Status report of RAN WG2 to RAN #12

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RAN WG2 Chairman

RP-010300

Main activities since last RAN Plenary

- **Release 99 corrections**
  - — still occupying more than 50% of meeting time, and most of delegates bandwidth/expertise
  - — Still many corrections on aspects which were not described, unclear, or incorrect.
    - – BUT few actual radio interface modifications, and level of importance of CRs is decreasing
  - — Backwards compatibilty taken into account
- **Methodology to ease introduction of future releases**
  - — Extensions, naming, etc
- **Discussions on backwards compatibility**
- **HSDPA**
  - — progressed with RAN1. Good progress

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RAN WG2 statistics

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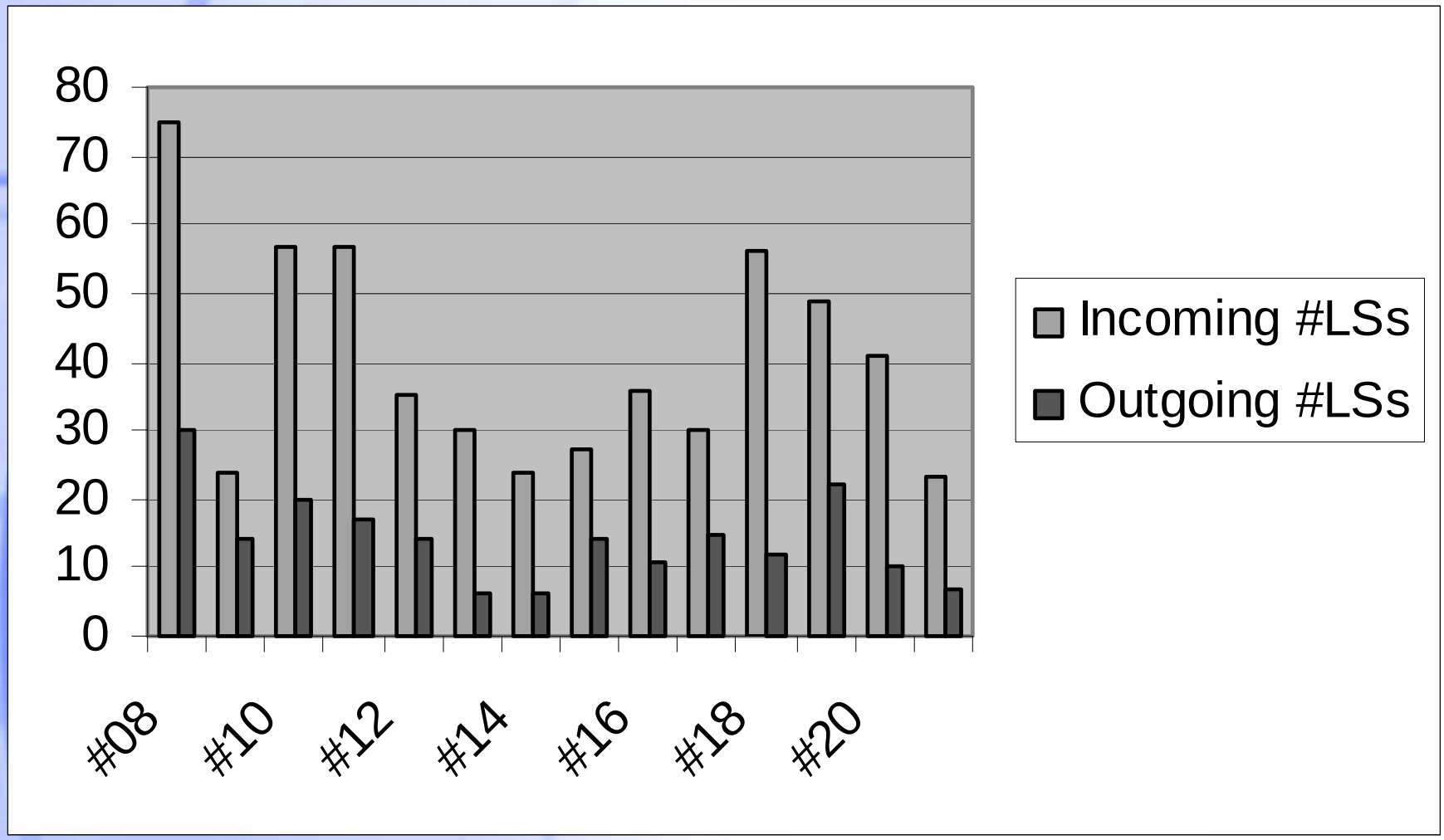
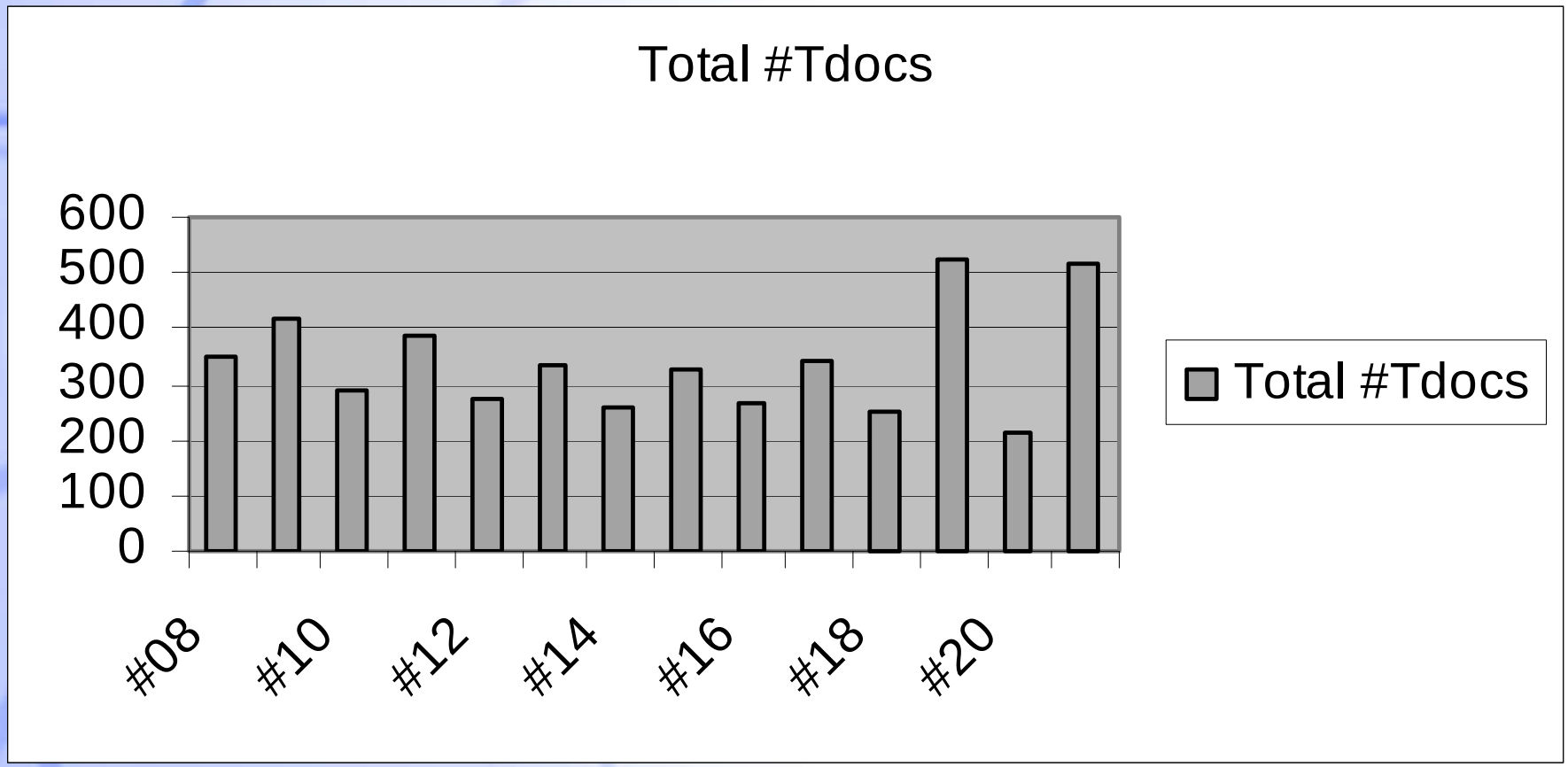
Meetings held since last RAN Plenary

