

# TSG GERAN Report to TSG-SA#09

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Tdoc SP-000463

# TSG GERAN work area (1/2)

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

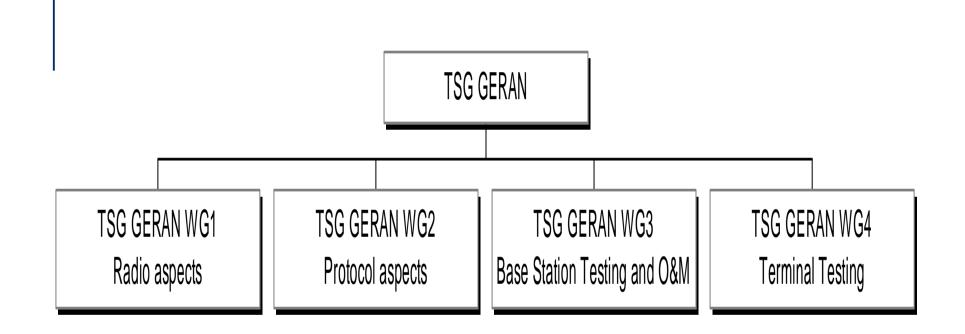
- GERAN Radio aspects, and interfaces
- RF aspects of GERAN
- Specifications for GERAN radio performance and RF system aspects
- GERAN Radio Layer 1 specification
- GERAN Radio Layer 2 specification
- GERAN Radio Layer 3 RR specification

# 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

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# **Organisation of TSG GERAN (1/3)**



# **Organisation of TSG GERAN (2/3)**

### TSG GERAN WG1 – Radio Aspects

- RF aspects of GERAN
- GERAN radio performance and RF system aspects
   Note: This corresponds to work of ETSI SMG2 WPB
- Ater (CCU-TRAU)

### TSG GERAN WG2 – Protocol Aspects

- GERAN Radio Layer 2 specification
- GERAN Radio Layer 3 RR specification
- A interface specification, Gb interface specification
- Internal GERAN interface specifications such as Abis

Note: This corresponds to work of ETSI SMG2 WPA

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

## TSG GERAN WG3 – Base Station Testing and O&M

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

Note: This corresponds to work of ETSI SMG2 WPC & Radio part of ETSI SMG6

## TSG GERAN WG4 – Base Station Testing

 Conformance test specifications for testing of all aspects of GERAN terminals

Note: This corresponds to work of ETSI SMG7

### **Current work areas**

Workplan elaborated (see attachment)

More than 30 Work Items adopted covering

- GERAN/UTRAN interface evolution 1 (Iu<sub>ps</sub>) (F)
- GERAN/UTRAN interface evolution 2 (Iu<sub>cs</sub>) (F)
- Low chip rate TDD interworking with GERAN (B)
- GERAN improvements 1 (Gb over Ip) (F)
- GERAN improvements 2 (Gb enhancements) (F)
- GERAN radio interface evolution (F)
- 700 MHz spectrum support (F)
- Support of WB AMR in GERAN incl. testing (3 B)
- Location Services in GERAN incl testing (4B)

# Highlights from 1<sup>st</sup> meeting (1/2)

- GSM 3G interworking reviewed and clarified and is considered stable
  - TSG GERAN specifies GSM part
  - TSG RAN specifies 3G part
- GPRS Release 97 stable only minor corrections made
- DTM (Dual Transfer Mode) completed including EGPRS support (Rel 99)
- EDGE Release 99 stable only minor corrections
- Concern about the complexity and potential undicovered errors in the RATSCCH – S4 asked for advice if RATSCCH could be deleted or made optional for Terminals Rel 98 & Rel 99

# Highlights from 1<sup>st</sup> meeting (2/2)

- Support of GSM in 700 MHz band First change requests approved – expected completion January 2001
- Draft of specifications to make GSM in 400 MHz bands release independent reviewed – expected completion November 2000
- Work on Stage 2 for LCS in GERAN commenced first version reviewed – LCS for PS is new relative to Rel 99
- Definition of small MS changed to be based on MS power class

List of Change Request and their status attached

# TSG GERAN relation to TSG T (1/2)

- TSG GERAN WG4 responsible for Access Stratum (AS) related to GERAN
- TSG T WG1 responsible for Access Stratum (AS) related to UTRAN
- Dual mode testing split following the core specifications
  - TSG GERAN WG4 responsible for GSM to 3G HO/Cell selection
  - TSG T WG1 responsible for 3G to GSM HO/Cell selection

# TSG GERAN relation to TSG T (2/2)

### Situation for Non Access Stratum

- Part of Non Access Stratum test dependent on access network, e.g., Mobility Management
- Part of Accees Stratum common core specifications, but separate test cases
- TTCN test cases developed by TSG T can theoretically cover both GSM and 3G, however if adopted today no verified test cases would exist for GSM Release 99
- The GSM TTCN cases do not have a clear separation between AS and NAS – Therefore AS TTCN cases needs reworking to have common NAS test cases

TSG GERAN will have to consider the full consequences of any change on availability of single mode GSM tests

# **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

e.g

 $05.08 \Rightarrow 45.008$ 

# **Future TSG GERAN Plenary meetings**

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TSG GERAN #02 6 - 10 November 2000, Stockholm
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TSG GERAN #03 15 - 19 January 2001, Boston

TSG GERAN #04 2 - 6 April 2001, ?

TSG GERAN #05 28 May - 1 June 2001, USA ?

TSG GERAN #06 27 - 31 August 2001, ?

TSG GERAN #07 26 - 30 November 2001, ?

### List of Change Requests at TSG GERAN #01

Tdoc	Title	Source	Status
GP-000006	CR 03.22-A049 Check selected cell deduced by SI10 information with SI3 ones (R00)	ETSI STF139	Revised
GP-000331	CR 03.22-A049 rev 1 Check selected cell deduced by SI10 information with SI3 ones (R00)	TSG GERAN WG1	Approved
GP-000221	CR 03.22-A050 GSM 700 spectrum update (R00)	Nokia	Approved
GP-000222	CR 03.30-A011 GSM 700 cell sizes and RF budgets (R00)	Nokia	Approved
GP-000090	CR 03.64-A073 DTM (R99)	Nokia	Revised
GP-000326	CR 03.64-A073 rev 1 DTM (R99)	Nokia	Approved
GP-000091	CR 03.64-A074 DTM+EGPRS (R99)	Nokia	Approved
GP-000154	CR 03.64-A075 DTM: alignments (R99)	Vodafone	Revised
GP-000327	CR 03.64-A075 rev 1 DTM: alignments (R99)	Vodafone	Approved
GP-000018	CR 04.08-A728 Extended measurement report (MAFA) (R96)	Siemens	Revised
GP-000360	CR 04.08-A728 rev 1 Extended measurement report (MAFA) (R96)	Siemens	Approved
GP-000019	CR 04.08-A730 Extended measurement report (MAFA) (R97)	Siemens	Revised
GP-000378	CR 04.08-A730 rev 1 Extended measurement report (MAFA) (R97)	Siemens	Approved
GP-000020	CR 04.08-A732 Extended measurement report (MAFA) (R98)	Siemens	Revised
GP-000379	CR 04.08-A732 rev 1 Extended measurement report (MAFA) (R98)	Siemens	Approved
GP-000025	CR 04.08-A736 Handling of Power-Control-Parameter alpha (R97)	Siemens	Approved
GP-000026	CR 04.08-A738 Handling of Power-Control-Parameter alpha (R98)	Siemens	Approved
GP-000027	CR 04.18-A125 Handling of Power-Control-Parameter alpha (R99)	Siemens	Approved

