

RAN WG1 Status Report

Dirk Gerstenberger

RAN WG1 Convenor

RP-050173

TSG RAN Meeting #28

June 1-3, 2005, Quebec, Canada

RAN WG1 Meetings

- **RAN1#40bis**
April 04-08 2005
Beijing, China



- **RAN1#41**
May 09-13 2005
Athens, Greece

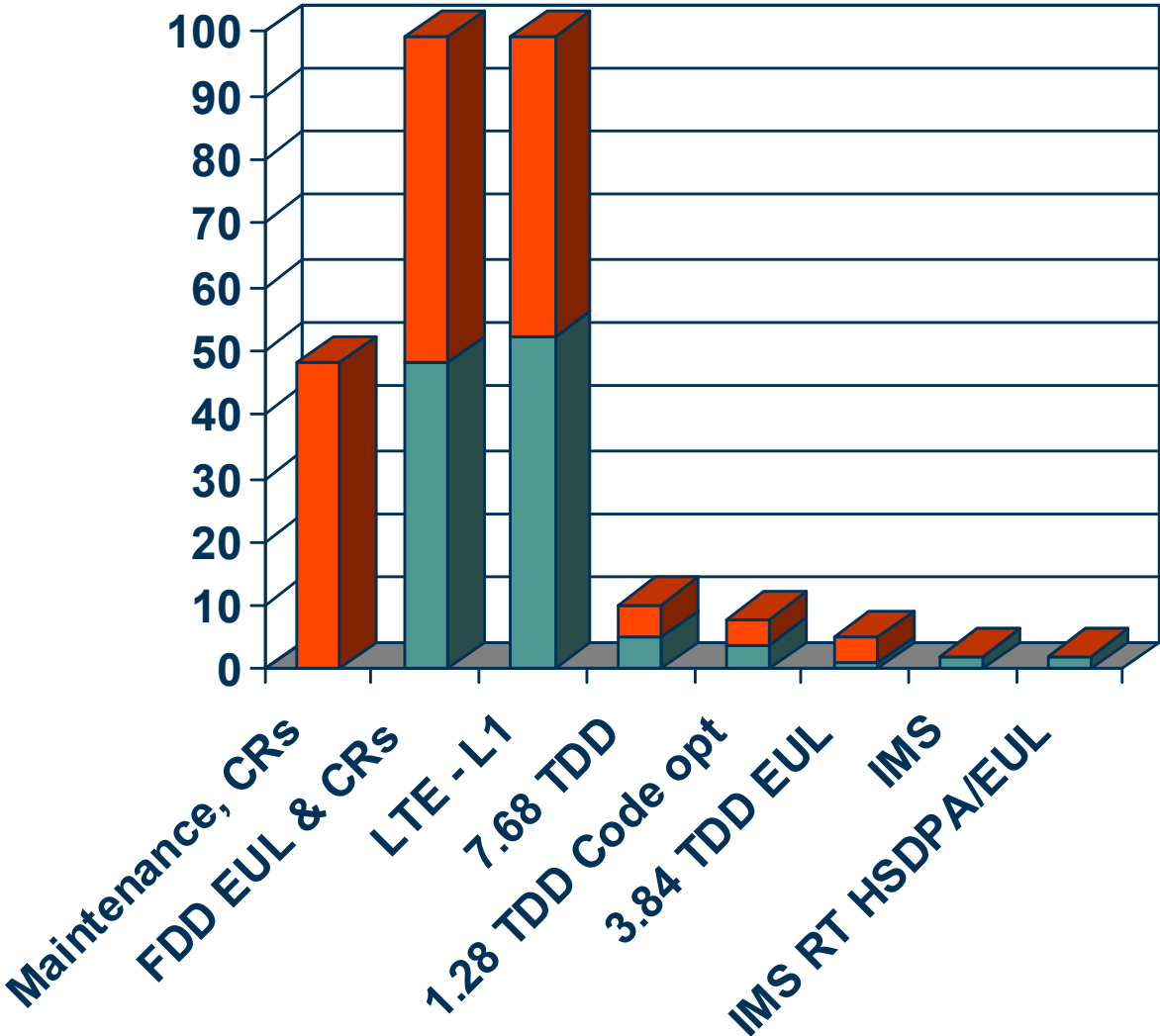


Executive Summary

- Agreed change requests
 - Rel4: 2 CRs (TDD)
 - Rel5: 24 CRs (FDD, including 22 CRs on feature removal)
 - Rel6: 24 CRs (FDD, most for Enhanced UL), 3 CRs (TDD)
- Remaining issues on FDD Enhanced Uplink resolved
 - Compressed mode, gain factors, timing, E-AGCH coding, RRM measurements, ...
- MBMS Rake combining removed
- Feature removal CRs agreed
- Timing maintained HHO and Fast L1 Sync agreed (again)
- RAN1 part of 1.28Mcps Code Optimisation WI ready
- Discussions on LTE multiple access scheme started

Contribution Statistics

- RAN1#40bis
- RAN1#41



Change Requests

Agreed Change Requests

- Release 4
 - 25.221: Two CRs on transmission of SS and TPC (1.28Mcps TDD)
- Release 5
 - 25.201-25.215: Feature removal
 - DSCH, SS DT, CPCH, TX diversity CL mode 2, Compressed mode by puncturing, 80ms TTI, GSM OTD measurement, dedicated pilot phase reference
 - 25.212: HSDPA bit separation
 - 25.214: HS-SCCH discarding

Agreed Change Requests (cont.)

- Release 6
 - 25.211, 25.212, 25.213, 25.214:
 - FDD Enhanced Uplink (17CRs), MBMS Rake combining removal, MBMS soft combining, Uplink SSC, Downlink phase references, Timing maintained HHO, Fast L1 Sync, Clarifications...
 - 25.221:
 - Two CRs on informative annex (1.28Mcps TDD)
 - 25.224:
 - UpPCH subchannel clarification (1.28Mcps TDD)

 - CRs agreed via email before RAN#28
 - ✓ 25.214: F-DPCH TPC in SHO
 - ✓ 25.214: E-DCH timing

Work Items & Study Items

WI/SI where RAN WG1 is the Leading Group

- MIMO
 - No discussion (in line with decision from RAN#26)
- Optimisation of channelisation code utilisation for 1.28Mcps TDD
