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TSG GERAN

TSG SA#19

TSG GERAN Report

to

TSG-SA#19

TSG-GERAN Chairman

Niels Peter Skov Andersen

Motorola



Tdoc SP-030168



TSG GERAN work area (1/2)



**TSG GERAN
TSG SA#19**

TSG GSM/EDGE Radio Access Network (TSG-GERAN)

- **GERAN Radio aspects, and interfaces**
- **RF aspects of GERAN**
- **Specifications for GERAN radio performance and RF system aspects**
- **GERAN Radio Layer 1 specification**
- **GERAN Radio Layer 2 specification**
- **GERAN Radio Layer 3 RR specification**

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TSG GERAN work area (2/2)



- **A interface specification, Gb interface specification**
- **Internal GERAN interface specifications such as Abis, and Ater (CCU-TRAU)**
- **Conformance test specifications for testing of all aspects of GERAN base stations**
- **Conformance test specifications for testing of all aspects of GERAN terminals**
- **GERAN specific O&M specifications for the nodes in the GERAN**

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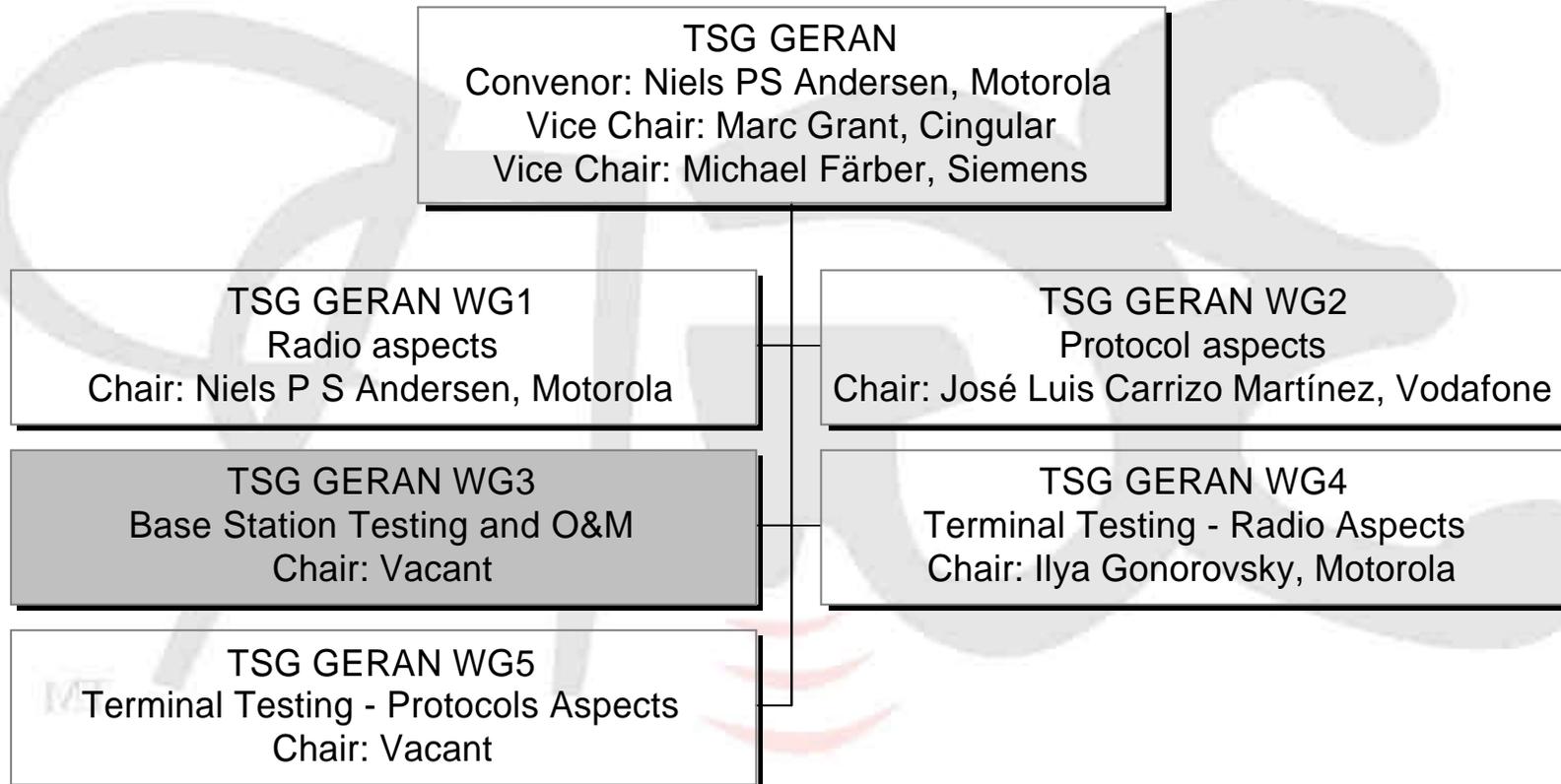
Organisation of TSG GERAN (1/4)



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Organisation of TSG GERAN ***(2/4)***



TSG GERAN WG1 – Radio Aspects

- **Chairman: Niels Peter Skov Andersen, Motorola**
- **RF aspects of GERAN**
- **GERAN radio performance and RF system aspects**
- **Ater (CCU-TRAU)**

TSG GERAN WG2 – Protocol Aspects

- **Chairman: José Luis Carrizo Martínez, Vodafone**
- **GERAN Radio Layer 2 specification**
- **GERAN Radio Layer 3 RR specification**
- **A interface specification, Gb interface specification**
- **Internal GERAN interface specifications such as Abis**

Organisation of TSG GERAN (3/4)



TSG GERAN WG3 – Base Station Testing and O&M

Chairman: Vacant

- **Conformance test specifications for testing of all aspects of GERAN base stations**
- **GERAN specific O&M specifications for the nodes in the GERAN**

Group is dormant and issues being dealt with by TSG GERAN WG1

Organisation of TSG GERAN (4/4)



TSG GERAN WG4 – Terminal Testing – Radio Aspects

Chairman: Ilya Gonorovsky

- **Conformance test specifications for testing of Lower layers including RLC/MAC**

TSG GERAN WG5 – Terminal Testing – Protocol Aspects

Chairman: Vacant

- **Conformance test specifications for testing Protocol aspects above the RLC/MAC**

TSG GERAN WG4 & WG5 will be conducted as a joint meeting during TSG GERAN #14

R99 mobiles in R97 networks



- **TSG GERAN have been made aware of problems with R99 mobiles in some pre-R99 networks**
 - R99 mobiles might be rejected due to revision level indication in Classmark
 - R99 extensions to GPRS protocols might cause network to reject messages
- **Specifications have in the past been updated to clarify behaviour.**
- **LS sent to GSMA asking for action to help quick deployment of network "corrections"**

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Pre-Release 5



- **A few corrections to DTM**
- **Correction of timing requirement for 2G to 3G handover**
- **MS RAC for UMTS-only terminal**
 - **Several alternatives discussed; no strong preference**
 - **To be discussed next week at CN1**
 - **Issue: theoretical maximum length exceeds by 6 bits**

LCS



- **No changes/corrections for LCS R98** ✍️
- **LCS support for GPRS completed and stable**
- **Work on U-TDOA has started**
- **Discussions ongoing regarding the potential for improvement of the LCS performance**

TM

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Support for Codecs



- **TSG GERAN has completed work on 8-PSK channels for AMR and WB-AMR**
- **The final radio performance requirements for 8-PSK channels have now been agreed**
- **CR to 44.014: Defining test loop for AMR-NB**

TM

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GERAN Iu-mode / Rel 5



- **RLC/MAC for Iu mode**
 - Some smaller corrections
 - Open issue of SRB-logical channel mapping was closed
- **RR(C)**
 - 2 CRs for Iu mode RRC
 - Correction for the support of EPC

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GERAN A/Gb enhancements



- **Work started (Work items agreed) on**
 - Multiple TBF
 - Streaming
- **Agreement on a way forward for conversational class QoS including the following steps**
 - Report on concept and impact
 - Stage 2 work
 - Stage 3 work

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Release 6 (1/4)

Multiple TBFs for A/Gb mode

- Number of TBFs linked to number of PDP Contexts
- RLC buffer size:
 - To be indicated to the network
 - Function of the multislot class
- TBF reconfiguration
 - Pseudo-RLC/MAC segmentation v sequential reconfiguration
 - Duplications of timers FFS
- TBF sharing
 - Three options investigated

Release 6 (2/4)



Streaming

- **Generic QoS architecture**
 - Left open for confirmation of approval of CR to 23.107
 - TSG GERAN to provide realistic figures for QoS parameters
- **TR updated with areas that are being investigated**
- **Improvements for loss-less LLC ADM**
 - MS-controlled LLC/SNDCP restart
 - LLC ack at cell change, SNDCP ack at RA change
- **Suspend/resume**
 - Simpler: it does not involve the MS
 - Simulations expected to assess performance

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Release 6 (2/4)



Streaming continued

- **Simulation results for higher link rates**
 - Improvements to RAU procedure essential
 - Link overdimensioning <10%
- **Proposal for MS-centric flow control**
 - More efficient MS memory management
 - More efficient network scheduling
- **Cell change enhancements**
 - Reduced NACC towards UTRAN cells
 - Interested to know performance of NACC 3G ~~vs~~ 2G
 - Initial focus on the intra-GERAN case
- **Tolerance to “late packets” to be clarified by SA4**

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Release 6 (3/4)