Tdoc	Title	Source	Status
GP-000021	CR 04.18-A126 Extended measurement report (MAFA) (R99)	Siemens	Revised
GP-000380	CR 04.18-A126 rev 1 Extended measurement report (MAFA) (R99)	Siemens	Approved
GP-000121	CR 04.18-A127 DTM: Removal of polling from DTM assignment (R99)	Ericsson	Approved
GP-000123	CR 04.18-A128 DTM: Correction of timers T3148 and T3107 (R99)	Ericsson	Revised
GP-000342	CR 04.18-A128 rev 1 DTM: Correction of timers T3148 and T3107 (R99)	Ericsson	Approved
GP-000127	CR 04.18-A129 DTM: tunnelling of GPRS signalling on the main DCCH (R99)	Nokia / Vodafone	Approved
GP-000132	CR 04.18-A130 DTM: provision of GPRS information for correct DTM behaviour (R99)	Vodafone	Revised
GP-000314	CR 04.18-A130 rev 1 DTM: provision of GPRS information for correct DTM behaviour (R99)	Vodafone	Approved
GP-000137	CR 04.18-A131 DTM: reuse of the GPRS Suspension procedure in cells with no DTM capabilities (R99)	Vodafone	Revised
GP-000317	CR 04.18-A131 rev 1 DTM: reuse of the GPRS Suspension procedure in cells with no DTM capabilities (R99)	Vodafone	Approved
GP-000142	CR 04.18-A132 DTM: alignment of the handover procedure (R99)	Vodafone	Approved
GP-000144	CR 04.18-A133 DTM: clarification of Radio Link Failure and RR connection abortion while in DTM (R99)	Vodafone	Approved
GP-000146	CR 04.18-A134 DTM: removal of the Main DCCH Assignment message (R99)	Vodafone	Revised
GP-000337	CR 04.18-A134 rev 1 DTM: removal of the Main DCCH Assignment message (R99)	Vodafone	Approved
GP-000150	CR 04.18-A135 DTM: definition (R99)	Vodafone	Approved
GP-000155	CR 04.18-A136 Support of 11 bits request reference in IA and IAR messages (R99)	Alcatel	Revised
GP-000389	CR 04.18-A136 rev 1 Support of 11 bits request reference in IA and IAR messages (R99)	Alcatel	Approved
GP-000179	CR 04.18-A137 DTM: GPRS information for DTM operation - TBF re-establishment (R99)	Ericsson	Approved
GP-000185	CR 04.18-A138 Correction of Table 10.5.60/GSM 04.18 (R99)	Ericsson	Withdrawn

Tdoc	Title	Source	Status
GP-000191	CR 04.18-A139 Interpretation addition of CELL_BAR_QUALIFY_2 value (R99)	Ericsson	Approved
GP-000095	CR 04.18-A140 DTM+EGPRS (R99)	Nokia	Approved
GP-000266	CR 04.18-A141 Correction on Measurement Info Message (R99)	Nortel Networks	Approved
GP-000204	CR 04.18-A142 SI2ter bit map correction (R99)	Vodafone	Revised
GP-000385	CR 04.18-A142 rev 1 SI2ter bit map correction (R99)	Vodafone	Approved
GP-000206	CR 04.18-A143 SI2quater updates to allow GPRS->UMTS Cell-Reselection (R99)	Vodafone	Approved
GP-000209	CR 04.18-A144 Detailed coding modifications for the preconfigurations (R99)	Vodafone	Revised
GP-000313	CR 04.18-A144 rev 1 Detailed coding modifications for the preconfigurations (R99)	Vodafone	Revised
GP-000411	CR 04.18-A144 rev 2 Detailed coding modifications for the preconfigurations (R99)	Vodafone	Approved
GP-000211	CR 04.18-A145 Allowing MT calls when downloading preconfigurations (R99)	Vodafone	Withdrawn
GP-000213	CR 04.18-A146 Handover to UMTS description procedure including "blind handover" to UMTS	Vodafone	Revised
GP-000356	CR 04.18-A146 rev 1 Handover to UMTS description procedure including "blind handover" to UMTS	Vodafone	Approved
GP-000270	CR 04.18-A147 Correction on UTRAN classmark change procedure (R99)	Nortel Networks	Revised
GP-000353	CR 04.18-A147 rev 1 Correction on UTRAN classmark change procedure (R99)	Nortel Networks	Approved
GP-000234	CR 04.18-A148 Handover to UTRAN Command message format (R99)	Ericsson	Revised
GP-000387	CR 04.18-A148 rev 1 Handover to UTRAN Command message format (R99)	Ericsson	Withdrawn
GP-000236	CR 04.18-A149 RAB pre-configuration (R99)	Ericsson	Revised
GP-000348	CR 04.18-A149 rev 1 RAB pre-configuration (R99)	Ericsson	Withdrawn
GP-000259	CR 04.18-A150 Editorial correction on RR Packet Uplink/Downlink Assigment (R99)	Nokia	Revised
GP-000306	CR 04.18-A150 rev 1 Editorial correction on RR Packet Uplink/Downlink Assigment (R99)	Nokia	Approved

Tdoc	Title	Source	Status
GP-000288	CR 04.18-A151 UE Security in UTRAN CM CHANGE (R99)	Ericsson	Revised
GP-000350	CR 04.18-A151 rev 1 UE Security in UTRAN CM CHANGE (R99)	Ericsson	Withdrawn
GP-000358	CR 04.18-A152 Noise suppression control for AMR	BellSouth, DT, BT, FT	Approved
GP-000076	CR 04.35-A006 related to GPS Assistance Data Broadcast Message ciphering (R98)	Nokia	Approved
GP-000077	CR 04.35-A007 related to GPS Assistance Data Broadcast Message ciphering (R99)	Nokia	Approved
GP-000056	CR 04.60-A845 rev 3 DTM: Exclusive allocation and other DTM alignments	Ericsson	Revised
GP-000341	CR 04.60-A845 rev 4 DTM: Exclusive allocation and other DTM alignments	Ericsson	Approved
GP-000023	CR 04.60-A872 Correction of RLC/MAC message (R97) (Wrong incorporation of CR A731)	Siemens	Approved
GP-000024	CR 04.60-A873 Correction of RLC/MAC message (R98) (Wrong incorporation of CR A732)	Siemens	Approved
GP-000046	CR 04.60-A874 Clarification on Timeslot Number in the Fixed Allocation Bitmap (R97)	Nortel Networks	Approved
GP-000047	CR 04.60-A875 Clarification on Timeslot Number in the Fixed Allocation Bitmap (R98)	Nortel Networks	Approved
GP-000048	CR 04.60-A876 Clarification on Timeslot Number in the Fixed Allocation Bitmap (R99)	Nortel Networks	Approved
GP-000131	CR 04.60-A877 DTM: cell support indication (R99)	Vodafone	Approved
GP-000157	CR 04.60-A878 Editorial correction on cell reselection (R99)	Alcatel	Approved
GP-000158	CR 04.60-A879 CV within radio block made of 2 RLC data blocks (R99)	Alcatel	Approved
GP-000391	CR 04.60-A879 rev 1 CV within radio block made of 2 RLC data blocks (R99)	Alcatel	Withdrawn
GP-000181	CR 04.60-A880 DTM: GPRS information for DTM operation - TBF re-establishment (R99)	Ericsson	Approved
GP-000320	CR 04.60-A880 rev 1 DTM: GPRS information for DTM operation - TBF re-establishment (R99)	Ericsson	Withdrawn
GP-000182	CR 04.60-A881 Correction of Packet Measurement Order and PSI5 messages (EM1 struct) (R97)	Ericsson	Revised

