



# Status Report RAN WG3 to TSG-RAN #22

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RAN WG3 Chairman



## **Meetings since RAN#21**

- **RAN WG3#38, 6 – 10 October 2003, Sophia Antipolis, France**
- **RAN WG3#39, 17 – 21 November 2003, San Diego, US**



## Executive summary

### ■ RAN3 agreed CRs:

- 4 R99 CRs
- 18 Rel-4 CRs (4 cat. A, 14 cat F)
- 65 Rel-5 CRs (18 cat.A, 47 cat. F)  
(12 CRs on HSDPA)
- 2 Rel-6 CRs (2 cat.A)

### ■ further:

- 7 Rel-6 CRs „in principle agreed“ (on hold until Rel-6 specs created)
- 2 conditionally agreed and 5 technically endorsed CRs
- Complete list of CRs in RP-030587



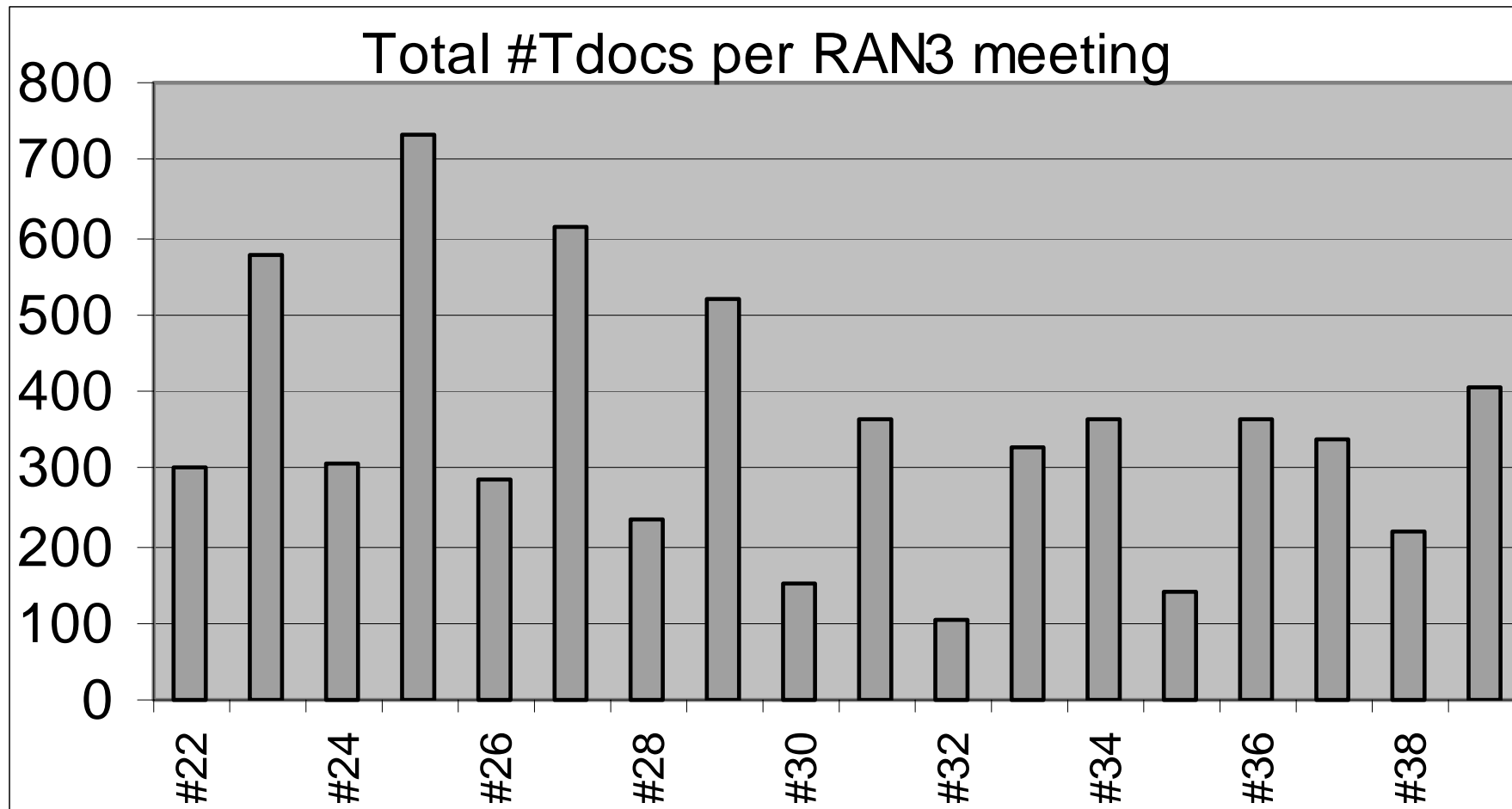
### Executive summary

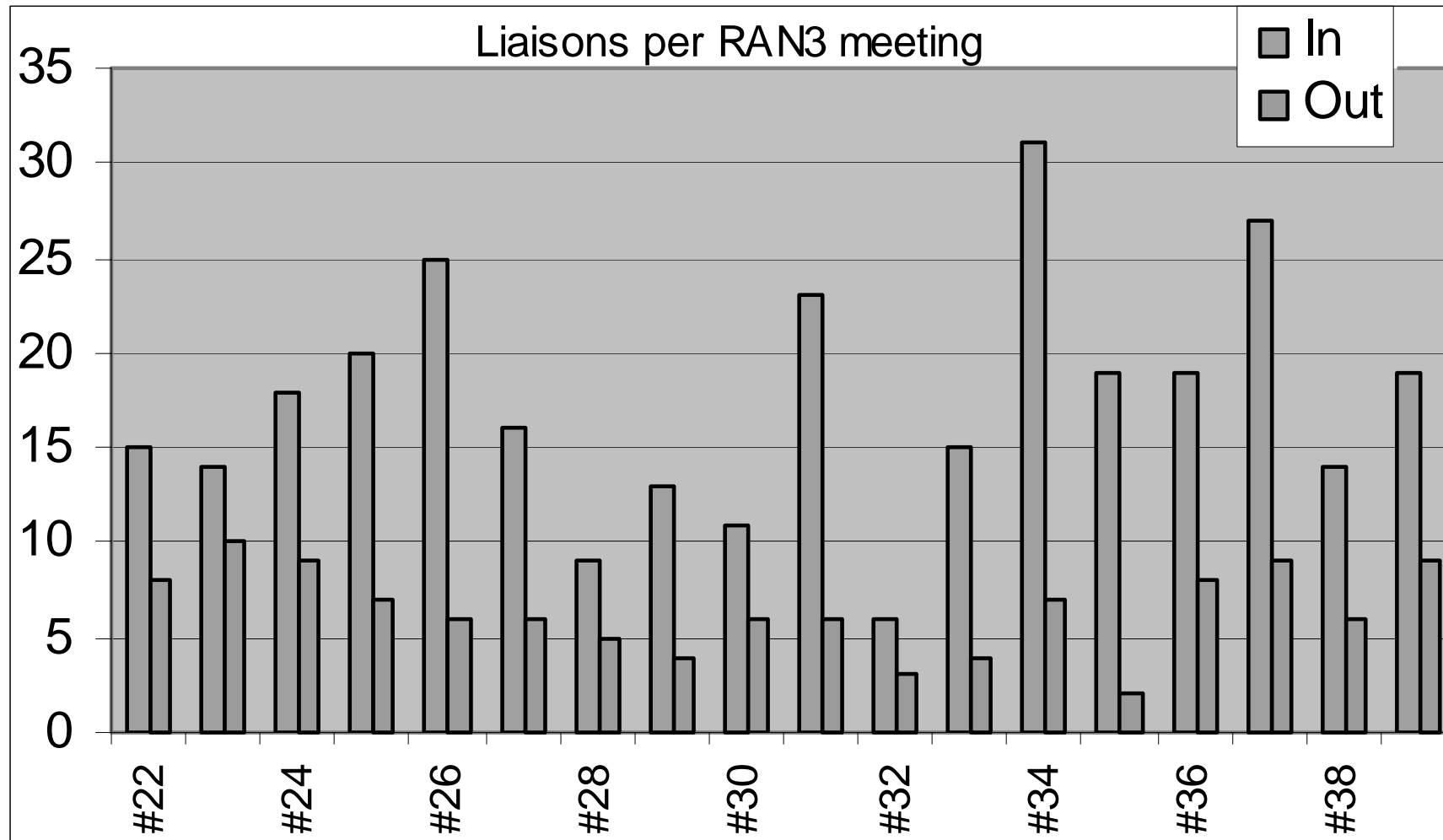
- R99 +mirror CRs required less than 10% of meeting time
- Rel-5 review was the major part in #39
- Progress on RAN3 Rel-6 topics could be better, we treated all WI's and SI's at least once at #38 and #39.



