# TSG GERAN Report
## to
# TSG-SA#20

**TSG-GERAN Chairman
Niels Peter Skov Andersen
Motorola**

**Tdoc SP-030321**

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# *TSG GERAN work area (1/2)*

## 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

# *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**

# *Organisation of TSG GERAN (1/4)*

TSG GERAN
Convenor: Niels PS Andersen, Motorola
Vice Chair: Marc Grant, Cingular
Vice Chair: Michael Färber, Siemens

TSG GERAN WG1
Radio aspects
Chair: Niels P S Andersen, Motorola

TSG GERAN WG2
Protocol aspects
Chair: José Luis Carrizo Martínez, Vodafone

TSG GERAN WG3
Terminal Testing
Convenor: Ilya Gonorovsky, Motorola Ltd

# *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)

- BTS testing and GERAN specific O&M aspects

# *Organisation of TSG GERAN (3/4)*

**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 (4/4)*

**TSG GERAN WG3 – Terminal Testing Aspects**

**Convenor: Ilya Gonorovsky**

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

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

# *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"**
- **Positive answer received – Will be discussed at TSG GERAN#15**

# *Pre-Release 5*

- **Change between Dynamic and Ext Dynamic Allocation**

  – **Restriction removed (Rel-99)**

- **Modulation based multislot class support (Rel-4)**

  – **Use of GPRS multislot class for EGPRS GMSK**

- **Mapping of PFCs onto LLC SAPIs**

  – **Clarification of the rules to multiplex onto same SAPI**

- **Corrections to EDGE and DTM**

- **Correction to… Phase 2!**

  – **Mathematical expressions due to file format change**

# LCS

- **No significant changes/corrections for LCS R98→**

- **LCS support for GPRS completed and stable**

- **Discussions ongoing regarding the potential for improvement of the LCS performance**

- **Work on U-TDOA has started**
  - **CR to stage 2 endorsed**
    - **RR procedures that affect/reset the location procedure**
  - **Two stage 3 CRs agreed (48.071 and 49.031)**
  - **Completion timescales for CS changed to Nov 2003***
  - **PS side has not started**

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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 has been agreed for Release 5 (Can be implemented in mobiles of earlier release but first required from Release 5)**

# GERAN Rel 5

- **Early UE handling**
  - **'Basic CR' agreed**
    - **New cause added to Handover Request Reject $\rightarrow$ BSC does not attempt further handovers to UMTS**
    - **Old BSS tells new BSS at external handover**
  - **UESBI on the A interface**
    - **To discriminate different implementations of measurement reporting**
    - **Left open for this meeting**

# GERAN Iu-mode / Rel 5

- **Iu mode RRC**
  - Number of corrections up from previous meetings
  - General review of sections/procedures

- **Iu mode RLC/MAC**
  - Number of corrections up; typically small corrections

- **CRs for alignment to 25.331**
  - RAN2 have approved "non-essential CRs" to 25.331 v5.x.y
  - General rule: non-essential CRs to 44.118 should go to Rel-6
  - This would not align the functionality in Rel-5 (25.331/44.118)

# *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**

# *Release 6* (1/4)

## Multiple TBFs for A/Gb mode

- **Timers for multiple TBF establishment agreed**
- **Network and MS indications of support**
  - **Broadcast and classmark (1 bit), respectively**
- **Agreed to use legacy messages (with PFI) for assignment/reconfiguration**
- **Areas to progress:**
  - **Partial relocation: include PFI to keep TBF alive; else drop it**
  - **Clarifications in the relationship between TBF and PFC**
  - **Message definition: many synergies with *Iu mode***
- **Open issues:**
  - **Allocation of multiple TBFs on the (P)AGCH**
  - **Multiple TBF Assignment in/for DTM**
- **Making good progress for completion in August**

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# *Release 6*(2/4)

## Streaming

- **Status of discussions on QoS parameters**
  - **Residual BER: ok**
  - **SDU error ratio: 1e-3 (1e-4 not possible)**
  - **Transfer delay**
    - **Likely that a transfer delay of 2 s can be met**
    - **Still some discrepancies on the simulations results**
      - **Possibly due to differences in the video traffic model (e.g. packet size)**

# *Release 6* *(2/4)*

**Flexible Layer 1**

- **Performance simulations being evaluated**
- **FLO architecture for A/Gb mode discussed**
- **Proposals for Coded Transport Format Combinations**
- **Iu mode: no more work on security is foreseen (90%)**
- **Work for 'CS A/Gb' has not started**
- **Work on 'PS A/Gb' continues under conversational WI**
  - **Strong links between FLO and conversational**
  - **Stable parts will be incorporated to the FLO TR (45.902)**

# *Release 6* (3/4)

**MBMS**

- **One dedicated workshop with focus on radio bearers has been held**

- **Estimated throughput for 1% IP-frame error rate for point-to-multipoint ~ 4.5 kbit/s per timeslot**

  **(C/I = 9 dB - IP-frame size 500 bytes)**

- **Change from ptp to ptm and vice versa during session is causes significant complexity**

- **Progress on radio bearer key to progress on other parts**

# *Release 6* (4/4)

- **Work progressing on Single Antenna Interference Cancellation (SAIC) feasibility study**
  - **Already significant amount of contribution**
  - **Simulation results based on the current assumptions shows gains in the order of 1 – 2 dB**
  - **Current focus GMSK, CS-domain and synchronous networks.**

- **GSM T frequency bands definition completed**

# *Testing* (1/2)

- **Main focus has been on testing of:**
  - **Radio & Layer 1**
  - **GPRS – Ongoing analysis of needs for update of R97 test cases to align with R99 core specifications**
  - **EDGE**
  - **Selection/Reselection & Handover (2.5G, 3G)**
  - **LCS**
  - **Tracking of core specification changes**
  - **AMR (Narrow band)**
  - **DTM – Tests completed**

# *Testing* (2/2)

- **Work has started on including (align) the test cases which are being used by PCTRB in the US into TS 51.010**

- **New areas of testing**
  - **RLC/MAC (Iu interface CS and PS domain)**

- **The following items have no progress due to lack of input:**
  - **Enhanced power control**
  - **Wideband AMR**
  - **AMR 8 PSK HR**
  - **Selection/Reselections (GERAN I$_u$-mode >UTRAN)**
  - **Handover (GERAN I$_u$-mode >UTRAN PS).**

# *Document distribution at TSG GERAN WG2 #14bis*

**Documents for each WI**

Pie chart values: 5%, 21%, 2%, 3%, 2%, 15%, 5%, 4%, 1%, 9%, 6%, 3%, 13%, 11%

Legend:
- LSs in
- LSs out
- TEI 99
- TEI 4
- Iu mode
- TEI 5
- Multiple TBF A/Gb
- FLO
- MBMS
- Streaming
- U-TDOA
- Conversational
- TEI 6
- Other
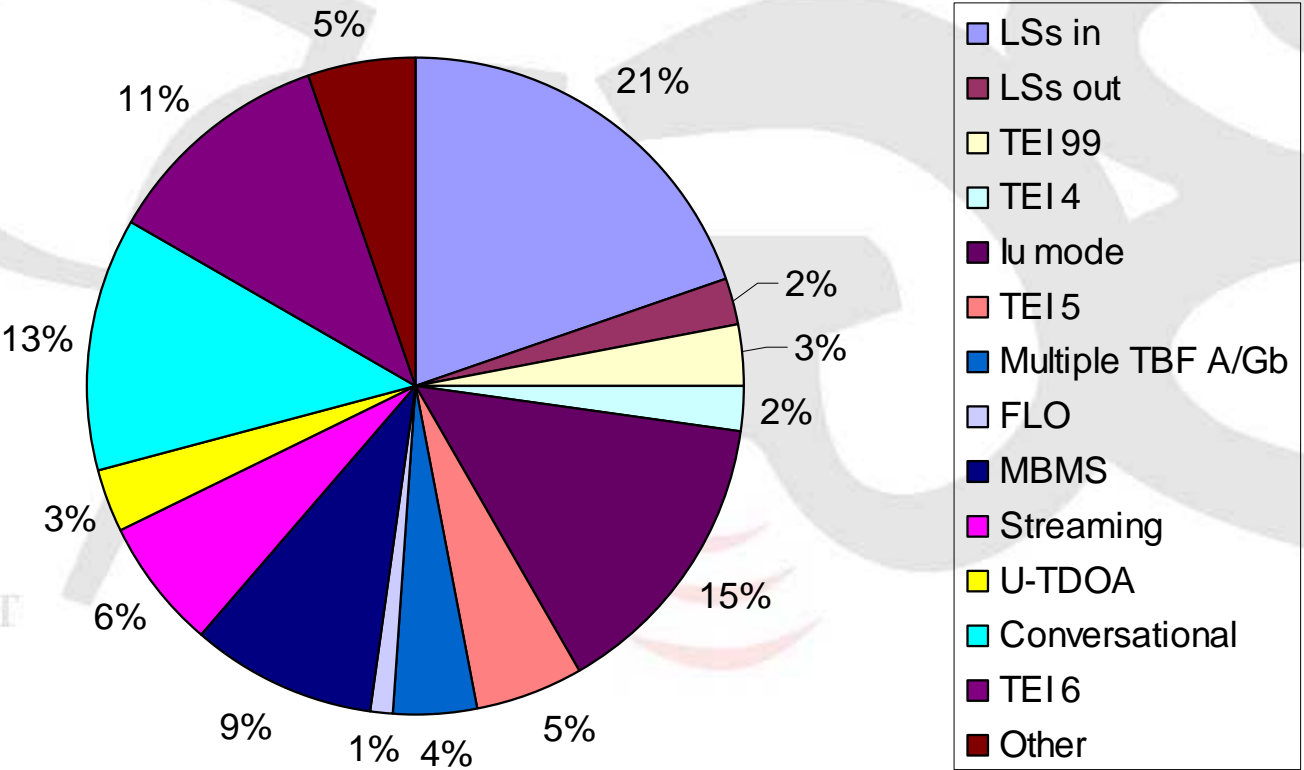
# The LS disease

# *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**

  $$ab.cd => (40+ab).0cd$$

  **e.g**

  $$05.08 => 45.008$$

# *Future TSG GERAN Plenary meetings*

TSG GERAN #15    24-26 June 2003      Fort Lauderdale, US
TSG GERAN #16    25-29 August 2003        New York, US
TSG GERAN #17    17-21 November 2003    Hungary
TSG GERAN #18    2-6 February 2004
TSG GERAN #19    19-23 April 2004
TSG GERAN #20    21-25 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 #14 are attached to this report*

# Workplan for TSG GERAN as agreed at TSG GERAN #14

## Open Work item status and approval time frame

This list reflects the open work items running under the responsibility of TSG GERAN.