Tdoc	Title	Source	Status
GP-000303	CR 04.60-A881 rev 1 Correction of Packet Measurement Order and PSI5 messages (EM1 struct) (R97)	Ericsson	Approved
GP-000183	CR 04.60-A882 Correction of Packet Measurement Order and PSI5 messages (EM1 struct) (R98)	Ericsson	Revised
GP-000304	CR 04.60-A882 rev 1 Correction of Packet Measurement Order and PSI5 messages (EM1 struct) (R98)	Ericsson	Approved
GP-000184	CR 04.60-A883 Correction of Packet Measurement Order and PSI5 messages (EM1 struct) (R99)	Ericsson	Revised
GP-000305	CR 04.60-A883 rev 1 Correction of Packet Measurement Order and PSI5 messages (EM1 struct) (R99)	Ericsson	Approved
GP-000187	CR 04.60-A884 Correction of Packet PDCH Release procedure (TIMESLOT_ALLOCATION) (R99)	Ericsson	Approved
GP-000188	CR 04.60-A885 Correction of CSN.1 in "Neighbour cell parameters 2 struct" (R97)	Ericsson	Revised
GP-000407	CR 04.60-A885 rev 1 Correction of CSN.1 in "Neighbour cell parameters 2 struct" (R97)	Ericsson	Approved
GP-000189	CR 04.60-A886 Correction of CSN.1 in "Neighbour cell parameters 2 struct" (R98)	Ericsson	Revised
GP-000408	CR 04.60-A886 rev 1 Correction of CSN.1 in "Neighbour cell parameters 2 struct" (R98)	Ericsson	Approved
GP-000190	CR 04.60-A887 Correction of CSN.1 in "Neighbour cell parameters 2 struct" (R99)	Ericsson	Revised
GP-000409	CR 04.60-A887 rev 1 Correction of CSN.1 in "Neighbour cell parameters 2 struct" (R99)	Ericsson	Revised
GP-000467	CR 04.60-A887 rev 2 Correction of CSN.1 in "Neighbour cell parameters 2 struct" (R99)	Ericsson	Approved
GP-000193	CR 04.60-A888 Addition of CELL_BAR_QUALIFY_2 in neighbour cell descriptions	Ericsson	Revised
GP-000392	CR 04.60-A888 rev 1 Addition of CELL_BAR_QUALIFY_2 in neighbour cell descriptions	Ericsson	Approved
GP-000197	CR 04.60-A889 Correction of COMPACT neighbour cells description in PSI3bis (R99)	Motorola	Approved
GP-000215	CR 04.60-A890 Miscellaneous corrections on packet access and message coding (R99)	Motorola	Revised
GP-000308	CR 04.60-A890 rev 1 Miscellaneous corrections on packet access and message coding (R99)	Motorola	Revised

Tdoc	Title	Source	Status
GP-000466	CR 04.60-A890 rev 2 Miscellaneous corrections on packet access and message coding (R99)	Motorola	Approved
GP-000198	CR 04.60-A891 Correction on I_LEVEL_TN(R99)	Motorola	Revised
GP-000421	CR 04.60-A891 rev 1 Correction on I_LEVEL_TN (R99)	Motorola	Approved
GP-000199	CR 04.60-A892 Maximum bit rate indication for radio interface (R99)	Motorola, Nokia, Mitsubishi, BT- Cellnet	Rejected
GP-000203	CR 04.60-A893 CSN1 backward compatibility corrections (R98)	Vodafone	Approved
GP-000208	CR 04.60-A894 GPRS->UMTS Cell-Reselection (R99)	Vodafone	Revised
GP-000347	CR 04.60-A894 rev 1 GPRS->UMTS Cell-Reselection (R99)	Vodafone	Approved
GP-000258	CR 04.60-A895 Correction to EGPRS OPA contention resolution	Nokia	Revised
GP-000479	CR 04.60-A895 rev 1 Correction to EGPRS OPA contention resolution	Nokia	Approved
GP-000261	CR 04.60-A896 Alignment of abnormal cases (R99)	Nokia	Revised
GP-000311	CR 04.60-A896 rev 1 Alignment of abnormal cases (R99)	Nokia	Approved
GP-000301	CR 04.60-A897 Delaying the final Packet Uplink Ack/Nack (R99)	Nokia	Withdrawn
GP-000302	CR 04.60-A898 Polling GPRS MS for uplink data after downlink TBF release (R99)	Nokia	Withdrawn
GP-000310	CR 04.60-A899 Correction of Packet Flow Context Procedures (R99)	Motorola	Revised
GP-000419	CR 04.60-A899 rev 1 Correction of Packet Flow Context Procedures (R99)	Motorola	Approved
GP-000410	CR 04.60-A900 Clarification of assembling convention for RLC/MAC control blocks	Ericsson	Postponed
GP-000078	CR 04.71-A005 related to modifications of the RIT measurements (R98)	Nokia	Revised
GP-000399	CR 04.71-A005 rev 1 related to modifications of the RIT measurements (R98)	Nokia	Postponed
GP-000079	CR 04.71-A006 related to modifications of the RIT measurements (R99)	Nokia	Revised
GP-000400	CR 04.71-A006 rev 1 related to modifications of the RIT measurements (R99)	Nokia	Postponed
GP-000092	CR 05.01-A028 DTM (R99)	Nokia	Approved

