Source: T3

Title: Change Requests to GSM 02.19 "SIM API - stage 1"

Document for: Approval

This document contains a change request to GSM 02.19 as agreed by T3.

T3 Doc	Spec	CR	Rv	Rel	Subject
T3-010365	02.19	A002		rel-5	Limitation of proactive command issued by an application

CR-Form-v3

CHANGE REQUEST

| ⌘ | **02.19** CR **A002** | ⌘ rev | **-** | ⌘ Current version: | **7.1.0** | ⌘ |

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: ⌘   (U)SIM **X**   ME/UE ☐   Radio Access Network ☐   Core Network ☐

Title: ⌘	Limitation of proactive command issued by an application	
Source: ⌘	T3	
Work item code: ⌘		*Date:* ⌘ 08/05/2001
Category: ⌘ **B**		*Release:* ⌘ REL-5

Use *one* of the following categories:
F (essential correction)
A (corresponds to a correction in an earlier release)
B (Addition of feature),
C (Functional modification of feature)
D (Editorial modification)
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use *one* of the following releases:
2   (GSM Phase 2)
R96   (Release 1996)
R97   (Release 1997)
R98   (Release 1998)
R99   (Release 1999)
REL-4 (Release 4)
REL-5 (Release 5)

Reason for change: ⌘	A toolkit application may send a proactive command or call a SIM API service that may affect other applications or the system behaviour.
Summary of change: ⌘	The framework shall guaranty the applets and system integrity.
Consequences if not approved: ⌘	

Clauses affected: ⌘	§4.2
Other specs ⌘ *affected:*	☐ Other core specifications ⌘ Linked with T3-010365, T3-010368, T3-010371 ☐ Test specifications ☐ O&M Specifications
Other comments: ⌘	

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at:
http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://www.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.

3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

4.2   SIM API Architecture

The SIM API shall consist of APIs for GSM 11.14 [3] (pro-active functions) and GSM 11.11 [2] (transport functions). Figure 3 illustrates the interactions between these APIs.
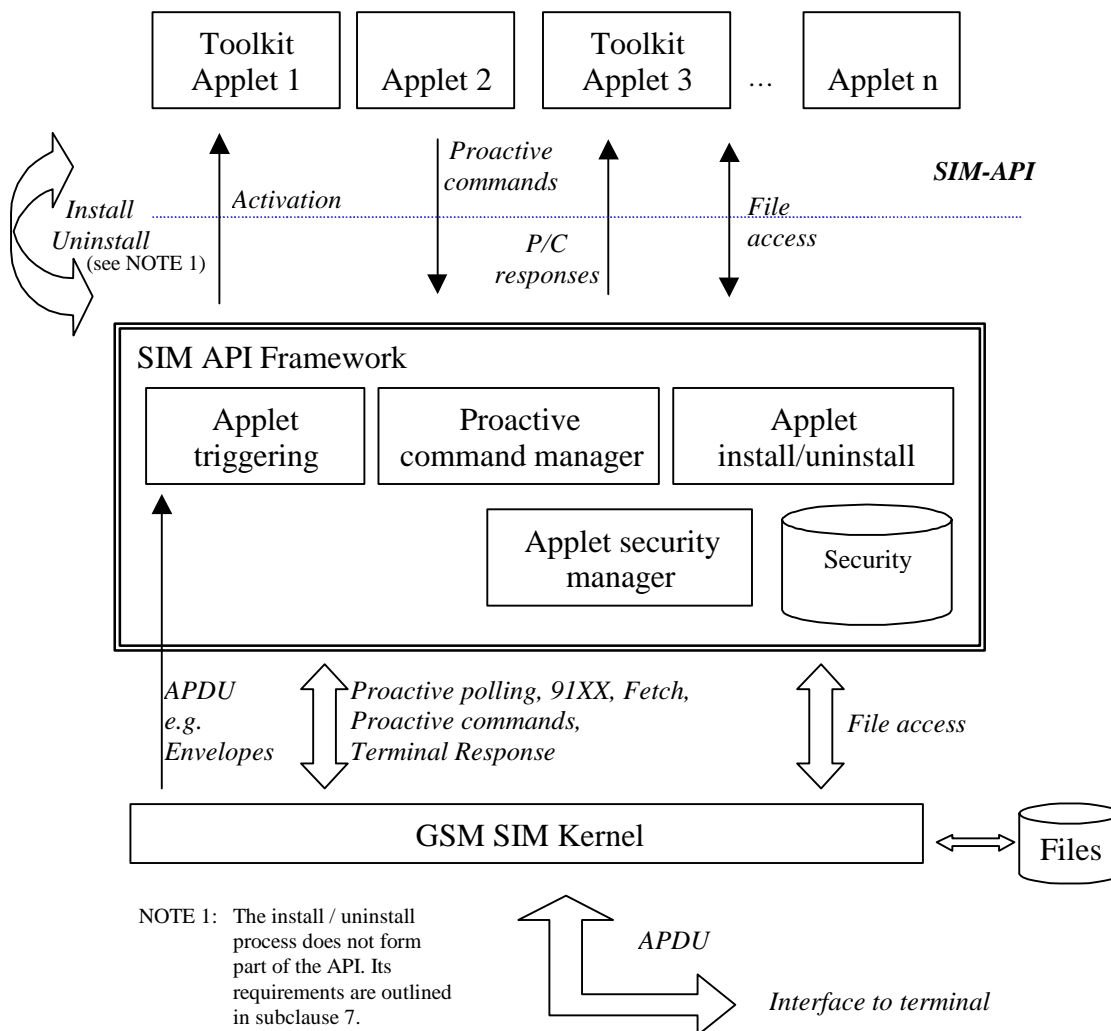

Figure 3: SIM API Architecture

In this model, the GSM data field structure is viewed as a series of data structures and data access functions to the API. In the physical model of course, they may still be stored in elementary files, but the functions will access these data as values within those data structures.

The following figure mirrors the SIM API architecture, relating each part to the appropriate ETSI/GSM or ISO/IEC specification.

Toolkit Applet	Process (A series of instructions requiring Toolkit commands and variables)
	SIM API

GSM 03.48 [4]	Transport Security Mechanisms (e.g. applied to SMS Data download)
GSM 11.14 [3]	TLVs (Built from commands and variables)
GSM 11.11 [2]	Transport of TLVs (Envelope, Fetch, Terminal Response)
	Interaction with data (Other GSM 11.11 [2] commands)

ISO/IEC 7816-3 [5]	Physical interface (e.g. T=0)

Figure 4: SIM API layers

A general requirement of the SIM API is that applets should not interfere with the basic GSM services.

The SIM API framework shall prevent the toolkit applets from sending proactive commands which would interfere with the correct execution of the card operating system and/or other toolkit applets.