

**Source: Chairman TSG SA**

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

**Agenda: 4.1**

**Document for:**

Decision	
Discussion	
Information	<b>X</b>

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

In the period July 2000 (PCG#04) to November 2000 (PCG#05) TSG-SA have held one TSG-SA plenary meeting, TSG-SA#09 in Kapolei, Hawaii, USA, 25-28 September 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.

In addition to the plenary meetings and the working group meetings TSG-SA has held one workshop on the subject of "IM Service Vision and Scenarios". The purpose of organising this workshop was to obtain an understanding of the service and scenario visions, associated with the IM subsystem. This in order to be better able to define the requirements and solutions for, e.g., service control and service 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 releases, 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 month compared to the original target.

The workload on TSG SA WG2 (S2) is significant and has been reason for concern. Therefore discussions is 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 was in the past established under S2. These ad-hoc groups have provided cross project technical co-ordination as well as to created and followed-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. As reported to the previous PCG meeting (PCG#04) it was the hope of TSG-SA that when this work has passed the initial phase, the MCC could takeover part of the work of updating the project plan as works proceed. The day to day handling of the project plan has now been transfer to the MCC, and the co-ordination groups within S2 closed. It is the understanding of TSG-SA that this transfer of the handling of the work plan provides a more logical flow for updates from the Working Groups. It has further been clarified that it is the responsible TSG (and its working groups), which are responsible for the updating the project plan.

## **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 have been include 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 pleased to see that the activities by the partners to publicly publish the algorithms as been successful.

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

WG4 (S4) did at the last meeting unanimously agree to recommend one of the candidates to TSG-SA for approval.

## **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 and few additions made at TSG-SA#09.

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**

For next releases 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 is a continues review in order to the work split between TSG-CN and the architectural work in TSG-SA are ongoing.

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

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 the next releases TSG-SA notes that TSG-RAN will need to prioritise the work for the next release. 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.

Further TSG-SA noted that TSG-RAN had started a study item on utilisation of UTRA in the 1800 MHz band. TSG-SA expressed its desire for ensuring that a potential specification of support of UTRA in the 1800 MHz band is performed in such a way that it would not block for specification of any future frequency bands, e.g., adopted by ITU-R.

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

As reported to the previous PCG meeting, TSG SA received at TSG-SA#08 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. Replies from several 3GPP WGs was received, including TSG-T WG2, which indicated joint work is needed in 3GPP groups in order to achieve a secure way of connecting applications to external devices. It was agreed that input from bodies outside 3GPP such as MRPs is required in order to do this analysis in TSG-T WG2 and TSG-SA WG2. This could include possible scenarios endangering e.g. conformance testing validity. TSG-SA have noted that to complete this item could cause a significant workload for some of the involved groups.

### **3.4 Co-ordination with TSG-GERAN**

At TSG-SA#09 TSG-SA received for the first time a report from the newly established TSG-GERAN. TSG-GERAN provided an overview of its activities and had elaborated a work plan based on the same work break down philosophy as the other groups. This work plan has be now been integrated in the overall work plan for 3GPP.

## **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**

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.

## **6 Next Releases**

As reported to the previous meeting of the PCG, TSG-SA held a planning ad-hoc in August to assess what realistically could be introduced in the next release(s). The ad-hoc lead to a number of recommendations on work planning and release handling which following was reviewed by the TSGs and agreed by TSG-SA.

The main principles for a release agreed are outlined below:

- A release shall consist of a well-defined, stable and internally consistent set of functions;
- A release shall be documented in a maintained, consistent stream of specifications;
- Essential corrections to a stable or frozen release shall be included in the applicable release;
- New or changed functionality shall be included in new (rather than retrospectively in old) releases.

Further it was agreed to decouple the Release naming from the Calendar Year, so a Release should be identified by a number corresponding to the major version number for specifications in that Release. e.g. Release 2000 becomes Release 4 (Rel 4), the following release will be Release 5 (Rel 5), etc.

Further TSG-SA agreed that the overall road map should be controlled by the 3GPP Project plan (i.e. a "3GPP Road Map") and not as in the past by the Releases. The content of the Release should be based upon the work plan with a well-defined closing time for the content of a Release (6 – 9 months before completion of a particular Release).

Reviewing the project plan TSG-SA found that considering the wish to have a real content in Release 4 the finalisation of the content of Releases 4 should be made, with a deadline of March 2001 for completion (TSG#11 / GERAN#03). TSG-SA further agreed that a final list of the content of Release 4 would be created in SA#10 for Rel4, containing items, which will be completed in March and a list of items where non-corrective CRs are acceptable in the period after December 2000. The work plan will indicate which WIs will be completed in time and therefore included in Rel4. It is expected that all WGs will update the Project plan as accurately as possible before the TSG#10 meeting to facilitate this work.

Further TSG-SA has set the preliminary target date for Release 5 to December 2001

*3GPP PCG is invited to endorse the change in release naming and the current target dates for the proposed release 4 and release 5.*

## **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 future releases a working model was be elaborated and agreed. This working model has now been 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.

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