

**Agenda item**                    3  
**Title:**                         Report of 3GPP TSG RAN WG1 #52 v1.0.0  
                                      (Sorrento, Italy, 11 – 15 February, 2008)  
**Document for:**             Comment  
**Source:**                      MCC Support

---



**Fact Summary**

**Meeting:**                    3GPP TSG RAN WG1 #52  
**Dates:**                     11<sup>th</sup> through 15<sup>th</sup> February, 2008  
**Venue:**                     Hilton Sorrento Palace, Sorrento, ITALY  
**Host:**                        European Friends of 3GPP  
**Attendees:**                162 delegates  
**Documents:**               519 (including some withdrawn and post-meeting artefacts)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](mailto:Patrick.merias@etsi.org)

## Table of contents

---

Executive summary .....	3
1 Opening of the meeting .....	5
1.1 Call for IPR.....	5
2 Approval of the agenda.....	5
3 Approval of the minutes from previous meeting .....	5
4 Liaison statement handling .....	6
5. Maintenance of UTRA R99 – Rel-8 .....	9
6. Evolved UTRA and UTRAN .....	13
6.1 Finalization of TS 36.211 .....	13
6.1.1 Downlink reference signals .....	13
6.1.2 Uplink reference signals .....	15
6.1.3 Downlink Control Signalling .....	17
6.1.4 Uplink Control Signalling .....	25
6.1.5 Mapping of virtual resource blocks to physical resource blocks .....	31
6.1.6 Bit Scrambling sequences for UL/DL transmissions .....	34
6.1.7 Remaining issues for TDD and FDD HD .....	35
6.1.8 Other remaining issues for 36.211 .....	38
6.2 Finalization of TS 36.212.....	38
6.3 Finalization of TS 36.213.....	38
6.3.1 Timing synchronization .....	38
6.3.2 UL/DL Power Control .....	39
6.3.3 Inter-cell Interference Coordination .....	42
6.3.4 UE Procedures for downlink shared channel .....	43
6.3.5 UE Procedures for uplink shared channel.....	43
6.3.6 Remaining issues for TDD and FDD HD .....	44
6.3.7 Other remaining issues for 36.213 .....	44
6.4 Finalization of TS 36.214.....	44
6.5 Finalization of TS 36.306.....	45
7. Enhanced Uplink for Cell_FACH State in FDD .....	47
8. Study Item on Synchronized E-DCH .....	52
9. Study Item on HS-PDSCH serving cell change enhancements .....	56
10. Study Item on Scope of future HSPA Evolution for 1.28Mcps TDD .....	57
11. Work Item on 64QAM for 1.28Mcps TDD HSDPA.....	57
12. Work Item on Enhanced CELL_FACH state in 1.28Mcps TDD (UL/DL).....	57
13. Closing of the meeting .....	57
Annex A: List of participants at RAN1 #52.....	59
Annex B: TSG RAN WG1 meetings in 2008 .....	60
Annex C: List of CRs agreed at RAN1#52.....	61
Annex D: List of Outgoing LSs from RAN1#52 .....	63
Annex E: List of Tdocs at RAN1 #52 .....	65
Annex F: List of actions .....	66

---

## Executive summary

3GPP TSG WG RAN1 #52 meeting took place in Hilton Sorrento Palace, Sorrento, ITALY.

The meeting started at 9:10 on Monday 11<sup>th</sup> February and finished at 17:00 on Friday 15<sup>th</sup> February 2008.

The week was scheduled as follows:

- Monday: Common session on Agenda items 1, 2, 3, 4 and 6.1.3 – Parallel session in the afternoon for Agenda item 5 chaired by Dirk Gerstenberger and discussions on 6.3.4 chaired by Juho Lee.
- Tuesday: Parallel session in the morning for Agenda item 7 chaired by Dirk Gerstenberger and discussions on 6.3.4 chaired by Juho Lee. Parallel session in the afternoon for Agenda items 8, 9, 10 and 11 chaired by Dirk Gerstenberger and discussions on 6.1.3 chaired by Stefan Parkvall. No contributions to AI 12.
- Wednesday: Parallel session for Agenda item 6.3.3 and discussions on 6.2 (chaired by Sadayuki Abeta) – Common session on Agenda items 6.1.7, 6.1.6 and 6.1.4 in the afternoon.
- Thursday: Common session on Agenda items 6.3.2, 6.1.5, 6.1.2 and 6.1.1.
- Friday: Common session on Agenda items 6.4 and 6.3.6. Review of the parallel session's results and pending action points before closure.

**The list of action points that required RAN1 close follow-up is listed in Annex F (end of document).**

The number of contribution documents for this meeting was 504, and those documents were categorized as followed.

Agenda Item	Input Document	Discussed Document
Liaison statement handling	23	22
Maintenance of R99, Rel4, Rel5, Rel6, Rel7	25	24
Evolved UTRA and UTRAN	385	
Enhanced Uplink for Cell_FACH State in FDD	20	19
Study Item on Synchronized E-DCH	41	36
Study Item on HS-PDSCH serving cell change enhancements	7	7
Study Item on Scope of future HSPA Evolution for 1.28Mcps TDD	2	2
Work Item on 64QAM for 1.28Mcps TDD HSDPA	1	1
Work Item on Enhanced CELL_FACH state in 1.28Mcps TDD (UL/DL)	-	-

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

R1-080656	Bitwidths for CQI reporting on PUCCH for MIMO support	Qualcomm Europe
R1-080657	System analysis comparing best-M and cycling CQI report mechanisms	Qualcomm Europe
R1-080743	System Results for Nd=3	Motorola
R1-080780	Simulation on the 64-QAM modulation indication scheme for 1.28Mcps TDD	ZTE
R1-080818	UE-specific RS pattern	Philips
R1-080867	Uplink SRS, discussion/proposals on remaining issues	Ericsson
R1-080901	Holes in the L1 specification	Ericsson
R1-081059	Consideration of Supportable MCS for E-UTRA DL	Texas Instruments
R1-081060	CQI Reporting Procedure for E-UTRA	Texas Instruments
R1-081061	CQI and PMI Report Combinations on PUSCH	Texas Instruments
R1-081070	Way forward on modifying LBRM procedure to avoid inconsistency	Broadcom
R1-081154	TR25.823 v0.1.4	Nokia Siemens Networks

---

## 1 Opening of the meeting

Mr. Dirk Gerstenberger (RAN1 Chairman) welcomed the participants to the 52<sup>sd</sup> RAN WG1 meeting and opened the meeting at 09:10.

Mr. Enrico Buracchini from Telecom Italia welcomed the delegates on behalf of the European 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

R1-080630	Draft Agenda for RAN1#52 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 meeting

R1-080631	Draft report of RAN1#51 bis meeting	MCC Support
-----------	-------------------------------------	-------------

The document was presented by Patrick Mérias.

**Discussion (Question / Comment):**

**Decision:** The document is approved.

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.