 - RAN1 part finished, set of draft CRs (Rel7) presented
- 3.84Mcps TDD Enhanced Uplink
 - RAN1 TR structure agreed
 - Text proposals on uplink signaling structure, PhCH structure, NodeB scheduling agreed
- 7.68Mcps TDD option
 - Structure of RAN1 TR and Stage 2 TS agreed together with first text proposals for the TR and Stage 2 TS

WI/SI where RAN WG1 is not the Leading Group

- **IMS RAB Support Enhancements**
 - Discussion on usage of SSC concluded and summarized in an LS to RAN2
- **Improved Support for IMS Realtime Services using HSDPA/HSUPA**
 - Two proposals presented at RAN1#40bis, no conclusions yet

UTRA/UTRAN Long Term Evolution

- LTE was discussed during two days at the RAN1#40bis meeting April, and during two days at the RAN1#41 meeting in May
 - Total of around 100 contributions
 - High attendance (150 delegates)
- Good news is that the number of fundamentally different multiple access proposals is small
 - Clear majority of companies proposes an OFDM based downlink
 - For the uplink, FDMA based proposals have the largest support, followed by OFDM based proposals
 - PAPR increase is an important issue to consider
- Macro-diversity (uplink only or uplink/downlink) was discussed and is related to discussion on EUTRAN architecture
 - Can be addressed during one of the joint WG Meeting sessions
- Issues as EVM, phase noise and Doppler were touched upon
 - Can be addressed together with RAN4 during one of the joint WG Meeting sessions

RAN WG1 Meeting Schedule 2005

Meeting	Date	Location	Host
RAN1#40	14-18 February 2005	Scottsdale, USA	North Am. Friends
RAN1#40bis	04-08 April 2005	Beijing, China	Huawei
RAN1#41	09-13 May 2005	Athens, Greece	European Friends
RAN1 LTE	20-21 June 2005	Sophia Antipolis, FR	ETSI
RAN1#42	29 Aug – 02 Sept 2005	London, UK	European Friends
RAN1#42bis	03-07 October 2005	TBD	TBD
RAN1#43	07-11 November 2005	Seoul(TBC), Korea	Samsung