3GPP TSG RAN Meeting #26
8th-10th December, 2004
Vouliagmeni, Greece

Report from TSG RAN WG1 Chairman to TSG RAN #26

Dirk Gerstenberger
TSG RAN WG1 Chairman

RAN1#38bis
September 20-24, 2004
Seoul, Korea

RAN1#39
November 15-19, 2004
Shin-Yokohama, Japan

Executive Summary

- Agreed change requests
  - 1 CR for Rel5 FDD
  - 12 CRs for Rel6 FDD (incl. Enhanced UL and MBMS)
  - 5 CRs for Rel6 TDD (incl. MBMS)

✓ Set of CRs agreed for FDD Enhanced Uplink

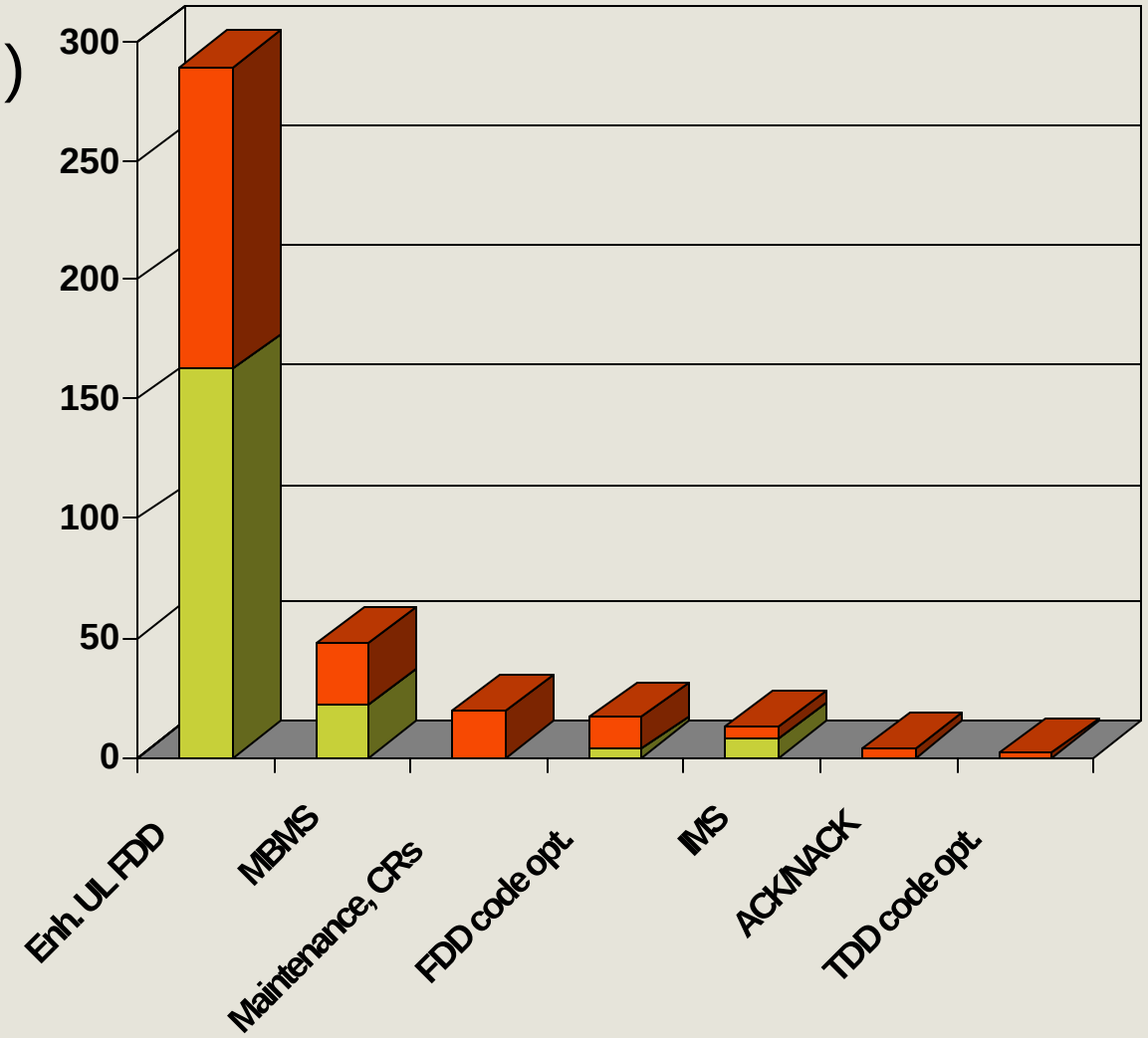
- Major progress at RAN1#38bis, during intensive email ad hocs and at RAN1#39
- Good cooperation between the experts across WG borders
  - Co-location of WG meetings is showing positive results!
- Completion level 80-90%.