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Flexible Layer 1

- **Performance simulations being evaluated**
- **FLO architecture for A/Gb mode discussed**
- **Discussions on single/flexible size of TB for RLC/MAC control messages**
- **Proposals for Coded Transport Format Combinations**
- **RLC/MAC blocks**
 - **Removal of unused fields accepted**
 - **Exception: limitation to “normal RLC/MAC behaviour”**
- **FLO for CS**
 - **Unclear requirement: no new services foreseen**
 - **Concerns about changes to LAPDm**

Release 6 (4/4)



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- **Work progressing on Single Antenna Interference Cancellation (SAIC) feasibility study**
 - Already significant amount of contribution
 - 2 Workshops held
- **GSM T frequency bands definition completed**
- **MBMS**
 - Increase of activity
 - First draft of stage 2 TS agreed
 - Joining: Will be transparent to the GERAN
 - Grouping of users on same cell/layer/RAN – FFS in WG1
 - No multicast in cells with no users
 - (Re-)counting: FFS
 - WG2 to analyse complexity of mechanisms
 - WG1 to analyse loss of efficiency in p-t-m channels
 - Cell change: Channel dropped and re-established

Testing ^(1/2)



- **Main focus has been on testing of:**
 - Radio & Layer 1
 - GPRS
 - EDGE
 - Selection/Reselection & Handover (2.5G, 3G)
 - LCS
 - Tracking of core specification changes
 - AMR (Narrow band)
 - DTM

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Testing (2/2)



- The members have been requested to provide input for the development of Test Cases for:
 - Wideband AMR
 - RLC/MAC (Iu interface CS and PS domain)
 - Enhanced power control
 - AMR 8 PSK HR
 - Selection/Reselections (GERAN I_u-mode >UTRAN)
 - Handover (GERAN I_u-mode >UTRAN PS).

Specification and version numbering



- Old specification numbers and version numbers are kept for Phase 1, Phase 2, Release 96, Release 97, Release 98, and Release 99
- For Releases after Release 99 specification numbering to follow 3GPP format $xx.yyy$ and version number aligned with other TSGs, e.g next release will be version $4.x.y$.
- New specification numbers to be derived from the old specification number
 $ab.cd \Rightarrow (40+ab).0cd$
e.g
 $05.08 \Rightarrow 45.008$

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Future TSG GERAN Plenary meetings



TSG GERAN #14	7-11 April 2003	Europe
TSG GERAN #15	24-26 June 2003	North America
TSG GERAN #16	25-29 August 2003	USA
TSG GERAN #17	17-21 November 2003	Europe
TSG GERAN #18	2-6 February 2004	
TSG GERAN #19	19-23 April 2004	
TSG GERAN #20	21-15 June 2004	
TSG GERAN #21	23-27 August 2004	
TSG GERAN #22	8-12 November 2004	

Extract of GERAN work programme and list of CR handled at TSG GERAN #13 is attached to this report

Work item status and approval time frame

This list reflects the work items running under the responsibility of TSG GERAN and their status at the end of TSG GERAN #13.

Ongoing work items

Feature	Building block	Work task	Level of completion	Date of completion	Status
GERAN improvements 2 GP-012812	Gb enhancements GP-000436	Intra BSC NACC ?? Concept ?? Changes in 03.64 ?? Changes in 04.60 ?? Changes in 44.008			Ready for R4. Closed
	MS conformance test for Intra BSC NACC GP-012811	?? Changes in 51.010	50%	Dec 2002	Started
Alignment of 3G functional split and lu GP-021256	GERAN user / control plane GP-021255	Alignment with UMTS bearer concept ?? Stage 2		Jun 2001	Ready for R5.
		?? Adoption of the UTRAN PDCP		Dec 2001	
		?? Development of RLC / MAC		Aug 2002	
		?? Development of GERAN RRC		Jun 2002	
		?? Ciphering and integrity protection concept paper		Apr 2002	
		?? Multiple TBF or equivalent Concept paper		Feb 2002	
		?? Paging concept		Apr 2002	
		?? Dedicated physical subchannels. Includes traffic and control channels		Nov 2001	
		?? lu support and broadcast concept		Apr 2002	
		?? Impact of using RLC instead of LAPDm concept		Feb 2002	
		?? Contention resolution, mobile-station identity, and access concept		Nov 2001	
		?? PDCP concept		Apr 2002	
		?? Downlink delayed TBF release		Aug 2002	
		?? Add transparent RLC Concept		Feb 2002	
		?? Handover concept		Feb 2002	
?? Physical layer alignment with UMTS bearer concept ?? Control channels in 45.003 ?? Receiver performance in 45.005 for PDTCH/TCH and control channels		Jun 2001			

	<p>Lu rg interface GP-010428</p>	<p>Inter BSS interface Identification of requirements Stage 2 Adoption of relevant parts from Lu r Complementation with GERAN specifics New stage 3</p>		Jun 2002	Ready for R5. Closed
		<p>Inter BSS-RNS interface Identification of requirements Stage 2 Adoption of relevant parts from Lu r Complementation with GERAN specifics New stage 3</p>		Jun 2002	Ready for R5. Closed
	<p>Voice over GERAN PS and CS concept GP-021252</p>	<p>Voice over GERAN PS and CS concept ?? Architecture for A, Lu cs and Lu ps ?? Handover ?? RTP payload</p>		Nov 2001	Ready for R5. Closed
	<p>GERAN MS Conformance test for GERAN interface evolution GP-021253</p>	<p>?? MS test</p>	0%	Dec 2002	Not started
	<p>GERAN BTS Conformance test for GERAN interface evolution GP-021254</p>	<p>?? BTS test</p>	0%	Dec 2002	Not started
<p>Enhanced A/Gb feasibility study GP-022565</p>	<p>Enhanced A/Gb feasibility study GP-022565</p>	<p>?? Requirements for the support of conversational services ?? Identification of the different building blocks for the provision of conversational services on the existing A/Gb protocol stack ?? Outline of impact and feasibility of these building blocks and their different solutions ?? Impact on 3GPP architecture and requirement to co-ordinate with other TSGs (CN, SA) ?? Standardisation effort ?? Dependency to other features</p>	100%	Nov 2002	Closed

<p><i>Enhancement of Broadcast and Introduction of Multicast (in responsibility of TSG SA1)</i></p>	<p>Support of the Multimedia Broadcast Multicast Service (MBMS) in GERAN GP-022566</p>	<p>?? Impact on the logical and physical channels ?? Simultaneous support of MBMS services ?? Simultaneous support of MBMS and non-MBMS services ?? Resynchronisation at cell change ?? Decision making process between point-to-point or point-to-multipoint configurations ?? MBMS channel allocation procedures to multiple MSs ?? Changes to the Gb interface ?? GERAN-specific changes to the Iu-PS interface ?? Interaction between MBMS and Iu-flex ?? Security aspects ?? MS conformance tests</p>	<p>5%</p>	<p>June 2003</p>	<p>Started</p>
<p>Multiple TBF in A/Gb mode GP-021263</p>	<p>Multiple TBF in A/Gb mode GP-021263</p>	<p>?? Multiple TBF Concept paper ?? Multiple TBF Stage 2 (43.064) CRs ?? Multiple TBF Stage 3 (44.060) CRs</p>	<p>50%</p>	<p>August 2003</p>	<p>Started</p>
	<p>Multiple TBF in A/Gb mode – MS testing GP-022098</p>	<p>?? MS conformance tests</p>	<p>0%</p>	<p>November 2003</p>	<p>Not Started</p>
<p>Seamless support of streaming services in A/Gb mode GP-022561</p>	<p>Identification of requirements for streaming GP-022564</p>	<p>?? Requirements</p>	<p>40%</p>	<p>June 2003</p>	<p>Started</p>
	<p>Performance study of cell change mechanisms GP-022562</p>	<p>?? Performance of NACC ?? Performance of cell change in DTM for the PS domain ?? Handover</p>	<p>60%</p>	<p>June 2003</p>	<p>Started</p>
	<p>Reduction of service interruption times and packet loss during mobility procedures GP-022563</p>	<p>?? Optimisations of existing mechanisms/procedures ?? Inter-system NACC ?? PS Handover (within GERAN and between GERAN and UTRAN) ?? Dependency to other features</p>	<p>20%</p>	<p>June 2003</p>	<p>Started</p>
	<p>MS conformance testing GP-023424</p>	<p>?? MS conformance tests</p>	<p>0%</p>	<p>December 2003</p>	<p>Not Started</p>
<p>Flexible Layer One for GERAN GP-021018</p>	<p>Realisation of a Flexible Layer One GP-021019</p>	<p>Technical Report Architecture in 45.001 and 43.051 Multiplexing in 45.002 Channel Coding in 45.003 Performance Requirements in 45.005 Radio subsystem link control in 45.008 Requirements in 44.004</p>	<p>40%</p>	<p>June 2003</p>	<p>Started</p>

