Technical Specification Group Services and System Aspects Meeting #11, Palm Springs, CA, USA, 19-22 March 2001

TSGS#11(01)0162

Source: Nokia

Title: 3GPP Future Evolution

Document for: Discussion
Agenda Item: 4 and 8.10

Introduction

3GPP roadmap and future evolution have been discussed in 3GPP on several occasions. The reason for these discussions has been the need to see beyond 3GPP Release 5, a point at which most 3GPP work items are expected to be completed. TSG-SA agreed to arrange workshops whose output is reported back to TSG-SA, and used as guidance in SA1 and SA2, for 3GPP future roadmaps. Two future oriented workshops were arranged in year 2000, covering architecture, requirements and service scenarios. The guidance given to SA1 and SA2 was very useful, but did not go beyond Release 5. Independent external forums have been set up to discuss future evolution, too. Nokia prefers that work on 3GPP future evolution be done in 3GPP, honouring the TSG-SA agreement.

Also, to learn from the history of cellular standardisation, and can be recalled that GSM phases 1 and 2 were expected to define 2G. Nevertheless, technology competition made it necessary to develop GSM further, before the deployment of UMTS. On Nokia's initiative, a two-day GSM Future Evolution Workshop was arranged in 1993. It covered several technical areas, e.g., new speech codecs and packet radio service. This led to GSM phase 2+.

Today, the 3GPP system is at a similar watershed as GSM was 8 years ago. It is a safe guess to say that there is similar evolutionary potential in 3GPP as there was in GSM. Now we need to define the topics on which to concentrate our efforts.

Proposal

Nokia volunteers to arrange and host 3GPP Future Evolution Workshop. The workshop should concentrate on topics beyond 3GPP Release 5, with a 2-4 year scope. Such a scope is far enough in the future to leave room for significant improvements, but near enough to allow concentrating on technical topics; e.g., presenting results of research programs, avenues for further research, and technologies that could be adapted to the 3GPP environment. Likely candidates are enhanced radio interface, mobility protocols, service creation environments, security, billing, addressing, and system architecture. After the workshop a smaller team could draft a proposal for the following TSG-SA, to be used also in SA1 and SA2 as guidance for roadmap planning.

Release 5 contents can be expected to have stabilised by TSG-SA#13 (in early October). To allow TSGs to work on Release 5 undisturbed, autumn 2001 would be a good time for the proposed workshop. Looking at the 3GPP meeting calendar, week 43 stands out. Two days would be a suitable duration for the workshop, e.g., October 24-25, 2001.