| Feature | Building block | Work task | Level of completion | Start Date | Date of completion | Status |
|---|---|---|---|---|---|---|
| GERAN improvements 2 (GEIMP2) GP-012812 | Gb enhancements GP-000436 | Intra BSC NACC<br>• Concept<br>• Changes in 03.64<br>• Changes in 04.60<br>• Changes in 44.008 | | Nov 2000 | June 2001 | Ready for R4. Closed |
| | MS conformance test for Intra BSC NACC GP-012811 | • Changes in 51.010 | 85% | Nov 2001 | November 2003 | Started |
| Alignment of 3G functional split and Iu (GER3GAL) GP-021256 | GERAN user / control plane (GER3GAL-GUCOPL) GP-021255 | Alignment with UMTS bearer concept<br>• Stage 2 | | Aug 2000 | 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 | |
| | | • Iu 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 | |

| | | | | | Jun 2001 | |
|---|---|---|---|---|---|---|
| | | • Physical layer alignment with UMTS bearer concept<br>• Control channels in 45.003<br>• Receiver performance in 45.005 for PDTCH/TCH and control channels | | | | |
| | Iu rg interface (GER3GAL-Iurg)<br><br>GP-010428 | Inter BSS interface<br>Identification of requirements<br>Stage 2<br>Adoption of relevant parts from Iu r<br>Complementation with GERAN specifics<br>New stage 3 | | Nov 2000 | Jun 2002 | Ready for R5. Closed |
| | | Inter BSS-RNS interface<br>Identification of requirements<br>Stage 2<br>Adoption of relevant parts from Iu r<br>Complementation with GERAN specifics<br>New stage 3 | | | Jun 2002 | Ready for R5. Closed |
| | Voice over GERAN PS and CS concept<br><br>GP-021252 | Voice over GERAN PS and CS concept<br>• Architecture for A, Iu cs and Iu ps<br>• Handover<br>• RTP payload | | Nov 2000 | Nov 2001 | Ready for R5. Closed |
| | GERAN MS Conformance test for GERAN interface evolution GP-021253 | • MS test | 0% | June 2003 | April 2004 | Not started |
| | GERAN BTS Conformance test for GERAN interface evolution GP-021254 | • BTS test | 0% | June 2003 | April 2004 | Not started |

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|---|---|---|---|---|---|---|
| *Enhancement of Broadcast and Introduction of Multicast (in responsibility of TSG SA1)* | Support of the Multimedia Broadcast Multicast Service (MBMS) in GERAN (MBMS-GERAN) GP-022566 | • Impact on the logical and physical channels<br><br>• Simultaneous support of MBMS services<br><br>• Simultaneous support of MBMS and non-MBMS services<br><br>• Resynchronisation at cell change<br><br>• Decision making process between point-to-point or point-to-multipoint configurations<br><br>• MBMS channel allocation procedures to multiple MSs<br><br>• Changes to the Gb interface<br><br>• GERAN-specific changes to the Iu-ps interface<br><br>• Interaction between MBMS and Iu-flex<br><br>• Security aspects<br><br>• MS conformance tests | 10% | August 2002 | November 2003 | Started |
| Multiple TBF in A/Gb mode (MULTBF)<br><br>**GP-021263** | Multiple TBF in A/Gb mode (MULTBF-Agbmode)<br><br>GP-021263 | • Multiple TBF Concept paper<br>• Multiple TBF Stage 2 (43.064) CRs<br>• Multiple TBF Stage 3 (44.060) CRs | 65% | April 2002 | August 2003 | Started |
| | Multiple TBF in A/Gb mode – MS testing GP-022098 | • MS conformance tests | 0% | | November 2003 | Not Started |
| Seamless support of streaming services in A/Gb mode (SSStrea)<br>**GP-022561** | Identification of requirements for streaming GP-022564 | • Requirements | 90% | August 2002 | June 2003 | Started |
| | Performance study of cell change mechanisms GP-022562 | • Performance of NACC<br>• Performance of cell change in DTM for the PS domain<br>• Handover | 90% | August 2002 | June 2003 | Started |
| | Reduction of service interruption times and packet loss during mobility procedures GP-022563 | • Optimisations of existing mechanisms/procedures<br>• Inter-system NACC<br>• PS Handover (within GERAN and between GERAN and UTRAN)<br>• Dependency to other features | 50% | August 2002 | June 2003 | Started |
| | MS conformance testing GP-023424 | • MS conformance tests | 0% | August 2003 | December 2003 | Not Started |

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|---|---|---|---|---|---|---|
| Flexible Layer One for GERAN (FLOGER) **GP-021018** | Realisation of a Flexible Layer One (FLOGER-Real) GP-021019 | Technical Report<br>Architecture in 45.001 and 43.051<br>Multiplexing in 45.002<br>Channel Coding in 45.003<br>Performance Requirements in 45.005<br>Radio subsystem link control in 45.008<br>Requirements in 44.004 | 40% | April 2002 | June 2003 | Started |
| | Signalling and protocol support for a Flexible Layer One (FLOGER-SigPro) GP-021020 | Modifications to RLC/MAC in 44.060 and 44.160<br>Modifications to RRC in 44.118 and 44.018 | 30% | April 2002 | June 2003 | Started |
| | Security for a Flexible Layer One (FLOGER-SecFLO) GP-021021 | Ciphering in 44.160,44.118, 44.060 and 44.018 | 5% | April 2002 | Jan 2003 | Started |
| | GERAN MS Conformance test for the Flexible Layer One (FLOGER-Msconf) GP-021022 | MS Test in 51.010 | 0% | August 2003 | November 2003 | Not Started |
| | GERAN BTS Conformance test for the Flexible Layer One (FLOGER-BTSconf) GP-021023 | BTS Test in 51.021 | 0% | August 2003 | November 2003 | Not Started |
| Addition of frequency bands to GSM (TAPS) **GP-022072** | Addition of frequency bands to GSM – Changes to core specs (TAPS-Specs)GP-022073 | 45.005     New frequency ranges<br>45.050     Scenarios for new frequencies<br>24.008     Classmark information elements<br>45.008     Add frequency ranges<br>45.001     Add frequency and channels<br>43.030     Add frequency ranges<br>43.022     Add channels to be searched | 100% | June 2002 | Dec 2002 | Redy for Rel-6 |
| | Addition of frequency bands to GSM – Changes for conformance tests (TAPS-Conf) GP-022074 | 51.010-1 Add testing | 0% | | August 2003 | Not Started |
| Enhanced Power Control (EPC) GP-012748 | Realization of Enhanced power control and signaling support GP-012749 | Concept<br>Changes to 43.051<br>Changes to 44.004<br>Changes to 44.018<br>Changes to 48.058<br>Changes to 45.001<br>Changes to 45.002<br>Changes to 45.003<br>Changes to 45.008 | | | Nov 2001 | Ready for Rel 5. Closed |

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|---|---|---|---|---|---|---|
| | GERAN MS Conformance test for Enhanced Power Control GP-012750 | • MS test | 0% | | November 2003 | Not started |
| | GERAN BTS Conformance test for Enhanced Power Control GP-012751 | • BTS test | 0% | | November 2003 | Not started |
| 8PSK AMR HR (8PSK-AH) GP-012752 | Definition of channel coding, performance requirements and signaling support GP-012753 | • Concept<br>• Changes to 44.018<br>• Changes to 45.001<br>• Changes to 45.002<br>• Changes to 45.003<br>• Changes to 45.005<br>• Changes to 24.008<br>• Changes to 48.058 | | Dec 2001 | Jun 2002 | Ready for R5. Closed |
| | GERAN MS Conformance test for 8PSK HR GP-012754 | • MS test | 0% | | Novmeber 2003 | |
| | GERAN BTS Conformance test for 8PSK HR GP-012755 | • BTS test | 100% | | Dec 2002 | |
| Wideband telephony services (UMTS) | Support of WB AMR in GERAN (GAMRWB) GP-000453 | GMSK and 8PSK WB FR / HR support<br>• Channel coding in 45.003<br>• Signalling for A interface<br>• Signalling for Iu<br>• Link adaptation in 45.009<br>• Receiver performance in 45.005 | | January 2000 | Apr 2002 Nov 2001<br><br>Jun 2002 | Ready for R5. Closed |
| | GERAN MS Conformance test for WB AMR GP-000454 | • MS test | 0% | | November 2003 | Not started |
| | GERAN BTS Conformance test for WB AMR GP-000455 | • BTS test | 100% | | Dec 2002 | Closed |
| Location service (UMTS) | LCS interoprability 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<br>• Gb interface support for LCS<br>• L3 protocol support for LCS<br>• Stage 3 specifications | | | Feb. 2002 | Ready for Rel-5. Closed |

| | | | % | | | |
|---|---|---|---|---|---|---|
| | Location Services (LCS) for GERAN in Iu Mode GP-011926 | • GERAN LCS stage 2<br>• Iu interface support for LCS<br>• Iur-g interface support for LCS<br>• RRC protocol support for LCS<br>• Additional impacts on Broadcast of LCS data on packet channels<br>• 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 (LCS-GERAN-Msconf) GP-000458 | • Develop LCS MS test case work plan (Release 98/99/4)<br>• Develop LCS MS test cases | 60% | | June 2003 | Ongoing |
| | GERAN BTS Conformance test for LCS (LCS-GERAN-BTSconf) GP-000459 | • Develop LCS BTS test case work plan (Release 99/99/4)<br>• Develop LCS BTS test cases | ?% | | November 2003 | Work has not started |
| 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.<br>• Realistic DIR (Dominant-to-rest of Interference Ratio) levels and distributions based on network simulations and measurements.<br>• Robustness against different training sequences.<br>• Determine method to detect/indicate SAIC capability. | 25% | Nov 2002 | November 2003 | Ongoing |
| Uplink TDOA location determination for GSM/GPRS (UTDOA) GP-023316 | Addition of U-TDOA in the CS domain | Addition of U-TDOA in the CS domain | 25% | November 2002 | June 2003 | Ongoing |
| | Addition of U-TDOA in the PS domain | • Addition of U-TDOA in the PS domain | 0% | November 2002 | Nov 2003 | Not Started |
| Support of Conversational Services in A/Gb mode via the PS domain (SCSAGB) GP-030443 | Creation of a Technical Report (SCSAGB-TR) GP-030444 | • Technical Report | 5% | Feb 2003 | November 2003 | Started |
| | Stage 2 (SCSAGB-Stage2) GP-030445 | • PS handover<br>• SNDCP/LLC compression<br>• Definition of radio resource management functionality<br>• Modifications to FLO<br>• Radio channel support | 0% | Nov 2003 | April 2004 | Not Started |
| | Radio Channel Support (SCSAGB-RCS) GP-030446 | • Radio channel support for Conversational QoS<br>• Introduction of continuous measurement reporting | 0% | Feb 2004 | April 2004 | Not Started |
| | Definition of radio resource management functionality (SCSAGB-RRM) GP-030447 | • Addition/modification of radio resource mangagement protocol layer | 0% | Feb 2004 | April 2004 | Not Started |

| | PS Handover (SCSAGB-PSH) GP-030448 | • BSSGP procedures for change of BSC • Bi-Casting • Context transfer | 0% | Feb 2004 | April 2004 | Not Started |
|---|---|---|---|---|---|---|
| | Modifications to FLO (SCSAGB-FLO) GP-030449 | • FLO specific impacts due to conversational QoS | 0% | Feb 2004 | April 2004 | Not Started |

| | Closed work items |
|---|---|

# Completed or Terminated Work items

This list reflects work items that have been completed or terminated.

