Status report of RAN WG2 to RAN #25

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RAN WG2 Chairman

RP-040277

Main activities since last RAN Plenary

- **Release 99 corrections**
  - Occupied 1 day of last Quarter only!!!

- **Release 4 corrections**
  - Very few

- **Release 5**
  - Many corrections

- **Release 6**
  - MBMS
    - Dedicated 2 days ad-hoc meeting
      - Mostly progress on stage 2 issues
    - 1,5 days on Stage 3 specification
  - HSUPA
    - Dedicated 2 days ad-hoc meeting, + 1,5 days in August
      - Mostly progress on stage 2 issues and in joint meetings with RAN1
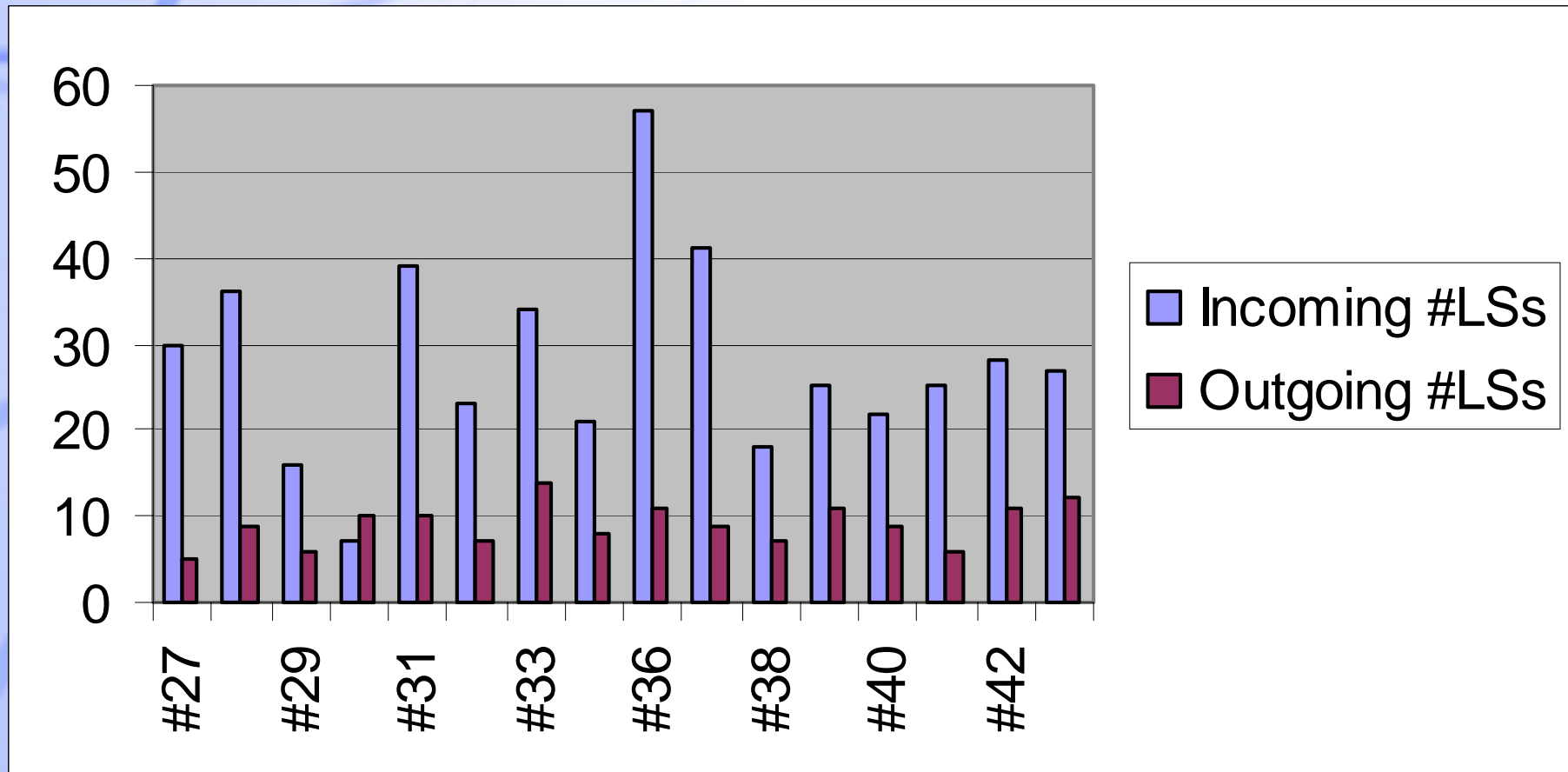   - Good progress and main architecture decisions now taken.
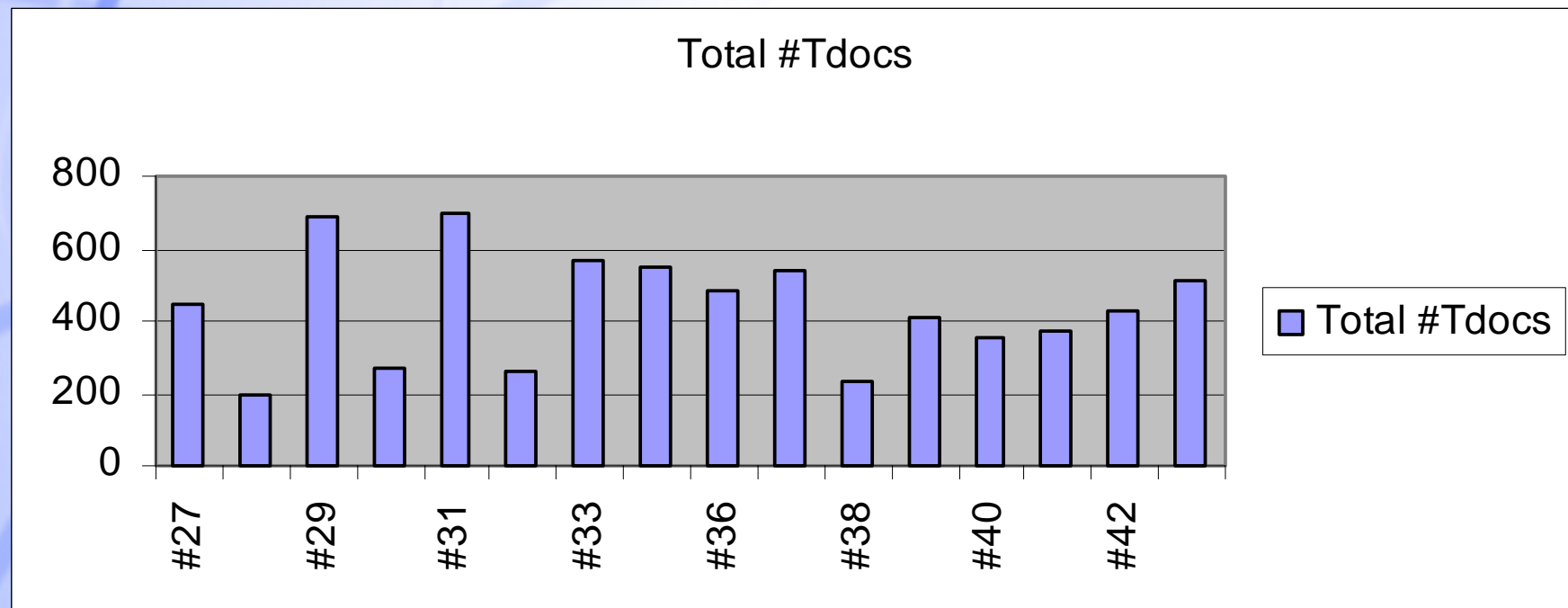
RAN WG2 statistics

