

Title: Elaboration of UE Vendor name plus time stamp
Source: Ericsson
Document for: Discussion
Agenda: 8

1 Introduction

During several of the previous TSG RAN meetings the issue of how to identify that a specific UE has a specific problem has been discussed. At TSG RAN #16 [1] was elaborated. This document further clarifies the option "UE Vendor name plus time stamp".

2 Discussion

Several of the options in [1] targets to identify the UEs that have problems due to that there either were a standard error or there were no possibility to verify the implementation at the launch of the UE. IMEI-SV is such identifier, which identifies the UE on a very detailed level. Although this would enable the RNC to avoid using functionality that the UE don't support, none of the IMEI-SV based options in [1] propose to provide the information in the very first message from the UE to the RNC. The reason is that the IMEI-SV is far too big to fit into the limited space of the RRC Connection Request message. From an RNC point of view, the UE identification should be identifying the functions of the AS, i.e. the platform vendor should be identified, and thus the "UE platform vendor name" is better describing the option.

The idea with UE platform vendor name plus time stamp is to take the good parts of the IMEI-SV and remove the heavy parts. In short one can say that it is "compressing" the IMEI-SV to a size that fits in the RRC Connection Request message. The "compression" is done in such a way that most of the information of the IMEI-SV is kept. Only if the UE vendor makes an update that suddenly makes a working and tested functionality not working there might be an issue. Those cases should be rare and easily avoided through testing with existing networks.

Based on the UE platform vendor name and time stamp, the RNC can for each functionality that has some problems with some of the existing UEs, decide whether to invoke the functionality or not. For a specific UE platform vendor it could be that the UE is indicating a time stamp after Q3 2003 the functionality works whereas for another UE platform vendor it works after Q2 2004.

3 Details of UE platform vendor name plus time stamp option

The UE platform vendor name can be identified with a bit string of 7 bits. This allows for 128 UE platform vendors, which should be more than sufficient. It is proposed that the GSM Association (or any other suitable organisation) allocates the UE platform vendor name. The time stamp would be increased every quarter of a year and with 6 bits 16 years will be covered. 16 years would be more than enough.

References

- [1] RP-020449 Methods to handle early mobiles (Vodafone)