- RAN WG2#20 in April
- RAN WG2 #21 in May
- Two joint meetings with RAN WG1 on HSDPA
- One joint meeting with RAN WG3 on Iupc for A-GPS positioning methods
- One joint meeting with RAN WG1 and RAN WG3 on Gated DPCCH Transmission

Liaison statements In/Out



Total number of documents per meeting



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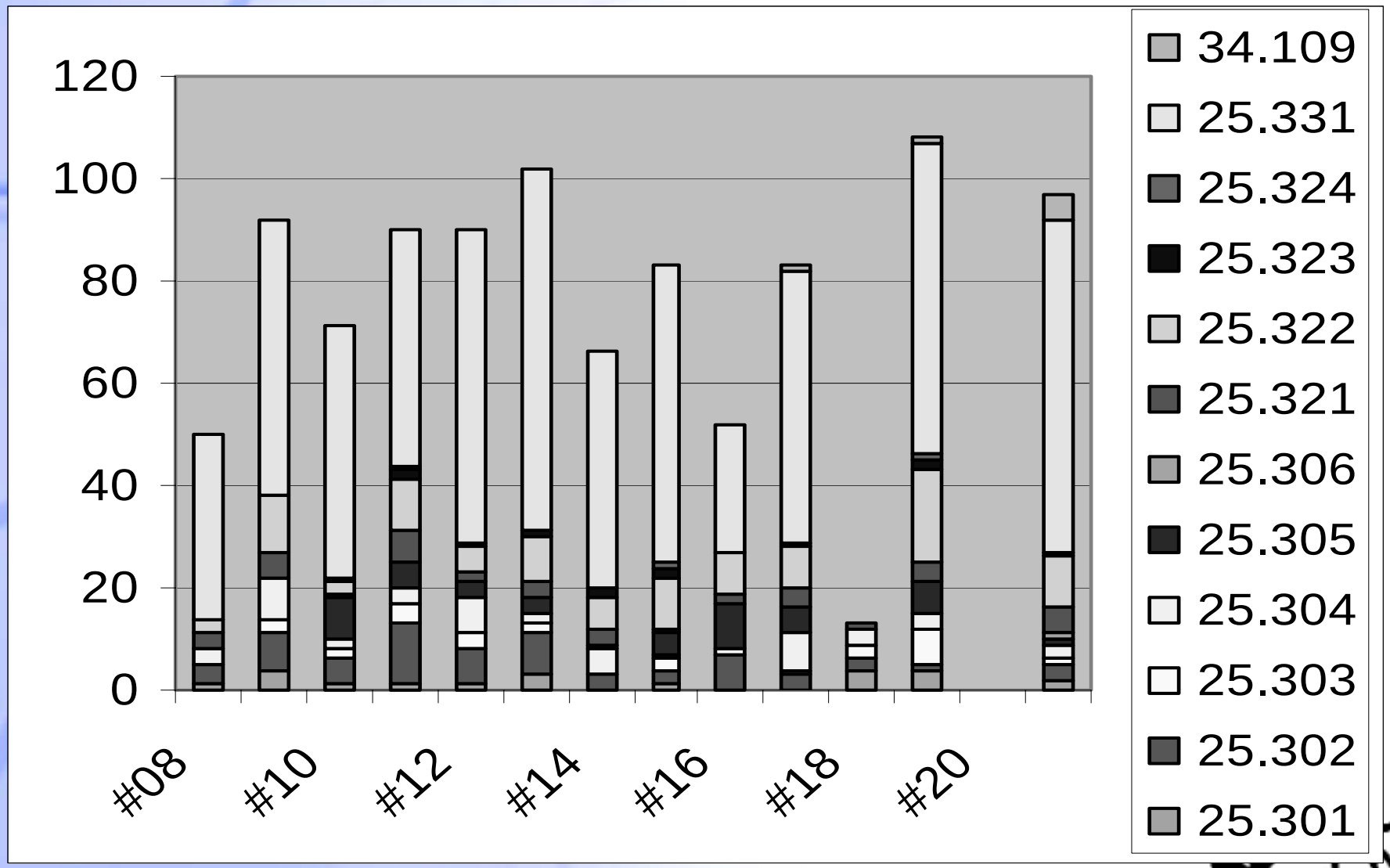
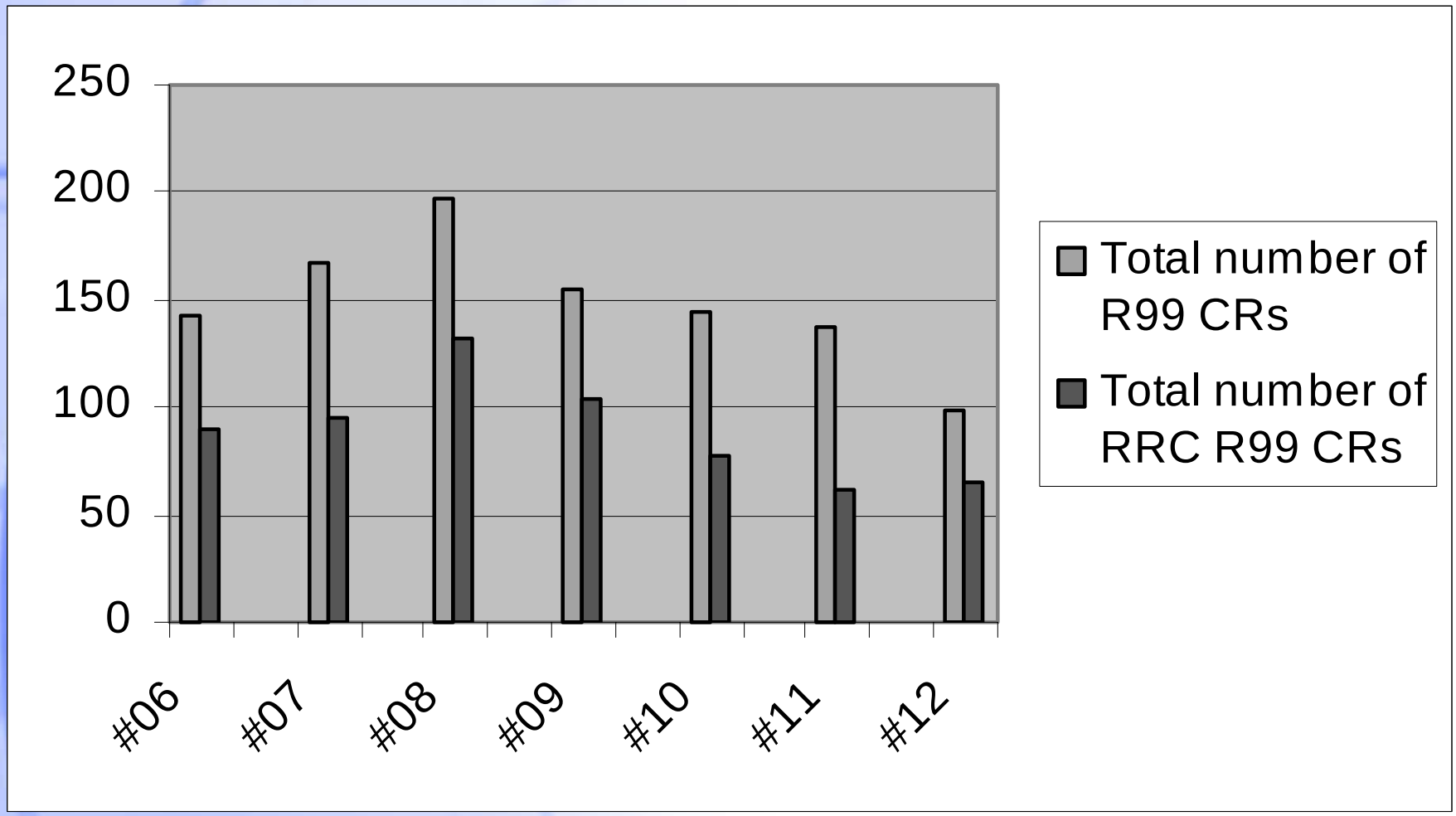
Rel 99 Change Request statistics (1)



