Loop Uplink HS-SICH Power Control for 1.28Mcps TDD	F	6.6.1	HSDPA-Phys	R1-070624
RP-070113	approved	25.224	158	2	Rel-7	Clarification of Closed Loop Uplink HS-SICH Power Control for 1.28Mcps TDD	A	7.1.0	HSDPA-Phys	R1-070625
RP-070118	approved	25.224	159	2	Rel-7	Introduction of E-DCH for 1.28Mcps TDD	B	7.1.0	LCRTDD-EDCH-Phys	R1-071266
RP-070118	approved	25.225	086	-	Rel-7	Introduction of E-DCH for 1.28Mcps TDD	B	7.2.0	LCRTDD-EDCH-Phys	R1-070849
RP-070113	approved	25.225	84	1	Rel-6	Modification on the HS-SICH reception quality of HS-SICH for LCR TDD	F	6.2.0	HSDPA-Phys	R1-070552
RP-070113	approved	25.225	85	1	Rel-7	Modification on the HS-SICH reception quality of	A	7.2.0	HSDPA-Phys	R1-070553

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
						HS-SICH for LCR TDD				
RP-070120	approved	25.225	87	-	Rel-7	Physical layer specification of UE power headroom measurement	F	7.2.0	EDCHTDD-Phys, RANimp-VHCRTDD-EDCH	R1-071200

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070164	approved	25.301	0083	-	Rel-7	L2 enhancements: Stage 2	B	7.0.0	RANimp-L2DataRates	R2-071051
RP-070157	approved	25.302	0177	-	Rel-7	Introduction of 1.28 Mcps TDD E-DCH	B	7.2.0	LCRTDD-EDCH-L23	R2-071034
RP-070165	approved	25.302	0178	-	Rel-7	Alignment of 25.302 with 25.321 and 25.331 to enable HS-DSCH operation without an associated DL DPCH for all TDD modes	F	7.2.0	RANimp-RABSE-CodOptLCRTDD	R2-071043
RP-070151	approved	25.306	0146	-	Rel-6	TTI values for MCCH RB configuration	F	6.9.0	MBMS-RAN	R2-070926
RP-070151	approved	25.306	0147	-	Rel-7	TTI values for MCCH RB configuration	A	7.2.0	MBMS-RAN	R2-070927
RP-070150	approved	25.306	0148	-	Rel-5	Correction of the HS-DSCH physical layger categories of 1.28Mcps TDD	F	5.13.0	HSDPA-L23	R2-070954
RP-070150	approved	25.306	0149	-	Rel-6	Correction of the HS-DSCH physical layger categories of 1.28Mcps TDD	A	6.9.0	HSDPA-L23	R2-070955
RP-070150	approved	25.306	0150	-	Rel-7	Correction of the HS-DSCH physical layger categories of 1.28Mcps TDD	A	7.2.0	HSDPA-L23	R2-070956
RP-070162	postponed	25.306	0151	1	Rel-7	Introduction of 16QAM in 25.306	B	7.2.0	RANimp-16QamUplink	R2-071088
RP-070157	approved	25.306	0152	-	Rel-7	Introduction of 1.28Mcps TDD E-DCH	B	7.2.0	LCRTDD-EDCH-L23	R2-071036
RP-070161	approved	25.306	0153	2	Rel-7	Introducing MIMO in UE Capability specification	B	7.2.0	MIMO-L23	R2-071116
RP-070163	approved	25.306	0155	-	Rel-7	Introduction of 64QAM downlink in 25.306	B	7.2.0	RANimp-64QamDownlink	R2-071093
RP-070148	approved	25.307	0058	-	R99	Signalling requirements for Band VI	F	3.8.0	RInImp-UMTS800	R2-071080
RP-070148	approved	25.307	0059	-	Rel-4	Signalling requirements for Band VI	A	4.8.0	RInImp-UMTS800	R2-071081
RP-070148	approved	25.307	0060	-	Rel-5	Signalling requirements for Band VI	A	5.7.0	RInImp-UMTS800	R2-071082
RP-070165	approved	25.308	0014	-	Rel-6	Alignment of 25.308 with 25.302 and 25.331 to enable HS-DSCH operation without an associated	F	6.3.0	RANimp-RABSE-CodOptTDD	R2-070938

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
						DL DPCH for all 3.84 McpsTDD				
RP-070165	approved	25.308	0015	-	Rel-7	Alignment of 25.308 with 25.302, 25.321 and 25.331 to enable HS-DSCH operation without an associated DL DPCH for all TDD modes	F	7.1.0	RANimp-RABSE-CodOptLCRTDD	R2-070939
RP-070163	approved	25.308	0016	-	Rel-7	25.308 DL HOM CR	B	7.1.0	RANimp-64QamDownlink	R2-071026
RP-070161	approved	25.308	0017	-	Rel-7	Introduction of MIMO in 25.308	B	7.1.0	MIMO-L23	R2-071038
RP-070155	approved	25.308	0018	2	Rel-7	L2 enhancements: Stage 2	B	7.1.0	RANimp-L2DataRates, RANimp-Enhstate, MIMO-L23	R2-071106
RP-070156	approved	25.308	0019	2	Rel-7	Stage 2 updates for Enhanced CELL_FACH state in FDD	B	7.1.0	RANimp-Enhstate, RANimp-L2DataRates	R2-071121
RP-070157	approved	25.319	0004	-	Rel-7	Introduction of 1.28Mcps TDD E-DCH	B	7.1.0	LCRTDD-EDCH-L23	R2-071033
RP-070162	approved	25.319	0005	-	Rel-7	25.319 UL HOM CR	B	7.1.0	RANimp-16QamUplink	R2-071018
RP-070160	approved	25.319	0006	-	Rel-7	Editorial Corrections Related to 3.84/7.68 Mcps TDD E-DCH	F	7.1.0	EDCHTDD-L23, EDCH-L23	R2-071048
RP-070150	approved	25.321	0308	-	Rel-5	Modification of HS-DSCH TB size for LCR TDD	F	5.12.0	HSDPA-L23	R2-070957
RP-070150	approved	25.321	0309	-	Rel-6	Modification of HS-DSCH TB size for LCR TDD	A	6.11.0	HSDPA-L23	R2-070958
RP-070150	approved	25.321	0310	-	Rel-7	Modification of HS-DSCH TB size for LCR TDD	A	7.3.0	HSDPA-L23	R2-070959
RP-070162	postponed	25.321	0311	1	Rel-7	Introduction of 16QAM in 25.321	B	7.3.0	RANimp-16QamUplink	R2-071085
RP-070163	approved	25.321	0312	1	Rel-7	Introduction of 64QAM in MAC specification	B	7.3.0	RANimp-64QamDownlink	R2-071089
RP-070157	approved	25.321	0313	-	Rel-7	Introduction of 1.28Mcps TDD E-DCH	B	7.3.0	LCRTDD-EDCH-L23	R2-071035
RP-070160	approved	25.321	0314	-	Rel-7	Editorial Corrections for 3.84/7.68 Mcps TDD E-DCH	F	7.3.0	EDCHTDD-L23	R2-071049
RP-070158	approved	25.321	0315	-	Rel-7	Introduction of DTX-DRX and HS-SCCH less in MAC	B	7.3.0	RANimp-ConCon	R2-071072
RP-070161	approved	25.321	0316	-	Rel-7	Introducing MIMO in MAC specification	B	7.3.0	MIMO-L23	R2-071091
RP-070149	approved	25.323	0300	-	Rel-6	Introduction of new test for O-mode including test requirement in case SRNS relocation for ROHC	F	6.8.0	RANimp-RABSE5	R2-070960

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
						performance testing				
RP-070149	approved	25.323	0301	-	Rel-7	Introduction of new test for O-mode including test requirement in case SRNS relocation for ROHC performance testing	A	7.3.0	RANimp-RABSE5	R2-070961
RP-070159	approved	25.331	2957	2	Rel-7	Deferred SIB11/12 reading and acting	B	7.3.0	TEI7	R2-071095
RP-070159	approved	25.331	2958	-	Rel-7	UE Positioning Fine Time Assistance for GPS	C	7.3.0	TEI7	R2-070594
RP-070159	approved	25.331	2959	-	Rel-7	Correction of "Threshold SFN-GPS TOW"	F	7.3.0	TEI7	R2-070593
RP-070159	approved	25.331	2960	1	Rel-7	Correction to standalone UE positioning	F	7.3.0	TEI7	R2-071046
RP-070159	approved	25.331	2961	-	Rel-7	Clarification on introduction of the new security algorithms	F	7.3.0	TEI7	R2-070500
RP-070159	approved	25.331	2962	-	Rel-7	Change to area scope of SIB1 value tag	F	7.3.0	TEI7	R2-070750
RP-070159	approved	25.331	2963	-	Rel-7	Correction of the tabular description of the IE Downlink information for each radio link Post	F	7.3.0	TEI7	R2-070986
RP-070159	approved	25.331	2964	-	Rel-7	Removal of redundant ASN1 element DL-CCTrChTPCList	F	7.3.0	TEI7	R2-070636
RP-070151	approved	25.331	2965	-	Rel-6	Correction of MBMS MODIFICATION REQUEST	F	6.12.0	MBMS-RAN	R2-070914
RP-070151	approved	25.331	2966	-	Rel-7	Correction of MBMS MODIFICATION REQUEST	A	7.3.0	MBMS-RAN	R2-070915
RP-070151	approved	25.331	2967	-	Rel-6	Wording of MBMS PL Service Restriction Information and preferred frequency layer	F	6.12.0	MBMS-RAN	R2-070917
RP-070151	approved	25.331	2968	-	Rel-7	Wording of MBMS PL Service Restriction Information and preferred frequency layer	F	7.3.0	MBMS-RAN	R2-070918
RP-070151	approved	25.331	2969	-	Rel-6	maxMBMS-Services definition	F	6.12.0	MBMS-RAN	R2-070919
RP-070151	approved	25.331	2970	-	Rel-7	maxMBMS-Services definition	A	7.3.0	MBMS-RAN	R2-070920
RP-070151	approved	25.331	2971	1	Rel-6	MBMS selected services indication	F	6.12.0	MBMS-RAN	R2-071117
RP-070151	approved	25.331	2972	1	Rel-7	MBMS selected services indication	A	7.3.0	MBMS-RAN	R2-071118
RP-070151	approved	25.331	2973	1	Rel-7	Correction of RAB release procedure for Mobile TV	F	7.3.0	MBMS-RAN	R2-071069
RP-070153	approved	25.331	2974	-	Rel-6	Tabular Alignment for Uplink DPCH Info	F	6.12.0	EDCH-L23	R2-070931
RP-070153	approved	25.331	2975	-	Rel-7	Tabular Alignment for Uplink DPCH Info	A	7.3.0	EDCH-L23	R2-070932

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070151	approved	25.331	2977	1	Rel-7	Update the IE" RAB information to reconfigure" for Mobile TV	F	7.3.0	MBMS-RAN	R2-071070
RP-070154	approved	25.331	2978	-	Rel-6	Absence of MS Classmark 2 and 3 in IE "Inter-RAT UE radio access capability"	F	6.12.0	TEI6	R2-070936
RP-070154	approved	25.331	2979	-	Rel-7	Absence of MS Classmark 2 and 3 in IE "Inter-RAT UE radio access capability"	A	7.3.0	TEI6	R2-070937
RP-070153	approved	25.331	2980	-	Rel-6	Handling of TFCS with no DCH configured	F	6.12.0	EDCH-L23, TEI6	R2-070940
RP-070153	approved	25.331	2981	-	Rel-7	Handling of TFCS with no DCH configured	A	7.3.0	EDCH-L23, TEI6	R2-070941
RP-070162	postponed	25.331	2982	2	Rel-7	Introducing 16QAM uplink support	B	7.3.0	RANimp-16QamUplink	R2-071087
RP-070163	approved	25.331	2983	1	Rel-7	Introducing 64QAM downlink support	B	7.3.0	RANimp-64QamDownlink	R2-071090
RP-070157	approved	25.331	2984	-	Rel-7	Introduction of 1.28 Mcps TDD E-DCH	B	7.3.0	LCRTDD-EDCH-L23	R2-071037
RP-070161	approved	25.331	2985	1	Rel-7	Introducing MIMO in RRC specification	B	7.3.0	MIMO-L23	R2-071092
RP-070172	approved	25.331	2986	-	Rel-7	Alignment of Tabular with ASN.1	F	7.3.0	VHCRTDD-L23	R2-071044
RP-070160	approved	25.331	2987	-	Rel-7	Corrections to Tabular for 3.84 and 7.68 McpsTDD E-DCH	F	7.3.0	EDCHTDD-L23	R2-071047
RP-070151	approved	25.331	2988	1	Rel-6	MICH reception for services scheduled with MSCH	C	6.12.0	MBMS-RAN	R2-071083
RP-070151	approved	25.331	2989	1	Rel-7	MICH reception for services scheduled with MSCH	C	7.3.0	MBMS-RAN	R2-071084
RP-070158	approved	25.331	2990	-	Rel-7	Introduction of DTX-DRX and HS-SCCH less in RRC	B	7.3.0	RANimp-ConCon	R2-071071
RP-070218	postponed	25.331	2991	-	Rel-7	Support for signalling of F-DPCH slot formats	C	7.3.0	TEI7	
RP-070151	approved	25.346	0025	1	Rel-6	Modification of the MBMS Service Area definition	F	6.9.1	MBMS-RAN	R2-070945
RP-070151	approved	25.346	0026	1	Rel-7	Modification of the MBMS Service Area definition	A	7.2.0	MBMS-RAN	R2-070946
RP-070166	postponed	25.346	0027	1	Rel-7	MBMS TDD and FDD Physical Layer Improvements	B	7.2.0	MBMSE-RANPhysTDD, MBMSE-RANPhysFDD	R2-071102
RP-070151	approved	25.922	0042	-	Rel-7	Examples of RRM strategies for MBMS	F	7.0.0	MBMS-RAN	R2-070916
RP-070173	approved	25.922	0043	-	Rel-7	Introduction of GAN CS Handover and PS Handover	B	7.0.0	GUGAN	R2-070934
RP-070152	approved	25.993	0088	1	Rel-7	Correction on RAB combinations for VoIP for TR	F	7.1.0	RANimp-RABSE	R2-070962

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
						25.993				
RP-070152	approved	25.993	0089	-	Rel-7	Addition of IMS MM Telephony configurations over HSPA	B	7.1.0	HSDPA-L23 and EDCH-L23	R2-070592
RP-070152	approved	25.993	0090	-	Rel-7	Correction to TF size in MBMS reference configuration	F	7.1.0	MBMS-RAN	R2-070913
RP-070152	approved	25.993	0091	-	Rel-7	UE capability requirement for 7.6 kbps signalling RB for MCCH	F	7.1.0	MBMS-RAN	R2-070928
RP-070152	approved	25.993	0092	-	Rel-7	Additional HSPA RAB Combinations	F	7.1.0	HSDPA-L23 and EDCH-L23	R2-070942
RP-070152	approved	25.993	0093	-	Rel-7	Additional HSDPA RAB Combinations	F	7.1.0	HSDPA-L23	R2-070952
RP-070153	approved	34.109	0041	-	Rel-6	Correction of max RLC SDU size	F	6.3.0	EDCH-Test	R2-071064
RP-070153	approved	34.109	0042	2	Rel-7	Correction of max RLC SDU size	A	7.1.0	EDCH-Test	R2-071119

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070058	approved	25.401	111		Rel-7	Introduction of TMA	B	7.2.0	RANimp-TMA	R3-070109
RP-070062	approved	25.401	112		Rel-7	Introduction of 1.28 Mcps TDD Enhanced Uplink	B	7.2.0	LCRTDD-EDCH-Iublur	R3-070218
RP-070070	postponed	25.401	113	1	Rel-7	Introduction of Enhanced Cell_FACH state feature	B	7.2.0	RANimp-EnhState	R3-070438
RP-070063	approved	25.413	891	2	Rel-7	Direct Tunnel Correction	F	7.4.0	TEI7	R3-070513
RP-070063	approved	25.413	895	2	Rel-7	Signalling RABs	F	7.4.0	TEI7	R3-070500
RP-070063	approved	25.413	898	1	Rel-7	Mandatory use of transport layer information	F	7.4.0	TEI7	R3-070405
RP-070063	approved	25.413	900		Rel-7	Modification of Rules for Building RANAP Messages	F	7.4.0	TEI7	R3-070200
RP-070054	approved	25.413	901	2	Rel-6	Correction on MBMS SESSION START and MBMS SESSION UPDATE	F	6.12.0	MBMS-RAN	R3-070501
RP-070054	approved	25.413	902	2	Rel-7	Correction on MBMS SESSION START and MBMS SESSION UPDATE	A	7.4.0	MBMS-RAN	R3-070502

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070066	postponed	25.413	905	1	Rel-7	Introduction of Extended RNC-ID	B	7.4.0	TEI7	R3-070381
RP-070061	approved	25.413	906	3	Rel-7	Introduction of MIMO in RANAP	B	7.4.0	MIMO	R3-070506
RP-070056	approved	25.413	908	2	Rel-7	MBMS Session setup of a parallel session of the same service in a distinct MBMS service area	F	7.4.0	MBMS-RAN	R3-070511
RP-070054	approved	25.413	909		Rel-6	Update of MBMS Session Duration	F	6.12.0	MBMS-RAN	R3-070458
RP-070054	approved	25.413	910		Rel-7	Update of MBMS Session Duration	A	7.4.0	MBMS-RAN	R3-070459
RP-070062	approved	25.420	058		Rel-7	Introduction of 1.28 Mcps TDD Enhanced Uplink	B	7.2.0	LCRTDD-EDCH-IubIur	R3-070187
RP-070057	approved	25.423	1258	2	Rel-7	Introduction of Continuous Packet Connectivity in RNSAP	B	7.3.0	RANimp-CPC	R3-070350
RP-070057	approved	25.423	1260	1	Rel-7	HS-PDSCH code change for CPC mode	B	7.3.0	RANimp-CPC	R3-070360
RP-070053	approved	25.423	1262	1	Rel-6	Abnormal conditions for IP Transport Option and Diversity Control field	F	6.12.0	TEI6	R3-070328
RP-070053	approved	25.423	1263	1	Rel-7	Abnormal conditions for IP Transport Option and Diversity Control field	A	7.3.0	TEI6	R3-070329
RP-070056	approved	25.423	1265	1	Rel-7	Correction of the Maximum number of logical channel ID	F	7.3.0	EDCH-IurIub	R3-070332
RP-070069	postponed	25.423	1266	2	Rel-7	Support of higher bitrates and Flexible RLC PDU size on HS-DSCH	B	7.3.0	RANimp-L2DataRates	R3-070493
RP-070061	approved	25.423	1267	1	Rel-7	Introduction of MIMO in RNSAP	B	7.3.0	MIMO-IurIub	R3-070363
RP-070063	approved	25.423	1268	2	Rel-7	Presence of Guaranteed Bit Rate	F	7.3.0	TEI7	R3-070469
RP-070129	approved	25.423	1269	2	Rel-7	Introduction of 1.28 Mcps TDD Enhanced Uplink	B	7.3.0	LCRTDD-EDCH-IubIur	
RP-070067	approved	25.423	1270	1	Rel-7	Introduction of Downlink Higher Order Modulation in RNSAP	B	7.3.0	RANimp-64QamDownlink	R3-070366
RP-070068	postponed	25.423	1271	1	Rel-7	Introduction of Uplink Higher Order Modulation in RNSAP	B	7.3.0	RANimp-16QamUplink	R3-070368
RP-070066	postponed	25.423	1272	1	Rel-7	Introduction of Extended RNC-ID	B	7.3.0	TEI7	R3-070382
RP-070070	postponed	25.423	1273	2	Rel-7	Introduction of Enhanced Cell_FACH state feature	B	7.3.0	RANimp-Enhstate	R3-070439

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070053	approved	25.423	1274		Rel-6	Correction of the procedure code ID	F	6.12.0	TEI6	R3-070309
RP-070053	approved	25.423	1275		Rel-7	Correction of the procedure code ID	A	7.3.0	TEI6	R3-070310
RP-070218	postponed	25.423	1276		Rel-7	Support of F-DPCH Enhancement	B	7.3.0	TEI7	
RP-070069	postponed	25.425	114	2	Rel-7	Support of higher bitrates and Flexible RLC PDU size on HS-DSCH	B	7.3.0	RANimp-L2DataRates	R3-070444
RP-070062	approved	25.427	141	1	Rel-7	Introduction of 1.28 Mcps TDD Enhanced Uplink	B	7.3.0	LCRTDD-EDCH-IubIur	R3-070481
RP-070062	approved	25.430	070		Rel-7	Introduction of 1.28 Mcps TDD Enhanced Uplink	B	7.2.0	LCRTDD-EDCH-IubIur	R3-070189
RP-070063	approved	25.432	006		Rel-7	Clarification for Client/Server functionality for SCTP in IP based Transport option	F	7.0.0	TEI7	R3-070075
RP-070065	approved	25.433	1329	5	Rel-7	Iub transport efficiency improvement for MBMS	C	7.3.0	TEI7	R3-070491
RP-070057	approved	25.433	1330	2	Rel-7	Introduction of Continuous Packet Connectivity in NBAP	B	7.3.0	RANimp-CPC	R3-070349
RP-070057	approved	25.433	1334	1	Rel-7	HS-PDSCH code change for CPC mode	B	7.3.0	RANimp-CPC	R3-070361
RP-070053	approved	25.433	1336	1	Rel-6	Abnormal conditions for IP Transport Option and Diversity Control field	F	6.12.0	TEI6	R3-070330
RP-070053	approved	25.433	1337	1	Rel-7	Abnormal conditions for IP Transport Option and Diversity Control field	A	7.3.0	TEI6	R3-070331
RP-070056	approved	25.433	1339	1	Rel-7	Correction of the Maximum number of logical channel ID	F	7.3.0	EDCH-IurIub	R3-070333
RP-070069	postponed	25.433	1341	2	Rel-7	Support of higher bitrates and Flexible RLC PDU size on HS-DSCH	B	7.3.0	RANimp-L2DataRates	R3-070492
RP-070061	approved	25.433	1342	1	Rel-7	Introduction of MIMO in NBAP	B	7.3.0	MIMO-IurIub	R3-070362
RP-070129	approved	25.433	1344	2	Rel-7	Introduction of 1.28 Mcps TDD Enhanced Uplink	B	7.3.0	LCRTDD-EDCH-IubIur	
RP-070067	approved	25.433	1346	1	Rel-7	Introduction of Downlink Higher Order Modulation in NBAP	B	7.3.0	RANimp-64QamDownlink	R3-070365
RP-070068	postponed	25.433	1347	1	Rel-7	Introduction of Uplink Higher Order Modulation in NBAP	B	7.3.0	RANimp-16QamUplink	R3-070367

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Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070070	postponed	25.433	1348	2	Rel-7	Introduction of Enhanced Cell_FACH state feature	B	7.3.0	RANimp-Enhstate	R3-070440
RP-070063	approved	25.433	1351	2	Rel-7	Presence of Guaranteed Bit Rate	F	7.3.0	TEI7	R3-070470
RP-070218	postponed	25.433	1352		Rel-7	Support of F-DPCH Enhancement	B	7.3.0	TEI7	
RP-070069	postponed	25.435	162	2	Rel-7	Support of higher bitrates and Flexible RLC PDU size on HS-DSCH	B	7.3.0	RANimp-L2DataRates	R3-070443
RP-070065	approved	25.435	165		Rel-7	Iub transport efficiency improvement for MBMS	C	7.3.0	TEI7	R3-070348
RP-070052	approved	25.453	099	2	Rel-5	Presence inconsistency	F	5.11.0	TEI5	R3-070413
RP-070052	approved	25.453	100	1	Rel-6	Presence inconsistency	A	6.10.0	TEI5	R3-070326
RP-070052	approved	25.453	101	1	Rel-7	Presence inconsistency	A	7.5.0	TEI5	R3-070327
RP-070064	approved	25.453	102	2	Rel-7	UE Rx-Tx Time Difference Type 1	B	7.5.0	TEI7	R3-070391
RP-070060	postponed	25.453	104	2	Rel-7	SAS-Centric A-GPS UE requesting additional Assistance Data	F	7.5.0	TEI7	R3-070464
RP-070058	approved	25.460	005	2	Rel-7	Introduction of TMA	B	7.0.0	RANimp-TMA	R3-070471
RP-070058	approved	25.461	044	1	Rel-7	Update of DC Power Supply Requirements	B	7.3.0	RANimp-TMA	R3-070356
RP-070058	approved	25.461	045		Rel-7	Tower Mounted Amplifier amendment	B	7.3.0	RANimp-TMA	R3-070426
RP-070056	approved	25.462	020	1	Rel-7	Clarification of broadcast message handling after reset (paragraph 4.3)	F	7.1.0	RANimp-TiltAnt	R3-070341
RP-070058	approved	25.462	021	2	Rel-7	Introduction of TMA	B	7.1.0	RANimp-TMA	R3-070514
RP-070056	approved	25.462	022	1	Rel-7	Missing requirement of maximum allowed secondary station response time	F	7.1.0	RANimp-TiltAnt	R3-070480
RP-070055	approved	25.463	060	1	Rel-6	Disregarded message length (paragraph 6.2.2)	F	6.5.0	RANimp-TiltAnt	R3-070373
RP-070055	approved	25.463	061	1	Rel-7	Disregarded message length (paragraph 6.2.2)	A	7.4.0	RANimp-TiltAnt	R3-070374
RP-070055	approved	25.463	062	1	Rel-6	Correction of MaxDataReceiveLength	F	6.5.0	RANimp-TiltAnt	R3-070336
RP-070055	approved	25.463	063	1	Rel-7	Correction of MaxDataReceiveLength	A	7.4.0	RANimp-TiltAnt	R3-070337
RP-070055	approved	25.463	064	3	Rel-6	Correction of procedure message interpretation	F	6.5.0	RANimp-TiltAnt	R3-070515
RP-070055	approved	25.463	065	3	Rel-7	Correction of procedure message interpretation	A	7.4.0	RANimp-TiltAnt	R3-070516
RP-070055	approved	25.463	066	1	Rel-6	Correction of additional data resolution description	F	6.5.0	RANimp-TiltAnt	R3-070342

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
						(Annex B)				
RP-070055	approved	25.463	067	1	Rel-7	Correction of additional data resolution description (Annex B)	A	7.4.0	RANimp-TiltAnt	R3-070343
RP-070055	approved	25.463	068	1	Rel-6	Definition of antenna bearing resolution (Annex B)	F	6.5.0	RANimp-TiltAnt	R3-070344
RP-070055	approved	25.463	069	1	Rel-7	Definition of antenna bearing resolution (Annex B)	A	7.4.0	RANimp-TiltAnt	R3-070345
RP-070055	approved	25.463	070	1	Rel-6	Clarification of additional data beamwidth description	F	6.5.0	RANimp-TiltAnt	R3-070346
RP-070055	approved	25.463	071	1	Rel-7	Clarification of additional data beamwidth description	A	7.4.0	RANimp-TiltAnt	R3-070347
RP-070062	approved	25.902	004		Rel-7	Introduction of 1.28 Mcps TDD Enhanced Uplink	B	7.0.0	LCRTDD-EDCH-IubIur	R3-070191
RP-070062	approved	25.931	049		Rel-7	Introduction of 1.28 Mcps TDD Enhanced Uplink	B	7.3.0	LCRTDD-EDCH-IubIur	R3-070192

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070084	approved	25.101	0506		Rel-7	Introduction of continuous packet connectivity (CPC) to "Out-of-syncronization handling of output power"	B	7.6.0	RANimp-CPC	R4-070119
RP-070082	approved	25.102	0201		Rel-7	Performance requirements for 7.68 Mcps E-DCH associated downlink signalling channels: E-AGCH and E-HICH	B	7.5.0	TEI7	R4-070002
RP-070085	postponed	25.102	0202		Rel-7	Performance requirements for MTCH using 16QAM in an extended delay spread environment	B	7.5.0	MBMSE-RANPhysTDD	R4-070039
RP-070082	approved	25.102	0203		Rel-7	Corrections & clarifications on 7.68 Mcps TDD MTCH demodulation test case.	F	7.5.0	TEI7	R4-070040
RP-070081	approved	25.102	0206		Rel-4	Modificaiton to SEM for 1.28Mcps TDD	F	4.8.0	TEI4	R4-070106
RP-070081	approved	25.102	0207		Rel-5	Modificaiton to SEM for 1.28Mcps TDD	A	5.10.0	TEI4	R4-070107
RP-070081	approved	25.102	0208		Rel-6	Modificaiton to SEM for 1.28Mcps TDD	A	6.6.0	TEI4	R4-070108
RP-070081	approved	25.102	0209		Rel-7	Modificaiton to SEM for 1.28Mcps TDD	A	7.5.0	TEI4	R4-070109
RP-070085	postponed	25.102	0211		Rel-7	Performance requirement for MCCH in an extended delay	B	7.5.0	MBMSE-	R4-070231

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
						spread environment			RANPhysTDD	
RP-070080	approved	25.104	0284		R99	Category B spurious emission limits for UTRA BS	F	3.13.0	TEI	R4-070156
RP-070080	approved	25.104	0285		Rel-4	Category B spurious emission limits for UTRA BS	A	4.8.0	TEI	R4-070157
RP-070080	approved	25.104	0286		Rel-5	Category B spurious emission limits for UTRA BS	A	5.12.0	TEI	R4-070158
RP-070080	approved	25.104	0287		Rel-6	Category B spurious emission limits for UTRA BS	A	6.14.0	TEI	R4-070159
RP-070080	approved	25.104	0288		Rel-7	Category B spurious emission limits for UTRA BS	A	7.5.0	TEI	R4-070160
RP-070082	approved	25.105	0200		Rel-7	Tx and Rx Spurious Emission from 7.68 Mcps TDD BS into FDD band in Japan	F	7.4.0	TEI7	R4-070112
RP-070082	approved	25.105	0201		Rel-7	Clarification on the deployment of UTRA TDD in Japan	F	7.4.0	TEI7	R4-070114
RP-070081	approved	25.105	0204		Rel-6	Introdution of HS-SICH detection performance for 1.28Mcps TDD	F	6.3.0	TEI6	R4-070103
RP-070081	approved	25.105	0205		Rel-7	Introdution of HS-SICH detection performance for 1.28Mcps TDD	A	7.4.0	TEI6	R4-070104
RP-070082	approved	25.113	0037		Rel-7	EMC updates from new IEC standards	F	7.5.0	TEI	R4-070167
RP-070081	approved	25.123	0379		Rel-6	Correction to UE measurement reporting requirements in Annex 8	F	6.9.0	TEI6	R4-070256
RP-070081	approved	25.123	0380		Rel-7	Correction to UE measurement reporting requirements in Annex 8	A	7.3.0	TEI6	R4-070257
RP-070081	approved	25.133	0897		Rel-6	Correction to Cell re-selection during an MBMS session	F	6.16.0	TEI6	R4-070055
RP-070081	approved	25.133	0898		Rel-7	Correction to Cell re-selection during an MBMS session	A	7.6.0	TEI6	R4-070056
RP-070084	approved	25.133	0899		Rel-7	Introduction of continuous packet connectivity (CPC) to ETFC restriction, UE transmitted power and UE transmission power headroom measurement requirements	B	7.6.0	RANimp-CPC	R4-070120
RP-070083	approved	25.141	0442		Rel-7	Corrections to spectrum emission requirements for band X.	F	7.6.0	RInImp-UMTS1721Ext	R4-070155
RP-070080	approved	25.141	0443		R99	Category B spurious emission limits for UTRA BS	F	3.14.0	TEI	R4-070161
RP-070080	approved	25.141	0444		Rel-4	Category B spurious emission limits for UTRA BS	A	4.9.0	TEI	R4-070162
RP-070080	approved	25.141	0445		Rel-5	Category B spurious emission limits for UTRA BS	A	5.12.0	TEI	R4-070163

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070080	approved	25.141	0446		Rel-6	Category B spurious emission limits for UTRA BS	A	6.15.0	TEI	R4-070164
RP-070080	approved	25.141	0447		Rel-7	Category B spurious emission limits for UTRA BS	A	7.6.0	TEI	R4-070165
RP-070082	approved	25.142	0216		Rel-7	Tx and Rx Spurious Emission from 7.68 Mcps TDD BS into FDD band in Japan	F	7.4.0	TEI7	R4-070113
RP-070082	approved	25.142	0217		Rel-7	Clarification on the deployment of UTRA TDD in Japan	F	7.4.0	TEI7	R4-070115
RP-070081	approved	25.142	0218		Rel-6	HS-SICH detection performance test specification for 1.28Mcps TDD	F	6.5.0	TEI6	R4-070269
RP-070081	approved	25.142	0219		Rel-7	HS-SICH detection performance test specification for 1.28Mcps TDD	A	7.4.0	TEI6	R4-070246
RP-070080	approved	25.942	0015		Rel-7	Category B spurious emission limits for UTRA BS	F	6.4.0	TEI	R4-070166
RP-070080	approved	25.942	0015		Rel-7	Category B spurious emission limits for UTRA BS	F	6.4.0	TEI	R4-070166
RP-070081	approved	25.945	0003		Rel-4	CR on Changing SEM for LCR TDD	F	4.1.1	TEI4	R4-070278
RP-070081	approved	25.945	0004		Rel-5	CR on Changing SEM for LCR TDD	F	5.1.0	TEI5	R4-070279

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070111	approved	34.108	557		Rel-6	34.108 v6.6.0 pointer to Release 7 version	F	6.5.0	TEI6_Test	R5-070338
RP-070105	approved	34.108	558		Rel-6	Correction of IE "DL UM RLC LI size" in RF default messages for HSDPA	F	6.5.0	TEI5_Test	R5-070548
RP-070096	approved	34.108	559		Rel-6	Signalled Reference E-TFCIs for E-DCH RF tests	F	6.5.0	EDCH_Test	R5-070113
RP-070096	approved	34.108	560		Rel-6	Correction to RB setup message used for E-DCH tests	F	6.5.0	EDCH_Test	R5-070221
RP-070096	approved	34.108	561		Rel-6	Correction of IE "DL UM RLC LI size" in RF default messages for E-DCH	F	6.5.0	EDCH_Test	R5-070549
RP-070090	approved	34.108	562		Rel-7	Generic test procedure for MBMS RF test case	F	6.5.0	MBMS-RAN-RF_Test	R5-070553
RP-070094	approved	34.108	563		Rel-7	Introduction of FDD Mode Test frequencies for	F	6.5.0	RInImp-	R5-070160

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
						Operating Band X (Extended 1.7/2.1 GHz)			UEConTest_UMTS1721Ext	
RP-070094	approved	34.108	564		Rel-7	Introduction of FDD Band X (Extended 1.7/2.1 GHz) to Contents of System Information Block type 5bis	F	6.5.0	RInImp-UEConTest_UMTS1721Ext	R5-070161
RP-070104	approved	34.108	565		Rel-6	Correction to contents of System Information Block type 5 (1.28 Mcps TDD)	F	6.5.0	TEI4_Test	R5-070109
RP-070104	approved	34.108	566		Rel-6	Remove DCH information from RRC Connection Setup message to Cell_FACH state	F	6.5.0	TEI4_Test	R5-070353
RP-070096	approved	34.108	567		Rel-6	Corrections to 34.108 Radio Bearer Setup Message: AM or UM	F	6.5.0	EDCH_Test	R5-070038
RP-070096	approved	34.108	568		Rel-6	Introduction of radio bearers for Stand-alone SRBs for DCCH on E-DCH and HS-DSCH	F	6.5.0	EDCH_Test	R5-070356
RP-070096	approved	34.108	569		Rel-6	Introduction of RRC Connection setup message for Stand-alone SRBs for DCCH on E-DCH and HS-DSCH	F	6.5.0	EDCH_Test	R5-070357
RP-070086	approved	34.108	570		Rel-6	MBMS test - MCCH configurations	F	6.5.0	MBMS_Test	R5-070429
RP-070086	approved	34.108	571		Rel-6	Generic setup procedures and default values for MBMS signalling testing	F	6.5.0	MBMS_Test	R5-070422
RP-070086	approved	34.108	572		Rel-6	Introduction of signalling radio bearer for MCCH	F	6.5.0	MBMS_Test	R5-070147
RP-070101	approved	34.121-1	782		Rel-7	Correction to 34.121-1 test case for: Change of TFC	F	7.3.0	TEI_Test	R5-070501
RP-070105	approved	34.121-1	783		Rel-7	Correction to 34.121-1 test case for: Change to peak code domain error applicability	F	7.3.0	TEI5_Test	R5-070173
RP-070101	approved	34.121-1	784		Rel-7	Correction to test tolerances in test cases 7.7.1 and 7.7.2.	F	7.3.0	TEI_Test	R5-070216
RP-070101	approved	34.121-1	785		Rel-7	Correction to test requirements in section 8.4.2.4 and F.4.4	F	7.3.0	TEI_Test	R5-070502
RP-070101	approved	34.121-1	786		Rel-7	Correction to Table 8.3.7.2.1 and Table F.4.1	F	7.3.0	TEI_Test	R5-070555

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070101	approved	34.121-1	787		Rel-7	Correction to the content of Measurement Control message in RRM Test cases 8.3.2.2, 8.6.2.1 and 8.6.2.2	F	7.3.0	TEI_Test	R5-070503
RP-070101	approved	34.121-1	788		Rel-7	Correction of the definition of known cell	F	7.3.0	TEI_Test	R5-070218
RP-070101	approved	34.121-1	789		Rel-7	Correction to system uncertainty of GSM test cases	F	7.3.0	TEI_Test	R5-070256
RP-070111	approved	34.121-1	790		Rel-7	Correction to SIB11for 8.6.5.1 in AnnexI	F	7.3.0	TEI6_Test	R5-070257
RP-070111	approved	34.121-1	791		Rel-7	Correction to 8.3.8	F	7.3.0	TEI6_Test	R5-070504
RP-070101	approved	34.121-1	792		Rel-7	Default Qrxlevmin value for RRM Testcases	F	7.3.0	TEI_Test	R5-070505
RP-070101	approved	34.121-1	793		Rel-7	Correction to Active Set Update messsage in Annex I	F	7.3.0	TEI_Test	R5-070506
RP-070105	approved	34.121-1	794		Rel-7	Correction to reference TFC in Annex I	F	7.3.0	TEI5_Test	R5-070219
RP-070105	approved	34.121-1	795		Rel-7	Continuous DPCH transmission during HSDPA and E-DCH performance tests	F	7.3.0	TEI5_Test	R5-070220
RP-070105	approved	34.121-1	796		Rel-7	Removal of the fixed MAC-hs header option for HSDPA test cases	F	7.3.0	TEI5_Test	R5-070290
RP-070105	approved	34.121-1	797		Rel-7	Correction to HSDPA Performance test cases	F	7.3.0	TEI5_Test	R5-070583
RP-070105	approved	34.121-1	798		Rel-7	Clarification of CQI test cases	F	7.3.0	TEI5_Test	R5-070584
RP-070111	approved	34.121-1	799		Rel-7	Introduction of Relative Code Domain Error	F	7.3.0	TEI6_Test	R5-070557
RP-070096	approved	34.121-1	800		Rel-7	E-TFC selection for E-DCH maximum power tests	F	7.3.0	EDCH_Test	R5-070512
RP-070096	approved	34.121-1	801		Rel-7	Corrections to method of test and limits for E-DCH RRM test 8.4.4.1	F	7.3.0	EDCH_Test	R5-070582
RP-070096	approved	34.121-1	802		Rel-7	Correction to HSUPA Test Case to 34.121-1: E-TFC restriction in UE 10ms TTI test case and 2ms TTI test case	F	7.3.0	EDCH_Test	R5-070576
RP-070096	approved	34.121-1	803		Rel-7	Reduction of lower limits in TC 5.2B	F	7.3.0	EDCH_Test	R5-070223
RP-070096	approved	34.121-1	804		Rel-7	Addition of test system uncertainties and test	F	7.3.0	EDCH_Test	R5-070524

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
						tolerances for inter cell E-DCH tests				
RP-070096	approved	34.121-1	805		Rel-7	Correction to E-AGCH test case	F	7.3.0	EDCH_Test	R5-070520
RP-070096	approved	34.121-1	806		Rel-7	Removal of the 2ms test from 10.2.1(E-HICH, Single link performance)	F	7.3.0	EDCH_Test	R5-070562
RP-070096	approved	34.121-1	807		Rel-7	Separation of the 2ms test from 10.2.1(E-HICH, Single link performance)	F	7.3.0	EDCH_Test	R5-070563
RP-070096	approved	34.121-1	808		Rel-7	Removal of the 2ms test from 10.2.2.1(E-HICH, SHO, RLS not cont….)	F	7.3.0	EDCH_Test	R5-070577
RP-070096	approved	34.121-1	809		Rel-7	Separation of the 2ms test from 10.2.2.1(E-HICH, SHO, RLS not cont…)	F	7.3.0	EDCH_Test	R5-070578
RP-070096	approved	34.121-1	810		Rel-7	Removal of the 2ms test from 10.2.2.2(E-HICH, SHO, RLS containing….)	F	7.3.0	EDCH_Test	R5-070579
RP-070096	approved	34.121-1	811		Rel-7	Separation of the 2ms test from 10.2.2.2(E-HICH, SHO, RLS containing….)	F	7.3.0	EDCH_Test	R5-070567
RP-070096	approved	34.121-1	812		Rel-7	Removal of the 2ms test from 10.3.1(E-RGCH, Single link performance)	F	7.3.0	EDCH_Test	R5-070568
RP-070096	approved	34.121-1	813		Rel-7	Separation of the 2ms test from 10.3.1(E-RGCH, single link)	F	7.3.0	EDCH_Test	R5-070569
RP-070097	approved	34.121-1	814		Rel-7	Correction to 10.3.2(E-RGCH, SHO)	F	7.3.0	EDCH_Test	R5-070570
RP-070097	approved	34.121-1	815		Rel-7	Statistical annex for E-DCH performance tests	F	7.3.0	EDCH_Test	R5-070561
RP-070097	approved	34.121-1	816		Rel-7	Statistical requirements for test cases 8.4.4	F	7.3.0	EDCH_Test	R5-070515
RP-070090	approved	34.121-1	817		Rel-7	New test case: Demodulation of MTCH and cell identification – RLC SDU Error Rate	F	7.3.0	MBMS-RAN-RF_Test	R5-070580
RP-070090	approved	34.121-1	818		Rel-7	Addition of reference measurement channel, downlink physical channels configuration and VA3 fading condition for MBMS RF testing	F	7.3.0	MBMS-RAN-RF_Test	R5-070546
RP-070090	approved	34.121-1	819		Rel-7	Introduction of the new demodulation of MTCH test case	F	7.3.0	MBMS-RAN-RF_Test	R5-070547

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070094	approved	34.121-1	820		Rel-7	CR to 34.121-1: Introduction of FDD Mode Test frequencies for Operating Band X (Extended 1.7/2.1 GHz) to Chapter 4	F	7.3.0	RInImp-UEConTest_UMTS1721Ext	R5-070162
RP-070094	approved	34.121-1	821		Rel-7	CR to 34.121-1: Introduction of FDD Band X (Extended UMTS 1.7/2.1 GHz) to Chapter 5	F	7.3.0	RInImp-UEConTest_UMTS1721Ext	R5-070536
RP-070094	approved	34.121-1	822		Rel-7	CR to 34.121-1: Introduction of FDD Band X (Extended UMTS 1.7/2.1 GHz) to Chapter 6	F	7.3.0	RInImp-UEConTest_UMTS1721Ext	R5-070537
RP-070094	approved	34.121-1	823		Rel-7	CR to 34.121-1: Introduction of FDD Band X (Extended UMTS 1.7/2.1 GHz) to Annex D	F	7.3.0	RInImp-UEConTest_UMTS1721Ext	R5-070165
RP-070094	approved	34.121-1	824		Rel-7	CR to 34.121-1: Introduction of FDD Band X (Extended UMTS 1.7/2.1 GHz) to Annex F	F	7.3.0	RInImp-UEConTest_UMTS1721Ext	R5-070166
RP-070101	approved	34.121-1	825		Rel-7	Test time reduction to event trigger tests	F	7.3.0	TEI_Test	R5-070560
RP-070090	approved	34.121-1	826		Rel-7	New test case: Cell re-selection during an MBMS session, one UTRAN inter-frequency and 2 GSM cells present in the neighbour list	F	7.3.0	MBMS-RAN-RF_Test	R5-070573
RP-070097	approved	34.121-2	11		Rel-7	Correction to 34.121-2: Introduction of applicability for 2ms TTI E-DCH E-TFC restriction test case	F	7.3.0	EDCH_Test	R5-070571
RP-070090	approved	34.121-2	12		Rel-7	Applicability of new MBMS RF and RRM test cases	F	7.3.0	MBMS-RAN-RF_Test	R5-070554
RP-070094	approved	34.121-2	13		Rel-7	Correction to 34.121-2: Introduction of FDD Band X (Extended UMTS 1.7/2.1 GHz) for transmitter and receiver characteristics test cases	F	7.3.0	RInImp-UEConTest_UMTS1721Ext	R5-070167
RP-070111	approved	34.122	226		Rel-6	34.122 v6.0.0 pointer to Release 7 version	F	5.6.0	TEI6_Test	R5-070075
RP-070105	approved	34.122	227		Rel-5	34.122 v5.7.0 pointer to Release 6 version	F	5.6.0	TEI5_Test	R5-070076
RP-070104	approved	34.122	228		Rel-5	Correcting the inter frequency measurement for 1.28Mcps TDD option	F	5.6.0	TEI4_Test	R5-070119

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070104	approved	34.122	229		Rel-5	Correcting the intra frequency measurement test case for 1.28Mcps TDD option	F	5.6.0	TEI4_Test	R5-070120
RP-070104	approved	34.122	230		Rel-5	Correcting the test case of open loop power control for 1.28Mcps TDD option	F	5.6.0	TEI4_Test	R5-070121
RP-070104	approved	34.122	231		Rel-5	Adding the test criteria in RRM test cases for 1.28Mcps TDD option	F	5.6.0	TEI4_Test	R5-070122
RP-070104	approved	34.122	232		Rel-5	Adding test case of Timing Advance for 1.28Mcps TDD option	F	5.6.0	TEI4_Test	R5-070123
RP-070091	approved	34.122	233		Rel-7	Addition of 7.68Mcps to Frequency bands and channel arrangement (section 4 of 34.122)	F	5.6.0	VHCRTDD-UEConTest	R5-070175
RP-070091	approved	34.122	234		Rel-7	Addition of 7.68Mcps tests to transmitter characteristics (section 5 of 34.122)	F	5.6.0	VHCRTDD-UEConTest	R5-070538
RP-070091	approved	34.122	235		Rel-7	Addition of 7.68Mcps tests to receiver characteristics (section 6 of 34.122)	F	5.6.0	VHCRTDD-UEConTest	R5-070539
RP-070091	approved	34.122	236		Rel-7	Addition of 7.68Mcps tests to performance requirements (section 7 of 34.122)	F	5.6.0	VHCRTDD-UEConTest	R5-070178
RP-070091	approved	34.122	237		Rel-7	Addition of 7.68Mcps tests to connected mode mobility requirements for support of RRM (section 8.3 of 34.122)	F	5.6.0	VHCRTDD-UEConTest	R5-070540
RP-070091	approved	34.122	238		Rel-7	Addition of 7.68Mcps tests to RRC connection control for support of RRM (section 8.4 of 34.122)	F	5.6.0	VHCRTDD-UEConTest	R5-070180
RP-070091	approved	34.122	239		Rel-7	Addition of 7.68Mcps tests to idle mode requirements for support of RRM (section 8.2 of 34.122)	F	5.6.0	VHCRTDD-UEConTest	R5-070181
RP-070091	approved	34.122	240		Rel-7	Addition of 7.68Mcps tests to UE measurement procedures (section 8.6 of 34.122)	F	5.6.0	VHCRTDD-UEConTest	R5-070182
RP-070091	approved	34.122	241		Rel-7	Addition of 7.68Mcps tests to measurements performance requirements (section 8.7 of 34.122)	F	5.6.0	VHCRTDD-UEConTest	R5-070183
RP-070091	approved	34.122	242		Rel-7	Addition of 7.68Mcps tests to timing charcteristics for support of RRM (section 8.5 of 34.122)	F	5.6.0	VHCRTDD-UEConTest	R5-070184

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070091	approved	34.122	243		Rel-7	Addition of 7.68Mcps tests to Performance requirements for HSDPA (section 9 of 34.122)	F	5.6.0	VHCRTDD-UEConTest	R5-070541
RP-070091	approved	34.122	244		Rel-7	Addition of 7.68Mcps reference measurement channels to Annex C of 34.122	F	5.6.0	VHCRTDD-UEConTest	R5-070542
RP-070091	approved	34.122	245		Rel-7	Addition of 7.68Mcps propagation conditions to Annex D of 34.122	F	5.6.0	VHCRTDD-UEConTest	R5-070543
RP-070091	approved	34.122	246		Rel-7	Addition of 7.68Mcps cases to Annex F of 34.122	F	5.6.0	VHCRTDD-UEConTest	R5-070544
RP-070091	approved	34.122	247		Rel-7	Addition of 7.68Mcps to Annex H of 34.122	F	5.6.0	VHCRTDD-UEConTest	R5-070545
RP-070091	approved	34.122	248		Rel-7	Addition of 7.68Mcps messages to Annex I of 34.122	F	5.6.0	VHCRTDD-UEConTest	R5-070190
RP-070092	approved	34.122	249		Rel-7	Addition of measurement parameters for MBMS tests to Annex C of 34.122	F	5.6.0	MBMS-UEConTest_TDH	R5-070192
RP-070093	approved	34.122	250		Rel-7	Addition of E-DCH reference measurement channels for E-DCH tests to Annex C of 34.122	F	5.6.0	RANimp-UEConTest_EDCHTDH	R5-070191
RP-070104	approved	34.123-1	1818		Rel-6	Addition of LCR TDD contents in testcase 8.4.1.31, 8.4.1.33, 8.4.1.44, 8.4.1.45 and 8.4.1.46	F	6.5.0	TEI4_Test	R5-070108
RP-070104	approved	34.123-1	1819		Rel-6	Change the Message Content of Testcase 8.1.5.1	F	6.5.0	TEI4_Test	R5-070354
RP-070111	approved	34.123-1	1820		Rel-6	Supplement to HS-DSCH radio bearer test parameters in TDD	F	6.5.0	TEI6_Test	R5-070355
RP-070097	approved	34.123-1	1821		Rel-6	Correction to GCF WI-25 MAC Test Case 7.1.6.4.2	F	6.5.0	EDCH_Test	R5-070042
RP-070097	approved	34.123-1	1822		Rel-6	Correction to GCF WI 25 MAC test cases 7.1.6.1.1, 7.1.6.1.2, 7.1.6.1.3, 7.1.6.2.1, 7.1.6.2.8, 7.1.6.2.9, 7.1.6.3.1, 7.1.6.4.1, 7.1.6.4.2	D	6.5.0	EDCH_Test	R5-070043
RP-070097	approved	34.123-1	1823		Rel-6	Correction to GCF WI 25 RRC test case 8.2.2.45	F	6.5.0	EDCH_Test	R5-070044
RP-070097	approved	34.123-1	1824		Rel-6	Correction to generic test procedure for HS-DSCH and E-DCH radio bearer combinations	F	6.5.0	EDCH_Test	R5-070479
RP-070097	approved	34.123-1	1825		Rel-6	Correction of RADIO BEARER RECONFIGURATION message used in E-DCH	F	6.5.0	EDCH_Test	R5-070052

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
						RRC TC 8.2.2.46 & 8.2.2.48				
RP-070097	approved	34.123-1	1826		Rel-6	Correction of Generic test procedure for HS-DSCH & HS-DSCH / E-DCH radio bearer combinations in 14.1.3 & 14.1.4	F	6.5.0	EDCH_Test	R5-070053
RP-070097	approved	34.123-1	1827		Rel-6	TC-8.2.6.52 - IE "Uplink channel requirement" in Physical channel reconfiguration message is replaced with "Uplink DPCH info".	F	6.5.0	EDCH_Test	R5-070403
RP-070097	approved	34.123-1	1828		Rel-6	Correction to E-DCH radio bearer test case 14.7.8	F	6.5.0	EDCH_Test	R5-070143
RP-070097	approved	34.123-1	1829		Rel-6	Addition of new test case for RRC connection establishment using the default configuration for HS-DSCH / E-DCH signalling bearers.	F	6.5.0	EDCH_Test	R5-070360
RP-070097	approved	34.123-1	1830		Rel-6	Introduction of test scenario for Stand-alone SRBs for DCCH on E-DCH and HS-DSCH	F	6.5.0	EDCH_Test	R5-070361
RP-070097	approved	34.123-1	1831		Rel-6	Correction to test case 14.7.4	F	6.5.0	EDCH_Test	R5-070362
RP-070097	approved	34.123-1	1832		Rel-6	Correction to GCF WI 25 HSUPA RAB test case 14.7.8	F	6.5.0	EDCH_Test	R5-070278
RP-070097	approved	34.123-1	1833		Rel-6	Corrections to GCF WI-25 test case 7.1.6.2.10	F	6.5.0	EDCH_Test	R5-070307
RP-070097	approved	34.123-1	1834		Rel-6	Correction to GCF WI 25 MAC test case 7.1.6.2.9	F	6.5.0	EDCH_Test	R5-070331
RP-070097	approved	34.123-1	1835		Rel-6	Correction to MAC test cases 7.1.6.2.2, 7.1.6.4.1, 7.1.6.4.2 and 7.1.6.4.3	F	6.5.0	EDCH_Test	R5-070470
RP-070095	approved	34.123-1	1836		Rel-6	Addition of RoHC Performance TC 7.3.6.5 Re-establishment of TS function after DTX in R-mode	F	6.5.0	RANimp-RABSE5_Test	R5-070363
RP-070095	approved	34.123-1	1837		Rel-6	Addition of RoHC Performance TC 7.3.6.7 Compressor response to single lost packets in R-mode	F	6.5.0	RANimp-RABSE5_Test	R5-070229
RP-070095	approved	34.123-1	1838		Rel-6	Addition of RoHC Performance TC 7.3.6.9 TS function during DTX with varying delta in R-mode	F	6.5.0	RANimp-RABSE5_Test	R5-070364
RP-070095	approved	34.123-1	1839		Rel-6	Addition of a new RoHC Performance Test Case.	F	6.5.0	RANimp-RABSE5_Test	R5-070365

