First TSG RAN WG5 Status Report to RAN#28
1st – 3rd June 2005
Quebec, Canada

Phil Brown, NTT DoCoMo

Convenor

Stoyan Baev, MCC

Secretary

RP-050181

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General update last 3 months

- RAN5#27 was held in Bath, England hosted by Aeroflex 25 – 29 Apr 05 and was attended by 63 delegates
- Maintained good pace of TTCN test case approvals; 53 more TTCN test cases have been T1 approved @ 27 May 05 with another xx undergoing email approval
- First 30 tests in WI-012 have been verified (enhanced R99 coverage);
- Verification of signalling test cases with ciphering ON now mandated with RAN5 to meet industry requirements
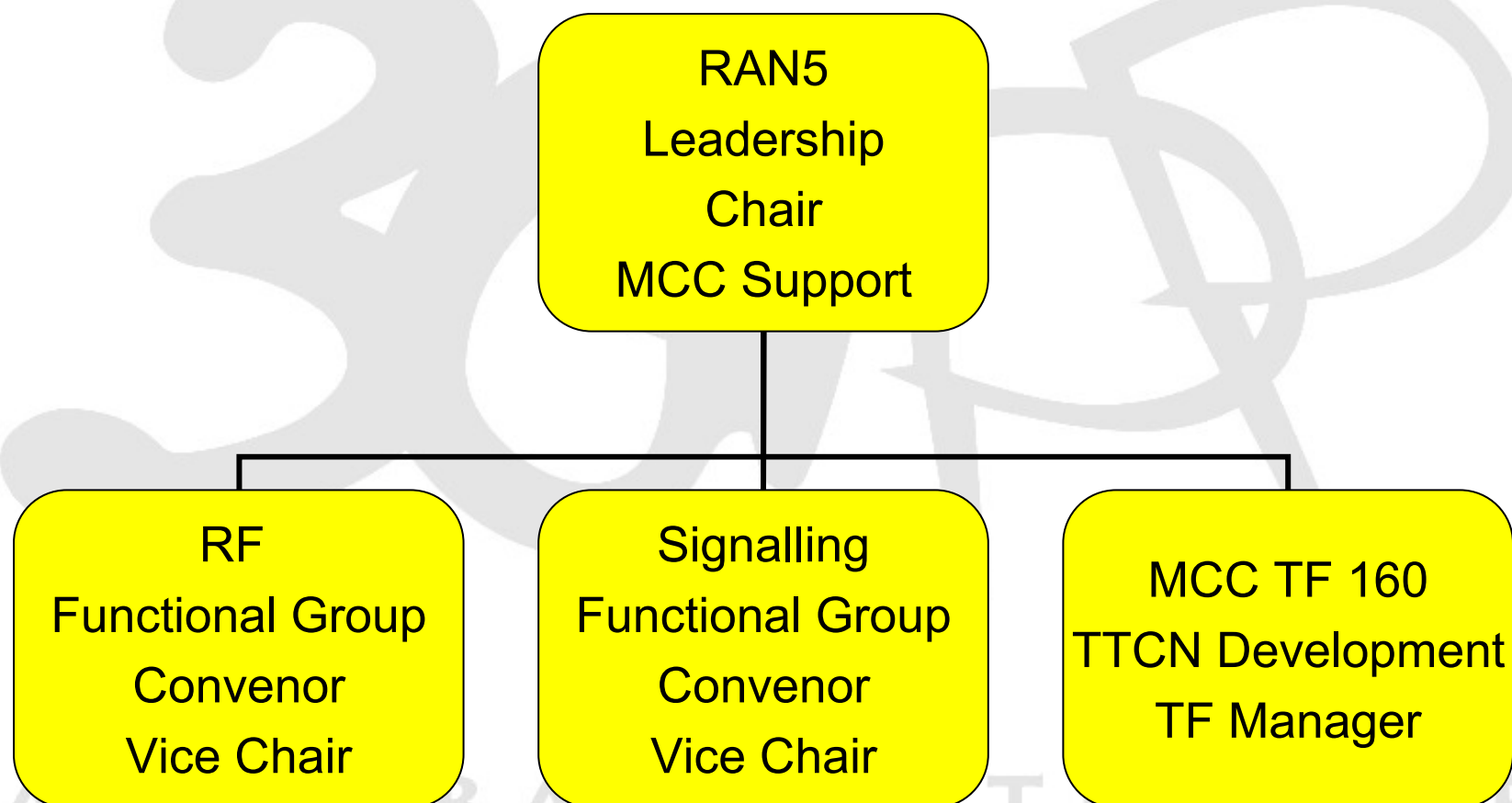- RRM tests still 94% complete but RF tests are 95% complete overall