	Signalling and protocol support for a Flexible Layer One GP-021020	Modifications to RLC/MAC in 44.060 and 44.160 Modifications to RRC in 44.118 and 44.018	30%	June 2003	Started
	Security for a Flexible Layer One GP-021021	Ciphering in 44.160,44.118, 44.060 and 44.018	0%	Jan 2003	Started
	GERAN MS Conformance test for the Flexible Layer One GP-021022	MS Test in 51.010	0%	Jun 2003	Not Started
	GERAN BTS Conformance test for the Flexible Layer One GP-021023	BTS Test in 51.021	0%	Jun 2003	Not Started
Addition of frequency bands to GSM GP-022072	Addition of frequency bands to GSM – Changes to core specs GP-022073	45.005 New frequency ranges 45.050 Scenarios for new frequencies 24.008 Classmark information elements 45.008 Add frequency ranges 45.001 Add frequency and channels 43.030 Add frequency ranges 43.022 Add channels to be searched	100%	Dec 2002	Redy for Rel-6
	Addition of frequency bands to GSM – Changes for conformance tests GP-022074	51.010-1 Add testing	0%	Dec 2002	Not Started
Enhanced Power Control GP-012748	Realization of Enhanced power control and signaling support GP-012749	Concept Changes to 43.051 Changes to 44.004 Changes to 44.018 Changes to 48.058 Changes to 45.001 Changes to 45.002 Changes to 45.003 Changes to 45.008		Nov 2001	Ready for Rel 5 Closed
	GERAN MS Conformance test for Enhanced Power Control GP-012750	?? MS test	0%	Dec 2002	Not started
	GERAN BTS Conformance test for Enhanced Power Control GP-012751	?? BTS test	0%	Dec 2002	Not started
8PSK AMR HR GP-012752	Definition of channel coding, performance requirements and signaling support GP-012753	?? Concept ?? Changes to 44.018 ?? Changes to 45.001 ?? Changes to 45.002 ?? Changes to 45.003 ?? Changes to 45.005 ?? Changes to 24.008 ?? Changes to 48.058		Jun 2002	Ready for R5. Closed
	GERAN MS Conformance test for 8PSK HR GP-012754	?? MS test	0%	Dec 2002	

	GERAN BTS Conformance test for 8PSK HR GP-012755	?? BTS test	100%	Dec 2002	
700 MHz spectrum support GP-000449	GERAN support for the 700 MHz band	?? Signaling support ?? Physical layer definitions ?? Receiver performance and RF budget			Ready for R5 Closed
	GERAN MS Conformance test for 700 MHz band GP-000451	?? MS test		Jun 2001	Closed
	GERAN BTS Conformance test for GERAN interface evolution GP-000452	?? BTS test	100%	Dec 2002	Closed
Wideband telephony services (UMTS)	Support of WB AMR in GERAN GP-000453	GMSK and 8PSK WB FR / HR support ?? Channel coding in 45.003 ?? Signalling for A interface ?? Signalling for Iu ?? Link adaptation in 45.009 ?? Receiver performance in 45.005		Apr 2002 Nov 2001 Jun 2002	Ready for R5. Closed
	GERAN MS Conformance test for WB AMR GP-000454	?? MS test	0%	Dec 2002	Not started
	GERAN BTS Conformance test for WB AMR GP-000455	?? BTS test	100%	Dec 2002	Closed
Location service (UMTS)	LCS interoperability aspects to GERAN GP-000456	?? Co-ordinated development of GSM LCS Phase 2 and UMTS LCS, S2 and GERAN			Ready for R5. Closed
	Location service for GERAN R4 GP-010932	?? Work for aligning LCS R4 CN and GERAN			Ready for R4. Closed
	Location Services (LCS) for GERAN in A/Gb Mode GP-011925	?? GERAN LCS Stage Two ?? Gb interface support for LCS ?? L3 protocol support for LCS ?? Stage 3 specifications		Feb. 2002	Ready for Closed
	Location Services (LCS) for GERAN in Iu Mode GP-011926	?? GERAN LCS stage 2 ?? Iu interface support for LCS ?? Iur-g interface support for LCS ?? RRC protocol support for LCS ?? Additional impacts on Broadcast of LCS data on packet channels ?? Stage 3 specifications		Stage 2- GERAN #8 Feb. 2002 Stage 3 – GERAN #9 Jun 2002	Ready for R5. Closed
	GERAN MS Conformance test for LCS GP-000458	?? Develop LCS MS test case work plan (Release 98/99/4) ?? Develop LCS MS test cases	60%	June 2003	Ongoing

	GERAN BTS Conformance test for LCS GP-000459	?? Develop LCS BTS test case work plan (Release 99/99/4) ?? Develop LCS BTS test cases	??%	Dec 2002	Work has not started
MS Conformance Testing of Dual Transfer Mode GP-023236	MS Conformance Testing of Dual Transfer Mode	?? MS Conformance Testing of Dual Transfer Mode	100%	Feb 2003	Ongoing
Single Antenna Receiver Interference Cancellation (SAIC) GP-023400	Single Antenna Receiver Interference Cancellation (SAIC)	?? Determine feasibility of SAIC for GMSK and 8PSK scenarios under realistic synchronized and non-synchronized network conditions. Using a single Feasibility Study, both GMSK and 8PSK scenarios will be evaluated individually. ?? Realistic DIR (Dominant -to-rest of Interference Ratio) levels and distributions based on network simulations and measurements. ?? Robustness against different training sequences. ?? Determine method to detect/indicate SAIC capability.	20%	June 2003	Ongoing
Uplink TDOA location determination for GSM/GPRS GP-023316	Uplink TDOA location determination for GSM/GPRS	?? Addition of U-TDOA in the CS domain	10%	June 2003	Ongoing
		?? Addition of U-TDOA in the PS domain	0%	Nov 2003	
Support of Conversational Services in A/Gb mode via the PS domain GP-030443	Creation of a Technical Report GP-030444	?? Technical Report	0%	November 2003	Started
	Stage 2 GP-030445	?? PS handover ?? SNDCP/LLC compression ?? Definition of radio resource management functionality ?? Modifications to FLO ?? Radio channel support	0%	April 2004	Not Started
	Radio Channel Support GP-030446	?? Radio channel support for Conversational QoS ?? Introduction of continuous measurement reporting	0%	April 2004	Not Started
	Definition of radio resource management functionality GP-030447	?? Addition/modification of radio resource management protocol layer	0%	April 2004	Not Started
	PS Handover GP-030448	?? BSSGP procedures for change of BSC ?? Bi-Casting ?? Context transfer	0%	April 2004	Not Started
	Modifications to FLO GP-030449	?? FLO specific impacts due to conversational QoS	0%	April 2004	Not Started

Closed work items

Completed and terminated work items

Feature	Building block	Work task	Level of completion	Date of completion	Status
GERAN/UTRAN interface evolution 1 GP-000481	Evolution of Iu ps	?? Identification of GERAN requirements on Iu ps		Nov 2001	Ready for R5. Closed
		?? Update of specifications		Mar 2002	

GERAN/UTRAN interface evolution 2 GP-010417	Evolution of Iu cs GP-000430	?? Identification of GERAN requirements on Iu cs ?? Update of specifications		Apr 2002 Jun 2002	Ready for R5. Closed
Low chip rate TDD option (UTRAN)	Low chip rate TDD interworking with GERAN GP-000432	?? Handover and Cell Selection / Reselection to UTRA 1.28Mcps TDD			Ready for R4. Closed
GERAN improvements 1 GP-000433	Gb over IP GP-000434	IP-fication of Gb ?? Concept ?? Changes to 08.16, 08.18			Ready for R4. Closed
GERAN improvements 3 GP-010909	Evolution of the transport for A GP-010910	?? Definition of a new A/Ater Interface Transport Layer option based on the Iu Interface Transport Layer ?? Adaptation of the Layer 3 BSSMAP procedures as required.	0%	Dec 2002	Terminated. Not standardised
GERAN Improvements 4 GP-010363	Gb enhancements 2 GP-010363	Stage 2 Stage 3 (changes in 44.060) ?? Definition of enhanced countdown procedure ?? Definition of enhanced TBF release procedure			Ready for R4. Closed
GERAN Inter BSC NACC improvements over the Gb Interface GP-012313	Modification of Gb protocols for GERAN Inter BSC NACC over the Gb interface GP-012314	Stage 3 (changes to) ?? 48.018		Apr 2002	Ready for R5. Closed
	Modification of core network protocols for GERAN Inter BSC NACC for Gb interface GP-011877	Stage 2 ?? Concept ?? 23.060 change – Definition of Inter BSC NACC Stage 3 (changes to) ?? 29.060		Nov 2001 Apr 2002	
GERAN support for IP multimedia GP-010420	GERAN Header adaptation GP-010421	Header adaptation: ?? Definition of compression for PDCP protocol ?? Conceptual description in stage 2 ?? Necessary changes on stage 3	100%	Sept 2000 Oct 2001 Dec 2002	Ready for Rel-5 Closed
	GERAN Radio access bearer design for IP multimedia GP-010422	MuM control signalling for conversational multimedia services. ?? Identification of requirements ?? Necessary modifications due to SIP	??%	Feb 2002 Dec 2002	Terminated. Not standardised
	GERAN MS Conformance test for support of IP multimedia GP-010424	?? MS test	0%	Dec 2002	Terminated. Not standardised
	GERAN BTS Conformance test for support of IP multimedia GP-010425	?? BTS test	0%	Dec 2002	Terminated. Not standardised

Flow control supporting an MS with multiple data flows with different QoS over the Gb interface GP-021767	Update of stage 2 specifications	?? Concept document 23.060 (changes to) – Flow Control		June 2002 June 2002	Closed
	Modification of BSSGP protocol GP-021508	Stage 3 (changes to) ?? 48.018		June 2002	Ready for relea Closed
GERAN enhancements for streaming services 1 GP-010430	GERAN enhancements for streaming services 1 GP-010430	?? Concept ?? RLC protocol enhancement (SDU Discard)		Oct 2001 Nov 2001????	Ready for R5. Closed
GERAN enhancements for streaming services 2 GP-010429	GERAN enhancements for streaming services 2 GP-010429	Usage of ECSD Stage 2 Stage 3 ?? RLC PDU formats ?? MAC header		Jun 2001 Jun 2002	Ready for R5. Closed
Intra Domain Connection of RAN Nodes to Multiple CN Nodes: Overall System Architecture SA2 Feature	GERAN work for Intra Domain Connection of RAN Nodes to Multiple CN Nodes GP-020492	Stage 2 (changes to) ?? 43.051 Introduction of support for IDNNS in GERAN lu mode Stage 3 (changes to) ?? 48.016 Use of Gb interface concepts when a network applies IDNNS ?? 48.018 Include MSC/VLR identity in CS IMSI paging		Jun 2002	Ready for R5. Closed, accept changes for Gb IP
Real Time QoS for packet services including VoIP (UTRAN)	HOs: maintenance of real-time QoS while moving between cells in the PLMN including inter-SGSN change and SRNS relocation or possibly other mechanisms (UTRAN)	Handover for the packet switched domain ?? Stable RT handover report 25.936 including header removal ?? Update of stage 2 ?? Update of relevant stage 3 specs		Nov 2001	Closed
Uplink TDOA feasibility study GP-012794	GP-010431 Uplink TDOA feasibility study GP-012794	?? Performing of a feasibility study		Jun 2002	Closed.

