3GPP TSG_CN Plenary #8 **NP-000256**
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Agenda item:

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TSGN1 status report to TSGN plenary meeting #8

1 Introduction

This report summarises the progress of TSGN1 on the work items which have been active in the working group since TSGN plenary meeting #7. TSGN1 has had one regular meeting since TSGN plenary #7. TSGN1 #11 was held in Hawaii, U.S., hosted by T1P1. Additionally to this TSGN1 was invited to two ad-hoc meetings, one on multimedia call control and architecture and the other one on R00 work items in general. Both were hosted by Nokia in Espoo, Finland. More detailed meeting reports are available on the 3GPP server. TSGN1 #7 meeting report is also provided to this meeting in Tdoc NP-000257 (Hawaii).

2 Main achievements

TSGN1 vice chairman Mark Fenton from Ericsson resigned from his post and TSGN1 #12 elected with acclamations Andrew Howell from Motorola to succeed him.

Two major features, security and Out-of-Band Transcoder Control, were given more time in the previous plenary meeting for completion in R99. Security has already been split in R99 and R00 part and the CRs from TSGN1 to this TSGN plenary #8 cover the outstanding R99 part. OoBTC was thought to be complete, but then cross-WG checking brought up an open item in the negotiation and indication of the selected codec (no CRs for this plenary are provided).

GPRS R97 is quite stable and TSGN1 is currently shifting its frocus from R99 to R00 work. This will be reflected in the agenda of the next meeting and the more stable R99 work items will not merit a separate agenda item.

More information on the status of each work item is given later in this report.

The consistency of the specifications under TSGN1 control has been less than perfect due to lack of rapporteurs. Now that we were able to nominate rapporteurs for our specifications there is promise for improvement in this area, tdoc NP-000277.

3 Information to be noted

3.1 Meeting schedule for year 2000

1. TSGN1 #10 11.-14.1.2000 (Abiko, Japan/NEC)
2. GPRS Ad-Hoc 19.-20.1.2000 (Oslo/ Motorola)
3. SMG#31 14.-18.2.2000
4. TSGN1 #11 28.2.-3.3.2000 (Umeå, Sweden/Telia)
5. TSGN#7 13.-15.3.2000
6. TSGS2 – TSGN1 Ad-hoc on CC and Architecture 11.-13.4.2000
7. TSGS2 – TSGN ad-hoc on R00 work planning 13.-14.4.2000
8. TSGN1 #12 22.-26.5.2000 (Hawaii, U.S./T1P1)
9. TSGS3 – TSGN R00 ad-hoc security requirements 13.-14.6.2000
10. TSGS2 – TSGN R00 work item drafing 14.-15.6.2000
11. SMG#32 19.-20.6.2000
12. TSGN#8 21.-23.6.2000
13. TSGN1 ad-hoc on SIP issues (date and host TBD)
14. TSGN1 #13 14.-18.8.2000 (U.S./T1P1)
15. TSGN#9 20.-22.9.2000
16. SMG#33 6.-10.11.2000
17. TSGN1 #14 20. – 24.11.2000 (UK, Lucent)
18. TSGN#10 6.-8.12.2000

The meeting dates for year 2000 were originally fixed as the minimum number of meetings that will be needed to finalise the TSGN1 input to each plenary meeting. This leaves time for ad-hoc meetings that will be needed particularly on SIP issues in between the scheduled meetings.

3.2 TSGN1 work item list

All R99 work items can now be reported to be complete for TSGN1 part but admitting that some of them were completed for this release with scope reduced from the original target.

The R00 Feature / Building Block / Work Task list was reviewed by TSGN1 #12 NP-000259. Three work item proposals were identified to be within the working groups' scope. Subsequently one of these has already been discussed in TSGN3. The remaining two proposal WI description sheets were discussed in the ad-hoc meeting and they are provided for this meeting for approval in tdoc NP-000263/SIP and N1-000264/ Emergency call enhancement.

4 Issues for action/decision by CN plenary

4.1 Controversial issues for plenary decision

This section of the report summarises the issues where TSGN1 has failed to reach an agreement and it is not likely that allowing more time in the working group would lead to a rapid solution and therefore plenary decision is being sought so that the work can continue in TSGN1.

4.1.1 Removal of SERVICE ACCEPT message

- Related with an already agreed TSGS2 CR on stage 2 but N1 disagreed on the concept of implicit response to SERVICE REQUEST and deletion of SERVICE ACCEPT message as this would cause unnecessary inter-layer interfaces and provide little benefit in lowering signalling load.

