

**Source:** Chairman TSG SA  
**Title:** Report to PCG#06 on work in TSG-SA  
**Agenda:** 4.1

**Document for:**

Decision	
Discussion	
Information	X

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

In the period November 2000 (PCG#05) to April 2001 (PCG#06) TSG-SA have held two TSG-SA plenary meeting, TSG-SA#10 in Bangkok, Thailand, 11-14 December 2000 and TSG-SA#11 in Palm Springs, USA, 19-22 March 2001. Further to TSG-SA plenaries, a number of meetings of the TSG-SA working groups have taken place. At the TSG-SA#11 an election of chairman and vice-chairmen of TSG-SA took place and resulted in election of Niels Peter Skov Andersen of Motorola as TSG-SA chairman, Gary Jones VoiceStream and Hiroshi Nakamura NTT DoCoMo as Vice-chairmen.

## **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 two workshop on the subjects of "UE in idle mode" and "LCS". The purpose of organising these workshops was to for the "UE in idle mode" to review and ensure consistency of the 3GPP specifications in the areas of PLMN and cell (re-)selection, an area in which it traditionally is difficult to obtain consistency across the different working groups spanning service, architecture, core network and radio aspects. The purpose of the "LCS" workshop was to review the LCS related work in order to ensure that the work on functionalities and interfaces not specified in Release 99 is progressed in a timely manner.

### **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. Similarly the service requirements and associated stage 1 documentation for release 4 are considered complete and the only adjustments expected are those caused by the final decisions on the content of release 4 and detailed stage 2 and 3 work by other groups. 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, the natural next step for TSG-SA WG1 (S1) is to review 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. Even though the overall process put in place by TSG-SA allow for medium to long term work and planning, too few contributions are received for TSG-SA WG1 (S1) to establish the requirements for longer term vision. It is the hope of TSG-SA that the 3G Service Deployment workshop organised by the MRPs together with a TSG-SA workshop planned for the autumn will assist in encouraging more contributions on medium to long term requirements and visions.

## **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. At TSG-SA#11 the overall architecture specification for the IM subsystem was approved and is now considered stable. However, the work is delayed approximately 3 month compared to the original target.

The workload on TSG SA WG2 (S2) has been significant and has been reason for concern. Therefore discussions was 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. These discussions have lead to some smaller adjustments of the work split between TSG-SA WG2 (S2) and TSG-CN. This together with the completion of the initial architectural work on the IP based network has created a situation where it is believe that the workload of TSG-SA WG2 (S2) is significantly reduced.

As reported earlier, in order to get a better cross project co-ordination an overall 3GPP project plan was established. The day to day handling of the project plan has successfully been transfer to the MCC. It is the understanding of TSG-SA that this transfer of the handling of the work plan have provided 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**

As a part of the security related work the specifications for an Authentication algorithm has been elaborated and approved. For release 99 the security related specifications are believed to be stable and for release 4 the main open item is related to specification of MAP security, this as the specification under TSG-SA WG3 (S3) control unfortunately was not completed in due time. However, considering the information from TSG-CN that the technical solution already are specified and in place in the relevant TSG-CN specifications, TSG-SA decide to grant an exception for late inclusion in Release 4 for this item.

## **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 was the characterisation report for usage of the AMR in the 3G radio channel environment, which was approved by the TSG-SA#11.

For wideband AMR the qualification phase have been completed according to schedule, and 5 candidates will entered 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 was able to fulfil this tight schedule and TSG-SA WG4 (S4) unanimously agreed to

recommend one of the candidates, which made the selection and approval at TSG-SA simple and straight forward. However, due to the required signalling support, which was not complete by the TSG meetings in March, TSG-SA decided to shift wideband AMR to Release 5, but functionally freeze the wideband AMR codec specification.

## **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 build 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 months 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. A similar situation is occurring for Release 4 where the telecom management related specifications first are expected to be fully ready in June 2001.

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 feedback 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 by the late availability of requirement and architecture documents which are the prerequisites for the work of TSG-CN. In order to reduce this type of problem in the future, there is a continuous review in order for the work split between TSG-CN and the architectural work in TSG-SA to be 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 releases. TSG-SA is taking this into account in the review of the overall project plan for future releases.

As earlier reported TSG-SA has 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. Further TSG-SA has taken note of and supported the decision of TSG-RAN to make the support frequency bands release independent.

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

As reported to the previous PCG meetings, 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. Due to the complexity of the issue TSG-SA have had difficulties obtaining progress in the speed desired.

### **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**

As earlier reported TSG-SA does not see any major changes in its requirement for support in 2001 compared to 2000, and sees no reason to change the earlier given requirement 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 Release 4**

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 have now been completed. However, TSG-SA foresees there still for a while will be a need for corrective changes to Release 99. These corrective changes might reach a second peak when larger scale of network deployment based on the specification starts.

TSG-SA has in co-operation with the other TSGs compiled and completed Release 4. This work was based on the principles for a release agreed at TSG-SA#09 and confirmed by PCG#05. These principles are:

- 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 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).

An overview of the content of Release 4 is provided separately in Tdoc PCG#06(01)11.

## **6 Next Releases**

So far little additional discussion have taken place around the preliminary target date for Release 5 to December 2001. The feasibility of this date will have to be monitored at the next rounds for TSG meetings.

## **7 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 elaborated and agreed. This working model has now been in place for a while 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. This process was found very useful in the discussions around the completion of Release 4.