The draft report of RAN5#27 found in RP-050260 for information

RAN5 Leadership Team

RAN5 Convenor   Phil Brown, NTT DoCoMo

RF Functional Area
    Convenor: Carolyn Taylor, Motorola
    Assistant: Mike Page-Jones, Siemens AG
Sig Functional Area
    Convenor: Dan Fox, Anritsu
    Assistant: Kazuo Hayashi, Panasonic PMC
MCC Support: Stoyan Baev
MCC TF 160 Manager: Shicheng Hu

WG Elections to be held at RAN5 #28 for Chair and 2 Vice Chairs
Intention is to have the Vice Chairs convene each functional area

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Outline RAN5 Structure

RAN5
Leadership
Chair
MCC Support

RF
Functional Group
Convenor
Vice Chair

Signalling
Functional Group
Convenor
Vice Chair

MCC TF 160
TTCN Development
TF Manager

RAN5 – A Bridge to Certification Regimes and the Test Industry

- RAN5 provides UE conformance test specifications based on the 3GPP core specifications and has strong links to the RAN1, RAN2, RAN4 and GERAN3 in this respect
- As there are too many permutations of tests to be implemented therefore RAN5 uses a focussed approach for test development based on industry requirements
- For the last 3 years RAN5 has liaised very closely with the Global Certification Forum (GCF) and has based its priorities of work accordingly
- Liaison with the PCS Type Certification Review Board (PTCRB) – the North American equivalent of the GCF, has begun. The PTCRB is working together with the GCF to agree on common priorities for WCDMA testing areas.
- More recently it has supported the work of the TD SCDMA Industry Alliance (TDIA) in its preparation of TTCN for LCR TDD signalling protocol tests
- WG Terms of Reference confirmed and presented for approval in RP-050262

Note on MCC TF 160

- Based at ETSI with a permanent project manager who works via RAN5 for requirements
- Provides an industry neutral facility to develop TTCN code on behalf of 3GPP
- Funded in part by the OP (58 man months) with additional funding coming from the industry:
  - Voluntary contributions (man power)
  - TDIA (man power)
  - Via the GCF (cash)
  - Via the PTCRB (cash)
  - Individual companies
- Requirements determined around September for the following year's activity and once endorsed by RAN5 the case is made to the PCG and OP for funding in the October meeting.
- Shortfalls in funding for 2006 have to be made up from alternative sources

- The TF 160 report provided in RP-050261 for approval
- Updated ToR provided in RP-050263 for approval

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RAN5 Current Priorities of Work

Based primarily on GCF activities/work items (WI) as follows:

- WI-010   R99 test cases
    - Around 460 tests (Sig and RF)
    - Sufficient for certification to start
- WI-012   R99 Enhancements
    - Around 45 tests (mainly Sig)
- WI-013   Rel4 & Rel5 Enhancements
    - Around 15 tests (mainly RF)
- WI-014   HSDPA
    - Around 61 tests (currently 9 RF and 52 Sig)
- WI-015   A-GPS
    - Around 21 tests (all Sig)

RF Group Update

- **Main topics to be covered:**

  - Routine Maintenance
  - TS34.121 & TR 34.902
  - GCF targets for RF groups
  - HSDPA: see slide in Signalling section
  - A-GPS: see slide in Signalling section

Routine Maintenance

- Follow up database maintained by Nokia

- Provides assistance in tracking the changes to core specs not covered by relevant test specification CRs