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070095	approved	34.123-1	1840		Rel-6	Addition of RoHC Performance TC 7.3.6.8: TS function during DTX with varying delta in O-mode	F	6.5.0	RANimp-RABSE5_Test	R5-070366
RP-070086	approved	34.123-1	1841		Rel-6	Correction to MBMS GMM test case 12.9.18	F	6.5.0	MBMS_Test	R5-070069
RP-070086	approved	34.123-1	1842		Rel-6	Generic test procedure for MBMS radio bearer test cases	F	6.5.0	MBMS_Test	R5-070431
RP-070086	approved	34.123-1	1843		Rel-6	New MBMS radio bearer test cases	F	6.5.0	MBMS_Test	R5-070432
RP-070086	approved	34.123-1	1844		Rel-6	Corrections to MBMS RLC test cases	F	6.5.0	MBMS_Test	R5-070473
RP-070086	approved	34.123-1	1845		Rel-6	Corrections to MBMS test cases 8.5.3.5 and 8.5.3.6	F	6.5.0	MBMS_Test	R5-070475
RP-070086	approved	34.123-1	1846		Rel-6	New MBMS test case for Modification of the list of MBMS Selected Service whilst in Cell_PCH, URA_PCH & Cell_FACH	F	6.5.0	MBMS_Test	R5-070466
RP-070086	approved	34.123-1	1847		Rel-6	Correction to MBMS Test Cases 11.5.1, 11.5.2.1 and 11.5.2.2	F	6.5.0	MBMS_Test	R5-070436
RP-070086	approved	34.123-1	1848		Rel-6	New MBMS RRC Test Case: MBMS session Start at Notification via DCCH in CELL_DCH	F	6.5.0	MBMS_Test	R5-070465
RP-070086	approved	34.123-1	1849		Rel-6	New MBMS RRC Test Case: Transmission of the MBMS Selected Services Information when entering RRC connected mode	F	6.5.0	MBMS_Test	R5-070406
RP-070086	approved	34.123-1	1850		Rel-6	New MBMS RRC Test Case: MBMS Serving Cell Reselection in CELL_DCH during ongoing Session	F	6.5.0	MBMS_Test	R5-070437
RP-070086	approved	34.123-1	1851		Rel-6	New MBMS RRC Test Case: MBMS Serving Cell Reselection in CELL_PCH during ongoing Session	F	6.5.0	MBMS_Test	R5-070438
RP-070086	approved	34.123-1	1852		Rel-6	Correction of TC 8.5.1.1: MBMS Session Start in Idle mode	F	6.5.0	MBMS_Test	R5-070439
RP-070086	approved	34.123-1	1853		Rel-6	Addition of TC 8.5.1.2: MBMS session start at notification in CELL_PCH	F	6.5.0	MBMS_Test	R5-070440
RP-070086	approved	34.123-1	1854		Rel-6	Addition of TC 8.5.3.2: MBMS Session Start (Frequency Layer Convergence)/Session Stop	F	6.5.0	MBMS_Test	R5-070443

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
						(Frequency Layer Dispersion) in CELL_PCH				
RP-070086	approved	34.123-1	1855		Rel-6	Addition of TC 8.5.1.6: MBMS session start at MCCH acquisition in CELL_DCH (for a MBMS service) when entering into an MBMS cell (UE capable of MBMS p-t-m reception in CELL_DCH)	F	6.5.0	MBMS_Test	R5-070441
RP-070086	approved	34.123-1	1856		Rel-6	Addition of TC 8.5.3.3: MBMS Session Start (Frequency Layer Convergence)/Session Stop (Frequency Layer Dispersion) in CELL_FACH	F	6.5.0	MBMS_Test	R5-070442
RP-070086	approved	34.123-1	1857		Rel-6	Addition of TC 8.5.5.5: P-t-p Request in Idle Mode	F	6.5.0	MBMS_Test	R5-070444
RP-070087	approved	34.123-1	1858		Rel-6	Addition of TC "MBMS Cell reselection - Idle mode - Frequency Layer Convergence – HCS Not Used"	F	6.5.0	MBMS_Test	R5-070457
RP-070087	approved	34.123-1	1859		Rel-6	Addition of TC 8.5.5.6: P-t-p Request in URA_PCH, CELL_PCH or CELL_FACH	F	6.5.0	MBMS_Test	R5-070445
RP-070087	approved	34.123-1	1860		Rel-6	Addition of TC 8.5.2.2: MBMS Session Stop at Notification, reception via MCCH	F	6.5.0	MBMS_Test	R5-070458
RP-070087	approved	34.123-1	1861		Rel-6	Addition of TC 8.5.3.4: MBMS session stop with frequency layer dispersion - no previous frequency layer available (Idle Mode)	F	6.5.0	MBMS_Test	R5-070480
RP-070087	approved	34.123-1	1862		Rel-6	Update of TC 8.5.5.1: MBMS Counting in Idle Mode to cover Selected services.	F	6.5.0	MBMS_Test	R5-070459
RP-070087	approved	34.123-1	1863		Rel-6	Update of TC 8.5.5.3: MBMS No Counting in CELL_DCH to cover Selected services.	F	6.5.0	MBMS_Test	R5-070280
RP-070087	approved	34.123-1	1864		Rel-6	Update of TC 8.5.5.4: MBMS Counting in CELL_PCH to cover Selected services.	F	6.5.0	MBMS_Test	R5-070281
RP-070087	approved	34.123-1	1865		Rel-6	Addition of TC 8.5.5.2: MBMS Counting in CELL_FACH	F	6.5.0	MBMS_Test	R5-070380
RP-070087	approved	34.123-1	1866		Rel-6	Update to MBMS test cases 11.6.1 and 11.7	F	6.5.0	MBMS_Test	R5-070396
RP-070101	approved	34.123-1	1867		Rel-6	Add a note in clause 6	F	6.5.0	TEI_Test	R5-070058
RP-070101	approved	34.123-1	1868		Rel-6	Correction to GCF WI-10 Inter-RAT Test Case	F	6.5.0	TEI_Test	R5-070082

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Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
						6.2.2.3				
RP-070101	approved	34.123-1	1869		Rel-6	Correction to WI-010 test case 7.1.1.3	F	6.5.0	TEI_Test	R5-070288
RP-070105	approved	34.123-1	1870		Rel-6	Correction of RRC HSDPA test case 8.3.1.35	F	6.5.0	TEI5_Test	R5-070386
RP-070105	approved	34.123-1	1871		Rel-6	Correction of RRC test case 8.4.1.47	F	6.5.0	TEI5_Test	R5-070387
RP-070105	approved	34.123-1	1872		Rel-6	Correction of RRC test case 8.3.4.9	F	6.5.0	TEI5_Test	R5-070388
RP-070105	approved	34.123-1	1873		Rel-6	Correction to GCF WI 13/1 RRC test case 8.4.1.47	F	6.5.0	TEI5_Test	R5-070078
RP-070101	approved	34.123-1	1874		Rel-6	Correction to GCF WI 10 RRC test case 8.2.4.1	F	6.5.0	TEI_Test	R5-070079
RP-070101	approved	34.123-1	1875		Rel-6	Correction to WI-10/3 RRC test case 8.4.1.29	F	6.5.0	TEI_Test	R5-070373
RP-070101	approved	34.123-1	1876		Rel-6	Correction to RRC test case 8.4.1.14	F	6.5.0	TEI_Test	R5-070085
RP-070101	approved	34.123-1	1877		Rel-6	Change in the phrase "Frequency band modification" to "Frequency modification" in RRC cases	F	6.5.0	TEI_Test	R5-070086
RP-070101	approved	34.123-1	1878		Rel-6	Correction to GCF WI 10 RRC test case 8.1.2.2	F	6.5.0	TEI_Test	R5-070089
RP-070101	approved	34.123-1	1879		Rel-6	Correction to GCF WI 10/4 Inter system cell reselection from UTRAN test case 8.3.9.1	F	6.5.0	TEI_Test	R5-070090
RP-070111	approved	34.123-1	1880		Rel-6	Addition of new test case for Radio Bearer Establishment using Specification Mode = Preconfiguration	F	6.5.0	TEI6_Test	R5-070375
RP-070101	approved	34.123-1	1881		Rel-6	Update to test case 8.1.2.15 for Rel-6	F	6.5.0	TEI_Test	R5-070477
RP-070102	approved	34.123-1	1882		Rel-6	Correction to RRC test case 8.2.6.37	F	6.5.0	TEI_Test	R5-070377
RP-070102	approved	34.123-1	1883		Rel-6	Correction to test cases 8.4.1.2 and 8.4.1.24	F	6.5.0	TEI_Test	R5-070376
RP-070102	approved	34.123-1	1884		Rel-6	Correction to GCF WI 10/2 RRC test case 8.1.10.1	F	6.5.0	TEI_Test	R5-070277
RP-070102	approved	34.123-1	1885		Rel-6	Corrections to test cases in Section 8	F	6.5.0	TEI_Test	R5-070378
RP-070102	approved	34.123-1	1886		Rel-6	Correction to GCF WI-10 RRC test case 8.4.1.28	F	6.5.0	TEI_Test	R5-070332
RP-070102	approved	34.123-1	1887		Rel-6	Correction to GCF WI 10 MM test case 9.2.2	F	6.5.0	TEI_Test	R5-070077

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070102	approved	34.123-1	1888		Rel-6	Corrections to GCF WI-10/4 test cases 9.4.3.5 and 9.5.7.1	F	6.5.0	TEI_Test	R5-070402
RP-070102	approved	34.123-1	1889		Rel-6	Correction to GCF WI-012 test case 12.3.2.7	F	6.5.0	TEI_Test	R5-070046
RP-070102	approved	34.123-1	1890		Rel-6	Correction of GMM test case 12.4.1.4b	F	6.5.0	TEI_Test	R5-070064
RP-070102	approved	34.123-1	1891		Rel-6	Correction to GCF WI 10/4 GMM test case 12.9.13	F	6.5.0	TEI_Test	R5-070068
RP-070111	approved	34.123-1	1892		Rel-6	Correction to GMM test cases in sub clause 12.4.2.11, 12.4.2.12	F	6.5.0	TEI6_Test	R5-070349
RP-070102	approved	34.123-1	1893		Rel-6	Correction to GCF WI-10 RAB Test Case 14.2.58	F	6.5.0	TEI_Test	R5-070047
RP-070105	approved	34.123-1	1894		Rel-6	Correction to GCF WI-14 RAB Test Case 14.6.1a and 14.6.2	D	6.5.0	TEI5_Test	R5-070048
RP-070105	approved	34.123-1	1895		Rel-6	Correction to GCF WI 14/3 HSDPA test case 14.6.7	F	6.5.0	TEI5_Test	R5-070049
RP-070105	approved	34.123-1	1896		Rel-6	Correction to GCF WI13/1 RAB testcase 14.2.4b and 14.2.62	F	6.5.0	TEI5_Test	R5-070050
RP-070105	approved	34.123-1	1897		Rel-6	Correction to GCF WI 14/3 HSDPA test case 14.6.8	F	6.5.0	TEI5_Test	R5-070051
RP-070105	approved	34.123-1	1898		Rel-6	Correction to HSDPA radio bearer test case 14.6.8	F	6.5.0	TEI5_Test	R5-070142
RP-070105	approved	34.123-1	1899		Rel-6	Corrections to GCF WI-14 test case 14.6.8	F	6.5.0	TEI5_Test	R5-070287
RP-070097	approved	34.123-1	1900		Rel-6	Correction to GCF WI-25 test case 8.3.4.10	F	6.5.0	EDCH_Test	R5-070435
RP-070095	approved	34.123-1	1901		Rel-6	Addition of RoHC Performance TC 7.3.6.10: SRNS relocation for ROHC RTP O-mode compressor	F	6.5.0	RANimp-RABSE5_Test	R5-070248r1
RP-070102	approved	34.123-1	1902		Rel-6	Correction of SMS test case 16.1.2	F	6.5.0	TEI_Test	R5-070478r1
RP-070098	approved	34.123-2	290		Rel-6	Applicability table for addition of new test cases for RRC connection establishment for HS-DSCH / E-DCH signalling bearers.	F	6.5.0	EDCH_Test	R5-070157
RP-070095	approved	34.123-2	291		Rel-6	Addition of applicability for new ROHC test cases	F	6.5.0	RANimp-RABSE5_Test	R5-070246
RP-070087	approved	34.123-2	292		Rel-6	Applicability of new MBMS radio bearer test cases	F	6.5.0	MBMS_Test	R5-070146
RP-070087	approved	34.123-2	293		Rel-6	Applicability table for addition of new MBMS test	F	6.5.0	MBMS_Test	R5-070153

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
						case for Modification of the list of MBMS Selected Service whilst in Cell_PCH, URA_PCH & Cell_FACH				
RP-070087	approved	34.123-2	294		Rel-6	Addition of applicability for new MBMS test cases	F	6.5.0	MBMS_Test	R5-070448
RP-070087	approved	34.123-2	295		Rel-6	Modification of MBMS test case numbering	F	6.5.0	MBMS_Test	R5-070474
RP-070102	approved	34.123-2	296		Rel-6	Correction to the applicability for the GCF WI 10 RRC test case 8.2.4.1	F	6.5.0	TEI_Test	R5-070080
RP-070102	approved	34.123-2	297		Rel-6	Correction to Table 1: Applicability of tests	F	6.5.0	TEI_Test	R5-070087
RP-070102	approved	34.123-2	298		Rel-6	Correction to Table 1: Change in the phrase "Frequency band modification" to "Frequency modification"	F	6.5.0	TEI_Test	R5-070088
RP-070111	approved	34.123-2	299		Rel-6	Applicability table for addition of new test case for Radio Bearer Establishment using Specification Mode = Preconfiguration	F	6.5.0	TEI6_Test	R5-070390
RP-070102	approved	34.123-2	300		Rel-6	8.2.4.36a – the redundant test case shall be deleted	F	6.5.0	TEI_Test	R5-070391
RP-070102	approved	34.123-2	301		Rel-6	Correction to the applicability for GCF WI-012 test case 8.4.1.48	F	6.5.0	TEI_Test	R5-070235
RP-070102	approved	34.123-2	302		Rel-6	Deletion of PICS 'Indication and user selection of PLMN' and corrections of the condition statements	F	6.5.0	TEI_Test	R5-070392
RP-070102	approved	34.123-2	303		Rel-6	Correction of ICS parameter A.13/2 and update of applicability of FDD radio bearer test casas depending on ICS parameter A.13/2	F	6.5.0	TEI_Test	R5-070461
RP-070111	approved	34.123-2	304		Rel-6	Deletion of PICS 'Indication and user selection of PLMN' and corrections of the condition statements for Rel-6 TCs	F	6.5.0	TEI6_Test	R5-070476
RP-070095	approved	34.123-2	305		Rel-6	Addition of applicability for new ROHC test case 7.3.6.10: SRNS relocation for ROHC RTP O-mode compressor	F	6.5.0	RANimp-RABSE5_Test	R5-070249

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070102	approved	34.123-2	306		Rel-6	Recommendation concerning number of TC execution added to applicability table	F	6.5.0	TEI_Test	R5-070491r2
RP-070099	approved	34.123-3	1898		Rel-6	Addition of GCF WI-25 HSUPA MAC Test Case 7.1.6.4.3	B	6.1.0	EDCH_Test	R5s060401
RP-070099	approved	34.123-3	1899		Rel-6	Addition of GCF WI-25 RAB Test Case 14.7.4	B	6.1.0	EDCH_Test	R5s060399
RP-070099	approved	34.123-3	1900		Rel-6	Addition of GCF WI-25 HSUPA Test Case 7.1.6.2.10	B	6.1.0	EDCH_Test	R5s060378
RP-070099	approved	34.123-3	1901		Rel-6	Addition of GCF WI-25 HSUPA MAC Test Case 7.1.6.4.2	B	6.1.0	EDCH_Test	R5s060395
RP-070099	approved	34.123-3	1902		Rel-6	Addition of GCF WI-25 HSUPA Test Case 8.2.2.45	B	6.1.0	EDCH_Test	R5s060384
RP-070099	approved	34.123-3	1903		Rel-6	Addition of GCF WI-25 HSUPA MAC Test Case 7.1.6.1.3	B	6.1.0	EDCH_Test	R5s060380
RP-070099	approved	34.123-3	1904		Rel-6	Addition of GCF WI-25 HSUPA MAC Test Case 7.1.6.2.8	B	6.1.0	EDCH_Test	R5s060376
RP-070099	approved	34.123-3	1905		Rel-6	Addition of GCF WI-25 HSUPA Test Case 7.1.6.2.9	B	6.1.0	EDCH_Test	R5s060381
RP-070106	approved	34.123-3	1906		Rel-6	Addition of GCF WI-10 Idle mode test case 6.1.2.9a	B	6.1.0	TEI_Test	R5s070027
RP-070106	approved	34.123-3	1907		Rel-6	Addition of GCF WI-10 Idle mode test case 6.1.2.9b	B	6.1.0	TEI_Test	R5s070029
RP-070110	approved	34.123-3	1908		Rel-6	Addition of WB-AMR RAB test case 14.2.4b to HSD_ENH_r5 ATS V6.1.0	B	6.1.0	TEI5_Test	R5s070033
RP-070099	approved	34.123-3	1909		Rel-6	Addition of E-DCH RAB test case 14.7.5 to HSU_ENH_r6 ATS V6.0.0	B	6.1.0	EDCH_Test	R5s060328
RP-070099	approved	34.123-3	1910		Rel-6	Addition of E-DCH RAB test case 14.7.2 to HSU_ENH_r6 ATS V6.0.0	B	6.1.0	EDCH_Test	R5s060326
RP-070099	approved	34.123-3	1911		Rel-6	Addition of E-DCH MAC test case 7.1.6.3.1 to HSU_ENH_r6 ATS V6.0.0	B	6.1.0	EDCH_Test	R5s060364
RP-070099	approved	34.123-3	1912		Rel-6	Addition of E-DCH MAC test case 7.1.6.1.2 to	B	6.1.0	EDCH_Test	R5s060362

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
						HSU_ENH_r6 ATS V6.0.0				
RP-070099	approved	34.123-3	1913		Rel-6	Addition of E-DCH MAC test case 7.1.6.1.1 to HSU_ENH_r6 ATS V6.0.0	B	6.1.0	EDCH_Test	R5s060360
RP-070099	approved	34.123-3	1914		Rel-6	Correction to GCF WI-025 test case 8.3.1.41	F	6.1.0	EDCH_Test	R5s060404
RP-070099	approved	34.123-3	1915		Rel-6	Correction to GCF WI-25 RAB Test Case 14.7.5	F	6.1.0	EDCH_Test	R5s060408
RP-070106	approved	34.123-3	1916		Rel-6	Summary of Regression Errors in NAS wk49 ATS	F	6.1.0	TEI_Test	R5s060406
RP-070106	approved	34.123-3	1917		Rel-6	Summary of regression errors in wk49 ATS	F	6.1.0	TEI_Test	R5s060405
RP-070106	approved	34.123-3	1918		Rel-6	Correction to GCF WI-10 SMS test case 16.3	F	6.1.0	TEI_Test	R5s070005
RP-070106	approved	34.123-3	1919		Rel-6	Correction to GCF WI-10 SMS test cases 16.1.1 and 16.1.2	F	6.1.0	TEI_Test	R5s070006
RP-070106	approved	34.123-3	1920		Rel-6	Correction to GCF WI-10 RRC test case 6.1.2.3	F	6.1.0	TEI_Test	R5s070007
RP-070106	approved	34.123-3	1921		Rel-6	Summary of regression errors in wk49 IRAT ATSs.	F	6.1.0	TEI_Test	R5s070004
RP-070106	approved	34.123-3	1922		Rel-6	Correction to GCF WI-10 NAS Test Case 12.9.12	F	6.1.0	TEI_Test	R5s070001
RP-070106	approved	34.123-3	1923		Rel-6	Correction to GCF WI-10 RRC Test Case 8.4.1.25 and 8.4.1.48	F	6.1.0	TEI_Test	R5s070002
RP-070106	approved	34.123-3	1924		Rel-6	Correction to GCF WI-10 RAB Test Case 14.2.58	F	6.1.0	TEI_Test	R5s070003
RP-070099	approved	34.123-3	1925		Rel-6	Correction to GCF WI-025 test case 14.7.4	F	6.1.0	EDCH_Test	R5s070019
RP-070106	approved	34.123-3	1926		Rel-6	Correction to GCF WI-10 RRC Test Case 8.4.1.2	F	6.1.0	TEI_Test	R5s070026
RP-070106	approved	34.123-3	1927		Rel-6	Correction to GCF WI-10 IR-U Test Case 12.8	F	6.1.0	TEI_Test	R5s070025
RP-070106	approved	34.123-3	1928		Rel-6	Corrections to GCF WI-17 DTM test case 8.3.7.17	F	6.1.0	TEI_Test	R5s070023
RP-070106	approved	34.123-3	1929		Rel-6	Correction to approved test case 8.4.1.8	F	6.1.0	TEI_Test	R5s070020
RP-070106	approved	34.123-3	1930		Rel-6	Correction to approved test case 8.2.6.38	F	6.1.0	TEI_Test	R5s070021
RP-070106	approved	34.123-3	1931		Rel-6	Correction to the NAS test case 9.2.2	F	6.1.0	TEI_Test	R5s070011
RP-070106	approved	34.123-3	1932		Rel-6	Correction to NAS test cases 12.4.1.1b and 12.9.9	F	6.1.0	TEI_Test	R5s070012

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070106	approved	34.123-3	1933		Rel-6	Correction to RRC testcase 8.4.1.2	F	6.1.0	TEI_Test	R5s070013
RP-070106	approved	34.123-3	1934		Rel-6	Correction to DSAC testcases 12.9.15, 12.4.2.11 and 12.4.2.12	F	6.1.0	TEI_Test	R5s070014
RP-070107	approved	34.123-3	1935		Rel-6	Correction to AGPS ASP Retri_GPS_AssistanceData_CNF	F	6.1.0	TEI_Test	R5s070015
RP-070107	approved	34.123-3	1936		Rel-6	Correction to the RRC testcase 8.3.4.8	F	6.1.0	TEI_Test	R5s070017
RP-070107	approved	34.123-3	1937		Rel-6	Summary of Regression Errors in wk49 ATSs	F	6.1.0	TEI_Test	R5s070018
RP-070107	approved	34.123-3	1938		Rel-6	Introduction of Band 8	F	6.1.0	TEI_Test	R5s070008
RP-070107	approved	34.123-3	1939		Rel-6	Correction of CC procedure for multimedia calls	F	6.1.0	TEI_Test	R5s070010
RP-070110	approved	34.123-3	1940		Rel-6	Correction to RRC TC 8.3.4.9 to avoid possible radio link failure.	F	6.1.0	TEI5_Test	R5s070022
RP-070110	approved	34.123-3	1941		Rel-6	Correction to GCF WI-14 HSDPA Test Case 14.6.4a	F	6.1.0	TEI5_Test	R5s070024
RP-070107	approved	34.123-3	1942		Rel-6	Step enhancement for the introduction of InterBand Test cases	F	6.1.0	TEI_Test	R5s070031
RP-070107	approved	34.123-3	1943		Rel-6	Correction to GCF WI-10 RRC Test Case 8.3.1.5	F	6.1.0	TEI_Test	R5s070039
RP-070107	approved	34.123-3	1944		Rel-6	Correction to Inter-RAT testcase 8.3.7.3	F	6.1.0	TEI_Test	R5s070038
RP-070110	approved	34.123-3	1945		Rel-6	Correction to GCF WI-13 Test Case 8.3.1.40	F	6.1.0	TEI5_Test	R5s070040
RP-070110	approved	34.123-3	1946		Rel-6	Correction to Idle mode testcase 6.1.2.10	F	6.1.0	TEI5_Test	R5s070036
RP-070112	approved	34.123-3	1947		Rel-6	Correction to DSAC RRC testcase 8.1.2.16	F	6.1.0	TEI6_Test	R5s070037
RP-070110	approved	34.123-3	1948		Rel-6	Correction to test case 8.2.6.39b & 8.3.4.9	F	6.1.0	TEI5_Test	R5s070041
RP-070107	approved	34.123-3	1949		Rel-6	Correction to the NAS Test Case 12.3.2.1	F	6.1.0	TEI_Test	R5s060352
RP-070107	approved	34.123-3	1950		Rel-6	Correction to GCF WI-012 test case 12.3.2.7	F	6.1.0	TEI_Test	R5s060351
RP-070107	approved	34.123-3	1951		Rel-6	Correction to approved GCF WI-10 test case 8.3.7.1.	F	6.1.0	TEI_Test	R5s060345

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070107	approved	34.123-3	1952		Rel-6	Correction of approved GCF WI-010 test case 8.1.7.1c	F	6.1.0	TEI_Test	R5s060316
RP-070107	approved	34.123-3	1953		Rel-6	Correction to GCF WI-12 MAC Test Case 7.1.3.2	F	6.1.0	TEI_Test	R5s060354
RP-070107	approved	34.123-3	1954		Rel-6	Correction to QOS checking for UE not support AT commands to start MO PS call	F	6.1.0	TEI_Test	R5s060353
RP-070112	approved	34.123-3	1955		Rel-6	Correction to GCF WI-24 DSAC Test Case 12.4.2.11	F	6.1.0	TEI6_Test	R5s060355
RP-070107	approved	34.123-3	1956		Rel-6	Summary of regression errors in wk43 ATS	F	6.1.0	TEI_Test	R5s060341
RP-070107	approved	34.123-3	1957		Rel-6	Correction to GCF WI 10/2 RRC testcase 8.4.1.8	F	6.1.0	TEI_Test	R5s060389
RP-070107	approved	34.123-3	1958		Rel-6	TTCN correction to GMM Test Case 12.4.1.4b	F	6.1.0	TEI_Test	R5s060357
RP-070107	approved	34.123-3	1959		Rel-6	Summary of regression errors in wk47 IRAT ATSs.	F	6.1.0	TEI_Test	R5s060372
RP-070107	approved	34.123-3	1960		Rel-6	Change of PDU type definition REGISTER used in MM test cases	F	6.1.0	TEI_Test	R5s060388
RP-070107	approved	34.123-3	1961		Rel-6	Correction to GCF WI-10 RRC Test Case 8.4.1.25	F	6.1.0	TEI_Test	R5s060374
RP-070108	approved	34.123-3	1962		Rel-6	Summary of Regression Errors in NAS wk47 ATS – Batch2	F	6.1.0	TEI_Test	R5s060371
RP-070108	approved	34.123-3	1963		Rel-6	Summary of Regression Errors in NAS wk47 ATS	F	6.1.0	TEI_Test	R5s060369
RP-070108	approved	34.123-3	1964		Rel-6	Summary of Regression Errors in RAB wk47 ATS	F	6.1.0	TEI_Test	R5s060370
RP-070108	approved	34.123-3	1965		Rel-6	Correction to GCF WI-10 RRC Test Case 8.1.2.4	F	6.1.0	TEI_Test	R5s060367
RP-070108	approved	34.123-3	1966		Rel-6	Correction to GCF WI-10 RRC Test Case 6.1.2.1	F	6.1.0	TEI_Test	R5s060366
RP-070110	approved	34.123-3	1967		Rel-6	TTCN correction to GCF WI-014 RRC HSDPA Test Case 8.3.1.35	F	6.1.0	TEI5_Test	R5s060359
RP-070110	approved	34.123-3	1968		Rel-6	Summary of Regression Errors in HSDPA wk47 ATS	F	6.1.0	TEI5_Test	R5s060368
RP-070099	approved	34.123-3	1969		Rel-6	Corrections to E-DCH test case 14.7.1	F	6.1.0	EDCH_Test	R5s060403
RP-070099	approved	34.123-3	1970		Rel-6	Corrections to E-DCH test case 7.1.6.2.3 and	F	6.1.0	EDCH_Test	R5s060394

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
						7.1.6.2.7				
RP-070099	approved	34.123-3	1971		Rel-6	Summary of Regression Errors in HSU wk47 ATS	F	6.1.0	EDCH_Test	R5s060375
RP-070108	approved	34.123-3	1972		Rel-6	Correction to approved test case 8.4.1.2, 8.4.1.6, 8.4.1.24	F	6.1.0	TEI_Test	R5s060391
RP-070110	approved	34.123-3	1973		Rel-6	Summary of regression errors in wk47 ATS	F	6.1.0	TEI5_Test	R5s060393
RP-070110	approved	34.123-3	1974		Rel-6	Correction to approved GCF WI-014 test case 8.2.6.48	F	6.1.0	TEI5_Test	R5s060392
RP-070108	approved	34.123-3	1975		Rel-6	Correction to RRC constraint 'cr_RRC_RrcConnSetupCmplRadioCap_BandList2' for Band VIII	F	6.1.0	TEI_Test	R5s070035
RP-070108	approved	34.123-3	1976		Rel-6	Addition of GCF WI-010 P4 test case 8.2.6.37 to RRC ATS V6.1.0	B	6.1.0	TEI_Test	R5s070050
RP-070108	approved	34.123-3	1977		Rel-6	Correction to GCF WI-10 NAS test cases using SETUP ul constraints	F	6.1.0	TEI_Test	R5s070043
RP-070108	approved	34.123-3	1978		Rel-6	Correction to GCF WI-10 NAS test cases 9.1 and 12.9.7c	F	6.1.0	TEI_Test	R5s070044
RP-070108	approved	34.123-3	1979		Rel-6	Correction to GCF WI-10 NAS test case 9.4.2.2 Procedure 2	F	6.1.0	TEI_Test	R5s070045
RP-070100	approved	34.123-3	1981		Rel-6	CR to 34.123-3: Add new verified and e-mail agreed TTCN test cases in the TC lists in 34.123-3 (prose), Annex A	F	6.1.0	TEI_Test	-
RP-070108	approved	34.123-3	1982		Rel-6	Correction to the MAC suite for Band VI	F	6.1.0	TEI_Test	R5s070052
RP-070108	approved	34.123-3	1983		Rel-6	Summary of regression errors in 07wk03 ATSs	F	6.1.0	TEI_Test	R5s070053
RP-070108	approved	34.123-3	1984		Rel-6	Cell setup issue in 15 Idle Mode, RRC and NAS test cases	F	6.1.0	TEI_Test	R5s070054
RP-070108	approved	34.123-3	1985		Rel-6	Correction to RRC testcase 6.1.2.6	F	6.1.0	TEI_Test	R5s070059
RP-070108	approved	34.123-3	1986		Rel-6	Correction to constraint cr_UE_CapabilityInfoAM_BandList2 for Band VIII	F	6.1.0	TEI_Test	R5s070061

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070108	approved	34.123-3	1987		Rel-6	Corrections to wk03 AGPS ATS	F	6.1.0	TEI_Test	R5s070032
RP-070108	approved	34.123-3	1988		Rel-6	Recovering LAI checking in RRC CONNECTION REQUEST in 8.1.2.x. test cases	F	6.1.0	TEI_Test	R5s070057
RP-070108	approved	34.123-3	1989		Rel-6	Correction to RRC testcase 8.4.1.2	F	6.1.0	TEI_Test	R5s070056
RP-070108	approved	34.123-3	1990		Rel-6	Cleaning of UE capability check procedure and band PICS	F	6.1.0	TEI_Test	R5s070042
RP-070109	approved	34.123-3	1991		Rel-6	Correction to remove dependency on px_CipheringOnOff in L2 test cases	F	6.1.0	TEI_Test	R5s070055
RP-070110	approved	34.123-3	1992		Rel-6	Correction to HSDPA testcase 8.2.4.36	F	6.1.0	TEI5_Test	R5s070060
RP-070099	approved	34.123-3	1993		Rel-6	Addition of GCF WI 25 RRC test case 8.2.3.36 to HSU_ENH_r6 ATS V6.1.0.	B	6.1.0	EDCH_Test	R5s070062
RP-070099	approved	34.123-3	1994		Rel-6	Addition of GCF WI-25 EDCH RRC test case 8.2.2.46	B	6.1.0	EDCH_Test	R5s070064
RP-070109	approved	34.123-3	1995		Rel-6	Correction to RLC Test case 7.2.3.35	F	6.1.0	TEI_Test	R5s070058
RP-070098	approved	34.123-3	1996		Rel-6	Activation time in EDCH ASP and ASP order	F	6.1.0	EDCH_Test	R5-070033
RP-070087	approved	34.123-3	1997		Rel-6	MBMS test model and ASP	F	6.1.0	MBMS_Test	R5-070460
RP-070103	approved	34.123-3	1998		Rel-6	Correction of Band VIII test and Max. number of Almanac data	F	6.1.0	TEI_Test	R5-070400
RP-070105	approved	34.123-3	1999		Rel-6	Documentation of a test configuration and other corrections	F	6.1.0	TEI5_Test	R5-070401
RP-070103	approved	34.123-3	2000		Rel-6	Corrections to AGPS asn.1 module	F	6.1.0	TEI_Test	R5-070091
RP-070088	approved	34.229-1	34		Rel-6	New TC 12.6	F	6.0.0	IMS2_CCR_Test	R5-070408
RP-070088	approved	34.229-1	35		Rel-6	New TC 12.7	F	6.0.0	IMS2_CCR_Test	R5-070447
RP-070088	approved	34.229-1	36		Rel-6	New TC 12.8	F	6.0.0	IMS2_CCR_Test	R5-070446
RP-070088	approved	34.229-1	37		Rel-6	TC 8.5 Conformance requirement update	F	6.0.0	IMS2_CCR_Test	R5-070099
RP-070088	approved	34.229-1	38		Rel-6	TC 8.6 Conformance requirement update	F	6.0.0	IMS2_CCR_Test	R5-070410

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070088	approved	34.229-1	39		Rel-6	TC 8.7 Conformance requirement update	F	6.0.0	IMS2_CCR_Test	R5-070101
RP-070088	approved	34.229-1	40		Rel-6	TC 12.2 Conformance requirement update	F	6.0.0	IMS2_CCR_Test	R5-070102
RP-070088	approved	34.229-1	41		Rel-6	Corrections and updating default message according release 6	F	6.0.0	IMS2_CCR_Test	R5-070407
RP-070088	approved	34.229-1	42		Rel-6	IMS security and early IMS security capability update	F	6.0.0	IMS2_CCR_Test	R5-070104
RP-070088	approved	34.229-1	43		Rel-6	Correct missing IMS security in TC 14.2	F	6.0.0	IMS2_CCR_Test	R5-070105
RP-070088	approved	34.229-1	44		Rel-6	Rename TC 8.6 and 8.7 to include "IMS security" instead of "IMS support"	F	6.0.0	IMS2_CCR_Test	R5-070106
RP-070088	approved	34.229-1	45		Rel-6	Updates to 34.229 TC 12.1	F	6.0.0	IMS2_CCR_Test	R5-070412
RP-070088	approved	34.229-1	46		Rel-6	Corrections to P-CSCF Discovery (IPv4) test cases	F	6.0.0	IMS2_CCR_Test	R5-070413
RP-070088	approved	34.229-1	47		Rel-6	New IMS CC test case for MO call initiation when MO UE supports and uses preconditions whereas MT UE does not support preconditions (TC 12.5).	F	6.0.0	IMS2_CCR_Test	R5-070414
RP-070088	approved	34.229-1	48		Rel-6	Updates to TC 8.2 User Initiated Re-Registration for IMS Rel-6	F	6.0.0	IMS2_CCR_Test	R5-070415
RP-070088	approved	34.229-1	49		Rel-6	Removal of IMS CC test cases 7.7 and 7.8	F	6.0.0	IMS2_CCR_Test	R5-070210
RP-070088	approved	34.229-1	50		Rel-6	Update IMS default message content for 503 Service Unavailable response	F	6.0.0	IMS2_CCR_Test	R5-070416
RP-070088	approved	34.229-1	51		Rel-6	Update Specific message Content for 503 response in IMS TCs 10.1 and 12.2.	F	6.0.0	IMS2_CCR_Test	R5-070417
RP-070088	approved	34.229-1	52		Rel-6	Updates to TC 13.1 SigComp in the Initial registration for IMS Rel-6	F	6.0.0	IMS2_CCR_Test	R5-070418
RP-070088	approved	34.229-1	53		Rel-6	Updates to TC 13.2 SigComp in the MO Call for IMS Rel-6	F	6.0.0	IMS2_CCR_Test	R5-070419
RP-070089	approved	34.229-1	54		Rel-6	Updates to TC 13.3 SigComp in the MT Call for IMS Rel-6	F	6.0.0	IMS2_CCR_Test	R5-070420

Doc-1st-Level	Status-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Workitem	Doc-2nd-Level
RP-070089	approved	34.229-1	55		Rel-6	Updates to TC 13.4 State creation before authentication for IMS Rel-6	F	6.0.0	IMS2_CCR_Test	R5-070421
RP-070089	approved	34.229-1	56		Rel-6	Correction to test case 7.4	F	6.0.0	IMS2_CCR_Test	R5-070309
RP-070089	approved	34.229-1	57		Rel-6	Rel-6 ISIM parameters	F	6.0.0	IMS2_CCR_Test	R5-070310
RP-070089	approved	34.229-1	58		Rel-6	Updates to TC 12.4 Call initiation – Mobile termination for IMS Rel-6	F	6.0.0	IMS2_CCR_Test	R5-070424
RP-070089	approved	34.229-1	59		Rel-6	Updates to TC 8.3 User initiated deregistration for IMS Rel-6	F	6.0.0	IMS2_CCR_Test	R5-070425
RP-070089	approved	34.229-2	8		Rel-6	IMS security and early IMS security capability update	F	6.0.0	IMS2_CCR_Test	R5-070426
RP-070089	approved	34.229-2	9		Rel-6	Removal of applicability statements for IMS test cases 7.7 and 7.8	F	6.0.0	IMS2_CCR_Test	R5-070330

Annex D: Summary of TSG RAN Work Items

RAN Work Items Update after meeting #34

Abbreviations used: %: Estimated level of completion   WI: Work Item   SI: Study Item
                      Feat: Feature   BB: Building Block   FS: Feasibility Study
                      WT: Work Task   WIDS: WI Description Sheet

Type	Name	WI Code	WG	%	Completion	Remarks
Feat	Rel-7 Improvements of the Radio Interface	RInImp	RP			
BB	UE Antenna Performance Evaluation Method and Requirements	RInImp-UEAnt	R4	90	June 2007	Status report in RP-070032
Feat	Rel-7 RAN improvements	RANimp	RP			
BB	Continuous connectivity for packet data users	RANimp-CPC	R1	97	March 2007	WI completed, Status report in RP-070033
BB	Interface to Control Tower Mounted Amplifiers (TMAs)	RANimp-TMA	R3	100	March 2007	WI completed, Status report in RP-070140
BB	Enhanced CELL_FACH state in FDD	RANimp-EnhState	R2	70	June 2007	Status report in RP-070035
BB	64QAM for HSDPA	RANimp-64QamDownlink	R1	80	June 2007	Status Report in RP-070045
BB	Improved L2 support for high data rates	RANimp-L2dataRates	R2	85	June 2007	status Report in RP-070049
BB	Higher Order Modulation in HSUPA	RANimp-16QamUplink	R1	72	June 2007	Status Report in in RP-070046
BB	UE positioning Rel-7	LCS3-UEpos	RP			
WT	Inclusion of Uplink TDOA UE positioning method in the UTRAN specifications	LCS3-UEPos-UTDOA	R2	85	June 2007	Status report in RP-070036
BB	Global Navigation Satellite System (GNSS) in UTRAN	LCS3-GNSS-UTRAN	R2	70	June 2007	Status report in RP-070039

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Type	Name	WI Code	WG	%	Completion	Remarks
Feat	Multiple Input Multiple Output antennas (MIMO)	MIMO	R1	100	March 2007	Status report in RP-070037
BB	MIMO - Physical layer	MIMO-Phys	R1	100	March 2007	
BB	MIMO - Layer 2,3 aspects	MIMO-L23	R2	90	March 2007	
BB	MIMO - Iub/Iur Protocol Aspects	MIMO-Iurulub	R3	100	March 2007	
BB	MIMO - RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing	MIMO-RF	R4	35	June 2007	
Feat	1.28 Mcps TDD Enhanced Uplink	LCRTDD-EDCH	RP	82	March 2007	Status report in RP-070038
BB	1.28 Mcps TDD Enhanced Uplink: Physical Layer	LCRTDD-EDCH-Phys	R1	100	March 2007	
BB	1.28 Mcps TDD Enhanced Uplink: Layer 2 and 3 Protocol Aspects	LCRTDD-EDCH-L23	R2	100	March 2007	
BB	1.28 Mcps TDD Enhanced Uplink: UTRAN Iub/Iur Protocol Aspects	LCRTDD-EDCH-Iublur	R3	100	March 2007	
BB	1.28 Mcps TDD Enhanced Uplink: RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing	LCRTDD-EDCH-RF	R4	30	June 2007	
Feat	3G Long Term Evolution	LTE	RP		March 2008	Status report in RP-070044.
BB	3G Long Term Evolution – Physical Layer	LTE-Phys	R1	50	September 2007	Status report in RP-070044.
BB	3G Long Term Evolution – Radio Interface Layer 2 and 3 Protocol Aspect	LTE-L23	R2	5	September 2007	Status report in RP-070044.
BB	3G Long Term Evolution – eUTRAN Interfaces		R3	5	September 2007	Status report in RP-070044.
BB	3G Long Term Evolution – RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing	LTE-RF	R4	25	December 2007	Status report in RP-070044.
BB	3G Long Term Evolution – Terminal Conformance Test Specifications	LTE-UETest	R5	2	March 2008	Status report in RP-070018
SI	Further Improved Performance Requirements for UMTS/HSDPA UE (FDD)	RANFS-IC	R4	60	June 2007	Status report in RP-070138
SI	Scope of future FDD HSPA Evolution	RANFS-HSPAEvo	RP	75	June 2007	Status report in RP-070042
SI	Dynamically reconfiguring a FDD UE receiver to reduce power consumption when desired Quality of Service is met		R4	90	June 2007	Status report in RP-070043
BB	MBMS FDD Physical layer Enhancements	MBMSE-RANPhysFDD		62	June 2007	Status Report in RP-070047.

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Type	Name	WI Code	WG	%	Completion	Remarks
BB	MBMS TDD Physical layer Enhancements	MBMSE-RANPhysTDD		82	June 2007	Status Report in RP-070048.
new WI	MBMS LCR TDD physical layer enhancements					WID in RP-070253
Test	Conformance Test Aspects – FDD Enhanced Uplink	EDCH_Test	R5	95	June 2007	Status report in RP-070007
Test	Conformance Test Aspects – ROHC Performance	RANimp-RABSE5_Test	R5	100	March 2007	WI completed. Status report in RP-070006
Test	Conformance Test Aspects – IMS Call Control Rel-6 enhancements	IMS2_CCR_Test	R5	50	September 2007	Status report in RP-070009
Test	Conformance Test Aspects – MBMS	MBMS_Test	R5	85	June 2007	Status report in RP-070008
Test	RF/RRM Conformance Test Aspects MBMS	MBMS-RAN-RF_Test	R5	60	September 2007	Status report in RP-070011
Test	Conformance Test Aspects – 7.68 Mcps TDD	VHCRTDD-RF_Test	R5	65	September 2007	Status report in RP-070012
Test	Conformance Test Aspects – MBMS for 3.84Mcps and 7.68Mcps TDD	MBMS_HCRTDD_Test	R5	7	September 2007	Status report in RP-070013
Test	Conformance Test Aspects – 3.84 Mcps and 7.68 Mcps TDD Enhanced Uplink	RANimp-HCRTDD-EDCH_Test	R5	7	March 2008	Status report in RP-070014
Test	Signalling Conformance Test Aspects – MBMS for LCR TDD	MBMS_LCRTDD_Test	R5	30	September 2007	Status report in RP-070015
Test	Conformance Test Aspects –UE Antenna Performance OTA	RInImp-UEAnt_Test	R5	15	September2007	Status report in RP-070016
Test	Conformance Test Aspects – Extended UMTS 1.7/2.1 GHz		R5	60	June 2007	Status Reort in in RP-070017
new WI	UMTS in 1500 MHz Bands					WID in RP-070078
new WI	UMTS in 700 MHz Bands					WID in RP-070127
new WI	UMTS in 2300 MHz Bands					WID in RP-070128
new WI	Further Improved Minimum Performance Requirements for HSDPA UE (FDD) - Two-Branch Interference Cancellation					WID in RP-070254
new WI	Conformance test aspects – 64QAM for HSDPA (FDD)					WID in RP-070019
new WI	Conformance test aspects – Improved L2 support for high data rates					WID in RP-070020

Type	Name	WI Code	WG	%	Completion	Remarks
new WI	Conformance test aspects – Multiple Input Multiple Output antennas (MIMO) for FDD					WID in RP-070021
new WI	Conformance test aspects – Introduction of 16QAM in HSUPA (FDD)					WID in RP-070022
new WI	Conformance test aspects – Continuous connectivity for packet data users					WID in RP-070023
new SI	3G Home NodeB					SID in RP-070257

Annex E: Agenda for RAN Workshop on radio mobility with non-3GPP radio technologies

1   Opening of the meeting

2   Approval of the agenda

3   Status of current 3GPP work (9.10) – invited experts

    3.1   Mobility solutions within 3GPP

    3.2   Current support for non-3GPP inter-RAT mobility

    3.3   Overview of SA work (request SA2 to generate presentation)

Coffee (10.30 – 11.00)

4   Non-3GPP/3GPP mobility scenarios and requirements (11.00) – operators

Lunch (12.00 – 13.00)

5   Introduction to proposed non-3GPP technologies (13.00) – nominated 1 presentation pre technology, agreed via email

    5.1   Technical overview focusing on radio aspects of mobility

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Coffee (15.00 – 15.30)

6	Discussion and agreement on study item sheet (16.00)

7	Meeting close

Annex F: Meeting schedule

October 2006			
TITLE	DATES	LOCATION	CTRY
3GPPRAN1#46-BIS	9 - 13 Oct 2006	Seoul	KR
3GPPRAN2#55	9 - 13 Oct 2006	Seoul	KR
3GPPRAN3#53-bis	10 - 13 Oct 2006	Seoul	KR
November 2006			
TITLE	DATES	LOCATION	CTRY
3GPPRAN1#47	6 - 10 Nov 2006	Riga	LV
3GPPRAN2#56	6 - 10 Nov 2006	Riga	LV
3GPPRAN3#54	6 - 10 Nov 2006	Riga	LV
3GPPRAN4#41	6 - 10 Nov 2006	Riga	LV
3GPPRAN5#33	6 - 10 Nov 2006	Riga	LV
3GPPRAN#34	28 Nov - 1 Dec 2006	Budapest	HU
December 2006			
TITLE	DATES	LOCATION	CTRY
3GPPRAN5-TTCN Workshop	11 - 12 Dec 2006	Sophia Antipolis	FR
January 2007			
TITLE	DATES	LOCATION	CTRY
Workshop on GSM LTE handovers	10-11 Jan 2007	Sophia-Antipolis	France
3GPPRAN1#47bis	15 - 19 Jan 2007	Sorrento	Italy
3GPPRAN2#56bis	15 - 19 Jan 2007	Sorrento	Italy
February 2007			
TITLE	DATES	LOCATION	CTRY
3GPPRAN5#34	5 - 9 Feb 2007	Hong Kong	HK
3GPPRAN4#42	12 - 16 Feb 2007	St Louis, Missouri	US
3GPPRAN2#57	12 - 16 Feb 2007	St Louis, Missouri	US
3GPPRAN1#48	12 - 16 Feb 2007	St Louis, Missouri	US
3GPPRAN3#55	12 - 16 Feb 2007	St Louis, Missouri	US
March 2007			

3GPP TSG RAN #35

TITLE	DATES	LOCATION	CTRY
3GPPRAN#35	6 - 9 Mar 2007	Lemesos	CY
3GPP RAN1#48bis	26-30 March 2007	St Julians	Malta
3GPP RAN2#57bis	26-30 March 2007	St Julians	Malta
3GPP RAN3#55bis	27-30 March 2007	St Julians	Malta
3GPP RAN4 LTE ad-hoc	02-04 April 2007	Sophia-Antipolis	France
3GPP RAN1 TDD ad-hoc	17-20 April 2007	Beijing	China
May 2007			
TITLE	DATES	LOCATION	CTRY
3GPPRAN3#56	7 - 11 May 2007	Kobe	JP
3GPPRAN1#49	7 - 11 May 2007	Kobe	JP
3GPPRAN2#58	7 - 11 May 2007	Kobe	JP
3GPPRAN4#43	7 - 11 May 2007	Kobe	JP
3GPPRAN5#35	7 - 11 May 2007	Kobe	JP
3GPPRAN Workshop on radio mobility with non-3GPP radio technologies	28 May 2007	Busan	KR
3GPPRAN#36	29 May - 1 Jun 2007	Busan	KR
June 2007			
3GPPRAN1#49bis	25 -29 June 2007	Orlando	USA
3GPPRAN2#58bis	25 -29 June 2007	Orlando	USA
3GPPRAN4 LTE ad-hoc	June/July 2007	Athens	Greece
August 2007			
TITLE	DATES	LOCATION	CTRY
3GPPRAN3#57	20 - 24 Aug 2007	EUROPE	EU
3GPPRAN5#36	20 - 24 Aug 2007	EUROPE	EU
3GPPRAN4#44	20 - 24 Aug 2007	EUROPE	EU
3GPPRAN2#59	20 - 24 Aug 2007	EUROPE	EU
3GPPRAN1#50	20 - 24 Aug 2007	EU	EU
September 2007			
TITLE	DATES	LOCATION	CTRY
3GPPRAN#37	11 - 14 Sep 2007	Riga	LV
Oct 2007			
3GPPRAN1#50bis	08-12- Oct 2007	CN	CN

3GPPRAN2#59bis	08-12- Oct 2007	CN	CN
3GPPRAN4 LTE ad-hoc	Oct 2007	CN	CN
November 2007			
TITLE	DATES	LOCATION	CTRY
3GPPRAN3#58	5 - 9 Nov 2007	South Korea	KR
3GPPRAN1#51	5 - 9 Nov 2007	Korea	KR
3GPPRAN2#60	5 - 9 Nov 2007	Korea	KR
3GPPRAN4#45	5 - 9 Nov 2007	Korea	KR
3GPPRAN5#37	5 - 9 Nov 2007	Korea	KR
3GPPRAN#38	28 - 30 Nov 2007	US	US
March 2008			
TITLE	DATES	LOCATION	CTRY
3GPPRAN#39	4 - 7 Mar 2008	tbd	
May 2008			
TITLE	DATES	LOCATION	CTRY
3GPPRAN#40	27 - 30 May 2008	tbd	
September 2008			
TITLE	DATES	LOCATION	CTRY
3GPPRAN#41	23 - 26 Sep 2008	tbd	
December 2008			
TITLE	DATES	LOCATION	CTRY
3GPPRAN#42	2 - 5 Dec 2008	tbd	

APPENDIX G

3GPP_TSG_RAN@LIST.ETSI.ORG

Options: Use Monospaced Font
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Message: [<< First] [< Prev] [Next >] [Last >>]
Topic: [<< First] [< Prev] [Next >] [Last >>]
Author: [<< First] [< Prev] [Next >] [Last >>]

Subject:	Minutes of RAN-35.
From:	Claude Arzelier <Claude.Arzelier@ETSI.ORG>
Reply To:	Claude Arzelier <Claude.Arzelier@ETSI.ORG>
Date:	Thu, 15 Mar 2007 17:48:22 +0100
Content-Type:	multipart/mixed
Parts/Attachments:	text/plain (286 bytes) , text/html (1868 bytes) , Draft1_Minutes_RAN-35.zip (341 kB)

Dear All,

Hope you went back safely. Please find enclosed the minutes (draft1) of the meeting held last week (06-09 March) in Lemesos, Cyprus.

Please try to send your last comments by the 29th March 2007.

Thanks and Regards,

Claude.

Claude Arzelier
ETSI MCC
+33 4 92 94 42 61

ATOM   RSS1   RSS2

APPENDIX H

Title: **Draft Report of the 33rd 3GPP TSG RAN meeting**
            (Palm Springs, Ca, US, 19 – 22 September 2006)

Document for: **Comments**
            Please provide your comments before 25/10/2006

Source: **3GPP support**

César Gutiérrez Miguélez
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Contents

Executive summary

TSG RAN meeting #33 took place in Palm Springs, Ca, US. The meeting started at 9:00 on Wednesday 19th September and finished on Friday 22nd at 11.45. 120 participants were registered and 209 documents were submitted.

Change Requests

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

Release	WG1	WG2	WG3	WG4	WG5	TSG RAN	Total
Release 99		2		6			8
Rel-4 CRs (Rel-4 excluding Cat A)		2 (2)		6 (0)			8 (2)
Rel-5 CRs (Rel-5 excluding Cat A)		8 (8)	2 (2)	11 (5)	116 (116)		137 (131)
Rel-6 CRs (Rel-6 excluding Cat A)	2 (2)	38 (34)	38 (35)	25 (14)	130 (130)		233 (215)
Rel-7 CRs (Rel-7 excluding Cat A)	16 (14)	50 (21)	59 (25)	38 (19)	34 (34)	3 (3)	200 (116)
Total CRs (Total excluding Cat A)	18 (16)	100 (67)	99 (62)	86 (44)	280 (280)	3 (3)	586 (472)

Incoming Liaisons

There was a LS from TSG GERAN on the issue of GERAN-LTE interworking, where GERAN raises the need for better coordination and asks for a joint meeting between GERAN and LTE experts. This was agreed, and a response LS was sent, cc TSG SA for global coordination (RP-060530).

A LS from RAN WG2 to SA WG2 on the support of SAE bearers was presented. It triggered discussion on what group will have the responsibility of deciding on bearer support and UE capabilities. Various groups could have a word on this, SA WG2, WG4 or the GCF for example, but it was agreed that the decisions on this area will be taken by WG2 (RP-060540).

A LS from OMA on Gaming requirements was received. There was some debate on how to accommodate these requirements with those from SA WG1 and WG4. RAN WG2 will have to look at the LS from OMA and see how it fits with what it has received from the 3GPP SA groups already (sec. 7.3.1)

ITU-R Issues

No documents for submission to the ITU were presented this time.

Release 7 Work Items and Study Items

A detailed summary of the status of TSG RAN Work Items can be found in Annex D.

The Work Item Delay optimisation for procedures applicable to CS and PS Connections was completed and closed, related CRs were approved. Remaining open issues in the area will be handled within TEI7 (sec. 9.2.3)

TR 25.815 Signalling enhancements for Circuit-Switched (CS) and Packet-Switched (PS) Connections; Analyses and Recommendations was approved. It will be put under change control as v7.0.0 (RP-060605).

The WI LCS Enhancements Related to Location-Based Services was completed and closed, the last batch of CRs was approved (sec. 9.3.2).

The WI 3.84 Mcps TDD Enhanced Uplink was completed and closed, related CRs were approved (sec. 9.6).

There was a request to have a joint meeting dedicated to the MBMS improvements Study during the WGs week in Riga (RP-060621). WG Chairmen are asked to consider this the agendas.

The group spent some time discussing the backwards compatibility in the HSPA evolution Study and its relation with the SAE work (RP-060617). It was agreed to focus the Study on the model of an Iu interface towards the core, instead of a SAE core and S1 interface.

