

Source: Chairman TSG SA

Title: Report to PCG#08 on work in TSG-SA

Agenda: 4

Document for:

Decision	
Discussion	
Information	X

1 Main events since last meeting

In the period October 2001 (PCG#07) to April 2002 (PCG#08) TSG-SA have held two TSG-SA plenary meeting, TSG-SA#14 (Kyoto, 17 – 20 December 2002) and TSG-SA#15 (Jeju, 11 – 14 March 2002). 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 "3GPP Future Evolution". The purpose of organising the workshop was to collect inspiration for the future evolution of the 3GPP based systems.

2.1 Work related to Service Aspects

The service requirements and associated stage 1 documentation for release '99 and release 4 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 5 are considered complete and the only adjustments expected are those caused by adjustment of the content of release 5 and detailed finalisation of stage 2 and 3 work by other groups. TSG-SA WG1 (S1) has therefore commence work on identifying functionalities and specifying the requirements for the next releases, taking into account the results from the 3GPP Future Evolution workshop. One of the key items is the further evolution of the IP Multimedia Subsystem beyond its first phase completed in Release 5. Even though the overall process put in place by TSG-SA allow for medium to long term work and planning, and the organisation of a 3GPP Future Evolution workshop only few contributions are received for TSG-SA WG1 (S1) to establish the requirements for longer term vision. On this background TSG-SA have started discussions of how to better stipulate the

creation of a long term vision. At TSG-SA #15 it was agreed to plan for a "long term vision" creation kick-off meeting in conjunction with TSG-SA #17. A preparation meeting for this will be held during the TSG #16 meetings.

2.2 Architecture related work

The architectural work related to the IP based network has been stable in the period and the key decisions for the IM subsystem kept unchanged, i.e., the selection of SIP as Call Control model and utilisation of IPv6.

The workload on TSG SA WG2 (S2) has in the past been significant and has been reason for concern. Therefore earlier discussions with other groups have been conducted, to see if, e.g., some of the more detailed stage 2 work could be offloaded to other groups in order to better spread the work load. These discussions 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 the workload of TSG-SA WG2 (S2) is no longer causing major concerns.

2.3 Security related work

The introduction of IP Multimedia Subsystem introduces significant changes to the network architecture, these changes requires a substantial work effort in order to ensure that all security aspects are considered and handled correct. TSG SA WG3 has been working closely with TSG CN working groups in this process. However, it has for a long time been clear that the security related work for IMS could first be completed in the June 2002 time frame. This unfortunately has caused a situation where TSG CN have had to wait for decisions from TSG SA WG3 in order to progress their work. As reported to the previous PCG meeting TSG-SA therefore accepted that an exception for completion and inclusion in Release 5 was to be granted for the security aspects.

2.4 Codec related work

The codec work in TSG-SA WG4 (S4) for release 99 is found stable and no significant changes expected.

As earlier reported a wideband AMR codec was selected by December 2000. 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. TSG SA WG4 (S4).

In ITU-T, the AMR-WB codec has now formally been approved as the new ITU-T recommendation G.722.2 (approved in January 2002).

In relation to IP Multimedia Subsystem TSG SA WG4 is working on Multimedia Codecs and Protocols for Conversational PS Services. The responsibility for MMS media formats and codecs has been transferred from TSG T WG2 to TSG SA WG4. The MMS media formats and codecs have been aligned for interoperability with those chosen for other services, in particular for streaming (PSS-E). This alignment has been one of the key motivations behind the transfer.

2.5 Work related to telecom management

TSG-SA has in the past reported to PCG that TSG-SA wished TSG-SA WG5 (S5) to complete the specifications at the same time as other parts of the release. However, parts of the telecom management specifications build on the core specifications and can therefore not be fully completed before the core specifications are completed. On this background TSG-SA have found it acceptable that a delay of 3 month compared to close of the release could occur for some telecom management specifications. This goal was not completely fulfilled in the case of Release 99 and Release 4, however the majority the specifications were completed at the requested point in time and remaining specifications within the time of one additional meeting cycle (3 month). The telecom management specifications for release 99 and release 4 are considered stable. A similar situation is occurring for Release 5 where the telecom management related specifications first are expected to be fully ready in June/September 2002. But already now significant progress has been made for telecom management specifications related to the expected content of Release 5.

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

TSG-SA has taken note of the substantial progress TSG-CN has made towards the completion of the first version of IMS. TSG-SA is aware that of the potential delay caused of the late availability of requirement and architecture document, which are the prerequisites for the work of TSG-CN. Considering that IMS is the key item in release 5, TSG-SA has found it natural to only freeze the Release 5 functionality and leave time to June for TSG-CN to complete the remaining open issues related to the detailed protocols for IMS. In order to reduce the potential delays caused by late completion of requirements and architecture in the future, the work split between TSG-CN and the architectural work in TSG-SA is continuously being monitored in order to optimise this split.