Rel 99 Change Request statistics (2)



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Release 99 activities

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RLC

- **Several detailed clarifications but few actual changes**

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PDCP/MAC/BMC

- **Stable protocols for many meetings**

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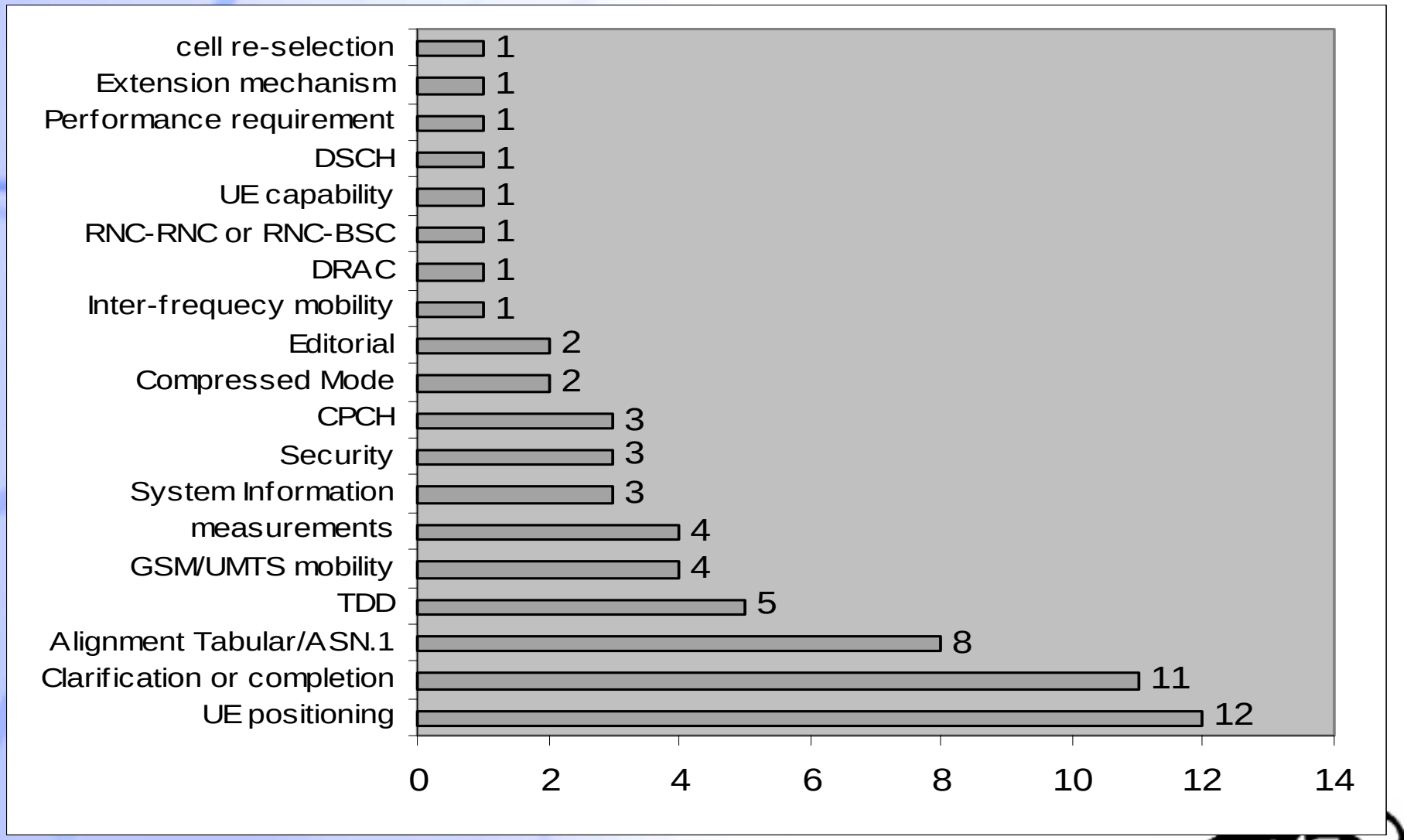
Cell selection/re-selection