Long Term Evolution

There was some debate on the specification series to be used for LTE. The 36 series had been provisionally assigned by the MCC, but it was noted that the SAE work might need also new series in DT and SA. If that is the case, it would be advisable to consider LTE/SAE specification numbering as a whole and to allocate contiguous series. This issue will be brought to TSG SA (sec. 7.2.1)

There were a number of discussions off line and during the meeting on how to optimize the specification of measurements for LTE, aiming at avoiding the troubles had in the past due to the spread of responsibility across groups (WG1 for the definition, WG2 for the RRM aspects, WG4 for the performances) (RP-060636).

There was a request from a number of operators that a task for performance verification is put in place during the Work Item phase, with clearly dated milestones. This was generally agreed, although the dates were debated, as unwisely chosen deadlines may put unnecessary stress on the normal evolution of the Work Item (RP-060592).

The WI Description Sheets for the LTE Building Blocks were presented and agreed (RP-060630). The Feature description was revised and agreed as well (RP-060635).

There was considerable debate on a CR to 25.813 for LTE that introduced a requirement for UEs to receive paging during MBMS reception. Companies agreed on this underlying assumption, but the wording was contested as it used the expression "single receiver UE" for which different companies and WGs seem to have different interpretation. The CR was finally approved without the controversial sentence and WG2 is tasked to review that particular requirement (RP-060589)

The SAE Work Plan and interactions with LTE were presented. LTE experts in RAN performed a quick review of the issues raised by SA WG2 and a feedback document was produced (sec. 9.19.1.3).

Two operators presented a document highlighting potential problems in the operation of a multi vendor network. The issue was tackled with a requirement in the LTE WI description to ensure that a multi-vendor network has the same network performance as a single-vendor network (RP-060594).

Project management

The budget for 2007 of Task Force 160, dedicated to the production of TTCN test case, was extensively debated. In particular, the allocation of 3 man month for preliminary analysis of LTE testing. It was explained that TF160 proposes to WG5 and TSG RAN a list of items and a request for man month, and this is approved by the groups. It was noted that it is likely that 3GPP PCG does not agree to fund the totality of the request, and companies should consider voluntary contributions to the Task Force (sec. 7.6.1)

The new version of the CR coversheet shall be used from the end of the TSGs. This version splits the source field in two, source to WG and source to TSG (RP-060610).

TSG RAN and GERAN officials have discussed the possibility of merging the two radio TSGs, after a request from 3GPP PCG. The outcome is that for the time being the status quo should be maintained (sec. 12.1)

This was the last meeting of César Gutiérrez Miguélez as secretary of the group. The chairman, in the name of TSG RAN, thanked him for the work of 4 years and wished him all the best for the future (sec. 13).

New Work Items and Study Items

The following new WIs were approved:
- Conformance Test Aspects - 7.68 Mcps TDD (RP-060482)
- Conformance Test Aspects - MBMS for 3.84Mcps and 7.68McpsTDD (RP-060483)
- Conformance Test Aspects - 3.84 Mcps and 7.68 Mcps TDD Enhanced Uplink (RP-060484)
- Signalling Conformance Test Aspects – MBMS for LCR TDD (RP-060485)
- Conformance Test Aspects –UE Antenna Performance OTA (RP-060486)
- Enhanced CELL_FACH state in FDD (RP-060619)

- 3G Long Term Evolution (Feature level, approved at TSG RAN #32 but the description is revised in RP-060635)
- 3G Long Term Evolution – Physical Layer (RP-060630)
- 3G Long Term Evolution – Radio Interface Layer 2 and 3 Protocol Aspect (RP-060630)
- 3G Long Term Evolution – eUTRAN Interfaces (RP-060630)
- 3G Long Term Evolution – RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing (RP-060630)
- 3G Long Term Evolution – Terminal Conformance Test Specifications (RP-060630)

The following new Study was approved:
- Dynamically reconfiguring a FDD UE receiver to reduce power consumption when desired Quality of Service is met (RP-060641)

1   Opening of the Meeting

Francois Courau, chairman of TSG RAN, opened the meeting the 19th September at 9:00. He noted that Denis Fauconnier, chairman of WG2, would not be able to attend the meeting. It was noted that none of the vice-chairs will be present either. Unfortunately, the decision was taken late and Denis couldn't appoint a replacement.

Don Zelmer, Cingular, welcomed the participants on behalf of the North American Friends of 3GPP and explained the meeting arrangements.

2   Approval of the Agenda

RP-060434   Revised draft agenda TSG RAN #33 (Chairman)
The agenda was approved without comments.

3   Approval of the meeting report on TSG-RAN #32

RP-060435   Revised draft report TSG RAN meeting #32 (3GPP Support)
The report was approved without comments.

4   Reminder for IPR declaration

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

5   Chairman Report of meetings

The chairman reported that the ETSI IPR Ad Hoc committee conclusion is that no change is made to the existing ETSI IPR policy. The single result of the Ad Hoc will be minor changes to the chairman guide for IPRs; IPR issues will be dealt outside ETSI.

5.1   TSG SA#32

Nothing relevant to report.

6   Liaisons from other groups

6.1   Groups outside 3GPP

RP-060532   Gaming over HSDPA networks (OMA Game Services WG)
Don Zelmer welcomed the response from OMA and hoped that the information here can be used by the relevant RAN WGs and SA WG1. He remarked that the latency requirements here seem to be more demanding that those coming from WG1.

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

RP-060533   LS on assignment of numeric values for standardised causes (TSG SA WG5)
This is mainly for consideration of RAN WG3.

RP-060534   Reply LS on GSM antenna minimum performance requirements (TSG GERAN WG1)
Jacques Achard (GERAN WG1 chairman) presented this LS.
This has been reviewed by WG4 already. It was noted that there is interaction with WG5 for the test of this feature; there is in fact a WI proposal from WG5 presented later on for the work on the tests.

RP-060539   LS on co-ordination of work on GERAN-LTE Interworking. (TSG GERAN)
Han van Bussel (TMobile) presented this LS
GERAN asks for clarification on the interworking of LTE and SAE with GERAN, regarding handover support and MBMS in particular. GERAN suggests that a meeting of GERAN and LTE experts would be beneficial.
This was generally supported by TSG RAN, but the problem seems to be finding an acceptable date. It is noted that SA WG1 experts should be invited as well, and that the intention of the meeting will be to clarify requirements.
Han noted that the requirements from 25.913 are still valid, the workshop should rather focus on ensuring that all groups have a common understanding of those requirements and of the interworking.
It was proposed to wait until SA WG2 progresses on VCC to have this workshop. Han observed that a main issue to be discussed is the measurements, which have been one of the problematic points of GSM-UMTS interworking. He didn't see the need to wait for completion of VCC or SAE to be able to progress on this. A response LS is drafted in RP-060638.

6.3   TSG RAN WGs

RP-060535   LS on LTE SI Conclusions (TSG RAN WG1)
RAN WG1 reports that it has performed the simulations of the enhancement techniques requested by last TSG RAN. Results show the gains in spectral efficiency and VoIP performance.

RP-060537   LS on spectral emissions mask and coexistence (TSG RAN WG4)

This is the response from WG4 to WG1 on the issue of the LTE spectrum emission mask, for information to TSG RAN

RP-060538   LS on The liaison activity regarding Category B emission limits (TSG RAN WG4)
This is to keep TSG RAN informed of the communication exchanged between WG4 and CEPT regarding the spurious emissions of LTE.

RP-060540   LS on minimum number of supported SAE bearers in the UE (TSG RAN WG2)
Serge Willenegger (Qualcomm) briefly presented this LS.
Regarding the mapping of bearers and the number of supported bearers, WG2 asks TSG RAN and TSG SA to consider what groups should have a word on this. Gert van Lieshout (Samsung) noted that it may be a group outside 3GPP, like GCF or market representatives. Qualcomm and Siemens preferred to keep inside 3GPP the discussion and decisions around UE capabilities and configurations.
Jussi Numminen (Nokia) noted that consultation to external groups will delay the process, and in any case RAN WG2 must be the group that takes the ultimate decisions.
Han van Bussel (TMobile) remarked that the request in the LS is about which 3GPP groups should be involved, nothing is mentioned about external bodies. The question to TSG SA is to decide weather SA WG2 is the only SA group concerned, or SA WG4 and WG1 should be involved as well.
The chairman summarized that independently of the collaboration from other groups, this is a discussion to be held between SA WG2 and RAN WG2.

The table below lists the LSs received:

Tdoc	Title	Source	Source File
RP-060532	Gaming over HSDPA networks	OMA Game Services WG	OMA-LS_0124
RP-060533	LS on assignment of numeric values for standardised causes	TSG SA WG5	S5-060874
RP-060534	Reply LS on GSM antenna minimum performance requirements	TSG GERAN WG1	GP-061332
RP-060535	LS on LTE SI Conclusions	TSG RAN WG1	R1-062443
RP-060536	LS on RAN1 decisions for "Continuous connectivity for packet data users"	TSG RAN WG1	R1-062445
RP-060537	LS on spectral emissions mask and coexistence	TSG RAN WG4	R4-061006
RP-060538	LS on The liaison activity regarding Category B emission limits	TSG RAN WG4	R4-061056
RP-060539	LS on co-ordination of work on GERAN-LTE Interworking.	TSG GERAN	GP-061878
RP-060540	LS on minimum number of supported SAE bearers in the UE	TSG RAN WG2	R2-062730
RP-060615	Letter to TSG RAN chairman from NGMN	NGNM	

7   Status Report and Approval of contributions on Release'99, Release 4, Release 5 and Release 6

7.1   ITU-R Ad Hoc

7.1.1   Status report

RP-060591   Status Report (ITU-R Ad Hoc Contact Person)

Giovanni Romano (TelecomItalia) presented this document
The Update Submission for M.1457 rev7 is expected to be approved by RAN#34 for subsequent submission to ITU-R WP8F#21. RAN#34 is also expected to approve a final contribution on PDNR M.[IP CHAR]. ITU-R Ad Hoc will provide to RAN#34 draft version of both documents without circulating them to WGs.

7.1.2   Submission to ITU-R

No contributions for submission to ITU in this meeting.

7.2   TSG RAN WG1

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

RP-060436   Status Report WG1 (RAN WG1 Chairman)
Dirk Gerstenberger (RAN WG1 chairman) presented this report.
RAN WG1 activity since last TSG RAN can be summarized as follows:
- Maintenance
  - Agreed change requests: Rel'6: 2 CRs (FDD), Rel'7: 1 CR (FDD, RRM for E-DCH), 2 CRs (TDD)
- TDD Enhanced Uplink
  - 1.28Mcps work progressing
  - 3.84Mcps and 7.68Mcps work completed and sets of CRs agreed
- HSPA evolution
  - Rel'7 MIMO Work Item progressing – remaining work is on signalling solutions
  - Rel'7 Continuous Connectivity ("CPC") – agreement on the set of features
  - Scope of further FDD HSPA Evolution – several proposals for L1 enhancements
- 3G Long Term Evolution
  - RAN1 WID reviewed, RAN1 specification structure, editors and workplan agreed
  - Good start of the LTE work item (resulting from email ad hoc discussions)
    - Numerology agreed (except for alternative TDD frame structure)
    - Agreements on RACH preambles, bandwidth and overall procedure
    - Hierarchical SCH and hierarchical cell search and 20MHz SCH allocation agreed, some agreements on BCH and PCH
    - Agreements on reference signals (Multiplexing and UL sequence type)
    - Agreements on multi-codeword MIMO, SU-MIMO and MU-MIMO
    - Channel coding scheme agreed
  - LTE Study Item extension
    - Interference coordination, additional VoIP results, additional evaluation results and results for enhancement techniques discussed and agreed
    - RAN1 part of the SI is considered complete (LS and CRs from RAN1)

It was clarified that the alternative numerology for the TDD frame structure has been agreed as well, with the exception of 1.6 MHz bandwidth parameters.
It was clarified that the ongoing study on MBMS enhancements does not cover layer 1 aspects.

Regarding slide 11, It is clarified that the MBMs for SFN operation mode applies to both FDD and TDD, and as such it should go into a different slide as this one is titled "Further scope of FDD HSPA evolution".

Regarding slide 15, Dirk clarified that the assumption is that the dedicated MBMS mode is for broadcast.

Niels Andersen (Qualcomm) observed that the specification numbering should be considered together with the needs from CT and SA for SAE. In that sense, it is premature to reserve the 36 series at this point for LTE. It would be preferable to get a consecutive set for LTE and SAE.

For the time being, TSG RAN only agrees to have a new series for the LTE core specification. The proposed numbering in slide 14 is to be understood as XX.201, XX.211, XX.212 etc.

On slide 16, Dirk noted that the discussions have been mostly on non-synchronized access.

On slide 14, Edgar Fernandes (Motorola) asked for clarification on the intention of the measurements specification in WG1. Dirk explained that the understanding in WG1 is to follow the same approach as today in UMTS, with the definitions in WG1 spec and the accuracy in WG4. Dirk reminded that, according to the Terms of Reference, WG1 is responsible for measurements. The specification proposed here follows directly from this. The chairman asked that WG1 consults with WG4 before approving the contents of this specification. Howard Benn (WG4 chairman) reminded that responsibility and specifications on UMTS measurements are spread through all WGs, and this has been far from optimal. He noted that it is worth re-evaluating this for LTE.

RP-060437   List of CRs from RAN WG1 (RAN WG1)
This list is provided for information.

7.2.2   Discussions on decisions from WG1

No discussions.

7.2.3   Approval of CRs to Rel99, Rel-4 , Rel-5, Rel 6 with linked CRs

**RP-060490   CRs to 25.212 & 25.214 (Rel-6 & Rel-7) for corrections for Enhanced
            Uplink (RAN WG1)**
No comments, the CRs are approved.

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

No contributions.

7.3 TSG RAN WG2

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

RP-060438   Status Report WG2 (RAN WG2 Chairman)
Denis Fauconnier (RAN WG2 Chairman) presented this report
Main activities in RAN WG2 since last TSG RAN:
- No R'99, no Rel-4 CR
- Few Release 5 corrections
    - No FDD UE impact
- MBMS corrections
- E-DCH corrections
    - Corrections may not impact UE implementations
- Delay optimisations
    - TR completed
- TEI7
- LTE
    - Progress of the Stage 2
    - Completion of MBMS studies
- All TDD variants

Jacques Achard (GERAN WG1 chairman) explained that GERAN has the intention to introduce Galileo in its specifications in its next meeting, however there are two options differing on how to make the introduction generic enough for other satellite constellation. Clarification on this is needed in TSG RAN, it wasn't clear in WG2 if the RAN WI applies only to Galileo.

LG and IPWireless requested that the MBMS gets into the agenda of the additional meeting in October. Denis argued that MBMS, which now is just a study, can be finished by December even if it is only treated in the "normal" meeting in November. It is also highlighted that one of the pending issue on MBMS is related to WG4, which will not be coming to the October meetings.

Denis clarified that the non-LTE items in October will be discussed on Monday, and the rest of the week will be dedicated to LTE. MIMO will not be discussed in October.

Volker Breuer (Siemens) observed that the parallel sessions are very useful for certain items, but he asked that the review and endorsement of new Work Items is made in the main session.

On the gaming WI (slide 18), Luis Barreto (Nokia) observed that the group didn't agree on the particular proposal, only on its benefits. Denis observed that this WI risks becoming another basket, as companies are putting proposals not necessarily directed to gaming.
Tim Frost (Vodafone) asked if WG2 has it clear what requirements it has to use, given that inputs have been received from OMA, SA WG1 and others. Denis explained that in the past SA WG1 produced requirements for services that were later processed by SA WG4 into technical requirements and RAB configurations that can be used by WG2.
It was reminded that SA WG1 had already produced requirements for this. The chairman clarified that the requirements in the OMA LS should be evaluated by WG2 and, if possible, taken onboard.

RP-060439 **List of CRs from RAN WG2 (RAN WG2)**
Document for information.

7.3.2 Discussions on decisions from WG2

RP-060571 **Alternative 1: 34.109 Rel-6 introduction of UE test loop mode 3 (SDU counters) to support of MTCH performance testing (RAN WG2)**
RP-060599 **Alternative 2: 34.109 Rel-7 Introduction of UE test loop mode 3 (SDU counters) to support MTCH performance testing (RAN WG2)**
The alternatives propose different Releases of introduction for the test loop mode.
Edgar Fernandes (Motorola) noted that this CR only signs the start of the work in WG5, which will take some time to complete; he preferred to see it in Rel-7.
Phil Brown (RAN WG5 chairman) preferred to have the MBMS entirely in one Release, and noted that the expected completion of this WI in WG5 is March 2007.
It is agreed to proceed with the Release 6, RP-060571 is approved and RP-060599 is withdrawn.

7.3.3 Approval of CRs to Rel99, Rel-4, Rel-5 and Rel 6 with linked CRs

The following documents contain CRs agreed by RAN WG2:

Document	Title
RP-060572	CRs on TR 25.993
RP-060573	CRs on 25.323 and 25.331 CRs Rel-5 (Rel-6/Rel-7)
RP-060575	25.322 and 25.331 Rel-6/Rel-7 CRs
RP-060576	25.331 CRs on MBMS (Rel-6/Rel-7)
RP-060578	25.321, 25.331 CRs on MAC-hs reset (Rel-6/Rel-7)
RP-060593	25.331 Rel-6/Rel-7 CRs

It is clarified that CR78 in RP-060572 is only Cat D because it is changing the section of the numbering.

All CRs in RP-060578 should be under the HSDPA-L23 Work Item. This will be corrected in the CR DB.

All the CRs in the documents above are approved.

RP-060574 **CRs on 25.302, 25.321, 25.331 on FDD Enhanced Uplink (Rel-6/Rel-7) (RAN WG2)**
The category of CR285 and CR286 to 25.321 is incorrect, the CRs will be revised. The rest of CRs are approved.

RP-060625 **CRs to 25.321on Maximum number of transmissions (Rev of CRs in RP-060574) (RAN WG2)**
The CRs are approved without comments.

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

RP-060577   25.306, 25.331 CRs on the introduction of SIB11bis (Rel-6/Rel-7) (RAN WG2)
This document is withdrawn and replaced by RP-060614

RP-060614   25.306, 25.331 CRs on the introduction of SIB11bis (Rel-6/Rel-7) (RAN WG2)
CRs 143 and 144 to 25.306 are approved, CRs 2857 and 2858 to 25.331 are revised in RP-060597 below.

RP-060597   Proposed update to 25.331 CR's 2857/2858 on the introduction of SIB11bis (Samsung, Motorola, Siemens, Vodafone)
The CRs are approved without comments.

RP-060570   Introduction of SIB11bis (linked to RP-060577) (Siemens)
This document contains CRs to 25.433 linked to the SIB11bis. The CRs are approved.

RP-060579   CRs on 25.346, 25.331 and 25.413 on Enhancing MBMS support for Mobile TV (RAN WG2)
The CRs to 25.331 are revised in the document below. The rest of the CRs are revised in RP-060624 to change the category to C.

RP-060598   Proposed update to 25.331 CR's 2905/2911 on the introduction of Mobile TV (Samsung, Vodafone)
Ericsson objected having this at Cat F CRs, all these should be Cat C.

For cleanliness, it is agreed to revise all the CRs in RP-060579 and RP-060598 on Mobile TV with the correct category.

RP-060624   CRs to 25.346, 25.331 and 25.413 (revision of RP-060579 and RP-060598) for Mobile TV (RAN WG2)
The CRs are approved without comments.

7.4   TSG RAN WG3

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

RP-060440   Status Report WG3 (RAN WG3 Chairman)
Alex Vesely (Siemens) presented this report.
RAN WG3 activity since last TSG RAN can be summarized as follows:

- 104 RAN3 agreed CRs: 0 R99/R4 CRs, 2 Rel-5 CRs, 35 Rel-6 CRs (2 cat A), 65 Rel-7 (34 cat A)
- Rel-5: still 2 left-over's from feature removal exercise (FDD DSCH)
- Release 6
  - MBMS: RANAP CRs for „Mobile TV

- - Various CRs for EDCH/HSDPA corrections
- Release 7
    - Improved support of Gaming over HSDPA/EDCH: no contributions
    - Delay Optimisations for procedures applicable to CS and PS connections:
        - Discussions on a proposal of a Access Stratum controlled Service change as alternative to SCUDIF.
        - Necessary Work spans over all TSGs.
        - reply LS sent to S2.
    - Continuous connectivity for packet data users: Analysis of RAN3 impacts performed based on the proposals contained in TR 25.903
    - Extended WCDMA cell range: CRs agreed – based on RAN4 agreements
    - MIMO Iub/Iur Protocol Aspects: no contributions
    - 3.84 Mcps TDD Enhanced Uplink: UTRAN Iub/Iur Protocol Aspects: complete set of CRs agreed
    - 7.68 Mcps TDD Enhanced Uplink: complete set of CRs agreed.
    - 1.28 Mcps TDD Enhanced Uplink: UTRAN Iub/Iur Protocol Aspects: Input to internal TR agreed
    - LCS Enhancements Related to Location-Based Services: RANAP/PCAP CRs for periodic reporting available
    - Global Navigation Satellite System (GNSS) in UTRAN: no contributions
    - Interface to Control Tower Mounted Amplifiers: Review of AISG 2.0 started (as requested in WID); LS to SA5 (as requested in WID)
- Long Term Evolution
    - Work Item framework reviewed
    - Progress on S1/X2 interfaces, QoS, RRM, O&M, MBMS
    - Dependencies with TSG SA groups on Mobility, Impacts of EPC internal structure on E-UTRAN, QoS, Network Domain Security

Giovanni Romano (TelecomItalia) noted that operators will present inputs to the next meeting of WG3 on the issue of the O&M interface, regardless of the assumption that there will not be an open interface to the NodeB.

Kevin Holley (O2) asked for an estimation of the progress on the HSPA study. This will be further discussed when the Status Report is presented.

RP-060441   List of CRs from RAN WG3 (RAN WG3)
This list is presented for information.

7.4.2   Discussions on decisions from WG3

No contributions.

7.4.3 Approval of CRs to Rel99, Rel-4, Rel-5 and Rel 6 with linked CRs

The documents in the table below contain CRs agreed by RAN WG3:

Document	Title
RP-060498	CRs (Rel-5 cat F and Rel-6/Rel-7 cat A) to TS 25.433 and TS 25.435
RP-060499	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.401, TS 25.402, TS 25.413 and TS 25.414
RP-060500	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.423 and TS 25.433 on EDCH batch1
RP-060501	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.423 and TS 25.433 on EDCH batch2
RP-060502	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.423 and TS 25.433 TEI6
RP-060503	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.423 on EDCH batch 1
RP-060504	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.423 on EDCH batch 2
RP-060505	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.433 on EDCH
RP-060506	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.433 TEI6
RP-060507	CR (Rel-6 cat. D) on Removal of erroneous References from TR 25.902

It is noted that the CR in RP-60507 is Cat D, however the changes are not editorial. It is agreed to change the Category in the CR database, the file is left as it is. The CR is approved
All the CRs in the documents above are approved.

RP-060590   CR (Rel-6 cat F, Rel-7 cat.A) on Removal of MBMS SAI Semantic Description in RANAP (Vodafone)
These CRs have been circulated in WG3 reflector without comments. The changes are linked to other CRs in CT. No objections in TSG RAN.
The linked CRs are CR191 to 29.061 in C3-060501, Coding of the MBMS S.A.AVP, and CR110r4 to 23.003 in C4-061312, Definition of MBMS SAI.

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

No contributions.

7.5 TSG RAN WG4

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

RP-060442   Status Report WG4 (RAN WG4 Chairman)
Howard Benn (RAN WG4 chairman) presented this report.
RAN WG4 activity since last TSG RAN can be summarized as follows:
-   1 RAN WG4 meeting since last RAN meeting
-   Increase in number of delegates (around 100)
-   364 input contributions, increasing again
-   There will be one WG meeting before the next plenary.
-   Corrections to the specification (cat B,C & F numbers)
    -   Release 99 - 6 CRs, Addition of TDD – PHS out of band emissions for Japan
    -   Release 4 – No CRs
    -   Release 5 - 5 CRs: Continued clean up of spurious emissions, TDD - HS-SCCH performance requirements

- Release 6 – 14 CRs: EDCH, MBMS, TEI6
- Release 7 - 13 CRs:
    - Correction to 25.101 - 6.6.3 and 7.6.2
    - MBMS UE Performance for 7.68 Mcps TDD Option.
    - Clarification of 7.68 Mcps TDD UE ACLR at +/- 10 MHz offset.
    - 7.68 Mcps TDD Option UE Spectrum Emission Mask
- Release 7 open items:
  - MIMO:Awaiting RAN 1 conclusions
  - UE Antenna Performance Evaluation Method and Requirements:
    - Agreement with RAN 5 to transfer test spec (RAN 4 TR)
    - Agreed min performance requirement for primary mode only
    - Min performance requirements still under discussion
    - Need for target requirement being discussed
  - Extended UMTS 1.7/2.1 GHz
    - TR completed on schedule
    - CRs for the TS to be agreed at next RAN4
  - Improved cell range: accuracy requirement agreed to be over a 180 km range, accuracy CR agreed
  - LMU performance spec: difference of opinion over how the work should progress
  - Improved performance requirements, MBMS and EDCH:
    - Ideal simulation results presented and correlated
    - Implementation margin and CR's expected at next RAN 4 meeting
  - Further Improved Performance Requirements for UMTS/HSDPA UE (FDD)
    - Based on interference cancellation
    - Simulation results presented, simulation conditions extensively discussed
    - Further work ongoing
  - Performance Evaluation of the UE behaviour in high speed trains with speeds up to 350 kmph
    - More simulation assumptions and results presented
    - Still some debate on the need for a performance requirement
  - Long Term Evolution
    - 73 contributions in this area
    - Many RAN 4 areas discussed
    - Not many decisions
    - A dedicated meeting may be organized for the beginning of next year.

Regarding the UE Antenna performance (slide 7), Phil Brown (RAN WG5 chairman) asked what would be the way forward for the tests. Howard explained that WG4 agreed to leave that entirely to WG5 to decide.

RP-060443   List of CRs from RAN WG4 (RAN WG4)
This list is presented for information.

7.5.2   Discussions on decisions from WG4

No contributions.

7.5.3 Approval of CRs to Rel99, Rel-4, Rel-5 and Rel 6 with linked CRs

The documents in the table below contain CRs agreed by RAN WG4:

Document	Title
RP-060516	CRs to 25.102 (R99 to Rel-7) on Out of band blocking for TDD UE operating in 2010-2025 MHz of band (a) in Japan
RP-060517	CRs to 25.102, 25.105 & 25.142 (R99 to Rel-7) on Clarification of Tx spurious emission level from TDD UE & BS into PHS band
RP-060518	CRs to 25.105 & 25.142 (R99 to Rel-7) on Clarification on the deployment of UTRA TDD in Japan
RP-060519	CRs to 25.105 & 25.142 (Rel-6 & Rel-7) on Tx and Rx Spurious Emission from 3.84 Mcps and 7.68 Mcps TDD BS into FDD bands in Japan
RP-060520	CRs to 25.106 & 25.143 (Repeaters) (Rel-5, Rel-6 & Rel-7) on Clean up of Spurious emissions
RP-060521	CRs to 25.106 & 25.143 (Repeaters) (Rel-5, Rel-6 & Rel-7) on up-link spurious emissions limits for co-existence/co-location with TDD
RP-060522	CRs to 25.102 (Rel-5, Rel-6 & Rel-7) on HS-SCCH performance requirement
RP-060523	CRs to 25.101, 25.123, 25.133 & 25.951 (Rel-6 & Rel-7) under TEI6
RP-060524	CRs to 25.133 & 25.141 (Rel-6 & Rel-7) for corrections to EDCH

All CRs in the documents above were approved.
It is noted that the CRs in RP-060516 will need CRs to 34.122, the test specification. These will be presented in WG5 in the future.

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

No documents.

7.6 TSG RAN WG5

7.6.1 Report from WG5 including report on actions required from the previous meeting

RP-060444 Status Report WG5 (RAN WG5 Chairman)
Phil Brown (RAN WG5 chairman) presented this report.
RAN WG5 activity since last TSG RAN can be summarized as follows:
- RAN5#32 was held in Edinburgh, Scotland hosted by Agilent 21 – 25 Aug 06 and was attended by around 68 delegates
- 190 CRs agreed at the meeting; this does not include 90 TTCN CRs that were RAN5 agreed using the email agreement process between meetings
- 7 more TTCN test cases have been RAN5 agreed @ 7 Sep 06
- Draft 2007 requirements for TF 160 agreed
- 1 work item should be closed but 6 more are to be presented for approval at RP#33, including one for LTE

It is clarified that the percentages in slide 7 only refer to the prose version of test cases, TTCN is not accounted for.
On slide 5, it is noted that GCF has not yet selected the tests required for MBMS.

On slide 10 (LTE), Phil clarified that at this stage WG5 has only created the framework, it hasn't been considered whether it will cover network aspects for example.

It was clarified that WG5 has not gone through the same exercise for HSPA. The chairman clarified that the rationale for having WG5 involved in LTE from the beginning is avoiding the problems that arose in testing for GSM and UMTS.

Phil also clarified that WG5 hasn't started thinking about the specification structure for LTE.

RP-060445   List of CRs from RAN WG5 (RAN WG5)
Document for information.

RP-060481   MCC TF 160 report (TF 160 Leader)
Phil Brown (RAN WG5 chairman) presented this report. The TTCN funding for 2007 (slide 11) was extensively discussed.

There was some debate on the justification of the 3 man-month allocated to LTE. The chairman explained that this is to be used in the preliminary analysis on how LTE will be tested, how to implement the tests, whether to use TTCN-3, etc. This very early allocation of effort to LTE is to avoid the problems of the past regarding the production of the tests.

Phil clarified that the prioritization and allocation of the items in slide 11 is made by TF160, and then presented and endorsed by WG5 and TSG RAN.

Derek Richards (IPWireless) noted that IPWireless cannot commit at this point the 2 man month shown in the table.

The chairman explained that the table is an estimate, not more. And reminded that the 3GPP PCG still has to approve the 58 mm requested, and remarked that PCG had requested last year to reduce the budget of TF160.

Niels Andersen (Qualcomm) underlined that it is likely that 25% of the budget estimated here will not be available, and companies should start thinking if the gap is to be covered by voluntary contributions or else some of the items will have less man month available; and then the question would be on what items to cut.

Antti Toskala (Nokia) asked to add to the list a number of other topics that are likely to require TTCN by the second half of 2007.

The report is approved, the funding proposal in slide 11 will be revised and the revision presented to the 3GPP PCG.

RP-060623   STF160 budget for 2007 (RAN WG5 chairman)
Phil Brown (RAN WG5 chairman) presented this document
No comments, the budget proposal is approved. TSG RAN chairman will present it to 3GPP PCG.

7.6.2   Discussions on decisions from WG5

No discussions.

7.6.3   Approval of CRs to Rel99, Rel-4 , Rel-5 with linked CRs

The documents in the table below contain CRs agreed by RAN WG5:

Document	Title
RP-060549	Non TTCN CR(s) under WI TEI_Test Batch 1
RP-060550	Non TTCN CR(s) under WI TEI_Test Batch 2
RP-060551	Non TTCN CR(s) under WI TEI_Test Batch 3
RP-060552	Non TTCN CR(s) under WI TEI4_Test
RP-060553	Non TTCN CR(s) under WI TEI5_Test
RP-060554	TTCN CR(s) under WI TEI_Test Cat B
RP-060555	TTCN CR(s) under WI TEI_Test Cat F Batch 1
RP-060556	TTCN CR(s) under WI TEI_Test Cat F Batch 2
RP-060557	TTCN CR(s) under WI TEI_Test Cat F Batch 3
RP-060558	TTCN CR(s) under WI TEI_Test Cat F Batch 4
RP-060559	TTCN CR(s) under WI TEI5_Test Cat F

All CRs in the documents above were approved without comments.

RP-060548   CR to 34.123-3: Add new verified and e-mail agreed TTCN test cases in the TC lists in 34.123-3 (prose), Annex A (MCC STF 160)
The CR is approved without comments.

7.6.4   Approval of CRs for closed Rel-6 WIs

RP-060560   Non TTCN CR(s) under WI TEI6_Test (RAN WG5)
RP-060561   TTCN CR(s) under WI TEI6_Test Cat F (RAN WG5)
The CRs is approved without comments.

7.6.5   Approval of linked CRs where the leading one originated from WG5

No documents.

8   CRs to closed Release 7 Work items

RP-060508   CR (Rel-7 cat. B) on closed WIs (RAN WG3)
Postponed to next meeting pending the completion of the corresponding one in RAN WG2.

RP-060580   25.319 and 25.321 Rel-7 CRs on Enhanced Uplink (RAN WG2)
These CRs should be Cat F, this will be changed in the CR DB. The CRs are approved.

RP-060581   25.307 and 25.331 CRs on UMTS 2600/900 (RAN WG2)
RP-060582   25.331 Rel-7 CR on the Support of 2570 – 2620 MHz band for TDD (RAN WG2)
RP-060585   Corrections to ASN.1 (3.84 and 7.68 Mcps TDD) (RAN WG2)
No comments, the CRs are approved.

9 Open Release 7 WIs and beyond: Status update and approval of CRs, reports

9.1 Radio Interface Improvement Feature

9.1.1 UE Antenna Performance Evaluation Method and Requirements

RP-060446 Status Report for WI UE Antenna Performance Evaluation Method and Requirements (TeliaSonera)

Per Ernström (TeliaSonera) presented this report

Level of completion 80%, expected date December 2006.

Edgar Fernandes (Motorola) reminded that the purpose of this item is to define a common frame so that operators could test terminals from different vendors with the same test and get results that could be compared. The following step is the definition of minimum requirements, but in WG4 operators have been asking for "target" requirements, which is something that does not exist for other requirements.

Han van Bussel (TMobile) explained that operators are likely to request better performance than that of the minimum requirements. He acknowledged that for certain terminals, fashion type, the minimum requirements are acceptable, but for high end, data oriented units, better performance is required. The preference of operators is to have this "better than minimum" requirements also written in the specification, Han noted a point of agreement could be reached in the form of putting the "target" requirements in an Annex. A majority of operators clearly supported Han's view.

RP-060631 Revised WIDS for UE Antenna Performance Evaluation Method and Requirements (TeliaSonera)

Per Ernström (TeliaSonera) presented this report

The completion dates are updated, the information about the WG5 item is included and the new TS25.144 is listed.

The revision is approved.

9.1.2 Additional minimum UE performance requirement for non-HSDPA channels based on type 1 enhanced receiver (Rx-Diversity)

9.1.2.1 Additional minimum UE performance requirement for downlink physical channels in support of MTCH and MCCH operation based on type 1 enhanced receiver (Rx-Diversity)

RP-060447 Status Report for WI Additional minimum UE performance requirement for downlink physical channels in support of MTCH and MCCH operation based on type 1 enhanced receiver (Rx-Diversity) (Qualcomm)

Serge Willenegger (Qualcomm) presented this report

Level of completion 50%, expected date March 2007.

No comments, the report is noted

9.1.2.2   Additional minimum UE performance requirement for downlink physical channels in support of E-DCH operation based on type 1 enhanced receiver (Rx-Diversity)

RP-060448   Status Report for WI Additional minimum UE performance requirement for downlink physical channels in support of E-DCH operation based on type 1 enhanced receiver (Rx-Diversity) (Qualcomm)
Serge Willenegger (Qualcomm) presented this report
Level of completion 50%, expected date March 2007.
No comments, the report is noted

9.1.3   Improved support of gaming over HSDPA/EDCH

RP-060618   Status Report for WI Improved Support of gaming over HSDPA/EDCH (Cingular)
Don Zelmer (Cingular) presented this report.
Level of completion 35%, expected date December 2007.
It was noted that the completion date is unlikely to be met, it will be reviewed in December.

9.1.4   Extended UMTS 1.7/2.1 GHz

RP-060450   Status Report for WI Extended UMTS 1.7/2.1 GHz (Ericsson)
Per Beming (Ericsson) presented this report
Level of completion 75%, expected date December 2006.
No comments, the report is noted

RP-060525   CR to 25.806 (Rel-7) for the Introduction of Extended 1.7/2.1 GHz FDD (Band X) in Rel-7 (RAN WG4)
No comments, the CR is approved

9.1.5   UMTS 2.6 GHz 7.68 TDD

RP-060451   Status Report for WI UMTS 2.6 GHz 7.68 TDD (IPWireless)
Derek Richards (IPWireless) presented this report
Work Item is completed and closed, the CRs are presented below.
It was noted that the test part in WG5 can be put under the frame of the generic 2.6 GHZ TDD WI.

RP-060526   CRs to 25.102, 25.105, 25.113 & 25.142 (Rel-7) for the Introduction of UMTS 2.6GHz 7.68 Mcps TDD (RAN WG4)
No comments, the CRs are approved

9.2 RAN Improvement Feature

9.2.1 Optimization of channelization code utilization for TDD

9.2.1.1 Optimization of Channelisation Code Utilisation for 1.28 Mcps TDD

RP-060452   Status Report for WI Optimisation of channelisation code utilisation for 1.28 McpsTDD (UTStarcom)
Derek Richards (IPWireless) presented this report.
Completed in WG1, WG2, WG3. 80% completed in WG4, expected completion December 2006.
The chairman reminded that a WI for testing needs to be presented in the future.

RP-060491   CR to 25.222 (Rel-7) for correction for Coding of PLCCH (RAN WG1)
Derek clarified that the PLCCH channel didn't exist before Rel-7, there is no backwards compatibility problem even if the range of the sequence number is reduced. It was reminded that in the future such a statement shall be put on the CR cover sheet to avoid unnecessary question. The CR is approved.

RP-060479   CRs to 25.331, 25.423 and 25.433 on Correction to coding of PLCCH for 1.28Mcps TDD (IPWireless)
The CR to 25.331 doesn't have a CR number, it needs to be revised. The CRs to 25.423 and 25.433 are approved.

RP-060622   CR to 25.331 on Correction to coding of PLCCH for 1.28Mcps TDD (IPWireless)
No comments, the CR is approved.

9.2.2 RRM optimizations for Iur and Iub

No contributions.

9.2.3 Delay optimization for procedure applicable to CS and PS

RP-060453   Status Report for WI Delay optimisation for procedures applicable to CS and PS Connections (Nokia)
Luis Barreto (Nokia) presented this report.
Work Item is completed and closed, the CRs are presented below.
Luis commented that there are open issues, but the CRs couldn't be agreed in last WG2. These open aspects will be dealt with within TEI7.
It seems that there were a number of proposals under this WI that couldn't be treated in last WG2 meeting, Luis' understanding is that these will go to TEI7 as well.

RP-060584   25.331 CRs on Introduction of Call type indication in CELL_FACH, Rel-7 (RAN WG2)
The CRs are approved without comments.

RP-060605   TR 25.815 V2.0.0 Signalling enhancements for Circuit-Switched (CS) and Packet-Switched (PS) Connections; Analyses and Recommendations (Nokia)
Luis Barreto (Nokia) presented this TR.
The TR is approved and will be put under change control as v7.0.0.

9.2.4   Continuous connectivity for packet data users

RP-060454   Status Report for WI Continuous connectivity for packet data users (Siemens)
Joern Krause (Siemens) presented this report.
Level of completion 75%, expected date December 2007.

RP-060536   LS on RAN1 decisions for "Continuous connectivity for packet data users" (TSG RAN WG1)
Joern Krause (Siemens) presented this LS.
For information to TSG RAN. This LS summarizes for WG2/WG3/WG4 the agreements reached in WG1 on this WI as follows:

RNC configures a UE-specific so called "CPC mode" (CPC: continuously packet connected) which has in contrast to the current REL-6 E-DCH/HSDPA behaviour the following characteristics:
Uplink:
- UL DPCCH gating/DTX in 2 cycles configured by the RNC and autonomously switched by the UE:
- rule based UL activity detection and DTX setting which can handle no UL user traffic, light UL user traffic as well as moving to transmit continuously,
- using UL DPCCH preambles (0...15 slots, configurable from set of 3 or 4 different lengths) before E-DCH transmissions,
- coupled with CQI reporting reduction,
- L3 indication of the UL DPCCH slot format to be used during CPC (1 new slot format will be added to 25.211: 6 pilots/4 TPC bits).
Downlink:
- Node B L1 controlled and RNC configurable cycle allowing DRX at the UE for UE battery savings.
- DL F-DPCH gating/DTX coupled with gated UL DPCCH periods.
- HSDPA with reduced HS-SCCH overhead for realtime/small packet size traffic (e.g. VoIP) with the following working assumption: "HS-SCCH less initial transmission with modified HS-SCCH for retransmission".
Note: REL-6 type HS-SCCH operation remains possible also when the modified HSDPA operation is configured to the UE.

9.2.5   7.68 Mcps TDD Enhanced Uplink

RP-060455   Status Report for WI 7.68 Mcps TDD Enhanced Uplink (IP Wireless)
Derek Richards (IPWireless) presented this report
Work completed in WG1, WG2, WG3; 20% completed in WG4. Expected completion in WG4 is December 2006.
The CRs for WG1, WG2, WG3 are approved (see agenda item 9.6), the WI is kept open until WG4 completes its part.

9.2.6   Extended WCDMA Cell Range

RP-060456   Status Report for WI Extended WCDMA Cell Range (Ericsson)

Martin Israelsson (Ericsson) presented this report

Volker Breuer (Siemens) objected that the CR in WG2 is premature for OTDOA, the work should be completed first in WG4. For example, WG4 always defines mapping tables with an open value at their end; this is not the case here. Volker noted that the mapping is something to be decided by WG4, not WG2.

In addition, Howard Benn (Motorola) argued that the understanding has been that the signalling in the UE is not affected, and this CR in WG2 is changing it. This raises a problem of backwards compatibility.

Since the WG4 part is not completed, the WI cannot be closed.

Level of completion 97%, expected date December 2006.

RP-060509   CRs for introduction of Extended WCDMA Cell Range (RAN WG3)
RP-060527   CR to 25.133 (Rel-7) for Introduction of extended WCDMA cell range (RAN WG4)

No comments, the CRs are approved

RP-060588   25.331 CR Rel-7 on extended cell range (RAN WG2)

The CR is not approved, it will be brought back to WG2 and WG4.

9.2.7   Interface to Control Tower Mounted Amplifiers (TMAs)

RP-060457   Status Report for WI Interface to control Tower Mounted Amplifiers (Vodafone)

Tim Frost (Vodafone) presented this report

Level of completion 30%, expected date December 2006.

There is the issue on whether to refer to AISG specifications or to create a 3GPP specification that is a copy&paste of AISG. This will be considered in WG3, but the decision will be taken in next TSG RAN.

9.3   UE Positioning

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

RP-060458   Status Report for WI Inclusion of Uplink TDOA UE positioning method in the UTRAN specifications (TruePosition)

Terri Brooks (TruePosition) presented this report.

Level of completion 85%, expected date moved to March 2007.

No comments, the report is noted.

9.3.2   LCS Enhancements Related to Location-Based Services

RP-060459   Status Report for WI LCS Enhancements Related to Location-Based Services (SiRF)

Robert Gross (SiRF) presented this report

Work Item completed and closed with the CRs below.

Robert noted that there is no need for tests in WG5 for this feature.

3GPP TSG RAN #33

RP-060510   CRs for Addition of Periodic Location Procedures (RAN WG3)
No comments, the CRs are approved.

9.4   Multiple Input Multiple Output Antennas

RP-060460   Status Report for WI MIMO (Lucent)
Said Tatesh (Lucent) presented this report
Completion level 75% in WG1, 10% in WG4, expected completion date moved to March 2007.
Dirk Gerstenberger (RAN WG1 chairman) expected that it might be possible to have the WG1 part completed before the end of this year, and the other groups would need at least another meeting cycle. WG2 and WG3 haven't worked on this yet.
It was agreed that WG1 will send a LS from its October meeting to WG4 with all the information so that WG4 can officially start working on this item.
It is difficult to give an estimate of the time needed by WG4 to do performance requirements in this area. Howard Benn (RAN WG4 Chairman) stated that WG4 cannot, at this moment, do any work because of dependencies on other groups. Han van Bussel (T-Mobile) said that he does not believe RAN4 can do its work by March 2007. Howard didn't think that the work can be finished by March, but couldn't provide a better estimate. It was noted that this shouldn't stop TSG RAN from including this item in Rel-7, since the performance requirements are very often completed after the Release is frozen.
Several companies were sceptical about finishing this work by March.
RAN WG3 chairman expected to complete the WG3 part by March, the target for WG1 is December 2006.

9.5   1.28 Mcps TDD Enhanced Uplink

RP-060461   Status Report for WI 1.28 Mcps TDD Enhanced Uplink (CATT)
Hai Tang (CATT) presented this report
Completion level 35%, expected completion date March 2007.
No comments, the report is noted

RP-060543   TR 30.302 V1.0.0 1.28Mcps TDD Enhanced Uplink; RAN2 Stage 2 (CATT)
Hai Tang (CATT) presented this TR for information.
No comments, the TR is noted.

9.6   3.84 Mcps TDD Enhanced Uplink

RP-060462   Status Report for WI 3.84 Mcps TDD Enhanced Uplink (IPWireless)
Derek Richards (IPWireless) presented this report.
Work completed in all WGs, the WI is closed.

RP-060478   TR 25.826 v2.0.0 3.84Mcps TDD Enhanced Uplink; Physical Layer Aspects (IPWireless)
The TR is approved and will be put under change control as v7.0.0.

Two alternative sets are presented:

Alternative 1, presents the CRs for the introduction of EDCH to both 3.84Mcps and 7.68Mcps modes.
Alternative 2, presents the CRs for the introduction of EDCH in 3.84Mpcs only.
The rationale of these two alternatives is that the work for 7.68Mcps is not completed in WG4. It is up to TSG RAN to decide if it wants to approve the CRs for the introduction in 7.64Mcps in WG1/WG2/WG3 specifications now, even if the WG4 CRs are not available (Alternative 1), or approve only the 3.84Mcps EDCH, for which all CRs in all groups are available (Alternative 2).

In addition, RP-060493 contains a CR for 7.68Mcps only from WG1 and RP-060528 contain the CRs for implementation of 3.84Mcps EDCH in WG4 specifications. RP-060528 can be approved regardless of the alternative chosen.

Alternative 1 (3.84Mcps & 7.68Mcps TDD EDCH)
RP-060492   Alternative 1: Set of RAN1 CRs (Rel-7, B) for Introduction of E-DCH for 3.84Mcps and 7.68Mcps TDD (RAN WG1)
RP-060511   Alternative 1: CRs for Introduction of 3.84 Mcps and 7.68Mcps TDD Enhanced Uplink (RAN WG3)
RP-060586   Alternative 1 - CRs on 25.319, 25.302, 25.306, 25.321 and 25.331 Rel-7 on the introduction of 3.84 Mcps and 7.68 Mcps TDD E-DCH (RAN WG2)
RP-060493   CR to 25.202 (Rel-7, B) for Introduction of E-DCH for 7.68Mcps TDD (RAN WG1)

Alternative 2 (3.84Mcps TDD EDCH)
RP-060494   Alternative 2: Set of RAN1 CRs (Rel-7, B) for Introduction of E-DCH for 3.84Mcps TDD (RAN WG1)
RP-060512   Alternative 2: CRs for Introduction of 3.84 Mcps TDD Enhanced Uplink (RAN WG3)
RP-060587   Alternative 2 - CRs on 25.302, 25.306, 25.321 and 25.331 Rel-7 on the introduction of 3.84 Mcps TDD E-DCH (RAN WG2)

The group decided to go for Alternative 1, RP-060492, RP-060511, RP-060586 and RP-060493 are approved, RP-060494, RP-060512 and RP-060587 are rejected.

RP-060528   CRs to 25.102, 25.105 & 25.142 (Rel-7) for 3.84 Mcps TDD Enhanced Uplink (RAN WG4)
The CRs are approved

Dirk Gerstenberger (RAN WG1 chairman) noted that the WG1 CRs introduce a new measurement for both 3.84 Mcps and 7.68 Mcps, and asked if WG4 CRs cover it for 3.84 Mcps. This needs to be checked by WG4 in its next meeting.

9.7   UE performance requirements for MBMS (TDD)

RP-060477   Status Report for UE Performance Requirements for MBMS (TDD) (IPWireless)
Derek Richards (IPWireless) presented this report.
This item was kept open 3 months ago waiting for the WI for the tests. This is presented below, this WI can now be closed.

RP-060529   CRs to 25.102 (Rel-6 & Rel-7) for corrections to 3.84 Mcps TDD UE performances on MBMS (RAN WG4)

The CR titles are somehow misleading, as the corrections are not editorials. The CRs are approved.

9.8   Global Navigation Satellite System (GNSS) in UTRAN

RP-060463   Status Report for WI Global Navigation Satellite System (GNSS) in UTRAN (France Telecom)

Marcin Bortnik (France Telecom) presented this report.

Completion level 25%, expected completion date September 2007. Some of the intermediate dates have changed.

There was concern on the discussion about what and how different positioning constellations will be supported, GERAN is also looking at this and hence there is a risk that conclusions in WG2 and GERAN do not align.

Considering the dates proposed in the Status Report, Per Beming (Ericsson) observed that there is large time spread on the dates when CRs to different specifications are expected to be presented. This is not the usual procedure, all CRs under a given WI should be presented (more or less) at the same time. It was agreed that the intermediate dates are not necessary at RAN level, only the final completion date is of interest.

9.9   Technical Small Enhancements and Improvements

The CRs in the documents in the table below were approved without comments.

Document	Title	Source
RP-060495	CRs to 25.133, 25.215, 25.302, 25.319 & 25.433 (Rel-7, C) for Introduction of a Node B measurement for E-DCH RRM	RAN WG1, WG2, WG3 & WG4
RP-060497	CR to 25224 (Rel-7) for correction of Release 7 Timing Advance (3.84 Mpcs and 7.68 Mcps TDD)	RAN WG1
RP-060514	CRs (Rel-7 cat. F) on TS 25.413, TS 25.415, TS 25.423 and TS 25.433 TEI7	RAN WG3
RP-060530	CRs to 25.101, 25.102 & 25.829 (Rel-7) under TEI7	RAN WG4
RP-060583	25.331 Rel-7 CRs on TEI7	RAN WG2

RP-060596   CR to 25.433 (Rel-7, C) for Introduction of a noise floor indication from Node B for E-DCH RRM (Ericsson, Nortel)

Howard Benn (RAN WG4 chairman) noted that this measurement had been deemed unnecessary in a joint meeting sometime ago, and asked if performance requirements are needed for it. It had been clarified in the email reflector that no requirements are needed, WG4 does not need to get involved.

The CR is approved.

RP-060513   CR (Rel-7 cat.B) for Introduction of new ciphering algorithm UEA2 and integrity protection algorithm UIA2 (RAN WG3)

The CR is postponed, the corresponding CR in WG2 is not available.

9.10   Testing of ROHC performance

RP-060464   Status Report for WI Testing of ROHC performance (Nokia)
Jussi Numminen (Nokia) presented this report.
Completion level 10%, expected completion date December 2006.
No comments, the report is noted.

9.11   FDD Enhanced Uplink (Testing)

RP-060465   Status Report for WI testing of FDD Enhanced Uplink (Ericsson)
Per Beming (Ericsson) presented this report.
Completion level 80%, expected completion date moved to March 2007.
No comments, the report is noted.

RP-060489   Update of work item description for FDD E-DCH testing (Ericsson)
Per Beming (Ericsson) presented this update.
No comments, the updated WIDS is approved.

RP-060562   Non TTCN CR(s) under WI EDCH_Test Batch 1 (RAN WG5)
RP-060563   Non TTCN CR(s) under WI EDCH_Test Batch 2 (RAN WG5)
RP-060564   Non TTCN CR(s) under WI EDCH_Test Batch 3 (RAN WG5)
No comments, the CRs are approved

9.12   Conformance Test Aspects – IMS Call Control

RP-060466   Status Report for WI IMS Call Control (testing) (Motorola)
Edgar Fernandes (Motorola) presented this report.
Completion level 85%, expected completion date December 2006.
No comments, the report is noted.

RP-060565   Non TTCN CR(s) under WI IMS-CCR_Test (RAN WG5)
No comments, the CRs are approved.

9.13   Conformance Test Aspects – MBMS

RP-060467   Status Report for WI Conformance Test Aspects MBMS (Qualcomm)
Serge Willenegger (Qualcomm) presented this report.
Completion level 20%, expected completion date moved to March 2007.
Luis Barreto (Nokia) asked that WG5 looks at possibility of automation the MBMS test cases under development.

9.14   HSDPA testing

RP-060468   Status Report for WI LCR TDD HSDPA testing (CATT)
Hai Tang (CATT) presented this report
RP-060488   Status Report for WI 3.84Mcps TDD HSDPA testing (IPWireless)
Derek Richards (IPWireless) presented this report

The LCR TDD part is 100% completed, the 3.84 Mcps part is 65% completed, expected finalization December 2006.
The FDD HSDPA part is also 100%.

The legacy WI for HSDPA covered FDD and LCR TDD, this can be considered closed.

The CRs in the two documents below contain the FDD HSDPA, TTCN and prose.
RP-060567   Non TTCN CR(s) under WI HSDPA_Test FDD (RAN WG5)
RP-060569   TTCN CR(s) under WI HSDPA_Test FDD (RAN WG5)
No comments, the CRs are approved

The CRs in the two documents below contain prose tests for HCR and LCR TDD.
RP-060566   Non TTCN CR(s) under WI HSDPA_HCRTDD_Test (RAN WG5)
RP-060568   Non TTCN CR(s) under WI HSDPA_Test LCRTDD (RAN WG5)
No comments, the CRs are approved

For the HSDPA tests, the parts missing are the TTCN for LCR TDD, the completion of the non-TTCN for 3.84 Mcps TDD and the TTCN for 3.84 Mcps TDD.

9.15   Conformance Test Aspects – IMS Call Control Release 6 enhancements

RP-060469   Status Report for WI Conformance Test Aspects IMS Call Control Rel-6 enhancements (Motorola, Ericsson)
Edgar Fernandes (Motorola) presented this report.
Completion level 0%, expected completion date moved to March 2007.
Gordon Young (RIM) observed that a workshop had been held between WG5 and CT WG1 experts for the previous IMS WI, and asked whether the intention was doing similarly for this one. Phil Brown (RAN WG5) clarified that WG5 regularly consults with CT WG1 and didn't see the need for another workshop.

