

**Source:** Chairman TSG SA

**Title:** Report to PCG#04 on work in TSG-SA

**Agenda:** 4.1

**Document for:**

Decision	
Discussion	
Information	X

## **1 Main events since last meeting**

In the period January 2000 (PCG#02) to July 2000 (PCG#04) TSG-SA have held two TSG-SA plenary meetings, TSG-SA#07 in Madrid, Spain 15 – 17 March 2000 and TSG-SA#08 in Düsseldorf, Germany 26 - 28 June 2000. Further to TSG-SA plenaries, a number of meetings of the TSG-SA working groups have taken place.

## **2 Technical work in TSG-SA**

The work of TSG-SA consists of three main parts: technical work within TSG-SA, technical co-ordination between the TSGs and project management. In the period TSG-SA have been working in all three areas. The technical work within TSG-SA is organised in 5 working groups dealing with the service aspects, architecture, security, codec aspects and telecom management.

### **2.1 Work related to Service Aspects**

The service requirements and associated stage 1 documentation for release '99 are now considered complete and the necessary adjustments and clarification caused by the stage 2 and stage 3 work done. TSG-SA WG1 (S1) has been analysing and specifying the requirements for the next release, where one of the key items is the introduction of an IP based network in 3GPP. Receiving the feedback on timescales for implementation of different functionality, TSG-SA WG1 (S1) is now reviewing the scope of the different items to see whether the scope can be adjusted, the work phased or the completion date (release) should be changed.

### **2.2 Architecture related work**

The architectural work related to the IP based network is proceeding well within TSG-SA WG2 (S2) and key decisions for the IM subsystem made, selecting of SIP as Call Control model and adopting IPv6 as

working assumption. However, the work is delayed approximately 3 months compared to the original target. This is likely to impact either the overall content or the overall completion date for Release 00.

The workload on TSG SA WG2 (S2) is significant and has been a reason for concern. Therefore discussions are being initiated with other groups, especially TSG-CN, to see if, e.g., some of the more detailed stage 2 work can be offloaded to other groups in order to better spread the work load.

In order to get a better cross project co-ordination a number of work area oriented ad-hoc groups have been established under S2. These ad-hoc groups are to provide cross project technical co-ordination as well as to create and follow-up on project plans for the work area under their responsibility. The reports of these ad-hoc groups have shown to be a useful tool for the project co-ordination role of TSG-SA. It is the hope of TSG-SA that now when this work has passed the initial phase that the MCC can take over part of the work of updating the project plan as works proceed.

### **2.3 Security related work**

The security architecture specification was completed by end of 1999, but a few issues in relation to TSG-CN had been identified to potentially require adjustment of the expectations of TSG-SA WG3. In order to align the work of TSG-SA WG3 and TSG-CN joint expert meeting was held. Following adjustments to both the security specifications under responsibility of TSG-SA and the core network specification under responsibility of TSG-CN has been made. The Release 1999 security specifications are now considered fully in line with the rest of the Release 99 set of specifications. For the future release(s), TSG-SA WG3 (S3) have elaborated a number of work items, which are currently being included in the overall work plan.

As earlier reported, TSG-SA delegates have indicated significant interest in a simplified handling of the cryptographic algorithms for 3G systems. On this background TSG-SA can only encourage the ongoing activities by the partners to publicly publish the algorithms.

TSG-SA#07 decided to develop a standard authentication algorithm in order to encourage a minimum level of security across all 3GPP networks. Together with this decision a work plan for elaboration of the authentication algorithm was approved by TSG-SA. This decision made funding for the work necessary, and the corresponding request for ### Euro was sent to the PCG via the E-mail reflector. TSG-SA is aware, that this funding was not indicated to the PCG in January, even though the potential need for funding was known amongst some of the experts in TSG-SA WG3 (3). The TSG-SA management have taken steps to avoid similar situations to appear in the future.

In order to ensure the potential cross standard roaming capabilities TSG-SA WG3 (S3) are cooperating with 3GPP2 and AHAG on some of the security aspects such as, e.g., authentication mechanisms.

