

TSG RAN Meeting #20
02-06 June, 2003
Hämeenlinna, Finland

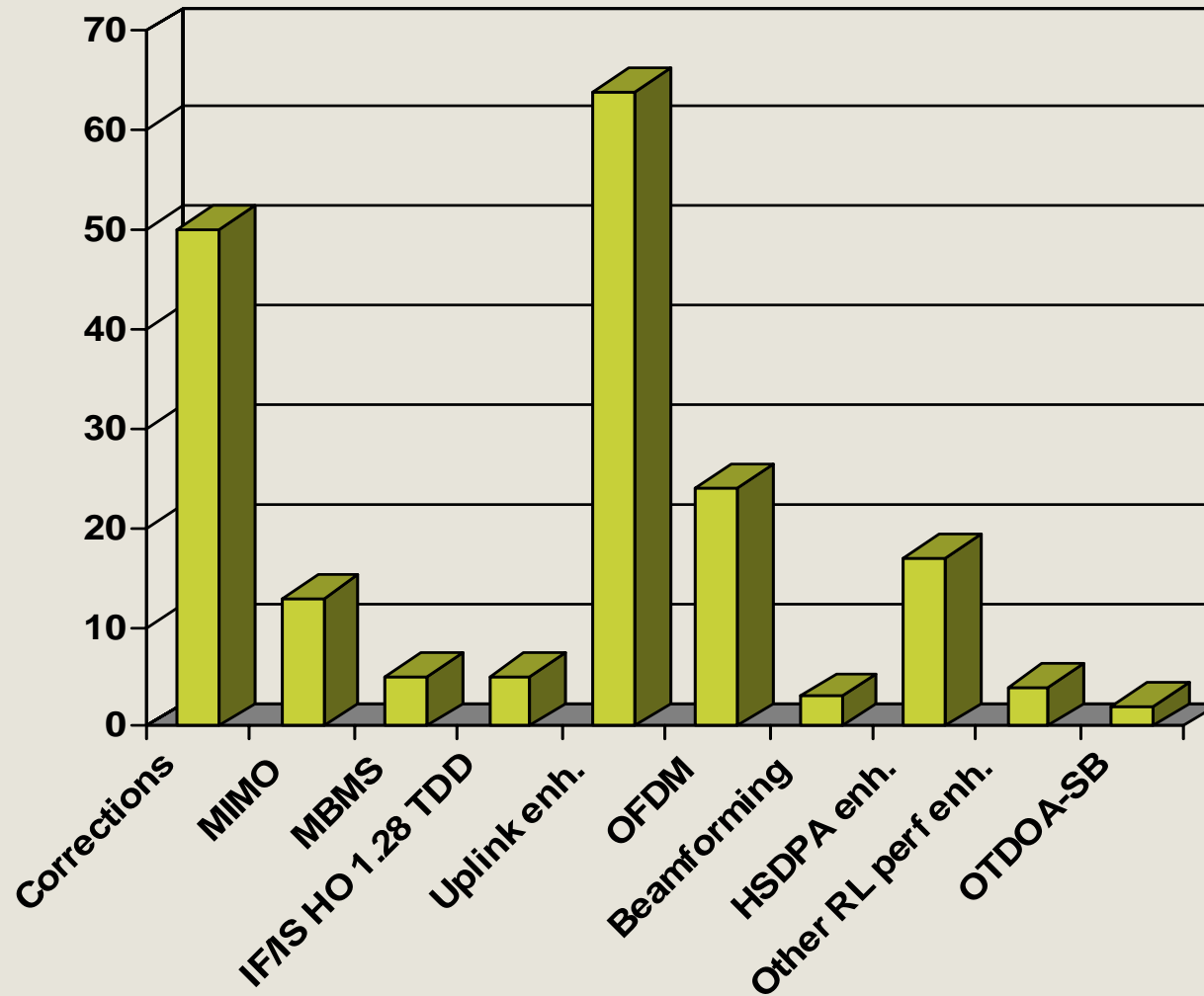
Report from TSG RAN WG1 Chairman to TSG RAN#20

Dirk Gerstenberger
TSG RAN WG1 Chairman

Executive Summary

- 1 CR for Rel99 FDD (UTRAN Transmit carrier power measurement with TX diversity)
- No CRs for Rel4
- 11(FDD) + 5(TDD) correction & clarification CRs agreed for Rel5
 - mostly HSDPA, PCA2, TFCI split mode, 1.28Mcps power control
- 1 CR for Rel6(TDD) agreed in principle
- TFCI transmission power on S-CCPCH issue resolved
- More than 80% of the contributions available on Wednesday before the meeting
- 1 joint session with RAN2, 1 session with RAN3 (informal)
- Around 80% of the time used for Rel'6 discussions
- Around 105 delegates are attending RAN1