9.16   UE conformance testing for FDD Inter-Band Operation

RP-060470   Status Report for WI Conformance Test Aspects FDD Inter-Band (NEC, Motorola)
Edgar Fernandes (Motorola) presented this report.
Completion level 10%, expected completion date moved to December 2006.
No comments, the report is noted

9.17   RF/RRM Conformance Test aspects FDD MBMS

RP-060471   Status Report for WI RF/RRM Conformance Test Aspects MBMS (Ericsson)
Per Beming (Ericsson) presented this report.
Completion level 10%, expected completion date moved to March 2007

9.18   3G Long Term Evolution

RP-060545   Status Report for WI 3G Long Term Evolution (NTT DoCoMo)
Takehiro Nakamura (NTT DoCoMo) presented this report
Level of completion: 10%. The building blocks and the timescales are to be approved at this meeting.
Regarding the specification numbering, there was some discussion on having the UE test specs in the same series as the rest of LTE specs (currently the new 36 series) or in a different series.
In any case, it has to be debated in SA whether a single new series for LTE is sufficient, or a set of new series has to be reserved to cope also with SAE specifications in SA and CT.
It is noted that WG2 and WG1 plan to have 4 additional meetings each.
Suzuki-san (Panasonic) asked for clarification on the procedure to complete the Stage 2 specification. Nakamura-san clarified that each WG will have to contribute to the Stage 2 and then forward to WG2.

RP-060546   Endorsed Building Block WIDs for 3G Long-Term Evolution (NTT DoCoMo)
Takehiro Nakamura (NTT DoCoMo) presented this set of Building Blocks.
There was a plea for a better organization of the work in the measurement area.
The structure of the specifications is still to be debated, and the performance checkpoints requested by operators below need to be added to the Description Sheets.
The Building Block Descriptions are revised in RP-060630.

RP-060592   Ensuring LTE Performance (China Mobile, KPN, Orange, NTT DoCoMo, SprintNextel, T-Mobile, Vodafone)
Tim Frost (Vodafone) presented this document
Operators request that there is a task for performance verification during the Work Item phase, with clearly dated milestones. It is however noted that the verification process should not cause delay to the LTE completion timescales.
There was some concern on the dates, as they may put unnecessary stress in completing the items before the work is really done. So basically, there was no disagreement on doing the verifications, but the question is when to do this without disturbing the normal progress.
Howard Benn (RAN WG4 chairman) asked for the relation between the performance verification here, that seems to apply to WG1, and the performance requirements that WG4 will produce. Tim clarified that this will look at system performance, rather than the requirements that come out of WG4. He noted also that WG4 requirements come normally at a later stage, and this is intended at an earlier phase.

The chairman advised that the groups, WG1 in particular, take a minimum bureaucracy approach. Tim Frost asked however that the performance assessment is kept in a document. The question of documentation can be discussed in TSG RAN in the future, the chairman recommended that the WGs stay away of it. Tim agreed that this is a TSG RAN discussion, rather than a WG discussion.

Finally, it is agreed to modify the WID Sheets to include verification checkpoints.

RP-060602   LTE documentation during WI phase (Siemens)
Volker Breuer (Siemens) presented this document.

Siemens proposes to consider a document/technical report maintaining most important LTE aspects in a comparable way as done in TR25.912 during the SI phase.

It was proposed to re-use 25.912 for this purpose. Volker objected that 25.912 has captured the conclusions of the Study, and thing can change as the WI progresses. It would be better to leave 25.912 as it is and to start a new specification.

Dirk Gerstenberger (RAN WG1 chairman) asked for clarification of what WG1 is supposed to put in the documentation specification, 25.912 or other.

Antti Toskala (Nokia) proposed to use the status reports for this documentation exercise; these reports can contain pointers to the WG tdocs and as such be a way to compile the evaluation / performance documents. He showed as an example the report in RP-060454.

Howard Benn (Motorola) reminded that 3GPP has very good documentation tools already: tdoc lists, meeting reports, status reports they all make easy to find and locate papers related to a given WI. He didn't see the need to have an additional documentation procedure.

Joern Krause (Siemens) clarified that the request from Siemens for documentation is not related to traceability and access to documentation, but to have a document showing the performance that the system will be able to achieve, of the final checkpoint proposed by Vodafone.

In conclusion, it is agreed that there is a need to document somehow the performance checkpoints, but the precise way of doing is still undecided. Hopefully, a conclusion can be reached at next TSG RAN. RAN WG1 advice on how to document is welcome.

RP-060547   Proposed Workplan for LTE (NTT DoCoMo)
Takehiro Nakamura (NTT DoCoMo) presented this document.
This document contains the detailed work plan for WG1, WG2, WG3 and WG5.
The chairman observed that this WorkPlan can be forwarded to SA WG2 to respond to their request for a WorkPlan for SAE/LTE. This was agreed.
Phil Brown (RAN WG5 chairman) asked that WGs inform WG5 of the items that should be prioritized for the tests, instead of relying on the GCF as it is done today. GCF bases its priorities on the deployments in the field, but WG5 cannot afford to wait until that for the LTE tests. Howard Benn (RAN WG4 chairman) reminded that WG4 used to indicate WG5 what needed to be tested, now the trend is for WG4 to focus on defining the performance and WG5 deciding alone on the tests that it produces. A solution for LTE could be to go back to the previous model of collaboration.
The work plan is approved.

**RP-060601   Proposed Draft LS from RAN #33 to SA #33 on 3G Long Term Evolution
                (Cingular)**
Don Zelmer (Cingular) presented this draft LS.
The principle of this LS is agreed. The LS will be revised to remove the editor notes.

RP-060594   Ensuring a viable multi-vendor E-UTRAN (Vodafone, KPN)
Tim Frost (Vodafone) presented this document
The document raises the issues of hand over pingpongs due to different algorithms being implemented by different vendors, and the need of test specifications for the S1 and X2 interfaces. This is in the light of maintaining the performance in a network with eNodeBs from multiple vendors.
Antti Toskala (Nokia) reminded that today's WDCMA networks have a working multi-vendor interface, the Iur, and no test specification exist. He warned that developing such specifications in 3GPP would take considerable time and effort. The current situation gives

flexibility in the network side over what is implemented and allows for multi Release networks. Furthermore, having a set of test specifications may equal to having a unique configuration for the interfaces.

Evelyne LeStrat (Nortel) agreed with the higher goal of multi-vendor operation, but argued that the proposed text for the WIDS is too restrictive. It is unclear what is a "3GPP mechanism" and she objected a precise definition of the handover algorithms. Evelyne reminded that it is not only an issue of handover, but rather resource allocation in general.

Antti Toskala (Nokia) objected also the wording of the first sentence, in particular the reference to the top-end requirements from TR25.913. First, the figures from that TR can be outdated by the successive enhancements, and second, the interoperability tests are not capacity tests and hence they do not prove that a given performance is achieved.

After off line discussions, the agreed text to be added to the WI description is the following:
The evolved UTRAN standard shall enable that the performance in a multi vendor environment is comparable to single vendor environment and the performance in a multi vendor environment shall, at least, be able to meet the system performance demonstrated at the end of the Work Item.

RP-060636   LTE mobility measurements (Motorola)
Howard Benn (Motorola) presented this document.
The proposal was endorsed by WG1 and WG3 chairmen.
Sarah Bourmendil (Nortel) noted that the problem of the measurements so far seemed to be that the definitions are written in WG1 and the performance is set in WG4. She didn't see the benefit of producing a TR on mobility strategies, which is a WG2 area. Gert van Lieshout (Samsung) supported this view, the proposal may be a solution, but not for the problem between WG1 and WG4.
Howard observed that it is not only a WG1/WG4 issue, it involves the other WGs as well.
Evelyne LeStrat (Nortel) remarked that mobility strategies require much more than measurements, and all the rest is not under the scope of WG4. She didn't agree on having a TR on mobility under the control of WG4.

RP-060640   LTE mobility measurements (Motorola)
Edgar Fernandes (Motorola) presented this document.
The proposal in this document is endorsed:
Create a TR covering the measurements requirements for mobility support. Make the prime responsibility RAN 4 and secondary responsibility RAN 1, 2, 3. Ask RAN 4 to develop the scope and list of sections for discussion at the next RAN plenary meeting. Ask the WG chairmen to encourage updating of the TR as the technical work progresses, especially as each of the WGs make agreements.

RP-060632   Modifications to Physical Layer Building Block WID to capture performance verification (Vodafone, Orange, T-Mobile, Ericsson)
Tim Frost (Vodafone) presented this revised building block.
The chairman explained that it is up to WG1 to decide how to organize the work on performance verification.
The Building Block is approved and it is incorporated also to the document below.

RP-060630   Building Block WIDs for 3G Long-Term Evolution (NTT DoCoMo)
Takehiro Nakamura (NTT DoCoMo) presented this proposal.
The document contains the Building Block Descriptions for the 5 WGs.

The document is approved.

RP-060633   Modifications to RAN1 Work Plan to add performance verification milestones (Vodafone, Orange, T-Mobile, Ericsson)
The document was approved without comments

RP-060635   Revised WIDS for the 3G Long Term Evolution feature (Vodafone)
The WID Sheet is approved without comments.

9.19   Study Items

9.19.1   UTRA UTRAN Long term evolution

9.19.1.1   Status report of LTE

RP-060615   Letter to TSG RAN chairman from MGMN (NGNM)
Han van Bussel (TMobile) presented this letter.
Regarding the IPR aspects, the operators here simply highlight that resolution of IPR problems is a key point in standardization, but it is not an issue to be discussed in 3GPP.
The chairman explained that his understanding of this letter is that the operators support to go ahead with the Work Item instead of keeping the Study Item open. Han supported this interpretation.

RP-060472   Status Report for FS on Evolved UTRA and UTRAN (NTT DoCoMo)
Takehiro Nakamura (NTT DoCoMo) presented this report.
Antti Toskala (Nokia) observed that the numerology for bandwidths lower than 5MHz is still open.
Regarding the QoS (slide 9), Sami Kekki (Nokia) recommended that SA WG2 and RAN WG2 lead the activity. RAN WG3 should just follow what they decide. This was endorsed and the chairman will indicate that in his report to SA.

9.19.1.2   CRs to LTE TRs

RP-060515   CR#1 to 25.912 (Rel-7 cat.B) on Bearer and C-plane establishment (RAN WG3)
No comments, the CR is approved

RP-060531   CR#2 to 25.912: Summary of downlink enhancement techniques over reference LTE unicast (NTT DoCoMo)
No comments, the CR is approved

RP-060589   25.813 Rel-7 CR on MBMS Transmissions & synchronization requirements and removal of note 1 (RAN WG2)
Edgar Fernandes (Motorola) asked for a better wording of the addition highlighted in yellow in section 11.1. This had been pointed out in TSG RAN reflector. In *"Single receiver UE should be able to receive paging messages during MBMS reception, assuming that a feasible method (e.g. by missing MBMS reception for some frames) is found"*, receiver should not be used, as it has different meaning to different WGs. Motorola proposes instead to word as

follows: *"A UE not capable of receiving simultaneously on more than one carrier frequency should be able…"*

Cingular and TelecomItalia supported the correction from Motorola.

Antti Toskala (Nokia) observed that the requirement should go further and state that LTE calls are be held while MBMS reception is maintained, since broadcast could be provided today through other systems like DVB-H where simultaneous operation is available in the devices.

There was some debate on what the intention of WG2 had been when drafting this text. It was preferred to bring the discussion offline to agree on a revision of the text.

RP-060629   25.813 Rel-7 CR on MBMS Transmissions & synchronization requirements and removal of note 1 (Motorola)

The controversial sentence as been removed. The issue will need to be discussed in the RAN WGs in the future.

In any case, it was agreed that a minimum requirement is that mobiles should be able to receive paging while receiving MBMS. The WGs will have to come out with an adequate writing.

Antti Toskala (Nokia) observed that this minimum requirement is obvious, no terminal will be put in the market that cannot respond to paging while receiving MBMS. The issue is not whether the UE must or mustn't receive the paging, but rather how this can be done.

The CR is approved, RAN WG2 is asked to study the issue of how can the UE receive paging, caller ID, make/receive calls, etc while receiving MBMS.

RP-060496   CRs to 25.814 (Rel-7, B) for Addition of Evaluation Results and Enhancement Techniques for E-UTRA (RAN WG1)

The CR is approved without comments.

9.19.1.3   Work plan review and associated documents

RP-060611   3GPP SAE/LTE project planning (SA WG2)

Jan Ellsberg (Ericsson) presented this document.

Kevin Holley (O2) noted that SAE and LTE are appearing together as unavoidably linked, but there has not been a firm decision to do so.

Regarding the request to the MCC to produce a detailed work plan, Jan clarified that SA WG2 is aiming at something more detailed and focused in SAE/LTE than the current 3GPP WP.

It was noted that RAN WG3 is waiting for feedback on item 9, security.

Tim Frost (Vodafone) observed that the major point of any SAE/LTE coordination, from TGS RAN perspective, is to make clear to SA groups what do RAN groups need from them in order to progress the work.

In any case, TSG RAN must provide feedback on this document to TSG SA.

RP-060612   3GPP SAE/LTE project planning (SAE rapporteur)

Jan Ellsberg (Ericsson) presented this document.

Alex Vesely (RAN WG3) chairman requested a clear decision as soon as possible on the group that is responsible of the tracking areas.

Sammi Kekki (Nokia) asked if the inter-system mobility is already solved in SA WG2, given that it is not in the list.

These two issues will be brought to the attention of TSG SA next week.

The calendar presented here is confusing; it starts with meetings more than a year ago and goes forward until the TSGs in December 2006 (TSGs #34)

RP-060613   Latest version of SAE TR in TR23.882 v1.4.1 (Vodafone)
Jan Ellsberg (Ericsson) presented this TR.
For information, noted. To be presented to WG2 and WG3 in October.

RP-060639   Comments to SAE project plan (RP-060611) (Ericsson)
Per Beming (Ericsson) presented this document
Sami Kekki (Nokia) asked for the intra 3GPP mobility, which had been listed by TSG RAN #32 as necessary for the progress in TSG RAN. Per clarified that the issue is properly captured at the end of the list.
The document will be presented by the chairman to TSG SA next week.

RP-060544   LTE MBMS concept status and way forward (China Mobile)
Yan Zhigang (China Mobile) presented this document.
The document clarifies the meaning of "dedicated cell" and "mixed cell" scenarios, and observes that the dedicated cell scenario can be optimized and the equipment simplified.
Yan clarified that the larger cell radius for the dedicated mode is estimated from 5 to 10 Kms. It was clarified that WG1 selection for the cyclic prefix doesn't allow for ranges larger than 10 Kms.
There was a request for operators to provide clarification on what they require for MBMS.
Ronan LeBras (Orange) mentioned that a group of operators will provide scenarios for broadcast to the forthcoming WG meetings.

RP-060603   Draft Stage 2 for E-UTRAN (Nokia)
For information, the TS is noted.

With the approval of the Building Blocks in RP-060630 of the 3G Long Term Evolution, the Study Item is closed.

9.19.2   Improvement of MBMS

RP-060473   Status Report for FS Improvements of MBMS (LG Electronics)
Mr. Kim (LG) presented this report
Completion level 70%, completion date is December 2006.
No comments, the report is noted.

RP-060604   TR25.905 V0.0.2 "Improvement of the Multimedia Broadcast Multicast Service (MBMS) in UTRAN" (LG)
Mr. Kim (LG) presented this TR
This TR is presented for information, should be v1.0.0.

RP-060621   Handling of evolved MBMS in UTRAN (Nokia)
Antti Toskala (Nokia) presented this document.
Nokia proposes to have a joint meeting during the next WG meetings in Riga dedicated to deployment assumptions for MBMS evolution, in order to have a better inter-WG coordination.
Derek Richards (IPWireless) reminded that the study explicitly excluded physical layer enhancements, so the purpose of a joint WG2-WG1 meeting is unclear.

Evelyne LeStrat (Nortel) corrected that there is not such restriction in the SI description sheet; furthermore, WG1 has secondary responsibility on this Study.
The proposal is noted, WG1, WG2 and WG4 chairmen are kindly asked to consider this point for the agendas for Riga.

9.19.3   Further Improved Performance Requirements for HSDPA UE

RP-060474   Status Report for FS Further Improved Performance Requirements for UMTS/HSDPA UE (Cingular)
Marc Grant (Cingular) presented this report.
Completion level 40%, completion date moved to March 2007.
No comments, the report is noted.

9.19.4   HSPA Evolution

RP-060475   Status Report for FS Scope of future FDD HSPA Evolution (Cingular)
Marc Grant (Cingular) presented this report.
Completion level 20%, completion date December 2006.
Don Zelmer (Cingular) will stop being rapporteur of this item, Marc will take over.
Marc clarified that RP-060616 contains the text proposals agreed in WG3.

RP-060616   Draft TR v0.3.0 for HSPA evolution (Cingular)
The draft of the TR is approved.

RP-060617   Backwards compatibility in HSPA evolution (Nokia, Three, Alcatel, Ericsson)
Sami Kekki (Nokia) presented this document
This paper addresses the backwards compatibility of HSPA evolution from two open issues:
-   Is the evolved HSPA architecture supposed to be compatible with 3G Core Network (Iu) or with the Evolved Packet Core network (S1 ála SAE)?
-   Is the evolved HSPA architecture supposed to be available for HSPA terminals of earlier releases?
In the view of the proponents, the answer is yes to both questions. It is proposed that the work in HSPA evolution follows the principles below:
-   To concentrate in HSPA Evolution architecture aspects on those alternatives that allow backwards compatible HSPA Evolution both from the terminal and core network viewpoint
-   To aim at the least possible impacts on UTRAN specifications.
-   To keep LTE/SAE and HSPA progress separated from each other.

This paper triggered discussion on whether the architecture for HSPA evo. should be completely new, based on existing UTRAN, or based on SAE and the S1 interface; whether the part of the study related to network architecture work and decisions could be de-coupled from the work on the air interface and terminal evolution, and on the backwards compatibility with legacy terminals.

Tim Frost (Vodafone) wondered how there can be benefits in a new architecture if support for legacy terminals is preserved, in particular in the area of soft handover.

Hashem Madadi (Three) supported the approach of not linking the HSDPA evolution to SAE. It should be an intermediate step that builds on existing equipment.

The chairman reminded that the close link between the SAE and LTE work items has only been put forward by SA WG2. However, it is a given fact since assumptions for LTE are based on a SAE in the core.

Evelyne LeStrat (Nortel) reminded that backwards compatibility regarding terminals is already a requirement in the Description Sheet (*legacy terminals should be able to use the same carrier as HSPA evo.*) She agreed however with the paper from Nokia in what concerns the backwards compatibility regarding the core. Antti Toskala (Nokia) noted that the requirement regarding the re-use of the carrier can be fulfilled regardless of whether the core is new or the existing one.

Serge Willenegger (Qualcomm) understanding of this paper is that whatever is done in the evolution of the network, it shouldn't force the implementation of a completely new protocol stack in the terminal.

Marc Grant (SI rapporteur) suggested closing the radio interface part of the study in December, and re-drafting the description sheet for the network part afterwards. Or else, simply creating a new study tailored to the network discussions. The new study would take into account the developments in SA WG2 in the SAE area.

Ronan LeBras (Orange) supported Nokia's paper and suggested to move it for discussion in the WGs, he remarked that the backwards compatibility aspects were paramount when the Study was approved, as shown in the description sheet.

After off line discussions, it was proposed to agree on a text indicating that TSG RAN would focus on Iu based solutions due to the foreseeable unavailability, for some time, of SAE and S1 interface. It was proposed to take this as a short term decision and to convey to TSG SA the concerns on the availability of SAE and its impact on TSG RAN work.

The short term decision (until next TSG RAN in fact) means that only the Iu based architecture is considered within the feasibility study. But this doesn't preclude considering S1 and SAE in the future. It must be noted however that the study may continue after RAN #34. Tim Frost (Vodafone) argued that the decision of considering S1 connectivity or only Iu shouldn't be linked to the closure of the Study, but to the availability of SAE in SA WG2. It was argued that the main reason to focus on Iu are the backwards compatibility aspects, regardless of the availability of the S1 interface in SA WG2.

Finally, the following approach was agreed:
Within the HSPA evolution study item in TSG RAN, there have been some concerns raised regarding the various architectural solutions. Since the SAE may not be available for some time, the complexity of connecting SAE to the evolved HSPA RAN through the S1 interface can not be fully understood at this time. Therefore, TSG RAN plans to focus the architectural work on studying Iu interface based solutions in the short term (UNTIL RAN 34 at least). The TSG RAN Chairman report in TSG SA should indicate the concerns raised in TSG RAN on the SAE availability and request further details on the SAE work plan with respect to this issue

RP-060634   Macro Diversity Combining in HSPA evolution (Drafting Group)

Sami Kekki (Nokia) presented this document

Regarding the impact on the uplink combining in the UE, Antti Toskala (Nokia) clarified that nothing is changed to the existing specifications, the UE will still have to implement the functions required for uplink combining. It is up to the network to have the combining and how to do it.

Sami clarified that the intention of the paper is not to study further MDC support for EDCH within this Study; as an assumption, MDC is not excluded of HSPA evolution.

It was finally agreed that MDC is kept, companies who would like to challenge the use of MDC shall come first to TSG RAN who will then decide whether to task WG1 to study the proposal or not. This only applies to FDD.

9.20   New Work Items/Study Items

RP-060482   Proposal for new work item: Conformance Test Aspects - 7.68 Mcps TDD (IPWireless)

Derek Richards (IPWireless) presented this WI proposal

Supporting companies: IPWireless, IPMobile, InterDigital, UTStarcom.

It is clarified that this WI covers HSDPA, but doesn't cover EDCH or MBMS.

No objections, the WI is approved.

RP-060483   Proposal for new work item: Conformance Test Aspects - MBMS for HCR TDD (IPWireless)

Derek Richards (IPWireless) presented this WI proposal

Supporting companies: IPWireless, IPMobile, InterDigital, UTStarcom.

It is noted this WI covers 3.84Mcps and 7.68Mcps, the title needs to be corrected accordingly. This will be done by the MCC before releasing the document with all WIDS

No objections, the WI is approved.

RP-060484   Proposal for new work item: Conformance Test Aspects - 3.84 Mcps and 7.68 Mcps TDD Enhanced Uplink (IPWireless)

Derek Richards (IPWireless) presented this WI proposal

Supporting companies: IPWireless, IPMobile, InterDigital, UTStarcom.

No objections, the WI is approved.

RP-060485   Proposal of new Work Item for LCR TDD MBMS SIG testing of Rel-6 (CATT)

Hai Tang (CATT) presented this WI proposal.

Supporting companies: RITT, ZTE, TD TECH ,CATT/CCSA

No objections, the WI is approved.

RP-060486   New Work Item Proposal: UE antenna over the air conformance testing (RAN WG5)

Jussi Numminen (Nokia) presented this WI proposal

Supporting companies: Nokia, TeliaSonera, Ericsson, NTT DoCoMo, Motorola, Vodafone, ZTE Corporation, Telecom Italia, Orange, Qualcomm

It is clarified that this WI follows the work in WG4, which so far doesn't cover TDD. It is agreed to revise the title to make it explicit that it is for paired spectrum only (FDD and GSM).

Gordon Young (RIM) observed that WG4 specifications only focus on minimum performance requirements, and this proposal here will produce test case that will provide will absolute values. These values need to be handled with care and should remain confidential.
Phil Brown (RAN WG5) couldn't provide any accuracy on what is "reasonable" in terms of test complexity, this will be seen when the tests are developed.
The Work Item is agreed in principle, the wording needs to be revised by WG5.

RP-060487   New WI for 3G Long-Term Evolution Testing (RAN WG5)
This proposal has been incorporated to the bundle with the Building Blocks of the all TSG RAN WGs in RP-060630. The document is withdrawn.

RP-060600   Proposed Work Item on "MBMS Physical Layer Enhancements for TDD" (IPWireless, IPMobile, InterDigital, UTStarcom)
Derek Richards (IPWireless) presented this proposal
It was asked if the WI is intended for all TDD chiprates. Derek noted that the intention is so.
Hai Tang (CATT) noted that the 1.28Mcps aspects are very different to the other chiprates, a preliminary study is required.
Antti Toskala (Nokia) noted that there is an ongoing study on MBMS enhancements, and asked how this proposal fits within the current studies. Derek clarified that the study is focused on signalling enhancements rather than physical layer changes. Antti corrected that the study encompasses physical layer aspects, this new technique can perfectly well be accommodated within the Study before proceeding with a Work Item.
Evelyne LeStrat (Nortel) aligned with Antti and requested that the proposal is considered within the existing study, with the focus of achieving as much commonality as possible between TDD and FDD in the signalling.
Serge Willenegger (Qualcomm) noted that results regarding this technique have been presented in WG1 within the study, for both TDD and FDD. He suggested to wait for more companies to present papers for this technique, conclude the study, and the start the Work Item.

As a way forward, it is agreed to postpone the approval of the Work Item until the Study is completed and this technique is studied.

RP-060619   Proposed new WI: Enhanced CELL_FACH state in FDD (Nokia)
Luis Barreto (Nokia) presented this proposal for a Work Item
Supporting companies: Cingular, Ericsson, Nokia, Qualcomm, Siemens, TeliaSonera, T-Mobile, Vodafone, Three, Motorola.
It cannot be confirmed at this point that the work will not impact WG4 and WG1 specifications, this will be seen as the work progresses.
The objectives of this work item is to provide necessary modifications to Rel7 specifications improving the CELL_FACH state by:
  - Increase the available peak rate for UEs in CELL_FACH state, e.g. by utilising HSDPA in CELL_FACH state.
  - Reduce the latency of user and control plane in the CELL_FACH, CELL_PCH and URA_PCH state by higher data peak rate
  - Reduce state transition delay from CELL_FACH, CELL_PCH and URA_PCH state to CELL_DCH state
  - Allow lower UE power consumption in CELL_FACH state by discontinuous reception

Luis clarified that these techniques were first studied within the call setup Work Item, they are not brand new ideas.

Hashem Madadi (Three) requested that the rest of techniques presented during the call setup work make their way into the specifications too, may be in TEI7 or in other form.

Patrick Fischer (LG) and Serge Willenegger (Qualcomm) clarified that the work shouldn't be seen as HSPA, there is no linkage to the HSPA study. This is just adding support of a given channel in a given RRC state. Marc Grant (Cingular) suggested removing the linkage to the HSPA study from the description sheet to avoid this misunderstanding. This was agreed.

With the modification proposed, the Work Item is approved. The Description Sheet will be revised by the MCC before inclusion in the compilation of TSG RAN WIs.

RP-060620   Dynamically reconfiguring a UE receiver to reduce power consumption when desired QoS is met (Nokia, Ericsson, Motorola, Samsung, Panasonic)

Jussi Numminen (Nokia) presented this proposal for a Study Item.

It is clarified that the study is for FDD only.

Hashem Madadi (Three) raised the concern on whether the performance reduction will be under the control of the operator or not. Jussi explained that this will be taken into account during the study. Hashem required that a premise of the study must be that the user experience is not degraded, if this is not guaranteed the study shouldn't be allowed.

The chairman reminded that the proposal is for study, and as such nothing should be precluded.

Per Ernstrom (TeliaSonera) asked to add a point to the objectives requiring to study how the operators can control the performance reduction.

Giovanni Romano (TelecomItalia) asked that metrics, or an evaluation of the gains of the performance reduction, are incorporated as an essential part of the study. Sharat Chandler (Cingular) asked that a clear assessment of the system wide benefits is provided by this study. Jussi reminded that the title of the study requires maintaining the QoS, this is exactly what the operators are requesting.

A revision is provided to incorporate the comments.

RP-060641   Dynamically reconfiguring a UE receiver to reduce power consumption when desired QoS is met (Nokia, Ericsson, Motorola, Samsung, Panasonic)

This revision takes into account the comments from the operator community.

Supporting companies: Ericsson, Nokia, Motorola, Samsung, Panasonic, T-Mobile, Qualcomm.

The Work Item is approved.

10   Technical co-ordination among WGs

The coordination has taken place during the meeting.

11   Outputs to other groups

RP-060637   Proposed Draft LS from RAN #33 to SA #33 on 3G Long Term Evolution (Cingular)

Don Zelmer (Cingular) presented this draft LS
Takehiro Nakamura (LTE rapporteur) is the contact person.
The LS is approved.

**RP-060638   Proposed reply LS on co-ordination of work on GERAN-LTE
interworking (TMobile)**
Han van Bussel (TMobile) presented this draft LS
The proposed joint meeting would be scheduled around the beginning of next year, it is not
possible to have it earlier.
The LS is approved.

Approved LSs:

Tdoc	Title	LS To	LS Cc	Attachment
RP-060637	Proposed Draft LS from RAN #33 to SA #33 on 3G Long Term Evolution	TSG SA	RAN WG1, WG2, WG3, WG4, WG5	RP-060547
RP-060638	Proposed reply LS on co-ordination of work on GERAN-LTE interworking	TSG GERAN, SA	SA WG2, RAN WG1, WG2, GERAN WG2	

12   Project management

RP-060476   TSG RAN Work Item & Study Item Description Sheets (3GPP Support)
RP-060480   Draft report of RAN5#31 (3GPP Support)
These documents are presented for information.

Alain Sultan (3GPP Support) presented the following 3 documents, no objections:
RP-060626   3GPP Work Plan (PowerPoint presentation) (3GPP Support)
RP-060627   3GPP Work Plan (MSProject file) (3GPP Support)
RP-060628   Description of the Release 6 (3GPP Support)

John Meredith (3GPP Support) presented the following documents:
RP-060610   CR source policy - reminder (3GPP Support)
It is reminded that after TSGs #33 all CRs must use the revision 9.1of the CR coversheet,
attached to this document. This new coversheet splits the source field in two, source to WG
and source to TSG.
This modification raises the issue on whether a new field should be added to the CR Data
Base to align it with the coversheet. John asked companies to think about this and come back
with proposals.

Other TSGs had discussed 3 months ago whether the CRs should have a CR number from the
first time the CR is presented in the WG. TSG CT has commanded its WGs to do so, and TSG
SA will take a decision next week. The situation in TSG RAN is diverse, some WGs do and
others do not.
There were views that supported keeping the status quo of each WG, and others that preferred
to have a 3GPP wide approach. The main argument to have the CRs numbered since the very
beginning is to increase traceability and visibility.

It was agreed to postpone the discussion for 3 additional months, companies were requested
to contact their colleagues from CT and SA in order to have a consistent position of

companies across different groups. There will be a dedicated item in the agenda of the next TSG RAN meeting for this issue.

RP-060609   MCC status report (3GPP Support)
This report is normally presented to TSG SA only, but this time it is brought here too due to the changes in MCC, in particular in the RAN area.

RP-060607   Specs lists per Release; a comparison (3GPP Support)
RP-060608   Status list before this round of meetings (3GPP Support)
These documents are for information.

12.1   Future Evolution for the Access TSGs

TSG RAN and GERAN chairmen were asked by the 3GPP PCG to study the feasibility of merging the two Radio TSGs. After discussions, which involved also the WG chairmen, it was concluded that the status quo should be maintained.

13   Any other business

The chairman noted that for the first time in his career in has overcome the 32 meetings in the same organization and that it was a good sign for 3GPP and that 50 meetings can already be foreseen for the TSGs as a minimum.

After four years in the job, this was the last meeting of César Gutiérrez Miguélez as MCC secretary and support for TSG RAN. He highlighted the invaluable experience that has been working with TSG RAN, and thanked the group, and the chairman in particular, for the trust and team work.

14   Closing of the meeting

The meeting was closed at 11:45 on Friday 22nd. The chairman thanked the participants for the work, remarked the biggest achievement of this meeting, the completion of the Long Term Evolution Study, and wished every body a safe trip home.

Annex A: List of participants

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Annex B: List of documents

Tdoc	Title	Source	Status
RP-060433	Draft agenda TSG RAN #33	Chairman	Revised in 434
RP-060434	Revised draft agenda TSG RAN #33	Chairman	Approved
RP-060435	Revised draft report TSG RAN meeting #32	3GPP Support	Approved
RP-060436	Status Report WG1	RAN WG1 Chairman	Noted
RP-060437	List of CRs from RAN WG1	RAN WG1	Noted
RP-060438	Status Report WG2	RAN WG2 Chairman	Noted
RP-060439	List of CRs from RAN WG2	RAN WG2	Noted
RP-060440	Status Report WG3	RAN WG3 Chairman	Noted
RP-060441	List of CRs from RAN WG3	RAN WG3	Noted
RP-060442	Status Report WG4	RAN WG4 Chairman	Noted
RP-060443	List of CRs from RAN WG4	RAN WG4	Noted
RP-060444	Status Report WG5	RAN WG5 Chairman	Noted
RP-060445	List of CRs from RAN WG5	RAN WG5	Noted
RP-060446	Status Report for WI UE Antenna Performance Evaluation Method and Requirements	TeliaSonera	Noted
RP-060447	Status Report for WI Additional minimum UE performance requirement for downlink physical channels in support of MTCH and MCCH operation based on type 1 enhanced receiver (Rx-Diversity)	Qualcomm	Noted
RP-060448	Status Report for WI Additional minimum UE performance requirement for downlink physical channels in support of E-DCH operation based on type 1 enhanced receiver (Rx-Diversity)	Qualcomm	Noted
RP-060449	Status Report for WI Improved Support of gaming over HSDPA/EDCH	Cingular	Revised in 618
RP-060450	Status Report for WI Extended UMTS 1.7/2.1 GHz	Ericsson	Noted
RP-060451	Status Report for WI UMTS 2.6 GHz 7.68 TDD	IPWireless	Noted
RP-060452	Status Report for WI Optimisation of channelisation code utilisation for 1.28 McpsTDD	UTStarcom	Noted
RP-060453	Status Report for WI Delay optimisation for procedures applicable to CS and PS Connections	Nokia	Noted
RP-060454	Status Report for WI Continuous connectivity for packet data users	Siemens	Noted
RP-060455	Status Report for WI 7.68 Mcps TDD Enhanced Uplink	IP Wireless	Noted

Tdoc	Title	Source	Status
RP-060456	Status Report for WI Extended WCDMA Cell Range	Ericsson	Noted
RP-060457	Status Report for WI Interface to control Tower Mounted Amplifiers	Vodafone	Noted
RP-060458	Status Report for WI Inclusion of Uplink TDOA UE positioning method in the UTRAN specifications	TruePosition	Noted
RP-060459	Status Report for WI LCS Enhancements Related to Location-Based Services	SiRF	Noted
RP-060460	Status Report for WI MIMO	Lucent	Noted
RP-060461	Status Report for WI 1.28 Mcps TDD Enhanced Uplink	CATT	Noted
RP-060462	Status Report for WI 3.84 Mcps TDD Enhanced Uplink	IPWireless	Noted
RP-060463	Status Report for WI Global Navigation Satellite System (GNSS) in UTRAN	France Telecom	Noted
RP-060464	Status Report for WI Testing of ROHC performance	Nokia	Noted
RP-060465	Status Report for WI testing of FDD Enhanced Uplink	Ericsson	Noted
RP-060466	Status Report for WI IMS Call Control (testing)	Motorola	Noted
RP-060467	Status Report for WI Conformance Test Aspects MBMS	Qualcomm	Noted
RP-060468	Status Report for WI LCR TDD HSDPA testing	CATT	Noted
RP-060469	Status Report for WI Conformance Test Aspects IMS Call Control Rel-6 enhancements	Motorola, Ericsson	Noted
RP-060470	Status Report for WI Conformance Test Aspects FDD Inter-Band	NEC, Motorola	Noted
RP-060471	Status Report for WI RF/RRM Conformance Test Aspects MBMS	Ericsson	Noted
RP-060472	Status Report for FS on Evolved UTRA and UTRAN	NTT DoCoMo	Noted
RP-060473	Status Report for FS Improvements of MBMS	LG Electronics	Noted
RP-060474	Status Report for FS Further Improved Performance Requirements for UMTS/HSDPA UE	Cingular	Noted
RP-060475	Status Report for FS Scope of future FDD HSPA Evolution	Cingular	Noted
RP-060476	TSG RAN Work Item & Study Item Description Sheets	3GPP Support	Noted
RP-060477	Status Report for UE Performance Requirements for MBMS (TDD)	IPWireless	Noted
RP-060478	TR 25.826 v2.0.0 3.84Mcps TDD Enhanced Uplink; Physical Layer Aspects	IPWireless	Approved
RP-060479	CRs to 25.331, 25.423 and 25.433 on Correction to coding of PLCCH for 1.28Mcps TDD	IPWireless	Approved
RP-060480	Draft report of RAN5#31	3GPP Support	Noted
RP-060481	MCC TF 160 report	TF 160 Leader	Approved
RP-060482	Proposal for new work item: Conformance Test Aspects - 7.68 Mcps TDD	IPWireless	Approved
RP-060483	Proposal for new work item: Conformance Test Aspects - MBMS for HCR TDD	IPWireless	Approved
RP-060484	Proposal for new work item: Conformance Test Aspects - 3.84 Mcps and 7.68 Mcps	IPWireless	Approved

Tdoc	Title	Source	Status
	TDD Enhanced Uplink		
RP-060485	Proposal of new Work Item for LCR TDD MBMS SIG testing of Rel-6	CATT	Approved
RP-060486	New Work Item Proposal: UE antenna over the air conformance testing	RAN WG5	Approved
RP-060487	New WI for 3G Long-Term Evolution Testing	RAN WG5	Withdrawn
RP-060488	Status Report for WI 3.84Mcps TDD HSDPA testing	IPWireless	Noted
RP-060489	Update of work item description for FDD E-DCH testing	Ericsson	Approved
RP-060490	CRs to 25.212 & 25.214 (Rel-6 & Rel-7) for corrections for Enhanced Uplink	RAN WG1	Approved
RP-060491	CR to 25.222 (Rel-7) for correction for Coding of PLCCH	RAN WG1	Approved
RP-060492	Alternative 1: Set of RAN1 CRs (Rel-7, B) for Introduction of E-DCH for 3.84Mcps and 7.68Mcps TDD	RAN WG1	Approved
RP-060493	CR to 25.202 (Rel-7, B) for Introduction of E-DCH for 7.68Mcps TDD	RAN WG1	Approved
RP-060494	Alternative 2: Set of RAN1 CRs (Rel-7, B) for Introduction of E-DCH for 3.84Mcps TDD	RAN WG1	Rejected
RP-060495	CRs to 25.133, 25.215, 25.302, 25.319 & 25.433 (Rel-7, C) for Introduction of a Node B measurement for E-DCH RRM	RAN WG1, RAN WG2, RAN WG3 & RAN WG4	Approved
RP-060496	CRs to 25.814 (Rel-7, B) for Addition of Evaluation Results and Enhancement Techniques for E-UTRA	RAN WG1	Approved
RP-060497	CR to 25224 (Rel-7) for correction of Release 7 Timing Advance (3.84 Mpcs and 7.68 Mcps TDD)	RAN WG1	Approved
RP-060498	CRs (Rel-5 cat F and Rel-6/Rel-7 cat A) to TS 25.433 and TS 25.435	RAN WG3	Approved
RP-060499	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.401, TS 25.402, TS 25.413 and TS 25.414	RAN WG3	Approved
RP-060500	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.423 and TS 25.433 on EDCH batch1	RAN WG3	Approved
RP-060501	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.423 and TS 25.433 on EDCH batch2	RAN WG3	Approved
RP-060502	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.423 and TS 25.433 TEI6	RAN WG3	Approved
RP-060503	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.423 on EDCH batch 1	RAN WG3	Approved
RP-060504	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.423 on EDCH batch 2	RAN WG3	Approved
RP-060505	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.433 on EDCH	RAN WG3	Approved
RP-060506	CRs (Rel-6 cat. F and Rel-7 cat. A) to TS 25.433 TEI6	RAN WG3	Approved
RP-060507	CR (Rel-6 cat.D) on Removal of erroneous References from TR 25.902	RAN WG3	Approved
RP-060508	CR (Rel-7 cat. B) on closed WIs	RAN WG3	Not approved
RP-060509	CRs for introduction of Extended WCDMA Cell Range	RAN WG3	Approved
RP-060510	CRs for Addition of Periodic Location Procedures	RAN WG3	Approved

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Tdoc	Title	Source	Status
RP-060511	Alternative 1: CRs for Introduction of 3.84 Mcps and 7.68Mcps TDD Enhanced Uplink	RAN WG3	Approved
RP-060512	Alternative 2: CRs for Introduction of 3.84 Mcps TDD Enhanced Uplink	RAN WG3	Rejected
RP-060513	CR (Rel-7 cat.B) for Introduction of new ciphering algorithm UEA2 and integrity protection algorithm UIA2	RAN WG3	Not approved
RP-060514	CRs (Rel-7 cat. F) on TS 25.413, TS 25.415, TS 25.423 and TS 25.433 TEI7	RAN WG3	Approved
RP-060515	CR#1 to 25.912 (Rel-7 cat.B) on Bearer and C-plane establishment	RAN WG3	Approved
RP-060516	CRs to 25.102 (R99 to Rel-7) on Out of band blocking for TDD UE operating in 2010-2025 MHz of band (a) in Japan.	RAN WG4	Approved
RP-060517	CRs to 25.102, 25.105 & 25.142 (R99 to Rel-7) on Clarification of Tx spurious emission level from TDD UE & BS into PHS band.	RAN WG4	Not agreed
RP-060518	CRs to 25.105 & 25.142 (R99 to Rel-7) on Clarification on the deployment of UTRA TDD in Japan	RAN WG4	Approved
RP-060519	CRs to 25.105 & 25.142 (Rel-6 & Rel-7) on Tx and Rx Spurious Emission from 3.84 Mcps and 7.68 Mcps TDD BS into FDD bands in Japan	RAN WG4	Approved
RP-060520	CRs to 25.106 & 25.143 (Repeaters) (Rel-5, Rel-6 & Rel-7) on Clean up of Spurious emissions	RAN WG4	Approved
RP-060521	CRs to 25.106 & 25.143 (Repeaters) (Rel-5, Rel-6 & Rel-7) on up-link spurious emissions limits for co-existence/co-location with TDD	RAN WG4	Approved
RP-060522	CRs to 25.102 (Rel-5, Rel-6 & Rel-7) on HS-SCCH performance requirement	RAN WG4	Approved
RP-060523	CRs to 25.101, 25.123, 25.133 & 25.951 (Rel-6 & Rel-7) under TEI6	RAN WG4	Approved
RP-060524	CRs to 25.133 & 25.141 (Rel-6 & Rel-7) for corrections to EDCH	RAN WG4	Approved
RP-060525	CR to 25.806 (Rel-7) for the Introduction of Extended 1.7/2.1 GHz FDD (Band X) in Rel-7	RAN WG4	Approved
RP-060526	CRs to 25.102, 25.105, 25.113 & 25.142 (Rel-7) for the Introduction of UMTS 2.6GHz 7.68 Mcps TDD	RAN WG4	Approved
RP-060527	CR to 25.133 (Rel-7) for Introduction of extended WCDMA cell range	RAN WG4	Approved
RP-060528	CRs to 25.102, 25.105 & 25.142 (Rel-7) for 3.84 Mcps TDD Enhanced Uplink	RAN WG4	Approved
RP-060529	CRs to 25.102 (Rel-6 & Rel-7) for corrections to 3.84 Mcps TDD UE performances on MBMS	RAN WG4	Approved
RP-060530	CRs to 25.101, 25.102 & 25.829 (Rel-7) under TEI7	RAN WG4	Approved
RP-060531	CR#2 to 25.912: Summary of downlink enhancement techniques over reference LTE unicast	NTT DoCoMo	Approved
RP-060532	Gaming over HSDPA networks	OMA Game Services WG	Noted

Tdoc	Title	Source	Status
RP-060533	LS on assignment of numeric values for standardised causes	TSG SA WG5	Noted
RP-060534	Reply LS on GSM antenna minimum performance requirements	TSG GERAN WG1	Noted
RP-060535	LS on LTE SI Conclusions	TSG RAN WG1	Noted
RP-060536	LS on RAN1 decisions for "Continuous connectivity for packet data users"	TSG RAN WG1	Noted
RP-060537	LS on spectral emissions mask and coexistence	TSG RAN WG4	Noted
RP-060538	LS on The liaison activity regarding Category B emission limits	TSG RAN WG4	Noted
RP-060539	LS on co-ordination of work on GERAN-LTE Interworking.	TSG GERAN	Noted
RP-060540	LS on minimum number of supported SAE bearers in the UE	TSG RAN WG2	Noted
RP-060541	Standard evolution of Power Control test cases.	Top Optimized Technologies	Withdrawn
RP-060542	New Work Item Proposal: Power Control testing improvements.	Telefonica, Top Optimized Technologies	Withdrawn
RP-060543	TR 30.302 V1.0.0 1.28Mcps TDD Enhanced Uplink; RAN2 Stage 2	CATT	Noted
RP-060544	LTE MBMS concept status and way forward	China Mobile	Noted
RP-060545	Status Report for WI 3G Long Term Evolution	NTT DoCoMo	Noted
RP-060546	Endorsed Building Block WIDs for 3G Long-Term Evolution	NTT DoCoMo	Revised in 630
RP-060547	Proposed Workplan for LTE	NTT DoCoMo	Approved
RP-060548	CR to 34.123-3: Add new verified and e-mail agreed TTCN test cases in the TC lists in 34.123-3 (prose), Annex A	MCC STF 160	Approved
RP-060549	Non TTCN CR(s) under WI TEI_Test Batch 1	RAN WG5	Approved
RP-060550	Non TTCN CR(s) under WI TEI_Test Batch 2	RAN WG5	Approved
RP-060551	Non TTCN CR(s) under WI TEI_Test Batch 3	RAN WG5	Approved
RP-060552	Non TTCN CR(s) under WI TEI4_Test	RAN WG5	Approved
RP-060553	Non TTCN CR(s) under WI TEI5_Test	RAN WG5	Approved
RP-060554	TTCN CR(s) under WI TEI_Test Cat B	RAN WG5	Approved
RP-060555	TTCN CR(s) under WI TEI_Test Cat F Batch 1	RAN WG5	Approved
RP-060556	TTCN CR(s) under WI TEI_Test Cat F Batch 2	RAN WG5	Not agreed
RP-060557	TTCN CR(s) under WI TEI_Test Cat F Batch 3	RAN WG5	Approved
RP-060558	TTCN CR(s) under WI TEI_Test Cat F Batch 4	RAN WG5	Approved
RP-060559	TTCN CR(s) under WI TEI5_Test Cat F	RAN WG5	Approved
RP-060560	Non TTCN CR(s) under WI TEI6_Test	RAN WG5	Approved
RP-060561	TTCN CR(s) under WI TEI6_Test Cat F	RAN WG5	Approved
RP-060562	Non TTCN CR(s) under WI EDCH_Test Batch 1	RAN WG5	Approved

Tdoc	Title	Source	Status
RP-060563	Non TTCN CR(s) under WI EDCH_Test Batch 2	RAN WG5	Approved
RP-060564	Non TTCN CR(s) under WI EDCH_Test Batch 3	RAN WG5	Approved
RP-060565	Non TTCN CR(s) under WI IMS-CCR_Test	RAN WG5	Approved
RP-060566	Non TTCN CR(s) under WI HSDPA_HCRTDD_Test	RAN WG5	Approved
RP-060567	Non TTCN CR(s) under WI HSDPA_Test FDD	RAN WG5	Approved
RP-060568	Non TTCN CR(s) under WI HSDPA_Test LCRTDD	RAN WG5	Approved
RP-060569	TTCN CR(s) under WI HSDPA_Test FDD	RAN WG5	Approved
RP-060570	Introduction of SIB11bis (linked to RP-060577)	Siemens	Approved
RP-060571	Alternative 1: 34.109 Rel-6 introduction of UE test loop mode 3 (SDU counters) to support of MTCH performance testing	RAN WG2	Approved
RP-060572	CRs on TR 25.993	RAN WG2	Approved
RP-060573	CRs on 25.323 and 25.331 CRs Rel-5 (Rel-6/Rel-7)	RAN WG2	Approved
RP-060574	CRs on 25.302, 25.321, 25.331 on FDD Enhanced Uplink (Rel-6/Rel-7)	RAN WG2	Partially approved
RP-060575	25.322 and 25.331 Rel-6/Rel-7 CRs	RAN WG2	Approved
RP-060576	25.331 CRs on MBMS (Rel-6/Rel-7)	RAN WG2	Approved
RP-060577	25.306, 25.331 CRs on the introduction of SIB11bis (Rel-6/Rel-7)	RAN WG2	Revised in 614
RP-060578	25.321, 25.331 CRs on MAC-hs reset (Rel-6/Rel-7)	RAN WG2	Approved
RP-060579	CRs on 25.346, 25.331 and 25.413 on Enhancing MBMS support for Mobile TV	RAN WG2	Revised in 624
RP-060580	25.319 and 25.321 Rel-7 CRs on Enhanced Uplink	RAN WG2	Approved
RP-060581	25.307 and 25.331 CRs on UMTS 2600/900	RAN WG2	Approved
RP-060582	25.331 Rel-7 CR on the Support of 2570 – 2620 MHz band for TDD	RAN WG2	Approved
RP-060583	25.331 Rel-7 CRs on TEI7	RAN WG2	Approved
RP-060584	25.331 CRs on Introduction of Call type indication in CELL_FACH, Rel-7	RAN WG2	Approved
RP-060585	Corrections to ASN.1 (3.84 and 7.68 Mcps TDD)	RAN WG2	Approved
RP-060586	Alternative 1 - CRs on 25.319, 25.302, 25.306, 25.321 and 25.331 Rel-7 on the introduction of 3.84 Mcps and 7.68 Mcps TDD E-DCH	RAN WG2	Approved
RP-060587	Alternative 2 - CRs on 25.302, 25.306, 25.321 and 25.331 Rel-7 on the introduction of 3.84 Mcps TDD E-DCH	RAN WG2	Rejected
RP-060588	25.331 CR Rel-7 on extended cell range	RAN WG2	Not approved
RP-060589	25.813 Rel-7 CR on MBMS Transmissions & synchronization requirements and removal of note 1	RAN WG2	Revised in 629
RP-060590	CR (Rel-6 cat F, Rel-7 cat.A) on Removal of MBMS SAI Semantic Description in RANAP	Vodafone	Approved

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Tdoc	Title	Source	Status
RP-060591	Status Report	ITU-R Ad Hoc Contact Person	Noted
RP-060592	Ensuring LTE Performance	China Mobile, KPN, Orange, NTT DoCoMo, SprintNextel, T-Mobile, Vodafone	Agreed
RP-060593	25.331 Rel-6/Rel-7 CRs	RAN WG2	Approved
RP-060594	Ensuring a viable multi-vendor E-UTRAN	Vodafone, KPN	Noted
RP-060595	Applicability of S1 interface to other access technologies	Vodafone	Withdrawn
RP-060596	CR to 25.433 (Rel-7, C) for Introduction of a noise floor indication from Node B for E-DCH RRM	Ericsson, Nortel	Approved
RP-060597	Proposed update to 25.331 CR's 2857/2858 on the introduction of SIB11bis	Samsung, Motorola, Siemens, Vodafone	Approved
RP-060598	Proposed update to 25.331 CR's 2905/2911 on the introduction of Mobile TV	Samsung, Vodafone	Revised in 624
RP-060599	Alternative 2: 34.109 Rel-7 Introduction of UE test loop mode 3 (SDU counters) to support MTCH performance testing	RAN WG2	Withdrawn
RP-060600	Proposed Work Item on "MBMS Physical Layer Enhancements for TDD"	IPWireless, IPMobile, InterDigital, UTStarcom	Not approved
RP-060601	Proposed Draft LS from RAN #33 to SA #33 on 3G Long Term Evolution	Cingular	Revised in 637
RP-060602	LTE documentation during WI phase	Siemens	Noted
RP-060603	Draft Stage 2 for E-UTRAN	Nokia	Noted
RP-060604	TR25.905 V0.0.2 "Improvement of the Multimedia Broadcast Multicast Service (MBMS) in UTRAN"	LG	Noted
RP-060605	TR 25.815 V2.0.0 Signalling enhancements for Circuit-Switched (CS) and Packet-Switched (PS) Connections; Analyses and Recommendations	Nokia	Approved
RP-060606	Proposed new WI: Enhanced CELL_FACH state in FDD	Nokia	Revised in 619
RP-060607	Specs lists per Release; a comparison	3GPP Support	Noted
RP-060608	Status list before this round of meetings	3GPP Support	Noted
RP-060609	MCC status report	3GPP Support	Noted
RP-060610	CR source policy - reminder	3GPP Support	Rejected
RP-060611	3GPP SAE/LTE project planning	SA WG2	Noted
RP-060612	3GPP SAE/LTE project planning	SAE rapporteur	Noted
RP-060613	Latest version of SAE TR in TR23.882 v1.4.1	Vodafone	Noted

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Tdoc	Title	Source	Status
RP-060614	25.306, 25.331 CRs on the introduction of SIB11bis (Rel-6/Rel-7)	RAN WG2	Partially approved
RP-060615	Letter to TSG RAN chairman from NGMN	NGNM	Noted
RP-060616	Draft TR v0.3.0 for HSPA evolution	Cingular	Approved
RP-060617	Backwards compatibility in HSPA evolution	Nokia, Three, Alcatel, Ericsson	Noted
RP-060618	Status Report for WI Improved Support of gaming over HSDPA/EDCH	Cingular	Noted
RP-060619	Proposed new WI: Enhanced CELL_FACH state in FDD	Nokia	Approved
RP-060620	Dynamically reconfiguring a UE receiver to reduce power consumption when desired QoS is met	Nokia, Ericsson, Motorola, Samsung, Panasonic	Revised in 641
RP-060621	Handling of evolved MBMS in UTRAN	Nokia	Noted
RP-060622	CR to 25.331 on Correction to coding of PLCCH for 1.28Mcps TDD	IPWireless	Approved
RP-060623	STF160 budget for 2007	RAN WG5 chairman	Approved
RP-060624	CRs to 25.346, 25.331 and 25.413 (revision of RP-060579 and RP-060598) for Mobile TV	RAN WG2	Approved
RP-060625	CRs to 25.321on Maximum number of transmissions (Rev of CRs in RP-060574)	RAN WG2	Approved
RP-060626	3GPP Work Plan (PowerPoint presentation)	3GPP Support	Noted
RP-060627	3GPP Work Plan (MSProject file)	3GPP Support	Noted
RP-060628	Description of the Release 6	3GPP Support	Noted
RP-060629	25.813 Rel-7 CR on MBMS Transmissions & synchronization requirements and removal of note 1	Motorola	Approved
RP-060630	Building Block WIDs for 3G Long-Term Evolution	NTT DoCoMo	Approved
RP-060631	Revised WIDS for UE Antenna Performance Evaluation Method and Requirements	TeliaSonera	Approved
RP-060632	Modifications to Physical Layer Building Block WID to capture performance verification	Vodafone, Orange, T-Mobile, Ericsson	Approved
RP-060633	Modifications to RAN1 Work Plan to add performance verification milestones	Vodafone, Orange, T-Mobile, Ericsson	Approved
RP-060634	Macro Diversity Combining in HSPA evolution	Drafting Group	Noted
RP-060635	Revised WIDS for the 3G Long Term Evolution feature	Vodafone	Approved
RP-060636	LTE mobility measurements	Motorola	Noted
RP-060637	Proposed Draft LS from RAN #33 to SA #33 on 3G Long Term Evolution	Cingular	Approved
RP-060638	Proposed reply LS on co-ordination of work on GERAN-LTE interworking	TMobile	Approved
RP-060639	Comments to SAE project plan (RP-060611)	Ericsson	Approved
RP-060640	LTE mobility measurements	Motorola	Approved