Meetings held since last RAN Plenary

- **One ad-hoc meeting on MBMS**

- **One ad-hoc meeting on HSUPA**

- **One RAN2 meeting**
  - One day joint meeting with RAN1 on HSUPA
  - Review of UTDOA with RAN1
  - One evening with SA4 on MBMS

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Liaison statements In/Out

Number of inputs per meeting
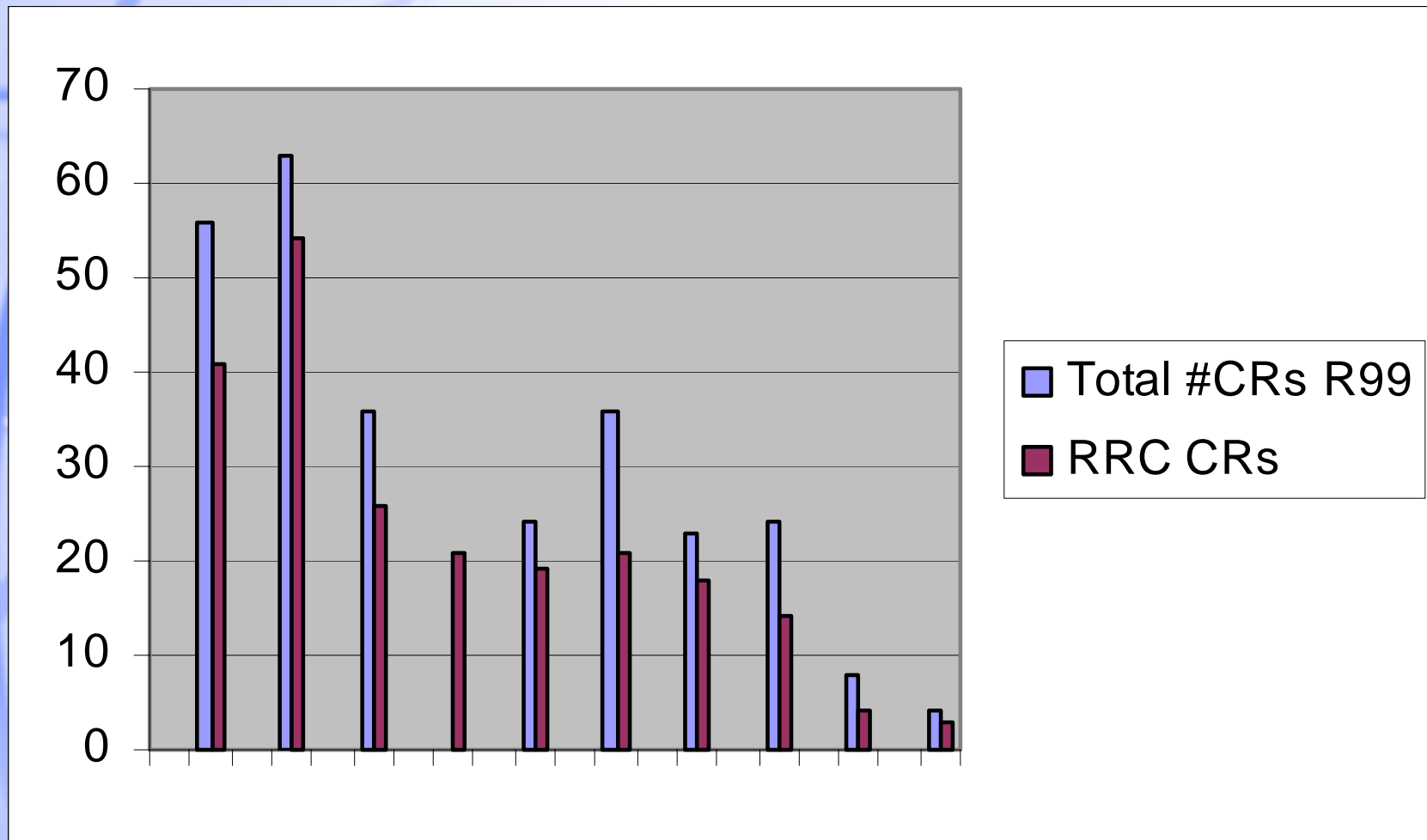

Total #Tdocs

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Release 99 activities

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Rel 99 Change Request statistics

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RRC CRs on R99 specifications

- **Refer to RP-040359 for complete list of RAN WG2 CRs**
  — RRC CRs
    – 1 TDD CR on ASN.1
    – 1 CR on some A-GPS definitions
      – Linked to progress on A-GPS performance in RAN4
    – 1 CR on the clean removal of some parts (R99/R4) of the Virtual Active Set functionality
      – companion CRs for the completion/cleaning (R5/R6) of the remaining parts
      – this was started last quarter
  — 1 CR on 25.307 to precise applicable clauses for release independent frequency bands
  — 3 CRs on test loop functionnality in 34.109

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Release 4 activities

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Release 4 CRs

- **Refer to RP-040359 for complete list of RAN WG2 CRs**
  - 3 RRC CRs
    - 1 CR aligning release 4 with other releases!
    - 1 CR on default AMR configurations
    - 1 CR on LCR TDD

