Technical Specification Group Services and System Aspects Meeting #12, Stockholm, Sweden, 18-21 June 2001

Source: Nokia

Title: Report from IPNG WG Interim Meeting May 30 – June 1, 2001

**Document for:** Information

Agenda Item: 6.3

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#### 1 INTRODUCTION

The IPNG Working Group invited 3GPP to make a presentation on IPv6 in 3GPP networks. This task was allocated to 3GPP TSG SA WG2 in the 3GPP TSG SA#11. The presentation was discussed in the 3GPP TSG SA WG2#18 meeting and a task force was named to prepare the presentation. The final presentation was distributed on the 3GPP TSG SA WG2 mail explorer and can also be found from the meeting web site. (http://playground.sun.com/ipng/meetings.html)

### 2 OVERVIEW OF THE MEETING

There was originally a day allocated for the 3GPP presentation and the spin-off discussions. In addition, 3GPP2 also requested for a timeslot to present their issues with Ipv6. The atmosphere in the meeting was very cooperative and also a bit enthusiastic. Anyway most of the day was used to present the overview of the 3GPP architecture, how IPv6 works in 3GPP networks and where it is mandatory. The IPNG WG showed great interest for the 3GPP architecture and to the technical details of how 3GPP plans to use IPv6. There was also some discussion about possible problems with the way that 3GPP has defined the usage for IPv6. As a very encouraging sign of cooperation, the IPNG WG is planning to provide 3GPP guidance to overcome the current shortcomings.

As the presentation covered current methods and specifications and the audience was not familiar with the 3GPP architecture and procedures, the discussion was mostly concentrated on questions about the functionality of the UMTS packet architecture. As the group was very interested, the presentation hopefully provided them the technical background knowledge of UMTS packet architecture. In addition, some interesting observations were raised that have not been discussed in detail in 3GPP. IPNG WG is also very enthusiastic to help 3GPP to further develop the support for IPv6 in UMTS. The draft meeting minutes can be found from (http://playground.sun.com/ipng/minutes/ipng-meeting-may2001.txt)

# 3 OBSERVATIONS AND OPEN ISSUES

As the IPNG WG interim-meeting participants had not had very much time to read 3GPP specifications, and thus the UMTS architecture was new to most of the people. Thus, there were not many open issues identified. However, as people were very interested in the subject already some possible issues were identified. The issues found are listed in the following.

- 1. Currently the MS can only be allocated a single IPv6 address per PDP Context. This is considered an unnecessary limitation for IPv6. It was discussed that maybe a better approach would be the allocation of a /64 prefix per PDP Context.
- 2. The support for IPv6 privacy extensions is not currently possible for the MS.
- 3. Is an IPv6 prefix allocated per PDP Context or among many PDP Contexts?
- 4. If the Interface ID not globally unique, the local Interface ID bit has to be set accordingly. It might be useful to make 23.060 to reference to RFC2373 to clarify this case.

# 4 PLANS FOR THE FUTURE

There was considerable interest from the group to create a design team to help 3GPP to further develop the support for IPv6 in 3GPP. The goal of the design team would be to not only identify issues, but also to propose solutions for 3GPP to consider. The output of the design team would be an Internet-Draft. This Internet-Draft would them be sent to 3GPP as a Liaison Statement.

# 5 SUMMARY

The meeting was a success in every aspect. People in the Interim-Meeting were genuinely interested and the atmosphere was one of good cooperation. Hopefully, the 3GPP presentation gave the IPNG WG good knowledge of UMTS packet architecture and a good basis for future cooperation.