

**Source:** TTC

**Title:** Progress of Evolution-related work in 3GPP

**Agenda item:** 4.4

**Document for:**

Decision	X
Discussion	
Information	

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## 1. Discussion

Currently work is ongoing within TSG SA and TSG RAN on the evolution of the 3GPP system to meet the future demands of the mobile telecommunications market. Specifically, this work is captured within the work items for All-IP Network (AIPN) in TSG SA WG1, System Architecture Evolution (SAE) in TSG SA WG2 and Long Term Evolution for the UTRA and UTRAN (RAN LTE) within TSG RAN.

The Work Items for SAE in TSG SA WG2 and RAN LTE in TSG RAN were both produced and approved at TSG#26 in December 2004. However, there is a large difference in the progress made for each of the work items. The RAN LTE study within TSG RAN is making good progress and the work has benefited substantially from creation of a work plan with agreed milestones within the initial phases of the activity. However, the progress of the SAE study within TSG SA WG2 has been very limited. In contrast to the structured methodology of the work on RAN LTE the SAE work within SA2 seems to be suffering from a lack of direction without clear working methods and/or work plan.

The Japanese market was the first to introduce 3G mobile systems in 2001 and currently Japan contains over half of the global 3G subscribers. With subscriber figures for 3GPP systems approaching 20 million and a high level of competition further advancement of 3G mobile systems within Japan is vital. Therefore, the current evolution-related activities within 3GPP, such as SAE and RAN LTE, are particularly important to the Japanese market and timely progress of the standardisation work is essential to ensure the commercial demands upon 3G systems within Japan are met. For this reason, the lack of progress of the work on SAE is of considerable concern to TTC.

It is now almost ten months since the work item for SAE was approved and the progress so far is from the level that should have been achieved in this time period. At this stage it seems extremely unlikely that the current schedule for the SAE work will be met. Furthermore, due to the strong relationship of the two pieces of work, the lack of progress of the SAE work may jeopardise progress on RAN LTE and close synchronisation of the activities is essential.

In order to improve the progress of work on SAE so as to maintain the current schedule and to synchronise the progress with the related work of other groups, particularly RAN LTE, TTC believe that an efficient and effective working process for SAE (similar to the one for RAN LTE) is necessary.

Concerns over the lack of progress the SAE work were discussed at the last TSG SA Plenary and a creation of a more structured approach to the work was proposed. Despite recognition of the concerns over the lack of progress, it was concluded that the interested parties progress formation of a structured working process for SAE offline, not within TSG SA WG2 meeting time. This approach is not acceptable as formation of a working methodology, such as clear work plan with agreed milestones, needs to be a transparent and inclusive process. Also, it is unlikely that a methodology agreeable to all

the companies involved in the work can be formulated by a small group of companies outside of the SA WG2 meetings.

## **2. Proposal**

It is proposed that the PCG advise TSG SA, in particular TSG SA WG2, that the work on SAE be more structured with a clear and documented working process. Furthermore, it should be requested that this methodology be formulated in an open and transparent manner.

### 3. Appendix

The following is an extract from the TSG SA#29 Draft Meeting Report v0.0.6 (Close of meeting draft) capturing the discussion of the 'Progress of SAE work'.

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#### 8.6 (SAE) - 3GPP System Architecture Evolution

[TD SP-050538](#) Progress of SAE work. This was introduced by NTT DoCoMo. It is proposed that TSG SA plenary instruct SA WG2 to discuss and produce a clear work plan for SAE. As a minimum this work plan shall include:

- i) milestones to be achieved during each TSG plenary cycle.
- ii) agenda items, expected input and expected output for each meeting.

Furthermore, it is recommended that an appropriate agenda item is added to the agenda for the next SA WG2 meeting (SA WG2 ad-hoc, 11th – 14th October 2005) to enable SA WG2 to consider this issue as soon as possible.

#### Discussion and conclusion:

The TSG RAN Chairman reported that the LTE work plan had been established by the working groups and progress is only achieved by a high level of effort from the Member companies. It was suggested that an overall work plan for the SAE and LTE work is created to show the relationship between the work. The SA WG2 Chairman commented that the progress is slowed down, not by the lack of a work plan but the focus has been on the instructions from RAN and TSG SA to define the Core Network and Radio architecture functional split, with only some "spare time" to look at the main architectural issues. He thought that the unwillingness for companies to compromise on proposed solutions was a contributing factor to the slow progress. NTT DoCoMo responded that their proposals would lead to a more comfortable environment in the meetings to allow compromises. Qualcomm reported that they agreed with many points of the NTT DoCoMo document and had felt frustrated by the SAE meetings, which have a broad agenda and not much time to cover it. More meetings would not necessarily improve matters as there would be less time for reflection and internal company discussions between meetings. A strict work plan was also not thought to be the solution as some time has already been lost on the functional split milestone imposed on the work. 3 stated that they would like a clear overview of the evolution work in order to monitor progress and determine where contribution is needed. 02 reminded the meeting that the RAN LTE work was dependent upon output from the SAE architecture work and realistic timescales for the work should be determined and documented.

TSG SA Chairman proposed to return to this issue after the TSG RAN LTE report and determine if any guidance can be given to SA WG2. The TSG RAN Chairman reported that a set of priorities had been developed in the joint meeting with SA WG2 which should stimulate the progress of the work in these areas. NTT DoCoMo asked that TSG SA bear in mind that there is more to the SAE work than the functionality split. This was discussed again with [TD SP-050602](#) (see agenda item 12.3) and this contribution was [noted](#).

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#### 12.3 TSG-RAN Report and Questions for Advice

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[TD SP-050602](#) LTE Way forward between RAN WGs and SA WG2. This was introduced by the TSG RAN Chairman. This paper summarises the discussions on issues that are currently not finalized between RAN WGs and SA WG2 and is proposing a way forward allocating the different aspects primarily in one of the WGs. It is foreseen that this allocation is for the start of the work and in no way proposing that the full responsibility is in that group. It is a shared responsibility. It is also proposed that due to the next meetings organization in different places but during the same weeks that as soon as one of the working group has progressed one issue the other groups are informed by providing the output of the discussion to the others.

**Discussion and conclusion:**

It was [noted](#) that this provides a **starting point** for discussions. It was asked whether SA WG2 could be asked to produce a similar document for the SAE work. The TSG RAN Chairman pointed out that this covers also the scope of the SAE work, so a second document is not necessary. The SA WG2 Chairman explained that this document can be used for guidance on where to send delegates for the LTE and SAE work and provides an initial overview of the functional split as determined at present. The next step is to divide the specification work up between RAN WGs and SA WG2. **This work plan and functional split was endorsed by TSG SA.**

It was commented that the SAE work is at a lower level than was hoped at the offset of SAE. It was proposed that more structure is introduced into the SA WG2 SAE work and SA WG2 should be asked to study this and make proposals for an improved structure. The SA WG2 Chairman was reluctant to have this discussion in the SA WG2 meeting but encouraged Delegates to talk about this off-line. In order not to use up SA WG2 meeting time, it was asked if SA WG2 could hold a discussion over the e-mail list. **SA WG2 were encouraged to efficiently plan and progress the work on SAE. Companies are asked to hold off-line discussions in order to facilitate this.**

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