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

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|---|---|---|---|---|---|---|
| | Modification of core network protocols for GERAN Inter BSC NACC for Gb interface GP-011877 | Stage 2<br><br>• Concept<br>• 23.060 change<br>  – Definition of Inter BSC NACC<br><br>Stage 3 (changes to )<br>• 29.060 | | | Nov 2001<br><br><br><br>Apr 2002 | |
| GERAN support for IP multimedia GP-010420 | GERAN Header adaptation GP-010421 | Header adaptation:<br>• Definition of compression for PDCP protocol<br>• Conceptual description in stage 2<br>• Necessary changes on stage 3 | 100% | | Sept 2000<br><br>Oct 2001<br>Dec 2002 | Ready for Rel-5. Closed |
| | GERAN Radio access bearer design for IP multimedia GP-010422 | MuM control signalling for conversational multimedia services.<br>• Identification of requirements<br>• Necessary modifications due to SIP | ?% | | Feb 2002<br>Dec 2002 | Termimated. Not standardised |
| | GERAN MS Conformance test for support of IP multimedia GP-010424 | • MS test | 0% | | Dec 2002 | Termimated. Not standardised |
| | GERAN BTS Conformance test for support of IP multimedia GP-010425 | • BTS test | 0% | | Dec 2002 | Termimated. 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<br>23.060 (changes to)<br>  – Flow Control | | | June 2002<br><br>June 2002 | Closed |
| | Modification of BSSGP protocol GP-021508 | Stage 3 (changes to )<br>• 48.018 | | | June 2002 | Ready for release 5. Closed |
| GERAN enhancements for streaming services 1 GP-010430 | GERAN enhancements for streaming services 1 GP-010430 | • Concept<br>• RLC protocol enhancement (SDU Discard) | | | Oct 2001<br>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<br>Stage 2<br>Stage 3<br>• RLC PDU formats<br>• MAC header | | | Jun 2001<br>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 )<br><br>• 43.051 Introduction of support for IDNNS in GERAN Iu mode<br><br>Stage 3 (changes to )<br><br>• 48.016 Use of Gb interface concepts when a network applies IDNNS<br>• 48.018 Include MSC/VLR identity in CS IMSI paging | | | Jun 2002 | Ready for R5. Closed, accept changes for Gb over IP |

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|---|---|---|---|---|---|---|
| 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)<br><br>GP-010431 | Handover for the packet switched domain<br>• Stabile RT handover report 25.936 including header removal<br>• Update of stage 2<br>• Update of relevant stage 3 specs | | | Nov 2001 | Closed |
| Uplink TDOA feasibility study GP-012794 | Uplink TDOA feasibility study GP-012794 | • Performing of a feasitibility study | | | Jun 2002 | Closed. |
| 700 MHz spectrum support GP-000449 | GERAN support for the 700 MHz band | • Signaling support<br>• Physical layer definitions<br>• Receiver performance and RF budget | | | | Ready for R4. Closed |
| | GERAN MS Conformance test for 700 MHz band GP-000451 | • MS test | | | Jun 2001 | Closed |
| | GERAN BTS Conformance test for GERAN interface evolution<br><br>GP-000452 | • BTS test | 100% | | Dec 2002 | Closed |
| Enhanced A/Gb feasibility study **GP-022565** | Enhanced A/Gb feasibility study GP-022565 | • Requirements for the support of conversational services<br>• Identification of the different building blocks for the provision of conversational services on the existing A/Gb protocol stack<br>• Outline of impact and feasibility of these building blocks and their different solutions<br>• Impact on 3GPP architecture and requirement to co-ordinate with other TSGs (CN, SA)<br>• Standardisation effort<br>• Dependency to other features | 100% | | Nov 2002 | Closed at GERAN #13 |
| 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 | Closed at GERAN #14 |

**Status of Change Requests presented to TSG GERAN #14**

| Tdoc | Title | Source | Status |
|---|---|---|---|
| GP-030818 | CR 03.64-A086 Padding for MCS-8 retransmissions (R99) | Nokia | Revised |
| GP-030980 | CR 03.64-A086 rev 1 Padding for MCS-3 retransmissions (R99) | Nokia | Approved |
| GP-030650 | CR 04.18-A273 Corrections and Clarifications on the Usage of Parameters for Measurements and Reporting (R99) | Siemens | Rejected |
| GP-030735 | CR 04.18-A274 DL TBF assignment fallback (R99) | Nokia | Revised |
| GP-030930 | CR 04.18-A274 rev 1 DL TBF assignment fallback (R99) | Nokia | Postponed |
| GP-030688 | CR 04.60-B120 Shift between dynamic and extended dynamic allocation (R99) | Ericsson | Revised |
| GP-030924 | CR 04.60-B120 rev 1 Shift between dynamic and extended dynamic allocation (R99) | Ericsson | Approved |
| GP-030751 | CR 04.60-B121 Clarification on continuous TA procedure (R99) | Siemens AG | Withdrawn |
| GP-030876 | CR 05.01-A035 MCS-3 padding for MCS-8 retransmission (R99) | Nortel Networks | Revised |
| GP-030983 | CR 05.01-A035 rev 1 MCS-3 padding for MCS-8 retransmission (R99) | Nortel Networks | Approved |
| GP-030508 | CR 05.02-201 Mapping of the PDTCH/D on PCCCH in case EGPRS (R99) | Siemens AG | Rejected |
| GP-030898 | CR 05.02-A202 Correction to Extended Dynamic Allocation operation (R99) | Panasonic | Postponed |
| GP-030756 | CR 05.03-A047 Padding for MCS-8 Retransmissions (R99) | Nokia | Approved |
| GP-030864 | CR 05.05-A216 Correction of transmitted power level versus time (R99) | Nokia | Approved |
| GP-030747 | CR 05.08-A366 Use of unbiased variance in the computation of CV_BEP (R99) | Nortel, Alcatel | Revised |
| GP-030976 | CR 05.08-A366 rev 1 Use of unbiased variance in the computation of CV_BEP (R99) | Nortel, Alcatel | Approved |

| Tdoc | Title | Source | Status |
|---|---|---|---|
| GP-030856 | CR 05.08-A367 Modification of test channel for MEAN_BEP accuracy for EPGRS (R99) | Ericsson | Postponed |
| GP-030881 | CR 05.10-A079 Clarification on continuous TA procedure (R99) | Siemens AG | Rejected |
| GP-031014 | CR 11.10-4-A011 References to 11.10-1 replaced and references to 11.10-2 removed | GemPlus | Revised |
| GP-031018 | CR 11.10-4-A011 rev 1 References to 11.10-1 replaced and references to 11.10-2 removed | GemPlus | Approved |
| GP-030826 | CR 23.060- xxx Usage of Allocation and Retention Priority in the BSS" (Rel 6) | Alcatel | NA |
| GP-030741 | CR 24.008-xxx Inclusion of the UE power class (FDD and TDD) in MS RAC (R99) | Siemens | NA |
| GP-030742 | CR 24.008-xxx Inclusion of the UE power class (FDD and TDD) in MS RAC (Rel 4) | Siemens | NA |
| GP-030743 | CR 24.008-xxx Inclusion of the UE power class (FDD and TDD) in MS RAC (Rel 5) | Siemens | NA |
| GP-030744 | CR 24.008-xxx Inclusion of the UE power class (FDD and TDD) in MS RAC (Rel 6) | Siemens | NA |
| GP-030515 | CR 24.008-xxx Indication of the MS support of "Modulation based multislot class" | Siemens AG | NA |
| GP-030822 | CR 43.051-052 Correction to SBPSCH and SBPSCH/H (Rel 5) | Nokia | Approved |
| GP-030891 | CR 43.055-005 Corrections for DTM multislot configurations and DTM capability indication (Rel-4) | Nokia | Revised |
| GP-030972 | CR 43.055-005 rev 1 Corrections for DTM multislot configurations and DTM capability indication (Rel-4) | Nokia | Approved |
| GP-030893 | CR 43.055-006 Corrections for DTM multislot configurations and DTM capability indication (Rel-5) | Nokia | Revised |
| GP-030973 | CR 43.055-006 rev 1 Corrections for DTM multislot configurations and DTM capability indication (Rel-5) | Nokia | Approved |
| GP-030895 | CR 43.055-007 Corrections for DTM multislot configurations and DTM capability indication (Rel-6) | Nokia | Revised |
| GP-030974 | CR 43.055-007 rev 1 Corrections for DTM multislot configurations and DTM capability indication (Rel-6) | Nokia | Approved |
| GP-030570 | CR 43.059-037 rev 4 Draft: Inclusion of U-TDOA location method | TruePosition | Revised |
| GP-030987 | CR 43.059-037 rev 5 Draft: Inclusion of U-TDOA location method | TruePosition | Revised |

| Tdoc | Title | Source | Status |
|---|---|---|---|
| GP-031031 | CR 43.059-037 rev 6 Draft: Inclusion of U-TDOA location method | TruePosition | Revised |
| GP-031063 | CR 43.059-037 rev 7 Draft: Inclusion of U-TDOA location method | TruePosition | Revised |
| GP-031064 | CR 43.059-037 rev 8 Draft: Inclusion of U-TDOA location method | TruePosition | Approved |
| GP-030819 | CR 43.064-008 Padding for MCS-8 retransmissions (Rel 4) | Nokia | Revised |
| GP-030981 | CR 43.064-008 rev 1 Padding for MCS-3 retransmissions (Rel 4) | Nokia | Approved |
| GP-030853 | CR 43.064-009 Padding for MCS-8 retransmissions (Rel 5) | Nokia | Revised |
| GP-030982 | CR 43.064-009 rev 1 Padding for MCS-3 retransmissions (Rel 5) | Nokia | Approved |
| GP-030518 | CR 44.018-251 Clarification of <3G Measurement parameters> usage (Rel 6) | Melco Mobile Communication Europe | Withdrawn |
| GP-030696 | CR 44.018-252 Missing SI15 option in PACKET SI STATUS message (Rel-4) | Ericsson | Approved |
| GP-030697 | CR 44.018-253 Missing SI15 option in PACKET SI STATUS message (Rel-5) | Ericsson | Approved |
| GP-030698 | CR 44.018-254 Missing SI15 option in PACKET SI STATUS message (Rel-6) | Ericsson | Approved |
| GP-030651 | CR 44.018-255 Corrections and Clarifications on the Usage of Parameters for Measurements and Reporting (Rel-4) | Siemens | Rejected |
| GP-030652 | CR 44.018-256 Corrections and Clarifications on the Usage of Parameters for Measurements and Reporting (Rel-5) | Siemens | Rejected |
| GP-030653 | CR 44.018-257 Corrections and Clarifications on the Usage of Parameters for Measurements and Reporting (Rel-6) | Siemens | Approved |
| GP-030766 | CR 44.018-258 Ciphering mode indication in handover command when handover from GERAN Iu occurs (Rel 5) | Nokia | Approved |
| GP-030767 | CR 44.018-259 Ciphering mode indication in handover command when handover from GERAN Iu occurs (Rel 6) | Nokia | Approved |
| GP-030845 | CR 44.060-283 rev 2 Clarification to GPRS cell reselection use in Packet Measurement Order message (Rel 6) | STMicroelectroincs | Revised |
| GP-031029 | CR 44.060-283 rev 3 Clarification to GPRS cell reselection use in Packet Measurement Order message. (Rel-6) | STMicroelectroincs | Revised |
| GP-031060 | CR 44.060-283 rev 4 Clarification to GPRS cell reselection use in Packet Measurement Order message (Rel 6) | STMicroelectroincs | Approved |