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Tdoc	Title	Source	Status
RP-060641	Dynamically reconfiguring a UE receiver to reduce power consumption when desired QoS is met	Nokia, Ericsson, Motorola, Samsung, Panasonic	Approved

Annex C: List of CRs presented at TSG RAN #32

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
25.101	0522	1	Rel-6	6.12.0	F	RP-060523	Approved	Peak code domain error for E-DCH	TEI6	R4-061085
25.101	0523	1	Rel-7	7.4.0	A	RP-060523	Approved	Peak code domain error for E-DCH	TEI6	R4-061086
25.101	0524		Rel-7	7.4.0	F	RP-060530	Approved	Correction to 6.6.3 and 7.6.2	TEI7	R4-061027
25.102	0178		Rel-5	5.8.0	F	RP-060522	Approved	HS-SCCH performance requirement for 3.84 Mcps TDD option	TEI5	R4-060766
25.102	0179		Rel-6	6.4.0	A	RP-060522	Approved	HS-SCCH performance requirement for 3.84 Mcps TDD option	TEI5	R4-060767
25.102	0180		Rel-7	7.3.0	F	RP-060522	Approved	HS-SCCH performance requirement for 3.84 Mcps TDD option and 7.68 Mcps TDD option	TEI7	R4-060768
25.102	0181	1	R99	3.12.0	F	RP-060516	Approved	Out of band blocking for 3.84 Mcps TDD UE operating in 2010-2025 MHz of band (a) in Japan.	TEI	R4-061028
25.102	0182	1	Rel-4	4.7.0	A	RP-060516	Approved	Out of band blocking for 3.84 Mcps TDD UE operating in 2010-2025 MHz of band (a) in Japan.	TEI	R4-061029
25.102	0183	1	Rel-5	5.8.0	A	RP-060516	Approved	Out of band blocking for 3.84 Mcps TDD UE operating in 2010-2025 MHz of band (a) in Japan.	TEI	R4-061030
25.102	0184	1	Rel-6	6.4.0	A	RP-060516	Approved	Out of band blocking for 3.84 Mcps TDD UE operating in 2010-2025 MHz of band (a) in Japan.	TEI	R4-061031
25.102	0185	1	Rel-7	7.3.0	F	RP-060516	Approved	Out of band blocking for 3.84 Mcps and 7.68 Mcps TDD UE operating in 2010-2025 MHz of band (a) in Japan.	TEI7	R4-061032
25.102	0186		R99	3.12.0	F	RP-060517	Approved	Clarification of Tx spurious emission level from 3.84 Mcps TDD UE into PHS band.	TEI	R4-060779
25.102	0187		Rel-4	4.7.0	A	RP-060517	Approved	Clarification of Tx spurious emission level from 3.84 Mcps TDD UE into PHS band.	TEI	R4-060780
25.102	0188		Rel-5	5.8.0	A	RP-060517	Approved	Clarification of Tx spurious emission level	TEI	R4-060781

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
								from 3.84 Mcps TDD UE into PHS band.		
25.102	0189		Rel-6	6.4.0	A	RP-060517	Approved	Clarification of Tx spurious emission level from 3.84 Mcps TDD UE into PHS band.	TEI	R4-060782
25.102	0190		Rel-7	7.3.0	F	RP-060517	Approved	Clarification of Tx spurious emission level from 3.84 Mcps and 7.68 MCps TDD UE into PHS band	TEI7	R4-060783
25.102	0191		Rel-6	6.4.0	F	RP-060529	Approved	Editorial corrections to 3.84 Mcps TDD UE performances on MBMS.	MBMS-RAN-RF-TDD	R4-060794
25.102	0192		Rel-7	7.3.0	A	RP-060529	Approved	Editorial corrections to 3.84 Mcps TDD UE performances on MBMS.	MBMS-RAN-RF-TDD	R4-060795
25.102	0193		Rel-7	7.3.0	B	RP-060528	Approved	Performance requirements for 3.84 Mcps E-DCH associated downlink signalling channels: E-AGCH and E-HICH	EDCHTDD-RF	R4-060798
25.102	0194		Rel-7	7.3.0	B	RP-060526	Approved	7.68 Mcps Operations in 2.6 GHz band	RInImp-UMTS26VHCRTDD	R4-060802
25.102	0195		Rel-7	7.3.0	F	RP-060530	Approved	Clarification of 7.68 Mcps TDD UE ACLR at +/- 10 MHz offset.	TEI7	R4-060807
25.102	0196		Rel-7	7.3.0	B	RP-060530	Approved	MBMS UE Performance for 7.68 Mcps TDD Option.	TEI7	R4-060810
25.105	0183		R99	3.13.0	F	RP-060517	Approved	Clarification of Tx spurious emission level from 3.84 Mcps TDD BS into PHS band	TEI	R4-060784
25.105	0184		Rel-4	4.8.0	A	RP-060517	Approved	Clarification of Tx spurious emission level from 3.84 Mcps TDD BS into PHS band	TEI	R4-060785
25.105	0185		Rel-5	5.6.0	A	RP-060517	Approved	Clarification of Tx spurious emission level from 3.84 Mcps TDD BS into PHS band	TEI	R4-060786
25.105	0186		Rel-6	6.2.0	A	RP-060517	Approved	Clarification of Tx spurious emission level from 3.84 Mcps TDD BS into PHS band	TEI	R4-060787
25.105	0187		Rel-7	7.2.0	F	RP-060517	Approved	Clarification of Tx spurious emission level from 3.84 Mcps and 7.68 Mcps TDD BS into PHS band	TEI7	R4-060788
25.105	0188		Rel-7	7.2.0	B	RP-060528	Approved	Performance requirements for 3.84 Mcps E-DCH channel.	EDCHTDD-RF	R4-060799

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
25.105	0189	1	Rel-7	7.2.0	B	RP-060526	Approved	7.68 Mcps Operations in 2.6 GHz band	RInImp-UMTS26VHCRTDD	R4-061046
25.105	0190	1	R99	3.13.0	F	RP-060518	Approved	Clarification on the deployment of UTRA TDD in Japan	TEI	R4-061059
25.105	0191	1	Rel-4	4.8.0	A	RP-060518	Approved	Clarification on the deployment of UTRA TDD in Japan	TEI	R4-061033
25.105	0192	1	Rel-5	5.6.0	A	RP-060518	Approved	Clarification on the deployment of UTRA TDD in Japan	TEI	R4-061034
25.105	0193	1	Rel-6	6.2.0	A	RP-060518	Approved	Clarification on the deployment of UTRA TDD in Japan	TEI	R4-061035
25.105	0194	1	Rel-7	7.2.0	A	RP-060518	Approved	Clarification on the deployment of UTRA TDD in Japan	TEI	R4-061036
25.105	0195	1	Rel-6	6.2.0	F	RP-060519	Approved	Tx and Rx Spurious Emission from 3.84 Mcps TDD BS into FDD bands in Japan	TEI6	R4-061041
25.105	0196	1	Rel-7	7.2.0	A	RP-060519	Approved	Tx and Rx Spurious Emission from 3.84 Mcps and 7.68 Mcps TDD BS into FDD bands in Japan	TEI6	R4-061042
25.106	0044	1	Rel-5	5.10.0	F	RP-060520	Approved	Clean up of Spurious emissions	TEI5	R4-061008
25.106	0045	1	Rel-6	6.4.0	A	RP-060520	Approved	Clean up of Spurious emissions	TEI5	R4-061009
25.106	0046	1	Rel-7	7.0.0	A	RP-060520	Approved	Clean up of Spurious emissions	TEI5	R4-061010
25.106	0047	1	Rel-5	5.10.0	F	RP-060521	Approved	New UTRA Repeater up-link spurious emissions limits for co-existence/co-location with TDD	TEI5	R4-061014
25.106	0048	1	Rel-6	6.4.0	A	RP-060521	Approved	New UTRA Repeater up-link spurious emissions limits for co-existence/co-location with TDD	TEI5	R4-061015
25.106	0049	1	Rel-7	7.0.0	A	RP-060521	Approved	New UTRA Repeater up-link spurious emissions limits for co-existence/co-location with TDD	TEI5	R4-061016
25.113	0036		Rel-7	7.3.0	B	RP-060526	Approved	7.68 Mcps Exclusion bands	RInImp-UMTS26VHCRTDD	R4-060805

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Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
25.123	0373	1	Rel-6	6.7.0	F	RP-060523	Approved	Correction of GSM measurement test case for 1.28Mcps TDD	TEI6	R4-061021
25.123	0374	1	Rel-7	7.1.0	A	RP-060523	Approved	Correction of GSM measurement test case for 1.28Mcps TDD	TEI6	R4-061022
25.123	0375		Rel-6	6.7.0	F	RP-060523	Approved	Removal of square brackets from requirement for Event Triggering and Reporting Criteria CELL_FACH state	TEI6	R4-060971
25.123	0376		Rel-7	7.1.0	A	RP-060523	Approved	Removal of square brackets from requirement for Event Triggering and Reporting Criteria CELL_FACH state	TEI6	R4-060972
25.133	0879	3	Rel-7	7.4.0	C	RP-060495	Approved	Introduction of a Node B measurement for EDCH RRM	EDCH-RF	R4-061051
25.133	0883	2	Rel-6	6.14.0	F	RP-060524	Approved	E-TFC restriction test case with 2mS E-DCH TTI and corrections to existing 10mS TTI testcase	EDCH-RF	R4-061063
25.133	0884	2	Rel-7	7.4.0	A	RP-060524	Approved	E-TFC restriction test case with 2mS E-DCH TTI and corrections to existing 10mS TTI testcase	EDCH-RF	R4-061064
25.133	0886	1	Rel-6	6.14.0	F	RP-060523	Approved	UE Power Headroom Test Case	TEI6	R4-061025
25.133	0887	1	Rel-7	7.4.0	A	RP-060523	Approved	UE Power Headroom Test Case	TEI6	R4-061026
25.133	0888	1	Rel-7	7.4.0	C	RP-060527	Approved	Introduction of extended WCDMA cell range	RANimp-ExtCell	R4-061075
25.133	0889		Rel-6	6.14.0	F	RP-060523	Approved	Correction of the definition of PMaxj in E-TFC selection	TEI6	R4-060933
25.133	0890		Rel-7	7.4.0	A	RP-060523	Approved	Correction of the definition of PMaxj in E-TFC selection	TEI6	R4-060934
25.133	0893		Rel-6	6.14.0	F	RP-060523	Approved	Modification of MBMS RRM test cases to use SDU error rate rather than BLER	TEI6	R4-060947
25.133	0894		Rel-7	7.4.0	A	RP-060523	Approved	Modification of MBMS RRM test cases to use SDU error rate rather than BLER	TEI6	R4-060948
25.133	0895		Rel-6	6.14.0	F	RP-060524	Approved	Removal of brackets from E-TFC MPR values	EDCH-RF	R4-060949
25.133	0896		Rel-7	7.4.0	A	RP-060524	Approved	Removal of brackets from E-TFC MPR values	EDCH-RF	R4-060950
25.133	0897		Rel-6	6.14.0	F	RP-060523	Approved	Correction of first significant path to first	TEI6	R4-060955

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
								detected path (in time)		
25.133	0898		Rel-7	7.4.0	A	RP-060523	Approved	Correction of first significant path to first detected path (in time)	TEI6	R4-060956
25.141	0439		Rel-6	6.14.0	F	RP-060524	Approved	Clarification of EUL test setup	EDCH-RF	R4-061072
25.141	0440		Rel-7	7.4.0	A	RP-060524	Approved	Clarification of EUL test setup	EDCH-RF	R4-061073
25.142	0201		R99	3.13.0	F	RP-060517	Approved	Clarification of Tx spurious emission level from 3.84 Mcps TDD BS into PHS band	TEI	R4-060789
25.142	0202		Rel-4	4.10.0	A	RP-060517	Approved	Clarification of Tx spurious emission level from 3.84 Mcps TDD BS into PHS band	TEI	R4-060790
25.142	0203		Rel-5	5.8.0	A	RP-060517	Approved	Clarification of Tx spurious emission level from 3.84 Mcps TDD BS into PHS band	TEI	R4-060791
25.142	0204		Rel-6	6.4.0	A	RP-060517	Approved	Clarification of Tx spurious emission level from 3.84 Mcps TDD BS into PHS band	TEI	R4-060792
25.142	0205		Rel-7	7.2.0	F	RP-060517	Approved	Clarification of Tx spurious emission level from 3.84 Mcps and 7.68 Mcps TDD BS into PHS band	TEI7	R4-060793
25.142	0206		Rel-7	7.2.0	B	RP-060528	Approved	Performance requirements for 3.84 Mcps E-DCH channel.	EDCHTDD-RF	R4-060800
25.142	0207	2	Rel-7	7.2.0	B	RP-060526	Approved	7.68 Mcps Operations in 2.6 GHz band	RInImp-UMTS26VHCRTDD	R4-061057
25.142	0208	1	R99	3.13.0	F	RP-060518	Approved	Clarification on the deployment of UTRA TDD in Japan	TEI	R4-061060
25.142	0209	1	Rel-4	4.10.0	A	RP-060518	Approved	Clarification on the deployment of UTRA TDD in Japan	TEI	R4-061037
25.142	0210	1	Rel-5	5.8.0	A	RP-060518	Approved	Clarification on the deployment of UTRA TDD in Japan	TEI	R4-061038
25.142	0211	1	Rel-6	6.4.0	A	RP-060518	Approved	Clarification on the deployment of UTRA TDD in Japan	TEI	R4-061039
25.142	0212	1	Rel-7	7.2.0	A	RP-060518	Approved	Clarification on the deployment of UTRA TDD in Japan	TEI	R4-061040
25.142	0213	1	Rel-6	6.4.0	F	RP-060519	Approved	Tx and Rx Spurious Emission from 3.84 Mcps	TEI6	R4-061043

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
								TDD BS into FDD bands in Japan		
25.142	0214	1	Rel-7	7.2.0	A	RP-060519	Approved	Tx and Rx Spurious Emission from 3.84 Mcps and 7.68 Mcps TDD BS into FDD bands in Japan	TEI6	R4-061044
25.143	0055	1	Rel-5	5.10.0	F	RP-060520	Approved	Clean up of Spurious emissions	TEI5	R4-061011
25.143	0056	1	Rel-6	6.4.0	A	RP-060520	Approved	Clean up of Spurious emissions	TEI5	R4-061012
25.143	0057	1	Rel-7	7.0.0	A	RP-060520	Approved	Clean up of Spurious emissions	TEI5	R4-061013
25.143	0058	1	Rel-5	5.10.0	F	RP-060521	Approved	New UTRA Repeater up-link spurious emissions limits for co-existence/co-location with TDD	TEI5	R4-061017
25.143	0059	1	Rel-6	6.4.0	A	RP-060521	Approved	New UTRA Repeater up-link spurious emissions limits for co-existence/co-location with TDD	TEI5	R4-061018
25.143	0060	1	Rel-7	7.0.0	A	RP-060521	Approved	New UTRA Repeater up-link spurious emissions limits for co-existence/co-location with TDD	TEI5	R4-061019
25.201	0024	2	Rel-7	7.0.0	B	RP-060494	Rejected	Introduction of E-DCH for 3.84Mcps TDD	EDCHTDD-Phys	R1-061978
25.201	0025	-	Rel-7	7.0.0	B	RP-060492	Approved	Introduction of E-DCH for 3.84Mcps and 7.68Mcps TDD	EDCHTDD-Phys, RANimp-VHCRTDD-EDCH	R1-061984
25.202	0001	-	Rel-7	7.0.0	B	RP-060493	Approved	Introduction of E-DCH for 7.68Mcps TDD	RANimp-VHCRTDD-EDCH	R1-062116
25.212	0239	-	Rel-6	6.8.0	F	RP-060490	Approved	Correction to the E-DCH HARQ rate matching for compressed mode	EDCH-Phys	R1-062085
25.212	0240	-	Rel-7	7.1.0	A	RP-060490	Approved	Correction to the E-DCH HARQ rate matching for compressed mode	EDCH-Phys	R1-062086
25.214	0422	1	Rel-6	6.9.0	F	RP-060490	Approved	Clarification of E-DPDCH gain factor quantization	EDCH-Phys	R1-062404
25.214	0423	1	Rel-7	7.1.0	A	RP-060490	Approved	Clarification of E-DPDCH gain factor quantization	EDCH-Phys	R1-062405

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Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
25.215	0170	3	Rel-7	7.0.0	C	RP-060495	Approved	Introduction of a Node B measurement for E-DCH RRM	EDCH-Phys	R1-061972
25.221	0137	2	Rel-7	7.0.0	B	RP-060494	Rejected	Introduction of E-DCH for 3.84Mcps TDD	EDCHTDD-Phys	R1-061979
25.221	0138	-	Rel-7	7.0.0	B	RP-060492	Approved	Introduction of E-DCH for 3.84Mcps and 7.68Mcps TDD	EDCHTDD-Phys, RANimp-VHCRTDD-EDCH	R1-061985
25.222	0128	-	Rel-7	7.0.0	B	RP-060494	Rejected	Introduction of E-DCH for 3.84Mcps TDD	EDCHTDD-Phys	R1-061980
25.222	0129	-	Rel-7	7.0.0	B	RP-060492	Approved	Introduction of E-DCH for 3.84Mcps and 7.68Mcps TDD	EDCHTDD-Phys, RANimp-VHCRTDD-EDCH	R1-061986
25.222	0130	-	Rel-7	7.0.0	B	RP-060491	Approved	Correction to coding of PLCCH for 1.28Mcps TDD	RANimp-RABSE-CodOptLCRTDD	R1-062408
25.223	0039	2	Rel-7	7.1.0	B	RP-060494	Rejected	Introduction of E-DCH for 3.84Mcps TDD	EDCHTDD-Phys	R1-061981
25.223	0041	-	Rel-7	7.1.0	B	RP-060492	Approved	Introduction of E-DCH for 3.84Mcps and 7.68Mcps TDD	EDCHTDD-Phys, RANimp-VHCRTDD-EDCH	R1-061987
25.224	0151	2	Rel-7	7.0.0	B	RP-060494	Rejected	Introduction of E-DCH for 3.84Mcps TDD	EDCHTDD-Phys	R1-061982
25.224	0152	-	Rel-7	7.0.0	B	RP-060497	Approved	Release 7 Timing Advance (3.84 Mpcs and 7.68 Mcps TDD)	TEI7	R1-061975
25.224	0153	-	Rel-7	7.0.0	B	RP-060492	Approved	Introduction of E-DCH for 3.84Mcps and 7.68Mcps TDD	EDCHTDD-Phys, RANimp-VHCRTDD-EDCH	R1-061988
25.225	0082	2	Rel-7	7.1.0	B	RP-060494	Rejected	Introduction of E-DCH for 3.84Mcps TDD	EDCHTDD-Phys	R1-061983
25.225	0083	-	Rel-7	7.1.0	B	RP-060492	Approved	Introduction of E-DCH for 3.84Mcps and 7.68Mcps TDD	EDCHTDD-Phys, RANimp-VHCRTDD-EDCH	R1-061989
25.302	0172	2	Rel-7	7.1.0	B	RP-060587	Rejected	Introduction of 3.84 Mcps TDD E-DCH	EDCHTDD-L23	R2-062646

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
25.302	0173	2	Rel-7	7.1.0	C	RP-060495	Approved	Introduction of a Node B measurement for E-DCH RRM	EDCH-L23	R2-062524
25.302	0174	-	Rel-6	6.7.0	F	RP-060574	Approved	RGCH requirement in physical channel conbinations	EDCH-L23	R2-062512
25.302	0175	-	Rel-7	7.1.0	A	RP-060574	Approved	RGCH requirement in physical channel conbinations	EDCH-L23	R2-062513
25.302	0176	-	Rel-7	7.1.0	B	RP-060586	Approved	Introduction of 3.84 and 7.68 Mcps TDD E-DCH	EDCHTDD-L23, RANimp-VHCRTDD-EDCH	R2-062653
25.306	0142	2	Rel-7	7.0.0	B	RP-060587	Rejected	Introduction of 3.84 Mcps TDD E-DCH	EDCHTDD-L23	R2-062647
25.306	0143	-	Rel-6	6.8.0	F	RP-060614	Approved	Introduction of SIB 11bis	TEI6	R2-062581
25.306	0144	-	Rel-7	7.0.0	F	RP-060614	Approved	Introduction of SIB 11bis	TEI7	R2-062582
25.306	0145	-	Rel-7	7.0.0	B	RP-060586	Approved	Introduction of 3.84 Mcps and 7.68 McpsTDD E-DCH	EDCHTDD-L23, RANimp-VHCRTDD-EDCH	R2-062654
25.307	0044	1	R99	3.6.0	F	RP-060581	Approved	Power class for UMTS2600 (VII) internal / 900 (VIII)	RInImp-UMTS900, RInImp-UMTS2600	R2-062697
25.307	0045	1	Rel-4	4.6.0	F	RP-060581	Approved	Power class for UMTS2600 (VII) internal / 900 (VIII)	RInImp-UMTS900, RInImp-UMTS2600	R2-062698
25.307	0046	-	Rel-5	5.5.0	F	RP-060581	Approved	Power class for UMTS2600 (VII) internal / 900 (VIII)	RInImp-UMTS900, RInImp-UMTS2600	R2-062588
25.307	0047	-	Rel-6	6.3.0	F	RP-060581	Approved	Power class for UMTS2600 (VII) internal / 900 (VIII)	RInImp-UMTS900, RInImp-UMTS2600	R2-062589

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
25.319	0001	1	Rel-7	7.0.0	C	RP-060495	Approved	Introduction of a Node B measurement for E-DCH RRM	EDCH-L23	R2-062525
25.319	0002	-	Rel-7	7.0.0	F	RP-060580	Approved	Inconsistent terminology in Enhanced Uplink stage 2	EDCH-L23	R2-062521
25.319	0003	-	Rel-7	7.0.0	B	RP-060586	Approved	Introduction of 3.84 Mcps and 7.68 Mcps TDD E-DCH	EDCHTDD-L23, RANimp-VHCRTDD-EDCH	R2-062650
25.321	0279	2	Rel-7	7.1.0	B	RP-060587	Rejected	Introduction of 3.84 Mcps TDD E-DCH	EDCHTDD-L23	R2-062644
25.321	0285	1	Rel-6	6.9.0	D	RP-060574	Revised	Maximum number of transmissions	EDCH-L23	R2-062734
25.321	0285	2	Rel-6	6.9.0	F	RP-060625	Approved	Maximum number of transmissions	EDCH-L23	
25.321	0286	1	Rel-7	7.1.0	D	RP-060574	Revised	Maximum number of transmissions	EDCH-L23	R2-062735
25.321	0286	2	Rel-7	7.1.0	A	RP-060625	Approved	Maximum number of transmissions	EDCH-L23	
25.321	0288	-	Rel-6	6.9.0	F	RP-060574	Approved	HLBS values in Scheduling Information message	EDCH-L23	R2-062530
25.321	0289	-	Rel-7	7.1.0	A	RP-060574	Approved	HLBS values in Scheduling Information message	EDCH-L23	R2-062531
25.321	0290	1	Rel-7	7.1.0	F	RP-060580	Approved	Note on Serving Grant Update with Zero Grant	EDCH-L23	R2-062731
25.321	0291	-	Rel-7	7.1.0	B	RP-060586	Approved	Introduction of 3.84 Mcps and 7.68 Mcps TDD E-DCH	EDCHTDD-L23, RANimp-VHCRTDD-EDCH	R2-062651
25.321	0292	1	Rel-6	6.9.0	F	RP-060578	Approved	MAC-hs reset	HSDPA-L23	R2-062729
25.321	0293	-	Rel-7	7.1.0	A	RP-060578	Approved	MAC-hs reset	HSDPA-L23	R2-062710
25.322	0304	-	Rel-6	6.8.0	F	RP-060575	Approved	AMD PDU discard	TEI6	R2-062706
25.322	0305	-	Rel-7	7.1.0	A	RP-060575	Approved	AMD PDU discard	TEI6	R2-062707
25.323	0079	-	Rel-5	5.7.0	F	RP-060573	Approved	Removal of CID indication in PDCP PID	RANimp-RABSE5	R2-062504
25.323	0080	-	Rel-6	6.6.0	A	RP-060573	Approved	Removal of CID indication in PDCP PID	RANimp-RABSE5	R2-062505
25.323	0081	-	Rel-7	7.1.0	A	RP-060573	Approved	Removal of CID indication in PDCP PID	RANimp-	R2-062506

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
									RABSE5	
25.331	2828	2	Rel-7	7.1.0	B	RP-060587	Rejected	Introduction of 3.84 Mcps TDD E-DCH	EDCHTDD-L23	R2-062645
25.331	2846	-	Rel-5	5.17.0	F	RP-060573	Approved	Removal of CID indication in PDCP PID	RANimp-RABSE5	R2-062507
25.331	2847	-	Rel-6	6.10.0	A	RP-060573	Approved	Removal of CID indication in PDCP PID	RANimp-RABSE5	R2-062508
25.331	2848	-	Rel-7	7.1.0	A	RP-060573	Approved	Removal of CID indication in PDCP PID	RANimp-RABSE5	R2-062509
25.331	2849	-	Rel-5	5.17.0	C	RP-060573	Approved	Final removal of SIB types 8, 9 and 10 from Specifications	TEI5	R2-062510
25.331	2850	-	Rel-5	5.17.0	F	RP-060573	Approved	Removal of TGPL2 and reinstating of TGL2 in the DPCH compressed mode info	TEI5	R2-062511
25.331	2851	-	Rel-6	6.10.0	F	RP-060574	Approved	Correction to the tabulars for Serving Grant value	EDCH-L23	R2-062522
25.331	2852	-	Rel-7	7.1.0	A	RP-060574	Approved	Correction to the tabulars for Serving Grant value	EDCH-L23	R2-062523
25.331	2853	-	Rel-6	6.10.0	F	RP-060575	Approved	Range of the encoding of E-DCH physical layer category and HS-DSCH physical layer category	TEI6	R2-062526
25.331	2854	-	Rel-7	7.1.0	A	RP-060575	Approved	Range of the encoding of E-DCH physical layer category and HS-DSCH physical layer category	TEI6	R2-062527
25.331	2855	-	Rel-6	6.10.0	F	RP-060574	Approved	3-index step 2-index step clarifications	EDCH-L23	R2-062528
25.331	2856	-	Rel-7	7.1.0	A	RP-060574	Approved	3-index step 2-index step clarifications	EDCH-L23	R2-062529
25.331	2857	1	Rel-6	6.10.0	F	RP-060614	Revised	Introduction of SIB 11bis	TEI6	R2-062699
25.331	2857	2	Rel-6	6.a.0	F	RP-060597	Approved	Introduction of SIB 11bis	TEI-6	
25.331	2858	1	Rel-7	7.1.0	F	RP-060614	Revised	Introduction of SIB 11bis	TEI7	R2-062700
25.331	2858	2	Rel-7	7.1.0	F	RP-060597	Approved	Introduction of SIB 11bis	TEI-7	
25.331	2859	-	Rel-7	7.1.0	F	RP-060581	Approved	Power class for UMTS2600 (VII) internal / 900 (VIII)	RInImp-UMTS900, RInImp-UMTS2600	R2-062585

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25.331	2860	-	Rel-6	6.10.0	F	RP-060576	Approved	Corrections to MBMS Downlink Timeslots and Codes for TDD	MBMS-RAN	R2-062590
25.331	2861	-	Rel-7	7.1.0	A	RP-060576	Approved	Corrections to MBMS Downlink Timeslots and Codes for TDD	MBMS-RAN	R2-062591
25.331	2864	-	Rel-6	6.10.0	F	RP-060576	Approved	Clarification on MBMS notification for UEs in CELL_DCH state	MBMS-RAN	R2-062596
25.331	2865	-	Rel-7	7.1.0	A	RP-060576	Approved	Clarification on MBMS notification for UEs in CELL_DCH state	MBMS-RAN	R2-062597
25.331	2866	1	Rel-6	6.10.0	F	RP-060576	Approved	Clarification on MBMS p-t-m activation time IE	MBMS-RAN	R2-062737
25.331	2867	-	Rel-7	7.1.0	A	RP-060576	Approved	Clarification on MBMS p-t-m activation time IE	MBMS-RAN	R2-062599
25.331	2868	-	Rel-6	6.10.0	F	RP-060576	Approved	Access probability factor	MBMS-RAN	R2-062600
25.331	2869	-	Rel-7	7.1.0	A	RP-060576	Approved	Access probability factor	MBMS-RAN	R2-062601
25.331	2870	-	Rel-6	6.10.0	F	RP-060575	Approved	Modification to the HS-SCCH set configuration method in RRC spec for 1.28Mcps TDD	HSDPA-L23	R2- 062604
25.331	2871	-	Rel-7	7.1.0	A	RP-060575	Approved	Modification to the HS-SCCH set configuration method in RRC spec for 1.28Mcps TDD	HSDPA-L23	R2- 062605
25.331	2872	-	Rel-6	6.10.0	F	RP-060575	Approved	Correction to tabular for IE "Delay restriction Flag".	TEI6	R2-062608
25.331	2873	-	Rel-7	7.1.0	A	RP-060575	Approved	Correction to tabular for IE "Delay restriction Flag"	TEI6	R2-062609
25.331	2876	-	Rel-6	6.10.0	F	RP-060575	Approved	Corretion on 3G-2G Handover	TEI6	R2-062614
25.331	2877	-	Rel-7	7.1.0	A	RP-060575	Approved	Corretion on 3G-2G Handover	TEI6	R2-062615
25.331	2878	-	Rel-6	6.10.0	F	RP-060575	Approved	Pending security configuration for SRB2	TEI6	R2-062616
25.331	2879	-	Rel-7	7.1.0	A	RP-060575	Approved	Pending security configuration for SRB2	TEI6	R2-062617
25.331	2880	-	Rel-6	6.10.0	F	RP-060593	Approved	UE radio access capability for Single-band UE	TEI6	R2-062618
25.331	2881	-	Rel-7	7.1.0	A	RP-060593	Approved	UE radio access capability for Single-band UE	TEI6	R2-062619
25.331	2882	-	Rel-6	6.10.0	F	RP-060593	Approved	Inter-RAT handover to UTRAN (HSPA)	TEI6	R2-062621
25.331	2883	-	Rel-7	7.1.0	A	RP-060593	Approved	Inter-RAT handover to UTRAN (HSPA)	TEI6	R2-062622
25.331	2884	-	Rel-6	6.10.0	F	RP-060593	Approved	Tabular & reference corrections	TEI6	R2-0622624
25.331	2885	-	Rel-7	7.1.0	A	RP-060593	Approved	Tabular & reference corrections	TEI6	R2-0622625

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
25.331	2886	-	Rel-6	6.10.0	F	RP-060593	Approved	F-DPCH Tx Diversity	TEI6	R2-062626
25.331	2887	-	Rel-7	7.1.0	A	RP-060593	Approved	F-DPCH Tx Diversity	TEI6	R2-062627
25.331	2888	1	Rel-6	6.10.0	F	RP-060593	Approved	Expiration of RRC timer T314/T315 associated to CS/PS RABs	TEI6	R2-062663
25.331	2889	1	Rel-7	7.1.0	A	RP-060593	Approved	Expiration of RRC timer T314/T315 associated to CS/PS RABs	TEI6	R2-062664
25.331	2892	-	Rel-7	7.1.0	F	RP-060583	Approved	Clarification on Exceeding Variance in Traffic Volume Measurement	TEI7	R2-062633
25.331	2895	1	Rel-5	5.17.0	F	RP-060573	Approved	Use of CM_PATTERN_ACTIVATION_ABORTED flag	TEI5	R2-062688
25.331	2896	1	Rel-6	6.10.0	A	RP-060573	Approved	Use of CM_PATTERN_ACTIVATION_ABORTED flag	TEI5	R2-062689
25.331	2897	1	Rel-7	7.1.0	A	RP-060573	Approved	Use of CM_PATTERN_ACTIVATION_ABORTED	TEI5	R2-062690
25.331	2898	1	Rel-5	5.17.0	F	RP-060573	Approved	Corrections of procedures dealing with Hard Handover	TEI5	R2-062691
25.331	2899	1	Rel-6	6.10.0	A	RP-060573	Approved	Corrections of procedures dealing with Hard Handover	TEI5	R2-062692
25.331	2900	1	Rel-7	7.1.0	A	RP-060573	Approved	Corrections of procedures dealing with Hard Handover	TEI5	R2-062693
25.331	2901	-	Rel-7	7.1.0	F	RP-060585	Approved	Correction to spreading factors used for 7.68 Mcps TDD PRACH	VHCRTDD-L23	R2-062648
25.331	2902	-	Rel-7	7.1.0	F	RP-060583	Approved	Corrections to ASN.1 (3.84 Mcps and 7.68 Mcps TDD)	TEI7	R2-062649
25.331	2903	-	Rel-7	7.1.0	B	RP-060586	Approved	Introduction of 3.84 Mcps and 7.68 Mcps TDD E-DCH	EDCHTDD-L23, RANimp-VHCRTDD-EDCH	R2-062652
25.331	2904	-	Rel-7	7.1.0	C	RP-060582	Approved	Support of 2570 – 2620 MHz band for TDD	RInImp-UMTS2600TDD	R2-062655

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Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
25.331	2905	1	Rel-6	6.10.0	C	RP-060579	Revised	Enhancing MBMS support for Mobile TV	MBMS-RAN	R2-062686
25.331	2905	2	REL-6	6.a.0	C	RP-060598	Revised	Enhancing MBMS support for Mobile TV	MBMS-RAN	
25.331	2905	3	Rel-6	6.10.0	C	RP-060624	Approved	Enhancing MBMS support for Mobile TV	MBMS-RAN	
25.331	2906	-	Rel-6	6.10.0	F	RP-060593	Approved	ASN1 correction on Inter-frequency RACH measurement reporting, backward compatible solution	TEI6	R2-062676
25.331	2907	-	Rel-7	6.10.0	A	RP-060593	Approved	ASN1 correction on Inter-frequency RACH measurement reporting, backward compatible solution	TEI6	R2-062677
25.331	2908	-	Rel-7	7.1.0	B	RP-060584	Approved	CS Call type indication in CELL_FACH	RANimp-DelayOpt	R2-062679
25.331	2910	1	Rel-7	7.1.0	C	RP-060584	Approved	UE behaviour in RRC Connection Re-establishment scenarios	RANimp-DelayOpt	R2-062736
25.331	2911	-	Rel-7	7.1.0	C	RP-060579	Revised	Enhancing MBMS support for Mobile TV	MBMS-RAN	R2-062687
25.331	2911	1	REL-7	7.1.0	C	RP-060598	Revised	Enhancing MBMS support for Mobile TV	MBMS-RAN	
25.331	2911	2	Rel-7	7.1.0	C	RP-060624	Approved	Enhancing MBMS support for Mobile TV	MBMS-RAN	
25.331	2912	-	Rel-6	6.10.0	F	RP-060574	Approved	E-DCH gain factor computation	EDCH-L23	R2-062701
25.331	2913	-	Rel-7	7.1.0	A	RP-060574	Approved	E-DCH gain factor computation	EDCH-L23	R2-062702
25.331	2914	-	Rel-6	6.10.0	F	RP-060593	Approved	Correction to default configuration #22	TEI6	R2-062712
25.331	2915	-	Rel-7	7.1.0	A	RP-060593	Approved	Correction to default configuration #22	TEI6	R2-062713
25.331	2916	-	Rel-7	7.1.0	C	RP-060588	Rejected	UE based OTDOA positioning in WCDMA cells with extended range	RANImp-ExtCell	R2-062727
25.331	2917	-	Rel-7	7.1.0	F	RP-060622	Approved	Correction to coding of PLCCH for 1.28Mcps TDD	RANimp-RABSE-CodOptLCRTDD	
25.331	2918	-	Rel-6	6.10.0	F	RP-060578	Approved	MAC-hs reset	HSDPA-L23	R2-062732
25.331	2919		Rel-7	7.1.0	A	RP-060578	Approved	MAC-hs reset	HSDPA-L23	R2-062733
25.346	0023	-	Rel-6	6.8.0	F	RP-060579	Revised	Enhancing MBMS support for Mobile TV	MBMS-RAN	R2-062666
25.346	0023	1	Rel-6	6.8.0	C	RP-060624	Approved	Enhancing MBMS support for Mobile TV	MBMS-RAN	
25.346	0024	-	Rel-7	7.1.0	A	RP-060579	Revised	Enhancing MBMS support for Mobile TV	MBMS-RAN	R2-062678
25.346	0024	1	Rel-7	7.1.0	C	RP-060624	Approved	Enhancing MBMS support for Mobile TV	MBMS-RAN	
25.401	104		Rel-7	7.0.0	B	RP-060512	Rejected	Introduction of 3.84 Mcps TDD Enhanced	EDCHTDD-	R3-061123

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
								Uplink	Iurub	
25.401	105		Rel-7	7.0.0	B	RP-060511	Approved	Introduction of 3.84 Mcps and 7.68Mcps TDD Enhanced Uplink	RANimp-VHCRTDD-EDCH, EDCHTDD-Iurub	R3-061129
25.401	106	2	Rel-6	6.7.0	F	RP-060499	Approved	MBMS Transport Identifiers	TEI6	R3-061383
25.401	107	2	Rel-7	7.0.0	A	RP-060499	Approved	MBMS Transport Identifiers	TEI6	R3-061384
25.402	052		Rel-6	6.3.0	F	RP-060499	Approved	Correction of CFN for MBMS	TEI6	R3-061072
25.402	053		Rel-7	7.0.0	A	RP-060499	Approved	Correction of CFN for MBMS	TEI6	R3-061073
25.413	0870	3	Rel-6	6.10.0	C	RP-060624	Approved	Enhanced MBMS Broadcast: Inclusion of the MBMS Counting Information IE to the MBMS Session Start Request	MBMS-RAN	
25.413	0871	3	Rel-7	7.2.0	C	RP-060624	Approved	Enhanced MBMS Broadcast: Inclusion of the MBMS Counting Information IE to the MBMS Session Start Request	MBMS-RAN	
25.413	854	1	Rel-7	7.2.0	B	RP-060508	Postponed	Introduction of inter-RAT DTM Handover	HO-DSRDTM	R3-061361
25.413	855	1	Rel-6	6.10.0	F	RP-060499	Approved	Criticality Diagnostics IE for MBMS RAB Release	TEI6	R3-061275
25.413	856	1	Rel-7	7.2.0	A	RP-060499	Approved	Criticality Diagnostics IE for MBMS RAB Release	TEI6	R3-061276
25.413	857	2	Rel-7	7.2.0	F	RP-060514	Approved	Status of Service Handover IE	TEI7	R3-061420
25.413	858		Rel-7	7.2.0	F	RP-060514	Approved	Alignment of PLMN identity	TEI7	R3-061075
25.413	859		Rel-6	6.10.0	F	RP-060499	Approved	Correction of the Meaning of cause value	TEI6	R3-061076
25.413	860		Rel-7	7.2.0	A	RP-060499	Approved	Correction of the Meaning of cause value	TEI6	R3-061077
25.413	861	1	Rel-7	7.2.0	B	RP-060510	Approved	Addition of Periodic Location Procedures	LCS3-UEPos-Velocity	R3-061374
25.413	865	2	Rel-7	7.2.0	B	RP-060513	Postponed	Introduction of new ciphering algorithm UEA2 and integrity protection algorithm UIA2	TEI7	R3-061362
25.413	870	2	Rel-6	6.10.0	F	RP-060579	Revised	Inclusion of the MBMS Counting Information IE to the MBMS Session Start Request	MBMS-RAN	R3-061411
25.413	871	2	Rel-7	7.2.0	A	RP-060579	Revised	Inclusion of the MBMS Counting Information	MBMS-RAN	R3-061412

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
								IE to the MBMS Session Start Request		
25.413	872	-	REL-6	6.10.0	F	RP-060590	Approved	Removal of MBMS SAI Semantic Description in RANAP	MBMS	
25.413	873	-	REL-7	7.2.0	A	RP-060590	Approved	Removal of MBMS SAI Semantic Description in RANAP	MBMS	
25.414	087	2	Rel-6	6.3.0	F	RP-060499	Approved	MBMS Transport Identifiers	TEI6	R3-061385
25.414	088	2	Rel-7	7.0.0	A	RP-060499	Approved	MBMS Transport Identifiers	TEI6	R3-061386
25.415	128	1	Rel-7	7.1.0	F	RP-060514	Approved	Correction of type 14 frame number handling	TEI7	R3-061314
25.420	055		Rel-7	7.0.0	B	RP-060512	Rejected	Introduction of 3.84 Mcps TDD Enhanced Uplink	EDCHTDD-IurIub	R3-061124
25.420	056	1	Rel-7	7.0.0	B	RP-060511	Approved	Introduction of 3.84 Mcps and 7.68Mcps TDD Enhanced Uplink	RANimp-VHCRTDD-EDCH, EDCHTDD-IurIub	R3-061319
25.423	1202	1	Rel-6	6.10.0	F	RP-060501	Approved	Correction on the value range of E-DCH IEs	EDCH-IurIub	R3-061337
25.423	1203	1	Rel-7	7.1.0	A	RP-060501	Approved	Correction on the value range of E-DCH IEs	EDCH-IurIub	R3-061338
25.423	1204	1	Rel-6	6.10.0	F	RP-060503	Approved	Presence of "E-DCH FDD Information Response" IE	EDCH-IurIub	R3-061341
25.423	1205	1	Rel-7	7.1.0	A	RP-060503	Approved	Presence of "E-DCH FDD Information Response" IE	EDCH-IurIub	R3-061342
25.423	1206	1	Rel-6	6.10.0	F	RP-060501	Approved	E-AGCH and E-RGCH/E-HICH FDD scrambling code in response messages	TEI6	R3-061343
25.423	1207	1	Rel-7	7.1.0	A	RP-060501	Approved	E-AGCH and E-RGCH/E-HICH FDD scrambling code in response messages	TEI6	R3-061344
25.423	1208	1	Rel-6	6.10.0	F	RP-060500	Approved	DCH combined when EDCH operation	EDCH-IurIub	R3-061391
25.423	1209	1	Rel-7	7.1.0	A	RP-060500	Approved	DCH combined when EDCH operation	EDCH-IurIub	R3-061392
25.423	1210		Rel-6	6.10.0	F	RP-060503	Approved	Correction of maxNrOfMACdFlows for EDCH in ASN.1	EDCH-IurIub	R3-061083
25.423	1211		Rel-7	7.1.0	A	RP-060503	Approved	Correction of maxNrOfMACdFlows for EDCH in ASN.1	EDCH-IurIub	R3-061084
25.423	1212		Rel-6	6.10.0	F	RP-060503	Approved	Use of the RL Specific E-DCH Information IE	EDCH-IurIub	R3-061102

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
								for E-DCH modification		
25.423	1213		Rel-7	7.1.0	A	RP-060503	Approved	Use of the RL Specific E-DCH Information IE for E-DCH modification	EDCH-IurIub	R3-061103
25.423	1214	1	Rel-6	6.10.0	F	RP-060500	Approved	Optional usage of the E-DCH Reference Power Offset IE	EDCH-IurIub	R3-061295
25.423	1215	1	Rel-7	7.1.0	A	RP-060500	Approved	Optional usage of the E-DCH Reference Power Offset IE	EDCH-IurIub	R3-061296
25.423	1216	1	Rel-6	6.10.0	F	RP-060504	Approved	MAC-HS reset Indicator alignment for the Radio Link Addition Response	EDCH-IurIub	R3-061280
25.423	1217	1	Rel-7	7.1.0	A	RP-060504	Approved	MAC-HS reset Indicator alignment for the Radio Link Addition Response	EDCH-IurIub	R3-061281
25.423	1218	1	Rel-7	7.1.0	B	RP-060512	Rejected	Introduction of 3.84 Mcps TDD Enhanced Uplink	EDCHTDD-IurIub	R3-061350
25.423	1219	1	Rel-7	7.1.0	B	RP-060511	Approved	Introduction of 3.84 Mcps and 7.68Mcps TDD Enhanced Uplink	RANimp-VHCRTDD-EDCH, EDCHTDD-IurIub	R3-061352
25.423	1220	1	Rel-6	6.10.0	F	RP-060503	Approved	E-DCH not optional in RNSAP message RL SETUP RESPONSE	EDCH-IurIub	R3-061365
25.423	1221	1	Rel-7	7.1.0	A	RP-060503	Approved	E-DCH not optional in RNSAP message RL SETUP RESPONSE	EDCH-IurIub	R3-061366
25.423	1222	3	Rel-7	7.1.0	B	RP-060509	Approved	Extended WCDMA Cell Range	RANimp-ExtCell	R3-061419
25.423	1223	1	Rel-7	7.1.0	F	RP-060514	Approved	Ignore Traffic Class if HS-DSCH or E-DCH MAC-d flow user is SRB (RRC)	TEI7	R3-061364
25.423	1228		Rel-6	6.10.0	F	RP-060500	Approved	Further Abnormal Conditions for E-DCH	EDCH-IurIub	R3-061242
25.423	1229		Rel-7	7.1.0	A	RP-060500	Approved	Further Abnormal Conditions for E-DCH	EDCH-IurIub	R3-061243
25.423	1231	1	Rel-6	6.10.0	F	RP-060504	Approved	Correction for RL Reconfiguration	EDCH-IurIub	R3-061317
25.423	1232	1	Rel-6	7.1.0	A	RP-060504	Approved	Correction for RL Reconfiguration	EDCH-IurIub	R3-061318
25.423	1233	1	Rel-6	6.10.0	F	RP-060504	Approved	Correction on the value range of E-DCH Ies	EDCH-IurIub	R3-061436
25.423	1234	1	Rel-7	7.1.0	A	RP-060504	Approved	Correction on the value range of E-DCH Ies	EDCH-IurIub	R3-061437
25.423	1237		Rel-6	6.10.0	F	RP-060502	Approved	Introduction of new indicator for non DCH	TEI6	R3-061431

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
								operation		
25.423	1238		Rel-7	7.1.0	A	RP-060502	Approved	Introduction of new indicator for non DCH operation	TEI6	R3-061432
25.423	1239		Rel-7	7.1.0	F	RP-060479	Approved	Correction to coding of PLCCH for 1.28Mcps TDD	RANimp-RABSE-CodeOptTDD	
25.425	106	1	Rel-7	7.1.0	B	RP-060509	Approved	Extended WCDMA Cell Range	RANimp-ExtCell	R3-061326
25.427	132		Rel-7	7.1.0	B	RP-060512	Rejected	Introduction of 3.84 Mcps TDD Enhanced Uplink	EDCHTDD-IurIub	R3-061125
25.427	133	1	Rel-7	7.1.0	B	RP-060511	Approved	Introduction of 3.84 Mcps and 7.68Mcps TDD Enhanced Uplink	RANimp-VHCRTDD-EDCH, EDCHTDD-IurIub	R3-061320
25.430	065		Rel-7	7.0.0	B	RP-060512	Rejected	Introduction of 3.84 Mcps TDD Enhanced Uplink	EDCHTDD-IurIub	R3-061126
25.430	066	1	Rel-7	7.0.0	B	RP-060511	Approved	Introduction of 3.84 Mcps and 7.68Mcps TDD Enhanced Uplink	RANimp-VHCRTDD-EDCH, EDCHTDD-IurIub	R3-061321
25.433	1260	2	Rel-7	7.1.0	C	RP-060495	Approved	Introduction of a Node B measurement for E-DCH RRM	EDCH-IurIub	R3-061360
25.433	1261	3	Rel-6	6.10.0	F	RP-060506	Approved	Modifying HS-DSCH Physical Layer Category Info in Radio Link Reconfiguration procedure	TEI6	R3-061304
25.433	1262	3	Rel-7	7.1.0	A	RP-060506	Approved	Modifying HS-DSCH Physical Layer Category Info in Radio Link Reconfiguration procedure	TEI6	R3-061305
25.433	1269	2	Rel-6	6.10.0	F	RP-060506	Approved	Addition of the TPC step size for HS-SICH in 1.28Mcps TDD	TEI6	R3-061285
25.433	1270	2	Rel-7	7.1.0	A	RP-060506	Approved	Addition of the TPC step size for HS-SICH in 1.28Mcps TDD	TEI6	R3-061286
25.433	1274	1	Rel-6	6.10.0	F	RP-060501	Approved	Correction on the value range of E-DCH IEs	EDCH-IurIub	R3-061339
25.433	1275	1	Rel-7	7.1.0	A	RP-060501	Approved	Correction on the value range of E-DCH IEs	EDCH-IurIub	R3-061340

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Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
25.433	1276	2	Rel-6	6.10.0	F	RP-060505	Approved	Corrections on physical shared channel reconfiguration	TEI6	R3-061381
25.433	1277	2	Rel-7	7.1.0	A	RP-060505	Approved	Corrections on physical shared channel reconfiguration	TEI6	R3-061382
25.433	1278	1	Rel-6	6.10.0	F	RP-060501	Approved	E-AGCH and E-RGCH/E-HICH FDD scrambling code in response messages	TEI6	R3-061345
25.433	1279	1	Rel-7	7.1.0	A	RP-060501	Approved	E-AGCH and E-RGCH/E-HICH FDD scrambling code in response messages	TEI6	R3-061346
25.433	1280	1	Rel-6	6.10.0	F	RP-060500	Approved	DCH combined when EDCH operation	EDCH-IurIub	R3-061389
25.433	1281	1	Rel-7	7.1.0	A	RP-060500	Approved	DCH combined when EDCH operation	EDCH-IurIub	R3-061390
25.433	1282		Rel-6	6.10.0	F	RP-060505	Approved	Alignment of the RL Specific E-DCH Information IE tabular format to ASN.1	EDCH-IurIub	R3-061100
25.433	1283		Rel-7	7.1.0	A	RP-060505	Approved	Alignment of the RL Specific E-DCH Information IE tabular format to ASN.1	EDCH-IurIub	R3-061101
25.433	1286		Rel-6	6.10.0	F	RP-060500	Approved	Optional usage of the E-DCH Reference Power Offset IE	EDCH-IurIub	R3-061106
25.433	1287		Rel-7	7.1.0	A	RP-060500	Approved	Optional usage of the E-DCH Reference Power Offset IE	EDCH-IurIub	R3-061107
25.433	1288	1	Rel-6	6.10.0	F	RP-060506	Approved	Clarification on Communication Context ID usage for the Reset Request	TEI6	R3-061379
25.433	1289	1	Rel-7	7.1.0	A	RP-060506	Approved	Clarification on Communication Context ID usage for the Reset Request	TEI6	R3-061380
25.433	1290		Rel-5	5.15.0	F	RP-060498	Approved	TFCI2 bearer Cleanup for Radio link Deletion	TEI5	R3-061119
25.433	1291		Rel-6	6.10.0	A	RP-060498	Approved	TFCI2 bearer Cleanup for Radio link Deletion	TEI5	R3-061120
25.433	1292		Rel-7	7.1.0	A	RP-060498	Approved	TFCI2 bearer Cleanup for Radio link Deletion	TEI5	R3-061121
25.433	1293	1	Rel-7	7.1.0	B	RP-060512	Rejected	Introduction of 3.84 Mcps TDD Enhanced Uplink	EDCHTDD-IurIub	R3-061351
25.433	1294	1	Rel-7	7.1.0	B	RP-060511	Approved	Introduction of 3.84 Mcps and 7.68Mcps TDD Enhanced Uplink	RANimp-VHCRTDD-EDCH, EDCHTDD-IurIub	R3-061353

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25.433	1295	2	Rel-6	6.10.0	F	RP-060506	Approved	Per time slot configuration of TFCI for TDD FACH type CCTrCHs	TEI6	R3-061287
25.433	1296	2	Rel-7	7.1.0	A	RP-060506	Approved	Per time slot configuration of TFCI for TDD FACH type CCTrCHs	TEI6	R3-061288
25.433	1299	2	Rel-7	7.1.0	B	RP-060509	Approved	Extended WCDMA Cell Range	RANimp-ExtCell	R3-061358
25.433	1300	1	Rel-7	7.1.0	F	RP-060514	Approved	Addition of missing ASN.1 from CR1252	TEI7	R3-061367
25.433	1304		Rel-6	6.10.0	F	RP-060500	Approved	Further Abnormal Conditions for E-DCH	EDCH-IurIub	R3-061244
25.433	1305		Rel-7	7.1.0	A	RP-060500	Approved	Further Abnormal Conditions for E-DCH	EDCH-IurIub	R3-061245
25.433	1306		Rel-6	6.10.0	F	RP-060505	Approved	General Description for E-DCH in RL Setup procedure	EDCH-IurIub	R3-061246
25.433	1307		Rel-7	7.1.0	A	RP-060505	Approved	General Description for E-DCH in RL Setup procedure	EDCH-IurIub	R3-061247
25.433	1308	2	Rel-7	7.1.0	C	RP-060596	Approved	Introduction of a noise floor indication from Node B for E-DCH RRM	EDCH-IurIub	
25.433	1309		Rel-6	6.10.0	F	RP-060502	Approved	Introduction of new indicator for non DCH operation	TEI6	R3-061433
25.433	1310		Rel-7	7.1.0	A	RP-060502	Approved	Introduction of new indicator for non DCH operation	TEI6	R3-061434
25.433	1311		Rel-7	7.1.0	F	RP-060479	Approved	Correction to coding of PLCCH for 1.28Mcps TDD	RANimp-RABSE-CodeOptTDD	
25.433	1312		Rel-6	6.10.0	F	RP-060570	Approved	Introduction of SIB11bis	TEI6	
25.433	1313		Rel-7	7.1.0	A	RP-060570	Approved	Introduction of SIB11bis	TEI6	
25.435	150	1	Rel-6	6.3.0	A	RP-060498	Approved	Leftover from FDD DSCH	TEI5	R3-061290
25.435	151	1	Rel-7	7.1.0	A	RP-060498	Approved	Leftover from FDD DSCH	TEI5	R3-061291
25.435	152	1	Rel-7	7.1.0	B	RP-060509	Approved	Extended WCDMA Cell Range	RANimp-ExtCell	R3-061328
25.435	153		Rel-5	5.8.0	F	RP-060498	Approved	Leftover from FDD DSCH	TEI5	R3-061289
25.453	095	3	Rel-7	7.3.0	B	RP-060510	Approved	Addition of Periodic Location Procedures	LCS3-UEPos-Velocity	R3-061422
25.453	096	2	Rel-7	7.3.0	B	RP-060509	Approved	Extended WCDMA Cell Range	RANimp-ExtCell	R3-061359
25.806	0001		Rel-7	6.0.0	B	RP-060525	Approved	Introduction of Extended 1.7/2.1 GHz FDD (Band X) in Rel-7	RInImp-UMTS1721Ext	R4-061049