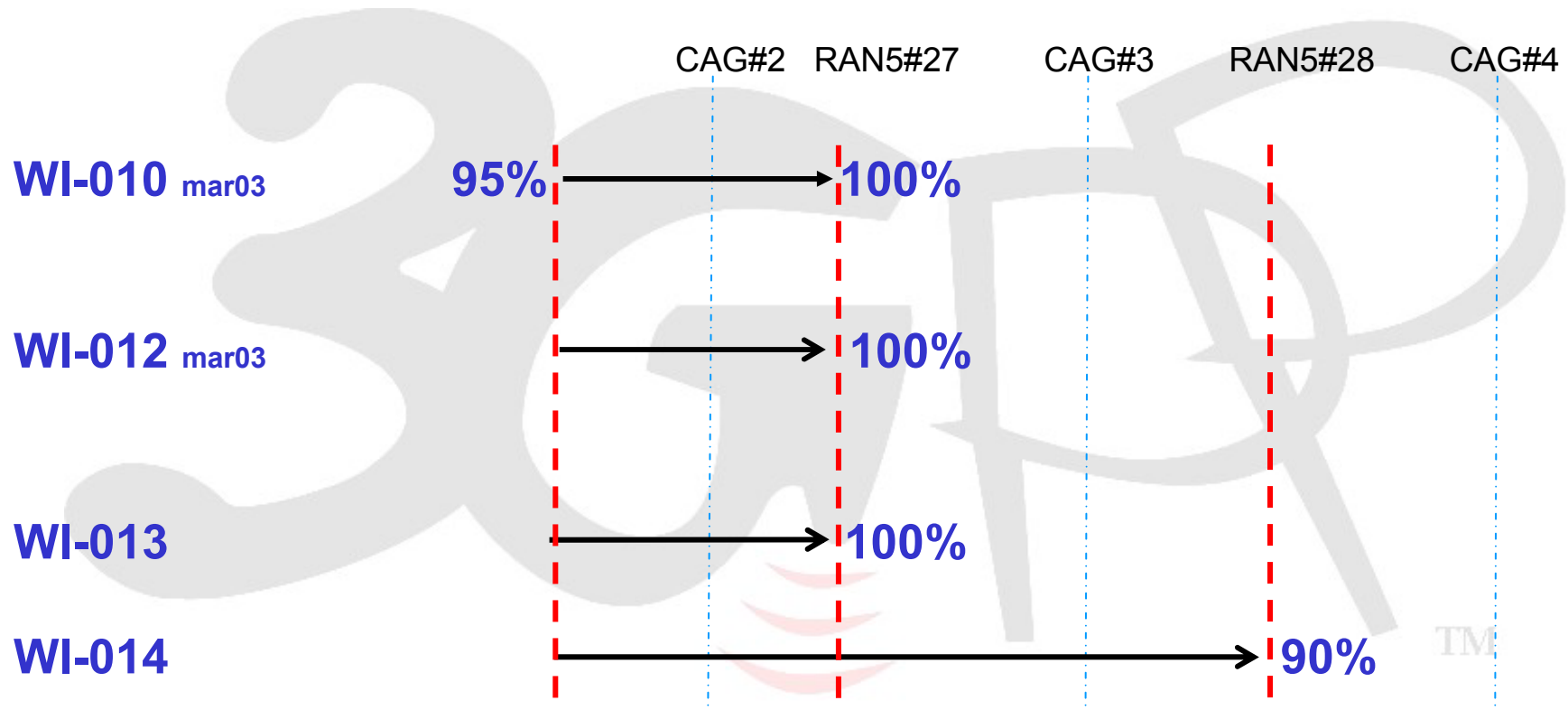- Updates made in accordance with the latest core specifications

TS 34.121 and TS 34.902

- **TS 34.121**
  - 33 CRs in total
  - 12 for RRM
  - 05 for HSDPA
  - 05 for transmitter and receiver characteristics
  - 11 for performance requirements and annexes