Tdoc	Title	Source	Status
GP-000093	CR 05.01-A029 DTM+EGPRS (R99)	Nokia	Approved
GP-000223	CR 05.01-A030 Introduction of GSM 700 in 05.01 (R00)	Nokia	Approved
GP-000426	CR 05.01-A031 Minimum Mobile Station Class and Channelisation Capabilities	Motorola	Approved
GP-000007	CR 05.02-A161 NCH clarification (R00)	ETSI STF139	Approved
GP-000094	CR 05.02-A162 DTM (R99)	Nokia	Approved
GP-000106	CR 05.02-A163 Corrections to COMPACT (R99)	Ericsson	Approved
GP-000107	CR 05.02-A164 Removal of GPRS related text (R96)	Ericsson	Approved
GP-000195	CR 05.02-A165 Editorial corrections related to COMPACT (R99)	Motorola	Approved
GP-000196	CR 05.02-A166 Maximum bit rate indication for radio interface (R99)	Motorola, Nokia, Mitsubishi, BT- Cellnet	Rejected
GP-000108	CR 05.03-A042 Removal of GPRS related text (R96)	Ericsson	Approved
GP-000013	CR 05.05-A162 Pico BTS Reference interference level clarification (R99)	Siemens	Approved
GP-000030	CR 05.05-A163 Alignment of spurious emissions GSM-3G(UTRA): BTS	Telia, T-Mobil	Approved
GP-000031	CR 05.05-A164 Alignment of spurious emissions GSM-3G(UTRA): MS	Telia, T-Mobil	Approved
GP-000087	CR 05.05-A165 Introduction of GSM 700 in 05.05 GSM on 700 MHz Frequency Band (R99)	Ericsson	Revised
GP-000370	CR 05.05-A165 rev 1 Introduction of GSM 700 in 05.05 GSM on 700 MHz Frequency Band (R99)	Ericsson	Approved
GP-000098	CR 05.05-A166 Definition of "small MS" (R97)	Ericsson	Revised
GP-000371	CR 05.05-A166 rev 1 Definition of "small MS" (R97)	Ericsson	Approved
GP-000099	CR 05.05-A167 Definition of "small MS" (R98)	Ericsson	Revised
GP-000372	CR 05.05-A167 rev 1 Definition of "small MS" (R98)	Ericsson	Approved
GP-000100	CR 05.05-A168 Definition of "small MS" (R99)	Ericsson	Revised
GP-000373	CR 05.05-A168 rev 1 Definition of "small MS" (R99)	Ericsson	Approved
GP-000109	CR 05.05-A169 Removal of GPRS related text (R96)	Ericsson	Approved
GP-000321	CR 05.05-A170 Correction on CS-4 performance requirements (R97)	Alcatel	Approved

Tdoc	Title	Source	Status
GP-000322	CR 05.05-A171 Correction on CS-4 performance requirements (R98)	Alcatel	Approved
GP-000323	CR 05.05-A172 Correction on CS-4 performance requirements (R99)	Alcatel	Approved
GP-000088	CR 05.05-A173 Clarification of BTS output power capability with 8PSK (R99)	Ericsson & Nokia	Revised
GP-000363	CR 05.05-A173 rev 1 Clarification of BTS output power capability with 8PSK (R99)	Ericsson & Nokia	Approved
GP-000014	CR 05.08-A284 Extended measurement report (MAFA) (R96)	Siemens	Revised
GP-000332	CR 05.08-A284 rev 1 Extended measurement report (MAFA) (R96)	Siemens	Approved
GP-000015	CR 05.08-A285 Extended measurement report (MAFA) (R97)	Siemens	Revised
GP-000333	CR 05.08-A285 rev 1 Extended measurement report (MAFA) (R97)	Siemens	Approved
GP-000016	CR 05.08-A286 Extended measurement report (MAFA) (R98)	Siemens	Revised
GP-000334	CR 05.08-A286 rev 1 Extended measurement report (MAFA) (R98)	Siemens	Approved
GP-000017	CR 05.08-A287 Extended measurement report (MAFA) (R99)	Siemens	Revised
GP-000335	CR 05.08-A287 rev 1 Extended measurement report (MAFA) (R99)	Siemens	Approved
GP-000101	CR 05.08-A288 Clarifications on EGPRS Quality parameters (R99)	Ericsson	Revised
GP-000361	CR 05.08-A288 rev 1 Clarifications on EGPRS Quality parameters (R99)	Ericsson	Approved
GP-000102	CR 05.08-A289 Editorial corrections (R99)	Ericsson	Revised
GP-000336	CR 05.08-A289 rev 1 Editorial corrections (R99)	Ericsson	Approved
GP-000103	CR 05.08-A290 Clarifications of interference measurements for COMPACT (R99)	Ericsson	Revised
GP-000362	CR 05.08-A290 rev 1 Clarifications of interference measurements for COMPACT (R99)	Ericsson	Approved
GP-000104	CR 05.08-A291 Corrections to Inter System Handover and Cell re-selection (R99)	Ericsson	Revised
GP-000330	CR 05.08-A291 rev 1 Corrections to Inter System Handover and Cell re-selection (R99)	Ericsson	Approved

Tdoc	Title	Source	Status
GP-000110	CR 05.08-A292 Removal of GPRS related text (R96)	Ericsson	Approved
GP-000224	CR 05.08-A293 GSM 700 bands introduced in 05.08 (R00)	Nokia	Approved
GP-000273	CR 05.08-A294 BTS RF power control (R97)	Alcatel	Rejected
GP-000274	CR 05.08-A295 BTS RF power control (R98)	Alcatel	Rejected
GP-000275	CR 05.08-A296 BTS RF power control (R99)	Alcatel	Revised
GP-000325	CR 05.08-A296 rev 1 BTS RF power control (R99)	Alcatel	Approved
GP-000328	CR 05.08-A297 Correction to measurement reporting for DTM (R99)	Motorola	Approved
GP-000329	CR 05.08-A298 Corrections to BSIC decoding (R99)	Motorola	Revised
GP-000364	CR 05.08-A298 rev 1 Corrections to BSIC decoding (R99)	Motorola	Approved
GP-000291	CR 05.09-A009 ACS changes (R98)	Nortel Networks	Rejected
GP-000292	CR 05.09-A010 ACS changes (R99)	Nortel Networks	Rejected
GP-000293	CR 05.09-A011 RATSCCH Mapping (R98)	Nortel Networks	Rejected
GP-000294	CR 05.09-A012 RATSCCH Mapping (R99)	Nortel Networks	Rejected
GP-000105	CR 05.10-A059 Correction of assignment reaction time (R99)	Ericsson	Approved
GP-000111	CR 05.10-A060 Removal of GPRS related text (R96)	Ericsson	Approved
GP-000220	CR 05.10-A061 Addition of the switching requirement for the GSM to UTRAN (R99)	Nokia	Approved
GP-000010	CR 08.08-A210 Subject: Geographic Shape Restriction in LCS (R98)	Siemens ICM	Revised
GP-000395	CR 08.08-A210 rev 1 Subject: Geographic Shape Restriction in LCS (R98)	Siemens	Approved
GP-000011	CR 08.08-A211 Subject: Geographic Shape Restriction in LCS (R99)	Siemens ICM	Approved
GP-000140	CR 08.08-A212 DTM: correction to DTM information in Old BSS to new BSS Information IE (R99)	Vodafone	Approved
GP-000148	CR 08.08-A213 DTM: deletion of reference to PDSS2 (R99)	Vodafone	Approved
GP-000152	CR 08.08-A214 DTM: clarification of the use of the COMMOM ID message (R99)	Vodafone	Revised
GP-000339	CR 08.08-A214 rev 1 DTM: clarification of the use of the COMMOM ID message (R99)	Vodafone	Revised