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Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
25.813	0001	2	Rel-7	7.0.0	C	RP-060589	Revised	MBMS Transmissions & synchronization requirements and removal of note 1	RANFS-Evo	R2-062728
25.813	0001	3	Rel-7	7.0.0	C	RP-060629	Approved	MBMS Transmissions & synchronization requirements and removal of note 1	RANFS-Evo	
25.814	0003	1	Rel-7	7.0.0	B	RP-060496	Approved	DL MIMO evaluation	RANFS-Evo	R1-062424
25.814	0004	1	Rel-7	7.0.0	B	RP-060496	Approved	DL and UL VoIP capacity characterization for E-UTRA	RANFS-Evo	R1-062412
25.814	0008	1	Rel-7	7.0.0	B	RP-060496	Approved	Inclusion of beamfroming Results	RANFS-Evo	R1-062413
25.814	0010	1	Rel-7	7.0.0	B	RP-060496	Approved	Summary of downlink enhancement techniques over reference LTE unicast performance	RANFS-Evo	R1-062442
25.829	0001		Rel-7	7.0.0	F	RP-060530	Approved	7.68 Mcps TDD Option UE Spectrum Emission Mask	TEI7	R4-060806
25.902	001		Rel-7	6.0.0	B	RP-060512	Rejected	Introduction of 3.84 Mcps TDD Enhanced Uplink	EDCHTDD-IurIub	R3-061128
25.902	002		Rel-7	6.0.0	B	RP-060511	Approved	Introduction of 3.84 Mcps and 7.68Mcps TDD Enhanced Uplink	RANimp-VHCRTDD-EDCH, EDCHTDD-IurIub	R3-061134
25.902	003	1	Rel-6	6.0.0	F	RP-060507	Approved	Removal of erroneous References from TR 25.902 Iub/Iur Congestion Control	TEI6	R3-061292
25.912	0001	-	Rel-7	7.0.0	B	RP-060515	Approved	Bearer and C-plane establishment	RANFS-Evo	
25.912	0002	-	Rel-7	7.0.0	B	RP-060531	Approved	Summary of downlink enhancement techniques over reference LTE unicast	RANFS-Evo	
25.931	046		Rel-7	7.1.0	B	RP-060512	Rejected	Introduction of 3.84 Mcps TDD Enhanced Uplink	EDCHTDD-IurIub	R3-061127
25.931	047		Rel-7	7.1.0	B	RP-060511	Approved	Introduction of 3.84 Mcps and 7.68Mcps TDD Enhanced Uplink	RANimp-VHCRTDD-EDCH, EDCHTDD-IurIub	R3-061133
25.951	0003		Rel-6	6.2.0	B	RP-060523	Approved	Out-of-band emission requirements	TEI6	R4-060903

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
								considerations in Japan for WA, MR and LA-BS		
25.993	0078	-	Rel-6	6.14.0	D	RP-060572	Approved	Correction to chapter numbering in E-DPDCH and HS-DPSCH RB combinations	TEI6	R2-062607
25.993	0080	-	R99	3.1.0	D	RP-060572	Approved	Creation of TR 25.993 Rel-7: modification of the R'99 pointer	TEI	R2-062658
25.993	0081	-	Rel-4	4.1.0	D	RP-060572	Approved	Creation of TR 25.993 Rel-7: modification of the Rel-4 pointer	TEI4	R2-062659
25.993	0082	-	Rel-5	5.1.0	D	RP-060572	Approved	Creation of TR 25.993 Rel-7: modification of the Rel-5 pointer.	TEI5	R2-062660
25.993	0083	-	Rel-6	6.14.0	D	RP-060572	Approved	Creation of TR 25.993 Rel-7: turning the Rel-6 into a pointer	TEI6	R2-062661
25.993	0084	-	Rel-6	6.14.0	F	RP-060572	Approved	Correction on combinaisons with Streaming / unknown / UL:0 DL:64 kbps / CS RAB	TEI	R2-062711
34.108	526		Rel-6	6.3.0	F	RP-060560	Approved	Editorial changes in 34.108	TEI6_Test	R5-062092
34.108	527		Rel-6	6.3.0	F	RP-060549	Approved	CR to 34.108: Correction of reference test frequencies for UMTS800 (Band VI)	TEI_Test	R5-062440
34.108	528		Rel-6	6.3.0	F	RP-060549	Approved	Correction to SIB11 in 6.1	TEI_Test	R5-062427
34.108	529		Rel-6	6.3.0	F	RP-060549	Approved	Correction to SECURITY MODE COMMAND message in 9.2.1	TEI_Test	R5-062403
34.108	530		Rel-6	6.3.0	F	RP-060562	Approved	Correction to RB Setup default message for E-DCH RF testing	EDCH_Test	R5-062208
34.108	531		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.108: Correction the contents of RADIO BEARER SETUP message: AM or UM (1.28 Mcps TDD)	HSDPA_Test	R5-062511
34.108	532		Rel-6	6.3.0	F	RP-060566	Approved	Addition of HSDPA cases to radio bearer setup and radio bearer release in section 9.1.2	HSDPA_HCRTDD_Test	R5-062253
34.108	533		Rel-6	6.3.0	F	RP-060567	Approved	Corrections to the default PHYSICAL CHANNEL RECONFIGURATION message	HSDPA_Test	R5-062291
34.108	534		Rel-6	6.3.0	F	RP-060567	Approved	Corrections to specification of HARQ RV sequence and retransmissions for 34.123-1	HSDPA_Test	R5-062544

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
								test cases configuring HSDPA		
34.108	535		Rel-6	6.3.0	F	RP-060562	Approved	Corrections to the default RADIO BEARER SETUP message	EDCH_Test	R5-062320
34.108	536		Rel-6	6.3.0	F	RP-060562	Approved	New Test RABS for MAC-E/Es test cases	EDCH_Test	R5-062328
34.108	537		Rel-6	6.3.0	F	RP-060562	Approved	Correction to radio bearer configuration 6.10.2.4.6 and 6.10.2.4.8	EDCH_Test	R5-062199
34.108	538		Rel-6	6.3.0	F	RP-060562	Approved	Correction to 34.108 Section 9.1 : Corrections to Radio Bearer Setup for A12	EDCH_Test	R5-062348
34.108	539		Rel-6	6.3.0	F	RP-060549	Approved	Clarification to section 6.10 and 6.11	TEI_Test	R5-062194
34.108	540		Rel-6	6.3.0	F	RP-060549	Approved	Correction to 34.108 Section 6.1 : Inclusion of System Information Block Type 5bis	TEI_Test	R5-062398
34.108	541		Rel-6	6.3.0	F	RP-060549	Approved	Corrections to maximum data rate for combinations on PRACH (FDD)	TEI_Test	R5-062350
34.109	0037	-	Rel-6	6.1.0	B	RP-060571	Approved	Introduction of UE test loop mode 3 (SDU counters) to support MTCH performance testing.	MBMS-RAN-RF_Test	R2-062632
34.109	0038	-	Rel-7	6.1.0	B	RP-060599	Withdrawn	Introduction of UE test loop mode 3 (SDU counters) to support MTCH performance testing.	MBMS-RAN-RF_Test	R2-062632
34.121-1	715		Rel-7	7.1.0	F	RP-060549	Approved	Correction to the formula of CPICH_RSCP of Table 5.5.2.3	TEI_Test	R5-062423
34.121-1	716		Rel-7	7.1.0	F	RP-060553	Approved	Correction to 5.13.3 UE phase discontinuity	TEI5_Test	R5-062220
34.121-1	717		Rel-7	7.1.0	F	RP-060553	Approved	Correction to 5.13.4 PRACH preamble quality	TEI5_Test	R5-062406
34.121-1	718		Rel-7	7.1.0	F	RP-060549	Approved	Split of 34.121-1 test case 6.4 to 6.4 and 6.4A	TEI_Test	R5-062407
34.121-1	719		Rel-7	7.1.0	F	RP-060553	Approved	BLER test limit for TC 7.8.4 Power control in DL, different transport formats	TEI5_Test	R5-062129
34.121-1	720		Rel-7	7.1.0	F	RP-060552	Approved	Correction to test case 7.11 Demodulation of Paging Channel (PCH)	TEI4_Test	R5-062450
34.121-1	721		Rel-7	7.1.0	F	RP-060549	Approved	Correction to 7.8.2 Power control in the downlink, initial convergence	TEI_Test	R5-062409
34.121-1	722		Rel-7	7.1.0	F	RP-060549	Approved	Clarification to UL data rate in test 7.8.2 subtest 3 & 4	TEI_Test	R5-062400

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
34.121-1	723		Rel-7	7.1.0	F	RP-060549	Approved	Correction to the RRM Test cases 8.6.1.1 and 8.6.1.1A	TEI_Test	R5-062411
34.121-1	724		Rel-7	7.1.0	F	RP-060549	Approved	Correction to ARFCN of GSM target cell in test case 8.2.3.3	TEI_Test	R5-062203
34.121-1	725		Rel-7	7.1.0	F	RP-060549	Approved	Clarification to GSM target cell in test case 8.3.5.3	TEI_Test	R5-062204
34.121-1	726		Rel-7	7.1.0	F	RP-060549	Approved	Correction to 8.5.1 UE Transmit Timing	TEI_Test	R5-062222
34.121-1	727		Rel-7	7.1.0	F	RP-060560	Approved	Correction to 8.6.5.1 Correct reporting of neighbours in AWGN propagation condition	TEI6_Test	R5-062413
34.121-1	728		Rel-7	7.1.0	F	RP-060549	Approved	Correction to Annex C.6.2 Channel combinations for BLER measurements	TEI_Test	R5-062426
34.121-1	729		Rel-7	7.1.0	F	RP-060567	Approved	Beta values for HSDPA RF tests	HSDPA_Test	R5-062060
34.121-1	730		Rel-7	7.1.0	F	RP-060567	Approved	Correction to beta values to be used in test 5.13.1A	HSDPA_Test	R5-062420
34.121-1	731		Rel-7	7.1.0	F	RP-060567	Approved	Correction of reference to connection diagram in 9.3.1	HSDPA_Test	R5-062421
34.121-1	732		Rel-7	7.1.0	F	RP-060567	Approved	MAC header transmission on HS-DSCH	HSDPA_Test	R5-062439
34.121-1	733		Rel-7	7.1.0	F	RP-060567	Approved	New Rel-6 RRM test case: 8.3.8 Serving HS-DSCH cell change	HSDPA_Test	R5-062422
34.121-1	734		Rel-7	7.1.0	F	RP-060567	Approved	Changes to annex of 34.121-1 for the testcase "Serving HS-DSCH cell change"	HSDPA_Test	R5-062231
34.121-1	735		Rel-7	7.1.0	F	RP-060567	Approved	Correction of beta factors during the measurement period for test cases in 5.xA tests	HSDPA_Test	R5-062441
34.121-1	736		Rel-7	7.1.0	F	RP-060562	Approved	New HSUPA Test Case to 34.121-1: E-TFC restriction in UE	EDCH_Test	R5-062452
34.121-1	737		Rel-7	7.1.0	F	RP-060562	Approved	New HSUPA Test Case to 34.121-1: Detection Inter-Cell Handover conditions for E-HICH for RLS not containing the Serving E-DCH cell and containing the Serving E-DCH cell	EDCH_Test	R5-062448
34.121-1	738		Rel-7	7.1.0	F	RP-060562	Approved	New HSUPA Test Case to 34.121-1:	EDCH_Test	R5-062449

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Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
								Detection Inter-Cell Handover conditions for E-RGCH		
34.121-1	739		Rel-7	7.1.0	F	RP-060562	Approved	Clarification on the loopback test mode for E-DCH RF test cases	EDCH_Test	R5-062433
34.121-1	740		Rel-7	7.1.0	F	RP-060562	Approved	Introduction of E-AGCH information sequence for E-AGCH test case.	EDCH_Test	R5-062434
34.121-1	741		Rel-7	7.1.0	F	RP-060562	Approved	Test tolerance for E-AGCH test case.	EDCH_Test	R5-062211
34.121-1	742		Rel-7	7.1.0	F	RP-060549	Approved	Correction to 5.11 and 6.5.2.2	TEI_Test	R5-062436
34.121-1	743		Rel-7	7.1.0	F	RP-060560	Approved	Addition of phase discontinuity to HSDPA EVM test	TEI6_Test	R5-062444r2
34.121-1	744		Rel-7	7.1.0	F	RP-060562	Approved	Beta values for E-DCH RF tests	EDCH_Test	R5-062447r2
34.121-2	3		Rel-7	7.1.0	F	RP-060549	Approved	Correction of applicability for RF test case 6.5 (narrow band blocking requirement)	TEI_Test	R5-062127
34.121-2	4		Rel-7	7.1.0	F	RP-060549	Approved	Addition of applicability for new test cases	TEI_Test	R5-062453
34.121-2	5		Rel-7	7.1.0	F	RP-060567	Approved	New Rel-6 RRM test case: 8.3.8 Serving HS-DSCH cell change	HSDPA_Test	R5-062232
34.121-2	6		Rel-7	7.1.0	F	RP-060549	Approved	Correction of applicability for RF test case 6.7	TEI_Test	R5-062416
34.122	218		Rel-5	5.4.0	F	RP-060552	Approved	Correction to Handover to GSM for 1.28Mcps TDD option	TEI4_Test	R5-062124
34.122	219		Rel-5	5.4.0	F	RP-060552	Approved	Correcting the RRC re-establishment delay for 1.28Mcps TDD option	TEI4_Test	R5-062125
34.122	220		Rel-5	5.4.0	F	RP-060552	Approved	Correcting the statistical testing of receiver BER/BLER performance	TEI4_Test	R5-062126
34.122	221		Rel-5	5.4.0	F	RP-060552	Approved	Correcting the statistical testing of RRM delay performance	TEI4_Test	R5-062128
34.122	222		Rel-5	5.4.0	F	RP-060549	Approved	Clarification of Tx spurious emission level from 3.84 Mcps TDD UE into PHS band.	TEI_Test	R5-062267_r1
34.123-1	1614		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Contents Addition for LCR TDD in 8.2.1.30	HSDPA_Test	R5-062073
34.123-1	1615		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Contents Addition for LCR TDD in 8.2.2.39	HSDPA_Test	R5-062074
34.123-1	1616		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Contents Addition for LCR	HSDPA_Test	R5-062075

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
								TDD in 8.2.2.42		
34.123-1	1617		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Contents Addition for LCR TDD in 8.2.3.32	HSDPA_Test	R5-062076
34.123-1	1618		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Contents Addition for LCR TDD in 8.3.1.33	HSDPA_Test	R5-062078
34.123-1	1619		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Contents Addition for LCR TDD in 8.3.1.34	HSDPA_Test	R5-062399
34.123-1	1620		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Contents Addition for LCR TDD in 8.3.1.36	HSDPA_Test	R5-062080
34.123-1	1621		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Contents Addition for LCR TDD in 8.3.1.37	HSDPA_Test	R5-062081
34.123-1	1622		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Addition of LCR TDD contents to testcase 8.2.1.29	HSDPA_Test	R5-062500
34.123-1	1623		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Addition of TDD contents to testcase 8.2.1.32	HSDPA_Test	R5-062501
34.123-1	1624		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Addition of LCR TDD contents to testcase 8.2.2.40	HSDPA_Test	R5-062502
34.123-1	1625		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Addition of LCR TDD contents to testcase 8.2.3.33	HSDPA_Test	R5-062503
34.123-1	1626		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Addition of LCR TDD contents to testcase 8.2.3.34	HSDPA_Test	R5-062114
34.123-1	1627		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Addition of LCR TDD contents to testcase 8.2.4.36	HSDPA_Test	R5-062504
34.123-1	1628		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Addition of TDD part for testcase 8.2.6.42	HSDPA_Test	R5-062505
34.123-1	1629		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Addition of LCR TDD contents to testcase 8.2.6.46	HSDPA_Test	R5-062506
34.123-1	1630		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Addition of LCR TDD contents to testcase 8.2.6.49	HSDPA_Test	R5-062507
34.123-1	1631		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: Contents Addition for LCR TDD in 8.3.11.9, 8.3.11.10 and 8.3.7.14	HSDPA_Test	R5-062508
34.123-1	1632		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-1: New test case addition of	HSDPA_Test	R5-062509

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
								8.2.6.40a to LCR TDD		
34.123-1	1633		Rel-6	6.3.0	F	RP-060568	Approved	CR to 34.123-2: ICS parameter addition for the new test cese of 8.2.6.40a for LCR TDD HSDPA	HSDPA_Test	R5-062510
34.123-1	1634		Rel-6	6.3.0	F	RP-060566	Approved	Addition of 3.84 Mcps TDD MAC-hs transport block size selection to HS-DSCH MAC-hs Tests	HSDPA_HCRTDD_Test	R5-062542
34.123-1	1635		Rel-6	6.3.0	F	RP-060566	Approved	Addition of combinations on DPCH and HS-PDSCH for interoperability radio bearer tests for 3.84 Mcps TDD	HSDPA_HCRTDD_Test	R5-062384
34.123-1	1636		Rel-6	6.3.0	F	RP-060566	Approved	Addition of test: Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (Timing re-initialized hard handover to another frequency, serving HS-DSCH cell change) for 3.84 Mcps TDD	HSDPA_HCRTDD_Test	R5-062385
34.123-1	1637		Rel-6	6.3.0	F	RP-060566	Approved	Addition of TFRC test points for HS-DSCH radio bearer testing in 3.84 Mcps	HSDPA_HCRTDD_Test	R5-062386
34.123-1	1638		Rel-6	6.3.0	F	RP-060566	Approved	Update of test: Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover to another frequency with timing re-initialised. Serving HS-DSCH cell change): Failure (Physical channel failure and reversion to old channel) to incl	HSDPA_HCRTDD_Test	R5-062258
34.123-1	1639		Rel-6	6.3.0	F	RP-060566	Approved	Update of test: Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Success (Start of HS-DSCH reception) to include 3.84Mcps TDD	HSDPA_HCRTDD_Test	R5-062261
34.123-1	1640		Rel-6	6.3.0	F	RP-060566	Approved	Update of test: Radio Bearer Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (Start and stop of HS-DSCH reception) to include 3.84 Mcps TDD	HSDPA_HCRTDD_Test	R5-062262

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
34.123-1	1641		Rel-6	6.3.0	F	RP-060566	Approved	Update of test: Radio Bearer Reconfiguration for transition from CELL_DCH to CELL_FACH and from CELL_FACH to CELL_DCH: Success (start and stop of HS-DSCH reception) to include 3.84 Mcps TDD	HSDPA_HCRTDD_Test	R5-062263
34.123-1	1642		Rel-6	6.3.0	F	RP-060566	Approved	Update of test: Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Success (stop of HS-DSCH reception) to include 3.84 Mcps TDD	HSDPA_HCRTDD_Test	R5-062265
34.123-1	1643		Rel-6	6.3.0	F	RP-060567	Approved	Correction to the generic test procedure for HS-DSCH radio bearer combinations with AMR RB configurations using SRB#5 for TFC control	HSDPA_Test	R5-062312
34.123-1	1644		Rel-6	6.3.0	F	RP-060567	Approved	Corrections to HSDPA test case 8.2.6.39a	HSDPA_Test	R5-062313
34.123-1	1645		Rel-6	6.3.0	F	RP-060567	Approved	Corrections to HSDPA test case 8.2.6.39b	HSDPA_Test	R5-062314
34.123-1	1646		Rel-6	6.3.0	F	RP-060567	Approved	Correction to GCF WI-14 HSDPA Test Cases 8.3.1.35 and 8.3.1.37	HSDPA_Test	R5-062294
34.123-1	1647		Rel-6	6.3.0	F	RP-060567	Approved	Corrections to GCF WI-014 (HSDPA) RAB test case 14.6.4	HSDPA_Test	R5-062170
34.123-1	1648		Rel-6	6.3.0	F	RP-060567	Approved	Corrections to GCF WI-014 (HSDPA) RAB test case 14.6.4a	HSDPA_Test	R5-062171
34.123-1	1649		Rel-6	6.3.0	F	RP-060567	Approved	Correction to HS-SCCH code allocation	HSDPA_Test	R5-062212
34.123-1	1650		Rel-6	6.3.0	F	RP-060567	Approved	Corrections to GCF WI-014 MAC-HS test case 7.1.5.6	HSDPA_Test	R5-062239
34.123-1	1651		Rel-6	6.3.0	F	RP-060567	Approved	Enhancement of GCF WI-014 IRAT test case 8.3.7.14	HSDPA_Test	R5-062316
34.123-1	1652		Rel-6	6.3.0	F	RP-060567	Approved	Correction to GCF WI-014 test cases 8.3.11.9 and 8.3.11.10	HSDPA_Test	R5-062303
34.123-1	1653		Rel-6	6.3.0	F	RP-060562	Approved	Introduction of generic test procedure for AMR RB configurations using SRB#5 for TFC control in combination with HS-DSCH/E-DCH radio bearers	EDCH_Test	R5-062317
34.123-1	1654		Rel-6	6.3.0	F	RP-060562	Approved	Addition of details to E-DCH/WB AMR radio	EDCH_Test	R5-062321

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
								bearer test case 14.7.8		
34.123-1	1655		Rel-6	6.3.0	F	RP-060562	Approved	Correction to E-DCH radio bearer test case 14.7.4	EDCH_Test	R5-062296
34.123-1	1656		Rel-6	6.3.0	F	RP-060562	Approved	Addition of details to radio bearer test cases 14.7.6	EDCH_Test	R5-062318
34.123-1	1657		Rel-6	6.3.0	F	RP-060562	Approved	Addition of details to radio bearer test cases 14.7.7	EDCH_Test	R5-062319
34.123-1	1658		Rel-6	6.3.0	F	RP-060562	Approved	Correction to E-DCH radio bearer test case 14.7.5	EDCH_Test	R5-062065
34.123-1	1659		Rel-6	6.3.0	F	RP-060562	Approved	Correction to E-DCH radio bearer test case 14.7.1	EDCH_Test	R5-062066
34.123-1	1660		Rel-6	6.3.0	F	RP-060562	Approved	Corrections to Enhanced uplink test case 8.2.6.51	EDCH_Test	R5-062326
34.123-1	1661		Rel-6	6.3.0	F	RP-060563	Approved	Corrections to Enhanced uplink test case 8.3.4.10	EDCH_Test	R5-062354
34.123-1	1662		Rel-6	6.3.0	F	RP-060563	Approved	New Mac-es/e test case on Correct handling of HARQ profile power offsets	EDCH_Test	R5-062514
34.123-1	1663		Rel-6	6.3.0	F	RP-060563	Approved	New Mac-es/e test case on Correct handling of minimum set of E-TFCI	EDCH_Test	R5-062531
34.123-1	1664		Rel-6	6.3.0	F	RP-060563	Approved	Correction to testcase 8.2.6.50	EDCH_Test	R5-062154
34.123-1	1665		Rel-6	6.3.0	F	RP-060563	Approved	Correction to testcase 8.3.1.41	EDCH_Test	R5-062327
34.123-1	1666		Rel-6	6.3.0	F	RP-060563	Approved	Corrections to MAC-E/Es test case 7.1.6.1.1	EDCH_Test	R5-062333
34.123-1	1667		Rel-6	6.3.0	F	RP-060563	Approved	Corrections to MAC-E/Es test case 7.1.6.1.2	EDCH_Test	R5-062334
34.123-1	1668		Rel-6	6.3.0	F	RP-060563	Approved	Corrections to MAC-E/Es test case 7.1.6.1.3	EDCH_Test	R5-062335
34.123-1	1669		Rel-6	6.3.0	F	RP-060563	Approved	Corrections to MAC-E/Es test case 7.1.6.2.1	EDCH_Test	R5-062336
34.123-1	1670		Rel-6	6.3.0	F	RP-060563	Approved	Corrections to MAC-E/Es test case 7.1.6.2.3	EDCH_Test	R5-062338
34.123-1	1671		Rel-6	6.3.0	F	RP-060563	Approved	Corrections to MAC-E/Es test case 7.1.6.2.4	EDCH_Test	R5-062339
34.123-1	1672		Rel-6	6.3.0	F	RP-060563	Approved	Corrections to MAC-E/Es test case 7.1.6.2.5	EDCH_Test	R5-062340
34.123-1	1673		Rel-6	6.3.0	F	RP-060563	Approved	Corrections to MAC-E/Es test case 7.1.6.2.6	EDCH_Test	R5-062341
34.123-1	1674		Rel-6	6.3.0	F	RP-060563	Approved	Corrections to MAC-E/Es test case 7.1.6.2.7	EDCH_Test	R5-062342
34.123-1	1675		Rel-6	6.3.0	F	RP-060563	Approved	Corrections to MAC-E/Es test case 7.1.6.2.8	EDCH_Test	R5-062343
34.123-1	1676		Rel-6	6.3.0	F	RP-060563	Approved	Corrections to MAC-E/Es test case 7.1.6.3.1	EDCH_Test	R5-062344

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34.123-1	1677		Rel-6	6.3.0	F	RP-060563	Approved	Corrections to MAC-E/Es test case 7.1.6.3.2	EDCH_Test	R5-062345
34.123-1	1678		Rel-6	6.3.0	F	RP-060563	Approved	Corrections and extensions to MAC-E/Es test case 7.1.6.4.1	EDCH_Test	R5-062392
34.123-1	1679		Rel-6	6.3.0	F	RP-060563	Approved	Corrections to MAC-E/Es test case 7.1.6.4.2	EDCH_Test	R5-062347
34.123-1	1680		Rel-6	6.3.0	F	RP-060563	Approved	Correction TC 8.2.6.52: Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH: Success	EDCH_Test	R5-062329
34.123-1	1681		Rel-6	6.3.0	F	RP-060564	Approved	Addition of a new E-DCH RRC test case to 34.123 for Hard Handover fallback with active E-DCH transmission	EDCH_Test	R5-062330
34.123-1	1682		Rel-6	6.3.0	F	RP-060564	Approved	Addition of a new E-DCH RRC test case to 34.123 for Radio Link Failure during active E-DCH transmission	EDCH_Test	R5-062331
34.123-1	1683		Rel-6	6.3.0	F	RP-060564	Approved	Addition of a new E-DCH RRC test case to 34.123 for Cell Change Order From UTRAN with stop of E-DCH transmission	EDCH_Test	R5-062379
34.123-1	1684		Rel-6	6.3.0	F	RP-060564	Approved	Enhancement of GCF WI-025 MACes/e test case 7.1.6.2.2	EDCH_Test	R5-062378
34.123-1	1685		Rel-6	6.3.0	F	RP-060564	Approved	New Mac-es/e test case on Correct handling of MAC-es/e reset	EDCH_Test	R5-062516
34.123-1	1686		Rel-6	6.3.0	F	RP-060560	Approved	Correction to testcase 9.4.3.6 & 9.5.9	TEI6_Test	R5-062156
34.123-1	1687		Rel-6	6.3.0	F	RP-060560	Approved	Correction to Idle mode test case 6.1.1.8 (Network Sharing)	TEI6_Test	R5-062523
34.123-1	1688		Rel-6	6.3.0	F	RP-060560	Approved	Correction to Idle mode test case 6.1.1.9 (Network Sharing)	TEI6_Test	R5-062367
34.123-1	1689		Rel-6	6.3.0	F	RP-060550	Approved	Correction to GCF WI-10 Inter-RAT Test Case 6.2.2.3	TEI_Test	R5-062099
34.123-1	1690		Rel-6	6.3.0	F	RP-060550	Approved	Correction to GCF WI-010 HCS idle mode test case 6.1.2.4	TEI_Test	R5-062521
34.123-1	1691		Rel-6	6.3.0	F	RP-060550	Approved	Correction to GCF WI-010 HCS idle mode test case 6.1.2.5	TEI_Test	R5-062522
34.123-1	1692		Rel-6	6.3.0	F	RP-060550	Approved	Correction to GCF WI 10/1 Idle mode test	TEI_Test	R5-062351

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								case 6.1.1.4		
34.123-1	1693		Rel-6	6.3.0	F	RP-060560	Approved	New test case: 6.2.2.5 Cell reselection using SIB18; UTRAN to GSM	TEI6_Test	R5-062519
34.123-1	1694		Rel-6	6.3.0	F	RP-060550	Approved	Correction to 34.123-1 Section 6 : Defines the uplink UARFCN for test frequencies of Band IV	TEI_Test	R5-062277
34.123-1	1695		Rel-6	6.3.0	F	RP-060550	Approved	Correction to InterRAT Idle Mode frequency lists	TEI_Test	R5-062310
34.123-1	1696		Rel-6	6.3.0	F	RP-060550	Approved	Correction to GCF WI 10/1 MAC testcase 7.1.2.3.1	TEI_Test	R5-062159
34.123-1	1697		Rel-6	6.3.0	F	RP-060550	Approved	Correction to 34.123-1 Section 7: Inclusion of System Information Block Type 5bis	TEI_Test	R5-062278
34.123-1	1698		Rel-6	6.3.0	F	RP-060560	Approved	Frequency band extension for GSM 710, GSM 750 and T-GSM 810 bands in interRAT tests	TEI6_Test	R5-062394
34.123-1	1699		Rel-6	6.3.0	F	RP-060553	Approved	Correction to GCF WI-13 Test Cases 8.3.1.38 and 8.3.1.39	TEI5_Test	R5-062095
34.123-1	1700		Rel-6	6.3.0	F	RP-060550	Approved	Corrections to GCF WI-012 RRC test case 8.3.1.30	TEI_Test	R5-062097
34.123-1	1701		Rel-6	6.3.0	F	RP-060550	Approved	Corrections to GCF WI-010 RRC test case 8.3.1.10 and 8.3.2.4	TEI_Test	R5-062098
34.123-1	1702		Rel-6	6.3.0	F	RP-060550	Approved	Correction to GCF WI 10/2 RRC testcase 8.4.1.8	TEI_Test	R5-062160
34.123-1	1703		Rel-6	6.3.0	F	RP-060550	Approved	Correction to GCF WI-010/2 InterRAT test case 8.3.7.4	TEI_Test	R5-062297
34.123-1	1704		Rel-6	6.3.0	F	RP-060550	Approved	Correction to GCF WI-010/4 InterRAT test case 8.3.7.13	TEI_Test	R5-062298
34.123-1	1705		Rel-6	6.3.0	F	RP-060550	Approved	34.123-1 Section 8.1 - Corrections to the values for IE based on calculated ASN.1 value.	TEI_Test	R5-062192
34.123-1	1706		Rel-6	6.3.0	F	RP-060550	Approved	Correction to GCF WI-10 RRC Hard Handover Test Case 8.2.6.37	TEI_Test	R5-062396

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34.123-1	1707		Rel-6	6.3.0	F	RP-060550	Approved	Correction to 34.123-1 Section 8.1: Inclusion of System Information Block Type 5bis	TEI_Test	R5-062397
34.123-1	1708		Rel-6	6.3.0	F	RP-060550	Approved	Correction to 34.123-1 Section 8.2: Inclusion of System Information Block Type 5bis	TEI_Test	R5-062280
34.123-1	1709		Rel-6	6.3.0	F	RP-060550	Approved	Corrections to GCF WI-12 test case 8.4.1.48	TEI_Test	R5-062284
34.123-1	1710		Rel-6	6.3.0	F	RP-060550	Approved	Correction to GCF WI-10 test Case 9.4.5.2	TEI_Test	R5-062356
34.123-1	1711		Rel-6	6.3.0	F	RP-060550	Approved	Correction to WI-012 GMM test case 12.3.2.8 Proc1	TEI_Test	R5-062315
34.123-1	1712		Rel-6	6.3.0	F	RP-060551	Approved	Correction to GCF WI-10 NAS Test Case 12.4.2.4	TEI_Test	R5-062094
34.123-1	1713		Rel-6	6.3.0	F	RP-060551	Approved	Correction to GCF WI 10 GMM testcase 12.9.7c	TEI_Test	R5-062391
34.123-1	1714		Rel-6	6.3.0	F	RP-060551	Approved	Correction to GCF WI-012/1 test case 12.3.2.7	TEI_Test	R5-062191
34.123-1	1715		Rel-6	6.3.0	F	RP-060551	Approved	Correction to 34.123-1 Section 14: Inclusion of System Information Block Type 5bis	TEI_Test	R5-062281
34.123-1	1716		Rel-6	6.3.0	F	RP-060551	Approved	CR to 34.123-1: Corrections to SMS TC 16.1.1 and 16.1.2	TEI_Test	R5-062050
34.123-2	270		Rel-6	6.3.0	F	RP-060564	Approved	Addition of the applicability of the new E-DCH RRC test cases to 34.123-2, update of name and applicability of E-DCH test case 8.2.6.52	EDCH_Test	R5-062332
34.123-2	271		Rel-6	6.3.0	F	RP-060564	Approved	Correction to the definition of the applicability statement C408 and creation of a new applicability condition for test case 8.2.3.36	EDCH_Test	R5-062557
34.123-2	272		Rel-6	6.3.0	F	RP-060560	Approved	Addition of new PICS	TEI6_Test	R5-062520
34.123-2	273		Rel-6	6.3.0	F	RP-060553	Approved	Corrections to TS 34.123-2, in test case applicability table.	TEI5_Test	R5-062236
34.123-2	274		Rel-6	6.3.0	F	RP-060560	Approved	New test case: 6.2.2.5 Cell reselection using SIB18; UTRAN to GSM, Applicability	TEI6_Test	R5-062290
34.123-2	275		Rel-6	6.3.0	F	RP-060551	Approved	Clean-up of PICS tables for radio bearer configurations	TEI_Test	R5-062518
34.123-2	276		Rel-6	6.3.0	F	RP-060564	Approved	Applicability Statements for newly added	EDCH_Test	R5-062545

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
								MAC-es/e test cases		
34.123-3	1730		Rel-5	5.5.0	F	RP-060548	Approved	CR to 34.123-3: Add new verified and e-mail agreed TTCN test cases in the TC lists in 34.123-3 (prose), Annex A	TEI_Test	-
34.123-3	1731		Rel-5	5.5.0	F	RP-060555	Approved	Correction to the RRC testcase 8.4.1.23	TEI_Test	R5s060225
34.123-3	1732		Rel-5	5.5.0	F	RP-060555	Approved	Correction to the RRC testcase 8.4.1.25	TEI_Test	R5s060226
34.123-3	1733		Rel-5	5.5.0	F	RP-060555	Approved	Correction to the GMM test case 12.9.7b	TEI_Test	R5s060223
34.123-3	1734		Rel-5	5.5.0	F	RP-060555	Approved	Correction of Inter RAT testcase 12.8	TEI_Test	R5s060222
34.123-3	1735		Rel-5	5.5.0	F	RP-060555	Approved	Summary of regression errors in wk29 GCF WI-10 ATS	TEI_Test	R5s060227
34.123-3	1736		Rel-5	5.5.0	F	RP-060555	Approved	Correction to GCF WI-010/1 approved test case 7.2.3.27	TEI_Test	R5s060230
34.123-3	1737		Rel-5	5.5.0	F	RP-060555	Approved	Correction to GCF WI-12/1 approved test case 8.2.2.43	TEI_Test	R5s060231
34.123-3	1738		Rel-5	5.5.0	F	RP-060569	Approved	Correction to test cases 14.6.4	HSDPA_Test	R5s060229
34.123-3	1739		Rel-5	5.5.0	F	RP-060555	Approved	Correction to test cases 8.2.2.35 & tcv_BcapMmedia	TEI_Test	R5s060232
34.123-3	1740		Rel-5	5.5.0	F	RP-060555	Approved	Correction to GCF WI10 RRC Test Case 8.4.1.5	TEI_Test	R5s060218
34.123-3	1741		Rel-5	5.5.0	F	RP-060555	Approved	Correction to approved GCF WI-12 RAB test case 14.2.58a	TEI_Test	R5s060221
34.123-3	1742		Rel-5	5.5.0	F	RP-060555	Approved	Correction to approved GCF WI-12 RRC test cases 8.2.6.39 and 8.2.6.44	TEI_Test	R5s060220
34.123-3	1743		Rel-5	5.5.0	F	RP-060555	Approved	Correction to approved GCF WI-10 RLC test case 7.2.3.17	TEI_Test	R5s060219
34.123-3	1744		Rel-5	5.5.0	F	RP-060555	Approved	Summary of Regression Errors in NAS wk29 ATS	TEI_Test	R5s060217
34.123-3	1745		Rel-5	5.5.0	F	RP-060569	Approved	Correction GCF WI-14 HSDPA Test Case 8.2.1.27	HSDPA_Test	R5s060214
34.123-3	1746		Rel-5	5.5.0	F	RP-060569	Approved	Correction to test cases 14.6.6	HSDPA_Test	R5s060215
34.123-3	1747		Rel-5	5.5.0	F	RP-060555	Approved	Summary of Regression Errors in WK29 ATS	TEI_Test	R5s060212
34.123-3	1748		Rel-5	5.5.0	F	RP-060555	Approved	ASP enhancement for HSUPA testing	TEI_Test	R5s060196

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
34.123-3	1749		Rel-5	5.5.0	F	RP-060569	Approved	Summary of regression errors in the wk27 HSD Suite	HSDPA_Test	R5s060209
34.123-3	1750		Rel-5	5.5.0	F	RP-060555	Approved	Summary of regression errors in the wk27 RLC ATS	TEI_Test	R5s060210
34.123-3	1751		Rel-5	5.5.0	F	RP-060555	Approved	Corrections to GCF WI-12/1 approved test case 7.1.3.2	TEI_Test	R5s060208
34.123-3	1752		Rel-5	5.5.0	B	RP-060554	Approved	Addition of GCF WI10 RRC test case 8.4.1.8 to RRC ATS v5.5.0	TEI_Test	R5s060201
34.123-3	1753		Rel-5	5.5.0	F	RP-060555	Approved	Corrections to GCF WI-12/1 approved test case 12.9.7a.	TEI_Test	R5s060206
34.123-3	1754		Rel-5	5.5.0	F	RP-060569	Approved	Summary of Regression Errors in HSDPA ATS	HSDPA_Test	R5s060207
34.123-3	1755		Rel-5	5.5.0	F	RP-060555	Approved	Summary of regression errors in the wk27 GCF WI-10 and GCF WI-12 ATS	TEI_Test	R5s060205
34.123-3	1756		Rel-5	5.5.0	F	RP-060555	Approved	Correction to GCF WI-10 Idle Mode test case 6.1.2.5	TEI_Test	R5s060203
34.123-3	1757		Rel-5	5.5.0	F	RP-060556	Approved	Correction to GCF WI-10 RRC test case 8.3.4.3	TEI_Test	R5s060204
34.123-3	1758		Rel-5	5.5.0	F	RP-060556	Approved	Regression Error report for RRC & MAC ATS	TEI_Test	R5s060199
34.123-3	1759		Rel-5	5.5.0	F	RP-060559	Approved	Regression Error report for HSD_ENH_r5 ATS	TEI5_Test	R5s060200
34.123-3	1760		Rel-5	5.5.0	F	RP-060559	Approved	Correction of CC procedure for multimedia calls	TEI5_Test	R5s060063
34.123-3	1761		Rel-5	5.5.0	F	RP-060556	Approved	Corrections to GCF WI-10 RRC Test Case 8.4.1.24 and 8.4.1.25	TEI_Test	R5s060198
34.123-3	1762		Rel-5	5.5.0	B	RP-060554	Approved	Addition of GCF WI-015 AGPS test case 17.2.3.7 to AGPS ATS V5.5.0	TEI_Test	R5s060193
34.123-3	1763		Rel-5	5.5.0	B	RP-060554	Approved	Addition of GCF WI-015 AGPS test case 17.2.3.6 to AGPS ATS V5.5.0	TEI_Test	R5s060192
34.123-3	1764		Rel-5	5.5.0	F	RP-060556	Approved	Correction to GCF WI-12 NAS Test Case 12.9.9	TEI_Test	R5s060197
34.123-3	1765		Rel-5	5.5.0	F	RP-060556	Approved	Correction to the RRC testcase 8.2.3.8	TEI_Test	R5s060190

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
34.123-3	1766		Rel-5	5.5.0	F	RP-060556	Approved	Correction to the RRC testcase 8.2.4.1	TEI_Test	R5s060191
34.123-3	1767		Rel-5	5.5.0	F	RP-060556	Approved	Correction of GCF WI-10 RRC Test Case 8.3.1.10 and 8.3.2.4	TEI_Test	R5s060186
34.123-3	1768		Rel-5	5.5.0	F	RP-060556	Approved	Correction to the Security procedure	TEI_Test	R5s060189
34.123-3	1769		Rel-5	5.5.0	F	RP-060556	Approved	Correction to GCF WI-10 NAS Test Case 11.1.1.1	TEI_Test	R5s060178
34.123-3	1770		Rel-5	5.5.0	F	RP-060556	Approved	Correction to GCF WI-12 RRC Test Case 8.1.1.10	TEI_Test	R5s060187
34.123-3	1771		Rel-5	5.5.0	F	RP-060556	Approved	Correction to the test step ts_ToStateMOCompressMode_CS_6_9_PS_6_10	TEI_Test	R5s060188
34.123-3	1772		Rel-5	5.5.0	F	RP-060561	Approved	Moving baseline to the June 06, Rel-6	TEI6_Test	R5s060183
34.123-3	1773		Rel-5	5.5.0	F	RP-060556	Approved	Corrections to GCF WI-10 SMS Test Cases 16.1.1 and 16.1.2	TEI_Test	R5s060185
34.123-3	1774		Rel-5	5.5.0	F	RP-060559	Approved	Corrections to GCF WI-13 Test Case 8.3.11.13	TEI5_Test	R5s060184
34.123-3	1775		Rel-5	5.5.0	F	RP-060556	Approved	Correction GCF WI-12 Inter-RAT Test Case 8.4.1.48	TEI_Test	R5s060182
34.123-3	1776		Rel-5	5.5.0	F	RP-060569	Approved	Corrections to GCF WI 14 test case 14.6.4	HSDPA_Test	R5s060181
34.123-3	1777		Rel-5	5.5.0	F	RP-060556	Approved	Correction of GCF WI-10 Idle Mode Testcase 6.1.2.6	TEI_Test	R5s060180
34.123-3	1778		Rel-5	5.5.0	F	RP-060556	Approved	Correction of value for t_IdlePageTimer timer	TEI_Test	R5s060175
34.123-3	1779		Rel-5	5.5.0	F	RP-060556	Approved	Correction to GCF WI-12 NAS Test Case 12.9.9	TEI_Test	R5s060176
34.123-3	1780		Rel-5	5.5.0	F	RP-060556	Approved	Correction to Approved GCF WI-10 NAS test case 12.9.6	TEI_Test	R5s060179
34.123-3	1781		Rel-5	5.5.0	F	RP-060556	Approved	Summary of regression errors in wk23 GCF WI-10 and GCF WI-12 ATS	TEI_Test	R5s060177
34.123-3	1782		Rel-5	5.5.0	F	RP-060556	Approved	Correction to the test step ts_U2GCellChange_RAUpdate	TEI_Test	R5s060174
34.123-3	1783		Rel-5	5.5.0	F	RP-060556	Approved	Corrections to GCF WI 12/1 IR_U test case 8_4_1_48	TEI_Test	R5s060173

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Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
34.123-3	1784		Rel-5	5.5.0	F	RP-060569	Approved	Correction to test case 8.2.6.48	HSDPA_Test	R5s060170
34.123-3	1785		Rel-5	5.5.0	F	RP-060559	Approved	Correction to test case 8.1.6.5	TEI5_Test	R5s060171
34.123-3	1786		Rel-5	5.5.0	F	RP-060557	Approved	Correction to test step ts_ SS_Rel	TEI_Test	R5s060172
34.123-3	1787		Rel-5	5.5.0	F	RP-060557	Approved	Correction to the GCF WI-12 RRC testcase 8.1.6.3	TEI_Test	R5s060169
34.123-3	1788		Rel-5	5.5.0	F	RP-060557	Approved	Correction to the GCF WI-10 NAS test case 12.4.2.4	TEI_Test	R5s060166
34.123-3	1789		Rel-5	5.5.0	F	RP-060557	Approved	Correction to the GCF WI-10 RRC test case 8.4.1.2	TEI_Test	R5s060167
34.123-3	1790		Rel-5	5.5.0	F	RP-060557	Approved	Summary of regression errors in the wk21 GCF WI-10 and WI-12 ATS	TEI_Test	R5s060168
34.123-3	1791		Rel-5	5.5.0	F	RP-060569	Approved	Summary of regression errors in the wk21 HSD_ENH ATS	HSDPA_Test	R5s060165
34.123-3	1792		Rel-5	5.5.0	F	RP-060569	Approved	Correction to GCF WI14 test case 8.2.6.39a and 8.2.6.39b	HSDPA_Test	R5s060164
34.123-3	1793		Rel-5	5.5.0	F	RP-060557	Approved	Correction of GCF WI-12 and 10 NAS Test cases 9.4.5.4.6 and 9.4.5.4.1	TEI_Test	R5s060163
34.123-3	1794		Rel-5	5.5.0	B	RP-060554	Approved	Addition of GCF WI-012 MAC test case 7.1.3.2 to MAC ATS V5.4.0	TEI_Test	R5s060161
34.123-3	1795		Rel-5	5.5.0	F	RP-060557	Approved	Correction of GCF WI-10 IR_U Testcase 8.3.11.4	TEI_Test	R5s060158
34.123-3	1796		Rel-5	5.5.0	B	RP-060569	Approved	Addition of GCF WI14/3 test case 14.6.6 to HSD_ENH ATS V5.4.0	HSDPA_Test	R5s060159
34.123-3	1797		Rel-5	5.5.0	F	RP-060569	Approved	Correction of GCF WI-14 HSDPA Testcase 8.3.11.10	HSDPA_Test	R5s060156
34.123-3	1798		Rel-5	5.5.0	F	RP-060557	Approved	Correction of GCF WI-12 RRC Testcase 8.3.1.30	TEI_Test	R5s060157
34.123-3	1799		Rel-5	5.5.0	B	RP-060569	Approved	Addition of GCF WI14/3 test case 14.6.1a to HSD_ENH ATS V5.4.0	HSDPA_Test	R5s060154
34.123-3	1800		Rel-5	5.5.0	F	RP-060557	Approved	Summary of regression errors in the wk18 GCF WI-10 and GCF WI-12 ATS	TEI_Test	R5s060148
34.123-3	1801		Rel-5	5.5.0	F	RP-060557	Approved	Correction to common teststeps	TEI_Test	R5s060146

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Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
								ts_RRC_ReceiveUE_CapabilityInfo and ts_Check_UE_Capability		
34.123-3	1802		Rel-5	5.5.0	F	RP-060557	Approved	Correction to the constraint cbr_108_RRC_SecModeCmpl in approved teststep ts_RRC_Security	TEI_Test	R5s060147
34.123-3	1803		Rel-5	5.5.0	F	RP-060569	Approved	Correction to test step ts_RRC_ConnRel_AfterSwitchOff_r5	HSDPA_Test	R5s060153
34.123-3	1804		Rel-5	5.5.0	F	RP-060569	Approved	Correction of GCF WI-14 HSDPA MAC test case 7.1.5.4	HSDPA_Test	R5s060149
34.123-3	1805		Rel-5	5.5.0	F	RP-060557	Approved	Proposed enhancement for calculation of DPCH Frame Offset	TEI_Test	R5s060150
34.123-3	1806		Rel-5	5.5.0	F	RP-060557	Approved	Correction of PLMN presentation in test step ts_MMI_PLMN_SelPerf	TEI_Test	R5s060152
34.123-3	1807		Rel-5	5.5.0	F	RP-060557	Approved	Correction to InterRAT Idle Mode frequency lists	TEI_Test	R5s060151
34.123-3	1808		Rel-5	5.5.0	F	RP-060557	Approved	Correction to GCF WI-10 Idle Mode test case 6.1.2.3	TEI_Test	R5s060144
34.123-3	1809		Rel-5	5.5.0	F	RP-060557	Approved	Correction of integrity error in TC 8.1.7.1d	TEI_Test	R5s060145
34.123-3	1810		Rel-5	5.5.0	F	RP-060569	Approved	TTCN correction to mac-hs testcase 7.1.5.6	HSDPA_Test	R5s060143
34.123-3	1811		Rel-5	5.5.0	F	RP-060558	Approved	Summary of regression errors in wk29 IRAT ATSs.	TEI_Test	R5s060236
34.123-3	1812		Rel-5	5.5.0	F	RP-060558	Approved	Correction to Approved GCF WI-10 NAS test case 12.4.1.1a	TEI_Test	R5s060243
34.123-3	1813		Rel-5	5.5.0	F	RP-060558	Approved	Summary of Regression Errors in RRC wk34 ATS	TEI_Test	R5s060248
34.123-3	1814		Rel-5	5.5.0	F	RP-060558	Approved	Summary of Regression Errors in NAS wk34 ATS	TEI_Test	R5s060249
34.123-3	1815		Rel-5	5.5.0	F	RP-060558	Approved	Summary of Regression Errors in SMS wk34 ATS	TEI_Test	R5s060250
34.123-3	1816		Rel-5	5.5.0	F	RP-060559	Approved	Summary of Regression Errors in HSD_ENH wk34 ATS	TEI5_Test	R5s060256
34.123-3	1817		Rel-5	5.5.0	F	RP-060558	Approved	Correction to GCF WI-12 IR_U Test Case	TEI_Test	R5s060253

Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
								8.4.1.48		
34.123-3	1818		Rel-5	5.5.0	F	RP-060558	Approved	Summary of regression errors in wk34 GCF WI-10 and GCF WI-12 ATS	TEI_Test	R5s060255
34.123-3	1819		Rel-5	5.5.0	F	RP-060558	Approved	Correction to UE capability constraints	TEI_Test	R5s060254
34.123-3	1820		Rel-5	5.5.0	B	RP-060558	Approved	Addition of GCF WI-017 test case 8.3.7.17 to IR_U_r3 ATS V5.5.0.	TEI_Test	R5s060234
34.123-3	1821		Rel-5	5.5.0	F	RP-060564	Approved	CR to 34.123-3: ASP changes for EDCH test	EDCH_Test	R5-062325
34.123-3	1822		Rel-5	5.5.0	F	RP-060551	Approved	New ASP and updated ASP to resolve SRB3 UL ciphering	TEI_Test	R5-062534
34.123-3	1823		Rel-5	5.5.0	F	RP-060553	Approved	Production of pointer version 5.6.0 of TS 34.123-3 with no technical contents	TEI5_Test	R5-062535
34.123-3	1824		Rel-6	5.5.0	F	RP-060560	Approved	Upgrade TS 34.123-3 to version 6.0.0	TEI6_Test	R5-062536
34.123-3	1825		Rel-5	5.5.0	F	RP-060551	Approved	CR to 34.123-3: Update TSO and PIXIT	TEI_Test	R5-062395
34.123-3	1826		Rel-5	5.5.0	F	RP-060551	Approved	CR to 34.123-3: SFN offset issue in the CFN timing-maintained test	TEI_Test	R5-062046
34.123-3	1827		Rel-5	5.5.0	F	RP-060560	Approved	CR to 34.123-3: GERAN additional bands for interRAT test	TEI6_Test	R5-062537
34.171	10		Rel-6	6.4.0	F	RP-060560	Approved	Implementation change for Moving Scenario and Periodic Update Performance Test	TEI6_Test	R5-062028
34.171	11		Rel-6	6.4.0	F	RP-060560	Approved	Test procedure change to A-GPS Minimum Performance TTFF test cases	TEI6_Test	R5-062029
34.171	12		Rel-6	6.4.0	F	RP-060560	Approved	Change to UE Simulated Altitude	TEI6_Test	R5-062093
34.229-1	1		Rel-5	5.0.0	F	RP-060565	Approved	Correction to TS 34.229-1 contents	IMS-CCR_Test	R5-062360
34.229-1	10		Rel-5	5.0.0	F	RP-060565	Approved	Alignment with TS 24.229 version 5.16.0 affecting TCs 8.1, 8.2, 8.3 and the default message REGISTER.	IMS-CCR_Test	R5-062215
34.229-1	11		Rel-5	5.0.0	F	RP-060565	Approved	Correction for TC 8.4: Invalid Behaviour – 423 Interval Too Brief	IMS-CCR_Test	R5-062216
34.229-1	12		Rel-5	5.0.0	F	RP-060565	Approved	Correction for TCs 9.1and 9.2	IMS-CCR_Test	R5-062370
34.229-1	2		Rel-5	5.0.0	F	RP-060565	Approved	Clarification to Emergency Test Case	IMS-CCR_Test	R5-062543
34.229-1	3		Rel-5	5.0.0	F	RP-060565	Approved	Clarifications for SDP handling in TC 12.1 MO Call Successful	IMS-CCR_Test	R5-062309

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Spec	CR	Rev	Phase	Curr Ver	Cat	Doc 1st-Level	Status 1st-Level	Subject	Work Item	Doc 2nd-Level
34.229-1	4		Rel-5	5.0.0	F	RP-060565	Approved	Test Case Correction on SigComp in the Initial registration	IMS-CCR_Test	R5-062362
34.229-1	5		Rel-5	5.0.0	F	RP-060565	Approved	New TC on SigComp in the MO Call	IMS-CCR_Test	R5-062323
34.229-1	6		Rel-5	5.0.0	F	RP-060565	Approved	Correction to authentication test case 9.2 Invalid Behaviour – SQN out of range	IMS-CCR_Test	R5-062372
34.229-1	7		Rel-5	5.0.0	F	RP-060565	Approved	New TC on SigComp in the MT Call	IMS-CCR_Test	R5-062363
34.229-1	8		Rel-5	5.0.0	F	RP-060565	Approved	New test cases for P-CSCF Discovery List	IMS-CCR_Test	R5-062364
34.229-1	9		Rel-5	5.0.0	F	RP-060565	Approved	General IMS testing corrections and clarifications	IMS-CCR_Test	R5-062371
34.229-2	1		Rel-5	5.0.0	F	RP-060565	Approved	Applicability for new P-CSCF Discovery List test cases	IMS-CCR_Test	R5-062365
34.229-2	2		Rel-5	5.0.0	F	RP-060565	Approved	CR to 34.229-2: Update applicability table for IMSCC test	IMS-CCR_Test	R5-062026

Annex D: Summary of TSG RAN Work Items

RAN Work Items Update after meeting #33
Abbreviations used: %: Estimated level of completion   WI: Work Item   SI: Study Item
                       Feat: Feature   BB: Building Block   FS: Feasibility Study
                       WT: Work Task   WIDS: WI Description Sheet