| Tdoc | Title | Source | Status |
|---|---|---|---|
| GP-030699 | CR 44.060-332 rev 3: Enhancement of network controlled cell reselection procedure (Rel-6) | Ericsson | Revised |
| GP-031028 | CR 44.060-332 rev 4 Enhancement of network controlled cell reselection procedure (Rel-6) | Ericsson | Approved |
| GP-030512 | CR 44.060-333 rev 1 Indication of the MS support of "Modulation based multislot class" (Rel 4) | Siemens AG | Revised |
| GP-030915 | CR 44.060-333 rev 2 Indication of the MS support of "Modulation based multislot class" (Rel-4) | Siemens AG | Revised |
| GP-031036 | CR 44.060-333 rev 3 Indication of the MS support of "Modulation based multislot class" (Rel-4) | Siemens AG | Approved |
| GP-030513 | CR 44.060-334 rev 1 Indication of the MS support of "Modulation based multislot class" (Rel 5) | Siemens AG | Revised |
| GP-030916 | CR 44.060-334 rev 2 Indication of the MS support of "Modulation based multislot class" (Rel-5) | Siemens AG | Revised |
| GP-031037 | CR 44.060-334 rev 3 Indication of the MS support of "Modulation based multislot class" (Rel-5) | Siemens AG | Approved |
| GP-030514 | CR 44.060-335 rev 1 Indication of the MS support of "Modulation based multislot class" (Rel 6) | Siemens AG | Revised |
| GP-030917 | CR 44.060-335 rev 2 Indication of the MS support of "Modulation based multislot class" (Rel-6) | Siemens AG | Revised |
| GP-031038 | CR 44.060-335 rev 3 Indication of the MS support of "Modulation based multislot class" (Rel-6) | Siemens AG | Approved |
| GP-030629 | CR 44.060-336 rev 1 EGPRS Supplementary/Polling (ES/P) Field usage in RLC unacknowledged mode (Rel-6) | Alcatel | Approved |
| GP-030632 | CR 44.060-337 rev 1 Conflicting implementations CRs 253r1 and 200r2 (Rel-5) | Nokia | Approved |
| GP-030633 | CR 44.060-338 rev 1 Conflicting implementations CRs 253r1 and 200r2 (Rel-6) | Nokia | Approved |
| GP-030625 | CR 44.060-339 Correction to CBQ3 in PSI3 and PSI3bis (Rel-5) | Nokia | Approved |
| GP-030626 | CR 44.060-340 Correction to CBQ3 in PSI3 and PSI3bis (Rel-6) | Nokia | Approved |
| GP-030636 | CR 44.060-341 rev 2 Correction to wrong references to PACKET DL ACK/NACK message instead of EGPRS PACKET DL ACK/NACK message (Rel-5) | Nokia | Approved |
| GP-030637 | CR 44.060-342 rev 2 Correction to wrong references to PACKET DL ACK/NACK message instead of EGPRS PACKET DL ACK/NACK message (Rel-6) | Nokia | Approved |

| Tdoc | Title | Source | Status |
|---|---|---|---|
| GP-030695 | CR 44.060-343 rev 1: Missing SI15 option in PACKET SI STATUS message (Rel-6) | Ericsson | Approved |
| GP-030693 | CR 44.060-344 rev 1: Missing SI15 option in PACKET SI STATUS message (Rel-4) | Ericsson | Approved |
| GP-030694 | CR 44.060-345 rev 1: Missing SI15 option in PACKET SI STATUS message (Rel-5) | Ericsson | Approved |
| GP-030635 | CR 44.060-346 rev 1 Clarification/correction of the usage of the PACKET PSI/SI STATUS message (Rel-6) | Ericsson | Approved |
| GP-030613 | CR 44.060-347 MS reporting of radio-access capability in Iu mod (Rel 5) | AWS | Approved |
| GP-030614 | CR 44.060-348 MS reporting of radio-access capability in Iu mode (Rel 6) | AWS | Approved |
| GP-030689 | CR 44.060-349 Shift between dynamic and extended dynamic allocation (Rel-4) | Ericsson | Revised |
| GP-030925 | CR 44.060-349 rev 1 Shift between dynamic and extended dynamic allocation (Rel-4) | Ericsson | Approved |
| GP-030690 | CR 44.060-350 Shift between dynamic and extended dynamic allocation (Rel-5) | Ericsson | Revised |
| GP-030926 | CR 44.060-350 rev 1 Shift between dynamic and extended dynamic allocation (Rel-5) | Ericsson | Approved |
| GP-030691 | CR 44.060-351 Shift between dynamic and extended dynamic allocation (Rel-6) | Ericsson | Revised |
| GP-030927 | CR 44.060-351 rev 1 Shift between dynamic and extended dynamic allocation (Rel-6) | Ericsson | Approved |
| GP-030717 | CR 44.060-352 Inclusion of the channel quality report in dependency of the ES/P field (Rel 6) | Siemens AG | Approved |
| GP-030724 | CR 44.060-353 Correction to definition of T3168 in chapter 13 (Rel 5) | Siemens | Revised |
| GP-030931 | CR 44.060-353 rev 1 Correction to definition of T3168 in chapter 13 (Rel-5) | Siemens | Approved |
| GP-030725 | CR 44.060-354 Correction to definition of T3168 in chapter 13 (Rel 6) | Siemens | Revised |
| GP-030932 | CR 44.060-354 rev 1 Correction to definition of T3168 in chapter 13 (Rel-6) | Siemens | Approved |
| GP-030718 | CR 44.060-355 Correction of power reduction mode coding after fixed allocation removal (Rel 5) | Ericsson | Withdrawn |
| GP-030795 | CR 44.060-356 Transmission of dummy blocks on FACCH, SACCH, SDCCH (Rel 5) | Nokia | Rejected |

| Tdoc | Title | Source | Status |
|------|-------|--------|--------|
| GP-030796 | CR 44.060-357 Transmission of dummy blocks on FACCH, SACCH, SDCCH (Rel 6) | Nokia | Revised |
| GP-030933 | CR 44.060-357 rev 1 Transmission of dummy blocks on FACCH, SACCH, SDCCH (Rel-6) | Nokia | Approved |
| GP-030797 | CR 44.060-358 Missing MTBF messages in Downlink TBF release (Rel 5) | Nokia | Revised |
| GP-030934 | CR 44.060-358 rev 1 Missing MTBF messages in Downlink TBF release (Rel-5) | Nokia | Approved |
| GP-030798 | CR 44.060-359 Missing MTBF messages in Downlink TBF release (Rel 6) | Nokia | Revised |
| GP-030935 | CR 44.060-359 rev 1 Missing MTBF messages in Downlink TBF release (Rel-6) | Nokia | Approved |
| GP-030799 | CR 44.060-360 Missing G-RNTI extension in Packet Control Acknowledgement (Rel 5) | Nokia | Approved |
| GP-030800 | CR 44.060-361 Missing G-RNTI extension in Packet Control Acknowledgement  (Rel 6) | Nokia | Approved |
| GP-030801 | CR 44.060-362 Deletion of Iu mode references (Rel 5) | Nokia | Rejected |
| GP-030802 | CR 44.060-363 Deletion of Iu mode references (Rel 6) | Nokia | Revised |
| GP-030936 | CR 44.060-363 rev 1 Deletion of Iu mode references (Rel-6) | Nokia | Approved |
| GP-030823 | CR 44.060-364 Error handling on LI and E IE in EGPRS RLC unacknowledged mode (Rel 6) | Alcatel | Postponed |
| GP-030824 | CR 44.060-365 Clarification for downlink power control when PR field is missing in RLC control blocks (Rel 6) | Alcatel | Revised |
| GP-031055 | CR 44.060-365 rev 1 Clarification for downlink power control when PR field is missing in RLC control blocks (Rel 6) | Alcatel | Approved |
| GP-030752 | CR 44.060-366 Clarification on continuous TA procedure (Rel 4) | Siemens AG | Rejected |
| GP-030753 | CR 44.060-367 Clarification on continuous TA procedure (Rel 5) | Siemens AG | Rejected |
| GP-030754 | CR 44.060-368 Clarification on continuous TA procedure (Rel 6) | Siemens AG | Rejected |
| GP-030832 | CR 44.060-369 Correction of capability to modify the BA(GPRS) list (Rel-5) | Nokia | Approved |
| GP-030833 | CR 44.060-370 Correction of capability to modify the BA(GPRS) list (Rel-6) | Nokia | Approved |
| GP-030834 | CR 44.060-371 Mandatoriness of SI13Alt PBCCH Location parameters in Iu Mode only capable cells (Rel-5) | Nokia | Revised |

| Tdoc | Title | Source | Status |
|---|---|---|---|
| GP-030939 | CR 44.060-371 rev 1 Mandatoriness of SI13Alt PBCCH Location parameters in Iu Mode only capable cells (Rel-5) | Nokia | Postponed |
| GP-030835 | CR 44.060-372 Mandatoriness of SI13Alt PBCCH Location parameters in Iu Mode only capable cells (Rel-6) | Nokia | Revised |
| GP-030940 | CR 44.060-372 rev 1 Mandatoriness of SI13Alt PBCCH Location parameters in Iu Mode only capable cells (Rel-6) | Nokia | Postponed |
| GP-030870 | CR 44.060-373 Power control modes references removal (Rel 5) | Nortel Networks | Approved |
| GP-030871 | CR 44.060-374 Power control modes references removal (Rel 6) | Nortel Networks | Approved |
| GP-030519 | CR 44.060-375 Clarification of <GPRS REP PRIORITY> struct usage (Rel 6) | Melco Mobile Communication Europe | Revised |
| GP-031023 | CR 44.060-375 rev 1 Clarification of <GPRS REP PRIORITY> struct usage (Rel-6) | Melco Mobile Communication Europe | Revised |
| GP-031035 | CR 44.060-375 rev 2 Clarification of <GPRS REP PRIORITY> struct usage (Rel-6) | Melco Mobile Communication Europe | Revised |
| GP-031059 | CR 44.060-375 rev 3 Clarification of <GPRS REP PRIORITY> struct usage (Rel-6) | Melco Mobile Communication Europe | Approved |
| GP-030630 | CR 44.118-037 rev 1 Alignment procedures between UTRAN and GERAN Iu mode (Rel-5) | Nokia | Approved |
| GP-030628 | CR 44.118-038 Wrong implementation of CRs to 44.118vs 5.3.0 (Rel-5) | Nokia | Approved |
| GP-030631 | CR 44.118-039 rev 1 Alignment of Inter-RAT cell reselection and handover procedures between GERAN Iu mode and UTRAN (Rel-5) | Nokia | Approved |
| GP-030761 | CR 44.118-040 Correction to RRC Connection management procedures (Rel 5) | Nokia | Revised |
| GP-030920 | CR 44.118-040 rev 1 Correction to RRC Connection management procedures (Rel-5) | Nokia | Approved |
| GP-030762 | CR 44.118-041 Correction to RRC Connection mobility procedures (Rel 5) | Nokia | Revised |
| GP-031027 | CR 44.118-041 rev 1 Correction to RRC Connection mobility procedures (Rel-5) | Nokia | Approved |
| GP-030763 | CR 44.118-042 Correction to Transmission of MS capability information procedures (Rel 5) | Nokia | Approved |

