Source: **TSG-GERAN Chairman**

Title: **TSG-GERAN Management Report**

Agenda item: **4.5**

Document for:

Decision	
Discussion	
Information	**X**

1 Main events since last meeting

In the period April 2001 (PCG#06) to October 2001 (PCG#07) TSG-GERAN have held two TSG-GERAN plenary meeting, TSG-GERAN#05 in Chicago, USA, 28 May – 1 June 2001 and TSG-GERAN#06 in Naantali, Finland, 27 – 31 August 2001. Further to TSG-GERAN plenaries, a number of meetings of the TSG-GERAN working groups and ad-hoc meetings have taken place.

TSG GERAN have established the following five working groups:

TSG GERAN WG1 – Radio Aspects

TSG GERAN WG2 – Protocol Aspects

TSG GERAN WG3 – Base Station Testing and O&M

TSG GERAN WG4 – Terminal Testing – Radio Aspects

TSG GERAN WG5 – Terminal Testing – Protocol Aspects

2 Releases

As reported to 3GPP PCG #06 TSG GERAN completed at TSG GERAN#04 the expected work item for release 4 and thus causes no changes to the Release 4 content as agreed at TSG-SA#11. Following no major problems has been found and TSG GERAN therefore considers release 4 stabile. It is perhaps worth recalling that regarding earlier releases TSG-GERAN have issued a technical specification documenting very late changes to the Release 97 and Release 98 specifications for GPRS. This in order to ensure that documentation of the behaviour already existing mobiles exist when it has been found necessary to update the specifications for Release 97 and Release 98.

Also in relation to GPRS significant discussions have taken place in and out side the meetings of TSG GERAN regarding the support of PBCCH. However, the conclusion from TSG GERAN has been maintained the existing specification and focus on making testing avaialable. Meaning that support of PBCCH is kept mandatory for the terminals. Considering the high attention the issue attracted a summary of conclusions is provided below:

The following way forward for the PBCCH issues was agreed

1. *No change to R97*

2. *Definition of a recommended set of GPRS PCCCH/PBCCH features based on test capabilities and operator priorities, to ensure fast and safe mass market take-up of GPRS*

3. *IoT program that will first verify the recommended set, with the intention to verify the full PCCCH/PBCCH functionality, latest by the R99 implementation*

The objective of this program is to reduce ambiguity and lower investment risk. Further TSG GERAN received a contribution indicating the plan for Interoperability Testing and the recommend minimum set of features to be tested

*For a feature to be part of the recommended set, the following conditions should be met:it improves the packet signalling performance and provides a good business case for the operator;it can be tested now against at least two network manufacturers in their IOT laboratories.Note: the inclusion of a feature in this list assumes that it will be testable through test cases validated by the GSM Certification Forum (GCF) before the end of September 2001.**Recommended set**According to the above decision process, the following list had been agreed ammongst the manufacturers:NMO INMO IIIMultiple PCCCH (*)Hopping PBCCHHopping PCCCHHopping PDTCHC31 / C32NC0Multiplexing of PBCCH/PCCCH and PDTCH/PACCHPSI schedulingVariable PBCCH/PCCCH mappingHCS parametersSPLIT_PG_CYCLENon-DRX mode(*) Still under discussion: there was wide acceptance among the supporting companies that this feature should be part of the recommended set; however, only one network manufacturer could offer testing capability at present.In order to ensure fast IOT testing of the features in the recommended set, the following actions are on-going:a list of parameters that should be used to configure the network during those tests is being elaborated;a list of test cases corresponding to those features will be submitted to the GSM Certification Forum as early as possible.*At its initial meeting TSG-GERAN elaborated approximately 30 work items to cover the work of TSG GERAN. These work items have all be incorporated in a detailed work plan utilizing the Feature, Building Block and Work Task philosophy as used by the other TSGs. This work plan has following been integrated in the overall 3GPP work plan. TSG-GERAN have at the following meetings updated and adjusted these work item, in order to ensure that the correctly reflect the planned work and better aligns with the general structure in the overall 3GPP workplan. The decision of TSG SA of targeting release 5 for March 2002 was made after TSG GERAN#06 and the TSG GERAN work plan does therefore not yet reflect this date. The TSG GERAN work plan is provided in ANNEX I to this report.

3 Management issues

It is noted that the TSG GERAN WG2 chairman Bruno Landias, Alcatel has announced that he will not be able to continue as chairman for TSG GERAN WG2 from the end of 2001. Therefore and election of a chairman for TSG GERAN WG2 is scheduled for the WG2 meeting during TSG GERAN #07 in Cancun.

It is also to be noted that as the TSG GERAN WG3 chairman is no longer able to continue chairing the group a call for candidates for the TSG GERAN WG3 chairman position was made according to the working procedures, however no candidatures was received before or during the meeting. So currently TSG-GERAN WG3 is without a leadership. The TSG GERAN management has taken on board the task to find a convenor to convene the next meeting of the group.