Tdoc	Title	Source	Status
GP-000422	CR 08.08-A214 rev 2 DTM: clarification of the use of the COMMOM ID message (R99)	Vodafone	Approved
GP-000173	CR 08.08-A215 32 kbit/s UDI/RDI multimedia in GSM (R99)	Nokia	Revised
GP-000382	CR 08.08-A215 rev 1 32 kbit/s UDI/RDI multimedia in GSM (R99)	Nokia	Approved
GP-000175	CR 08.08-A216 Correction of Signalling Field Element Coding (R99)	Nokia	Approved
GP-000177	CR 08.08-A217 Source Identification (R99)	Nokia	Revised
GP-000345	CR 08.08-A217 rev 1 Source Identification (R99)	Nokia	Approved
GP-000268	CR 08.08-A218 Various corrections about Intersystem HO(R99)	Nortel Networks	Rejected
GP-000229	CR 08.08-A219 Correction on LCS message coding (R98)	Ericsson	Rejected
GP-000230	CR 08.08-A220 Correction on LCS message coding (R99)	Ericsson	Rejected
GP-000232	CR 08.08-A223 CIC allocation correction (R99)	Ericsson	Withdrawn
GP-000286	CR 08.08-A224 Old to new BSS container (R99)	Ericsson	Revised
GP-000415	CR 08.08-A224 rev 1 Old to new BSS container (R99)	Ericsson	Revised
GP-000424	CR 08.08-A224 rev 2 Old to new BSS container (R99)	Ericsson	Revised
GP-000474	CR 08.08-A224 rev 3 Old to new BSS container (R99)	Ericsson	Revised
GP-000476	CR 08.08-A224 rev 4 Old to new BSS container (R99)	Ericsson	Approved
GP-000129	CR 08.18-A104 DTM: tunnelling of GPRS signalling on the main DCCH (R99)	Nokia / Vodafone	Approved
GP-000135	CR 08.18-A105 DTM: download of the IMSI from the SGSN to the BSC	Vodafone	Approved
GP-000139	CR 08.18-A106 DTM: reuse of the GPRS Suspension procedure in cells with no DTM capabilities	Vodafone	Approved
GP-000309	CR 08.18-A107 Gb Interface: BSS Packet Flow Context Procedures (R99)	Motorola	Approved
GP-000398	CR 08.18-A108 Leaky bucket synchronization in BSSGP	Motorola	Revised
GP-000420	CR 08.18-A108 rev 1 Leaky bucket synchronization in BSSGP	Motorola	Postponed
GP-000263	CR 08.58-A054 Correction to Channel Mode IE (R99)	Nokia	Approved
GP-000008	CR 09.31-A017 Subject: Geographic Shape Restriction in LCS (R98)	Siemens ICM	Revised

Tdoc	Title	Source	Status
GP-000393	CR 09.31-A017 rev 1 Subject: Geographic Shape Restriction in LCS (R98)	Siemens	Approved
GP-000009	CR 09.31-A018 Subject: Geographic Shape Restriction in LCS (R99)	Siemens ICM	Revised
GP-000394	CR 09.31-A018 rev 1 Subject: Geographic Shape Restriction in LCS (R99)	Siemens	Approved
GP-000029	CR 11.21-A131 Changes in clause 7 due to EDGE and GSM 05.01 (R99)	Siemens	Revised
GP-000366	CR 11.21-A131 rev 1 Changes in clause 7 due to EDGE and GSM 05.01	Siemens	Approved
GP-000053	CR 11.21-A132 Correction of test case for Signal quality, EGPRS	Ericsson	Revised
GP-000367	CR 11.21-A132 rev 1 Correction of test case for Signal quality, EGPRS	Ericsson	Approved
GP-000054	CR 11.21-A133 Correction of spurious requirements in UMTS bands	Ericsson	Revised
GP-000368	CR 11.21-A133 rev 1 Correction of spurious requirements in UMTS bands.	Ericsson	Approved
GP-000276	CR 11.21-A134 Correction of Blocking and AM suppression test case in GSM11.21	Nokia	Revised
GP-000365	CR 11.21-A134 rev 1 Correction of Blocking and AM suppression test case in GSM11.21	Nokia	Approved
GP-000134	CR 23.060-xxx DTM: download of the IMSI from the SGSN to the BSC (R99)	Vodafone	Not GERAN
GP-000316	CR 23.060-xxx DTM: download of the IMSI from the SGSN to the BSC (R99)	Vodafone	Not GERAN
GP-000136	CR 23.060-xxx DTM: reuse of the GPRS Suspension procedure in cells with no DTM capabilities (R99)	Vodafone	Not GERAN
GP-000319	CR 23.060-xxx DTM: reuse of the GPRS Suspension procedure in cells with no DTM capabilities (R99)	Vodafone	Not GERAN
GP-000130	CR 23.060-xxx DTM: simultaneous LAU and RAU procedures on an SDCCH (R99)	Vodafone	Not GERAN
GP-000200	CR 24.008-xxx "Maximum bit rate indication for radio interface (for information) (R99)	Motorola, Nokia, Mitsubishi, BT- Cellnet	Not GERAN
GP-000097	CR 24.008-xxx DTM+EGPRS (R99)	Nokia	Not GERAN

Tdoc	Title	Source	Status
GP-000225	CR 24.008-xxx GSM 700 addition into MS classmark & radio access capability IE (R00)	Nokia	Not GERAN
GP-000417	CR 24.008-xxx GSM 700 addition into MS classmark & radio access capability IE (R00)	Nokia	Not GERAN
GP-000032	CR 44.018-001 Wrong NLN reference (R00)	ETSI STF139	Approved
GP-000022	CR 44.018-002 Extended measurement report (MAFA) (R00)	Siemens	Revised
GP-000381	CR 44.018-002 rev 1 Extended measurement report (MAFA) (R00)	Siemens	Approved
GP-000028	CR 44.018-003 Handling of Power-Control-Parameter alpha (R00)	Siemens	Approved
GP-000122	CR 44.018-004 DTM: Removal of polling from DTM assignment (R00)	Ericsson	Approved
GP-000124	CR 44.018-005 DTM: Correction of timers T3148 and T3107 (R00)	Ericsson	Revised
GP-000343	CR 44.018-005 rev 1 DTM: Correction of timers T3148 and T3107 (R00)	Ericsson	Approved
GP-000128	CR 44.018-006 DTM: tunnelling of GPRS signalling on the main DCCH (R00)	Nokia / Vodafone	Approved
GP-000133	CR 44.018-007 DTM: provision of GPRS information for correct DTM behaviour (R00)	Vodafone	Revised
GP-000315	CR 44.018-007 rev 1 DTM: provision of GPRS information for correct DTM behaviour (R00)	Vodafone	Approved
GP-000138	CR 44.018-008 DTM: reuse of the GPRS Suspension procedure in cells with no DTM capabilities (R00)	Vodafone	Revised
GP-000318	CR 44.018-008 rev 1 DTM: reuse of the GPRS Suspension procedure in cells with no DTM capabilities (R00)	Vodafone	Approved
GP-000143	CR 44.018-009 DTM: alignment of the handover procedure (R00)	Vodafone	Approved
GP-000145	CR 44.018-010 DTM: clarification of Radio Link Failure and RR connection abortion while in DTM (R00)	Vodafone	Approved
GP-000147	CR 44.018-011 DTM: removal of the Main DCCH Assignment message (R00)	Vodafone	Revised
GP-000338	CR 44.018-011 rev 1 DTM: removal of the Main DCCH Assignment message (R00)	Vodafone	Approved
GP-000151	CR 44.018-012 DTM: definition (R00)	Vodafone	Approved