| Tdoc | Title | Source | Status |
|------|-------|--------|--------|
| GP-030764 | CR 44.118-043 Corrections to Radio Bearer Control Procedures (Rel 5) | Nokia | Revised |
| GP-030921 | CR 44.118-043 rev 1 Corrections to Radio Bearer Control Procedures (Rel-5) | Nokia | Approved |
| GP-030765 | CR 44.118-044 Corrections to Signalling connection release indication procedure (Rel 5) | Nokia | Approved |
| GP-030839 | CR 44.118-045 Corrections to Security mode procedure (Rel 5) | Nokia | Revised |
| GP-030922 | CR 44.118-045 rev 1 Corrections to Security mode procedure (Rel-5) | Nokia | Approved |
| GP-030840 | CR 44.118-046 Corrections to Handover procedure (Rel 5) | Nokia | Approved |
| GP-030873 | CR 44.118-047 Corrections to Initial Direct Transfer message (Rel 5) | Nokia | Approved |
| GP-030624 | CR 44.160-046 PACKET DBPSCH ASSIGNMENT received before T3170 expires (Rel-5) | AWS | Approved |
| GP-030634 | CR 44.160-047 rev 1 Correction to wrong references to PACKET DL ACK/NACK message instead of EGPRS PACKET DL ACK/NACK message (Rel-5) | Nokia | Approved |
| GP-030627 | CR 44.160-048 Wrong implementation CR 042r1 (Rel-5) | Nokia | Approved |
| GP-030615 | CR 44.160-049 Multi-block allocation for two-phase access (Rel 5) | AWS | Revised |
| GP-031021 | CR 44.160-049 rev 1 Multi-block allocation for two-phase access (Rel-5) | AWS | Approved |
| GP-030803 | CR 44.160-050 RLC/MAC Control block size on FACCH, SDCCH (Rel 5) | Nokia | Approved |
| GP-030804 | CR 44.160-051 Transmission of Handover Access and Physical Information (Rel 5) | Nokia | Revised |
| GP-030937 | CR 44.160-051 rev 1 Transmission of Handover Access and Physical Information (Rel-5) | Nokia | Approved |
| GP-030805 | CR 44.160-052 Measurement order procedure in MAC-Idle state (Rel 5) | Nokia | Postponed |
| GP-030806 | CR 44.160-053 Removal Fixed Allocation parameters from ciphering (Rel 5) | Nokia | Approved |
| GP-030807 | CR 44.160-054 SFACCH and SRB2 in MAC-DTM state (Rel 5) | Nokia | Revised |
| GP-030938 | CR 44.160-054 rev 1 SFACCH and SRB2 in MAC-DTM state (Rel-5) | Nokia | Approved |
| GP-030808 | CR 44.160-055 Packet Mobile TBF status on DBPSCH (Rel 5) | Nokia | Postponed |

| Tdoc | Title | Source | Status |
|------|-------|--------|--------|
| GP-030809 | CR 44.160-056 Maximum TBF capacity (Rel 5) | Nokia | Postponed |
| GP-030810 | CR 44.160-057 Incorrect implementation CR 24r1 (Rel 5) | Nokia | Approved |
| GP-030811 | CR 44.160-058 Correction wrong reference (Rel 5) | Nokia | Postponed |
| GP-030836 | CR 44.160-059 The removal of the incorret text from broadcast procedure (Rel-5) | Nokia | Approved |
| GP-030886 | CR 44.160-060 Retransmission of Iu mode channel request description during a DL TBF (Rel 5) | Nokia | Postponed |
| GP-030877 | CR 45.001-021 MCS-3 padding for MCS-8 retransmission (Rel 4) | Nortel Networks | Revised |
| GP-030984 | CR 45.001-021 rev 1 MCS-3 padding for MCS-8 retransmission (Rel 4) | Nortel Networks | Approved |
| GP-030878 | CR 45.001-022 MCS-3 padding for MCS-8 retransmission (Rel 5) | Nortel Networks | Revised |
| GP-030985 | CR 45.001-022 rev 1 MCS-3 padding for MCS-8 retransmission (Rel 5) | Nortel Networks | Approved |
| GP-030879 | CR 45.001-023 MCS-3 padding for MCS-8 retransmission (Rel 6) | Nortel Networks | Revised |
| GP-030986 | CR 45.001-023 rev 1 MCS-3 padding for MCS-8 retransmission (Rel 6) | Nortel Networks | Approved |
| GP-030509 | CR 45.002-067 Mapping of the PDTCH/D on PCCCH in case EGPRS (Rel 4) | Siemens AG | Rejected |
| GP-030510 | CR 45.002-068 Mapping of the PDTCH/D on PCCCH in case EGPRS (Rel 5) | Siemens AG | Rejected |
| GP-030511 | CR 45.002-069 Mapping of the PDTCH/D on PCCCH in case EGPRS (Rel 6) | Siemens AG | Revised |
| GP-030975 | CR 45.002-069 rev 1 Mapping of the PDTCH/D on PCCCH in case EGPRS (Rel 6) | Siemens AG | Approved |
| GP-030892 | CR 45.002-070 Corrections for DTM multislot configurations (Rel-4) | Nokia | Approved |
| GP-030894 | CR 45.002-071 Corrections for DTM multislot configurations (Rel-5) | Nokia | Approved |
| GP-030896 | CR 45.002-072 Corrections for DTM multislot configurations (Rel-6) | Nokia | Approved |
| GP-030899 | CR 45.002-073 Correction to Extended Dynamic Allocation operation (Rel 4) | Panasonic | Postponed |
| GP-030900 | CR 45.002-074 Correction to Extended Dynamic Allocation operation (Rel 5) | Panasonic | Postponed |

| Tdoc | Title | Source | Status |
|---|---|---|---|
| GP-030901 | CR 45.002-075 Correction to Extended Dynamic Allocation operation (Rel 6) | Panasonic | Postponed |
| GP-030757 | CR 45.003-023 Padding for MCS-8 Retransmissions (Rel 4) | Nokia | Approved |
| GP-030758 | CR 45.003-024 Padding for MCS-8 Retransmissions (Rel 5) | Nokia | Approved |
| GP-030720 | CR 45.005-071 Correction of static AMR sensitivity requirements for TCH/AHS (Rel 6) | Ericsson | Approved |
| GP-030865 | CR 45.005-072 Correction of transmitted power level versus time (Rel 4) | Nokia | Approved |
| GP-030866 | CR 45.005-073 Correction of transmitted power level versus time (Rel 5) | Nokia | Approved |
| GP-030867 | CR 45.005-074 Correction of transmitted power level versus time (Rel 6) | Nokia | Approved |
| GP-030863 | CR 45.008-148 rev 1 BEP estimation accuracy for EMR (Rel 6) | Nokia | Approved |
| GP-030520 | CR 45.008-151 Clarification on the usage of Qsearch_P when broadcast on the BCCH (Rel 6) | Melco Mobile Communication Europe | Withdrawn |
| GP-030716 | CR 45.008-152 Clarification of BEP_PERIOD (Rel-6) | Siemens AG | Rejected |
| GP-030719 | CR 45.008-153 Correction of power reduction mode after fixed allocation removal (Rel 5) | Ericsson | Withdrawn |
| GP-030748 | CR 45.008-154  Use of unbiased variance in the computation of CV_BEP (Rel 4) | Nortel, Alcatel | Revised |
| GP-030977 | CR 45.008-154 rev 1 Use of unbiased variance in the computation of CV_BEP (Rel 4) | Nortel, Alcatel | Approved |
| GP-030749 | CR 45.008-155  Use of unbiased variance in the computation of CV_BEP (Rel 5) | Nortel, Alcatel | Revised |
| GP-030978 | CR 45.008-155 rev 1 Use of unbiased variance in the computation of CV_BEP (Rel 5) | Nortel, Alcatel | Approved |
| GP-030750 | CR 45.008-156  Use of unbiased variance in the computation of CV_BEP (Rel 6) | Nortel, Alcatel | Revised |
| GP-030979 | CR 45.008-156 rev 1 Use of unbiased variance in the computation of CV_BEP (Rel 6) | Nortel, Alcatel | Approved |
| GP-030837 | CR 45.008-157 Inconsistency of CBQ3 (Rel-5) | Nokia | Revised |
| GP-030988 | CR 45.008-157 rev 1 Inconsistency of CBQ3 (Rel-5) | Nokia | Approved |
| GP-030838 | CR 45.008-158 Inconsistency of CBQ3 (Rel-6) | Nokia | Revised |
| GP-030989 | CR 45.008-158 rev 1 Inconsistency of CBQ3 (Rel-6) | Nokia | Approved |

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|------|-------|--------|--------|
| GP-030857 | CR 45.008-159 Modification of test channel for MEAN_BEP accuracy for EPGRS (Rel-4) | Ericsson | Postponed |
| GP-030858 | CR 45.008-160 Modification of test channel for MEAN_BEP accuracy for EPGRS (Rel-5) | Ericsson | Postponed |
| GP-030859 | CR 45.008-161 Modification of test channel for MEAN_BEP accuracy for EPGRS (Rel-6) | Ericsson | Postponed |
| GP-030868 | CR 45.008-162 Power control modes references removal (Rel 5) | Nortel Networks | Approved |
| GP-030869 | CR 45.008-163 Power control modes references removal (Rel 6) | Nortel Networks | Approved |
| GP-030882 | CR 45.010-014 Clarification on continuous TA procedure (Rel 4) | Siemens AG | Rejected |
| GP-030883 | CR 45.010-015 Clarification on continuous TA procedure (Rel 5) | Siemens AG | Rejected |
| GP-030884 | CR 45.010-016 Clarification on continuous TA procedure (Rel 6) | Siemens AG | Approved |
| GP-030663 | CR 48.016-006 Correction to configuration options for network entities supporting Gb/IP (Rel-4) | Siemens | Postponed |
| GP-030664 | CR 48.016-007 Correction to configuration options for network entities supporting Gb/IP (Rel-5) | Siemens | Postponed |
| GP-030825 | CR 48.018-080 rev 3: Usage of Allocation and Retention Priority in the BSS (rel 6) | Alcatel | Revised |
| GP-031030 | CR 48.018-080 rev 4 Usage of Allocation and Retention Priority in the BSS (Rel-6) | Alcatel | Approved |
| GP-030675 | CR 48.018-081 PFC release procedure | Siemens AG | Revised |
| GP-031026 | CR 48.018-081 rev 1 PFC release procedure (Rel-6) | Siemens AG | Revised |
| GP-031040 | CR 48.018-081 rev 2 PFC release procedure | Siemens AG | Approved |
| GP-030571 | CR 48.071-009 rev 4 Proposed modification of SMLC-BSS signalling | TruePosition | Revised |
| GP-031032 | CR 48.071-009 rev 5 Proposed modification of SMLC-BSS signalling (Rel-6) | TruePosition | Approved |
| GP-030656 | CR 48.071-010 Proposed modification of SMLC-BSS signaling | TruePosition | Withdrawn |
| GP-030830 | CR 51.010-1-1337 rev 4    Section 42.1.2.1 Addition of test case in TS 51.010 S42: Packet Timeslot Reconfigure containing a new Coding Scheme command | Alcatel | Revised |