- **TS 34.902**
  - 01 CR for Derivation of test tolerances for multi-cell (RRM) tests

CRs for 34.121 (Rel 6), presented in RP-050269 & RP-050270 for approval

CRs for 34.902 (Rel-5), presented in RP-050284 for approval

GCF Targets for RF Group

Signalling Group Update

- General Issues
- TS 34.108 Common Test Environment for UE Conformance Tests
- TS 34.123 – 1 Prose test specifications
- TS 34.123 – 2 Applicability Statement
- TS 34.123 – 3 TTCN Test Specification
- HSDPA Update
- A GPS Update
- LCR TDD Update

General Signalling Test Issues

- Testing of IMS functionality
  - Agreed that it is within RAN5 scope to test IMS Call Control protocol
  - RAN5 recommend creation of a new TS
  - Possible re-use of TTCN from other ETSI projects.
- Discussion of performance testing for ROHC
  - Needs new WI and supporting companies.

TS 34.108

- Now quite stable, only 17 CRs including:

- Contribution for testing ciphering on VBS/VGCS raised the need for a Work Item to cover testing this issue. Siemens took the action to get supporting companies.

CRs for 34.108 Rel-5 are presented in RP-050267 & RP-050268 for approval

Separate CRs relating to LCS/GPS are presented in RP-050349 & RP-050350 for approval

TS 34.123 – 1

- Issue raised over how to apply some multiple PLMN test cases to Bands V and VI as there are not enough carrier frequencies. This has been left for further investigation
- First discussions on FDD enhanced Uplink testing (state transitions)
- Discussions on testing of Network Sharing with possibility of contributions for test cases at the next plenary

CRs for TS 34.123-1 are presented in RP-050271 to RP-050276 for approval

The associated CRs for TS 34.123-2 (applicability specification) are presented in RP-050277 for approval
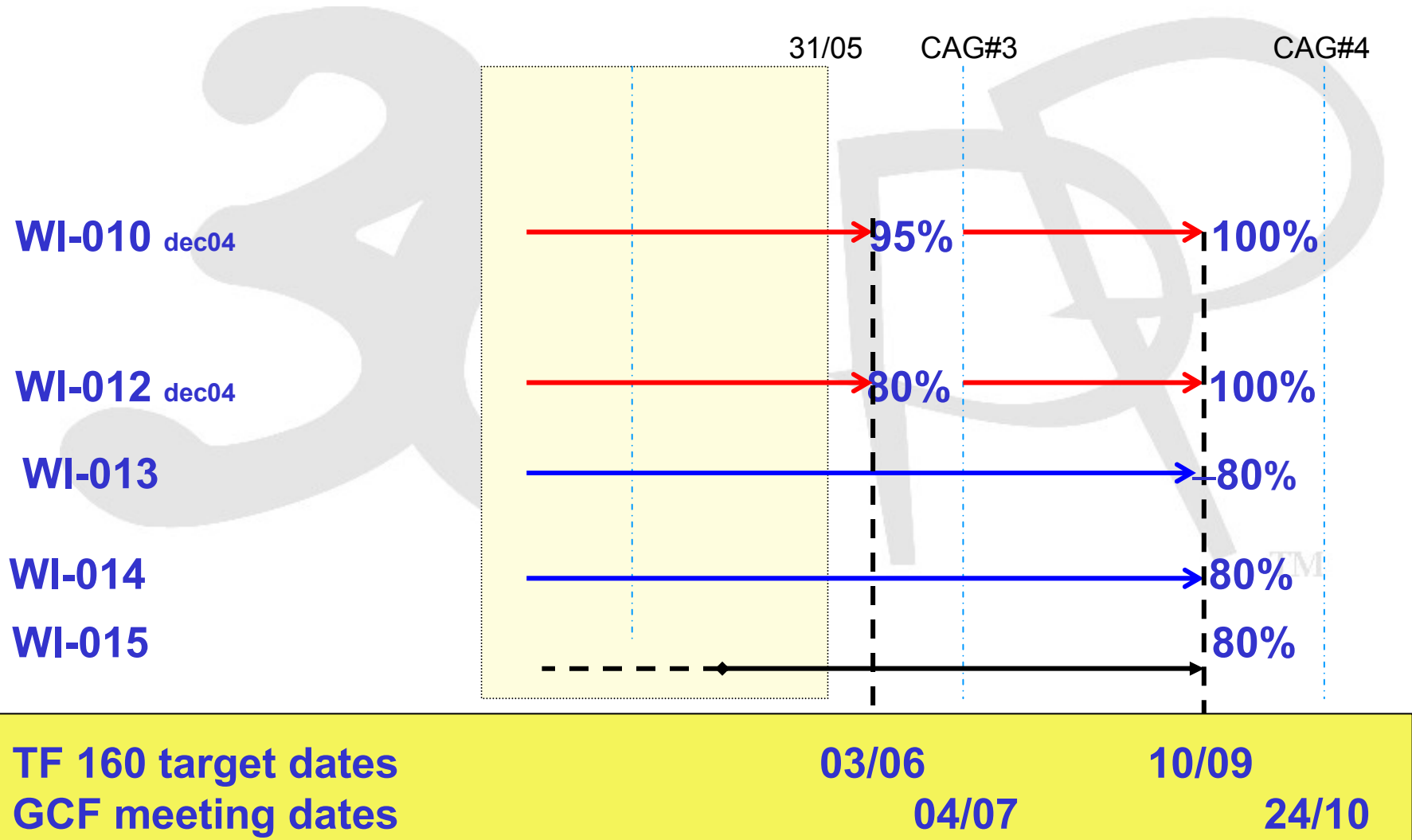
TS34.123 – 3 (TTCN)