Tdoc	Title	Source	Status
GP-000156	CR 44.018-013 Support of 11 bits request reference in IA and IAR messages (R00)	Alcatel	Revised
GP-000390	CR 44.018-013 rev 1 Support of 11 bits request reference in IA and IAR messages (R00)	Alcatel	Approved
GP-000180	CR 44.018-014 DTM: GPRS information for DTM operation - TBF re-establishment (R00)	Ericsson	Approved
GP-000186	CR 44.018-015 Correction of Table 10.5.60/GSM 44.018 (R00)	Ericsson	Withdrawn
GP-000192	CR 44.018-016 Interpretation addition of CELL_BAR_QUALIFY_2 value (R00)	Ericsson	Approved
GP-000096	CR 44.018-017 DTM+EGPRS (R00)	Nokia	Approved
GP-000267	CR 44.018-018 Correction on Measurement Info Message (R00)	Nortel Networks	Approved
GP-000205	CR 44.018-019 SI2ter bit map correction (R00)	Vodafone	Revised
GP-000386	CR 44.018-019 rev 1 SI2ter bit map correction (R00)	Vodafone	Approved
GP-000207	CR 44.018-020 SI2quater updates to allow GPRS->UMTS Cell-Reselection (R00)	Vodafone	Approved
GP-000210	CR 44.018-021 Detailed coding modifications for the preconfigurations (R00)	Vodafone	Revised
GP-000412	CR 44.018-021 rev 1 Detailed coding modifications for the preconfigurations (R00)	Vodafone	Approved
GP-000212	CR 44.018-022 Allowing MT calls when downloading preconfigurations (R00)	Vodafone	Withdrawn
GP-000214	CR 44.018-023 Handover to UMTS description procedure including "blind handover" to UMTS	Vodafone	Revised
GP-000357	CR 44.018-023 rev 1 Handover to UMTS description procedure including "blind handover" to UMTS	Vodafone	Approved
GP-000271	CR 44.018-024 Correction on UTRAN classmark change procedure (R00	Nortel Networks	Revised
GP-000354	CR 44.018-024 rev 1 Correction on UTRAN classmark change procedure (R00	Nortel Networks	Approved
GP-000235	CR 44.018-025 Handover to UTRAN Command message format (R00)	Ericsson	Revised
GP-000388	CR 44.018-025 rev 1 Handover to UTRAN Command message format (R00)	Ericsson	Withdrawn
GP-000237	CR 44.018-026 RAB pre-configuration (R00)	Ericsson	Revised

Tdoc	Title	Source	Status
GP-000349	CR 44.018-026 rev 1 RAB pre-configuration (R00)	Ericsson	Withdrawn
GP-000260	CR 44.018-027 Editorial correction on RR Packet Uplink/Downlink Assigment (R00)	Nokia	Revised
GP-000307	CR 44.018-027 rev 1 Editorial correction on RR Packet Uplink/Downlink Assigment (R00)	Nokia	Approved
GP-000289	CR 44.018-028 UE Security in UTRAN CM CHANGE (R00)	Ericsson	Revised
GP-000351	CR 44.018-028 rev 1 UE Security in UTRAN CM CHANGE (R00)	Ericsson	Withdrawn
GP-000359	CR 44.018-029 Noise suppression control for AMR	BellSouth, DT, BT, FT	Approved
GP-000034	CR 48.008-001 VBS/VGCS assignment request message can be piggy-backed in a SCCP Connection Request message (R00)	ETSI STF139	Approved
GP-000033	CR 48.008-002 CLEAR REQUEST use precision with VGCS/VBS call (R00)	ETSI STF139	Approved
GP-000012	CR 48.008-003 Subject: Geographic Shape Restriction in LCS (R00)	Siemens ICM	Approved
GP-000141	CR 48.008-004 DTM: correction to DTM information in Old BSS to new BSS Information IE (R00)	Vodafone	Approved
GP-000149	CR 48.008-005 DTM: deletion of reference to PDSS2 (R00)	Vodafone	Approved
GP-000153	CR 48.008-006 DTM: clarification of the use of the COMMOM ID message (R00)	Vodafone	Revised
GP-000340	CR 48.008-006 rev 1 DTM: clarification of the use of the COMMOM ID message (R00)	Vodafone	Revised
GP-000423	CR 48.008-006 rev 2 DTM: clarification of the use of the COMMOM ID message (R00)	Vodafone	Approved
GP-000174	CR 48.008-007 32 kbit/s UDI/RDI multimedia in GSM (R00)	Nokia	Revised
GP-000383	CR 48.008-007 rev 1 32 kbit/s UDI/RDI multimedia in GSM (R00)	Nokia	Approved
GP-000176	CR 48.008-008 Correction of Signalling Field Element Coding (R00)	Nokia	Approved
GP-000178	CR 48.008-009 Source Identification (R00)	Nokia	Revised
GP-000346	CR 48.008-009 rev 1 Source Identification (R00)	Nokia	Approved
GP-000269	CR 48.008-010 Various corrections about Intersystem HO(R00)	Nortel Networks	Rejected

Tdoc	Title	Source	Status
GP-000231	CR 48.008-011 Correction on LCS message coding (R00)	Ericsson	Rejected
GP-000233	CR 48.008-012 CIC allocation correction (R00)	Ericsson	Witthdrawn
GP-000287	CR 48.008-013 Old to new BSS container (R00)	Ericsson	Revised
GP-000416	CR 48.008-013 rev 1 Old to new BSS container (R00)	Ericsson	Revised
GP-000425	CR 48.008-013 rev 2 Old to new BSS container (R00)	Ericsson	Revised
GP-000475	CR 48.008-013 rev 3 Old to new BSS container (R00)	Ericsson	Revised
GP-000477	CR 48.008-013 rev 4 Old to new BSS container (R00)	Ericsson	Approved

## GSM/EDGE Radio Access Network Technical Specification Group (TSG-GERAN) Terms of Reference

### **Background**

Operators of GSM/GPRS systems need an evolution and interoperability strategy. Evolution of GSM/EDGE radio access technologies offers such a path. This approach will ensure that systems based on 3GPP specifications will be capable of rapid development and deployment of competitive service offerings while still enabling global roaming.

### Terms of reference

The technical specification development work within 3GPP is accomplished by Technical Specification Groups (TSGs) according to the principles and rules contained in the Project reference documentation (Partnership Project Description, Partnership Project Agreement, Partnership Project Working Procedures). In particular, the TSGs report to the Project coordination Group (PCG), and may organize their work in Working Groups and liaise with other groups as appropriate.

Each TSG has the responsibility to develop, approve and maintain the specifications within its terms of reference.

The TSG GSM/EDGE Radio Access Network (TSG-GERAN) is responsible for the radio access part for GERAN specifications.

Specifically it has a responsibility for:

- · GERAN Radio aspects, and interfaces.
- Management of work items placed under its responsibility.