3GPP TSG GERAN
Meeting no 13
San Antonio, USA
3 – 7 February 2003

Status of Change Requests presented to TSG GERAN #13

Tdoc	Title	Source	Status
GP-030317	CR 03.22-A059 Barred cell due to network authentication failure (R99)	Vodafone	Rejected
GP-030056	CR 04.18-A272 rev 1 Wrong CR incorporation "Removal of CBQ2" in SI19 rest octets (R99)	Siemens AG	Approved
GP-030249	CR 04.60-B119 Validity of the RBB and SSN in EGPRS RLC unacknowledged mode (R99)	Alcatel	Rejected
GP-030213	CR 05.10-A076 Timing of DTM assignment (R99)	Ericsson	Approved
GP-030254	CR 05.10-A077 Correction of interruption times for GSM to UTRAN FDD handover (R99)	Siemens	Revised
GP-030374	CR 05.10-A077 rev 1 Correction of interruption times for GSM to UTRAN handover (R99)	Siemens	Revised
GP-030437	CR 05.10-A077 rev 2 Correction of interruption times for GSM to UTRAN handover (R99)	Siemens	Approved
GP-030257	CR 05.10-A078 Correction of interruption times for GSM to UTRAN TDD handover (R99)	Siemens	Withdrawn
GP-030351	CR 11.10-4-A009 R96: Inclusion of pointer to maintained specification	Gemplus	Revised
GP-030358	CR 11.10-4-A009 rev 1 R96: Inclusion of pointer to maintained specification	Gemplus	Approved
GP-030353	CR 11.10-4-A010 : Addition of Terminal Profile information, suppression of PLAY TONE Test sequence 1.2	Gemplus	Revised
GP-030360	CR 11.10-4-A010 rev 1 : Addition of Terminal Profile information, suppression of PLAY TONE Test sequence 1.2	Gemplus	Approved
GP-030284	CR 11.21-A157 Correction to reference interference performance requirements (R99)	Nokia	Revised
GP-030413	CR 11.21-A157 rev 1 Correction to reference interference performance requirements (R99)	Nokia	Approved
GP-030441	CR 11.21-A158 Correction to reference interference performance requirements (R98)	Nokia	Approved
GP-030190	CR 24.008-xxx Enhanced Power Control (EPC) information in classmark 3 (Rel 5)	Ericsson	NA
GP-030396	CR 24.008-xxx Enhanced Power Control (EPC) information in classmark 3 (Rel 5)	Ericsson	NA
GP-030274	CR 24.008-xxx MS RAC for UMTS only terminal (R99)	Nokia	NA
GP-030262	CR 26.093-xxx Handling of FACCH and RATSCCH during AMR DTX	Nokia	NA

Tdoc	Title	Source	Status
GP-030318	CR 43.022-012 Barred cell due to network authentication failure (Rel-4)	Vodafone	Rejected
GP-030319	CR 43.022-013 Barred cell due to network authentication failure (Rel-5)	Vodafone	Rejected
GP-030268	CR 43.055-002 Clarification of inclusion of DTM information in handover from 3G to 2G (Rel 6)	Vodafone	Approved
GP-030270	CR 43.055-003 Clarification on the use of basic HR in DTM single slot configuration (Rel 6)	Vodafone	Revised
GP-030378	CR 43.055-003 rev 1 Clarification on the use of basic HR in DTM single slot configuration (Rel 6)	Vodafone	Revised
GP-030405	CR 43.055-003 rev 2 Clarification on the use of basic HR in DTM single slot configuration (Rel-6)	Vodafone	Approved
GP-030271	CR 43.055-004 Clarification on the default value of MAX_LAPDm parameter (Rel 6)	Vodafone	Revised
GP-030315	CR 43.055-004 rev 1 Clarification on the default value of MAX_LAPDm parameter (Rel-6)	Vodafone	Revised
GP-030406	CR 43.055-004 rev 2 Clarification on the default value of MAX_LAPDm parameter (Rel-6)	Vodafone	Approved
GP-030040	CR 43.059-037 rev 1 Inclusion of Uplink TDOA	TruePosition	Revised
GP-030380	CR 43.059-037 rev 2 Inclusion of Uplink TDOA	TruePosition	Revised
GP-030400	CR 43.059-037 rev 3 Inclusion of U-TDOA (Rel-6)	TruePosition	Revised
GP-030421	CR 43.059-037 rev 4 Inclusion of U-TDOA (Rel-6)	TruePosition	Postponed
GP-030152	CR 44.014-002 rev 6 New test loops for AMR-NB	Cingular Wireless, Motorola, Philips Semiconductors	Approved
GP-030061	CR 44.018-236 Removal of TBF establishment via dedicated mode, unused IE's (Rel 5)	Siemens AG	Approved
GP-030066	CR 44.018-237 Removal of TBF establishment via dedicated mode, unused IE's (Rel 6)	Siemens AG	Approved
GP-030059	CR 44.018-238 Requested access technology types for GSM900 in IA rest octets (Rel 5)	Siemens AG	Approved
GP-030064	CR 44.018-239 Requested access technology types for GSM900 in IA rest octets (Rel 6)	Siemens AG	Approved
GP-030067	CR 44.018-240 rev 1 Omitted bits in Bitmap type reporting structure (Rel 6)	Siemens AG	Approved
GP-030065	CR 44.018-241 rev 3 Clarification on deriving the GSM Neighbour Cell list (Rel 6)	Siemens AG	Approved
GP-030057	CR 44.018-242 rev 1 Correction of CCN Support Description (Rel 4)	Nokia	Approved
GP-030058	CR 44.018-243 rev 1 Correction of CCN Support Description (Rel 5)	Nokia	Approved
GP-030062	CR 44.018-244 rev 1 Correction of CCN Support Description (Rel 6)	Nokia	Approved
GP-030060	CR 44.018-245 Fixed Allocation Removal correction (Rel 5)	Nokia	Approved

Tdoc	Title	Source	Status
GP-030063	CR 44.018-246 Fixed Allocation Removal correction (Rel 6)	Nokia	Approved
GP-030263	CR 44.018-247 Packet Cell Change Failure replacement (Rel 6)	Ericsson	Withdrawn
GP-030272	CR 44.018-248 Clarification on the default value of MAX_LAPDm parameter (Rel 6)	Vodafone	Revised
GP-030316	CR 44.018-248 rev 1 Clarification on the default value of MAX_LAPDm parameter (Rel-6)	Vodafone	Approved
GP-030191	CR 44.018-249 Early classmark sending for Enhanced Power Control (EPC) (Rel 5)	Ericsson	Revised
GP-030303	CR 44.018-249 rev 1 Early Classmark Sending for Enhanced Power Control (EPC) (Rel-5)	Ericsson	Revised
GP-030397	CR 44.018-249 rev 2 Early Classmark Sending for Enhanced Power Control (EPC) (Rel-5)	Ericsson	Approved
GP-030192	CR 44.018-250 Early classmark sending for Enhanced Power Control (EPC) (Rel 6)	Ericsson	Revised
GP-030304	CR 44.018-250 rev 1 Early Classmark Sending for Enhanced Power Control (EPC) (Rel-6)	Ericsson	Revised
GP-030398	CR 44.018-250 rev 2 Early Classmark Sending for Enhanced Power Control (EPC) (Rel-6)	Ericsson	Approved
GP-030077	CR 44.060-292 Requested access technology types for GSM900 in Multiple TBF Uplink Assignment message (Rel 5)	Siemens AG	Approved
GP-030078	CR 44.060-293 Requested access technology types for GSM900 in Multiple TBF Uplink Assignment message (Rel 6)	Siemens AG	Approved
GP-030080	CR 44.060-296 rev 1 Undefined MS behaviour in case of undefined EGPRS MCS values (Rel 6)	Siemens AG	Approved
GP-030087	CR 44.060-297 rev 1 GPRS Mobile Allocation, wrong character in "NF-1" (Rel 6)	Siemens AG	Approved
GP-030086	CR 44.060-298 rev 1 Inconsistent definition of Cell_Index_Start_RTD in PSI3ter message (Rel 6)	Siemens AG	Approved
GP-030069	CR 44.060-299 CSN.1 coding of PSI3-bis (Rel 4)	Ericsson	Approved
GP-030073	CR 44.060-300 CSN.1 coding of PSI3-bis (Rel 5)	Ericsson	Approved
GP-030082	CR 44.060-301 CSN.1 coding of PSI3-bis (Rel 6)	Ericsson	Approved
GP-030068	CR 44.060-302 Inconsistency between CSN.1 and details of PACKET SI STATUS (Rel 4)	Ericsson	Approved
GP-030074	CR 44.060-303 Inconsistency between CSN.1 and details of PACKET SI STATUS (Rel 5)	Ericsson	Approved
GP-030083	CR 44.060-304 Inconsistency between CSN.1 and details of PACKET SI STATUS (Rel 6)	Ericsson	Approved
GP-030070	CR 44.060-305 Removal of CCN description from PSI3quater (Rel 4)	Nokia	Approved
GP-030076	CR 44.060-306 Removal of CCN description from PSI3quater (Rel 5)	Nokia	Approved