### **2.4 Codec related work**

The codec work in TSG-SA WG4 (S4) for release 99 is found stable and no significant changes are expected. The only remaining open item for Release 99 characterisation report for usage of the AMR in the 3G radio channel environment, which is expected for the next meeting of TSG-SA. This speech codec is the same as the AMR codec for GSM, but it should be noted that due to the different radio access technology the radio related adaptation algorithm can not be reused from GSM. Also due to the different radio technology it has been decided to perform this supplementary characterisation tests in order to evaluate the quality under 3G error conditions (UTRA FDD and UTRA TDD).

For wideband AMR the qualification phase has been completed according to schedule, and 5 candidates will enter the selection phase, which is planned to be completed by October 2000 with results and resulting specifications presented for approval to TSG-SA#10 in December 2000.

## **2.5 Work related to telecom management**

The timing of release 99 for the telecom management related specifications were reported to previous meetings of the PCG. It was noted that TSG-SA wished TSG-SA WG5 (S5) to complete the specifications by December 1999 as for the rest of release 99. However, it was understood that parts of the telecom management specifications builds on the core specifications and could therefore not be fully completed before the core specifications were completed. On this background TSG-SA found it acceptable that a delay of 3 month compared to the December 1999 could occur for some telecom management specifications. This goal was not completely fulfilled, however the majority of the specifications were completed by TSG-SA#07 and the remaining specifications completed by TSG-SA#08.

Also in the area of telecom management specifications some cooperation with the corresponding 3GPP2 groups has been established. According to information available to TSG-SA, 3GPP2 plans to build some of their telecom management specifications on basis of the 3GPP specifications as delta specifications. TSG-SA welcomes this harmonisation of telecom management specifications across standards. TSG-SA does not foresee any negative impact on the 3GPP timescales and workload due to this.

## **3 Technical co-ordination**

### **3.1 Issues related TSG-CN**

The co-operation with TSG-CN has in the period focussed on the checking alignment between the detailed implementation and the requirements, the architecture and the security aspects, which have been developed by TSG\_SA WG1, WG2 and WG3. As conclusion of this work the scope for OSA release 99 has been adjusted and Enhanced User Confidentiality and MAP security moved to release 00.

Similar to the other TSGs and the working groups of TSG-SA, TSG-CN provided in December a list of items for late inclusion in Release 1999 to TSG-SA. All items on this list have now been completed or removed from Release 1999.

For release 2000 a joint meetings on the IP network architecture between TSG-CN and TSG-SA WG2 has been organised, to provide TSG-CN information about the architectural considerations and to provide feed-back on the impact and potential time scales for standardisation in the TSG-CN area. TSG-SA has taken note of TSG-CN time estimates and are in the process of reviewing the overall work plan. TSG-SA have especially taken note of the potential delay caused of the late availability of requirement and architecture document which are the prerequisites for the work of TSG-CN. In order to reduce this type of problem in the future, there has been initiated discussions on optimisation of the work split between TSG-CN and the architectural work in TSG-SA are ongoing.

### **3.2 Issues related to TSG-RAN**

Similar to the other TSGs and the working groups of TSG-SA, TSG-RAN provided in December a list of items for late inclusion in Release 1999 to TSG-SA. All items on this list have now been completed or removed from Release 1999.

TSG-SA has noted the discussions on working methods in TSG-RAN. As TSG-SA agreed in the need for clarifying the categorisation of change requests, TSG-SA has updated the working methods in 3G TR 21.900 based on the results from the discussion in TSG RAN and TSG-CN.

TSG-RAN's work creating and organising work items for future releases has been noted. TSG-SA has also taken note of the fact that TSG-RAN still needs to perform substantial work on error corrections for the Release 99 set of specifications. As this reduces the time available for work on Release 2000 TSG-SA notes that TSG-RAN will need to prioritise the Release 2000 work and possibly modify the scope of

Release 2000. TSG-SA is taking this into account in the review of the overall project plan for future releases.

TSG-SA has also been informed about the work by TSG-RAN on a lower chip rate TDD and its need for interoperation with other modes of the radio access. TSG-SA expressed its desire for maximising commonalities between modes to ensure that multi-mode implementations are made realistic. On this background TSG-SA noted that this desire was in line with the steps taken by TSG-RAN.

