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Source: Cingular Wireless, Voicestream Wireless, BT, GSM Alliance
Title: Updating of 11.11 and 11.14 for Release 4
Document for: Discussion and Approval

Introduction

This document addresses some of the concerns that North American 2G operators have with respect to the migration and support of the SIM from a 2G to 3G platform.

Discussion

Of particular interest is the status of the SIM specifications, GSM TS 11.11 and 11.14, which are currently frozen at R99. This means that only editorial modifications and corrections can be made and new features can not be added for 2G operators. Consequently, the only place to add any new features for a 2G operator is the 3G specification, TS 31.102, which is for the USIM application and the UICC physical device.

According to 3G TS 22.101, it shall be possible to use a UICC to be used in a 2G ME to provide GSM access and security context by having the SIM application on it. In other words, a 2G ME reads the SIM application only and not the USIM application from a UICC. Thus, adding new features for 2G operators to the USIM specification means that these still can not be used in a pure 2G environment (i.e. 2G ME, SIM, HLR etc), as a 2G ME does not support the USIM application.

Of course, it may be mandated that a 2G Rel-4 ME support the USIM application, but again, this does not fully resolve the migration issue, since the introduction of new ME's and UICC's would be required.

The net result is that for any new feature that a 2G operator needs, he must get new ME's that support a USIM and SIM as well as the new cards i.e. UICC's. The current UIC/SIM will not be able to updated, even though the role-out of the new ME's and cards may take a considerable amount of time.

Other reasons why new features may be required for 2G operators include:

- The addition of the new GSM 850 band, this provides a path for existing ANSI-136 carriers to overlay or replace their ANSI-136 networks with a GSM network and this may require some specific SIM only support

- Some operators in North America are in the process of converging their networks for voice services via the GAIT initiative (GSM/ANSI-136 Interoperability Team) and through the EDGE work for packet services, and this may require additional SIM support

- It should also be noted that the specifications and standards for these multi-mode mobiles and SIMs have been based on the GSM TS 11.11 specification, as 3G USIM specifications were not stable at that time.

By allowing GSM TS 11.11 and 11.14 to continue to evolve beyond R99 or by some other means (e.g. a new specification defining files and procedures independently to the 2G or 3G platforms and having TS 11.11 and TS 31.102 reference it), it would be possible for 2G operators to define

new features for 2G and even 3G operation. This would enable 2G operators to provide a smoother migration from existing 2G platforms to 3G platforms without having to make major equipment changes. It is much easier for an operator to over-the-air-program a new file than to replace a SIM card with a UICC and for a 2G ME to have a software upgrade to support a new file and it's functionality than to replace that 2G ME with a 3G/2G ME.

Conclusion/Recommendations

The coexistence of the two specifications (SIM R99+ and USIM) would also make it possible to specify features that were independent of 2G or 3G i.e. GPRS parameters, operator name's etc. Then when an operator migrated to 3G it would allow for a smoother transition and the transparency of these features.

It would also allow a 2G operator to deploy UICC's ahead of actual 3G deployment and still provide a consistent set of features for their customers.

We understand that there is some concern about the maintenance of two specifications, however we believe strongly that at least until release 4, this should be minimal at best.

Therefore, the contributors request that TSG-T and TSG-SA open GSM 11.11 and GSM 11.14 for enhancements at least until release 4.