@ 27 May 05	RAN#28	T#27	Difference	Completion	Total TCs
WI-010	355	332	+23	93%	383
WI-012	30	Nil	+30	68%	44
WI-013	Nil	Nil	Nil	0	1
WI-014	Nil	Nil	Nil	0	52
WI-015	Nil	Nil	Nil	0	21

Notes: Email submissions currently in train as follows: WI-010: 4, WI-012: 1, WI-014: 9. Plan agreed by RAN5 for introduction of Ciphering in test cases in response to a request from the GCF

CRs for 34.123-3 are presented in RP-050278 to RP-050283 for approval

GCF Targets for TF 160 showing baseline transition phase

	31/05	CAG#3	CAG#4
WI-010 dec04		95%	100%
WI-012 dec04		80%	100%
WI-013			80%
WI-014			80%
WI-015			80%

TF 160 target dates   03/06   10/09

GCF meeting dates   04/07   24/10

HSDPA Progress

- HSDPA protocol tests 100% completed (no change sinceT1#26)
  - 55 out of 55 planned test cases ready
  - CR to 34.108 to add 2 new HSDPA streaming RAB combinations endorsed (R5-050976)
  - ~15 maintenance CRs endorsed
- HSDPA RF FDD tests now 75% completed (was 60% at T1#26)
  - 7 out of 12 planned test cases ready
  - Remaining issues:
    - Adoption of the RAN4 reference measurement configurations in RAN5 test cases. An LS is sent to RAN2 and RAN4 in R5-050868.
    - Measuring of EVM (test cases 5.13.1A). An LS is sent to RAN4 in R5-050867.
- HSDPA RF TDD
  - No progress. No contributions since T1#21 (Nov-03)!
- HSDPA work plan in R5-050522

A-GPS Progress

- **Signalling (TS 34.123)**
  - 3 CRs with corrections only
  - Prose work now complete
- **RF (TS 34.171)**
  - Suitable GPS scenario and assistance data for use in tests defined in TS 34.108
  - Test procedures and most test tolerances agreed
  - Work on all 6 tests estimated 85% complete (was 70% at T1 #26)

  Version 2.0.0 of TS 34.171 available in RP-050264 for approval

LCR TDD

- **LCR TDD TTCN**
  - CCSA/TDIA experts has restarted in March 28 along side TF 160
  - 36 test cases have been coded in April 05
  - 300 test cases to be developed by Sep 05