Submitted contributions per topic

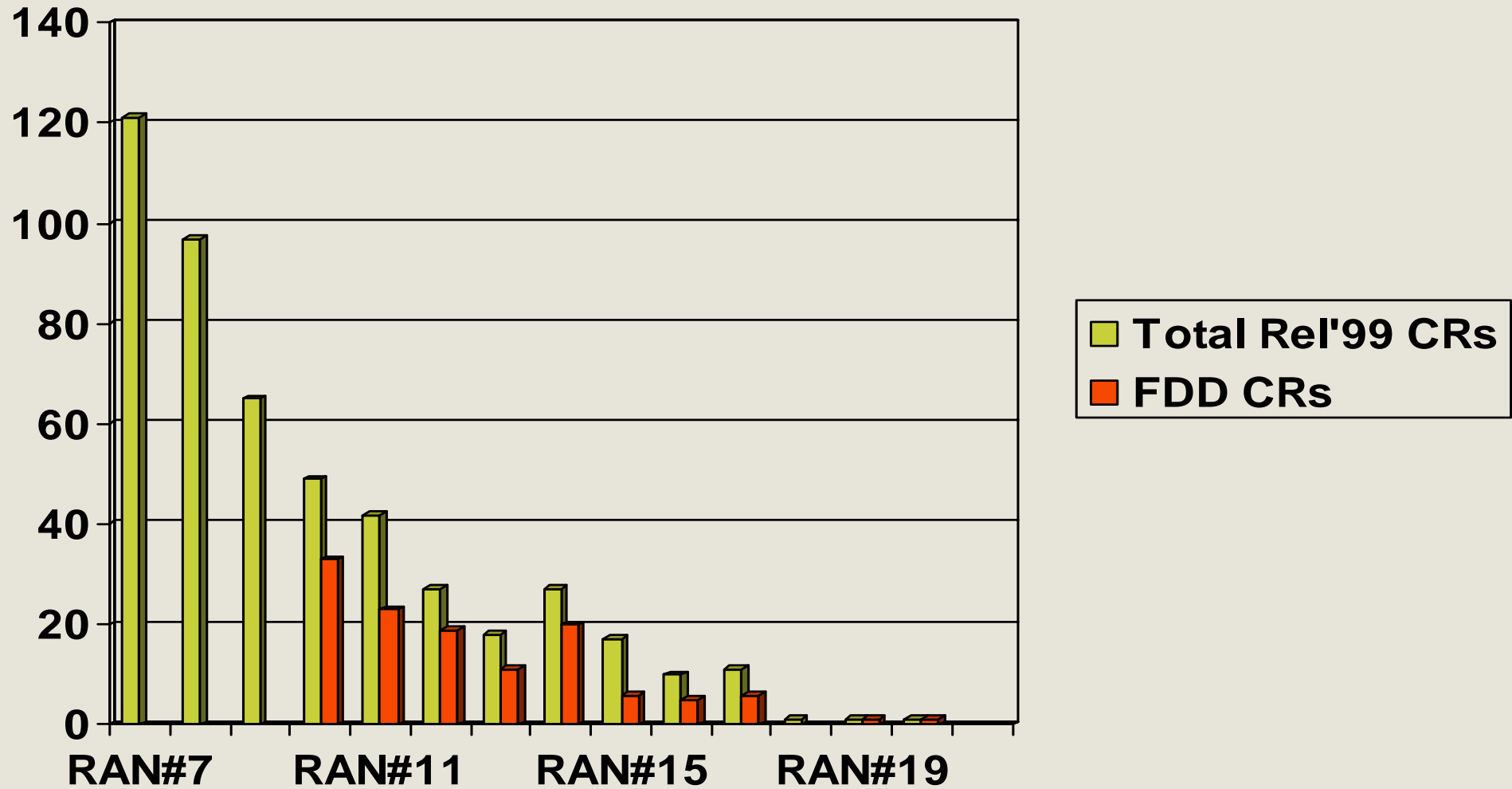


Release 99 & Release 4

Release 99 & Release 4

- 25.215 (Rel99)
 - Transmitted carrier power measurement with TX diversity
 - Current reporting for TX diversity does not work
 - Changed to reporting of relative cell load (sum of all branches)
 - Correction is needed in Rel99, otherwise TX diversity would not be supported in a Rel99 network
- No CRs for Rel4

Total of 1 Rel99 CR agreed for RAN#20, 1 for FDD



Release 5

Release 5 (FDD)

- 25.211
 - “sub-frame” and AICH signal description
 - HS-DPCCH transmit timing clarification
- 25.212
 - TPC and pilot transmission with STTD during transmission gaps
 - Flexible TFCI split mode formula
- 25.214
 - Power control algorithm 2
 - HS-DPCCH gain factor in compressed DPCH frames
 - HS-DPCCH reference power
 - HS-SCCH reception for inter-TTI=1
 - CQI transmission timing
- 25.215
 - TX carrier power definition for non-HSDPA codes with TX diversity