Tdoc	Title	Source	Status
GP-030085	CR 44.060-307 Removal of CCN description from PSI3quater (Rel 6)	Nokia	Approved
GP-030072	CR 44.060-308 Fixed Allocation Removal correction (Rel 5)	Nokia	Approved
GP-030079	CR 44.060-309 Fixed Allocation Removal correction (Rel 6)	Nokia	Approved
GP-030071	CR 44.060-312 Wrong Implementation CR 44.060 278r2 (GP-022931) (Rel 5)	Nokia	Approved
GP-030081	CR 44.060-313 Wrong Implementation CR 44.060 278r2 (GP-022931) (Rel 6)	Nokia	Approved
GP-030075	CR 44.060-314 Removal of Iu mode text from §9.1.12b RLC/MAC Control Message reassembly (Rel 5)	Nokia	Approved
GP-030084	CR 44.060-315 Removal of Iu mode text from §9.1.12b RLC/MAC Control Message reassembly (Rel 6)	Nokia	Approved
GP-030217	CR 44.060-316: Packet Cell Change Failure replacement	Ericsson	Withdrawn
GP-030229	CR 44.060-317 Wrong Length Indicator in TCH TBF mode (Rel 5)	Nokia	Revised
GP-030309	CR 44.060-317 rev 1 Wrong Length Indicator in TCH TBF mode (Rel-5)	Nokia	Approved
GP-030230	CR 44.060-318 Wrong Length Indicator in TCH TBF mode (Rel 6)	Nokia	Revised
GP-030310	CR 44.060-318 rev 1 Wrong Length Indicator in TCH TBF mode (Rel-6)	Nokia	Approved
GP-030231	CR 44.060-319 Correction to Packet Ack/Nack messages for SFACCH (Rel 5)	Nokia	Approved
GP-030232	CR 44.060-320 Correction to Packet Ack/Nack messages for SFACCH (Rel 6)	Nokia	Approved
GP-030233	CR 44.060-321 Correction to MTBF Uplink Assignment message (Rel 5)	Nokia	Revised
GP-030312	CR 44.060-321 rev 1 Correction to MTBF Uplink Assignment message (Rel-5)	Nokia	Approved
GP-030234	CR 44.060-322 Correction to MTBF Uplink Assignment message (Rel 6)	Nokia	Revised
GP-030313	CR 44.060-322 rev 1 Correction to MTBF Uplink Assignment message (Rel-6)	Nokia	Approved
GP-030236	CR 44.060-323 Wrong Implementation CR 44.060 263 rev 2 (Rel 5)	Nokia	Approved
GP-030237	CR 44.060-324 Wrong Implementation CR 44.060 263 rev 2 (Rel 6)	Nokia	Revised
GP-030314	CR 44.060-324 rev 1 Wrong Implementation CR 44.060 263 rev 2 (Rel-6)	Nokia	Approved
GP-030244	CR 44.060-325 MS behaviour in case of un-successful cell re-selection (Rel 4)	Alcatel	Revised
GP-030325	CR 44.060-325 rev 1 MS behaviour in case of un-successful cell re-selection (Rel-4)	Alcatel	Withdrawn
GP-030245	CR 44.060-326 MS behaviour in case of un-successful cell re-selection (Rel 5)	Alcatel	Revised

Tdoc	Title	Source	Status
GP-030326	CR 44.060-326 rev 1 MS behaviour in case of unsuccessful cell re-selection (Rel-5)	Alcatel	Withdrawn
GP-030246	CR 44.060-327 MS behaviour in case of unsuccessful cell re-selection (Rel 6)	Alcatel	Revised
GP-030327	CR 44.060-327 rev 1 MS behaviour in case of unsuccessful cell re-selection (Rel-6)	Alcatel	Withdrawn
GP-030250	CR 44.060-328 Validity of the RBB and SSN in EGPRS RLC unacknowledged mode (Rel 4)	Alcatel	Rejected
GP-030251	CR 44.060-329 Validity of the RBB and SSN in EGPRS RLC unacknowledged mode (Rel 5)	Alcatel	Rejected
GP-030252	CR 44.060-330 Validity of the RBB and SSN in EGPRS RLC unacknowledged mode (Rel 6)	Alcatel	Revised
GP-030302	CR 44.060-330 rev 1 Validity of the RBB and SSN in EGPRS RLC unacknowledged mode (Rel-6)	Alcatel	Approved
GP-030324	CR 44.060-331 MS RAC in PACKET RESOURCE REQUEST during one phase access for MS RAC acquisition within an EGPRS TBF. (Rel-6)	Motorola	Postponed
GP-030407	CR 44.060-332 Enhancement of network controlled cell reselection procedure (Rel-6)	Ericsson	Postponed
GP-030089	CR 44.118-032 rev 1 HFN handling in case of handover and cell reselection between GERAN and UTRAN (Rel 5)	Nokia	Approved
GP-030090	CR 44.118-033 rev 2 Alignment UTRAN/GERAN on Iu mode procedures (Rel 5)	Nokia	Approved
GP-030088	CR 44.118-034 rev 1 Correction CR to 44.118vs 5.2.0 (Rel 5)	Nokia	Approved
GP-030203	CR 44.118-035 Handling of predefined configuration and NAS message retransmission at inter-rat and inter-mode HO in GERAN Iu mode	Nokia	Revised
GP-030282	CR 44.118-035 rev 1 Handling of predefined configuration and NAS message retransmission at inter-rat and inter-mode HO in GERAN Iu mode	Nokia	Revised
GP-030305	CR 44.118-035 rev 2 Handling of predefined configuration and NAS message retransmission at inter-rat and inter-mode HO in GERAN Iu mode (Rel-5)	Nokia	Revised
GP-030410	CR 44.118-035 rev 3 Handling of predefined configuration and NAS message retransmission at inter-rat and inter-mode HO in GERAN Iu mode (Rel-5)	Nokia	Approved
GP-030204	CR 44.118-036 Correction CR to 44.118vs 5.2.0	Nokia	Revised
GP-030306	CR 44.118-036 rev 1 Correction CR to 44.118vs 5.2.0 (Rel-5)	Nokia	Revised
GP-030419	CR 44.118-036 rev 2 Correction CR to 44.118vs 5.2.0 (Rel-5)	Nokia	Approved
GP-030092	CR 44.160-032 Wrong implementation of CR 44.160 030r1 (GP-022918) (Rel 5)	Nokia	Approved
GP-030094	CR 44.160-033 rev 1 Correction to abnormal cases for multiple TBF (Rel 5)	Siemens	Approved

Tdoc	Title	Source	Status
GP-030096	CR 44.160-034 rev 1 Use and interpretation of RTI (Rel 5)	Nokia	Approved
GP-030091	CR 44.160-035 Correction to RLC/MAC procedures during contention resolution on SBPSCH (Rel 5)	Nokia	Approved
GP-030093	CR 44.160-036 Removal of the Final Segment bit on DBPSCH (for FACCH, SACCH and SDCCH) (Rel 5)	Nokia	Approved
GP-030235	CR 44.160-037 rev 1 Correction to mapping of SRBs onto logical channels	Nokia	Revised
GP-030329	CR 44.160-037 rev 2 Correction to mapping of SRBs onto logical channels (Rel-5)	Nokia	Approved
GP-030095	CR 44.160-038 MS requirements on simultaneous RLC/MAC transactions and MTBF (Rel 5)	Nokia	Approved
GP-030223	CR 44.160-039 USF Handling on DBPSCH (Rel 5)	Nokia	Approved
GP-030224	CR 44.160-040 Correction to 2-phase access in Iu mode (MTBF) (Rel 5)	Nokia	Revised
GP-030311	CR 44.160-040 rev 1 Correction to 2-phase access in Iu mode (MTBF) (Rel-5)	Nokia	Approved
GP-030225	CR 44.160-041 Correction to RLC/MAC procedures during contention resolution on SBPSCH (MTBF) (Rel 5)	Nokia	Approved
GP-030226	CR 44.160-042 Correction to contention resolution at 1-phase access on DBPSCH (Rel 5)	Nokia	Revised
GP-030308	CR 44.160-042 rev 1 Correction to contention resolution at 1-phase access on DBPSCH (Rel-5)	Nokia	Approved
GP-030227	CR 44.160-043 Correction to access causes in Iu mode (Rel 5)	Nokia	Revised
GP-030307	CR 44.160-043 rev 1 Correction to access causes in Iu mode (Rel-5)	Nokia	Approved
GP-030228	CR 44.160-044 Wrong Length Indicator in TCH TBF mode (Rel 5)	Nokia	Approved
GP-030264	CR 44.160-045 Packet Cell Change Failure replacement (Rel 6)	Ericsson	Withdrawn
GP-030111	CR 45.002-060 Inconsistent specification of Iu-mode multislot configurations (Rel 5)	AT&T Wireless	Revised
GP-030379	CR 45.002-060 rev 1 Inconsistent specification of Iu-mode multislot configurations (Rel 5)	AT&T Wireless	Approved
GP-030220	CR 45.002-061 Multislot configurations for dual transfer mode. (Rel 4)	Nokia	Approved
GP-030221	CR 45.002-062 Multislot configurations for dual transfer mode. (Rel 5)	Nokia	Approved
GP-030222	CR 45.002-063 Multislot configurations for DBPSCH in Iu mode (Rel 5)	Nokia	Approved
GP-030261	CR 45.002-064 Fixed allocation removal correction (Rel 6)"	Siemens	Approved
GP-030266	CR 45.002-065 Correction of maximum number of basic physical channels in DTM configuration (Rel 4)	Vodafone	Withdrawn
GP-030267	CR 45.002-066 Correction of maximum number of basic physical channels in DTM configuration (Rel 5)	Vodafone	Withdrawn