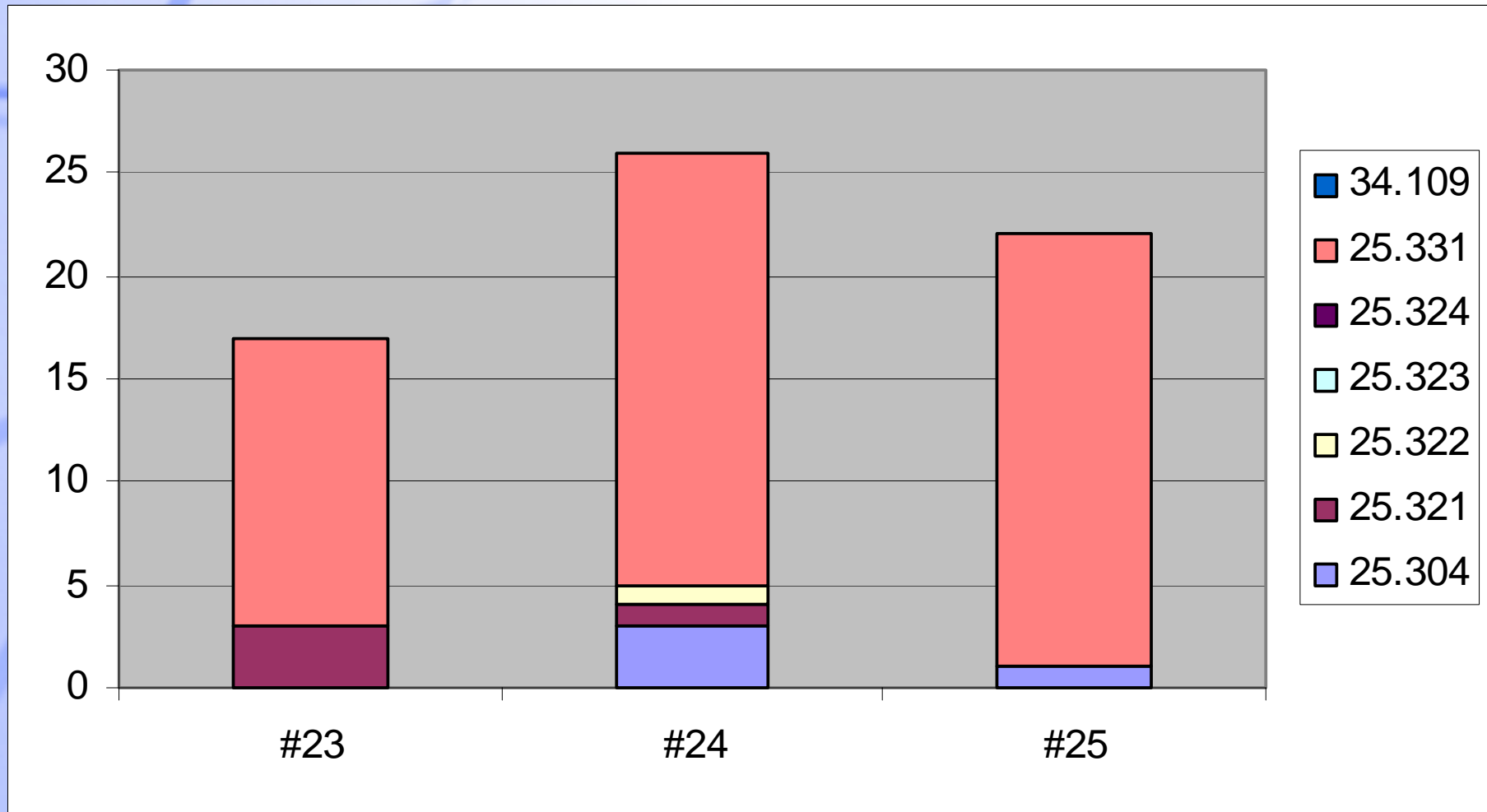RP-040277

Release 5 activities

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Release 5 CRs

- **Refer to RP-040359 for complete list of RAN WG2 CRs**

Release 5 CR statistics

Legend:
- 34.109
- 25.331
- 25.324
- 25.323
- 25.322
- 25.321
- 25.304

Categories: #23, #24, #25

RAN2 inputs to 34.108 for HSDPA

- **Discussions have been ongoing on which RB conbinations should be sent to T1 for testing. Like before, many opinions:**
  - Only what extends test coverage
  - Best « commercial » RABs
  - The ones I want…

- **Difficult discussions, and sometimes impacts on T1 not necessarily easy to understand in RAN2**

- **Discussion is expected in RAN on whether improvements to the current process/criteria can be done**
  - Also, potential new organisation may help, if T1-SIG co-located with RAN2

- **Note that a first set of HSDPA CRs was already agreed and sent to T1, so the process works…**

- **Note that 25.993 is less contentious**

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Recap on the current process as was agreed in RAN, and the current practices