Type	Name	WI Code	WG	%	Completion	Remarks
Feat	Rel-7 Improvements of the Radio Interface	RInImp	RP			
BB	UE Antenna Performance Evaluation Method and Requirements	RInImp-UEAnt	R4	80	December 2006	Status report in RP-060446
BB	Extended UMTS 1.7/2.1 GHz	RInImp-UMTS1721Ext	R4	75	December 2006	Status report in RP-060450
BB	UMTS 2.6 GHz 7.68 TDD	RInImp-UMTS26VHCRTDD	R4	100	September 2006	WI completed, status report in RP-060451
BB	Additional minimum UE performance requirement for non-HSDPA channels based on type 1 enhanced receiver (Rx-Diversity)	RInImp-RxDiv	R4			
WT	Additional minimum UE performance requirement for downlink physical channels in support of MTCH and MCCH operation based on type 1 enhanced receiver (Rx-Diversity)	RInImp-RxDiv-MBMS	R4	50	March 2007	Status report in RP-060447
WT	Additional minimum UE performance requirement for downlink physical channels in support of E-DCH operation based on type 1 enhanced receiver (Rx-Diversity)	RInImp-RxDiv-EDCH	R4	50	March 2007	Status report in RP-060448
Feat	Rel-7 RAN improvements	RANimp	RP			
WT	Optimisation of channelisation code utilisation for 1.28 Mcps TDD	RANimp-RABSE-CodOptLCRTDD	R1	90	December 2006	Status report in RP-060452
BB	Delay optimisation for procedures applicable to CS and PS Connections	RANimp-DelayOpt	R2	100	September 2006	WI completed, status report in RP-060453
BB	Continuous connectivity for packet data users	RANimp-CPC	R1	75	December 2006	Status report in RP-060454
BB	Improved support of gaming over HSDPA/EDCH	RInImp-Gaming	R2	35	December 2006	Status report in RP-060618
BB	7.68 Mcps TDD Enhanced Uplink	RANimp-VHCRTDD-	R1	95	December 2006	Status report in RP-060455

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Type	Name	WI Code	WG	%	Completion	Remarks
		EDCH				
BB	Extended WCDMA Cell Range	RANimp-ExtCell	R3	97	December 2006	Status report in RP-060456
BB	Interface to Control Tower Mounted Amplifiers (TMAs)	RANimp-TMA	R3	30	December 2006	Status report in RP-060457
New BB	Enhanced CELL_FACH state in FDD		R2		March 2007	WIDS in RP-060619
BB	UE positioning Rel-7	LCS3-UEpos	RP			
WT	Inclusion of Uplink TDOA UE positioning method in the UTRAN specifications	LCS3-UEPos-UTDOA	R2	85	March 2007	Status report in RP-060458
WT	LCS Enhancements Related to Location-Based Services	LCS3-UEPos-Velocity	R2	100	September 2006	WI completed, status report in RP-060459
BB	Global Navigation Satellite System (GNSS) in UTRAN	LCS3-GNSS-UTRAN	R2	20	September 2007	Status report in RP-060251
WT	UE Performance Requirements for MBMS (TDD)	MBMS-RAN-RF-TDD	R4	100	September 2006	WI completed and closed with the presentation of the test WI
Feat	Multiple Input Multiple Output antennas (MIMO)	MIMO	R1	70	March 2006	Status report in RP-060461
BB	MIMO - Physical layer	MIMO-Phys	R1	70		
BB	MIMO - Layer 2,3 aspects	MIMO-L23	R2	0		
BB	MIMO - Iub/Iur Protocol Aspects	MIMO-IurIub	R3	0		
BB	MIMO - RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing	MIMO-RF	R4	10		
Feat	7.68Mcps TDD option	VHCRTDD	RP	100	September 2006	Feature completed and closed with the presentation of the test WI
Feat	3.84 Mcps TDD Enhanced Uplink	EDCHTDD	RP	100	September 2006	WI completed, status report in RP-060462
BB	EDCHTDD: Stage 2	EDCHTDD-Stage2	R2	100	June 2006	

3GPP TSG RAN #33

Type	Name	WI Code	WG	%	Completion	Remarks
BB	EDCHTDD: Physical Layer	EDCHTDD-Phys	R1	100	September 2006	
BB	EDCHTDD: Layer 2 and 3 Protocol Aspects	EDCHTDD-L23	R2	100	September 2006	
BB	EDCHTDD: UTRAN Iub/Iur Protocol Aspects	EDCHTDD-IurIub	R3	100	September 2006	
BB	EDCHTDD: RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing	EDCHTDD-RF	R4	100	September 2006	
Feat	1.28 Mcps TDD Enhanced Uplink	LCRTDD-EDCH	RP	33	March 2007	Status report in RP-060461
BB	1.28 Mcps TDD Enhanced Uplink: Physical Layer	LCRTDD-EDCH-Phys	R1	40	December 2006	
BB	1.28 Mcps TDD Enhanced Uplink: Layer 2 and 3 Protocol Aspects	LCRTDD-EDCH-L23	R2	80	December 2006	
BB	1.28 Mcps TDD Enhanced Uplink: UTRAN Iub/Iur Protocol Aspects	LCRTDD-EDCH-Iublur	R3	10	December 2006	
BB	1.28 Mcps TDD Enhanced Uplink: RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing	LCRTDD-EDCH-RF	R4	0	March 2007	
Feat	3G Long Term Evolution	LTE	RP	10	March 2008	Status report in RP-060545, WIDS revised in RP-060635
New BB	3G Long Term Evolution – Physical Layer	LTE-Phys	R1		September 2007	WIDS in RP-060630
New BB	3G Long Term Evolution – Radio Interface Layer 2 and 3 Protocol Aspect	LTE-L23	R2		September 2007	WIDS in RP-060630
New BB	3G Long Term Evolution – eUTRAN Interfaces		R3		September 2007	WIDS in RP-060630
New BB	3G Long Term Evolution – RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing	LTE-RF	R4		September 2007	WIDS in RP-060630
New BB	3G Long Term Evolution – Terminal Conformance Test Specifications	LTE-UETest	R5		March 2008	WIDS in RP-060630
SI	FS on Evolved UTRA and UTRAN	RANFS-Evo	RP	100	September 2006	Status report in RP-060472. Study completed
SI	Improvement of the Multimedia Broadcast Multicast Service (MBMS) in UTRAN	RANFS-MBMSImp	R2	70	December 2006	Status report in RP-060473
SI	Further Improved Performance Requirements for UMTS/HSDPA UE (FDD)	RANFS-IC	R4	40	March 2007	Status report in RP-060474

3GPP TSG RAN #33

Type	Name	WI Code	WG	%	Completion	Remarks
SI	Scope of future FDD HSPA Evolution	RANFS-HSPAEvo	RP	20	December 2006	Status report in RP-060475
New SI	Dynamically reconfiguring a FDD UE receiver to reduce power consumption when desired Quality of Service is met		R4		March 2007	WIDS in RP-060641
Test	Conformance Test Aspects – FDD Enhanced Uplink	EDCH_Test	R5	80	March 2007	Status report in RP-060465
Test	Conformance Test Aspects – IMS Call Control	IMS-CCR_Test	R5	85	December 2006	Status report in RP-060466
Test	Conformance Test Aspects – ROHC Performance	RANimp-RABSE5_Test	R5	10	December 2006	WI completed, status report in RP-060464
Test	Conformance Test Aspects – IMS Call Control Rel-6 enhancements	IMS2_CCR_Test	R5	0	March 2007	Status report in RP-060469
Test	Conformance Test Aspects – MBMS	MBMS_Test	R5	20	March 2007	Status report in RP-060467
Test	TDD HSDPA testing	HSDPA_HCRTDD_Test	R5	65	December 2007	Status report in RP-060468, RP-060488
Test	UE conformance testing for FDD Inter-Band Operation	RInImp-InterBand_Test	R5	10	December 2006	Status report in RP-060470
Test	RF/RRM Conformance Test Aspects MBMS	MBMS-RAN-RF_Test	R5	10	March 2007	Status report in RP-060471
New Test	Conformance Test Aspects – 7.68 Mcps TDD	VHCRTDD-RF_Test	R5		September 2007	WIDS in RP-060482
New Test	Conformance Test Aspects – MBMS for 3.84Mcps and 7.68Mcps TDD	MBMS_HCRTDD_Test	R5		September 2007	WIDS in RP-060483
New Test	Conformance Test Aspects – 3.84 Mcps and 7.68 Mcps TDD Enhanced Uplink	RANimp-HCRTDD-EDCH_Test	R5		March 2008	WIDS in RP-060484
New Test	Signalling Conformance Test Aspects – MBMS for LCR TDD	MBMS_LCRTDD_Test	R5		September 2007	WIDS in RP-060485
New Test	Conformance Test Aspects –UE Antenna Performance OTA	RInImp-UEAnt_Test	R5		June 2007	WIDS in RP-060486

Annex E: Meeting schedule

TITLE	DATES	LOCATION	CTRY
October 2006			
TITLE	DATES	LOCATION	CTRY
3GPPRAN1#46-BIS	9 - 13 Oct 2006	Seoul	KR
3GPPRAN2#55	9 - 13 Oct 2006	Seoul	KR
3GPPRAN3#53-bis	10 - 13 Oct 2006	Seoul	KR
November 2006			
TITLE	DATES	LOCATION	CTRY
3GPPRAN1#47	6 - 10 Nov 2006	Riga	LV
3GPPRAN2#56	6 - 10 Nov 2006	Riga	LV
3GPPRAN3#54	6 - 10 Nov 2006	Riga	LV
3GPPRAN4#41	6 - 10 Nov 2006	Riga	LV
3GPPRAN5#33	6 - 10 Nov 2006	Riga	LV
3GPPRAN#34	28 Nov - 1 Dec 2006	Budapest	HU
December 2006			
TITLE	DATES	LOCATION	CTRY
3GPPRAN5-TTCN Workshop	11 - 12 Dec 2006	Sophia Antipolis	FR
January 2007			
TITLE	DATES	LOCATION	CTRY
3GPPRAN1#47bis	15 - 19 Jan 2007	EU	EU
3GPPRAN2#?	15 - 19 Jan 2007	EU	EU
February 2007			
TITLE	DATES	LOCATION	CTRY
3GPPRAN5#34	5 - 9 Feb 2007	TBD	
3GPPRAN4#42	12 - 16 Feb 2007	US	US
3GPPRAN2#57	12 - 16 Feb 2007	US	US
3GPPRAN1#48	12 - 16 Feb 2007	US	US
3GPPRAN3#55	12 - 16 Feb 2007	US	US
March 2007			
TITLE	DATES	LOCATION	CTRY
3GPPRAN#35	6 - 9 Mar 2007	EU	EU

3GPP TSG RAN #33

May 2007			
TITLE	DATES	LOCATION	CTRY
3GPPRAN3#56	7 - 11 May 2007	JAPAN	JP
3GPPRAN1#49	7 - 11 May 2007	JAPAN	JP
3GPPRAN2#58	7 - 11 May 2007	Japan	JP
3GPPRAN4#43	7 - 11 May 2007	Japan	JP
3GPPRAN5#35	7 - 11 May 2007	Japan	JP
3GPPRAN#36	29 May - 1 Jun 2007	KR	KR
August 2007			
TITLE	DATES	LOCATION	CTRY
3GPPRAN3#57	20 - 24 Aug 2007	EUROPE	EU
3GPPRAN5#36	20 - 24 Aug 2007	EUROPE	EU
3GPPRAN4#44	20 - 24 Aug 2007	EUROPE	EU
3GPPRAN2#59	20 - 24 Aug 2007	EUROPE	EU
3GPPRAN1#50	20 - 24 Aug 2007	EU	EU
September 2007			
TITLE	DATES	LOCATION	CTRY
3GPPRAN#37	11 - 14 Sep 2007	Riga	LV
November 2007			
TITLE	DATES	LOCATION	CTRY
3GPPRAN3#58	5 - 9 Nov 2007	South Korea	KR
3GPPRAN1#51	5 - 9 Nov 2007	Korea	KR
3GPPRAN2#60	5 - 9 Nov 2007	Korea	KR
3GPPRAN4#45	5 - 9 Nov 2007	Korea	KR
3GPPRAN5#37	5 - 9 Nov 2007	Korea	KR
3GPPRAN#38	28 - 30 Nov 2007	US	US
March 2008			
TITLE	DATES	LOCATION	CTRY
3GPPRAN#39	4 - 7 Mar 2008	tbd	
May 2008			
TITLE	DATES	LOCATION	CTRY
3GPPRAN#40	27 - 30 May 2008	tbd	
September 2008			
TITLE	DATES	LOCATION	CTRY

3GPP TSG RAN #33

TITLE	DATES	LOCATION	CTRY
3GPPRAN#41	23 - 26 Sep 2008	tbd	
December 2008			
TITLE	DATES	LOCATION	CTRY
3GPPRAN#42	2 - 5 Dec 2008	tbd	

APPENDIX I

3GPP_TSG_RAN Archives
September 2006

3GPP_TSG_RAN@LIST.ETSI.ORG

Options: Use Monospaced Font
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Topic: [<< First] [< Prev] [Next >] [Last >>]
Author: [<< First] [< Prev] [Next >] [Last >>]

Subject:	Draft report RAN #33
From:	Cesar Gutierrez Miguelez <[log in to unmask]>
Reply To:	Cesar Gutierrez Miguelez <[log in to unmask]>
Date:	Mon, 25 Sep 2006 16:30:39 +0200
Content-Type:	multipart/mixed
Parts/Attachments:	text/plain (355 bytes) , text/html (1420 bytes) , draft_report_RP33.zip (231 kB)

Dear all
Attached you can find the draft report of TSG RAN meeting #33. Please send your comments and corrections to this email reflector before the 25 October.
For amendments to the participant list, please contact directly Loubna Aliat ([log in to unmask]) and Claude Arzelier ([log in to unmask])

Best regards
Cesar Gutierrez Miguelez
3GPP Support

ATOM   RSS1   RSS2

APPENDIX J

Agenda item

Title:	**Draft Report of 3GPP TSG RAN WG1 #49b v0.1.0 (Orlando, Florida-USA, 25 – 29 June, 2007)**
Document for:	**Comment**
Source:	**MCC Support**
	Please send your comments before 15/08/2007

Fact Summary

Meeting:	**3GPP TSG RAN WG1 #49b**
Dates:	**25th through 29th June, 2007**
Venue:	**Orlando World Center Marriott Resort & Convention Center, Orlando, Florida**
Host:	**North American Friends of 3GPP**
Attendees:	**157 delegates**
Documents:	**589 (including some withdrawn and post-meeting artefacts)**

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Executive summary

3GPP TSG WG RAN1 #49b meeting took place in Marriott Orlando World Center Resort, Orlando, Florida-USA.

The meeting started at 9:20 on Monday 25th June and finished at 17:10 on Friday 29th June 2007.

The week was scheduled as follows:

- Monday: Agenda items 1, 2, 3, 4, 5.1, 5.2 and 5.3

- Tuesday: Agenda items 5.8, 5.13.1 and 5.13.2

- Wednesday: Agenda items 5.5 and 5.6 – Parallel session (full day) for 5.10

- Thursday: Agenda items 5.9, 5.11.2 – Parallel session (4:00PM-7:00PM) for 5.10.4 – Cocktail at 7:00PM

- Friday: Agenda items 5.7, 5.4, 5.12, 5.11.1

The meeting focused on LTE only discussions and progress. Therefore a set of Incoming Liaison Statements with regard to Release 7 Work items have been postponed to next 3GPP TSG WG RAN1 #50 meeting for further treatment.

The number of contribution documents for this meeting was 589, and those documents were categorized as followed.

Agenda Item	Input Document	Discussed Document

The following set of documents is missing. The corresponding contributions have not been handed over by companies.

R1-072809	Way Forward on MU-MIMO	Freescale Semiconductor
R1-072914	MU-MIMO codebook and CQI reporting	ZTE
R1-072948	Downlink L1/L2 Control Channel Structure in E-UTRA - Coding	NTT DoCoMo
R1-072956	Frequency Granularity of MIMO Precoding in E-UTRA Downlink	NTT DoCoMo
R1-072958	Closed Loop-Based Antenna Switching Transmit Diversity in E-UTRA Uplink	NTT DoCoMo
R1-073126	Scheduling request trasnmission using non-coherent OOK	Samsung
R1-073131	DL ACK/NACK to RE mapping	Samsung
R1-073157	Way Forward: Differential Codebook for SU-MIMO	Broadcom
R1-073180	Additional considerations on the SU-MIMO precoding design	Samsung
R1-073204	Way Forward on 4-Tx Antenna Codebook for SU-MIMO	Texas Instruments
R1-073213	UE TX power measurement	Ericsson

The next document, not presented during the session, provides a very good summary of remaining issues to RAN1 (thanks to Sadayuki Abeta who made the effort preparing the relevant material) and lists the different email moderators in charge of each issue:

R1-073233	Remaining Issues in RAN1

1   Opening of the meeting

Mr. Dirk Gerstenberger (RAN1 Chairman) welcomed the participants to the 49th RAN WG1 bis meeting and opened the meeting at 09:20.

Mr. Sharat Chandler from Cingular Wireless welcomed the delegates on behalf of the North American Friends of 3GPP.

1.1   Call for IPR

The Chairman drew attention to Members' obligations under the 3GPP Partner Organizations' IPR policies. Every Individual Member organization is obliged to declare to the Partner Organization or Organizations of which it is a member any IPR owned by the Individual Member or any other organization which is or is likely to become essential to the work of 3GPP.

> The attention of the members of this Technical Specification Group is drawn to the fact **that 3GPP Individual Members have the obligation** under the IPR Policies of their respective Organizational Partners to **inform their respective** Organizational Partners **of Essential IPRs they become aware of**.
>
> The members take note that they are hereby invited:
>
> - to investigate in their company whether their company does own IPRs which are, or are likely to become Essential in respect of the work of the Technical Specification Group.
>
> - to notify the Director-General, or the Chairman of their **respective** Organizational Partners, of all potential IPRs that their company may own, by means of the IPR Statement and the Licensing declaration forms (e.g. see the ETSI IPR forms http://webapp.etsi.org/Ipr/).

2   Approval of the agenda

R1-072645	Draft Agenda for RAN1#49b meeting	RAN1 Chairman

Dirk Gerstenberger (Chairman) proposed the agenda for the meeting.

Discussion (Question / Comment):
Decision: The agenda was approved.

3   Approval of the minutes from previous meetings

R1-072646	Draft report of RAN1#49 meeting	MCC Support

The document was presented by Patrick Mérias

Discussion (Question / Comment): Mr Chairman expressed that minutes shall be reported by the secretary only and no company inputs should be written down directly into the minutes
Decision: The document is approved.

4　　　Liaison statement handling (LTE related LS)

Incoming LS

R1-072647	LS on neighbour cell lists and reading neighbour cell P-BCH	RAN2, NTT DoCoMo	= R2-072188

The document was presented by Sadayuki Abeta from NTT DoCoMo.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072648	LS on LTE latency analysis	RAN2, Ericsson	= R2-072193

The document was presented by Stefan Parkvall from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072649	Response to LS R2-071605 (R4-070714) on MBSFN cluster selection and reselection, and suitability criteria	RAN4, Nokia	= R4-070823

The document was presented by Jari Lindholm from Nokia.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072650	[DRAFT] LS on CQI reporting requirements for E-UTRA UE	RAN4, Nokia	= R4-070802

The document was presented by Timo Lunttila from Nokia.

Discussion (Question / Comment):
Decision: Document is noted. Document shall be revisited once discussion on CQI is reported (Tuesday session)

Friday: No revision available by the end of the week

Incoming LSs received during RAN1#49b WG meeting.

R1-073158	LS on RAN3 EMBMS architecture discussion and agreements	RAN3, NSN	= R3-071269

The document was presented by Joern Krause from NSN.

Discussion (Question / Comment):
Decision: Document is noted.

R1-073179	Synchronization in Radio Access Networks	ITU-T SG15, Ericsson, Orange, Alcatel-Lucent	

The document was presented by Dirk Gerstenberger from Ericsson and outlines the following actions for 3GPP RAN1, RAN3 and RAN4:

- Request for comments about the existing 3GPP Synchronization requirements with respect to ITU-T recommendations and on the proposal for clarification on the ITU-T Rec. G.823 and G.824.

- Request for 3GPP Synchronization future requirements

Discussion (Question / Comment): Mr Chairman suggested to leave the lead to RAN3 on these particular synchronization topics and to provide support on request.

Decision: Document is noted.

R1-073198	Response LS on neighbour cell lists and reading neighbour cell P-BCH	RAN4, Nokia	= R4-071084

The document was presented by Asbjörn Grovlen from Nokia.

Discussion (Question / Comment):
Decision: Document is noted.

The following LS has not been treated at RAN1#49b. Postponed to next WG meeting.

R1-073226	[DRAFT] LS on Complementary Time Domain Filter for Neighbour Cell Measurements	RAN4, Ericsson	= R4-071119

Outgoing LS

R1-073017	DRAFT LS response on maintenance of UL Synchronisation	Ericsson	

The document was presented by Stefan Parkvall from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted. Document shall be revised in R1-073169 in order to include the decisions from UL TA session and to consider the feedback from the discussion of R1-073017.

Wednesday: LS was agreed in R1-073185.

R1-073165	Physical-layer parameters to be configured by RRC	Ericsson	(R1-073019)

The document was shortly introduced by Erik Dahlman from Ericsson but not presented. This paper provides a first list of physical-layer parameters configurable by RRC with the intention to be communicated to RAN2.

Discussion (Question / Comment):
Decision: Drafting session is planned on Tuesday 26th 8:00AM and R1-073184 is reserved for the revised version.

Thursday: Further to a number of revisions (R1-073184→R1-073220), list of parameters is finally agreed as R1-073221.

LS R1-073211 to RAN2 is revised and agreed in R1-073222 (with R1-073221 as attachment to LS)

R1-073223	Draft LS on the dynamic range of UE transmission power	Panasonic	(R1-073177)

The document was presented by Hidetoshi Suzuki from Panasonic.

Discussion (Question / Comment):
Decision: Document is noted and agreed in R1-073230.

5.　　　Evolved UTRA and UTRAN

The following set of documents has not been treated during the session.

| R1-072992 | DL UL allocation period of 20ms for EUTRA TDD Frame Structure Type 1 | Nokia, Nokia Siemens Networks | |
| R1-072993 | DL UL allocation options for EUTRA TDD | Nokia, Nokia Siemens Networks | |

5.1   Updated Physical Layer Specifications

| R1-073021 | TS 36.201 v1.1.1 | Ericsson | |

The document was presented by Dirk Gerstenberger from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted and endorsed as v.1.2.0 in R1-073170.

| R1-073020 | TS 36.211 v1.1.2 | Ericsson | |

The document was presented by Stefan Parkvall from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted. Decision is taken to inform RAN2 about the current list of PhCH names in R1-073171 drafting LS. Off line discussion should go on during the week w.r.t OOK mapping.

Document is endorsed as v.1.2.0 in R1-073172.

Friday: LS R1-073171 is presented by Sadayuki Abeta from NTT DoCoMo and is revised and agreed in R1-073231.

| R1-072725 | New version of 36.212 | Qualcomm Europe | |

The document was presented Juan Montojo from Qualcomm.

Discussion (Question / Comment): Mr Chairman requested more time for every delegates to have a chance to review more deeply this late contribution and provide their comments
Decision: Document is noted. It shall be revised in R1-073173 by email approval until July 13th.

| R1-072959 | TS 36.214 v.1.0.1 | Nokia | |

The document was presented by Asbjörn Grovlen from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted and endorsed in R1-073175 as v1.1.0.

5.2   SCH and Cell Search

| R1-072663 | Cell Search E-mail Reflector Summary | Motorola | |

The document was presented by Amitava Ghosh from Motorola and reports the results of the email discussion w.r.t cell search from different companies.

Discussion (Question / Comment):
Decision: Document is noted. As result of this contribution and long debate afterwards, following statements are drawn:

- **Conclusion for PSC:**

- o   ZC sequence length =63 and PSC sequence length =63 (including DC)
- o   The root indices are M=n1, M=N-n1, M=n2
  - ▪   N=63, n1=29, n2=25
- o   Leave the remaining 9 sub-carriers reserved

- •   **Way forward on SSC:**
  - o   M-sequence based code
    - ▪   Generate a set of 31 sequences obtained as cyclic shifts of a single length 31 M-sequence generated from the primitive polynomial x^5+x^2+1 over GF(2)
    - ▪   Two short SSC codes selected from above set
    - ▪   Interleaved multiplexing of two short SSC sequences.
      - •   It is noted that whether to use the P-SCH as a phase-reference is an implementation issue
    - ▪   First and second sequence scrambled with a binary scrambling code depending on the P-SCH
      - •   FFS: Exact specification of scrambling code
    - ▪   Scrambling of the second sequence with a binary scrambling code corresponding to the index of the first sequence. Many-to-1 relation between scrambling code and first sequence index is not precluded.
      - •   FFS: Exact specification of scrambling code and relation of scrambling code to index of the first sequence
    - ▪   Mapping onto sub-carriers: 31 length sequence + DC + 31 length sequence
      - •   Leave the remaining 9 sub-carriers reserved
    - ▪   BPSK mapping of binary sequence

P_SCH

R1-073087	CP length of P-SCH for TDD frame structure type 2	Samsung	

The document was presented by (…) from Samsung. In this contribution, discussion on the CP length design of P-SCH, aiming to maximize the commonality between frame structure type 2 and frame structure type 1 is provided.

Discussion (Question / Comment):
Decision: Document is noted.

R1-073167	CP Detection in the Initial Cell Search for the TDD Frame Structure Type 2	ZTE, CATT, Huawei	(R1-072911)

The document was presented by Zuo Zhisong from ZTE and shows the evaluation of two kinds of CP length blind detection methods for the TDD frame structure type 2, which are based on DL RS and S-SCH respectively.

Discussion (Question / Comment):
Decision: Document is noted.

Conclusion: No change of current FS2. Correct DwPTS length (both for short and extended CP) in 36.211 Figure 2 to 2560, remaining 12 samples added in the end of UpPTS.

The following set of documents has not been treated during the session.

R1-072660	ZC sequence selection for P-SCH	Motorola	
R1-072726	Details on PSC sequence design	Qualcomm Europe	
R1-072818	P-SCH for LTE cell search	NEC Group	
R1-072860	P-SCH design	LGE	
R1-072896	Optimised P-SCH sequences	Huawei	
R1-073161	Primary SCH Design and Performance	Texas Instruments	(R1-072836)

R1-073084	ZC Based P-SCH Sequences and Initial Frequency Estimation Uncertainty	Broadcom	

S_SCH

R1-072861	S-SCH design	LGE	

The document was presented by (…) from LGE.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072727	Details on SSC sequence design	Qualcomm Europe	

The document was presented by Juan Montojo from Qualcomm.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072784	PN-Hadamard Orthogonal Sequences for S-SCH in E-UTRA	InterDigital Communications Corporation	

The document was presented by Ron Murias from InterDigital.

Discussion (Question / Comment):
Decision: Document is noted.

The following set of documents has not been treated during the session.

R1-072661	Scrambling Method for Two S-SCH Short Code	Motorola	
R1-072662	Evaluations of number of sub-carriers occupied by S-SCH	Motorola	
R1-072757	Further Discussion on the Mapping of Short Sequences for S-SCH	Nortel	
R1-072811	Design of S-SCH sequences	ETRI	
R1-072819	S-SCH for LTE cell search	NEC Group	
R1-072837	Secondary SCH Design and Performance	Texas Instruments	
R1-072897	S-SCH sequences based on concatenated Golay-Hadamard codes	Huawei	
R1-072910	Scrambling Method for S-SCH	ZTE	
R1-072940	Scrambling Method for S-SCH for E-UTRA Downlink	NTT DoCoMo	
R1-072941	S-SCH Structure for E-UTRA Downlink	NTT DoCoMo	
R1-073023	Synchronization signals for LTE	Ericsson	

Cell Search

The next document has not been treated during the session.

R1-072942	Neighbouring Cell Search Time Performance in E-UTRA	NTT DoCoMo	

5.3   BCH

R1-073024	Summary of e-mail discussion on BCH physical-layer structure	Ericsson	

The document was presented by Erik Dahlman from Ericsson.

Further to RAN1 #49 decisions regarding the BCH physical-layer structure, this document summarizes the email discussions since then and makes proposals for decision.

Discussion (Question / Comment):
Decision: Document is noted.

Conclusions are as follows:

- The coded BCH transport block is mapped to four subframes (subframes #0) within a 40 ms interval

- 40 ms timing is blindly detected, i.e. there is no explicit signalling indicating 40 ms timing.

- Coded BCH mapped to 4 OFDM symbols within a subframe. In case of extended CP, this implies a restriction in number of idle symbols in case of TDD FS type 1 to three idle symbols.

- Each subframe should be self-decodable, approach 2 is agreed

- The downlink reference-signal transmit power is not signalled on the BCH but as part of the dynamic system information.

Number of symbols carrying PBCH

R1-072943	BCH Structure for E-UTRA Downlink	NTT DoCoMo	

The document was presented by (…) from NTT DoCoMo and presents the number of P-BCH transmission bursts within a 40-msec TTI, detection of the 40-msec TTI boundary, the scheme for multiplexing the P-BCH into a sub-frame, and the transmit diversity scheme for the P-BCH.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072960	Primary BCH performance; coverage and detection	Nokia Siemens Networks, Nokia	

The document was presented by Mieszko Chmiel from NSN and provides an analysis of the performance of the primary broadcast channel (P-BCH) channel in a 1.25 MHz bandwidth or 6 RBs.

The multiplexing structure of the P-BCH is addressed in R1-072962.

Discussion (Question / Comment):
Decision: Document is noted.

The following set of documents has not been treated during the session.

R1-072665	P-BCH Design	Motorola	
R1-072728	Structure of PBCH and location of D-BCH	Qualcomm Europe	
R1-072962	On the multiplexing structure of the primary broadcast channel	Nokia Siemens Networks, Nokia	

PBCH coding and mapping structure

The following set of documents has not been treated during the session.

R1-073123	P-BCH structure	Samsung	
R1-072653	P-BCH to CCPCH mapping scheme for 40msec TTI timing blind detection	Toshiba	
R1-072759	The detection of P-BCH TTI	Nortel	
R1-072813	P-BCH structure considering soft-combining	ETRI	

Transmit diversity for PBCH

| R1-072730 | Open Loop TxDiv for PBCH | Qualcomm Europe | |

The document was presented by Juan Montojo from Qualcomm and provides a comparison of the link performance for both VTSTD and SFBC transmit diversity and channel estimation schemes for PBCH in the 2x2 antenna configuration.

Discussion (Question / Comment):
Decision: Document is noted.

| R1-072812 | Efficient diversity scheme for P-BCH transmission | ETRI | |

The document was presented by (…) from ETRI and provides system level simulation results and analysis for each candidate TX Div scheme for both ANT cases, and a guideline for the selection of the Div scheme for PBCH.

Discussion (Question / Comment):
Decision: Document is noted.

Agreed compromise proposal:

- 340 hypotheses on SSC, and SFBC based TX diversity scheme
  - For 2 TX antennas SFBC
  - For 4 TX antennas based on SFBC + FSTD
- No antenna information carried on SSC for SFBC

SFBC+FSTD

The following set of documents has not been treated during the session.

R1-072665	P-BCH Design	Motorola	
R1-072961	Further results on transmit diversity and channel estimation for primary BCH	Nokia Siemens Networks, Nokia	
R1-073025	Transmit Diversity for Primary BCH in E-UTRA DL	Ericsson	
R1-073102	Link Performance of 4-Tx Antenna diversity for P-BCH	Samsung	
R1-072651	Performance Evaluation of various CCPCH Structures employing Transmit Diversity	Toshiba	
R1-072758	Simulation Comparison of Tx Diversity Schemes for P-BCH	Nortel	

TDD specific issues

The following set of documents has not been treated during the session. Mr Chairman requested companies to continue off-line discussion regarding TDD specifics issues.

| R1-072666 | LTE TDD split signaling on D-BCH | Motorola | |
| R1-073147 | Frame configurations for TDD frame structure type 1 | IPWireless | |

R1-073040	Idle subframes for TDD	Ericsson	

LS to RAN2

The following set of documents has not been treated during the session. Mr Chairman requested the companies to bring a common response to RAN2 LS as far as possible during the week.

R1-072965	Proposed response to RAN2 LS on System Information (R1-072622)	Nokia Siemens Networks, Nokia	
R1-072817	Proposed response to RAN2 LS on System Information	NEC Group	
R1-073152	Response to TSG RAN WG1 LS on "System Information"	Motorola	
R1-073153	Draft LS" RAN1 response to RAN2 LS System Information"	Motorola	
R1-073154	UE capabilities	Motorola	

R1-073192	Draft LS response on System Information (Simultaneous reception of system information and unicast data)	Motorola, NSN, NEC, Panasonic, Nokia	

The document was presented by Jean-Aicard Fabien from Motorola.

Discussion (Question / Comment):
Decision: Document is noted.

Thursday: LS is revised and agreed in R1-073219.

The following set of documents has not been treated during the session.

R1-072652	Soft-Combining for CCPCH	Toshiba	
R1-072664	BCH/SCH transmission for odd number of RB	Motorola	
R1-072713	SFN Synchronization for LTE UEs	SHARP	
R1-072729	Capacity of PBCH for SIMO	Qualcomm Europe	
R1-072820	Maximizing radio efficiency of BCCH transmission on DL-SCH	NEC Group	
R1-072821	One Bit info in network maintained neighbour list	NEC Group	

5.4   RACH

R1-072667	Random Access E-mail Reflector Summary	Motorola	

The document was presented by Amitava Ghosh from Motorola and collects the result of email discussions on RACH.

Discussion (Question / Comment):
Decision: Document is noted.

Conclusions from email discussion:

- Signalling of one index number and cyclic shift duration. The exact definition of the index number is FFS.

- Predefined random access slot configurations (at most 4bits)

- 16 shifts for $N_{CS.}$ Value of the shift FFS.

- Use a dedicated scheduling request channel.

In R1-072667, 16 shifts for N_{CS} was agreed (third bullet). Nokia disagreed with the conclusion and proposed to look at R1-072966.

| R1-072966 | Flexible RACH signature number | Nokia Siemens Networks, Nokia | |

The document was presented by (…) from Nokia and proposes the extension of the N_{cs} set to 32 values so that the more flexible scheme (where the total number of sequences could vary and be larger than 64) could be fully utilized.

Discussion (Question / Comment): No formal agreement could be reached further to the discussion. Conclusions remain as they are.
Decision: Document is noted.

The following set of documents has not been treated during the session.

R1-072731	Scheduling requests using CQI	Qualcomm Europe	
R1-072800	RACH sequence allocation and indication to the cell	Panasonic	
R1-072801	RACH sequence allocation for efficient matched filter implementation	Panasonic	
R1-072838	Random Access Preamble L1 Parameters in E-UTRA	Texas Instruments	
R1-072862	Additional Burst Types for Non-Synchronized RACH	LGE	
R1-072863	Cyclic Shift Configuration Set for Non-Synchronized RACH	LGE	
R1-072864	Preamble Allocation for Non-Synchronized RACH	LGE	
R1-072892	RACH in LTE TDD frame structure type 2	Huawei	
R1-072898	Specification of restricted set of cyclic shifts of root Zadoff-Chu sequences	Huawei, Panasonic	
R1-072899	Multiple values of cyclic shift increment NCS	Huawei	
R1-072937	On the specification of restricted set of cyclic shifts of root Zadoff-Chu sequences	Huawei, Panasonic, LGE, Nokia, Nokia Siemens Networks	
R1-073026	RACH transmission timing alignment for LTE TDD	Ericsson	
R1-073058	Contention and Dedicated RACH signature allocation	LG Electronics Inc.	
R1-073059	Transport Format in RACH signature	LG Electronics Inc.	
R1-073060	Comparison of Formula for Restricted Cyclic shift Set	LG Electronics Inc., Nokia, Nokia Siemens Networks	
R1-073113	Procedure and Algorithm to Determine the Cyclic Shift Restricted Sets and Associated Signalling for RACH	Samsung	
R1-073148	RACH for TDD frame structure type 1	IPWireless	
R1-073168	Using Restricted Preamble Set for RACH in High Mobility Environments	Samsung	(R1-073112)
R1-073178	Limitation of RACH sequence allocation for high mobility cell	Panasonic	(R1-072802)

5.5   Channel coding

R1-072927	Summary of the e-mail discussion on channel coding	NTT DoCoMo	

The document was presented by Sadayuki Abeta from NTT DoCoMo and provides the results of email discussion on listed below topics:

- Rate matching for turbo code

- Rate matching for convolutional code

- Coding chain (CRC attachment, channel interleaving)

- Number of HARQ processes

Discussion (Question / Comment):
Decision: Document is noted.

HARQ Processing

R1-072674	HARQ Timing and Number of HARQ Processes	Motorola	

The document was presented by Jean-Aicard Fabien from Motorola and outlines a potential acknowledgement timing scheme for both downlink and uplink, leading to a recommendation on the minimum number of HARQ processes to be supported.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072760	Discussion on LTE channel coding	Nortel	

The document was presented by (…) from Nortel.

Discussion (Question / Comment):
Decision: Document is noted.

R1-073027	On the number of hybrid ARQ processes in LTE	Ericsson	

The document was presented by Stefan Parkvall from Ericsson and addresses some aspects of hybrid ARQ and the associated rate matching.

Discussion (Question / Comment):
Decision: Document is noted.

R1-073074	Number of HARQ processes	Qualcomm Europe	

The document was presented by Durga Malladi from Qualcomm.

Discussion (Question / Comment):
Decision: Document is noted.

R1-073108	Analysis of per code block CRC and per transport block CRC	Samsung	

The document was presented by Zhouyue Pi from Samsung and proposes to add code block CRC to improve the pipelining capability of the receiver.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072808	Parameter combinations in LTE	Panasonic	

The document was presented by Hidetoshi Suzuki from Panasonic and addresses the number of parameter combinations in LTE, particularly the number of

- physical resource combinations

- transport block size combinations

- rate matching combinations

Discussion (Question / Comment): No concrete proposal so far
Decision: Document is noted.

Way forward:

- Number of HARQ processes
  - o FFS via email discussion: select one value from the range 6 - 8 processes (FDD)
  - o FFS via email discussion: number of processes for TDD, depends on UL/DL configuration
- Number of RV=4
- Constellation rearrangement
  - o FFS until next meeting or resolve via email discussion
- CRC per code block
  - o FFS until next meeting or resolve via email discussion
- Equal split of soft buffer memory between processes
  - o FFS until next meeting or resolve via email discussion
- Code-rate dependent switching between RV=0 vs RV=3
  - o Left for implementation
- Sub-block interleaver optimization
  - o FFS via email discussion: "old" vs "new" sub-block interleaver
- RE assigned to each codeblock segment for rate matching
  - o FFS until next meeting or resolve via email discussion

Channel Interleaving

| R1-072659 | Performance Evaluation of Codeblock based flexible-size Channel Interleaving | Alcatel-Lucent | |

The document was presented by Rainer Bachl from Alcatel-Lucent and discusses the performance of codeblock based channel interleaving in the framework of codeblock based circular buffer rate matching.

Discussion (Question / Comment):
Decision: Document is noted.

| R1-072671 | Uplink channel interleaving | Motorola | |
| R1-072672 | Downlink channel interleaving | Motorola | |

Both documents were presented by Brian Classon from Motorola.

Discussion (Question / Comment):
Decision: Document is noted.

| R1-073174 | Transmission of coded blocks across TTI | Qualcomm Europe | (R1-072733) |

The document was presented by Durga Malladi from Qualcomm and addresses the impact of a channel interleaver with a circular buffer based rate matching structure.

Discussion (Question / Comment):
Decision: Document is noted.

| R1-073166 | LTE channel interleaving | ZTE | (R1-072918) |

The document was presented by (…) from ZTE.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072967	Time Interleaving for LTE Shared TrCH Processing	Nokia Siemens Networks, Nokia	

The document was presented by Thomas Chapman from NSN and provides analysis of cross-code block interleaving in LTE DL and UL.

Discussion (Question / Comment):
Decision: Document is noted.

R1-073159	Frequency Interleaving for LTE Shared TrCH Processing	Nokia Siemens Networks, Nokia	(R1-072968)

The document was presented by Thomas Chapman from NSN.

Discussion (Question / Comment):
Decision: Document is noted.

R1-073111	Performance of OFDM symbol based channel interleaver	Samsung	

The document was presented by Zhouyue Pi from Samsung and considers some channel coding and channel interleaving aspects that can contribute to the pipelining capability of the receiver.

Discussion (Question / Comment):
Decision: Document is noted.

R1-073129	Row-column based channel interleaver for E-UTRA	Samsung	

The document was presented by Zhouyue Pi from Samsung and proposes detailed channel interleaver design for downlink and uplink of E-UTRA.

Discussion (Question / Comment):
Decision: Document is noted.

Way forward:

- DL: WA on 1-OS-based interleaving on RE level
  - FFS whether additional S/P bit interlacing or S/P separation in FD
  - FFS whether the interleaver is an identity interleaver (ie no interleaving)
- UL: FFS

Convolutional Coding

R1-073033	Complexity and Performance Improvement for Convolutional Coding	Ericsson	

The document was presented by Thomas Cheng from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072735	Tail biting convolutional coding	Qualcomm Europe	

The document was presented by Durga Malladi from Qualcomm and compares the performances of different convolutional codes.

Discussion (Question / Comment):
Decision: Document is noted.

R1-073197	Way forward for LTE convolutional code	Ericsson, Nokia Siemens Networks, Nokia, Motorola, Nortel, ZTE, NTT DoCoMo, LGE, Broadcom, Samsung, ITRI	

The document was presented by Brian Classon from Motorola.

Discussion (Question / Comment):
Decision: Document is noted. The Way forward is agreed in principle (to be nevertheless confirmed on email reflector)

R1-072670	Convolutional code rate matching in LTE	Motorola	

The document was presented by Brian Classon from Motorola and discusses how to modify the circular buffer based rate matching algorithm described in R1-072139 to provide the best performance.

Discussion (Question / Comment):
Decision: Document is noted. Additional results can be found in R1-073203.

R1-072867	Tail-biting convolutional code rate matching	LGE	

The document was presented by (…) from LGE.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072919	Convolutional code rate matching in LTE	ZTE	

The document was presented by (…) from ZTE.

Discussion (Question / Comment):
Decision: Document is noted.

R1-073034	Convolutional Coding Rate Matching Based on Circular Buffers	Ericsson	

The document was presented by Thomas Cheng from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted.

R1-073194	LTE Convolutional Code Rate Matching	Nokia Siemens Networks, Nokia	(R1-072969)

The document was presented by Thomas Chapman from NSN.

Discussion (Question / Comment):
Decision: Document is noted.

Following the debate, following document was produced:

R1-073207	Way forward for LTE convolutional code rate matching	Broadcom, Ericsson, Motorola, Nokia-Siemens Networks, Nokia, Nortel, Qualcomm, Samsung, ZTE	

As a way forward the following is proposed:

- Circular buffer rate matching with a 32 column interleaver

- No interlacing of circular buffer (P1, then P2, then P3 in circular buffer)

- The following column permutation: [1, 17, 9, 25, 5, 21, 13, 29, 3, 19, 11, 27, 7, 23, 15, 31, 0, 16**,** 8, 24, 4, 20, 12, 28, 2, 18, 10, 26, 6, 22, 14, 30].

Decision: Way forward as stated in the document is approved.

Turbo Code Rate Matching

R1-073031	Combined Partial Depadding and Rate Matching Based on Circular Buffers	Ericsson	

The document was presented by Thomas Cheng from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted and agreed in principle. Both padding and dummy bits are fed into the circular buffer. Padded bits for systematic and parity 1 bits are removed when the coded bits are read out of the circular buffer.

The exact text for 36.212 shall be prepared by the editor.

The following set of documents has not been treated during the session.

R1-072970	LTE TrCH Processing Chain	Nokia Siemens Networks, Nokia	
R1-072669	Issues related to turbo code rate matching	Motorola	
R1-072673	RE sizing for turbo code block segments	Motorola	
R1-072732	RVs needed for circular buffer based RM	Qualcomm Europe	
R1-072736	Transmission of coded bits from circular buffer	Qualcomm Europe	
R1-072780	Performance evaluation of Circular Buffer Rate Matching schemes for E-UTRA	InterDigital Communications Corporation	
R1-072866	On the considerations of sub-block interleaver design for CBRM	LGE	
R1-072868	Mapping of encoded code blocks to layers in 4 tx antennas	LGE	
R1-072906	Bit mapping and constellation rearrangement	ZTE	
R1-072920	Optimization of Circular Buffer Rate Matching	ZTE	
R1-073028	Catastrophic Puncturing Avoidance	Ericsson	
R1-073029	Performance of Improve Circular Buffer Rate Matching Design	Ericsson	
R1-073030	Considerations of CBRM and HARQ Operations	Ericsson	
R1-073103	Performance of orthogonal Hybrid ARQ for multi-user MIMO in E-UTRA uplink	Samsung	
R1-073128	HARQ symbol to RE mapping	Samsung	
R1-073130	HARQ redundant symbol selection for synchronous HARQ	Samsung	
R1-073163	Decoder Performance for CBRM Algorithms	Ericsson	
R1-073164	Further Details and Performance of CBRM Algorithms	Ericsson	
R1-073188	Adoption of 1st rate matching and modified IR-HARQ	Fujitsu	(R1-073150)
R1-073193	Turbo Rate Matching Fine Tuning	Nokia Siemens Networks, Nokia	

| R1-073200 | An R.V. definition scheme with variable starting Positions | LGE | (R1-072865) |
| R1-073203 | Additional results on convolutional code rate matching | Motorola | |

5.6　　UL/DL Power Control

| R1-072973 | Summary of Power Control E-mail Discussion | Nokia Siemens Networks | |

The document was presented by Mieszko Chmiel from NSN.

Discussion (Question / Comment):
Decision: Document is noted.

Conclusions from the email discussion:

- ~~PC formula is implemented in the UE~~

- Power headroom information is needed in the eNB. Signaling is FFS

- PC for sounding RS

  o Follows PUSCH with an offset

- PC for persistent scheduling

  o Same mechanism as PUCCH

Conclusions on PUCCH:

- PUCCH PC as described in R1-073209.

| R1-073209 | Way forward on Uplink Power Control for PUCH | CATT, Ericsson, Fujitsu, IPWireless, Mitsubishi Electric, Motorola, NEC, Nokia, NSN, Nortel, NTT DoCoMo, Orange, Panasonic, Philips, Qualcomm, Samsung, Sharp, TI, T-Mobile, Toshiba Corp., Vodafone, ZTE |

The document was presented by Durga Malladi from Qualcomm.

Discussion (Question / Comment):
Decision: Document is noted and way forward agreed.

Conclusions on PUSCH:

Friday: Following Way forward has been proposed and presented.

| R1-073224 | Way forward on Power Control of PUSCH | CATT, Ericsson, LGE, Motorola, Nokia, Nokia-Siemens, Nortel, NTT DoCoMo, Orange, Panasonic, Philips, Qualcomm, Samsung, Sharp, TI, Vodafone |

The document was presented by Durga Malladi from Qualcomm.

Discussion (Question / Comment):
Decision: Document is noted and way forward agreed.

The following set of documents has not been treated during the session.

R1-072675	Uplink Power Control: Details	Motorola	
R1-072676	Resource element energy settings for data, control, and RS	Motorola	
R1-072737	PUCCH power control - link level analysis	Qualcomm Europe	
R1-072738	PUCCH power control - system level analysis	Qualcomm Europe	
R1-072740	Understanding UL power control for E-UTRA	Qualcomm Europe	
R1-072761	UL Power Control with Fractional Frequency Reuse for E-UTRA	Nortel	
R1-072781	E-UTRA Uplink Power Control Proposal and Evaluation	InterDigital Communications Corporation	
R1-072839	On UL Power Control in E-UTRA	Texas Instruments	
R1-072869	Power control of E-UTRA uplink channels	LGE	
R1-072870	Power control of PUSCH	LGE	
R1-072909	One Criterion for Scaling Interference Impact in LTE	ZTE	
R1-072926	Overload indicator and Tx power of RACH preamble from handover UE	Fujitsu	
R1-072944	Intra-cell Transmission Power Control Method in E-UTRA Uplink	NTT DoCoMo	
R1-072971	Cluster based Overload Indication	Nokia Siemens Networks, Nokia	
R1-072972	Uplink Power Control Performance Results	Nokia Siemens Networks, Nokia	
R1-073035	Intra-cell Uplink Power Control for E-UTRA – Comments on Open Issues and Proposed Mechanism	Ericsson	
R1-073036	Intra-cell Uplink Power Control for E-UTRA – Evaluation of Fractional Path Loss Compensation	Ericsson	
R1-073037	Downlink power setting	Ericsson	
R1-073062	On the UL power control rule for the UE	Alcatel-Lucent	
R1-073063	Power Control for RACH	Alcatel-Lucent	

5.7   Inter-cell Interference Coordination

R1-072974	Downlink interference coordination	Nokia, Nokia Siemens Networks	

The document was presented by Asbjörn Grovlen from Nokia and addresses the downlink LTE performance (FDD mode) for cases with interference coordination with soft frequency re-use (SFR). Evaluations have been performed for the following configurations:

- Traditional time-frequency domain proportional fair (PF) with flat power spectrum (reuse one)

- Dynamic QoS aware scheduling using flat power spectrum (reuse one)

- Static soft frequency re-use (SFR) with CQI-based grouping scheduling

Discussion (Question / Comment):
Decision: Document is noted.

R1-072922	Voice over IP resource allocation benefiting from Interference Coordination	Alcatel-Lucent	

The document was presented by Christian G. Gerlach from Alcatel-Lucent and proposes to follow in downlink the derived rules for the DVRB definition, to exploit the gains by Interference Coordination scheduling for VoIP or persistent scheduling.

Discussion (Question / Comment):
Decision: Document is noted.

R1-073038	Inter-cell Interference Coordination for E-UTRA – Overload Indicator for Uplink Power Control	Ericsson	

The document was presented by Stefan Parkvall from Ericsson and discusses the open issue of the format of the overload indicator, whether the overload indicator should be frequency dependent or not, an absolute or relative measure should be used, the number of bits used to represent it, and whether it should be periodic or event triggered.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072945	Transmission Method of Overload Indicator for Inter-cell Transmission Power Control in E-UTRA Uplink	NTT DoCoMo	

The document was presented by (…) from NTT DoCoMo and presents the necessity for OI transmission at the transmission time interval (TTI) level interval for an RB-level narrow transmission bandwidth, and then, presents an OI transmission method that indicates the worst interfering UEs (i.e., CAZAC sequences) with priority.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072739	Details on the OI transfer over the X2 interface	Qualcomm Europe	

The document was presented by Durga Malladi from Qualcomm and presents some design considerations for the inter-eNB *logical* X2 interface.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072921	Impact of Uplink Inter-cell Interference Coordination on Uplink Power Control	Alcatel-Lucent	

The document was presented by Christian G. Gerlach from Alcatel-Lucent.

Discussion (Question / Comment):
Decision: Document is noted.

R1-073187	Interference Coordination Framework with results	Alcatel-Lucent	(R1-072925)

The document was presented by Christian G. Gerlach from Alcatel-Lucent and investigates the principles to be followed in semi-static Interference Coordination.

Discussion (Question / Comment):
Decision: Document is noted.

Proposals:

For DL:　　　Do not specify additional signalling or request/grant for hard/soft mute per frequency part in the neighbouring cells

For UL:　　　Use OI to indicate overload per frequency part, or request/grant for interference burden per frequency part in the neighbouring cells

Way forward:

- Overload indicator to neighbouring cells to indicate UL interference in the own cell exceeding a trigger event on a part of the bandwidth
- Continue discussion on whether request/grant based method should be added for UL/DL

The following set of documents has not been treated during the session.

R1-072714	Uplink Inter-cell Interference Management for LTE	SHARP	
R1-072762	Further Discussion on Adaptive Fractional Frequency Reuse	Nortel	
R1-072840	Fractional Time Re-Use Interference Co-Ordination in E-UTRA DL	Texas Instruments	
R1-073039	On Inter-cell Interference Coordination Schemes without/with Traffic Load Indication	Ericsson	
R1-073114	Improving cell-edge performance by Inter-Cell Interference Coordination	Samsung	

5.8　　　UL Timing Control

| R1-072975 | Remaining Issues for Uplink Timing Control | Nokia Siemens Networks, Nokia | |

The document was presented by Timo Lunttila from Nokia and proposes to use a 4-bit TA when maintaining timing alignment for synchronized UE. For establishing timing alignment for unsynchronized UE, it is proposed that multiple, e.g., 2 TA formats are specified to reduce the number of bits used for TA signalling while providing support for cell ranges up to 100 km. Finally, the use of sounding reference signal for timing estimation when UE has no data to transmit is supported.

Discussion (Question / Comment):
Decision: Document is noted.

| R1-072677 | Uplink Synchronization Maintenance and Timing Advance | Motorola | |

The document was presented by Ravikiran Nory from Motorola and discusses the issues of synchronization maintenance and how the timing advance command will be transmitted.

Discussion (Question / Comment): Need to check with RAN2 what has been decided on their side
Decision: Document is noted.

| R1-072822 | Discussion on Uplink Synchronization Maintenance | NEC Group | |

The document was presented by (…) from NEC and discusses pros. and cons. of UL synchronization maintenance methods. NEC view on UL synchronization maintenance is,

- eNodeB maintains UL timing periodically,
  - ° requests UEs to transmit UL RS.

    °   with the UE-specific periodicity related with the UE speed (at most 2Hz agreed in RAN1).
    °   conveys TAs to UEs.

 If the influence of corner effect on the performance is significant, the following may be applied in addition.

- eNodeB maintains UL timing,
   °   with UL transmission, e.g. DM-RS, RS in L1/L2 control signal.

NEC preference of DL channel for conveying TAs is MAC signalling.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072841	Simulation of Uplink Timing Error Impact on PUSCH	Texas Instruments	
R1-072842	On the need for UE-initiated Timing Adjustment Requests in E-UTRA	Texas Instruments	

Both documents were presented by Pierre Bertrand from TI.

R1-072841 provides detailed multi-user link-level BLER simulations, and shows that about +/-0.5 μsec timing error leads, in a worst-case scenario where adjacent UEs experience opposite timing errors, to less than 0.5 dB loss in uplink BLER performance at 10% BLER point, and that a full multiplexing of user SRSs can be supported without apparent degradation in uplink frequency-scheduled BLER.

R1-072842 analyzes the time varying characteristics of the power delay profile (PDP) in urban environments. It proposes that the periodic approach is complemented with a UE driven timing adjustment (TA) request, upon observed change in DL PDP.

