

Source: Chairman TSG SA

Title: Report to PCG#09 on work in TSG-SA

Agenda: 4

Document for:

Decision	
Discussion	
Information	X

1 Main events since last meeting

In the period April 2002 (PCG#08) to October 2002 (PCG#09) TSG-SA have held two TSG-SA plenary meeting, TSG-SA#16 (Marco Island, 10 – 13 June 2002) and TSG-SA#17 (Biarritz, 9 – 12 September 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 ad-hoc meeting on the subject of "3GPP Future Evolution". The purpose of organising the ad-hoc was to collect inspiration for the future evolution of the 3GPP based systems. Further a workshop on MBMS was held in May 2002.

2.1 Work related to Service Aspects

The service requirements and associated stage 1 documentation for release '99 and release 4 and release 5 are considered complete and the necessary adjustments and clarification caused by the stage 2 and stage 3 work done. 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. This kick-off meeting took place during TSG_SA#17 and drafted a set of terms of references for the further work to establish a vision of the 3GPP Future Evolution. Also proposals for outline and type of deliverables were elaborated. The recommendations from the ad-hoc meeting was approved by TSG-SA and a next meeting to further progress the issue will be held in conjunction with TSG SA #18. The full meeting report from the ad-hoc meeting is provided separately (See PCG#09(02)19).

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

Has reported earlier to PCG 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 had been working closely with TSG CN working groups in this process. However, it was early been clear that the security related work for IMS could first be completed in the June 2002 time frame and thus causing an unfortunate 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 granted an exception for completion and inclusion in Release 5 for the security aspects. These issues were timely resolve and there is now no major outstanding items for release 5.

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 2001, 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). Also in ITU-T characterization test of the Wideband AMR codec is being performed and it is intended that the results will be include together with the 3GPP characterization results in 3GPP TR 26.976

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.

Finally, TSG SA have adopted a new work item on "Performance characterisation of default codecs for PS conversational multimedia application (Release 6)". It is worth nothing that to complete this work

founding of an independent laboratory would be required. No final estimate of the cost exists, however it expected that at least 160 kEuro will be required to finance this task. TSG SA have encouraged its membership to see if it is possible to help financing this task fully or partly through voluntary contributions. However, for time being TSG SA WG4 have been ask not to initiate any action which would require financing before the founding is settled. ***PCG is invited to consider if this task could be included as part of 3GPP's founded work programme for 2003.***

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 occurred for Release 5 where the telecom management related specifications first were fully ready in September 2002. However, this represent a clear improvement compared to the previous releases and already now a work plan for the telecom management work for Release 6 has been established.

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 final completion of the first version of IMS. TSG SA has in cooperation with TSG-CN reviewed the liaison statement from IETF raising concern about the way 3GPP in certain cases have made use of SIP, which IETF believe is not in line with the intentions and thus longer term could cause problems. As response to this a 3GPP action plan to review and potentially fix the issues identified by IETF has been elaborated. In addition a reply to IETF indicating that 3GPP are reviewing the issues raises has been drafted and sent.

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 has taken note of the completion of major work items such as HSDPA as part of Release 5.

As reported to the last meeting of PCG, 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. This workshop took

place in May 2002 and was successful in establishing a common understanding of the requirements and the technical challenges across the different TSGs and working groups.

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. In general no major issues has raised between TSG SA and TSG-T, only the usual coordination of the requirement and architectural work with the technical work of TGS T.

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 and TSG GERAN's considerations about potential enhancements to A and Gb interfaces. 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, 4 and 5

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.

TSG-SA has in co-operation with the other TSGs reviewed the overall work plan regarding the content and completion of release 5.

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#09(02)13. TSG-SA believes that with or two exceptions a complete set of specifications for Release 5 now is available. As usual TSG –SA will at its next meeting review all the status and stability 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.

6 Beyond Release 5

As the content of Release 5 has only just been functionally completed, it is too early to date and provide a full and stable overview of the content of the following Releases. Tdoc PCG#09(02)14 provides an first indication of the potential content of Release 6.

It is perhaps worth reiterating that the work on defining a content of a release is 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.

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 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 work plan. 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. This kick-off meeting took place during TSG_SA#17 and drafted a set of terms of references for the further work to establish a vision of the 3GPP Future Evolution. Also proposals for outline and type of deliverables were elaborated. The recommendations from the ad-hoc meeting was approved by TGS-SA and a next meeting to further progress the issue will be held in conjunction with TSG SA #18. The full meeting report from the ad-hoc meeting is provided separately (See PCG#09(02)19).

8 General Management issues

At TSG SA #17 some discussion of the relation between TSG SA and 3GPP in general and the newly established Open Mobile Alliance known as OMA took place. It was found that OMA could be considered as a clear co-operation partner for 3GPP. Further it was found that the terms of reference for 3GPP is not and should not be affected by this new body and the work of OMA from a 3GPP point of view is to be seen as complementary to 3GPPs work. It was found that there for the time being is no need for a specific cooperation agreement or similar, as Liaisons with OMA in the usual way seems to fulfil the current needs.

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. Extract of the overall work plan is provided to PCG for consideration in Tdoc PCG#09(02)12.