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| GP-030946 | CR 51.010-1-1337 rev 5 Section 42.1.2.1 Addition of test case in TS 51.010 S42: Packet Timeslot Reconfigure containing a new Coding Scheme command | Alcatel | Approved |
| GP-030484 | CR 51.010-1-1343 Corrections of the Peak Throughput Class and Maximum bit rate values for clause 50.5 - Test PDP Context. | Nokia | Revised |
| GP-030967 | CR 51.010-1-1343 rev 1 Corrections of the Peak Throughput Class and Maximum bit rate values for clause 50.5 - Test PDP Context. | Nokia | Withdrawn |
| GP-030485 | CR 51.010-1-1344 Undo of the approved GERAN#12 changes for clause 51.2.5.1 - Packet access rejection / wait indication. | Nokia | Approved |
| GP-030486 | CR 51.010-1-1345 Correction of Expected Sequence and Specific Message Content for clause 52.4.1.2 - Network Control measurement reporting / Idle mode / New cell reselection | Nokia | Approved |
| GP-030487 | CR 51.010-1-1346 Deletion of clause 52.4.2.1.5 - Cell change order procedure / Uplink transfer / Failure cases / REJECT from the new cell and T3176 expiry | Nokia | Approved |
| GP-030488 | CR 51.010-1-1347 Clarification of Step 25 in Expected Sequence for clause 52.4.2.3.1 - Cell change order procedure / Simultaneous uplink and downlink transfer / Normal case | Nokia | Withdrawn |
| GP-030489 | CR 51.010-1-1348 Preventing of T3182 expiry in clause 53.1.1.9 - Acknowledged Mode/ Uplink TBF/ Pre-emptive Transmission Bit Set to '1' | Nokia | Approved |
| GP-030490 | CR 51.010-1-1349 Addition of Macro for downlink TBF establishment using ACCESS TYPE = "signalling" for section 53.2.2. | Nokia & Setcom | Approved |
| GP-030491 | CR 51.010-1-1350 Corrections on PACKET UPLINK ACK/NACK transmission timing and removal of T3198 in clause 53.1.1.x - Acknowledged Mode/ Uplink TBF | Nokia | Approved |
| GP-030492 | CR 51.010-1-1351 Corrections of the Peak Throughput Class and Maximum bit rate values for clause 40.5 - Test PDP Context. | Nokia | Revised |
| GP-030968 | CR 51.010-1-1351 rev 1 Corrections of the Peak Throughput Class and Maximum bit rate values for clause 40.5 - Test PDP Context. | Nokia | Withdrawn |
| GP-030493 | CR 51.010-1-1352 Correct of NC_REPORTING_PERIOD_I value in step 2 of clause 41.2.7.2 - Single block packet downlink assignment / MS returns to packet idle mode. | Nokia | Revised |
| GP-030956 | CR 51.010-1-1352 rev 1 Correct of NC_REPORTING_PERIOD_I value in step 2 of clause 41.2.7.2 - Single block packet downlink assignment / MS returns to packet idle mode. | Nokia | Approved |

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| GP-030494 | CR 51.010-1-1353 Correction of Expected Sequence and Specific Message Content for clause 42.4.1.2 - Network Control measurement reporting / Idle mode / New cell reselection. | Nokia | Approved |
| GP-030495 | CR 51.010-1-1354 Deletion of clause 42.4.2.1.5 - Cell change order procedure / Uplink transfer / Failure cases / REJECT from the new cell and T3176 expiry | Nokia | Approved |
| GP-030496 | CR 51.010-1-1355 Clarification of Step 25 in Expected Sequence for clause 42.4.2.3.1 - Cell change order procedure / Simultaneous uplink and downlink transfer / Normal case - WITHDRAWN | Nokia | Withdrawn |
| GP-030497 | CR 51.010-1-1356 Correction of step 5 of Expected Sequence for clause 44.2.3.1.7 - Routing area updating / abnormal cases / change of cell during routing area updating procedure. | Nokia | Revised |
| GP-030969 | CR 51.010-1-1356 rev 1 Correction of step 5 of Expected Sequence for clause 44.2.3.1.7 - Routing area updating / abnormal cases / change of cell during routing area updating procedure. | Nokia | Approved |
| GP-030498 | CR 51.010-1-1357 R99 compliance update of clause 44.2.3.2.5 Test Procedure 2 - Combined routing area updating / rejected / roaming not allowed in this location area. | Nokia | Approved |
| GP-030501 | CR 51.010-1-1358 Correction of Test Procedure and Expected Sequence for clause 52.1.2.1.10.2 - Packet Uplink Assignment / Abnormal cases / Expiry of timer T3164. | Nokia | Approved |
| GP-030502 | CR 51.010-1-1359 Correction of Test Procedure and Expected Sequence for clause 42.1.2.1.10.2 - Packet Uplink Assignment / Abnormal cases / Expiry of timer T3164. | Nokia | Approved |
| GP-030521 | CR 51.010-1-1360 42.3.1.2.3 Dynamic Allocation / Uplink Transfer / Abnormal / with cell reselection in unacknowledged mode | Melco Mobile Communication Europe | Postponed |
| GP-030522 | CR 51.010-1-1361 42.2.2.8.1 Fixed Allocation / Uplink Transfer / MS requests new resources/ Failure/Packet Access Reject | Melco Mobile Communication Europe | Approved |
| GP-030523 | CR 51.010-1-1362 42.2.2.8.2 Fixed Allocation / Uplink Transfer / MS requests new resources/ Failure/Packet Access Reject with WAIT_INDICATION during allocation in progress | Melco Mobile Communication Europe | Approved |
| GP-030524 | CR 51.010-1-1363 52.3.1.2.3 Dynamic Allocation / Uplink Transfer / Abnormal / with cell reselection in unacknowledged mode | Melco Mobile Communication Europe | Postponed |
| GP-030527 | CR 51.010-1-1364 44.2.5.2.3 Correction of P-TMSI | Anite | Approved |
| GP-030528 | CR 51.010-1-1365 51.3.1.3 Step 13 is incorrect if optional step A12 is executed | Anite | Revised |

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| GP-031002 | CR 51.010-1-1365 rev 1 51.3.1.3 Step 13 is incorrect if optional step A12 is executed | Anite | Approved |
| GP-030529 | CR 51.010-1-1366 42.3.1.1.4 Optional Step required at Step 38 | Anite | Revised |
| GP-030941 | CR 51.010-1-1366 rev 1 42.3.1.1.4 Optional Step required at Step 38 | Anite | Revised |
| GP-031000 | CR 51.010-1-1366 rev 2 42.3.1.1.4 Optional Step required at Step 38 | Anite | Approved |
| GP-030530 | CR 51.010-1-1367 52.3.1.1.4 Optional Step required at Step 38 | Anite | Revised |
| GP-030960 | CR 51.010-1-1367 rev 1 52.3.1.1.4 Optional Step required at Step 38 | Anite | Approved |
| GP-030535 | CR 51.010-1-1369 40.2.1.1.1 Missing BandIndicator in SI1 default | Anite | Revised |
| GP-030957 | CR 51.010-1-1369 rev 1 40.2.1.1.1 Missing BandIndicator in SI1 default | Anite | Approved |
| GP-030536 | CR 51.010-1-1370 53.1.2.7 Correct handling of ES/Pfield, remove unnecessary constraint | Anite | Approved |
| GP-030537 | CR 51.010-1-1372 53.2.2.2 Correction of cause in step 2 of the macro | Anite | Withdrawn |
| GP-030538 | CR 51.010-1-1373 44.2.1.1.10 Corrections to step numbering in Expected Sequence | Anite | Approved |
| GP-030539 | CR 51.010-1-1374 42.3.1.1.9 Correction of Cell Allocation in the first set of Packet System Information Type 2 message | Anite | Revised |
| GP-031001 | CR 51.010-1-1374 rev 1 42.3.1.1.9 Correction of Cell Allocation in the first set of Packet System Information Type 2 message | Anite | Approved |
| GP-030540 | CR 51.010-1-1375 40.2.4.14.2, 40.2.4.14.3  Illegal values of Gamma in default messages | Anite | Approved |
| GP-030541 | CR 51.010-1-1376 50.2.4.3 Illegal values of Gamma in default messages | Anite | Approved |
| GP-030542 | CR 51.010-1-1377 42.3.3.1.2 - Correction to test PDP context number in initial condition and check in step 7 of expected sequence (Rel 5) | Sasken | Revised |
| GP-031003 | CR 51.010-1-1377 rev 1 42.3.3.1.2 - Correction to test PDP context number in initial condition and check in step 7 of expected sequence (Rel 5) | Sasken | Approved |
| GP-030543 | CR 51.010-1-1378 Addition of steps to Expected Sequence of 42.3.3.2.2 to meet the conformance requirements. (Rel-5) | Sasken | Approved |

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|---|---|---|---|
| GP-030544 | CR 51.010-1-1379 51.2.3.2 - Two message assignment / Failure case (Rel-5) | Sasken | Approved |
| GP-030545 | CR 51.010-1-1380 51.2.5.2 - Packet access rejection/assignment before T3142 expires (Rel-5) | Sasken | Withdrawn |
| GP-030546 | CR 51.010-1-1381 Test case 52.1.2.1.3.1 to be done in transfer mode (Rel-5) | Sasken | Approved |
| GP-030547 | CR 51.010-1-1382 Correction to Expected Sequence of 52.1.2.1.9.5 (Rel-5) | Sasken | Approved |
| GP-030548 | CR 51.010-1-1383 Correction to Expected Sequence of test case 52.3.1.1.6 (Rel-5) | Sasken | Approved |
| GP-030549 | CR 51.010-1-1384 52.3.3.1.2 - Correction to test PDP context number in initial condition and check in expected sequence (Rel-5) | Sasken | Approved |
| GP-030550 | CR 51.010-1-1385 Correction to Expected Sequence of test case 52.3.3.2.2 (Rel-5) | Sasken | Approved |
| GP-030551 | CR 51.010-1-1386 Correction to Expected Sequence of test case 52.3.3.3 (Rel-5) | Sasken | Approved |
| GP-030552 | CR 51.010-1-1387 Correction to Expected Sequence of test case 53.1.1.3 (Rel-5) | Sasken | Withdrawn |
| GP-030553 | CR 51.010-1-1388 51.2.2.1 - Link Quality Measurement Mode being removed from Immediate Assignment message, uplink construction (Rel-5) | Sasken | Approved |
| GP-030554 | CR 51.010-1-1389 Sec. 42.1.2.1.10.2 Packet Uplink Assignment / Abnormal cases / Expiry of timer T3164 | Siemens AG | Approved |
| GP-030555 | CR 51.010-1-1390 Sec. 42.1.2.1.9.2.1 Packet Uplink Assignment / Two phase access / Contention resolution / Expiry of timer T3168 | Siemens AG | Approved |
| GP-030556 | CR 51.010-1-1391 Sec. 52.1.2.1.10.2 Packet Uplink Assignment / Abnormal cases / Expiry of timer T3164 | Siemens AG | Approved |
| GP-030557 | CR 51.010-1-1392 Sec. 52.1.2.1.9.2.1 Packet Uplink Assignment / Two phase access / Contention resolution / Expiry of timer T3168 | Siemens AG | Approved |
| GP-030558 | CR 51.010-1-1393 Sec. 53.1.1.12 Acknowledged Mode/ Uplink TBF/ Retransmission/ Split RLC Data Block | Siemens AG | Approved |
| GP-030559 | CR 51.010-1-1394 Sec. 45.5.1 45.5.1 Change in Step 24: LLC SAPI value must be a reserved value | Siemens AG | Approved |
| GP-030560 | CR 51.010-1-1395 Sec. 46.1.2.3.1 Numbering mistake in 46.1.2.3.1 Collision of SABM | Siemens AG | Approved |
| GP-030562 | CR 51.010-1-1396 Correction in EOTD Test Case 70.6.2 | Racal Instruments | Withdrawn |