### Actions on WG3 from TSG RAN #21

- **To review the TR22.952, "Priority Service Guide", and provide comments to SA WG1 (RP-030470).**
  - The respective LS was answered at #38 in R3-031471.
- **To study the problem of loss of sync on the UL when in softHO and to present a full solution (RP-030544).**
  - **R3-031757** CR090r1 cat.F to 25.427 v5.2.0, REL-5, TEI5, Signalling support for soft handover indicator was agreed at #39.
  - No LS answer to RAN1. RAN1 might decide whether there is a 25.214 impact.
- **RAN3 will check whether ASN.1 of REL-5 specifications can be frozen at RAN #22 in Dec. 2003.**
  - Review performed via reflector and during #39
  - ASN1. can be regarded as stable, however alignment of freezing-dates with RRC would make sense

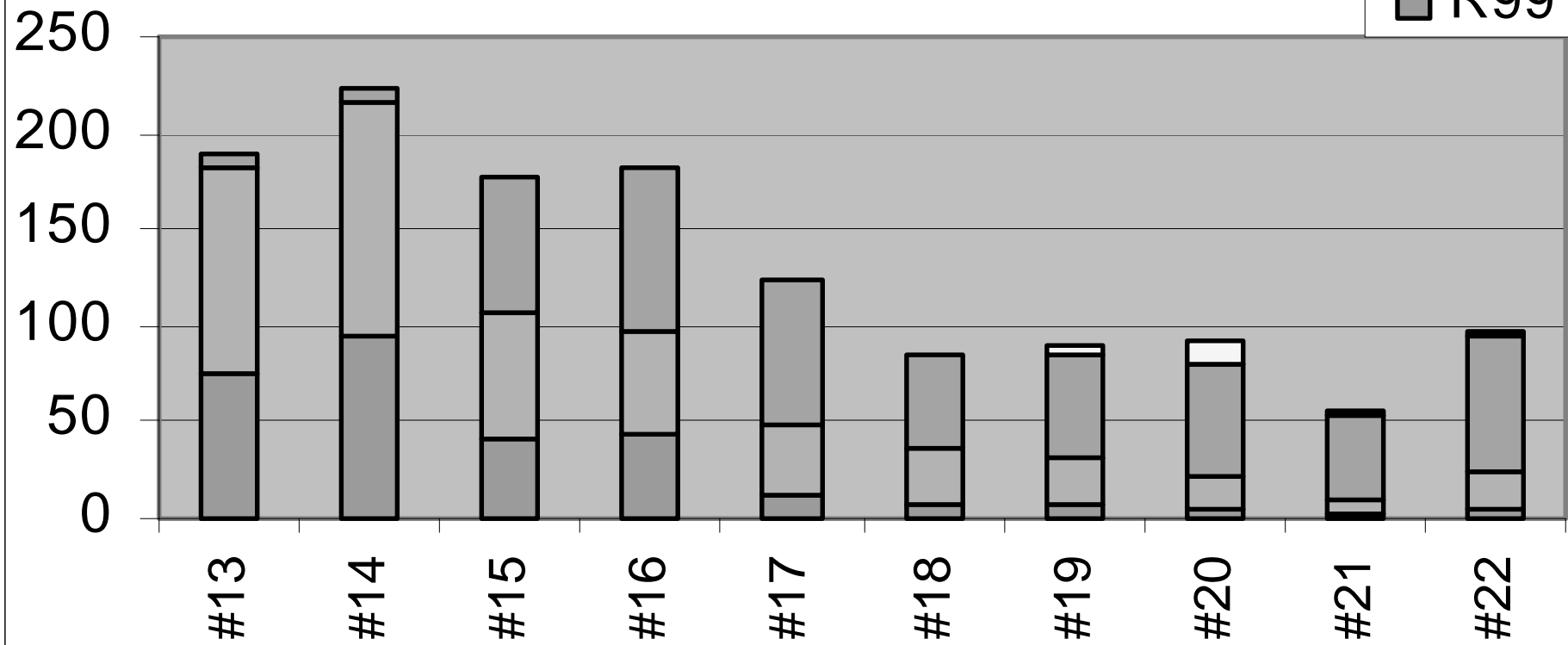




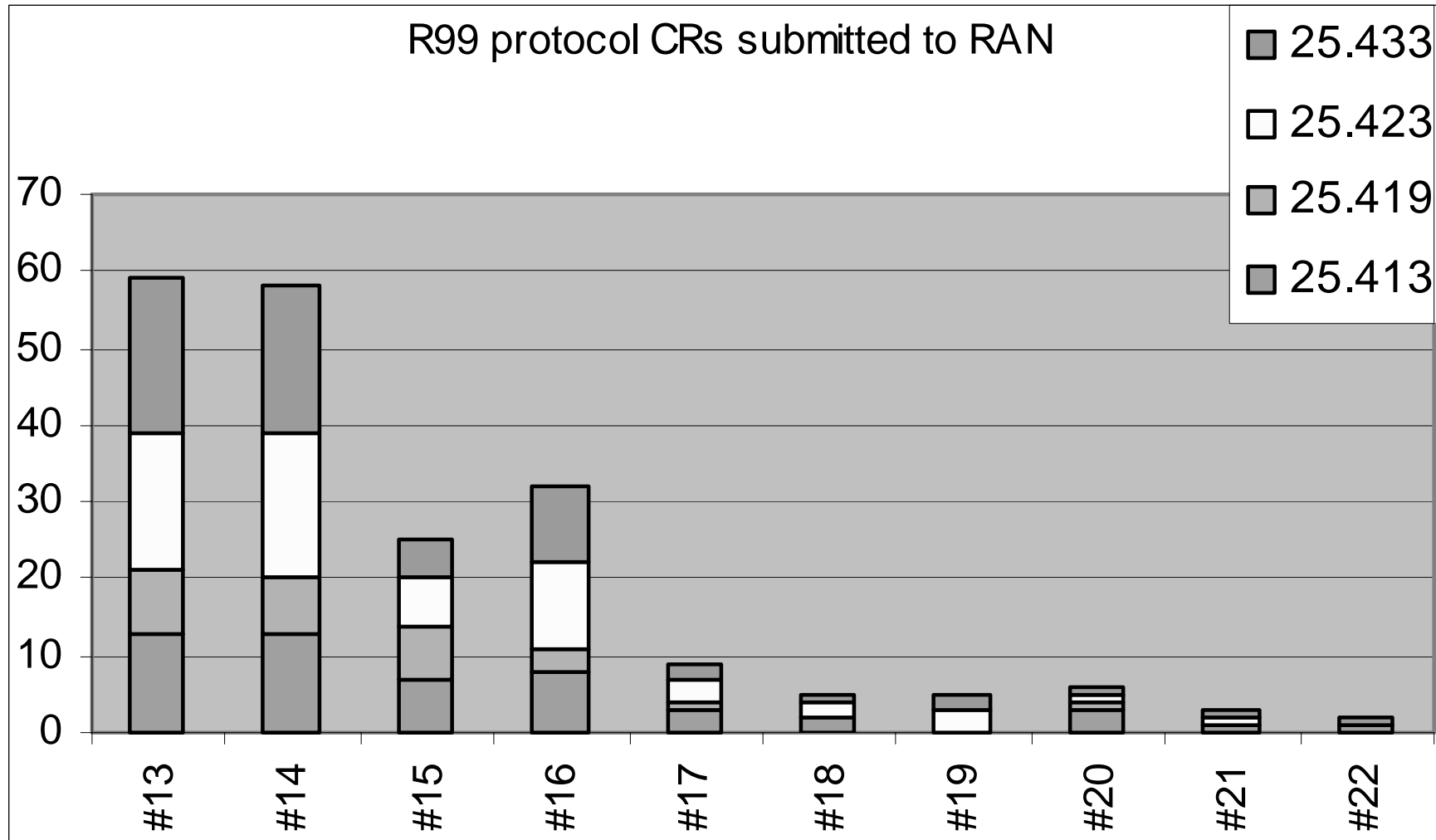


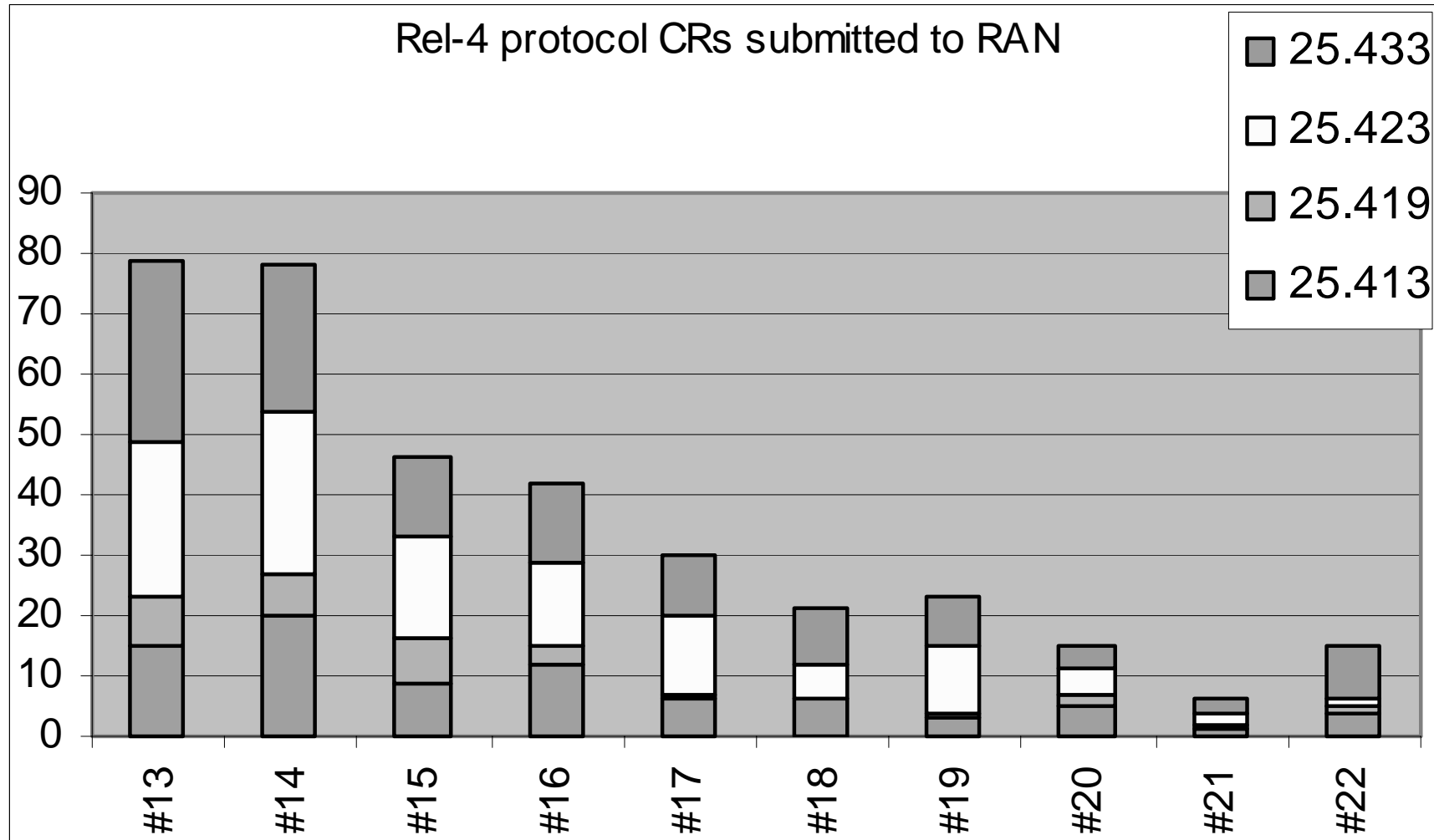
### Total # of CRs submitted to RAN

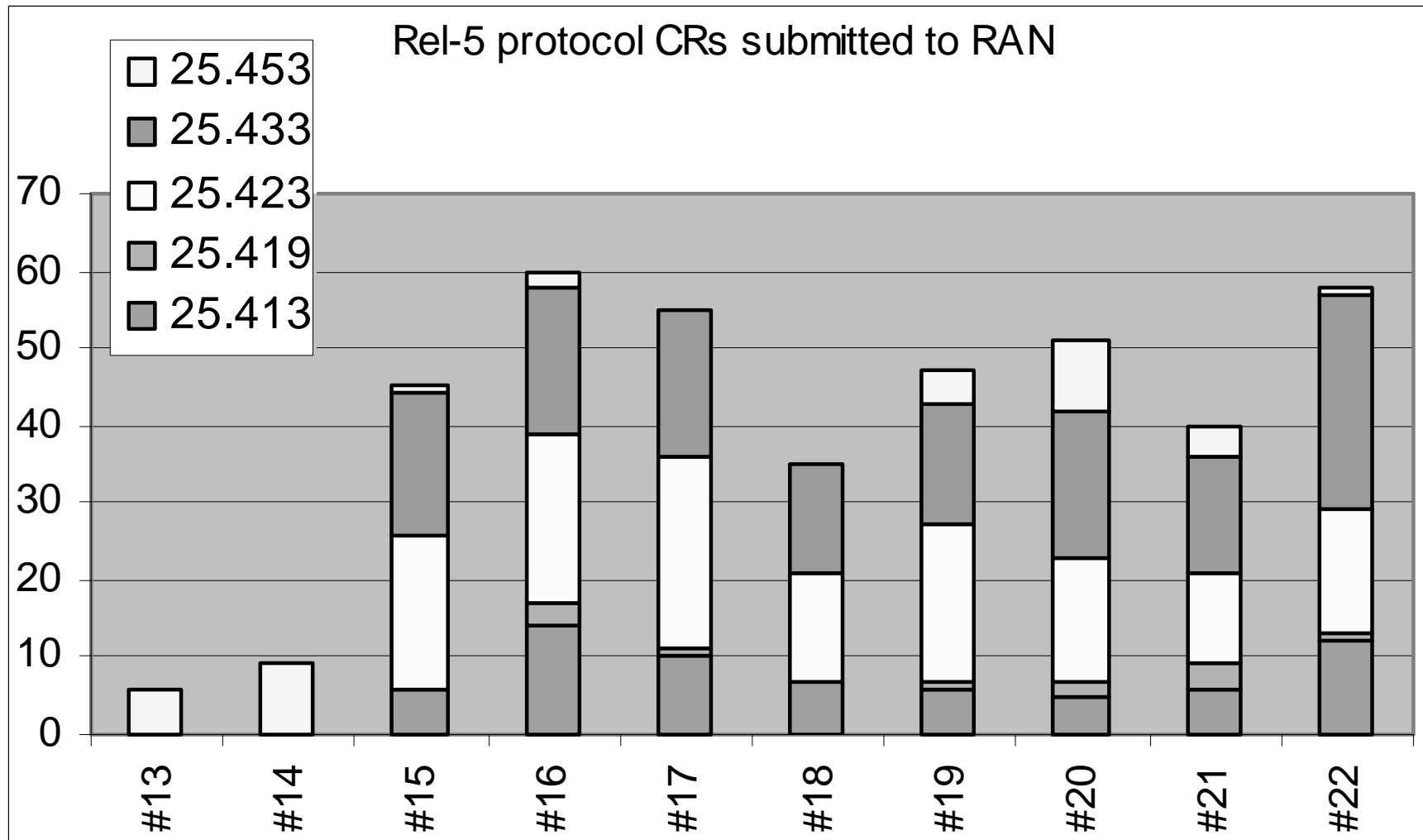
- Rel6
- Rel5
- Rel4
- R99