✓ Set of CRs agreed for MBMS (FDD & TDD)

- MICH and combining techniques completed and covered by CRs
- FDD UE capability requirements agreed, but no CR available yet

Contributions Statistics

- RAN1#38bis (green)
- RAN1#39 (red)



Change Requests

Agreed Change Requests

- Release 99, Release 4
  - No CRs for FDD/TDD
- Release 5
  - 25.214: Clarification on DL compressed mode
- Release 6
  - FDD Enhanced Uplink
    - 25.201, 25.211, 25.212, 25.213, 25.214, 25.215
  - MBMS
    - 25.211, 25.212, 25.213, 25.214, 25.221, 25.222, 25.224
  - TEI
    - 25.215: DL Transmission Branch Load measurement
    - 25.224: UL closed loop power control (1.28Mcps TDD)

Other TEI Issues

- Radio link synchronization issues (Rel6)
  - Faster DCH setup and fast Timing-maintained HHO discussed
    - LS sent to other WGs
- RAB combinations
  - Inputs to 34.108 and 25.993 reviewed by RAN1 and coordinated with T1 and RAN2

Work Items & Study Items

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

- HS-DPCCH ACK/NACK Enhancements (See RP-040423)
  - RAN1 CRs technically endorsed
  - No consensus reached in RAN1 for including the scheme in Rel'6
    - Issue is raised to the RAN plenary for decision

- MIMO (See RP-040427)
  - No discussion (in line with guidance from RAN#25)
  - Parallel MIMO session planned during RAN1#40

- 7.68Mcps TDD option (See RP-040430)
  - No discussion (in line with guidance from RAN#25)

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

- Uplink enhancements for UTRA TDD (See RP-040431)
  - Latest TR 25.804 (v1.0.0) presented to RAN for information
  - No discussion (in line with guidance from RAN#25)
- Optimisation of channelisation code utilisation for TDD (See RP-040422)
  - Two contributions were discussed (1.28Mcps & 3.84Mcps)

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

- Optimisation of channelisation code utilisation for FDD (See RP-040421)
  - Set of five CRs (25.211-25.215) reviewed for F-DPCH
    - Taken as basis for CRs in other WGs
    - One slot format with 2 TPC and 2 Pilot bits
      - Allowing up to 4 users sharing one code
    - Closed loop power control for F-DPCH with TPC error rate as outer loop target
    - Set of CRs updated and circulated on RAN1 reflector
  - Until RAN1#40, a more optimised F-DPCH solution without pilot bits will be studied, which may then replace the current assumption
  - One contributions could not be discussed due to lack of time
    - BTFD for flexible positions

WI/SI where RAN WG1 is not the Leading Group (1/3)

- FDD Enhanced Uplink (See RP-040429)
  - Set of L1 CRs ready for RAN approval, covering the essential L1 aspects of FDD Enhanced Uplink
    - Code mapping, channel structures, signalling channels, channel coding, HARQ functionality, TX diversity and beamforming, ...
  - Vital progress was made at RAN1#38bis & RAN1#39
    - Very intensive email discussion phase between the meetings contributed significantly to the progress (450 mails in 30 days)
    - Joint session with RAN2 and coordination of experts across WG borders did also help a lot
  - Issues to be addressed in the correction phase
    - Mainly the exact timing relations for the UL/DL signaling and UE capabilities

WI/SI where RAN WG1 is not the Leading Group (2/3)

- MBMS (See also RP-040425)
  - ✓ CRs for MICH agreed (FDD/TDD)
  - ✓ CRs for macro-diversity combining aspects agreed (FDD/TDD)
  - – UE capability requirements
    - TDD CR agreed
    - FDD UE requirements for macro-diversity combining agreed
      - – But no CR was provided yet
  - – No agreement reached on TTI reordering, one of the reasons being missing information from RAN4 on measurement occasion lengths
    - Application would be possible with selective combining only

WI/SI where RAN WG1 is not the Leading Group (3/3)

- RAB support enhancement (See also RP-040420)
  - Use of secondary scrambling codes discussed
    - Simulation results (link and system level) shown at RAN1#39
    - RAN4 feedback needed on UE power control issues

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 (TBC)	Huawei
RAN1#41	09-13 May 2005	Athens, Greece (TBC)	European Friends
RAN1#42	29 Aug – 02 Sept 2005	London, UK (TBC)	European Friends
RAN1#43	07-11 November 2005	TBD, Korea	Samsung

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

Thanks to everyone contributing during 2004!

It is important that companies

***keep their experts in RAN1** also in 2005!!*