Tdoc	Title	Source	Status
GP-030150	CR 45.005-059 rev 2 Rice doppler spectrum definition (Rel 6)	TTPCom & Nokia	Approved
GP-030188	CR 45.005-067 Correction of static AMR sensitivity requirements for TCH/AHS (Rel 4)	Ericsson	Revised
GP-030381	CR 45.005-067 rev 1 Correction of static AMR sensitivity requirements for TCH/AHS (Rel 4)	Ericsson	Approved
GP-030189	CR 45.005-068 Correction of static AMR sensitivity requirements for TCH/AHS (Rel 5)	Ericsson	Revised
GP-030382	CR 45.005-068 rev 1 Correction of static AMR sensitivity requirements for TCH/AHS (Rel 5)	Ericsson	Approved
GP-030283	CR 45.005-069 Correction to abbr. in reference interference performance requirements (Rel 6)	Nokia	Approved
GP-030383	CR 45.005-069 rev 1 Correction to abbr. in reference interference performance requirements (Rel 6)	Nokia	Withdrawn
GP-030371	CR 45.005-070 Clarification of spurious emissions requirements for multislots transmit MS's	TTPcom	Revised
GP-030373	CR 45.005-070 rev 1 Clarification of spurious emissions requirements for multislots transmit MS's	TTPcom	Withdrawn
GP-030149	CR 45.008-146 Clarification for EGPRS reporting (Rel 6)	Nokia	Approved
GP-030218	CR 45.008-147 Packet Cell Change Failure replacement (Rel 6)	Ericsson	Rejected
GP-030277	CR 45.008-148 BEP estimation accuracy for EMR (Rel 6)	Nokia	Postponed
GP-030417	CR 45.008-149 Indication of EPC capability (Rel 5)	Ericsson	Approved
GP-030418	CR 45.008-150 Indication of EPC capability (Rel 6)	Ericsson	Approved
GP-030214	CR 45.010-008 Timing of DTM assignment (Rel 4)	Ericsson	Approved
GP-030215	CR 45.010-009 Timing of DTM assignment (Rel 5)	Ericsson	Approved
GP-030255	CR 45.010-010 Correction of interruption times for GSM to UTRAN FDD handover (Rel 4)	Siemens	Revised
GP-030375	CR 45.010-010 rev 1 Correction of interruption times for GSM to UTRAN handover (Rel 4)	Siemens	Revised
GP-030438	CR 45.010-010 rev 2 Correction of interruption times for GSM to UTRAN handover (Rel 4)	Siemens	Approved
GP-030256	CR 45.010-011 Correction of interruption times for GSM to UTRAN FDD handover (Rel 5)	Siemens	Revised
GP-030376	CR 45.010-011 rev 1 Correction of interruption times for GSM to UTRAN handover (Rel 5)	Siemens	Revised
GP-030439	CR 45.010-011 rev 2 Correction of interruption times for GSM to UTRAN handover (Rel 5)	Siemens	Approved
GP-030258	CR 45.010-012 Correction of interruption times for GSM to UTRAN TDD handover (Rel 4)	Siemens	Withdrawn
GP-030259	CR 45.010-013 Correction of interruption times for GSM to UTRAN TDD handover (Rel 5)	Siemens	Withdrawn

Tdoc	Title	Source	Status
GP-030269	CR 48.008-066 Clarification of inclusion of DTM information in handover from 3G to 2G (Rel 6)	Vodafone	Revised
GP-030404	CR 48.008-066 rev 1 Clarification of inclusion of DTM information in handover from 3G to 2G (Rel-6)	Vodafone	Approved
GP-030097	CR 48.018-078 rev 1 Correction to PDU Type IE (Rel 5)	Siemens AG	Approved
GP-030243	CR 48.018-079 Enhancement to PFC creation procedure (Rel 6)	Alcatel	Revised
GP-030403	CR 48.018-079 rev 1 Enhancement to PFC creation procedure (Rel-6)	Alcatel	Revised
GP-030420	CR 48.018-079 rev 2 Enhancement to PFC creation procedure (Rel-6)	Alcatel	Revised
GP-030422	CR 48.018-079 rev 3 Enhancement to PFC creation procedure (Rel-6)	Alcatel	Approved
GP-030248	CR 48.018-080 Usage of Allocation and Retention Priority in the BSS (Rel 6)	Alcatel	Revised
GP-030328	CR 48.018-080 rev 1 Usage of Allocation and Retention Priority in the BSS (Rel-6)	Alcatel	Postponed
GP-030041	CR 48.071-009 Proposed modification of SMLC-BSS signalling	TruePosition	Revised
GP-030401	CR 48.071-009 rev 1 Proposed modification of SMLC-BSS signalling (Rel-6)	TruePosition	Postponed
GP-030042	CR 49.031-022 Proposed modification of BSSAP-LE signalling	TruePosition	Revised
GP-030402	CR 49.031-022 rev 1 Proposed modification of BSSAP-LE signalling (Rel-6)	TruePosition	Postponed
GP-030008	CR 51.010-1-1238 Correction in EOTD Test Case 70.2.1	Racal Instruments	Revised
GP-030364	CR 51.010-1-1238 rev 1 Correction in EOTD Test Case 70.2.1	Racal Instruments	Approved
GP-030009	CR 51.010-1-1239 Correction in EOTD Test Case 70.2.3	Racal Instruments	Revised
GP-030365	CR 51.010-1-1239 rev 1 Correction in EOTD Test Case 70.2.3	Racal Instruments	Approved
GP-030010	CR 51.010-1-1240 Correction in EOTD Test Case 70.2.4	Racal Instruments	Revised
GP-030366	CR 51.010-1-1240 rev 1 Correction in EOTD Test Case 70.2.4	Racal Instruments	Approved
GP-030013	CR 51.010-1-1241 BS_CV_MAX value, as specified in section 50, are used instead for the EGPRS RLC tests in clause 53.x - Test of EGPRS Radio Link Control (RLC) Protocol.	Nokia & Setcom	Approved
GP-030014	CR 51.010-1-1242 Applicability change of clause "30 Speech teleservices" test cases.	Nokia	Approved
GP-030016	CR 51.010-1-1243 Sec. 44.2.3.2.5 Combined routing area updating / rejected / roaming not allowed in this location area	Siemens	Approved
GP-030017	CR 51.010-1-1244 41.2.2.45 - Initiation of the packet access procedure / timer T3146	Anite	Approved

Tdoc	Title	Source	Status
GP-030018	CR 51.010-1-1245 42.1.2.1.10.1 - Clarification of conformance requirements, and consequent alterations to test procedure.	Anite	Approved
GP-030019	CR 51.010-1-1246 42.1.2.2.3 - Conflict between Specific Message Contents in Test Case and section 40 defaults	Anite	Revised
GP-030342	CR 51.010-1-1246 rev 1 42.1.2.2.3 - Conflict between Specific Message Contents in Test Case and section 40 defaults	Anite	Approved
GP-030020	CR 51.010-1-1247 44.2.3.2.5 - Test purpose 2 - Cell re-selection due to power levels – WITHDRAWN	Anite	Withdrawn
GP-030021	CR 51.010-1-1248 51.2.2.4 - Initiation of the packet access procedure / timer T3146	Anite	Approved
GP-030022	CR 51.010-1-1249 14.7 - Relaxation of requirements for blocking signal for GSM 850 in range > 914 MHz to 12,75 GHz	Anite	Revised
GP-030384	CR 51.010-1-1249 rev 1 14.7 - Relaxation of requirements for blocking signal for GSM 850 in range > 914 MHz to 12,75 GHz	Anite	Withdrawn
GP-030023	CR 51.010-1-1250 53.1.1.16 - Deletion of redundant steps and correction of step references	Anite	Approved
GP-030024	CR 51.010-1-1251 42.3.3.1.1 - Test Step added, BS_CV_MAX set to 1	Anite	Approved
GP-030025	CR 51.010-1-1252 53.1.1.20 - Core spec references corrected	Anite	Approved
GP-030026	CR 51.010-1-1253 52.1.2.1.8.1.1 - Redefinition of expected sequence	Anite	Withdrawn
GP-030027	CR 51.010-1-1254 53.1.1.21 - Sequence corrected to allow for all types of MCS switching, core spec references corrected	Anite	Approved
GP-030028	CR 51.010-1-1255 42.3.1.1.9 - Multiple corrections to initial conditions, expected sequence and specific message contents	Anite	Revised
GP-030343	CR 51.010-1-1255 rev 1 42.3.1.1.9 - Multiple corrections to initial conditions, expected sequence and specific message contents	Anite	Approved
GP-030029	CR 51.010-1-1256 46.1.2.5.2 - Correction of test procedure	Anite	Revised
GP-030354	CR 51.010-1-1256 rev 1 46.1.2.5.2 - Correction of test procedure	Anite	Approved
GP-030030	CR 51.010-1-1257 46.1.2.6.1 - Correction of PDP Context activation in step 5	Anite	Approved
GP-030031	CR 51.010-1-1258 52.3.3.1.1 - Test Step added, BS_CV_MAX set to 1	Anite	Approved
GP-030032	CR 51.010-1-1259 detach type should be specified and release of RR connection added in TC 44.2.2.2.6	Setcom	Revised
GP-030357	CR 51.010-1-1259 rev 1 detach type should be specified and release of RR connection added in TC 44.2.2.2.6	Setcom	Approved
GP-030033	CR 51.010-1-1260 Release of RR connection is needed in TC 44.2.1.1.10	Setcom	Approved