## R99 and Rel-4 activities



## **Selected topics for Release 99 CRs**

- **Extension Mechanisms for Iur/Iub frame protocols**
  - Was possible in a fully backwards compatible way
- **DCH Information Response**
  - Technically endorsed (related discussion papers available)
- **CRs for RAB Release Request corrections**
  - Suspect that this will go for Rel-5 only
- **Several R99 proposals were judged as clarifications and consequently agreed for Rel-5 only**
  - Rescue Handover
  - Security in multi-domain calls
  - Ambiguity about activation time



## **Selected topics for Rel4 CRs**

- **some Rel-4 CRs stem from Rel-5 review activities**
  - TDD LCR related CRs
  - CRs to the Information Exchange procedure (Corresponding CRs avail for PCAP as well)
  - CR to ensure extensibility of an IE introduced in Rel-4
  
- **Inclusion of AAL2 Link Characteristics in Q.AAL2\_ERQ (25.414)**
  
- **Correction of finite number of broadcast (SABP)**
  
- **2 CRs against 25.413 RANAP on LCS matters**

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## Release 5 specific activities



## **Review of Rel-5 signalling specifications**

- **Many discussions started via reflector**
- **Clarification CRs and individual CRs prepared for RAN#22**
- **Big effort spent by rapporteurs**

**Thank you !!!**





## **RANAP Rel-5 issues**

### **■ RANAP review touched among others**

- CRRM (source cell id missing in cell load information)
- Alignment between RAN and GERAN on Position Data information
- Shared network mechanism
- Data Volume Reporting procedure

### **■ LS traffic with S2 on Out of Service issues (double paging):**

- S2 agreed on 23.060 CR  $\Rightarrow$  no impact on UTRAN specifications



## **IP transport related issues**

### **■ Symmetrical TNL QoS for IP transport option on Iub**

- RNL based solution agreed

### **■ IP – ATM interworking**

- still no agreement on the 3<sup>rd</sup> interworking alternative although ITU-T finalised their work on IP ALCAP (Q.2631.1 approved in October 2003)