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|---|---|---|---|
| GP-030563 | CR 51.010-1-1397 Correction in EOTD Test Case 70.6.3 | Racal Instruments | Withdrawn |
| GP-030564 | CR 51.010-1-1398 Correction in EOTD Test Case 70.6.4 | Racal Instruments | Withdrawn |
| GP-030565 | CR 51.010-1-1399 Correction in EOTD Test Case 70.6.5 | Racal Instruments | Withdrawn |
| GP-030566 | CR 51.010-1-1400 Correction in EOTD Test Case 70.3.4.1 | Racal Instruments | Withdrawn |
| GP-030572 | CR 51.010-1-1401  Signal Quality Tests for AMR | Cingular | Revised |
| GP-030890 | CR 51.010-1-1401 rev 1 Signal Quality Tests for AMR | Cingular | Approved |
| GP-030573 | CR 51.010-1-1402   Update of testcases of section 52.1 to handle Mobiles using EPCR for signalling procedure | Setcom | Revised |
| GP-030958 | CR 51.010-1-1402 rev 1 Update of testcases of section 52.1 to handle Mobiles using EPCR for signalling procedure | Setcom | Approved |
| GP-030574 | CR 51.010-1-1403   Testcase 45.2.1.1 Attach initiated by context activation/QoS Offered by Network is the QoS Requested | Setcom | Approved |
| GP-030575 | CR 51.010-1-1404   New testcase added: 45.2.1.3 QoS parameter out of range | Setcom | Rejected |
| GP-030576 | CR 51.010-1-1405   New testcase added: 45.2.4.3 Network initiated PDP context activation request for an already activated PDP context (on the MS side) | Setcom | Approved |
| GP-030577 | CR 51.010-1-1406  New testcase added: 45.4.4 PDP context deactivation initiated by the network / Tear down indicator | Setcom | Revised |
| GP-031043 | CR 51.010-1-1406 rev 1 New testcase added: 45.4.4 PDP context deactivation initiated by the network / Tear down indicator | Setcom | Approved |
| GP-030578 | CR 51.010-1-1407   New section added :45.2.5 Secondary PDP context activation procedures | Setcom | Approved |
| GP-030579 | CR 51.010-1-1408   New section added :45.3.2 MS initiated PDP context modification | Setcom | Approved |
| GP-030580 | CR 51.010-1-1409 New section added :34.4.1 Short message service point to point over GPRS | Setcom | Revised |
| GP-030995 | CR 51.010-1-1409 rev 1 New section added :34.4.1 Short message service point to point over GPRS | Setcom | Approved |
| GP-030581 | CR 51.010-1-1410  Sec. 46.1.1 Default Conditions of Section 46 | Siemens AG | Approved |
| GP-030582 | CR 51.010-1-1411   Sec: 42.4 - Addition of allocation of resource to send Packet Cell Change Failure | Setcom | Approved |
| GP-030583 | CR 51.010-1-1412   Sec: 52.4 - Addition of allocation of resource to send Packet Cell Change Failure | Setcom | Revised |

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| GP-030942 | CR 51.010-1-1412 rev 1 Sec: 52.4 - Addition of allocation of resource to send Packet Cell Change Failure | Setcom | Revised |
| GP-031012 | CR 51.010-1-1412 rev 2 Sec: 52.4 - Addition of allocation of resource to send Packet Cell Change Failure | Setcom | Approved |
| GP-030584 | CR 51.010-1-1413 Sec: 42.4.2.3.3 - Correction of requirement check | Setcom | Revised |
| GP-030943 | CR 51.010-1-1413 rev 1 Sec: 42.4.2.3.3 - Correction of requirement check | Setcom | Withdrawn |
| GP-030585 | CR 51.010-1-1414 Sec 51.2.3.8 - Correction to number of Packet Access initiation attempts | Setcom | Revised |
| GP-030959 | CR 51.010-1-1414 rev 1 Sec 51.2.3.8 - Correction to number of Packet Access initiation attempts | Setcom | Revised |
| GP-031005 | CR 51.010-1-1414 rev 2 Sec 51.2.3.8 - Correction to number of Packet Access initiation attempts | Setcom | Approved |
| GP-030586 | CR 51.010-1-1415 Sec 51.3.1.1 - Introduction of Wait before sending Packet Uplink Ack/Nack | Setcom | Approved |
| GP-030587 | CR 51.010-1-1416 Sec 51.3.1.2 - Correction to multislot classes checked. | Setcom | Approved |
| GP-030588 | CR 51.010-1-1417 Sec 51.x and 52.x - Addition of check for EGPRS Packet Channel Request with Access Type 'Signalling' | Setcom | Approved |
| GP-030589 | CR 51.010-1-1418 Sec 52.4.4.2 - Attach procedure need to be completed before sending Packet Measurement order. | Setcom | Revised |
| GP-030962 | CR 51.010-1-1418 rev 1 Sec 52.4.4.2 - Attach procedure need to be completed before sending Packet Measurement order. | Setcom | Revised |
| GP-031007 | CR 51.010-1-1418 rev 2 Sec 52.4.4.2 - Attach procedure need to be completed before sending Packet Measurement order. | Setcom | Approved |
| GP-030590 | CR 51.010-1-1419 Sec 53.1.1.2 - Correction to BSN check in Step A12 | Setcom | Approved |
| GP-030591 | CR 51.010-1-1420 Sec 53.1.1.3 - Modification to the usage of Packet Timeslot Reconfigure and window size. | Setcom | Approved |
| GP-030592 | CR 51.010-1-1421 Sec 53.1.1.4 - Correction to verification of BSN sequence in Step 7. | Setcom | Approved |
| GP-030593 | CR 51.010-1-1422 Sec 53.1.2.12 - Correction to repetition sequence in step 4. | Setcom | Approved |
| GP-030594 | CR 51.010-1-1423 Sec 53.1.1.15 - Correction to CV calculation. | Setcom | Approved |
| GP-030595 | CR 51.010-1-1424 Sec 52.8.1.x - Addition of new testcases. | Setcom | Revised |

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| GP-030963 | CR 51.010-1-1424 rev 1 Sec 52.8.1.x - Addition of new testcases. | Setcom | Revised |
| GP-031008 | CR 51.010-1-1424 rev 2 Sec 52.8.1.x - Addition of new testcases. | Setcom | Approved |
| GP-030596 | CR 51.010-1-1425 Sec 52.1.2.1.8.x - Addition of new testcases. | Setcom | Revised |
| GP-030964 | CR 51.010-1-1425 rev 1 Sec 52.1.2.1.8.x - Addition of new testcases. | Setcom | Revised |
| GP-031009 | CR 51.010-1-1425 rev 2 Sec 52.1.2.1.8.x - Addition of new testcases. | Setcom | Approved |
| GP-030597 | CR 51.010-1-1426 Sec 42.1.2.1.8.x - Addition of new testcases. | Setcom | Revised |
| GP-030944 | CR 51.010-1-1426 rev 1 Sec 42.1.2.1.8.x - Addition of new testcases. | Setcom | Revised |
| GP-031004 | CR 51.010-1-1426 rev 2 Sec 42.1.2.1.8.x - Addition of new testcases. | Setcom | Approved |
| GP-030598 | CR 51.010-1-1427 Sec 51.2.5 - Addition of new testcases to cover Immediate Assignment Reject scenarios. | Setcom | Approved |
| GP-030599 | CR 51.010-1-1428 New testcase 53.1.1.24 - Acknowledged Mode/ Uplink TBF/ Interpretation of PBSN | Setcom | Approved |
| GP-030600 | CR 51.010-1-1429 Sec 53.1.1.9 - Correction to expected sequence check | Setcom | Withdrawn |
| GP-030601 | CR 51.010-1-1430 Section 42.1.2.1.5 Incorrect step reference in step 10 | Rohde & Schwarz | Approved |
| GP-030602 | CR 51.010-1-1431 Section 42.1.2.1.8.2.2 Inconsistency in expected sequence for two phase access | Rohde & Schwarz | Approved |
| GP-030603 | CR 51.010-1-1432 Section 42.1.2.2.6 Incorrect initial conditions and PICS reference | Rohde & Schwarz | Approved |
| GP-030604 | CR 51.010-1-1433 Section 42.3.1.1.6 Uplink TFI missing in specific message contents | Rohde & Schwarz | Approved |
| GP-030605 | CR 51.010-1-1434 Section 52.1.2.1.5 Incorrect step reference in step 10 | Rohde & Schwarz | Approved |
| GP-030606 | CR 51.010-1-1435 Section 52.3.1.1.6 Uplink TFI missing in specific message contents | Rohde & Schwarz | Approved |
| GP-030607 | CR 51.010-1-1436 Section 53.1.1.13 T3198 replaced by BS_CV_MAX block periods | Rohde & Schwarz | Withdrawn |
| GP-030608 | CR 51.010-1-1437 Section 53.1.1.17 Consideration of MS reaction time | Rohde & Schwarz | Approved |

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| GP-030609 | CR 51.010-1-1438 Section 53.1.1.18 Consideration of MS reaction time | Rohde & Schwarz | Approved |
| GP-030616 | CR 51.010-1-1439 Correction to DTM Conformance Test in sub-clause 41.3.4.3 | Vodafone | Approved |
| GP-030617 | CR 51.010-1-1440 Correction to DTM Conformance Test in sub-clause 22.11 | Vodafone | Approved |
| GP-030618 | CR 51.010-1-1441 Correction to DTM Conformance Test in sub-clause 44.2.8.2 | Vodafone | Revised |
| GP-030965 | CR 51.010-1-1441 rev 1 Correction to DTM Conformance Test in sub-clause 44.2.8.2 | Vodafone | Approved |
| GP-030619 | CR 51.010-1-1442 Correction to DTM Conformance Test in sub-clause 47.3.2.2 | Vodafone | Approved |
| GP-030621 | CR 51.010-1-1443 Addition of new test cases section 52.9 | Setcom | Withdrawn |
| GP-030622 | CR 51.010-1-1444 52.1.2.2.5.1 Packet Downlink Assignment / Abnormal cases / Incorrect PDCH assignment | Setcom | Approved |
| GP-030623 | CR 51.010-1-1445 42.1.2.2.5.1 Packet Downlink Assignment / Abnormal cases / Incorrect PDCH assignment | Setcom | Approved |
| GP-030638 | CR 51.010-1-1446 Correction of Expected Sequence for clause 52.4.1.3 - Network Control measurement reporting / Downlink transfer / Normal case | Nokia | Approved |
| GP-030658 | CR 51.010-1-1447 26.7.4.5.4.4 "Location updating/periodic search of the PLMN in foreign country, when a MS is receiving HPLMN /MS is in automatic mode". | Motorola | Withdrawn |
| GP-030659 | CR 51.010-1-1448 26.7.4.5.4.4 "Location updating/periodic search of the HPLMN, when a MS is receiving foreign country's VPLMN/MS is in automatic mode". | Motorola | Revised |
| GP-030951 | CR 51.010-1-1448 rev 1 26.7.4.5.4.4 "Location updating/periodic search of the higher priority PLMN, when a MS is receiving foreign country's VPLMN/MS is in automatic mode". | Motorola | Revised |
| GP-030996 | CR 51.010-1-1448 rev 2 26.7.4.5.4.4 "Location updating/periodic search of the higher priority PLMN, when a MS is receiving foreign country's VPLMN/MS is in automatic mode". | Motorola | Approved |
| GP-030660 | CR 51.010-1-1449 GPRS Enhanced Measurement Report (EMR) Test Cases | Motorola | Revised |
| GP-030953 | CR 51.010-1-1449 rev 1 GPRS Enhanced Measurement Report (EMR) Test Cases | Motorola | Revised |
| GP-030998 | CR 51.010-1-1449 rev 2 GPRS Enhanced Measurement Report (EMR) Test Cases | Motorola | Revised |