- **On 34.108**
  - RAN2 decides after sometimes long discussions on which combinations should be proposed to T1 in a CR to 34.108
    - Sometimes companies also input to RAN1 in parallel to speed up the process
  - Draft CR is checked by RAN2, then sent for review to RAN1
    - RAN1 has a 1 week review policy
  - LS is finally sent to T1 (by RAN1 or RAN2, depending on the last reviewer)

- **On 25.993**
  - RAN2 reviews CRs
    - Only technical correctness is a criteria
  - L1 parameters checked off-line by companies
  - CRs presented by RAN2 to RAN Plenary

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Release 6 activities

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List of Work Items under RAN WG2

- **MBMS**

- **FDD Enhanced Uplink**

- **Radio access bearer support enhancement**

- **MIMO layer 2/3**

- **Enhancement of the support of network sharing in the UTRAN**

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MBMS

- **Significant progress:**

  — Stage 3 work has started

  — Few remaining stage 2 decisions to be finalised in october based on SA2 input

  — Session with SA4 has shown difficulty to have an end to end vision (at this stage) of MBMS

  — Some companies have committed important resources to stage 3

  — Many companies now contributing on stage 3

  — Experts progressively build a good (and common!!) understanding of MBMS

- **See status report**

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FDD Enhanced Uplink

- **Work mainly in joint meetings with RAN1, to decide on main radio architecture aspects:**
  - Important progress was accomplished
  - Many contributions from many companies
  - fruitful discussions and very positive spirit from all companies

- **Important decisions taken on most key items:**
  - TFC selection
  - MUX architecture (some details to finalise)
  - Support of 2 ms TTI in addition to 10ms
  - Re-transmission mechanism (synchronous)
  - Some signalling mechanism (e.g. for redundancy version)
  - HARQ support in SHO
  - Scheduler architecture
    - Details to be finalised

- **RAN1 and RAN2 almost ready to autonomously finish their work**

- **See status report for the details**

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Radio access bearer support enhancement

- **Some decisions taken:**
  - No UEP in release 6
  - No specific release 6 optimisation for RTCP (which is assumed not to be present in the VoIP stream)

- **Some layer 2 optimisations proposed, to be considered**

- **Simulations on secondary scrambling code solution(s)**
  - Some joint discussions for RAN1 to spend time on this

- **Discussions on ROHC remaining work**
  - Companies invited to contribute to progress in October 04

- **CRs to be written for Dec O4**

- **See status report**

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Enhancement of the support of network sharing in the UTRAN

- **Some contributions**

  — Draft CRs were discussed

  — One pending question sent to SA2 prior to finalisation

  — Progress according to schedule
    – should be completed in Dec 04

  — See status report

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MIMO layer 2/3

- **No time**
    - One input stating little RAN2 impact

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other

- **Review of UTDOA Study Item proposal as requested by RAN**
  - Detailed presentation of the technology
    - No technical problem identified, CELL_DCH easier than CELL_FACH
  - Decision was finally to go for a Work Item instead, given that no RAN1/Node-B/UE impact is foreseen, and technology has been implemented successfully with other radio technologies
    - Main work is architecture (RAN2), Iupc (RAN3), and performance requirements (RAN4)
  - Issue of whether TDD should be in this WI submitted by proponents
    - One company expressed concerns on this

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Technical Enhancements and Improvements for Rel-6

- **CELL_FACH performance: common understanding of issues should now be reached with RAN4**
  - RAN2 will prepare CRs for Dec 04

- **Many other contributions not treated**

Feasibility Study under RAN WG2

- **none**

Release 6 Items under other WGs

- **No activity**

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Conclusions

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Chairman's concluding remarks

- **Very few R99 corrections, and none impacting Early UEs**

- **HSDPA corrections**

- **Good MBMS progress**
  — knowledge sharing session with SA4 clarified some points
  — progress is now on stage 3
  — last remaining architecture aspects under progress with SA2

- **HSUPA (FDD uplink enhts) architecture and main decisions progressed as planned, jointly with RAN WG1**

- **2 extra meetings added 1H05**
  — => 2 meetings planned for 1Q05 and 2 meetings for 2Q05

- **Conclusion on IMS (VoIP) optimisations should be made for Dec 04**

- **Future work should be mainly on MBMS, HSUPA, IMS support, TEI6**

Release 99 changes decrease, HSDPA is being corrected

MBMS and HSUPA has been progressing well, Thank you to all!

Meetings are very busy

Please sustain efforts and keep experts active in RAN WG2