More specifically, TSG-GERAN will address the following areas of work:

- · RF aspects of GERAN
- GERAN Radio Layer 1 specification;
- GERAN Radio Layer 2 specification;
- GERAN Radio Layer 3 RR specification
- 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
- Specifications for GERAN radio performance and RF system aspects.
- GERAN specific O&M specifications for the nodes in the GERAN
- Liaising with other TSGs to ensure overall co-ordination.

#### Glossary of terms

CCU Channel Codec Unit CN Core Network

GSM Global System for Mobiles

**EDGE** Enhanced Data for GSM Evolution RR Radio Resource Transcoder and Rate Adapter Unit Operations and Maintenance TRAU

O&M

# Proposed GSM/EDGE Radio Access Network Technical Specification Group Working Group 2 Protocol Aspects (TSG-GERAN WG2 Protocol Aspects) Terms of Reference

### **Background**

Operators of GSM/GPRS systems need an evolution and interoperability strategy. Evolution of GSM/EDGE radio access technologies offers such a path. This approach will ensure that systems based on 3GPP specifications will be capable of rapid development and deployment of competitive service offerings while still enabling global roaming.

#### Terms of reference

The technical specification development work within 3GPP is accomplished by Technical Specification Groups (TSGs) according to the principles and rules contained in the Project reference documentation (Partnership Project Description, Partnership Project Agreement, Partnership Project Working Procedures). In particular, the TSGs report to the Project coordination Group (PCG), and may organize their work in Working Groups and liaise with other groups as appropriate.

Each TSG has the responsibility to develop, approve and maintain the specifications within its terms of reference.

The TSG GSM/EDGE Radio Access Network (TSG-GERAN) is responsible for the radio access part for GERAN specifications.

Specifically it has a responsibility for:

- · GERAN Radio aspects, and interfaces.
- Management of work items placed under its responsibility.

More specifically, TSG-GERAN WG2 is responsible for and will address the following areas of work of TSG-GERAN:

- GERAN Radio Layer 2 specification;
- GERAN Radio Layer 3 RR specification
- A interface specification, Gb interface specification
- Internal GERAN interface specifications such as Abis
- Liaising with other TSGs to ensure overall co-ordination.

### **Glossary of terms**

CCU Channel Codec Unit CN Core Network

GSM Global System for Mobiles

EDGE Enhanced Data for GSM Evolution

RR Radio Resource

# Proposed GSM/EDGE Radio Access Network Technical Specification Group Working Group 3 Base Station Testing and O&M (TSG-GERAN WG3 Base Station Testing and O&M) Terms of Reference

### **Background**

Operators of GSM/GPRS systems need an evolution and interoperability strategy. Evolution of GSM/EDGE radio access technologies offers such a path. This approach will ensure that systems based on 3GPP specifications will be capable of rapid development and deployment of competitive service offerings while still enabling global roaming.

#### Terms of reference

The technical specification development work within 3GPP is accomplished by Technical Specification Groups (TSGs) according to the principles and rules contained in the Project reference documentation (Partnership Project Description, Partnership Project Agreement, Partnership Project Working Procedures). In particular, the TSGs report to the Project coordination Group (PCG), and may organize their work in Working Groups and liaise with other groups as appropriate.

Each TSG has the responsibility to develop, approve and maintain the specifications within its terms of reference.

The TSG GSM/EDGE Radio Access Network (TSG-GERAN) is responsible for the radio access part for GERAN specifications.

Specifically it has a responsibility for:

- GERAN Radio aspects, and interfaces.
- Management of work items placed under its responsibility.

More specifically, TSG-GERAN WG3 is responsible for and will address the following areas of work of TSG-GERAN:

- Conformance test specifications for testing of all aspects of GERAN base stations
- GERAN specific O&M specifications for the nodes in the GERAN
- Liaising with other TSGs to ensure overall co-ordination.

### Glossary of terms

CCU Channel Codec Unit CN Core Network

GSM Global System for Mobiles

EDGE Enhanced Data for GSM Evolution

RR Radio Resource

# Proposed GSM/EDGE Radio Access Network Technical Specification Group Working Group 4 Terminal Testing (TSG-GERAN WG4 Terminal Testing) Terms of Reference

### **Background**

Operators of GSM/GPRS systems need an evolution and interoperability strategy. Evolution of GSM/EDGE radio access technologies offers such a path. This approach will ensure that systems based on 3GPP specifications will be capable of rapid development and deployment of competitive service offerings while still enabling global roaming.

#### Terms of reference

The technical specification development work within 3GPP is accomplished by Technical Specification Groups (TSGs) according to the principles and rules contained in the Project reference documentation (Partnership Project Description, Partnership Project Agreement, Partnership Project Working Procedures). In particular, the TSGs report to the Project coordination Group (PCG), and may organize their work in Working Groups and liaise with other groups as appropriate.

Each TSG has the responsibility to develop, approve and maintain the specifications within its terms of reference.

The TSG GSM/EDGE Radio Access Network (TSG-GERAN) is responsible for the radio access part for GERAN specifications.

Specifically it has a responsibility for:

- · GERAN Radio aspects, and interfaces.
- Management of work items placed under its responsibility.

More specifically, TSG-GERAN WG4 is responsible for and will address the following areas of work of TSG-GERAN:

- Conformance test specifications for testing of all aspects of GERAN terminals
- Liaising with other TSGs to ensure overall co-ordination.

### **Glossary of terms**

CCU Channel Codec Unit CN Core Network

GSM Global System for Mobiles

EDGE Enhanced Data for GSM Evolution

RR Radio Resource

# Proposed GSM/EDGE Radio Access Network Technical Specification Group Working Group 1 Radio Aspects (TSG-GERAN WG1 Radio Aspects) Terms of Reference

### **Background**

Operators of GSM/GPRS systems need an evolution and interoperability strategy. Evolution of GSM/EDGE radio access technologies offers such a path. This approach will ensure that systems based on 3GPP specifications will be capable of rapid development and deployment of competitive service offerings while still enabling global roaming.

#### Terms of reference

The technical specification development work within 3GPP is accomplished by Technical Specification Groups (TSGs) according to the principles and rules contained in the Project reference documentation (Partnership Project Description, Partnership Project Agreement, Partnership Project Working Procedures). In particular, the TSGs report to the Project coordination Group (PCG), and may organize their work in Working Groups and liaise with other groups as appropriate.

Each TSG has the responsibility to develop, approve and maintain the specifications within its terms of reference.

The TSG GSM/EDGE Radio Access Network (TSG-GERAN) is responsible for the radio access part for GERAN specifications.

Specifically it has a responsibility for:

- · GERAN Radio aspects, and interfaces.
- Management of work items placed under its responsibility.

More specifically, TSG-GERAN WG1 is responsible for and will address the following areas of work of TSG-GERAN:

- · RF aspects of GERAN
- GERAN Radio Layer 1 specification;
- Internal GERAN interface specifications such Ater (CCU-TRAU)
- Specifications for GERAN radio performance and RF system aspects.
- Liaising with other TSGs and their working groups to ensure overall co-ordination.

### Glossary of terms

CCU Channel Codec Unit CN Core Network

GSM Global System for Mobiles

EDGE Enhanced Data for GSM Evolution

RR Radio Resource

Source: TSG GERAN

### **Detailed workplan for TSG GERAN**

### 1 Introduction

This document presents a detailed plan for the work carried out in TSG GERAN. The work plan below covers all radio related issues, even those handled by other TSGs, which is related to TSG GERAN. This is just done in order to give a complete picture (i.e. lu related issues).