- Still discussions whether PWE-3 is within the scope of the 3<sup>rd</sup> interworking alternative or should be rather seen as ATM transport option only.



- **Main part of Rel-5 Iur/Iub review was dedicated to HSDPA**
- **RAN3#38: 25 contributions – 6 in principle agreed CRs**
- **RAN3#39: 30 contributions – finally 12 agreed CRs**
- **Topics:**
  - Addition of HS-DSCH Mac-d flows
  - Common Measurements for HSDPA
  - Explicit HARQ Memory Partitioning (linked with RAN1&2 CRs)
  - Resource Status Indication and Audit for HSDPA
  - PhyShChannel Reconfig for HSDPA
  - Usage of MAC-hs reordering buffer size
  - HS-DSCH Initial Capacity Alloc
- **Others:**
  - Unsynchronised RL Reconfiguration for HSDPA – technically endorsed (Rel-5 F vs. Rel-6 B)
  - One company CR on the Traffic Class IE still under discussion

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## Release 6 specific activities



■ **Network Assisted Cell Change (NACC) from UTRAN to GERAN – Network-Side aspects**

- Well structured work, could be finalised in time
- WI Report in RP-030568

■ **Iu enhancements for IMS support in the RAN**

- specification impact yet unclear
- user payload in SIP messages still an issue ⇒ study now depends on other groups
- WI Report in RP-030564



■ **Remote Control of Electrical Tilting Antennas**

- Constructive co-operation with SA5, SA5 impact still to be elaborated
- Joint meeting / telco envisaged
- Impact on Architecture to be finally decided  
the advantage not to introduce a new reference point seems to well understood
- Layer 1 and protocol architecture under e-mail discussion
- WI Report in RP-030567

■ **MIMO Iub/Iur Aspects**

- no contributions



■ **Subscriber and Equipment Trace support in RAN**

- 2 solutions for management based activation further discussed
- lur/lub tracing
  - Some companies find it useless without lu/Uu trace data
  - Others do not want to prevent tracing in case of lur mobility ⇒ communicated to SA5
- WI Report in RP-030572