Tdoc	Title	Source	Status
GP-030034	CR 51.010-1-1261 Testcase 52.1.1.1 needs to be done in transfer mode	Setcom	Withdrawn
GP-030035	CR 51.010-1-1262 Testcase 52.1.2.1.6 needs to be done in transfer mode	Setcom	Revised
GP-030385	CR 51.010-1-1262 rev 1 Testcase 52.1.2.1.6 needs to be done in transfer mode	Setcom	Approved
GP-030036	CR 51.010-1-1263 Testcase 52.1.2.1.7 needs to be done in transfer mode	Setcom	Withdrawn
GP-030037	CR 51.010-1-1264 Addition of new test cases section 42.7	Setcom	Approved
GP-030038	CR 51.010-1-1265 Addition of new test cases section 52.7	Setcom	Withdrawn
GP-030039	CR 51.010-1-1266 Addition of new test cases section 52.8	Setcom	Approved
GP-030043	CR 51.010-1-1267 Enhanced Measurement Report, All neighbors present (400, 700 and 850 MHz)	Motorola	Revised
GP-030331	CR 51.010-1-1267 rev 1 Enhanced Measurement Report, All neighbors present (400, 700 and 850 MHz)	Motorola	Approved
GP-030044	CR 51.010-1-1268 Addition of an Optional and a Conditional step in the Expected Sequence in clause 41.3.1.1 - TBF Release / Uplink / Normal / MS initiated / Acknowledged mode	Anite & Nokia	Approved
GP-030045	CR 51.010-1-1269 Change of BSN in optional step A16 of the Expected Sequence in clause 43.1.1.6 - Acknowledged mode / Uplink TBF / Decoding of Received Block Bitmap	Nokia	Withdrawn
GP-030047	CR 51.010-1-1270 Introduction of AMR-NB Layer 1 In Band Signaling Tests	Cingular	Revised
GP-030333	CR 51.010-1-1270 rev 1 Introduction of AMR-NB Layer 1 In Band Signaling Tests	Cingular	Approved
GP-030048	CR 51.010-1-1271 Introduction of AMR-NB Layer 1 Sensitivity Tests with Link Adaptation turned on	Cingular	Revised
GP-030337	CR 51.010-1-1271 rev 1 Introduction of AMR-NB Layer 1 Sensitivity Tests with Link Adaptation turned on	Cingular	Withdrawn
GP-030049	CR 51.010-1-1272 Introduction of an AMR-NB Layer 1 Test to verify the CMR Generation performances	Cingular	Revised
GP-030452	CR 51.010-1-1272 rev 1 Introduction of an AMR-NB Layer 1 Test to verify the CMR Generation performances	TSG GERAN	Approved
GP-030050	CR 51.010-1-1273 Modifications of AMR-NB Sensitivity and Co-Channel Rejection Test Cases	Cingular	Withdrawn
GP-030051	CR 51.010-1-1274 52.1.2.1.10.1 Clarification of conformance requirements, and consequent alterations to test procedure.	Anite	Approved
GP-030052	CR 51.010-1-1275 42.1.3.1.2 Macro definition fails to allow for PACKET UPLINK DUMMY CONTROL BLOCK	Anite	Approved
GP-030053	CR 51.010-1-1276 52.1.3.1.2 Macro definition fails to allow for PACKET UPLINK DUMMY CONTROL BLOCK	Anite	Approved

Tdoc	Title	Source	Status
GP-030054	CR 51.010-1-1277 42.3.1.2.3 Mandatory use of two-phase packet access in RLC unacknowledged mode.	Anite	Approved
GP-030055	CR 51.010-1-1278 52.3.1.2.3 Mandatory use of two-phase packet access in RLC unacknowledged mode.	Anite	Approved
GP-030101	CR 51.010-1-1279 Clause 13.6.3. Correction to spurious emission requirements for GPRS MS with allocated channel when transmitting	TTPCom Ltd	Revised
GP-030338	CR 51.010-1-1279 rev 1 Clause 13.6.3. Correction to spurious emission requirements for GPRS MS with allocated channel when transmitting	TTPCom Ltd	Withdrawn
GP-030102	CR 51.010-1-1280 Clause 13.17.4. Correction to spurious emission requirements for EGPRS MS with allocated channel when transmitting	TTPCom Ltd	Revised
GP-030339	CR 51.010-1-1280 rev 1 Clause 13.17.4. Correction to spurious emission requirements for EGPRS MS with allocated channel when transmitting	TTPCom Ltd	Withdrawn
GP-030103	CR 51.010-1-1281 Section 34 Corrections to SMS test case 34.2.9 Multiple SMS mobile originated	Ericsson	Approved
GP-030104	CR 51.010-1-1282 Section 44 Corrections to GMM test case 44.2.3.2.5 Combined routing area updating/rejected/roaming not allowed in this location area	Ericsson	Approved
GP-030105	CR 51.010-1-1283 Correction in EOTD Test Case 70.2.2	Racal Instruments	Approved
GP-030106	CR 51.010-1-1284 Correction in EOTD Test Case 70.3.1.2	Racal Instruments	Revised
GP-030367	CR 51.010-1-1284 rev 1 Correction in EOTD Test Case 70.3.1.2	Racal Instruments	Approved
GP-030107	CR 51.010-1-1285 Correction of step 16 of Expected Sequence for clause 51.1.1.4 - RR / Paging / on PCCCH for EGPRS service / paging reorganisation successful.	Nokia	Approved
GP-030108	CR 51.010-1-1286 Correction on reaction times for RLC Data Blocks for clauses 53.1.1.14 and 53.1.1.17 - Acknowledged Mode / Uplink TBF.	Nokia	Approved
GP-030109	CR 51.010-1-1287 Correction of step 16 of Expected Sequence for clause 41.1.1.4 - RR / Paging / on PCCCH for GPRS service / paging reorganisation successful.	Nokia	Approved
GP-030120	CR 51.010-1-1288 Correction to testcase 43.2.1	Setcom	Approved
GP-030121	CR 51.010-1-1289 Correction of test case 12.1.2 in TS 51.010-1	CETECOM	Approved
GP-030122	CR 51.010-1-1290 EGPRS specific additions to Sec 50	Setcom	Approved
GP-030388	CR 51.010-1-1290 rev 1 EGPRS specific additions to Sec 50	Setcom	Withdrawn
GP-030123	CR 51.010-1-1291 Sec: 52.4 - Addition of allocation of resources for UL data transfer	Setcom	Approved
GP-030124	CR 51.010-1-1292 Sec: 51.3- Addition of allocation of resources for UL data transfer	Setcom	Approved

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GP-030125	CR 51.010-1-1293 Sec 53.1.1.3 - Modification to the usage of Packet Timeslot Reconfigure and window size	Setcom	Approved
GP-030126	CR 51.010-1-1294 Sec 51.3.1.2 - MS will not re-initiate Packet Access in Step 20.	Setcom	Approved
GP-030127	CR 51.010-1-1295 Sec 52.5.5.2 - Testcase requires only One Cell	Setcom	Approved
GP-030128	CR 51.010-1-1296 Sec 51.2.3.10 - PTCCH Access Bursts content should be 11-bit	Setcom	Approved
GP-030129	CR 51.010-1-1297 Sec 53.1.1.5 - Addition of optional steps to cater to MS reaction time and correction of BSN expected.	Setcom	Approved
GP-030130	CR 51.010-1-1298 Sec 52.3.1.1.4 - Packet Uplink Ack Nack shall not be sent on the activated PDCH in Step 30.	Setcom	Approved
GP-030131	CR 51.010-1-1299 Sec 51.2.2.1 - The Activation of PDP Context need to be done only once.	Setcom	Approved
GP-030132	CR 51.010-1-1300 Sec 53.1.2.18 - New testcase - Acknowledged Mode/ Downlink TBF/ Retransmission/Padding	Setcom	Approved
GP-030133	CR 51.010-1-1301 Sec 52.3.3.1.2 - Correction to the PDP contexts activated in expected sequence.	Setcom	Approved
GP-030134	CR 51.010-1-1302 Sec 51.2.2.3 - Request reference value check should cater for Egprs Packet Channel Request also.	Setcom	Approved
GP-030135	CR 51.010-1-1303 Sec 53.1.2.3 and 53.1.2.4 - Polling for Egprs Downlink Ack/Nack shall be done before step 5.	Setcom	Approved
GP-030136	CR 51.010-1-1304 Sec 53.1.1.11 - SS shall acknowledge all data blocks before Step 11.	Setcom	Approved
GP-030137	CR 51.010-1-1305 Section 20.22.* Clarification of the tables for GPRS cell selection	Rohde & Schwarz	Revised
GP-030332	CR 51.010-1-1305 rev 1 Section 20.22.* Clarification of the tables for GPRS cell selection	Rohde & Schwarz	Approved
GP-030138	CR 51.010-1-1306 Section 20.22.1 GPRS Cell selection and reselection – default paging on PCH	Rohde & Schwarz	Revised
GP-030301	CR 51.010-1-1306 rev 1 Section 20.22.1 GPRS Cell selection and reselection – default paging on PCH	Rohde & Schwarz	Approved
GP-030139	CR 51.010-1-1307 Section 40 Introduction of R99 to GPRS default conditions	Rohde & Schwarz	Revised
GP-030362	CR 51.010-1-1307 rev 1 Section 40 Introduction of R99 to GPRS default conditions	Rohde & Schwarz	Approved
GP-030140	CR 51.010-1-1308 Annex A7 New annex General rules for statistical testing	Rohde & Schwarz	Approved
GP-030141	CR 51.010-1-1309 Section 14.1.5 Bad frame indication - TCH/AFS (Speech frame) - Introduction of statistical testing	Rohde & Schwarz	Approved
GP-030142	CR 51.010-1-1310 Section 14.1.6 Bad frame indication - TCH/AHS - Introduction of statistical testing	Rohde & Schwarz	Approved
GP-030143	CR 51.010-1-1311 Section 14.2.10 Reference sensitivity - TCH/AFS - Introduction of statistical testing	Rohde & Schwarz	Approved