- LSs were exchanged between TSGN1 and TSGS2, these are in NP-000258 (N1 ->S2 in N1-000758, S2 -> N1 in N1-000802, N1 -> S2 in N1-000806). S2 re-considered the removal of SERVICE ACCEPT, but they still keep their original decision to remove it.

- This causes a more complex implementation because of inter-layer primitives to indicate the implicit service acceptance. **This is a matter of priorities and it can be done if needed.**

- Analogically CM SERVICE ACCEPT is most often omitted and implicit MM establishment is used instead by means of security procedure. But this can not be done for emergency calls with no SIM card as security procedures can not be applied. -> The same problem does exist with VoIP emergency calls without SIM. No answer to this problem could be given by N1. This question should be answered before proceeding with the deletion of SERVICE ACCEPT. **If that procedure can be done, then TSGN1 can not state any strong reason to overrule TSGS2 decision**.

The related TSGN1 CR which could not be agreed in this situation is in tdoc NP-000265 / N1-000646.

4.1.2 Removal of P-TMSI signature from SERVICE REQUEST message

- N1 cannot decide whether P-TMSI signature should be included in the SERVICE REQUEST even though S2 have agreed a CR on 23.060 on this issue.

If P-TMSI signature is always included in SERVICE REQUEST then it increases signaling load because a new one must be allocated to a mobile after the P-TMSI signature has been used once. Not including it adds to the signaling load when there is a need to authenticate the mobile.

BT and Lucent objected to the proposal in document NP-000266 / N1-000644.

The proposal was discussed in the TSGS3-TSGN ad-hoc meeting 13.-14.6.2000. There was no recommendation from the meeting but the delegations were invited to bring their own contributions to TSGN #8 if necessary.

4.1.3 R99 Terminology

TSGN1 needs to limit the applicability of certain paragraphs of the common CN specification to either GSM or WCDMA radio system. Discussion regarding the terms "(GSM only)" and "(UMTS only)" is going on between TSGN and TSGS working groups. In LS in tdoc NP-000258 / N1-000710 TSGN1 states that adopting the 2G and 3G operating modes is not an editorial correction but an essential modification of the functionality and it cannot be done at short notice. **GSM/UMTS/UTRAN/Whatever only depends on the serving radio network while the proposed modes of operation depend on the network interfaces not known to the R99 mobile station.** But if more suitable terms can be agreed then TSGN1 is convinced that matching set of CRs to all specification under the working group's control can be provided in the next meeting. If no agreeable proposal can be made then TSGN1 cannot take any action in this area.

4.1.4 Support of GPRS ciphering algorithm GEA2

Tdoc NP-000267 contains R99 CR N1-000722 and NP-000303 / N1-000798 is the corresponding R98 CR. Both were agreed by TSGN1 but with the following comments which TSGN #8 is asked to consider:

- There was strong reservations from one company (BT) on **whether this R98 CR should be acceptable**. At least it must be clear that the support of the new ciphering algorithms is optional for R98 mobiles.

- To be marked as strategic for TSGN #8

- The **concern that this change makes R97 and R98 GPRS different** was shared by several delegations.

The issue was discussed in TSGS3 – TSGN ad-hoc 13.-14.6.2000 and the recommendation of the meeting was that similar CRs should be generated for R97 also. The principle should be that for R99 the support of the GEA2 algorithm is mandatory and for R97 and R98 the support of the new algorithm(s) is not mandatory for the MS or the network but the support of the signalling mechanism to negotiate the algorithm is mandatory.

4.1.5 Alignment with ISDN BC coding

CRs in tdocs NP-000268 delete V.32bis modem type from R96, R97, R98 and R99 Bearer Capability. This modem type was indicated to be unused and not implemented in ISDN. The reason for not leaving the code point "not allocated but used by previous versions of this protocol" was that according to TSGN1 understanding V.32bis modem type never existed for real so there should not be conflicts with any existing implementations.Because it was defined in the earlier versions of the protocol the manufacturers are being asked to check that they have not implemented it.

4.2 Liaison statements

All liaison statements from TSGN1 since TSGN #7 have already been sent and the ones in Tdoc NP-000258 are for information for the plenary except for the ones which have already been mentioned in this report explicitly to require plenary action.

4.3 GSM Maintenance

4.3.1 GPRS

GPRS correction CRs in tdoc NP-000269 are provided for TSGN #8 plenary for approval.