- **Major editiorial clean-up and clarifications**
- **Removal of mapping function (removes issue flagged by RAN4 at last RAN Plenary)**

RRC

- **Major work has been to check consistensy between ASN.1 and Tabular description.**
  - Work now done. Very time consuming, but needed exercise
- **Still many corrections**
  - Some are clarifications => may not impact implementations
  - Some are real corrections
  - But the corrections are less and less on core functionalities
- **Methodology in progress on extensions for future releases**
- **Backwards compatibility taken into account**
  - All CRs have no impact on working functionalities
  - But still most functionalities have a potentially impacting correction

RRC CRs per function/category



R2 definition for backwards compatibility

- **A Change implemented in version N of a 3GPP release is backwards compatible when the following conditions are all met:**
  - Any functionality that was working in versions prior to version N still works with a UE that implements version N and a network implementing version N-1
  - Any functionality that was working in versions prior to version N still works with a network that implements version N and a UE implementing version N-1
  - Any functionality that was working in versions prior to version N still works with a UE that implements version N and a network implementing version N
- **Backwards compatibility with version N-1 should also mean BC with any prior version of the specifications in which the functionality was working, although exceptions may exist.**
- **A backwards compatible change needs to be implemented by networks and UEs if they support the corrected functionality so that the standard (and the functionality that it intends to correct) works.**

Change Requests on rel 99 specifications

- **Refer to RP-0010301 for complete list**
- **CRs are in RP-010302 to RP-000319**
  - Revision of CR on 25.304 provided seperately, after e-mail agreement

Release independant frequency bands

- **25.307 Requirements on UEs supporting a Release Independent Frequency band**
  - Release 99 document proposed for approval
  - Both UMTS1800 and UMTS1900 are introduced as release independant frequency bands
  - CR to create release 4 version provided by MCC => difference with the process in GSM
    - Proposal is to have a version of the document per release
    - Each version contains only bands where core specifications (RRC, RF specfications) are in later releases e.g. UMTS1800 is described in v3 and v4 or 25.307, but not in v5 since it is in the v5 core specifications
- **25.307 v2.0.0 in RP-010326**
- **Release 4 CR in RP-010YYY**

Other

- **Proposal from T1 for an joint R2/R4/T1 ad-hoc group on tests for RRM**
- **Answer from R2 is a proposal for a one day joint meeting in July (colocated T1-RF, R4 and R2)**
- **No commitment on a permanent ad-hoc at this stage**

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Release 4 activities

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Release 4 CRs

- **Some corrections on:**
  - Low Chip Rate TDD
  - UE Positioning for TDD
  - CPCH to allow testability in T1
- **Some progress on release 4 methodology**
  - Extensions
  - Naming conventions
- **Refer to RP-0010301 for complete list**
  - CRs are in RP-010320 to RP-000323

Remaining R4 Feasibility Study under RAN WG2

- **Improved Common DL Channel for Cell-FACH State**
  - No progress compared to previous RAN meeting. No submission was concluded positively.
  - Proposal to close Feasibility Study.