Finally the workload on the TSG-RAN support staff has been noted. In addition to the request for additional support to TSG-RAN, TSG-SA has started to look for optimisations of the processes to see if it is possible to reduce the workload on the support team, through optimisations of the working methods.

### **3.3 Co-ordination with TSG-T**

Similar to the other TSGs and the working groups of TSG-SA, TSG-T provided in December a list of items for late inclusion in Release 1999 to TSG-SA. All items on this list except for those related to the test specifications have now been completed or removed from Release 1999.

TSG SA was informed by TSG-T about the need for MIME registration. After checking that currently no other working groups foresee a need to register MIME types, TSG SA recommended that TSG-T (T WG2) took control over the task and, e.g., apply for types on a case by case basis. TSG T is expected to inform the other TSGs about the details of the mechanism chosen.

TSG SA also received a liaison statement from TSG-T concerning the split of functionality in the UE between TE and MT and the possibility to run call control from, e.g., a PC physically separate from the "radio ME". TSG-SA discussed the matter and found reason for concern about the potential impact on the security, system performance, conformance testing and certification if this area is not properly handled. As result of the discussion TSG-SA sent a Liaison Statement informing relevant parties and requesting them to study requirements, architectural and security aspects of the TE-MT model. The recipients of the liaison statement were GSM Association, SA WG1, SA WG2, SA WG3, SA WG4, EICTA CelCom, GSM Certification Forum with copies to TSG T and T WG2.

TSG-SA has been informed about the work of TSG-T in cooperation with TSG-RAN regarding the handling of measurement uncertainties. TSG-SA trusts that the proposed way forward will effectively deal with the problem.

Finally, TSG-SA have noted the funded parts of TSG-T's work program now have commenced, even though the start has been delayed due to the late availability of the funding and following that late availability of the actual man power.

## **4 Requirements for support in 2001**

TSG-SA does not see any major changes in its requirement for support in 2001 compared to 2000, and suggest that the same number of man month as for 2000 are budgeted for 2001. Currently no additional tasks requiring dedicated funding have been identified.

## **5 Release 99 and beyond**

As indicated earlier in this report TSG-SA have reviewed the status of the project in co-operation with the other TSGs. Based on the status report provided, TSG-SA compiled in December 1999 a list of items originally expected for release 1999, but not yet completed. For each of these items it was decided whether or not the item should be accepted for late inclusion in release 1999, or postponed for later

releases. TSG-SA has with the assistance from the other TSGs followed-up on this list. All Release 99 items except the test specifications and the AMR characterisation report has now been completed. Except for the two areas mentioned TSG-SA foresees now only corrective changes to Release 99.

Based on input from members, the other TSGs and TSG-SA Working groups, TSG-SA has initiated discussions on the scope and the release date for Release 2000. As reported above, it is clear that not all the work initially marked for release 2000 can be completed by December 2000. TSG-SA believes that it is very important that a release when completed is stable and requiring as little as possible maintenance. On this background TSG-SA are planning to review which items realistically truly can be completed for December 2000. In order to do this assessment and perform some more long time planning, TSG-SA are planning an ad-hoc meeting on the issue in August.

## **6 General Management issues**

As reported earlier, when establishing the overall status for the release 1999 it was realised that it was been difficult to link together the work items of the different TSGs in order to understand whether or not all part of a service or functionality is being completed according to the target. To help overcoming this problem for release 2000 a working model was be elaborated and agreed. This working model are now being implemented and allows the work items of the different TSGs to be linked into a hierarchical structure, based on three levels feature, building block and work task.

As part of the "All-IP" standardization strategy, TSG-SA has been feeling a need to strengthen co-operation between 3GPP and IETF. To do this a three-step approach was agreed:

- ?? Form a high level agreement between IETF and 3GPP.
- ?? 3GPP WGs to identify RFCs for wireless adaptation and propose modifications/additions to IETF
- ?? Appoint a Rapporteur to provide an overview report on IETF activities of interest to 3GPP, as a starting point

TSG-SA is providing a proposal for high level agreement between IETF and 3GPP to the PCG for approval. It is the believe of TSG-SA that the agreed strategy and the high level agreement can be handled without changes to the current working procedures, however TSG-SA are seeking the advice of the PCG on this matter.