Note: Change of GMMReady timer behaviour, N1-000763, N1000791 and N1-000792 were agreed in CN1#12. For stage 2 23.060 a CR is suggested and sent to TSGS2 in N1-000793 for approval TSGS2 secretary Alain Sultan to coordinate the (possibly email-) approval of this input document from TSGN1.

4.4 Release 99 work items

4.4.1 Multicall

TSGN1 task on the WI is complete and the WI is frozen as part of R99, R99 WI status sheet in N1-000261. One correction CR is forwarded for plenary approval in tdoc NP-000278.

4.5.2 Multimedia

TSGN1 task on the WI is complete and the WI is frozen as part of R99. One correction CR is forwarded for plenary approval in tdoc NP-000271 reflecting the TSGN #7 decision that Multimedia for R99 does apply to both UMTS and GSM.

4.5.3 GSM-UMTS interworking and MM for UMTS

TSGN1 task on the WI is complete and the WI is frozen as part of R99. Some correction CRs are still needed.

The problem with original SDL files in 23.009 which was reported to the last plenary meeting has now been removed and the SDT files are available. Thanks for Telelogic and Rouzbeh Farhoumand from Ericsson for getting it done.

The stable correction CRs are forwarded for plenary approval in tdoc NP-000270.

There are also two controversial issues (chapters 4.1.1 and 4.1.2) where TSGN1 is seeking for a plenary decision.

4.5.4 MS Classmark split

TSGN1 task on the WI is complete and the WI is frozen as part of R99.

4.5.5 EDGE and Compact EDGE

TSGN1 task on the WI is complete and the WI is frozen as part of R99. One CR in NP-000279 (N1-000780)

4.5.6 Security

TSGN1 had to report some open items to TSGN #7. R99 WI status sheet in NP-000262. These open items were consequently divided by TSGS #7 to different releases as follows:

- MS reaction after failure of the network authentication by the MS (R99)
- Integrity protection of emergency calls (R99)
- Encrypted IMSI (R00)
- USIM triggered re-authentication (R00)

The outstanding CRs to complete the R99 part are forwarded for plenary approval in tdoc NP-000273.These CRs complete the TSGN1 task on R99 security.

Additionally there is a controversial issue not related with the above in GEA2 support for earlier releases than R99 (section 4.1.4).

4.5.7 Out-of-Band Transcoder Control (OoBTC)

TSGN1 could not complete its part of the work on Out-of-Band Transcoder Control in the original scope defined for the R99 WI N1-000260. The main decision in TSGN #7 was that AMR codec being the only codec for R99 is default value and the transcoder control would be left for R00.

After the TSGN #7 some concern of future compatibility was raised, particularly regarding the indication of the selected codec. A joint meeting between TSGN1-TSGR2-TSGR3 was organised during TSGN1 #12 with the outcome that TSGR2 and TSGR3 need to cover the issue in their specifications for R99 while the TSGN1 part on active codec set negotiation and notification will be specified in R00.

No CRs for plenary approval but the work item status sheet is in tdoc NP-000260.

4.5.8 QoS

TSGN1 task on the WI is complete and the WI is frozen as part of R99. Correction CRs are forwarded for plenary approval in tdoc NP-000272.

4.5.9 ASCI

These are GSM only Crs. They need to be agreed/transferred from SMG#23

It was reported by Dr. Bergmann (via email) during the meeting that ASCI WI for R99 exists. Several ASCI R99 related CRs are provided in Tdoc NP-000275 but it would be appropriate to have the WI description available too.

4.5.10 Other R99 issues

Two GPRS related CRs were agreed and these are forwarded for plenary approval in tdoc NP-000269.

4.5.11 TEI

Several minor CRs under WI TEI are provided for plenary approval in tdoc NP-000274.

Two issues out of the TEI group of CRs deserve special attention, both because they are part of a feature which needs inter-WG co-operation.

One of these issues is IMEI hex coding where TSGN1 CR on 24.008 is N1-000779. The corresponding 23.003 change was under email approval process at the time of writing this report. The 24.008 CR agreed by TSGN1 refers to the IMEI coding which is defined in 23.003. If the corresponding 23.003 CR was agreed or revised, i.e. the hex coding is defined in 23.003 then also the TSGN1 CR should be agreed. If, on the other hand, no version of 23.003 defining the hex coding of IMEI field can be agreed, then also the 24.008 should be reconsidered.