  Rel 5 TR on Analysis of Differences between FDD and 1.28 Mcps TDD presented in version 1.0.0 for information in RP-050265

RAN 5 General Issues

- New Work Item proposals
    - FDD Enhanced Uplink
    - IMS Call Control
- RAN feature clean up discussions
- 2005 meeting schedule
- Summary of input documents

New Work Item Proposal for FDD Enhanced Uplink

- The core specifications for Rel 6 have been enhanced by the intro of FDD Enhanced Uplink feature so the test specifications need to be updated accordingly. This work item enables the conformance testing of FDD Enhanced Uplink feature

- The technical objective of this work item is to provide for conformance testing of the FDD Enhanced Uplink feature covering the various RF characteristics, the radio resource management aspects and the signalling Layer 2 and 3 aspects

- Rapporteur:
    - Mr Leif Mattisson, Ericsson, Sweden

- Supporting Companies:
    - Cingular, Ericsson, Nokia, NTT DoCoMo, Motorola, Vodafone, Qualcomm, ZTE, Nortel

Proposal to be presented in RP-050285 for approval

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New Work Item Proposal for IMS Call Control

- IMS Call Control based on SIP forms the basis of IMS applications. Conformance test specifications must be developed for IMS Call Control Protocol to verify correct functionality of the UE when operating in an IMS network. This work item enables the conformance testing of IMS Call Control Protocol.

- The technical objective of this work item is to provide for conformance testing of the IMS Call Control Protocol.

- Rapporteur
  - Mr Jacob John Motorola

- Supporting Companies
  - Motorola, Vodafone, Orange, Telecom Italia, NEC

Proposal to be presented in RP-050286 for approval

RAN Feature Clean Up Discussion

- Ericsson, Motorola and Nokia sourced document R5-050743 introduced RAN feature clean up to RAN5

- The RAN5 agreed to wait until the relevant core specifications have been updated and submit the necessary test specification CRs to RAN5#28 meeting in August

- RAN5 also discussed but could not agree how the affected R99 and Rel-4 test cases should be handled, two proposals were considered:
  - The R99 and Rel-4 core specs will keep the features so the affected test cases should be marked as relevant only to R99 and Rel-4 in RAN5 specifications and they should not be removed
  - As the rationale for removing these features was that they were not foreseen to be used in real networks there is no value in keeping the affected R99 and Rel-4 test cases in RAN5 specifications and they should be removed

- The Convenor will seek guidance from the RAN Plenary

RAN5 Meeting Schedule for 2005

Meeting	Dates	Location/Host
RAN5 #28	22 – 26 Aug 05	Berlin, Germany ETS
RAN5 #29	7 – 11 Nov 05	Korea Samsung

Summary of Input Docs

• RAN5 Status Report	RP-050181 Presentation
• List of RAN 5 CRs	RP-050182 Information
• Minutes of RAN5#27	RP-050260 Information
• MCC TF 160 Report	RP-050261 Approval
• MCC TF 160 ToR	RP-050263 Approval
• CRs to 34.108	RP-050267 – 268, 249 & 350 Approval
• CRs to 34.121	RP-050269 - 270 Approval
• CRs to 34.123-1	RP-050271 - 276 Approval
• CRs to 34.123-2	RP-050277 Approval
• CRs to 34.123-3 (Prose part not Annex A)	RP-050278 Approval
• CRs to 34.123-3 (Prose part in Annex A)	RP-050279 Approval
• CRs to 34.123-3	RP-050280 - 283 Approval
• Work Item FDD Enhanced Uplink	RP-050285 Approval
• Work Item IMS Call Control	RP-050286 Approval
• Work Item general update	RP-050266 Approval
• TS 34.171 A-GPS v2.0.0	RP-050264 Approval
• TR 34.943 FDD/TDD analysis v1.0.0	RP-050265 Information
• CRs to TR 34.902	RP-050284 Approval
• RAN5 ToR	RP-050262 Approval

RAN5 looks forward to working within the new RAN structure

Thank you