

3GPP TSG RAN Meeting #27  
9<sup>th</sup>-11<sup>th</sup> March, 2005  
Tokyo, Japan

# TSG RAN WG1 Status Report

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# RAN1 meetings

**RAN1#40**

Feb 14-18 2005

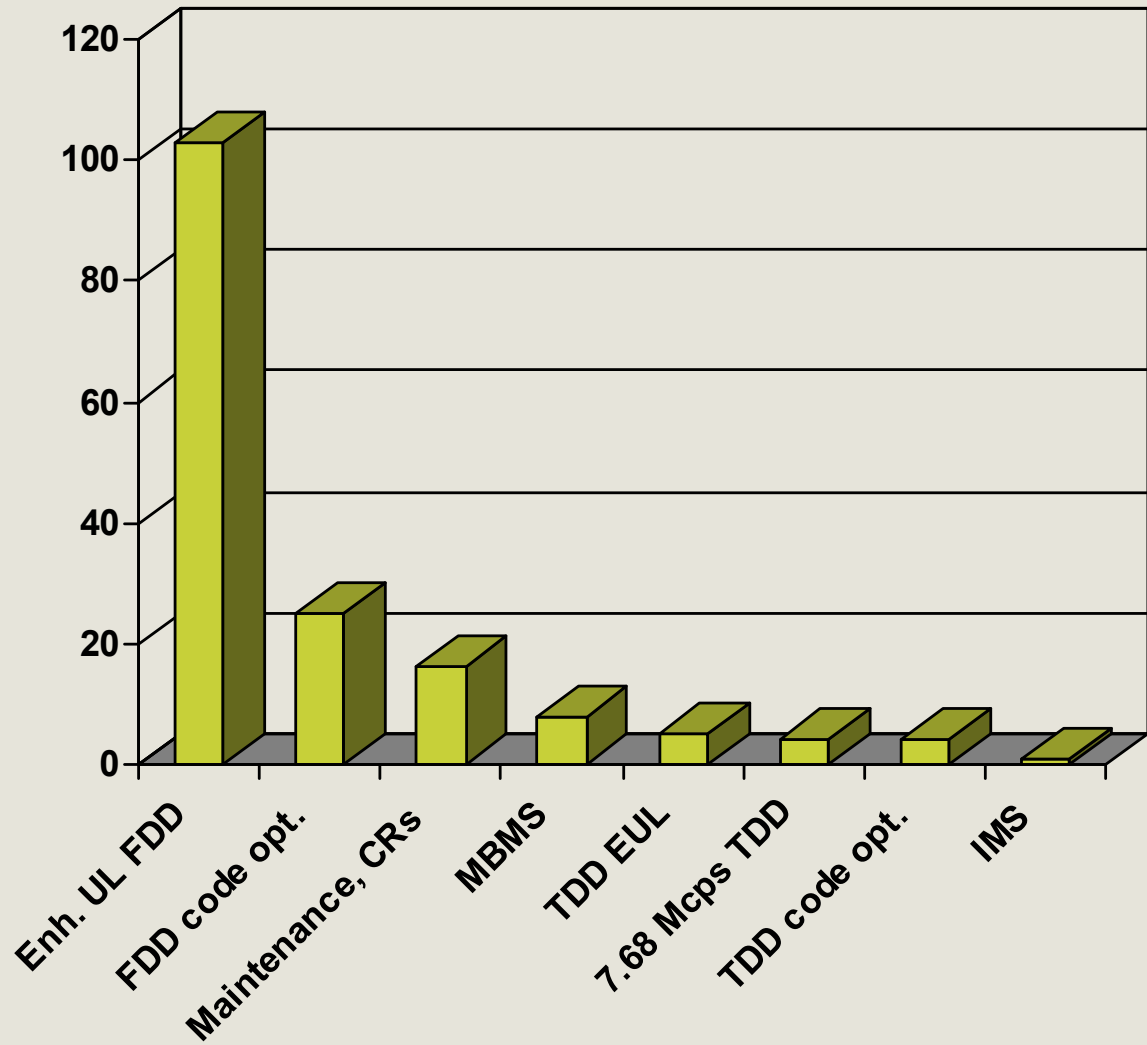
Scottsdale, AZ, USA

## Executive Summary

- ✓ Agreed change requests
  - 1 CR for R99 FDD (TEI), 1 CR for Rel5 FDD (TEI)
  - 19 CRs for Rel6 FDD (TEI6, Enhanced UL, F-DPCH)
  - 3 CRs for Rel6 TDD (LCR TDD, TDD Code optimisation)
- ✓ FDD Enhanced Uplink stage 3 progressing well
  - Joint session with RAN WGs on RRM concept and worksplit
  - 5 UE categories agreed
  - Timing relations and number of HARQ processes agreed
  - Total of 10 CRs on the L1 specifications on various details
- ✓ MBMS UE capability definition agreed
  - LS sent to RAN2 for incorporation into a CR for 25.306
- ✓ Code optimisation CRs for FDD and 3.84Mcps TDD agreed
  - F-DPCH (FDD) and HS-DSCH without DL DPCH (TDD)
- ✓ TDD Enhanced Uplink Study item completed

