Title

~~MS and Network-Resident Execution Environments (MS/N-RExE)~~
Traceability and ~~i~~Interactions of Applications and Automatic Execution

Intended Output

Technical Specification, rel. 2000

Impact on Other Technical Specifications and Technical Reports

22.038	SIM application toolkit (SAT); Stage 1
22.057	Mobile Station Application Execution Environment (MExE); Stage 1
23.057	Mobile Station Application Execution Environment (MExE)
24.008	Mobile Radio Interface Layer 3 specification; Core Network Protocols-Stage 3
27.005	Use of Data Terminal Equipment - Data Circuit terminating Equipment (DTE - DCE) interface for Short Message Service (SMS) and Cell Broadcast Service (CBS)
27.007	AT command set for 3G User Equipment (UE)
11.11	Specification of the Subscriber Identity Module - Mobile Equipment (SIM-ME) Interface
11.14	Phase 2+ SIM application Tool kit

Technical Scope

1 Justification

At least two Application Execution Environments have been identified which are resident in the MS; these are MExE (Mobile station Execution Environment), and the SIM Application Toolkit. These Execution Environments have the ability to initiate network transactions, such as making calls, sending MO-SMS etc.. Further, it is possible for CAMEL to make network initiated calls on behalf of the user.

Concerns over the user aspects, security, interactions, and traceability of such events need to be studied.~~and more, has resulted in a SMG Workshop, whose outputs, approved by SMG, are attached to this Work Item Description Sheet and shall be incorporated in the elaboration of this Work Item~~. Based on this work item new requirements on toolkits and changes to PLMN functionality may be needed.

The work should utilise previously achieved results in this area, in particular the outputs from the AAE (Applications and Automatic Execution) and S1 workshops.

2 Service Aspects

2.1 General

Applications using capabilities provided by APIs (Application Programming Interfaces) should conform to a "best practice" to be elaborated by S~~MG~~1. This includes user control, recording, etc., of chargeable events.

2.2 Special

Interactions between the various co-resident applications in the same and different application areas needs special attention. The behaviour of the MS shall not be compromised by interactions between applications.

3 MMI-Aspects

User control of the execution environment, in general, and specifically down to the enabling or disabling of individual applications in any execution environment shall be provided. It shall be possible for the user to review events of these kind that have occurred.

4 Charging Aspects

It is possible that chargeable events are triggered by applications; for this reason, means to provide information as to the initiator of a transaction, e.g. SIM Toolkit application or MExE, and the level of user knowledge of or interaction with such transaction(s) should be made available to the HPLMN.

5 Security Aspects

Security is especially important where it is possible for applications to be loaded into execution environments. It shall be possible for users to verify the authenticity of the source of such applications, and for the execution environment to restrict or control the capabilities of applications.

Supporting Companies

BT, Ericsson, Lucent Technologies, Motorola, Nokia

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