Also the TSG GERAN WG4 chairman Jean-Marc Recouvroux, Alcatel had announced that he due to other tasks in the company was not able to continue as chairman of TSG GERAN WG4. TSG GERAN has used the opportunity to split the terminal testing into two groups. One responsible for the lower layers including the RLC/MAC the other responsible for the layers above. Election for the chairman positions of these groups will take place at the working group meetings during TSG GERAN #07 in Cancun.

The changes in TSG GERAN structure has been discussed with the 3GPP MCC and it is believe that the changes will not impact the overall requirement for support. The TSG GERAN support requirement for 2002 can therefore still be considered as being the same as for 2001.

3GPP TSG GERAN **TSGG#06(01)1920 rev**

Meeting no 6 **Agenda Item: 10**

Naantali, Finland

27 – 31 August 2001

Source: TSG GERAN

GERAN time plan

On the next 3GPP SA plenary, 24-28th of September 2001 in Bejing, China a decision on the content of release 5 will be taken. In order to give SA a good basis for decision it is planned to update the work plan for TSG GERAN according to the latest state.

Closed work item

The following work items have been closed, since they were complete and have been removed from the work plan.

Feature or building block	WI Tdoc
Low chiprate TDD interworking with GERAN	GP-000432
GERAN improvements 1 (Feature)	GP-000433
Gb over IP (Building block)	GP-000434
GERAN improvements 2 (Intra NACC Feature)	GP-000435
Gb enhancements (Intra NACC Building block)	GP-000436
GERAN Improvements 4 (Delayed TBF)	GP-010363
Gb enhancements 2 (Delayed TBF)	GP-010363
	GP-010932

Updated work plan

Feature	Building block	Work task	Date of completion	Impacted parties	Status
Evolution of transport (UTRAN Feature	Evolution of transport in UTRAN and GERAN	Addition of transport mechanisms other than ATM for Iu • Identification of alternative transports • Specification of those alternative transports	Mar 2002?	RAN 3	Ongoing
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	GERAN, RAN 3	Ongoing
GERAN/UTRAN interface evolution 2 GP-010417	Evolution of Iu cs GP-000430	• Identification of GERAN requirements on Iu cs • Update of specifications	Nov 2001 Mar 2002	GERAN, RAN 3	Ongoing
GERAN improvements 3 GP-010418	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.	Mar 2002	GERAN	Ongoing
GERAN Inter BSC NACC improvements over the Gb Interface	Modification of core network protocols for GERAN Inter BSC NACC over Gb Interface	Stage 2 • Concept • 23.060 change - Definition of Inter BSC NACC Stage 3 (changes to) • 29.060	 Oct 2001 Dec 2001 (TSG SA2) Feb 2002 (TSG CN4)	SA2, CN4	Ongoing
	Modificiation of Gb protocols for GERAN Inter BSC NACC over Gb Interface	Stage 3 (changes to) • 48.018	Feb 2002 (TSG GERAN #8)	GERAN	Ongoing
GERAN support for IP multimedia GP-010420	GERAN Header adaptation GP-010421	Header adaptation: • Definition of compression and removal modes for PDCP protocol • Conceptual description in stage 2 • Necessary changes on stage 3 regarding header removal	Sept 2000 Feb 2002 Mar 2002	GERAN, SA2, RAN	Ongoing
	GERAN Radio access bearer design for IP multimedia GP-010422	MuM control signalling for conversational multimedia services. • Identification of requirements • Necessary modifications due to SIP	Nov 2001 Jun 2002	GERAN, SA2, RAN	Ongoing

Feature	Building block	Work task	Date of completion	Impacted parties	Status
	GERAN MS Conformance test for support of IP multimedia GP-010424	• MS test	Dec 2002		Not started
	GERAN BTS Conformance test for support of IP multimedia GP-010425	• BTS test	Dec 2002		Not started
Alignment of 3G functional split and Iu GP-010426	GERAN user / control plane GP-011971	Alignment with UMTS bearer concept • Enhanced power control	Aug 2001		Ongoing
		• Stage 2	Jun 2001	GERAN	
		• Adoption of the UTRAN PDCP	Dec 2001	RAN 2	
		• Development of RLC / MAC	Apr 2002	GERAN WG2	
		• Development of GERAN RRC	Jun 2002	GERAN WG2	
		• Ciphering and integrity protection concept paper	Oct 2001	GERAN WG2	
		• Multiple TBF or equivalent Concept paper	Oct 2001	GERAN WG2	
		• Paging concept	Oct 2001	GERAN WG2	
		• Dedicated physical subchannels. Includes traffic and control channels	Oct 2001	GERAN WG1 / WG2	
		• Iu support and broadcast concept	Nov 2001	GERAN WG1 / WG2	
		• Impact of using RLC instead of LAPDm concept	Oct 2001	GERAN WG1 / WG2	
		• Contention resolution, mobile-station identity, and access concept	Oct 2001	GERAN WG2	
		• PDCP concept	Oct 2001	GERAN WG 2 / WG1	
		• Downlink delayed TBF release	Oct 2001	GERAN WG2	