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| GP-031020 | CR 51.010-1-1449 rev 3 GPRS Enhanced Measurement Report (EMR) Test Cases | Motorola | Revised |
| GP-031045 | CR 51.010-1-1449 rev 4 GPRS Enhanced Measurement Report (EMR) Test Cases | Motorola | Approved |
| GP-030677 | CR 51.010-1-1450 Section 51.1.1.2 Check for completeness of ATTACH REQUEST not possible | Rohde & Schwarz | Approved |
| GP-030678 | CR 51.010-1-1451 Section 51.1.1.3 BS_PCC_CHANS is not included in PSI1 | Rohde & Schwarz | Approved |
| GP-030679 | CR 51.010-1-1452 Section 51.1.3 Check in step 5 incorrect for k=2 | Rohde & Schwarz | Approved |
| GP-030680 | CR 51.010-1-1453 Section 41.1.3 Check in step 5 incorrect for k=2 | Rohde & Schwarz | Approved |
| GP-030681 | CR 51.010-1-1454 Section 51.1.4.1 Correction of macro parameters (was fixed allocation) | Rohde & Schwarz | Approved |
| GP-030682 | CR 51.010-1-1455 Section 51.1.5.1.2 Incorrect channel assignment, step reference corrected | Rohde & Schwarz | Approved |
| GP-030683 | CR 51.010-1-1456 Section 41.1.5.1.2 Step reference corrected | Rohde & Schwarz | Approved |
| GP-030684 | CR 51.010-1-1457 Section 51.1.6 Incorrect WAIT_INDICATION in test procedure | Rohde & Schwarz | Approved |
| GP-030685 | CR 51.010-1-1458 Section 51.2.1.1 Priority level 4 missing in test parameters | Rohde & Schwarz | Approved |
| GP-030686 | CR 51.010-1-1459 Section 53.1.1.2 Incorrect BSN in optional step A12 | Rohde & Schwarz | Withdrawn |
| GP-030702 | CR 51.010-1-1460 New TC: Network Assisted Cell Change / Expiry of T3206 | Ericsson | Approved |
| GP-030703 | CR 51.010-1-1461 New TC: Network Assisted Cell Change / No Packet Neighbouring Cell Data and Packet Cell Change Continue | Ericsson | Approved |
| GP-030704 | CR 51.010-1-1462 New TC: Network Assisted Cell Change / Packet Neighbour Cell Data and Packet Cell Change Continue | Ericsson | Approved |
| GP-030705 | CR 51.010-1-1463 New TC: Network Assisted Cell Change / Packet Neighbour Cell Data and Packet Cell Change Order | Ericsson | Approved |
| GP-030706 | CR 51.010-1-1464 New TC: Network Assisted Cell Change / Expiry of T3208 and T3210 | Ericsson | Approved |
| GP-030707 | CR 51.010-1-1465 New TC: Network Assisted Cell Change / Entering packet idle mode | Ericsson | Revised |

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| GP-030992 | CR 51.010-1-1465 rev 1 New TC: Network Assisted Cell Change / Entering packet idle mode | Ericsson | Approved |
| GP-030708 | CR 51.010-1-1466 New TC: Network Assisted Cell Change / CCN not supported towards target cell | Ericsson | Revised |
| GP-030993 | CR 51.010-1-1466 rev 1 New TC: Network Assisted Cell Change / CCN not supported towards target cell | Ericsson | Approved |
| GP-030710 | CR 51.010-1-1468 Addition of PICS/PIXIT statement to clause 46.1.2.7.6 and 46.1.2.6.2 | Ericsson | Approved |
| GP-030711 | CR 51.010-1-1469 Correction to TC 43.1.1.5 | Ericsson | Revised |
| GP-030954 | CR 51.010-1-1469 rev 1 Correction to TC 43.1.1.5 | Ericsson | Approved |
| GP-030713 | CR 51.010-1-1470 Editorial Corrections to AMR-NB Tests | Cingular Wireless | Approved |
| GP-030714 | CR 51.010-1-1471 Updates to assign GPRS or EGPRS TBF depending upon the use of CHANNEL REQUEST or EGPRS PACKET CHANNEL REQUEST in clauses 51.2.2.1 | Sasken | Approved |
| GP-030715 | CR 51.010-1-1472 Additional Macros to Sec 50 | Sasken | Approved |
| GP-030769 | CR 51.010-1-1473 Section 51.2.x Corrections of PDP context specification in initial conditions | Rohde & Schwarz | Revised |
| GP-030961 | CR 51.010-1-1473 rev 1 Section 51.2.x Corrections of PDP context specification in initial conditions | Rohde & Schwarz | Approved |
| GP-030770 | CR 51.010-1-1474 Section 51.2.2.2 Incorrect reference in section Justification | Rohde & Schwarz | Approved |
| GP-030771 | CR 51.010-1-1475 Section 51.2.2.3 Items from GPRS mirror CRs missing | Rohde & Schwarz | Approved |
| GP-030772 | CR 51.010-1-1476 Section 51.2.2.5 Incorrect channel request type referenced | Rohde & Schwarz | Approved |
| GP-030773 | CR 51.010-1-1478 Section 51.2.3.3 Incorrect description in Test procedure | Rohde & Schwarz | Approved |
| GP-030774 | CR 51.010-1-1479 Section 14.* Correction in limit checking sections for AMR tests (statistical testing part) | Rohde & Schwarz | Approved |
| GP-030775 | CR 51.010-1-1480 Section 14.1.6 Accidentially removed from 51.010-1 V5.1.0 | Rohde & Schwarz | Approved |
| GP-030776 | CR 51.010-1-1481 Section 26.6.3.x BCCH allocation sequence number missing for DCS 1800 and PCS 1900 bands | Rohde & Schwarz | Approved |
| GP-030778 | CR 51.010-1-1482 Section 26.6.8.4 Default neighbour cells parameters specifications can not be used | Rohde & Schwarz | Withdrawn |
| GP-030779 | CR 51.010-1-1483 Section 40.2.1.1.1 MSCR bit in SI3 must be set for R99 network simulation | Rohde & Schwarz | Approved |

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| GP-030828 | CR 51.010-1-1484 Section 42.1.2.1 Multiple PCCCH test cases | Alcatel | Revised |
| GP-030945 | CR 51.010-1-1484 rev 1 Section 42.1.2.1 Multiple PCCCH test cases | Alcatel | Withdrawn |
| GP-030777 | CR 51.010-1-1485 Section 26.6.13.1 Ambiguity for test parameter T1 | Rohde & Schwarz | Approved |
| GP-030847 | CR 51.010-1-1486 42.3.2.1.2 Dynamic Allocation / Uplink Transfer with Downlink TBF establishment / Normal / Multislotcapabilities | Setcom | Withdrawn |
| GP-030848 | CR 51.010-1-1487 52.3.2.1.2 Dynamic Allocation / Uplink Transfer with Downlink TBF establishment / Normal / Multislot capabilities | Setcom | Withdrawn |
| GP-030849 | CR 51.010-1-1488 Clarification of applicability for different TCH/H -channels in 14.2.4 and 14.4.5 | Nokia | Approved |
| GP-030850 | CR 51.010-1-1490 Clarification on test procedure of 14.18.6 | Nokia | Approved |
| GP-030855 | CR 51.010-1-1491 Section 20.22.12 C1 value in wrong column | Rohde & Schwarz | Approved |
| GP-030889 | CR 51.010-1-1492 Test procedure for TC 44.2.1.1.9 does not take into account the specification conform behaviour of an autoattach GPRS MS | Agere Systems | Withdrawn |
| GP-030955 | CR 51.010-1-1493 Location updating/periodic search of the HPLMN, when a MS is receiving foreign country's VPLMN/MS is in automatic mode | Cingular | Revised |
| GP-030997 | CR 51.010-1-1493 rev 1 Location updating/periodic search of the HPLMN, when a MS is receiving foreign country's VPLMN/MS is in automatic mode | Cingular | Approved |
| GP-030990 | CR 51.010-1-1494 Corrections of Core Specification references for clause 41.1.5.1.2 - RR / Paging / on CCCH for GPRS service / normal paging with IMSI successful. | Nokia | Approved |
| GP-030991 | CR 51.010-1-1495 Corrections of Core Specification references for clause 51.1.5.1.2 - RR / Paging / on CCCH for EGPRS service / normal paging with IMSI successful. | Nokia | Approved |
| GP-030499 | CR 51.010-2-107 Clarification to speech codec definitions | Nokia | Approved |
| GP-030500 | CR 51.010-2-108 Correction of Applicability column for clause 14.2.4. | Nokia | Approved |
| GP-030620 | CR 51.010-2-109 Addition of some DTM test cases to the applicability table | Vodafone | Revised |
| GP-030966 | CR 51.010-2-109 rev 1 Addition of some DTM test cases to the applicability table | Vodafone | Approved |

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| GP-030639 | CR 51.010-2-110 Deletion of test cases 42.4.2.1.5 and 52.4.2.1.5 from Table B.1. | Nokia | Approved |
| GP-030657 | CR 51.010-2-111 Modification of applicability table in 51.010-2 due to introduction of new test cases in 51.010-1 | Setcom | Revised |
| GP-030970 | CR 51.010-2-111 rev 1 Modification of applicability table in 51.010-2 due to introduction of new test cases in 51.010-1 | Setcom | Revised |
| GP-031044 | CR 51.010-2-111 rev 2 Modification of applicability table in 51.010-2 due to introduction of new test cases in 51.010-1 | Setcom | Approved |
| GP-030829 | CR 51.010-2-112  Section 42.1.2.1 Multiple PCCCH test cases | Alcatel | Withdrawn |
| GP-030831 | CR 51.010-2-113  Section 42.1.2.1 "Addition of test case in TS 51.010 S42: Packet Timeslot Reconfigure containing a new Coding Scheme command | Alcatel | Revised |
| GP-031017 | CR 51.010-2-113 rev 1 Section 42.1.2.1 "Addition of test case in TS 51.010 S42: Packet Timeslot Reconfigure containing a new Coding Scheme command | Alcatel | Approved |
| GP-030841 | CR 51.010-2-114 Updating PICS for RxQual test cases | Cingular Wireless | Approved |
| GP-030952 | CR 51.010-2-115  Modification of applicability table in 51.010-2 due to introduction of new test cases in 51.010-1 | Motorola | Revised |
| GP-030999 | CR 51.010-2-115 rev 1 Modification of applicability table in 51.010-2 due to introduction of new test cases in 51.010-1 | Motorola | Approved |
| GP-030709 | CR 51.010-2-116 Addition of test cases for Network Assisted Cell Change | Ericsson | Revised |
| GP-030994 | CR 51.010-2-116 rev 1 Addition of test cases for Network Assisted Cell Change | Ericsson | Approved |
| GP-031013 | CR 51.010-2-117 Incorrect applicability for six test cases of section 42.3.1.1.x | Rohde & Schwarz | Approved |
| GP-031015 | CR 51.010-2-118  Update PICS for GPRS EMR test case | Motorola | Revised |
| GP-031046 | CR 51.010-2-118 rev 1  Update PICS for GPRS EMR test case | Motorola | Revised |
| GP-031050 | CR 51.010-2-118 rev 2  Update PICS for GPRS EMR test case | Motorola | Approved |
| GP-030531 | CR 51.010-3-018 20.14 Implementation of new Test Case | Anite | Revised |
| GP-030947 | CR 51.010-3-018 rev 1 20.14 Implementation of new Test Case | Anite | Approved |
| GP-030532 | CR 51.010-3-019 20.6 Bring TTCN of part 3 into alignment with part 1 | Anite | Revised |
| GP-030948 | CR 51.010-3-019 rev 1 20.6 Bring TTCN of part 3 into alignment with part 1 | Anite | Approved |

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| GP-030533 | CR 51.010-3-020 34.3 Update Number change in Cell Broadcasting | Anite | Revised |
| GP-030949 | CR 51.010-3-020 rev 1 34.3 Update Number change in Cell Broadcasting | Anite | Approved |
| GP-030534 | CR 51.010-3-021 Change to CCCAP structure | Anite | Revised |
| GP-030950 | CR 51.010-3-021 rev 1 Change to CCCAP structure | Anite | Approved |