Release 5 (TDD)

- 25.221
 - Field coding of TPC for HS-SICH
- 25.222
 - Field coding for TFCI for HS-SICH
 - Number of bits in one HS-DSCH TTI
- 25.224
 - 1.28 Mcps power control procedure
- 25.225
 - Power measurement on non-HSDPA codes

Other Rel'5 related issues

- Issue with TFCI transmission power on S-CCPCH in case of no data resolved
 - RAN1 agreement resulted in an agreed RAN3 CR (R3-030850)
- Agreement that STTD is the only TX diversity technique used on HS-SCCH
 - CRs to be provided for RAN#21

Release 6

WI/SI where RAN WG1 is the leading group (1/7)

- Enhanced Uplink DCH (See RP-030250)
 - The biggest topic in RAN1 both in terms of number of contributions and contributing companies
 - Discussed areas include: Scheduling, HARQ, Channel structure, fast DCH setup, TCP modeling
 - 6 text proposals agreed for inclusion in TR 25.896

WI/SI where RAN WG1 is the leading group (2/7)

- Radio link performance enhancements (See RP-030245)
 - HSDPA enhancements
 - CQI and ACK/NACK improvements agreed for TR 25.899
 - Fractional DPCH
 - Some papers postponed to RAN1#33
 - TX diversity with more than 2 antennas
 - Evaluation methodology and antenna verification for A-STTD
 - Power control improvements for TDD
 - Discussion on the TR structure to be concluded before RAN1#33

WI/SI where RAN WG1 is the leading group (3/7)

- MIMO (See RP-030237 for physical layer)
 - SCM channel model for MIMO finished and agreed in TR 25.996 (v2.0.0)
 - 3GPP specific MIMO system evaluation framework to be discussed in RAN1
 - How to conclude the SCM activity?

WI/SI where RAN WG1 is the leading group (4/7)

- Beamforming enhancements (See RP-030256)
 - Joint discussion with RAN1+RAN3 experts
 - Lacking measurement and signaling support for S-CPICH based beamforming was considered as problematic for RAN1, since S-CPICH is mandatory for Rel99 UEs
 - RAN guidance needed on alternatives for a way forward:
 - Agree all corrections/enhancements for Rel6 and block the use of S-CPICH for Rel5 and earlier releases
 - Advance the corrections to Rel5
 - Rel6 CRs for RAN1 not agreed yet, due to late concerns being stated

WI/SI where RAN WG1 is the leading group (5/7)

- OFDM (See RP-030249)
 - 4 text proposals were agreed for TR 25.892
 - Concerns raised on simulation methodology for performance evaluation of OFDM vs. WCDMA, hence there were fundamental concerns on the presented performance results. More discussion needed on the methodology.

WI/SI where RAN WG1 is the leading group (6/7)

- Improvements of interfrequency and intersystem measurements (See RP-030235)
 - No inputs.
- Improvements of interfrequency and intersystem measurements for 1.28 TDD (See RP-030248)
 - No agreement on the problem areas to be studied (except for the case of 0.8ms switching time for GSM measurements)
 - More discussion needed before detailed proposals can be discussed

WI/SI where RAN WG1 is the leading group (7/7)

- Higher chiprates for TDD (See RP-030251)
 - 2 text proposals agreed for inclusion in TR 25.895
- TEI6
 - CR 25.225-069 (Rel6): "Interference measurement in UpPTS for 1.28Mcps TDD" agreed in principle

WI/SI where RAN WG1 is not the leading group

- MBMS
 - Joint session ½ day with RAN2 on L1 requirements, UE capabilities
 - Multiplex of R'99 UEs and Rel'6 UEs on the same S-CCPCH shall be possible, STTD cannot always be assumed to be available
 - Outer coding to be further studied by RAN1
 - Achievable MBMS performance with current Layer 1 to be documented in a new TR (as reference for other groups)
- OTDOA-SB (See RP-030264)
 - No discussion due to absence of the proponent

Annex: RAN1 meeting schedule (2004 tentative)

Meeting	Date	Location	Host
RAN1#33	25-29 August 2003	New York, USA	North American Friends of 3GPP
RAN1#34	06-10 October 2003	Seoul, Korea (TBC)	Samsung
RAN1#35	17-21 November 2003	Lisboa, Portugal	European Friends of 3GPP
RAN1#36	16-20 February 2004	TBD (Europe/US)	TBD
RAN1#37	10-14 May 2004	TBD (Europe)	TBD
RAN1#38	23-27 August 2004	TBD (Europe/US)	TBD
RAN1#39	15-19 November 2004	TBD (Asia/US)	TBD

- Assumption is one RAN1 meeting per TSG cycle (according to PCG discussion)