The other one is the indication of the cause for the no CLI to B-subscriber. TSGN1 agreed 24.008 CR in tdoc N1-000750. This was agreed provisionally on the condition that the related SS stage 2 and stage 3 CRs on 23.081 and 24.081 are approved in TSGN4. If the related TSGN4 CRs are approved then N1-000750 should be also approved to complete the package but if not, then also this CR should be reconsidered.

TSGN4 chairman is asked to confirm the approval status of their CRs on hex IMEI and cause of no CLI as no formal LSs have been exchanged on the approval status of these CRs.

4.6 Release 2000 work in TSGN1

TSGN1 had to report to the previous plenary meeting that there has been no time to think about the choice of the multimedia call control protocol or any other R00 work item. Now the R00 work has been started, first in the ad-hoc meeting in April. We had some contributions in TSGN1 #12 meeting and also the ad-hoc meetings the week before TSGN #8.

The Feature-Building Block-Work Task document maintained by MCC allocates three work item descriptions for TSGN1 to prepare for approval. These were briefly discussed in TSGN1 meeting and editors from interested companies were nominated to draft the work item descriptions but there was no time to review any proposals during the meeting.

The following TSGN1 rapporteurs for IGC groups were nominated:

IGC	*Convenor*	TSGN1 rapporteur
1. Bearer and Access Stratum	*François Courau*, Alcatel	
2. QoS	*Oscar Lopez-Torres*, T-Mobil	Takashi Koshimizu / NTT DoCoMo
3. CC and roaming	*Ulrich Dropmann*, Siemens	Richard Brook / Lucent

4. Codecs	*Ian Doig*, Motorola	Andrew Howell / Motorola
5. Messaging	*Martin Guntermann*, Mannesmann Mobilfunk	
6. Terminal local features	*Paul Voskar*, Nokia	
7. Service platforms	*Christophe Gourraud*, Ericsson	
8. Security	*Chris Pudney*, Vodafone-Airtouch	Duncan Mills / Vodafone Airtouch
9. Billing, charging and management	*Yukio Hiramatsu*,NTT	
10. Testing	*N.N.*,Motorola	
11. Location related issues	*Jan Kall*,Nokia	Janne Muhonen / Nokia
12. Overall Co-ordination and general issues	*Alain Sultan*,ETSI/MCC	Ban Al-Bakri / MCC

4.6.1 SIP Call Control protocol over Gm reference point (CSCF – UE)

Work Item to be defined by TSGN1, contact person Richard Brook / Lucent.

Plenary tdoc NP-000263.

4.6.2 Emergency call enhancements

Work Item to be defined by TSGN1, contact person Rouzbeh Farhoumand / Ericsson.

Plenary tdoc NP-000264.

4.6.3 Service Modification without pre-notification (between speech, modem, fax and multimedia)

Work Item to be defined by TSGN3, contact person Masahiko Yahagi / NEC.

It was agreed during TSGN1 meeting that the same WI should cover both Speech / Modem and Speech / Fax. Multimedia was added to the scope of the WI during TSGN3 discussion.

4.6.4 L3 segmentation

There has been no progress on this work item and TSGN1 proposes to delete it.

4.6.5 Turbocharger

There has been no progress on this work item and TSGN1 proposes to delete it.

4.6.6 ASCI (R00 WI not approved yet)

GSM only Crs. Need to be agreed/transferred from SMG#23

Several ASCI CRs on 03.68, 03.69, 04.68 and 04.69 were agreed by TSGN1 and these R00 CRs are forwarded for plenary approval in tdoc NP-000276.

R00 ASCI Work Item description has not been seen by TSGN1 but the WG saw no technical reason to stop the CRs. For project management reasons an approved WI description proposed as feature under IGC CC and roaming should be available before the CRs can be approved at the plenary level.

5. Acknowledgements

As usual I take this opportunity to thank all those people who have contributed to TSGN1 work.

In particular I would like to thank the ex-vice-chairman Mark Fenton from Ericsson for his expertise in the meetings and for being there to organise whatever ad-hoc meeting was needed to stabilise GPRS specification, often at a very short notice. I must also thank the new vice-chairman Andrew Howell for his commitment to the post from now on.

Thanks to the recently nominated rapporteurs the situation regarding TSGN1 specifications rapporteurship is now better than it has been for years in 3GPP TSGN1 and ETSI SMG3 WPA history.

Thanks to the hosts of our meetings we have had meetings in exotic places and thanks to the delegates positive attitude the meetings have been productive and we have sometimes had some spare time to enjoy the exotic places too.

And finally thanks for Ban for keeping the meetings and the reporting well organised.