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 has had need to prioritise the work for the next releases. TSG-SA has taken this into account in the review of the overall project plan. Further TSG-SA have taken note of the completion of major work items such as HSDPA.

TSG-SA received information from TSG-RAN that MBMS has been reviewed and it was felt that it would be beneficial to organise a workshop between members of TSG SA WG1, TSG SA WG2, TSG-GERAN and TSG-RAN (but open to all of 3GPP). TSG-SA agreed to organise a workshop on MBMS in order to review and provide a better understanding of the requirements and architecture for MBMS in relation to the radio access networks.

3.3 Co-ordination with TSG-T

TSG-T has informed TSG-SA about the progress in elaboration of test specifications and the associated abstract test suites. TSG-SA further has noted the elaboration of priorities for the

completion of the remaining work based on input from the industry. TSG-SA also noted the discussions between TSG_T and TSG-RN on how to ensure that the test specifications reflect the latest versions of the core specifications, and the desire to ensure that change requests to the core specifications clearly indicate if they impact test specification. TSG-SA received the information about need for additional funding of the development of the abstract test suites (TTCN) and knowing the budget limitations encouraged its members to help raising the necessary funding either through monetary contribution or volunteer resource to perform the work.

For the work on Generic User Profiles, TSG-SA reviewed the situation and concluded that efforts need to be put in completion of the stage 1 and especially in progressing the stage 2 work before TSG-T further pursues the work.

3.4 Co-ordination with TSG-GERAN

TSG-GERAN continues in a manner equal to that of the other TSGs to provide an overview of its activities and work plan. The work plan for TSG GERAN is now been integrated in the overall work plan for 3GPP. In the period the main areas of contact between TSG SA and TSG GERAN have been in the area of Architecture and security issues related to the introduction of GERAN support for the lu interface. These activities have involved mainly involved TSG SA WG2 and WG3.

4 Requirements for support in 2002

As earlier reported TSG-SA does not see any major changes in its requirement for support in 2003 compared to 2002, and sees no reason to change the requirement that the same number of man month as for 2002 are budgeted for 2003. 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 concludes that all release 99 and release 4 items have been completed and the release can be considered stable. However, TSG-SA foresees there still for a while will be a need for corrective changes to Release 99 especially in the area of the radio access network. These corrective changes might reach a second peak when larger scale of network deployment based on the specification starts.

6 Release 5

TSG-SA has in co-operation with the other TSGs reviewed the overall work plan and content of release 5. This work was based on the principles for a release agreed at TSG-SA#09 and confirmed by PGC#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.

As a part of these principles it was also 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).

As earlier indicated the key topics in Release 5 are IMS and HSDPA, in addition a number of other items are included. An overview of the content of Release 5 is provided separately in Tdoc PCG#08(02)22. As already noted at the previous PCG meeting it has not been feasible to complete all Release 5 items by March 2002, however for the open issues which mainly relates to the substantial work in specifying a first generation of IMS, the remaining work and completion dates has been estimated. On this background TSG-SA believes that complete set of specifications for Release 5 will be available after TSG-SA #16 in June 2002. As usual TSG –SA will at its next meeting review all the open Release 5 items to see if they are completed and if not when they can be expected completed and whether or not they should remain a part of Release 5.

Considering that release 5 will add substantial new functionality to the 3GPP set specification, TSG SA believes that a not insignificant amount of correctional changes is to be expected. On this background TSG SA believes that an absolute earliest target date for Release 6 to June 2003 and probably not earlier than December 2003 as realistic.

7 Beyond Release 5

As the content of Release 5 has only just been defined, it is too early to date and provide a full and stable overview of the content of the following Releases. Tdoc PCG#08(02)23 provides an first indication of the potential content of Release 6.

As earlier reported even though the overall process put in place by TSG-SA allow for medium to long term work and planning, only few contributions are received for TSG-SA WG1 (S1) to establish the requirements for longer term vision. To help progressing this work TSG-SA organised in October 2001 a 3GPP future evolution workshop. The main focus of contributions to this workshop was short to medium term evolution with a strong focus on consolidation of technology and features introduced in Release 99, 4 and 5. The key items identified at the workshop has now been converted into work items and incorporated in the overall workplan.

However, TSG SA still would like to create a long term vision which spans longer than what is currently in the workplan. On this background TSG-SA have started discussions of how to better stipulate the creation of a long term vision. At TSG-SA #15 it was agreed to plan for a “long term vision” creation kick-off meeting in conjunction with TSG-SA #17. A preparation meeting for this will be held during the TSG #16 meetings.

8 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 has now enter a phase where it is a routine within the work of 3GPP and is very useful in the discussions around the content and target dates for releases. The overall work plan is provided to PCG for consideration in Tdoc PCG#08(02)14.