■ **Improved access to UE measurement data for CRNC to support TDD RMM**

- Formal draft CR for email discussion until #40
- WI Report in RP-030566



■ **(R1 WI) Improvement of inter-frequency & inter system measurements**

- RAN3 finalised their complexity studies on code sharing during compressed mode
- LS to RAN1 with list of restrictions

■ **(R1 WI) Beamforming Enhancements**

- signalling and frame protocol CRs „agreed in principle“
- decision that the RNC shall control which cell portions need to be reported (communicated to RAN1) was revised ⇒ Node B reports all cell portions

■ **(R2 WI) Enhancement of the support of network sharing in the UTRAN**

- No contributions in RAN3





## **(R2 WI) Enhancement of Broadcast and Introduction of Multicast Capabilities in RAN**

- ~ 4 sessions for MBMS during last 2 meetings
- 12 out of 19 documents treated at #38
- 1 out of 22 documents treated at #39
- Work needs to speed up ⇒ #40 pure Rel-6 meeting
- Yet to be discussed issues
  - UE Linking via Iur
  - Session Start Indication (SA2's assumption disputed due to unnecessary paging load)
  - RRC Connected/PMM Idle handling
  - Iub optimisations
  - And other non-peanut issues



■ **FS on the Evolution of UTRAN Architecture**

- **8 out of 12 documents treated at RAN3#38**
- **0 out of 10 documents treated at RAN3#39**
  - ⇒ **5 architectural proposals captured in TR**
- **Further work**
  - need to focus on complexity analysis along network functions (mainly mobility)
  - Attempt to align functional model
- **SI report in RP-030579**



■ **Low Output Powers for general purpose FDD BSs**

- Discussions revealed that due to definition of „Node-B“ and „antenna connector“ there is possibly no signalling impact.
- To be clarified with RAN4.
- WI Report in RP-030580



■ **(R4 SI) UTRA Wideband Distribution Subsystems (WDS)**

- LS from RAN4 received asking about the conclusion of a RAN3#22 document ...

■ **(R1 SI) Uplink Enhancements for Dedicated Transport Channels.**

- 3 documents submitted for #38 and #39, one noted, but no real discussions
- Propose to extend study period for estimating architectural impacts

■ **(R1 SI) Uplink Enhancements for UTRA TDD**

- No contributions



## Meetings 2003/2004

Meeting	Dates	Venue	Host
RAN WG3#39	17 - 21 November 2003	San Diego, USA (close to RAN W2 & WG4)	N-American Friends of 3GPP
TSG RAN#22	09 - 12 December 2003	Maui, Hawaii, USA,	ARIB/TTC/N-American Friends of 3GPP
RAN WG3 #40	12 - 16 January 2004	Sophia Antipolis, France (co-located with RAN WG2)	ETSI
RAN WG3 #41	16 - 20 February 2004	Malaga, Spain (co-located with RAN WG1&2)	European Friends of 3GPP
TSG RAN#23	09 - 12 March 2004	Phoenix (tbc), USA	
RAN WG3 #42	10 -14 May 2004	tbd, USA (co-located with RAN WG2)	
TSG RAN#24	01 - 04 June 2004	Korea	
RAN WG3 #43	16 - 20 August 2004	Prague (tbc), Czech Republic (all RAN groups co-located)	European Friends of 3GPP
TSG RAN#25	07 - 10 September 2004	USA (tbc)	
RAN WG3 #44	04 - 08 October 2004	tbd, Europe * (co-located with RAN WG2)	
RAN WG3 #45	15 - 19 November 2004	Shin-Yokohama (tbc), Japan (all RAN groups co-located)	NEC
TSG RAN#26	07 - 10 December 2004	Athens, Greece (tbc)	European Friends of 3GPP



## Summary

- Excellent Rel-5 review
- HSDPA still subject for CRs, some quite big issues
- Rel-6 work needs to speed up

*thanks to all the contributing RAN3 delegates  
for their excellent work*

*Keep experts active in RAN WG3 !!!*

*(wise words from an "old" chairman)*