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GP-030144	CR 51.010-1-1312 Section 14.2.18 Reference sensitivity - TCH/AHS - Introduction of statistical testing	Rohde & Schwarz	Approved
GP-030145	CR 51.010-1-1313 Section 14.4.8 Co-channel rejection - TCH/AFS - Introduction of statistical testing	Rohde & Schwarz	Approved
GP-030146	CR 51.010-1-1314 Section 14.4.16 Co-channel rejection - TCH/AHS - Introduction of statistical testing	Rohde & Schwarz	Approved
GP-030147	CR 51.010-1-1315 Section 14.5.1.2 Adjacent channel rejection - TCH/AFS – Introduction of statistical testing	Rohde & Schwarz	Approved
GP-030148	CR 51.010-1-1316 Section 14.5.1.3 Adjacent channel rejection - TCH/AHS – Introduction of statistical testing	Rohde & Schwarz	Approved
GP-030153	CR 51.010-1-1317 52.3.1.2.2, 52.3.1.2.3 Correction to test cases 52.3.1.2.2 and 52.3.1.2.3	Anite	Approved
GP-030154	CR 51.010-1-1318 Sec: 42.4 - Addition of allocation of resources for UL data transfer	Setcom	Approved
GP-030155	CR 51.010-1-1319 Sec 41.3 - Addition of allocation of CR 51.010-1-1317 resources for UL data transfer	Setcom	Approved
GP-030156	CR 51.010-1-1320 Sec 41.3.1.2 - MS will not re-initiate Packet Access in Step 20	Setcom	Approved
GP-030157	CR 51.010-1-1321 Sec 52.3.1.1.4 - Packet Uplink Ack Nack shall not be sent on the activated PDCH in Step 30	Setcom	Withdrawn
GP-030158	CR 51.010-1-1322 Sec 42.3.1.1.4 - Correction to the PDP contexts activated in expected sequence	Setcom	Withdrawn
GP-030162	CR 51.010-1-1323 Sec 42.3.1.1.4 - Packet Uplink Ack Nack shall not be sent on the activated PDCH in Step 30	Setcom	Approved
GP-030163	CR 51.010-1-1324 Sec 42.3.3.1.2 - Correction to the PDP contexts activated in expected sequence	Setcom	Approved
GP-030164	CR 51.010-1-1325 Removal of Authentication and Ciphering from LCS Emergency Call Tests	Qualcomm	Approved
GP-030165	CR 51.010-1-1326 Alignment of Test References to Conformance Requirements for LCS MO-LR Tests	Qualcomm	Approved
GP-030166	CR 51.010-1-1327 MO-LR Positioning Measurement for Assisted GPS	Qualcomm	Approved
GP-030173	CR 51.010-1-1328 Section 15.6 GPRS Timing advance and absolute delay	Rohde & Schwarz	Approved
GP-030174	CR 51.010-1-1329 Section 20.22.2 Clarification of Test Procedure and Paging Requirements	Rohde & Schwarz	Approved
GP-030175	CR 51.010-1-1330 Section 20.22.3 Clarification of Test Procedure and Paging Requirements	Rohde & Schwarz	Revised
GP-030386	CR 51.010-1-1330 rev 1 Section 20.22.3 Clarification of Test Procedure and Paging Requirements	Rohde & Schwarz	Approved
GP-030176	CR 51.010-1-1331 Section 20.22.4 Clarification of Test Procedure and Paging Requirements	Rohde & Schwarz	Revised
GP-030391	CR 51.010-1-1331 rev 1 Section 20.22.4 Clarification of Test Procedure and Paging Requirements	Rohde & Schwarz	Approved
GP-030177	CR 51.010-1-1332 Section 20.22.5 Clarification of Test Procedure and Paging Requirements	Rohde & Schwarz	Withdrawn
GP-030178	CR 51.010-1-1333 Section 20.22.9 Clarification of Test Procedure and Paging Requirements	Rohde & Schwarz	Revised

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GP-030387	CR 51.010-1-1333 rev 1 Section 20.22.9 Clarification of Test Procedure and Paging Requirements	Rohde & Schwarz	Approved
GP-030179	CR 51.010-1-1334 Section 50 Adaptions due to introduction of R99 to section 40	Rohde & Schwarz	Approved
GP-030275	CR 51.010-1-1335 Correction to Fixed Allocation Test Cases 42.2.2.10.1, 42.2.2.10.2 and 42.2.2.10.3	Motorola	Approved
GP-030294	CR 51.010-1-1336 Addition of test case 42.4.2.3.3 in TS 51.010-1: Packet Measurement Order Reset	Alcatel	Revised
GP-030335	CR 51.010-1-1336 rev 1 Addition of test case 42.4.2.3.3 in TS 51.010-1: Packet Measurement Order Reset	Alcatel	Revised
GP-030345	CR 51.010-1-1336 rev 2 Addition of test case 42.4.2.3.3 in TS 51.010-1: Packet Measurement Order Reset	Alcatel	Revised
GP-030349	CR 51.010-1-1336 rev 3 Addition of test case 42.4.2.3.3 in TS 51.010-1: Packet Measurement Order Reset	Alcatel	Revised
GP-030431	CR 51.010-1-1336 rev 4 Addition of test case 42.4.2.3.3 in TS 51.010-1: Packet Measurement Order Reset	Alcatel	Approved
GP-030295	CR 51.010-1-1337 Addition of test case in TS 51.010 S42: Packet Timeslot Reconfigure containing a new Coding Scheme command	Alcatel	Revised
GP-030336	CR 51.010-1-1337 rev 1 Addition of test case in TS 51.010 S42: Packet Timeslot Reconfigure containing a new Coding Scheme command	Alcatel	Revised
GP-030346	CR 51.010-1-1337 rev 2 Addition of test case in TS 51.010 S42: Packet Timeslot Reconfigure containing a new Coding Scheme command	Alcatel	Revised
GP-030350	CR 51.010-1-1337 rev 3 Addition of test case in TS 51.010 S42: Packet Timeslot Reconfigure containing a new Coding Scheme command	Alcatel	Withdrawn
GP-030299	CR 51.010-1-1338 Correction of specific message content for RELEASE COMPLETE in step 6 of expected sequence for clause 31.8.7	Nokia	Approved
GP-030300	CR 51.010-1-1339 Correction of step for expected sequence for clause 44.2.3.1.7	Nokia	Revised
GP-030356	CR 51.010-1-1339 rev 1 Correction of step for expected sequence for clause 44.2.3.1.7	Nokia	Rejected
GP-030340	CR 51.010-1-1340 Sec 42.5.5.3 - Change in timing	Setcom	Approved
GP-030341	CR 51.010-1-1341 Sec 52.5.5.3 - Change in timing	Setcom	Approved
GP-030392	CR 51.010-1-1342 Addition of test case 42.4.2.3.3 in TS 51.010-1: Packet Measurement Order Reset	Alcatel	Withdrawn
GP-030015	CR 51.010-2-099 Applicability of "Speech teleservices" test cases in Annex B.	Nokia	Revised
GP-030355	CR 51.010-2-099 rev 1 Applicability of "Speech teleservices" test cases in Annex B.	Nokia	Revised
GP-030368	CR 51.010-2-099 rev 2 Applicability of "Speech teleservices" test cases in Annex B.	Nokia	Approved
GP-030119	CR 51.010-2-100 Update of applicability table	Setcom	Revised

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GP-030344	CR 51.010-2-100 rev 1 Update of applicability table	Setcom	Revised
GP-030394	CR 51.010-2-100 rev 2 Update of applicability table	Setcom	Approved
GP-030167	CR 51.010-2-101 Update to Applicability Table Indicating Tests for MS-Assisted E-OTD	Qualcomm	Approved
GP-030168	CR 51.010-2-102 Update to Applicability Table for Assisted GPS MO-LR Tests	Qualcomm	Revised
GP-030363	CR 51.010-2-102 rev 1 Update to Applicability Table for Assisted GPS MO-LR Tests	Qualcomm	Approved
GP-030352	CR 51.010-2-103 : suppression of table A.26.2 Terminal Profile	Gemplus	Revised
GP-030359	CR 51.010-2-103 rev 1 : suppression of table A.26.2 Terminal Profile	Gemplus	Approved
GP-030348	CR 51.010-2-104 Updating PICS for AMR test cases	Cingular	Approved
GP-030390	CR 51.010-2-104 rev 1 Updating PICS for AMR test cases	Cingular	Withdrawn
GP-030389	CR 51.010-2-105 Updating PICS for EMR cases	Motorola	Approved
GP-030347	CR 51.010-2-106 Addition of test case on NC2 and Re-allocation in uplink	Alcatel	Revised
GP-030395	CR 51.010-2-106 rev 1 Addition of test case on NC2 and Re-allocation in uplink	Alcatel	Approved
GP-030285	CR 51.021-014 Correction to reference interference performance requirements (Rel 4)	Nokia	Revised
GP-030414	CR 51.021-014 rev 1 Correction to reference interference performance requirements (Rel 4)	Nokia	Approved
GP-030286	CR 51.021-015 Correction to reference interference performance requirements (Rel 5)	Nokia	Revised
GP-030415	CR 51.021-015 rev 1 Correction to reference interference performance requirements (Rel 5)	Nokia	Approved
GP-030287	CR 51.021-016 Correction to reference interference performance requirements (Rel 6)	Nokia	Revised
GP-030416	CR 51.021-016 rev 1 Correction to reference interference performance requirements (Rel 6)	Nokia	Approved
GP-030377	CR 51.021-017 Clarification of interference performance test conditions for AMR	Ericsson	Approved