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Release 5 activities

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List of release 5 Work Items under RAN WG2

- Radio access bearer support enhancement
- Improved usage of downlink resource in FDD for CCTrCHs of dedicated type
- Hybrid ARQ II/III
- High Speed Downlink Packet Access (HSDPA)
- High Speed Downlink Packet Access (HSDPA) - layer 2 and 3 aspects
- UE positioning enhancements
- UE positioning enhancements for 1.28 Mcps TDD
- Open interface between the SMLC and the SRNC within the UTRAN to support A-GPS Positioning
- Open interface between the SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods

Radio access bearer support enhancement

- **No activity**

Hybrid ARQ II/III

— No activity
  – HARQ progressed under HSDPA Work Item.

Improved usage of downlink resource in FDD for CCTrCHs of dedicated type

- **No activity**

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High Speed Downlink Packet Access

- **Two joint meetings with RAN WG1**
- **Good progress, according to Work Plan**
  - HSDPA architecture
  - Radio interface model and principles
  - UE capability
  - Evaluation criteria/scenarios
- **TR 25.855 v1.0.0 which capture progress made in RAN WG1 and RAN WG2 is presented for information**
  - See RP-010345
- **Detailed status report in RP-010328**

UE Positioning (UP) enhancements

- **Work performed**
  - started work on definition of tests for R99 radio interface
    - Good progress
    - Possible meeting with T1 in July.
  - Status of UP in UTRAN provided to TSG RAN as requested
    - RP-010411
  - No work on new positioning methods as per RAN request

UE positioning enhancements for 1.28 Mcps TDD

- **No activity due to lack of time.**

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Open SMLC-SRNC Interface within the UTRAN to support A-GPS Positioning

- **Joint meeting took place with RAN WG3**
- **RAN2 activity completed**
  - CR on Stage 2 in 25.305, RP-010325
- **Work in progress in RAN3.**
  - Work almost complete
- **See RP-010327 for detailed status report**

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Small Technical Enhancements and Improvements for Rel-5

- **None so far**

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Improved usage of downlink resource in FDD for CCTrCHs of dedicated type

- **No activity**

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Open interface between the SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods

- No activity
- TR outline proposed and will be addressed at new RAN WG2 (no time available at last meeting)

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Release 5 Items under other WGs

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Gated DPCCH transmission (RAN WG1)

- **Joint R1/R2/R3 on the subject**
  - When considering radio interface, CELL_FACH from release 99 is superior to DPCCH gating from terminal saving point of view
  - Gains on Iub/Iur very much dependant on implementation, and therefore are not sufficient to justify feature
  - Conclusion that work should not proceed in R1, unless R2 or R3 provide new potential benefits.

UMTS1800 and UMTS1900 (RAN WG4)

- **Work completed in RAN WG2**
  - Bands introduced in 25.307 proposed for approval
  - UE capability in CR on RRC
    - RP-010324

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USTS

- **Presentation of USTS was made**
- **Analysis of impacts in progress**

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Conclusions

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Chairman's concluding remarks

- Rel 99 CRs are mostly clarifying uncomplete descriptions. Good progress on RRC, other protocols are stable.
- Standard quality has already made significant progress. More needed to achieve interoperability level.
- Release 4 was completed in time, but majority of delegates is still busy with release 99. This now means more work with duplication of specifications, and maintance of two releases.

Past work has been paying off, release 99 quality improves, and stability is increasing. Please sustain efforts and keep experts active in RAN WG2