Feature	Building block	Work task	Date of completion	Impacted parties	Status
		• Add transparent RLC Concept	Oct 2001	GERAN WG2	
		• Handover concept	Nov 2001	GERAN WG2	
		Physical layer alignment with UMTS bearer concept • Control channels in 45.003 • Receiver performance in 45.005 for PDTCH/TCH and control channels	 Jun 2001 Nov 2001	GERAN	
	Iu rg interface GP-010427	Inter BSS interface • Identification of requirements • Stage 2 • Adoption of relevant parts from Iu r • Complementation with GERAN specifics • New stage 3	Jun 2002	GERAN	Ongoing
		Inter BSS-RNS interface • Identification of requirements • Stage 2 • Adoption of relevant parts from Iu r • Complementation with GERAN specifics • New stage 3	Jun 2002	GERAN, RAN3	Ongoing
	Voice over GERAN PS and CS concept GP-010432	Voice over GERAN PS and CS concept • Architecture for A, Iu cs and Iu ps • Handover • RTP payload • Codec renegotation concept	Mar 2002	GERAN, RAN3	Ongoing
	GERAN Narrowband speech realization GP-010433	8PSK NB HR • Channel coding in 45.003 • Signalling for A interface • Signalling for Iu • Link adaptation in 45.009 • Receiver performance in 45.005	Jun 2001 Mar 2002	GERAN WG1	Ongoing
	GERAN MS Conformance test for GERAN interface evolution GP-010434	• MS test	Dec 2002		Not started
	GERAN BTS Conformance test for GERAN interface evolution GP-010435	• BTS test	Dec 2002		Not started
GERAN enhancements for streaming services 1 GP-010430	GERAN enhancements for streaming services 1 GP-010430	• Concept • RLC protocol enhancement (SDU Discard)	Oct 2001 Nov 2001		Ongoing

Feature	Building block	Work task	Date of completion	Impacted parties	Status
GERAN enhancements for streaming services 2 GP-010429	GERAN enhancements for streaming services 2 GP-010429	Usage of ECSD concept Stage 2 Stage 3 • RLC PDU formats • MAC header	 Jun 2002 Jun 2002		Ongoing
700 MHz spectrum support GP-000449		•			
	GERAN MS Conformance test for 700 MHz band GP-000451	• MS test	Nov 2001		Ongoing
	GERAN BTS Conformance test for GERAN interface evolution GP-000452	• BTS test	Nov 2001		Ongoing
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) GP-010431	• Handover concept • Relevant stage 3 -> RRC	Nov 2001	GERAN WG2	Ongoing
	GERAN MS Conformance test for inter-system and intra-system Packet data real-time Handover GP-011622	Hand-over for the packet switched domain • Stable RT hand-over report 25.936 including header removal • Update of stage 2 • Update of relevant stage 3 specs	Jun 2002	GERAN WG4; RAN3	Ongoing
Wideband telephony services (UMTS)	Support of WB AMR in GERAN GP-000453	GMSK and 8PSK WB FR / HR support • Channel coding in 45.003 • Signalling for A interface • Signalling for Iu • • Receiver performance in 45.005	 Jun 2001 Jun 2001 Mar 2002		Ongoing

Feature	Building block	Work task	Date of completion	Impacted parties	Status
	GERAN MS Conformance test for WB AMR GP-000454	• MS test	Jun 2002		Not started
	GERAN BTS Conformance test for WB AMR GP-000455	• BTS test	Jun 2002		Not started
Location service (UMTS)	LCS interoprability aspects to GERAN GP-000456	• Co-ordinated development of GSM LCS Phase 2 and UMTS LCS, S2 and GERAN	November 2001 (#7)	SA WG 1, WG 2, WG 5 RAN WG 2, WG 3 GERAN WG 2, WG 1	Ongoing
	Location Services (LCS) for GERAN in A/Gb Mode GP-011925	• GERAN LCS Stage Two (first release) • Gb interface support for LCS • L3 protocol support for LCS • Stage 3 specifications	August 2001(#6) April 2001(#4)	GERAN WG 1, WG 2 SA WG 2	Ongoing GERAN LCS Stage 2 80% complete Gb mode CRs ready Stage 3 specifications ready
	Location Services (LCS) for GERAN in Iu Mode GP-011926	• GERAN LCS stage 2 (second release) • Iu-ps interface support for LCS • Iu-cs interface support for LCS • Iur-g interface support for LCS • RRC protocol support for LCS • Additional impacts on Broadcast of LCS data on packet channels • Stage 3 specifications	November 2001 (#7) – Stage 2 Stage 3 – June (#10) 2002	3GPP GERAN WG 1, WG 2 3GPP RAN WG 2, WG 3 3GPP SA WG 2	*Ongoing* *GERAN LCS Stage 2 IU mode 50% complete* *Iug-r i/f not started* *Stage 3 specifications needed*

Feature	Building block	Work task	Date of completion	Impacted parties	Status
	GERAN MS Conformance test for LCS GP-000458	• MS test	(R98/99/4) November 2001 (#7) (Rel 5) June 2002 (#10)	3GPP GERAN WG 4	*Ongoing*
	GERAN BTS Conformance test for LCS GP-000459	• BTS test	June 2002	3GPP GERAN WG 3	*Work has not started*