It is suggested to include the work plan into the overall 3GPP work plan.

### 2 3GPP project plan for R00

ICG has proposed a work plan for release 2000 in ref [1], which describes the complete set of R00 work items and classifies them as feature, building block and work tasks. This work plan is planned to be reviewed on the TSG-SA meeting in August also discussing, when in time certain features will be available. Currently this plan does not or very incomplete consider GERAN related issues.

In order to allow an easy introduction of GERAN issues the same skeleton for the GERAN work issues has been chosen. The following columns are used in this plan:

**Feature:** New, or substantially enhanced functionality which represents added value to the existing system. A feature should normally embody an improved service to the customer and / or increased revenue generation potential to the supplier.

**Building block:** A sub-division of a feature, representing a set of technical functionality which would generally be expected to reside in a single system element, i.e. a single physical or logical entity or a single protocol. Building blocks may be "re-usable" - that is, a single building block may be common to two or more features.

**Work task:** A sub-division of a building block, representing a self-contained, well-scoped and well-scheduled item of work. A work task will almost certainly be the responsibility of a single Working Group. The output of a work task is the creation of one or more new Technical Specifications (or Reports) and / or Change Requests to existing TSs / TRs.

### 3 The GERAN work plan

When mapping the date of completion the following assumptions have been taken on the timing of TSG GERAN meetings:

TSG GERAN #2 Nov 2000 TSG GERAN #3 Jan 2001 15-19 TSG GERAN #4 April 2001 2-6 TSG GERAN #5 May 2001 28-1 TSG GERAN #6 Aug 2001 27-31 TSG GERAN #7 Nov 2001 26-30

Feature	Building	Work task	Date of
	block		completion
Evolution of transport (UTRAN Feature	Evolution of transport in UTRAN and GERAN	Addition of transport mechanisms other than ATM for lu     Identification of alternative transports     Specification of those alternative transports	To be estimated by R3
GERAN/UTRAN interface evolution 1/48129	Evolution of lu ps	Identification of GERAN requirements on lu ps     Update of specifications	Nov 2000 (#2) Feb 2001 (#3)
GERAN/UTRAN interface evolution 2 478	Evolution of lu cs 430	Identification of GERAN requirements on lu cs     Update of specifications	Nov 2000 (#2) Feb 2001 (#3)
	Evolution of A interface 431	Identification of GERAN requirements on A     Update of specifications	Nov 2000 (#2) Feb 2001 (#3)
Low chip rate TDD option (UTRAN)	Low chiprate TDD interworking with GERAN 432	Handover and Cell Selection /     Reselection to UTRA 1.28Mcps     TDD	Jan 2001 (#3)
GERAN improvements 1 433	Gb over IP 434	IP-fication of Gb  Changes to 08.16, 08.18	Nov 2000 (#2)
GERAN improvements 2 435	Gb enhancements 436	Enhance cell reselections	Feb 2001 (#3)
GERAN radio interface evolution 46437	Overall concept for GERAN 438	Stage 2 03.51  Protocol architecture  Handover  Simultaneous RABs in GERAN.  Mapping of PDP contexts, RABs, RBs and TBFs?  Identity handling in GERAN  MS capabilities  ACK/NACK for OS2  MT / ME issue  SIP realization  RAB mode combinations	Nov 2000 (#2)
	GERAN Header adaptation 439	Header adaptation: Definition of compression and removal modes for PDCP protocol	Sept 2000 (#1)
	GERAN Radio access bearer design 440	MuM control signalling for conversational multimedia services.  Identification of requirements	Sept 2000 (#1)

	GERAN user / control plane 441	PDCP protocol design     Adoption of the UTRAN PDCP     Inclusion of header adaptation	Nov 2000 (#2)
		RLC / MAC     Specification	June 2001 (#5)
		Physical layer  Use of stealing bits  Fast Access  Logical and physical channel realization (TCH, PDTCH, control channels)  Fast power control	Feb 2001 (#3)
	GERAN RR	Receiver performance	June 2001 (#5) June 2001 (#5)
	442	GERAN RR	June 2001 (#3)
	lu rg interface 443	Inter BSC interface Identification of requirements Adoption of relevant parts from lu r Complementation with GERAN specifics New stage 3	Feb 2001 (#3)
	Voice over GERAN PS and CS concept 444	Voice over GERAN PS and CS concept	Nov 2000 (#2)
	GERAN Narrowband speech realization 445	<ul><li>Channel coding</li><li>Signalling</li><li>Link adaptation</li></ul>	Feb 2001 (#3)
	GERAN security 446	<ul> <li>Working assumptions for ciphering</li> <li>Requirements for integrity</li> <li>Modification of UTRAN specs to be valid also for GERAN</li> <li>Additional stage 3 work for GERAN</li> </ul>	Sept 2000*) Nov 2000*) Feb 2001*) June 2001*) (#5)
	GERAN MS Conformance test for GERAN interface evolution 447	MS test     BTS test	Dec 2001 (#7)
	GERAN BTS Conformance test for GERAN interface evolution 448	<ul><li>MS test</li><li>BTS test</li></ul>	Dec 2001 (#7)
700 MHz spect support 449	trum GERAN support for the 700 MHz band 450	Signaling support     Physical layer definitions     Receiver performance and RF budget	Feb 2001(#3)
	GERAN MS Conformance test for 700 MHz band 45 <u>1</u> 0	MS test	Apr 2001 (#4)
I	GERAN BTS Conformance test for GERAN interface evolution 4524	BTS test	Dec 2001 (#7)

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)	•	Stabile RT handover report 25.936	Required for RR development and lu rg by Nov 2000 (#2)
Wideband telephony services (UMTS)	Support of WB AMR in GERAN 453	• • •	Channel coding Signalling Link adaptation	Feb 2001 (#3)
	GERAN MS Conformance test for WB AMR 454	•	MS test	DecApr 2001 (#4)
	GERAN BTS Conformance test for WB AMR 455	•	BTS test	Dec 2001 (#7)
Location service (UMTS)	LCS interoprability aspects to GERAN 456	•	Co-ordinated development of GSM LCS Phase 2 and UMTS LCS, S2 and GERAN	Feb 2001 (#3)
	LCS in GERAN 457	• • •	GERAN LCS stage 2 lur-g interface support for LCS GERAN Gb,A interface support for LCS GERAN lu-cs(?), lu-ps interface support for LCS GERAN measurements + results Radio Resource Management (for LCS GERAN) Stage 3 specifications	Jan 2001 (#3) Feb 2001 (#3) Nov 2000 (#2) Feb 2001 (#3) May 2001 (#5) May 2001 (#5)
	GERAN MS Conformance test for LCS 458	•	MS test	Apr 2001 (#4)
	GERAN BTS Conformance test for LCS 459	•	BTS test	Dec 2001 (#7)

<sup>\*)</sup> Estimated by S3

### 4 Conclusion

A work plan covering all TSG related aspects is proposed. It should be noted, that the completion dates above reflect rather the date when the work is completed than a release date.