Discussion (Question / Comment):
Decision: Both documents are noted.

5.9   Physical Layer Measurements

R1-073043	Summary of e-mail discussions on measurements	Ericsson	

The document was presented by Dirk Gerstenberger from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted.

R1-073042	UE TX power measurement	Ericsson	

The document was presented by Ylva Jading from Ericsson and proposes an absolute UE TX power measurement containing a report of the *transmitted UE power per resource block* with the purpose to make accurate link adaptation following multipath fading for low UE speed possible for high UL data rates and capacity.

Discussion (Question / Comment):
Decision: Document is noted. Discussion shall continue off-line and potential results reported in R1-073213.

Friday: Continue discussion on the details of TX power measurement.

R1-072977	Introduction of a DL RS TX power eNodeB measurement for LTE	Nokia Siemens Networks	

The document was presented by Joern Krause from NSN and provides a text proposal for the introduction of a new eNode B measurement "DL RS TX power" for LTE in TS 36.214.

Discussion (Question / Comment):
Decision: Document is noted. Discussion shall continue off-line and potential results reported in R1-073214.

Friday: Text proposal in R1-073214 is approved.

| R1-072976 | Update of RSRP measurement definition for LTE | Nokia Siemens Networks, Nokia | |

The document was presented by Joern Krause from NSN and discusses open issues of the RSRP UE measurement for LTE.

Discussion (Question / Comment):
Decision: Document is noted. Revision shall be provided in R1-073212.

Friday: Revision in R1-073212 is approved.

| R1-073041 | Reference Signal Received Quality, RSRQ, measurement | Ericsson | |

The document was presented by Ylva Jading from Ericsson and analyzes the need for an additional physical layer measurement, reference signal received quality RSRQ, for improved handover performance and thereby decreased drop rate.

Discussion (Question / Comment): Motorola raised the question for additional discussion to find the useful measurements.
Decision: Document is noted. Discussion shall continue off-line and potential results reported in R1-073215

Friday: Further revision from R1-073215 in R1-073229 is approved. LS R1-073232 to RAN4 (Cc RAN2, RAN3) shall be prepared (deadline is 6th July)

| R1-072678 | MBSFN subframe transmission indication | Motorola | |

The document was presented by Jean-Aicard Fabien from Motorola.

Discussion (Question / Comment):
Decision: Document is noted.

| R1-072963 | Signaling of MBSFN subframe allocation in D-BCH | Nokia Siemens Networks, Nokia, Huawei | |

The document was presented by Mieszko Chmiel from NSN.

Discussion (Question / Comment):
Decision: Document is noted.

Conclusion:

Working Assumption is on having both MBSFN presence indicator and MBSFN difference indicator for the neighbouring cells on the D-BCH of the serving cell. Draft LS to RAN2/3 in R1-073216.

Friday: LS is agreed in R1-073228.

| R1-073155 | Clarification of work split on eNB measurements | NTT DoCoMo, T-Mobile, Telecom Italia, China Mobile, Vodafone, Telefonica, TeliaSonera, Orange, KPN, AT&T | (R1-072928) |

The document was presented by Sadayuki Abeta from NTT DoCoMo and discusses some high level issues regarding eNB measurements and proposes the work split among the involved RAN WGs.

> RAN WG1 is requested to study feasibility in defining the physical layer measurements, including those used internally at eNBs that have critical impact on the system performance. RAN WG1 is requested to specify the definitions of the measurements for those identified necessary and feasible.

Discussion (Question / Comment):
Decision: Document is noted.

R1-073156	Initial list of eNB measurements	NTT DoCoMo, Orange, AT&T, T-Mobile, China Mobile, Telecom Italia, Telefonica, TeliaSonera, KPN, Vodafone	(R1-072929)

The document was presented by Sadayuki Abeta from NTT DoCoMo and provides operators's view for the initial list of measurement items and their concrete use cases. It is requested that the appropriate WGs take over the main responsibility in standardising these measurements.

Discussion (Question / Comment): Mr Chairman proposed that RAN1 takes the list as basis for further work and tries to define the way to handle the measurements RAN1 will be in charge of.
Decision: Document is noted. Email discussion shall follow on feasibility, necessity and definitions of physical layer measurements eNB as part of the email discussion on measurements.

The following set of documents has not been treated during the session.

R1-072741	Measurements bandwidth and filtering	Qualcomm Europe	
R1-073064	Physical Layer eNodeB measurements for a standardized interface with OAM	Alcatel-Lucent	

5.10   MIMO, Transmit Diversity and Beamforming

Decision was agreed in the agenda of the week to conduct parallel session on MIMO topics. Results of this session have been reported in following document:

R1-073225	MIMO AH Summary	AH Chairman	

The document was presented by Juho Lee from Samsung as Ad Hoc chairman.

Discussion (Question / Comment):
Decision: Document is noted, including additional enhancement techniques for 4TX SU-MIMO precoding.

In R1-073206 (Text proposal for TS36.211 for 4TX antenna SU-MIMO codebook), it is agreed to include the technical decisions from text proposal on section 5.3.4.2.3 in the next version of 36.211.

All other decisions by the MIMO AH are endorsed.

5.10.1   DL Precoding Details, 4 antenna Codebook

R1-**072935**   LTE MIMO: Flexible Codebook Design for Improved Performance   AT&T

R1-**072936**   LTE MIMO: Householder vs DFT matrix based codebooks AT&T

4TX SU-MIMO precoding codebook proposals

R1-**072843**   Way Forward on 4-Tx Antenna Codebook for SU-MIMO   Texas Instruments, Motorola, Nokia, Ericsson, NTT DoCoMo, Panasonic, Freescale Semiconductor, Nortel, Huawei, Broadcom Corporation, Comsys Mobile, Marvell Semiconductor, Nokia Siemens Networks, InterDigital, Sharp, AT&T

R1-**072658**   Codebook aspects for DL SU-MIMO Schemes for cross-polarised Antennas   Alcatel-Lucent

R1-**073181**   Way-forward on Codebook for SU-MIMO Precoding   Samsung

R1-**072913**   4Tx Antenna Codebook for SU-MIMO   ZTE

R1-**073045**   4 Tx Precoding Codebooks for Dual-Polarized Antenna Setup in LTE DL Ericsson

Conclusion

- Working assumption for 4TX SU-MIMO precoding

  o The codebook proposal of Tdoc 2843.

    ▪ Show the hidden block diagonal structure explicitly in the codebook description -> text proposal in R1-073206 agreed with clarification that "Annex" is meant for "Informative Annex"

    ▪ AH chairman's remark: "u" in equation of page 2 is a typo of "u_n".

- Other works (e.g. control signalling design etc) related to the LTE MIMO precoding codebook is supposed to continue based on the working assumption

- Additional enhancements were discussed as below but not agreed upon.

  o Whether to define multiple codebooks depending on scenario (e.g., single polarization / dual polarization)?

  o Introduction of 64 elements codebook

  o Introduction of additional differential codebook

CDD precoding

R1-**072981**   Specification needs for the support of small delay CDD/PSD based precoding   Nokia, Nokia Siemens Networks, Motorola, Broadcom Corporation

R1-**073182**   Text Proposal for TS 36.211 Regarding CDD Design Ericsson, NTT DoCoMo, Qualcomm, Huawei, Panasonic, AT&T, ETRI, ITRI,CHTTL,Toshiba, Sharp, LGE, InterDigital, Orange, Mitsubishi

Conclusion: Text proposal of 3182 agreed.
AH chairman's remark: subscripts of delta in Table 6 is a typo and hence should be deleted. Text proposal is based on the version of TS 36.211 endorsed in RAN1#49 meeting.

Precoding adaptation

UE feedback

5.10.2   DL MU-MIMO

R1-**072693**   DL MU-MIMO Summary   Motorola

R1-**072985**   LTE Multiuser MIMO with Frequency-Domain Packet   Nokia, Nokia Siemens Networks

R1-**073205**   Way forward for MU-MIMO Huawei, Freescale Semiconductor

Supporters: Alcatel-Lucent

R1-**073208**   R1-073046   SDMA for MU-MIMO Support in E-UTRA DL with Correlated Antenna Setups
                   Ericsson
                   Supporters:

R1-**073100**   Way Forward for MU-MIMO Samsung

Agreed Way forward:

- MU-MIMO scheme focusing on the correlated antenna elements (but its use for the uncorrelated antenna elements is not precluded)

    o Precoding codebook baseline

        ▪ Reuse (a part of) the rank-1 SU-MIMO precoding possibilities defined for 2 TX and 4 TX antennas

        ▪ UE and Node B uses the same codebook

        ▪ Node B has the ability to independently choose the precoding vectors for the UEs scheduled in the same subframe.

    o UE feedback

        ▪ CQI calculation: same as the rank-1 SU-MIMO

        ▪ Precoding feedback: same as the rank-1 SU-MIMO

            • It is possible to configure non-frequency selective precoding feedback

        ▪ Need for additional means for robustness is FFS (inclusion into Rel8 is not precluded)

            • An additional CQI terms for interference indication

            • Alternative CQI definition

    o Downlink control signalling

        ▪ Explicit signalling of the used precoding vector for a scheduled UE is allowed

            • Other possibilities are to be aligned with the conclusion of SU-MIMO case

        ▪ Signalling of the interference vector(s) is FFS

        ▪ Indication of the power share for a UE among the scheduled UEs on the same set of frequency resource in the same subframe is FFS

            • Detailed signalling scheme is FFS

            • The conclusion on the UE-specific RS-to-PDSCH power offset signalling should preferably be reused.

                o Taking into account the subframe-wise power variation…

- More advanced MU-MIMO scheme

    o FFS, which means that this case may not be a focus for the initial version of LTE

Aspects considered during the discussion:

- Optimization case

    o correlated antennas

- o   uncorrelated antennas

- o   robust for both cases

- Limitation on Node B scheduling

  - o   Yes

  - o   No

- UE CQI calculation

  - o   only based on channel quantization

  - o   assumption on the intra-cell interference e.g. limitation on the precoding vectors that can be simultaneously scheduled

- Exact precoding codebook definition

  - o   E.g. Based on DFT-type (for spatial channel sampling)?

- Resolution for selection of the MU-MIMO precoding (from a UE perspective)

  - o   Per a set of RBs (subband?)

  - o   Common for all scheduled RBs

5.10.3   DL Transmit diversity with 4 TX Antennas

Confirmation of benefit of 4 TXD

R1-**072771**   The diversity gain of 4 Tx TxD over 2 Tx TxD   Nortel

Discussion on FFS issues from Kobe

R1-**072770**   Further Study on TxD Schemes for 4 Tx   Nortel

R1-**073189**   R1-072786   Performance of TxD Scheme for 4-Tx Antennas ITRI

Conclusion

- For SFBC + FSTD for 4TXD, (1,3) & (2,4) mapping agreed.

- Other works related to the LTE 4 antenna TXD is supposed to continue based on the agreed working assumption

- Additional enhancement for 4 antenna TXD as listed below is FFS

  - o   RE mapping for RS power handling

Others

R1-**073080**   RE mapping of SFBC+FSTD based TxD for Shared Data channel   Nortel

R1-**073086**   4Tx Diversity for E-UTRA   Broadcom

5.10.4   DL Beamforming

R1-**072657**   Further Discussion and Performance Results for DL SU-MIMO Schemes for cross-polarised Antennas
Alcatel-Lucent

R1-**073190**   R1-072787   Design Issues of DL Beamforming with more than four antennas   ITRI

R1-**072955**   Investigation on Adaptive Beamforming in E-UTRA Downlink   NTT DoCoMo

Discussion topics

Interference-limited case

- common control channel coverage not limited even without the dedicated beamforming

- data rate coverage can be improved with the dedicated beamforming (how much?)

Noise-limited case

- Common control channel coverage can still be limited as the beamforming cannot be applied. Instead, power boosting is possible?

- data rate coverage can be improved with the dedicated beamforming (significant?)

Is the support of the dedicated beamforming (if introduced) UE-mandatory?

- Yes:

- No:

Define the dedicated beamforming (by semi-static configuration per UE) for FDD and TDD FS1 in the initial version of LTE?

- Yes: Alcatel-Lucent, NTT DoCoMo, ITRI, ArrayCom, Ericsson, Philips, NEC, Sharp, ICERA, Qualcomm (9)

- No: Nokia, Nokia Siemens Networks, Motorola, Nortel (4)

- Abstain: InterDigital (1)

→ no conclusion reached

Questions

- What is the upper limit of the cell size to guarantee the control channel quality?

    o Control and data are TDM multiplexed. So, borrowing power from data to control is not possible.

- What should be specified to support the dedicated beamforming?

    o Dedicated reference signal

    o Modification of the control signalling needed to indicate the use of the dedicated RS?

        ▪ Yes in case of dynamic configuration

        ▪ No in case of semi-static configuration

- If the dedicated beamforming is introduced, will it be a UE capability or mandatory?

- When the final decision on support of the dedicated beamforming can be made?

    o Today (July 28th in RAN1#49bis)

      o   RAN1#50 (Aug)

      o   RAN1#51 (October)

R1-**073144**   Phase Reference for DL Beamforming   Philips, NXP Semiconductors, Alcatel-Lucent, ArrayComm

5.10.5   UL Antenna Switching

R1-**073067**   Adaptive antenna switching with low sounding reference signal overhead   Mitsubishi Electric, NTT DoCoMo
-> recommended to present 3067 in main session as part of the UL RS discussion.

5.10.6   UL MU-MIMO

Not covered

5.11   Reference signal structure

5.11.1   Downlink reference signals

R1-073090	Summary of Reflector Discussions on EUTRA DL RS	Samsung	

The document was presented by Aris Papasakellariou from Samsung and provides a summary of the DL RS email reflector discussions prior to RAN1#49b.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072901	Performances of realistic DL CQI estimation using cell-specific frequency-hopped/shifted DL RS	Huawei	

The document was presented by Branislav Popovic from Huawei and presents the system simulations results for investigating the impact of power boosted frequency hopped or shifted RS on the DL CQI, and ultimately the impact on cell and user throughput.

Discussion (Question / Comment):
Decision: Document is noted.

The following set of documents has not been treated during the session.

R1-072680	Performance comparison of orthogonal and random DL RS between sectors	Motorola	
R1-072681	MBSFN Performance with SFBC and Spatial Multiplexing	Motorola	
R1-072682	MIMO RS Structure for Unicast/MBMS-Mixed Scenarios	Motorola	
R1-072715	Investigation on the dependency of reference symbol structure on CCH performance in LTE Downlink	SHARP	
R1-072716	Investigation on the dependency of reference symbol structure on SCH performance in LTE Downlink	SHARP	
R1-072717	Proposal for 2-RS and 4-RS structure application in LTE Downlink	SHARP	

R1-072746	Structure and performance of DL dedicated RS	Qualcomm Europe	
R1-072775	MIMO RS structure for MBSFN	Nortel	
R1-072776	Precoding Matrix Verification Based on Dedicated RS in E-UTRA Downlink	Nortel	
R1-072847	Orthogonal RS for Different MBSFN Zones in E-UTRA	Texas Instruments	
R1-072930	Downlink Dedicated Reference Symbols Structure for TDD with Frame Structure Type 2	CATT	
R1-073079	DL RS periodicity	Qualcomm Europe	
R1-073088	Downlink reference signal structure for TDD frame structure type 2	Samsung	
R1-073160	OS for DL RS	Qualcomm Europe	(R1-073078)
R1-073195	Specification of cell-specific DL RS FH sequences	Huawei	(R1-072902)

5.11.2   Uplink reference signals

R1-073091	Summary of Reflector Discussions on EUTRA UL RS	Samsung	

The document was presented by Aris Papasakellariou from Samsung. Based on the progress achieved in the last meeting, the document focuses on two remaining issues:

- the sounding RS (SRS) transmission

- the generation of RS sequences (and based on the PUCCH decisions, the sequences for ACK/NAK and CQI transmission without data)

Discussion (Question / Comment):
Decision: Document is noted.

Conclusions from email discussion:

- Sounding RS
    - o eNB should be able to disable SRS transmission by a UE
    - o Signalling of these parameters to the UE:
        - Transmission bandwidth (and starting bandwidth position)
        - Transmission period
        - Cyclic shift
        - Transmission sub-frame
    - o Signalling of additional parameters FFS
        - Repetition factor: Signalled or predetermined for each operating bandwidth
        - Transmission comb: Signalled or predetermined for each SRS transmission bandwidth
        - Transmission power (offset relative to DM RS transmission power – power control applies)
        - CAZAC sequence index: Signalled (broadcasted) or implicitly determined from the cell ID
        - Duration of the SRS transmission
        - Position of the SRS within the subframe: Signalled or defined by the specification, but not put in the middle symbol of the slot

- o SRS for antenna selection: the same SRS should be used by both antennas. The eNB knows in advance which antenna sends the SRS. No additional SRS overhead to support antenna selection

    - o RPF=2. Additional values for RPF are FFS.

    - o SRS sequences: Reuse the DM RS sequences

    - o Cyclic shift hopping supported, and it can be turned off

- • Sequence and/or cyclic shift hopping for DM RS (and PUCCH ACK/NAK and CQI)

    - o Signalling of the Base Sequence and Hopping Pattern

        - ▪ Base sequence group index indicator broadcasted

        - ▪ Explicit signalling for hopping pattern FFS

    - o Hopping Period

        - ▪ For the PUSCH, the sequence and possible cyclic shift hopping period should be per slot (DM RS)

        - ▪ For the PUCCH, the cyclic shift hopping period should be per symbol (DM RS, ACK/NAK, CQI)

    - o PUSCH DM RS: Cyclic Shift Assignment

        - ▪ The possible use of multiple cyclic shifts within a cell is supported

        - ▪ In case of multiple cyclic shifts within a cell, the UE is informed as part of the UL grant (with up to 3 bits) which cyclic shift to use in the first slot

Reference Signals for PUCCH

R1-072747	RS structure for UL ACK transmission	Qualcomm Europe	

The document was presented by Durga Malladi from Qualcomm and analyzes:

- • The positions of the 3 pilot symbols for short CP

- • The pilot structures for ACK transmissions in Vehicle-B channels (long CP)

Discussion (Question / Comment):
Decision: Document is noted.

Conclusion:

- • 3 RS in the middle of the slot for short CP

- • 2 RS in the middle of the slot for long CP

R1-072748	RS structure for CQI transmission	Qualcomm Europe	

The document was presented by Durga Malladi from Qualcomm and evaluates the link performance and multiplexing capability of CQI channels.

Discussion (Question / Comment):
Decision: Document is noted.

Conclusion:

- • 1 RS in the 4th OFDM symbol of each slot for long CP

R1-072754	PUCCH (CQI) structure and multiplexing	Qualcomm Europe	

The document was presented by Durga Malladi from Qualcomm and evaluates the link performance and multiplexing capability of CQI channels.

Discussion (Question / Comment):
Decision: Document is noted.

DM Reference Signals for TDD Frame Structure 2

R1-073047	Further considerations on uplink reference signals for frame structure type 2	Ericsson, CATT, Hua Wei, Nokia, NSN	

The document was presented by David Astely from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted.

Conclusion for TDD FS type 2:

- Adopt a long block only uplink structure for frame structure type 2,
- Use an additional extra demodulation reference signals to improve link performance for very high speeds;
- Keep the position for the default demodulation reference signal fixed, independent of whether the additional demodulation reference signal is used or not
- Keep the position for the additional demodulation reference signal fixed;
- FFS which of the two possibilities to select
  - make it possible to configure the use of an additional reference signal on a per UE basis
  - make it possible to configure the use of an additional reference signal with a per cell default

R1-072816	Uplink DM Reference Signal Structure for High Speed UEs	Spreadtrum Communications	

The document was presented by Miss Tingting Shi from Spreatrum Comm.

Discussion (Question / Comment):
Decision: Document is noted.

The following set of documents has not been treated during the session.

R1-072683	Selection between Truncation and Cyclic Extension for UL RS Generation	Motorola	
R1-072684	Uplink Reference Signal Planning Aspects	Motorola	
R1-072685	Improving UL Data Frequency Hoping Performance with Sounding and Frequency Semi-Selective Scheduling	Motorola	
R1-072688	Considerations and Recommendations for UL Sounding RS	Motorola	
R1-072718	UL DM RS Design - Correlation Properties and Design Implications	SHARP	
R1-072719	UL RS via OZCL Sequences	SHARP	
R1-072803	Reference signal generation method for E-UTRA uplink	Panasonic	
R1-072804	Further consideration on uplink RS hopping and grouping	Panasonic	
R1-072824	Discussion on Uplink Reference Signal	NEC Group	
R1-072825	The Detail of ZC Sequence Planning for Uplink Reference Signal	NEC Group	
R1-072848	Design of CAZAC Sequences for Small RB Allocations in E-UTRA UL	Texas Instruments	

R1-072849	Sounding Reference Signal Assignments in E-UTRA Uplink	Texas Instruments	
R1-072850	Time – Sharing of Sounding Resources	Texas Instruments	
R1-072851	Sounding for Persistently Scheduled Transmissions	Texas Instruments	
R1-072875	Generation methods of UL RS sequence	LGE	
R1-072876	Further considerations on UL sounding RS multiplexing method	LGE	
R1-072893	Sequence grouping rule for uplink demodulation reference signal	Huawei	
R1-072938	Necessity of Multiple Bandwidths for Sounding Reference Signals	NTT DoCoMo	
R1-072939	Assignment Scheme of Sounding Reference Signals in E-UTRA Uplink	NTT DoCoMo	
R1-072988	UL Sounding Reference Signal	Nokia Siemens Networks, Nokia	
R1-072989	UL sounding reference signal for EUTRA TDD	Nokia, Nokia Siemens Networks	(R1-072298)
R1-072990	DM RS sequence hopping and coordination	Nokia Siemens Networks, Nokia	(R1-072295)
R1-072991	Cyclic Shift Hopping and DM RS Signalling	Nokia Siemens Networks, Nokia	(R1-072294)
R1-073048	PUSCH RS	Ericsson	
R1-073049	PUCCH RS	Ericsson	
R1-073073	Sounding Reference Signals	Qualcomm Europe	
R1-073092	Sounding RS Multiplexing in E-UTRA UL – Interaction with PUCCH	Samsung	
R1-073116	Uplink channel sounding RS structure	Samsung	
R1-073146	Uplink Channel Sounding Issues	Freescale Semiconductor	
R1-073210	Uplink sounding RS	Ericsson	(R1-073050)

5.12   Mapping of Virtual resource blocks to Physical resource blocks

| R1-072686 | Way forward for mapping of DL distributed transmissions to physical resource blocks | Motorola | |

The document was presented by Brian Classon from Motorola.

Discussion (Question / Comment):
Decision: Document is noted. Due to lack of time, RAN1 didn't consider any other contributions. The Way forward should be used <u>as the basis for further discussion</u> and reconsidered at next WG meeting.

The following set of documents has not been treated during the session.

| R1-072687 | E-UTRA DL Distributed Transmission Mapping rules and Performance | Motorola | |
| R1-072749 | Frequency Diverse transmissions for E-UTRA DL | Qualcomm Europe | |

R1-072750	Impact of constrained resource signalling in PDCCH	Qualcomm Europe	
R1-072777	Performance evaluation of diversity VRB mapping schemes	Nortel	
R1-072778	UL RB hopping	Nortel	
R1-072788	Partition Rule for Distributed Multiplexing in E-UTRA	ITRI	
R1-072795	Distributed channel mapping	Panasonic	
R1-072826	DL Distributed Resource Signalling for EUTRA	NEC Group	
R1-072827	DL Distributed Resource Block Mapping for inter-cell interference randomization	NEC Group	
R1-072828	Frequency Hopping Pattern for EUTRA Uplink	NEC Group	
R1-072903	Mapping of virtual resource blocks for the Physical Data Shared Channel	Huawei	
R1-072907	Combination of uplink semi-persistent schedule and frequency hopping	ZTE	
R1-072917	Resource block mapping for EUTRA downlink distributed transmissions	Mitsubishi Electric, Philips	
R1-072946	RB-level Distributed Transmission Method for Shared Data Channel in E-UTRA Downlink	NTT DoCoMo	
R1-072947	Control Signaling for Uplink Frequency Hopping in E-UTRA	NTT DoCoMo	
R1-073089	Uplink time domain hopping for E-UTRA TDD	Samsung	
R1-073115	LFDMA with hopping in PUSCH	Samsung	
R1-073127	DL VRB to PRB mapping	Samsung	
R1-073140	Further details of mapping of VRBs to PRBs in E-UTRA Downlink	Philips, NXP Semiconductors, Mitsubishi Electric	

5.13   Control Signaling

5.13.1   Downlink Control Signalling

R1-073051	Summary of e-mail discussion on downlink control signaling	Ericsson	

The document was presented by Stefan Parkvall from Ericsson and provides the results of email discussion since last meeting in Kobe on the following topics:

- How to encode the downlink resource assignments?

- Sequences for PCFICH ("cat0")?

- Mapping of ACK/NAK and PCFICH to REs?

- Interleaver details for DL control signaling?

- Scrambling?

Discussion (Question / Comment):
Decision: Document is noted.

Conclusions:

- PCFICH coding described with 4 explicit codewords, resulting from (3,2) simplex + 10 times repetition + appending 2 systematic bits (d_{min}=21)
- Define an explicit ACK/NAK channel
  - In cases where ACK/NACK information is implicitly given by the resource grant, then no explicit ACK/NACK is needed in addition
- ACK/NAK mapping independent from PCFICH
- Map ACK/NAK on 1 or 3 OFDM symbols for one ACK/NAK channel
  - Number of OFDM symbols is semi-statically configurable
  - ACK/NAK duration puts a lower limit on the value signalled on PCFICH
  - For TDD case where larger number of ACK/NAK may be needed at a time (depending on UL/DL configuration), the number of OFDM symbols may exceed 3 symbols
- Main proposals on resource allocation encoding
  - Bitmap with full allocation flexibility and possible reduced granularity (e.g. 3119)
  - Block based scheme with start-stop (e.g. 3052)
  - Tree-based allocation combined with bitmap (e.g. 2832)
  - Combinatorial scheme with reduced allocation flexibility and granularity (e.g. 2997, 2923)
  - Schemes for bandwidth splitting
  - Continue discussion offline during this week, address extension to 20MHz. Aim for reduction in number of bits while providing the necessary amount of allocation flexibility.

PCFICH design

R1-072881	On the design of PCFICH coding	LGE	

The document was presented by (…) from LGE and investigates the several possible (32, 2) PCFICH coding schemes. It proposes the generating matrix C to be adopted as a (32, 2) PCFICH coding scheme.

Discussion (Question / Comment):
Decision: Document is noted.

R1-072692	Coding and transmission of control channel format indicator	Motorola	

The document was presented by Ravikiran Nory from Motorola and presents some options for the coding and transmission of the CCFI and provides recommendations based on performance analysis.

Discussion (Question / Comment):
Decision: Document is noted.

R1-073162	CCFI Sequences in E-UTRA DL	Texas Instruments	(R1-072852)

The document was presented by Eko Onggosanusi from TI and evaluates the performance of CCFI transmission with conventional QPSK repetitions, Hamming coding, and optimal QPSK repetitions. TI proposes that optimal QPSK repetition is used for the CCFI transmission due to the substantial gains it provides relative to conventional QPSK repetition and due to the structural advantages it provides over Hamming coding.

Discussion (Question / Comment):
Decision: Document is noted.

ACK/NAK related papers

R1-072996	Implicit ACK/NAK for LTE DL	Nokia, Nokia Siemens Networks	

The document was presented by (…) from NSN and relates to signalling of the HARQ ACK/NAKs in DL for the UL traffic. In this contribution an implicit ACK/NAK mechanism is discussed and proposed for LTE DL.

Discussion (Question / Comment):
Decision: Document is noted.

| R1-072829 | DL Control Channel Structure | NEC Group | |

The document was presented by Yassin Awad from NEC and provides some analysis of the DL L1L2 Control structure.

Discussion (Question / Comment):
Decision: Document is noted.

| R1-072753 | ACKCH structure and multiplexing | Qualcomm Europe | |

The document was presented by Juan Montojo from Qualcomm.

Discussion (Question / Comment):
Decision: Document is noted.

Signalling of resource assignment

| R1-073119 | Resource Indication Scheme for Downlink Packet Scheduling | Samsung | |

The document was presented by (…) from Samsung and discusses the resource indication issues for the downlink control signalling.

Discussion (Question / Comment):
Decision: Document is noted.

| R1-073052 | Begin – end representation of scheduling allocations | Ericsson | |

The document was presented by Stefan Parkvall from Ericsson. It aims at finding an efficient signalling scheme which significantly reduces the overhead caused by the size of the allocation message in DL. As a conclusion, it is suggested to signal the resource assignment in the downlink using a begin-end approach.

Discussion (Question / Comment):
Decision: Document is noted.

| R1-072832 | DL Unicast Resource Allocation Signalling using L1L2 control channels | NEC Group | |

The document was presented by Yassin Awad from NEC and proposes a combination of reduced Bit-mapping and Tree-based method for DL resource assignment with discontinuous localized allocations and distribution resource transmission.

Discussion (Question / Comment):
Decision: Document is noted.

| R1-072750 | Impact of constrained resource signalling in PDCCH | Qualcomm Europe | |

The document was presented by Durga Malladi from Qualcomm.

Discussion (Question / Comment):
Decision: Document is noted.

| R1-072997 | Signalling and decoding of PRB allocations for LTE downlink | Nokia, Nokia Siemens Networks | |

The document was presented by Jari Lindholm from Nokia.

Discussion (Question / Comment):
Decision: Document is noted.

| R1-073199 | Some operators view on ACK/NACK mapping | AT&T, KDDI, NTT DoCoMo, Orange, Telecom Italia, TeliaSonera, T-Mobile, Vodafone | |

The document was presented by Sadayuki Abeta from NTT DoCoMo and raises some operators concerns on the ACK/NAK mapping scheme proposal 1.

- Different deployment scenario shall be supported

  o A single OFDM symbol may be enough for most scenario, however, the system should also support large cell such as 100km cell radius. Thus, a configurable scheme by RRC (e.g. broadcast information) should be supported.

- For TDD, the amount of ACK/NAK resources required in a subframe can be higher than for FDD and it is questionable whether a single OFDM symbol is sufficient in all scenarios. As stated in TR25.913, a common scheme should be applied both TDD (FS1 and FS2) and FDD as much as possible

Discussion (Question / Comment):
Decision: Document is noted.

The following papers were presented on Friday before closing the session.

| R1-073218 | On signalling of resource allocation | Ericsson, Qualcomm, Motorola, Panasonic, NEC, NTT DoCoMo, Nokia, Nokia Siemens Networks, Texas Instruments, Mitsibishi, Nortel | |

The document was presented by Stefan Parkvall from Ericsson.

Discussion (Question / Comment):
Decision: Document is noted.

Conclusion: Allow the use of the small payload size PDCCH format also for signaling of downlink scheduling information

| R1-073227 | Way forward for DL Resource Allocation Mapping | Motorola, Alcatel-Lucent, Ericsson, NEC, Nokia, Qualcomm, Samsung,LGE, Mitsubishi | |

The document was presented by Robert Love from Motorola.

Discussion (Question / Comment):
Decision: Document is noted.

Conclusion: Agreed as way forward for the further evaluation, i.e. none of the sets A or B is considered as a 'baseline' yet

The following set of documents has not been treated during the session.

R1-072689	Downlink Acknowledgement Mapping to RE's	Motorola	
R1-072690	Support of Precoding for E-UTRA DL L1/L2 Control Channel	Motorola	
R1-072691	Search space definition for L1/L2 control channel	Motorola	

R1-072695	Efficient structure for aggregating 1,2,[3],4,8 DL control channel elements	Motorola	
R1-072696	E-UTRA DL L1/L2 Invariant Control Channel Design	Motorola	
R1-072697	E-UTRA DL L1/L2 Control Channel Information & MIMO/Precoding details	Motorola	
R1-072698	DPCCH performance in E-UTRA for different reference symbol formats	Motorola	
R1-072699	E-UTRA DL L1/L2 Control Channel Design - PICH/AICH/DBCH	Motorola	
R1-072722	On fourth value of CCFI (Cat0)	Mitsubishi Electric	
R1-072723	Scheduling Policy and Signaling Way on DL Resource Allocation	Mitsubishi Electric	
R1-072724	Performance Evaluation of RB Group Scheduling	Mitsubishi Electric	
R1-072751	CCFI Structure and multiplexing	Qualcomm Europe	
R1-072752	PDCCH structure and multiplexing	Qualcomm Europe	
R1-072789	Mapping of CCEs (control channel element) onto physical resource	Panasonic	
R1-072790	CCE aggregation size and transport format signaling	Panasonic	
R1-072791	Discussion on resource allocation and transport format signaling	Panasonic	
R1-072792	Semi-static vs dynamic CCE aggregation	Panasonic	
R1-072793	Comparison of FDM and CDM+FDM for control channel multiplexing	Panasonic	
R1-072794	Assignment of Downlink ACK/NACK channel	Panasonic	
R1-072830	Downlink ACK/NACK signalling for E-UTRA	NEC Group	
R1-072831	Uplink Resource Allocation for E-UTRA	NEC Group	
R1-072877	DL LVRB assignment	LGE	
R1-072878	DL ACK/NACK structure	LGE	
R1-072879	UL frequency hopping over subbands	LGE	
R1-072880	Link adaptation for downlink control channel	LGE	
R1-072882	DL ACK/NACK Mapping Relations	LGE	
R1-072883	Modifications on UL synchronous HARQ procedure	LGE	
R1-072884	Cell-specific Interleaving for CCE-to-RE mapping	LGE	
R1-072885	Performance Evaluation of MIMO-related Dedicated Control Signaling	LGE	
R1-072886	Consideration on DL L1/L2 control channel design for MIMO	LGE	
R1-072894	MBSFN impact on paging transmission	Huawei	
R1-072904	CCE to RE interleaver design criteria	Huawei	
R1-072905	DL control signaling to support MIMO	Huawei	
R1-072908	DL resource allocation and related signalling way	ZTE	
R1-072916	UE and CCE specific scrambling codes for low complexity blind detection of downlink control signaling	Mitsubishi Electric	

R1-072923	Signaling Resource Allocations in DL Control Channel	Alcatel-Lucent	
R1-072931	Timing relationship between the DL control signaling and associated sub-frames for TDD	CATT	
R1-072932	CCFI for LTE TDD system	CATT	
R1-072949	Downlink Control Signaling for Uplink Re-transmission in E-UTRA	NTT DoCoMo	
R1-072994	Signaling PCH, RACH response and dynamic BCH allocations in L1/L2 control channel.	Nokia, Nokia Siemens Networks	
R1-072995	PDCCH UL and DL signaling entity payloads	Nokia, Nokia Siemens Networks	
R1-072998	Control signaling considerations for EUTRA TDD	Nokia, Nokia Siemens Networks	
R1-073069	L1/L2 Control Channel Structure with Multiplexing in E-UTRA Downlink	KDDI	
R1-073070	An Evaluation of the Rotational CDM for L1/L2 Control Channel	KDDI	
R1-073071	System-Level Evaluation of the Rotational CDM for L1/L2 Control Channel	KDDI	
R1-073076	RX Diversity impact on downlink control channels	Motorola	
R1-073077	PMI Downlink Signaling and PDCCH Downlink Format	Motorola	
R1-073081	RE mapping of the control channel elements	Nortel	
R1-073098	Coding for CCFI Transmission	Samsung	
R1-073099	DL ACK/NACK Transmit Diversity	Samsung	
R1-073105	Downlink Link Adaptation and Related Control Signaling	Samsung	
R1-073106	LTE downlink ACK channel mapping linked to CCE	Samsung	
R1-073109	Downlink Hybrid ARQ Signaling	Samsung	
R1-073110	Design of PDCCH format in support of MIMO	Samsung	
R1-073120	Restriction on PDCCH monitoring set	Samsung	
R1-073121	Performance of DL ACK/NACK transmission	Samsung	
R1-073132	DL CCFI to RE mapping	Samsung	
R1-073135	Control signalling for dynamically- and persistently-scheduled transmissions in E-UTRA	Philips, NXP Semiconductors	
R1-073217	Additional information on combinatorial PRB allocation signalling method	Nokia, Nokia Siemens Networks	

5.13.2   Uplink Control Signalling

R1-073053	Summary of e-mail discussion on uplink control signalling	Ericsson	

The document was presented by Stefan Parkvall from Ericsson and provides the results of the email discussions since RAN#49 on following topics:

- Which CAZAC-based structure to use?

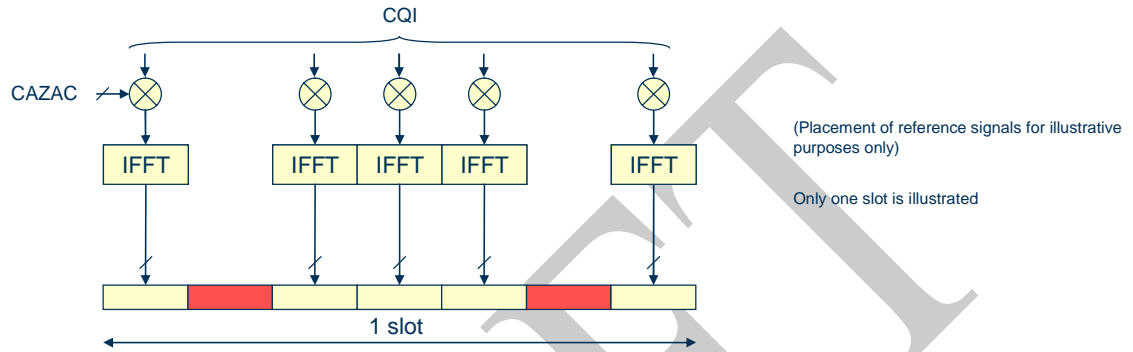- Details of the CAZAC-based structure?

- Transmission of scheduling request?

- ACK/NAK for TDD?

Discussion (Question / Comment):
Decision: Document is noted.

Conclusions:

- Structure A is agreed

(Placement of reference signals for illustrative purposes only)

Only one slot is illustrated

- Placement of reference symbols for short CP and FDD and TDD FS type 1: 2 RS, location as in figure above
- Transmission of scheduling request (in absence of uplink data): CQI and SR separated

| R1-072705 | Uplink CQI channel structure | Motorola | |

The document was presented by (…) from Motorola and discusses the number and placement of reference signals for the CAZAC-based structure.   (CQI transmission only)

Discussion (Question / Comment):
Decision: Document is noted.

| R1-073003 | Performance of CQI+ACKNACK transmission on PUCCH | Nokia Siemens Networks, Nokia | |

The document was presented by Timo Lunttila from NSN and presents link level performance results for the proposed ACK/NACK + CQI multiplexing scheme.

Discussion (Question / Comment):
Decision: Document is noted.

| R1-072668 | Performance of Scheduling Request using Contention Free Channel | Motorola | |

The document was presented by (…) from Motorola and

Discussion (Question / Comment):
Decision: Document is noted.

| R1-073054 | Summary of e-mail discussion on CQI reports | Ericsson | |

The document was presented by Stefan Parkvall from Ericsson and provides the results of the email discussions since RAN#49 mainly focused on the properties of the best-M scheme.

Discussion (Question / Comment):
Decision: Document is noted. Off line discussion should continue during this week, if no conclusions continue discussion via email.

The following set of documents has not been treated during the session.

R1-072701	Joint feedback for E-UTRA downlink precoding and CQI	Motorola	
R1-072702	CQI Feedback Schemes for E-UTRA	Motorola	
R1-072703	CQI Coding Schemes	Motorola	
R1-072704	Reference signal structure for UL Ack/Nack	Motorola	
R1-072706	Uplink transmission of CQI and Ack/Nack	Motorola	
R1-072707	CQI/PMI PUCCH Management	Motorola	
R1-072708	Uplink Control Signalling with Persistent Scheduling	Motorola	
R1-072709	Performance of CQI Feedback Schemes	Motorola	
R1-072710	Uplink Feedback for E-MBMS	Motorola	
R1-072711	Uplink Common Control Channel	Motorola	
R1-072712	UL L1/L2 control signals with data Multiplexing Details	Motorola	
R1-072720	ACK/NAK covering via OZCL Sequences	SHARP	
R1-072721	Clarify UL physical channel scheduling for CQI report	SHARP	
R1-072755	Coding structure for CQI + ACK	Qualcomm Europe	
R1-072756	SRS and PUCCH multiplexing	Qualcomm Europe	
R1-072779	Uplink Signaling Support for DL Rank Adaptation with Fixed Precoding	Nortel	
R1-072783	Performance Comparison of Distributed Haar-Based Compression for CQI Feedback in E-UTRA	InterDigital Communications Corporation	
R1-072796	DCT Partitioning for CQI Reporting	Panasonic	
R1-072797	CQI on PUCCH using multiple subframes	Panasonic	
R1-072798	Clarification of Implicit Resource Allocation of Uplink ACK/NACK Signal	Panasonic	
R1-072799	Usage of Cyclic Shifts and block-wise spreading codes for Uplink ACK/NACK	Panasonic	
R1-072814	Code hopping for uplink ACK/NAK channels	ETRI	
R1-072815	RS and multiplexing structure of uplink ACK/NAK channels	ETRI	
R1-072833	Multiplexing of uplink data-non-associated control signal with data	NEC Group	
R1-072834	Multiplexing of uplink data-non-associated control signal without data	NEC Group	
R1-072835	Way Forward for Uplink Blind Decoding	NEC Group	
R1-072853	CQI Feedback Reduction Scheme for E-UTRA	Texas Instruments	
R1-072854	Design Aspects of UE Feedback	Texas Instruments	
R1-072855	Feedback Rate for Rank Adaptation and Pre-coding	Texas Instruments	
R1-072856	Uplink ACK/NAK Transmission for Persistently Scheduled Downlink Packets	Texas Instruments	

R1-072857	Coherent Uplink ACK/NAK Transmission with High Speed UEs	Texas Instruments	
R1-072858	Preamble Based Scheduling Request	Texas Instruments	
R1-072859	Scheduling Request and DRX in E-UTRA	Texas Instruments	
R1-072887	Investigation on problems in case of PUCCH and S-RS simultaneous transmission	LGE	
R1-072888	Erroneous operation handling caused by DL/UL grant failure	LGE	
R1-072889	Reduction of MIMO CQI reporting in spatial domain	LGE	
R1-072890	Reduction of CQI reporting in time domain	LGE	
R1-072891	UL ACK/NACK Mapping Relations	LGE	
R1-072895	Multiplexing of scheduling request indicator	Huawei	
R1-072924	Incremental CQI Feedback Scheme and Simulation Results	Alcatel-Lucent	
R1-072933	Uplink ACK/NACK signaling for TDD	CATT	
R1-072934	Uplink control channel structure for TDD with frame structure type 2	CATT	
R1-072950	Persistent Scheduling in E-UTRA	NTT DoCoMo	
R1-072951	Performance Enhancement Techniques for ACK/NACK in E-UTRA Uplink	NTT DoCoMo	
R1-072952	CDMA-based Control Channel Structure in E-UTRA Uplink	NTT DoCoMo	
R1-072953	Basic Method for CQI Feedback in E-UTRA	NTT DoCoMo	
R1-072954	Feedback Control for MBMS in E-UTRA	NTT DoCoMo	
R1-072999	UL ACK/NACK aspects for EUTRA TDD	Nokia, Nokia Siemens Networks	
R1-073000	Increasing the size of CQI by means of enhanced sequence modulation	Nokia Siemens Networks, Nokia	
R1-073001	PUCCH sequence modulation sequences	Nokia Siemens Networks, Nokia	
R1-073002	ACK/NACK performance of high speed UEs	Nokia Siemens Networks, Nokia	
R1-073004	On CQI coding in PUCCH	Nokia Siemens Networks, Nokia	
R1-073005	Randomization for ACK/NACK signals transmitted on PUCCH	Nokia Siemens Networks, Nokia	
R1-073006	Signaling of Implicit ACK/NACK resources	Nokia Siemens Networks, Nokia	
R1-073007	CQI capacity and coverage of PUCCH	Nokia Siemens Networks, Nokia	
R1-073008	CQI per PRB versus per group of best PRBs	Nokia Siemens Networks, Nokia	
R1-073009	Two-Layer CQI Scheme	Nokia Siemens Networks, Nokia	
R1-073010	CQI reporting requirements for E-UTRA UE	Nokia Siemens Networks, Nokia	
R1-073011	Multiplexing of Scheduling Request and ACK/NACK and/or CQI	Nokia Siemens Networks, Nokia	
R1-073012	Multiplexing capability of CDM based Dedicated Scheduling Request	Nokia Siemens Networks, Nokia	

R1-073013	UL/DL resource allocation signaling errors and their impact to UL multiplexing design	Nokia Siemens Networks, Nokia	(R1-072312)
R1-073014	ACK/NACK transmission with UL data	Nokia Siemens Networks, Nokia	(R1-072313)
R1-073015	ACK/NACK modulation with UL data	Nokia Siemens Networks, Nokia	(R1-072310)
R1-073016	Uplink Scheduling Request for LTE	Nokia Siemens Networks, Nokia	(R1-072307)
R1-073055	Multiple CQI formats	Ericsson	
R1-073057	Contents of CQI reports	Ericsson	
R1-073066	Multiplexing the Scheduling Request in the Uplink	Alcatel-Lucent	
R1-073072	Uplink Data-non-associated Control Signaling in E-UTRA	KDDI	
R1-073093	PUCCH Transmission without Data in E-UTRA	Samsung	
R1-073094	Control Signaling Location in Presence of Data in E-UTRA UL	Samsung	
R1-073104	Performance of single CQI feedback for 2CW SU-MIMO	Samsung	
R1-073107	LTE uplink CQI report format	Samsung	
R1-073117	Control signaling transmission format in presence of data in E-UTRA UL	Samsung	
R1-073118	CQI report transmission using PUSCH resource	Samsung	
R1-073122	Implicit mapping of CCE to UL ACK/NACK resource	Samsung	
R1-073124	UL ACK/NACK resource indication for supporting persistent scheduling	Samsung	
R1-073125	On handling simultaneous transmission of ACK/NACK and CQI from a UE	Samsung	
R1-073133	RB-wise regrouping of UL control	Samsung	
R1-073145	Vector quantisation with successive refinement for MIMO feedback	Philips	
R1-073149	Cyclic Shift Hopping of UL ACK Channels	Samsung	
R1-073186	CAZAC sequence for PUCCH	Toshiba	(R1-072655)

6.   Closing of the meeting

Before closing the meeting, Mr Chairman recalled that RAN1 chairman and vice-chairmen election will be organized at next WG meeting in Athens. The election shall likely be made on the first day of the session.

Candidatures are now invited for these positions and should be addressed to the Mobile Competence Centre for the attention of Patrick Merias patrick.merias@etsi.org and Susanna Kooistra susanna.kooistra@etsi.org and should ideally be received by Monday 13 August 2007.

Then RAN1 Chairman, Mr. Dirk Gerstenberger expressed his appreciation to the delegates and the host, the North American Friends of 3GPP for their supports.

The meeting was closed at 17:10.

Annex A: List of participants at RAN1 #49b

Please see excel file attached to this report

Annex B: TSG RAN WG1 meetings in 2007

TITLE	TYPE	DATES	LOCATION	CTRY
3GPPRAN1#47bis	WG	15 – 19 Jan 2007	Sorrento	IT
3GPPRAN1#48	WG	12 – 16 Feb 2007	St Louis	US
3GPPRAN1#48bis	WG	26 – 30 March 2007	St Julians	Malta
3GPPRAN1 LTE TDD AH	AH	17 – 20 April 2007	Beijing	China
3GPPRAN1#49	WG	07 – 11 May 2007	Kobe	JP
3GPPRAN1#49bis	WG	25 – 29 June 2007	Orlando	USA
3GPPRAN1#50	WG	20 – 24 Aug 2007	Athens	Greece
3GPPRAN1#50bis	WG	08 – 12 Oct 2007	Shanghai	China
3GPPRAN1#51	WG	05 – 09 Nov 2007	Jeju	KR

MEETING TYPES	
AH = Ad Hoc	CM = Chairmen's meeting
JM = Joint	OR = Ordinary
PM = Preparatory Meeting	RG = Rapporteurs Group
RM = Resolution Meeting	SG = Steering Group
ST = Startup Meeting	TG = Task Group
WG = Working Group	XO = Extraordinary

Annex C: List of CRs agreed at RAN1#49b

Spec	CR	R	Cat	Rel	R1 Tdoc	Title	Work Item

Annex D: List of Outgoing LSs from RAN1#49b

R1	Response to (Ic LS)	To	Cc	Title	Contact	Ref'd /Attachd Tdoc	Release	WI
R1-073185	R2-071602 (R1-072004)	R2	R4, R3	LS response on maintenance of UL Synchronisation	Ericsson		Rel-8	LTE
R1-073219	R2-072186 (R1-072622)	R2		LS response on System Information (Simultaneous reception of system information and unicast data)	Motorola		Rel-8	SAE/LTE
R1-073222		R2		LS on L1-related parameters to be configured by RRC	Ericsson	R1-073221	Rel-8	LTE
R1-073231		R2	R3, R4	LS on physical channel definition	NTT DoCoMo		Rel-8	LTE
R1-073230		R4		LS on the dynamic range of UE transmission power	Panasonic		Rel-8	LTE
R1-073228		R2, R3, R4		LS on MBSFN subframe allocation signalling	Nokia Siemens Networks		Rel-8	LTE

Annex E: List of Tdocs at RAN1 #49b

Please see excel file attached to this report

Annex F: List of actions

1.   Outgoing LS.

To be readdressed at next meeting in Athens

R1-07xxxx   Draft response to RAN4 (R1-072650 = R4-070802) on CQI reporting requirements for E-UTRA UE

Deadline for below action point is until 6th of July.

R1-073232   Prepare LS to RAN4 on "Status of LTE physical layer measurements in RAN WG1" (NSN)

2.   Text proposal for TS and TR

Deadline for below action point is until 13th of July.

R1-073173   New version v1.3.0 of 36.212 (Qualcomm)

APPENDIX K

3GPP_TSG_RAN_WG1 Archives

July 2007

3GPP_TSG_RAN_WG1@LIST.ETSI.ORG

Subject:	Draft report of RAN1#49b Orlando meeting
From:	Patrick Merias <Patrick.Merias@ETSI.ORG>
Reply To:	Patrick Merias <Patrick.Merias@ETSI.ORG>
Date:	Thu, 5 Jul 2007 19:23:08 +0200
Content-Type:	multipart/mixed
Parts/Attachments:	text/plain (467 bytes) , text/html (2730 bytes) , Draft_ReportWG1#49b_v010.zip (242 kB)

Dear all,

Please find attached the Draft report from Orlando for your review.
You may also get it from 3GPP server as uploading is now completed.
All others available docs have also been uploaded so far.

Br,

Patrick

Patrick Mérias
European Telecommunication Standards Institute
Mobile Competence Centre
Tel: +33492944206
email: patrick.merias@etsi.org
www.etsi.org
www.3GPP.org

ATOM RSS1 RSS2

APPENDIX L

3GPP_TSG_RAN_WG1@LIST.ETSI.ORG

Options: Use Monospaced Font
Show Text Part by Default
Show All Mail Headers

Message: [<< First] [< Prev] [Next >] [Last >>]
Topic: [<< First] [< Prev] [Next >] [Last >>]
Author: [<< First] [< Prev] [Next >] [Last >>]

Subject:	Nokia Siemens Networks LTE contributions for RAN1 #49, batch 1
From:	timo.lunttila@NSN.COM
Reply To:	timo.lunttila@NSN.COM
Date:	Wed, 2 May 2007 09:55:57 +0300
Content-Type:	multipart/mixed
Parts/Attachments:	text/plain (1907 bytes) , text/html (5 kB) , R1-072268.zip (126 kB) , R1-072275.zip (48 kB) , R1-072278.zip (17 kB) , R1-072279.zip (19 kB) , R1-072293.zip (18 kB) , R1-072294.zip (46 kB) , R1-072295.zip (46 kB) , R1-072296.zip (30 kB) , R1-072307.zip (20 kB) , R1-072308.zip (27 kB) , R1-072309.zip (111 kB) , R1-072310.zip (29 kB) , R1-072311.zip (38 kB) , R1-072312.zip (23 kB) , R1-072313.zip (30 kB) , R1-072314.zip (54 kB) , R1-072315.zip (27 kB)

Dear all,

Please find enclosed first set of Nokia Siemens Networks LTE contributions.

BR,
Timo

<<R1-072268.zip>> <<R1-072275.zip>> <<R1-072278.zip>> <<R1-072279.zip>> <<R1-072293.zip>> <<R1-072294.zip>>
<<R1-072295.zip>> <<R1-072296.zip>> <<R1-072307.zip>> <<R1-072308.zip>> <<R1-072309.zip>> <<R1-072310.zip>>
<<R1-072311.zip>> <<R1-072312.zip>> <<R1-072313.zip>> <<R1-072314.zip>> <<R1-072315.zip>>

R1-072268   On construction and signalling of RACH preambles   Nokia Siemens Networks, Nokia   7.4
R1-072275   Uplink Power Control   Nokia Siemens Networks, Nokia   7.6
R1-072278   Uplink Timing Control   Nokia Siemens Networks, Nokia   7.8
R1-072279   On Maintenance of UL Synchronization   Nokia Siemens Networks, Nokia   7.8
R1-072293   Uplink DM reference signal structure – open issues   Nokia Siemens Networks, Nokia   7.11.2
R1-072294   Cyclic Shift Hopping and DM RS Signaling   Nokia Siemens Networks, Nokia   7.11.2
R1-072295   DM RS sequence hopping and coordination Nokia Siemens Networks, Nokia   7.11.2
R1-072296   UL sounding   Nokia Siemens Networks, Nokia   7.11.2
R1-072307   Uplink Scheduling Request for LTE   Nokia Siemens Networks, Nokia   7.13.2
R1-072308   Performance Comparison of CAZAC sequence modulation and DFT-S-OFDM methods   Nokia Siemens Networks, Nokia   7.13.2

R1-072309   CQI capacity and coverage of PUCCH   Nokia Siemens Networks, Nokia   7.13.2
R1-072310   ACK/NACK modulation with UL data   Nokia Siemens Networks, Nokia   7.13.2
R1-072311   Multiplexing of ACK/NACK and CQI from the same UE   Nokia Siemens Networks, Nokia   7.13.2
R1-072312   UL/DL resource allocation signaling errors and their impact to UL multiplexing design   Nokia Siemens Networks, Nokia   7.13.2

R1-072313   ACK/NACK transmission with UL data   Nokia Siemens Networks, Nokia   7.13.2
R1-072314   CQI Design and its Impact to DL Performance   Nokia Siemens Networks, Nokia   7.13.2
R1-072315   Multiplexing capability of CQIs and ACK/NACKs form different UEs   Nokia Siemens Networks, Nokia