# Contributions Statistics

- RAN1#40



# Change Requests

## Agreed Change Requests

- Release 99, Release 4
  - 25.215: Removal of TGPL2
- Release 5
  - 25.214: Computed gain factor quantization (Rel5 only)
    - Concerns raised by one company on the reflector
- Release 6
  - FDD Enhanced Uplink
    - CRs on 25.211, 25.212, 25.213, 25.214
      - HICH/RGCH signature sequences, Timing, power offsets, reliable HICH/RGCH detection, HARQ bit collection, puncturing limits
  - FDD code optimization (F-DPCH)
    - Set of CRs for 25.211, 25.212, 25.213, 25.214, 25.215

## Agreed Change Requests (cont.)

- Release 6 (cont.)
  - TDD code optimization
    - 25.221, 25.224:
      - HS-DSCH operation without DL DPCH (3.84Mcps)
  - TEI, TEI6
    - 25.214:
      - Fast L1 DCH synch., Timing maintained hard handover
    - 25.215:
      - DL Transmission Branch Load measurement
      - UE SFN-SFN measurement
        - » Company CRs for R99-Rel5 (RP-050093)
    - 25.224:
      - UL closed loop power control (1.28Mcps TDD)

# Work Items & Study Items



## WI/SI where RAN WG1 is the Leading Group (1/3)

- MIMO
  - No discussion (in line with decision from RAN#26)
- ✓ Optimisation of channelisation code utilisation for FDD (See RP-050011)
  - RAN1 part of the work item completed
  - Set of five CRs (25.211-25.215) agreed for F-DPCH, using the more optimised F-DPCH solution without pilot bits
  - BTFD for flexible positions
    - RAN1 discussed the gains vs complexity and did not agree to introduce the feature in the specifications.

## WI/SI where RAN WG1 is the Leading Group (2/3)

- Optimisation of channelisation code utilisation for 1.28Mcps TDD (See RP-050013)
  - One contribution was discussed on TX power requirements without agreement
- ✓ Optimisation of channelisation code utilisation for 3.84Mcps TDD (See RP-050012)
  - RAN1 part of the work item completed
  - Two CRs on HS-DSCH operation without DL DPCH were agreed after the meeting via email

## WI/SI where RAN WG1 is the Leading Group (3/3)

- 7.68Mcps TDD option (See RP-050017)
  - Discussion of contributions on work organisation across the RAN WGs deferred to TSG RAN
  - WID lists stage 2 under RAN1 control – confirm responsibility.
  - TR 25.809 (Rel7) created, TR structure agreed
  
- ✓ Uplink enhancements for UTRA TDD (See RP-050019)
  - RAN1 part of the study item completed
  - Latest TR 25.804 (v2.0.0) presented to RAN for approval
    - TR conclusion recommends the creation of a work item

## WI/SI where RAN WG1 is not the Leading Group

(1/3)

### ✓ FDD Enhanced Uplink (See RP-050016)

- The remaining big issues are resolved
  - Timing relations agreed
  - 5 UE categories agreed, 3 categories FFS, maximum of 6 categories
  - LS sent to RAN2 on AGCH contents
  - Various improvements of the E-DCH L1 specifications, resulting in CRs to the specifications
  - Joint discussion RAN1-2-3-4 on RRM concept, resulting in way forward and work split
  - Principle agreement on UE behaviour at maximum TX power
    - CRs to be produced at the coming RAN1 meeting
- Some aspects to be finalised at the coming RAN1 meeting, e.g. interaction with compressed mode

## WI/SI where RAN WG1 is not the Leading Group

(2/3)

- ✓ MBMS (work item is already closed)
  - ✓ RAN1 part of the MBMS UE capability agreed, including selection and soft combining capabilities
    - LS sent to RAN2 for inclusion in a CR to 25.306
  - TTI reordering discussed (for selection combining)
    - Gain should be compared to what is achievable when using MSCH properly
    - Gain achievable when the network does not utilise the freedom in scheduling provided by selection combining

## WI/SI where RAN WG1 is not the Leading Group

(3/3)

- RAB support enhancement (See RP-050010)
  - No further discussion on use of secondary scrambling codes
    - RAN4 LS on UE power control issues was received at the end of the meeting

# Other issues

## Other issues

- Short discussion on feature clean-up
  - Decision was deferred to RAN plenary
- RAN1 Terms of Reference
  - Proposed update of ToR was endorsed by RAN1
  - RP-050051 presented for approval



## RAN WG1 Meeting Schedule in 2005

Meeting	Date	Location	Host
RAN1#40	14-18 February 2005	Scottsdale, USA	North American Friends
RAN1#40bis	04-08 April 2005	Beijing, China	Huawei
RAN1#41	09-13 May 2005	Athens, Greece	European Friends
RAN1#42	29 Aug – 02 Sept 2005	London, UK	European Friends
RAN1#43	07-11 November 2005	TBD, Korea	Samsung

RAN1#40bis will be co-located with RAN2.