3GPP TSG-T (Terminals) Meeting #16
Marco Island, USA 4 – 6 June 2002

Tdoc TP-020110

Source: T3

Title: Change Requests to TS 03.19 SIM API – Java^{TM}

Document for: Approval

This document contains several change requests as follows:

T3 Doc	Spec	CR	Rel	Cat	Subject
T3-020387	03.19	A018	99	F	Clarification of MEProfile behaviour
T3-020391	03.19	A019	99	F	Correction of getSecuredDataOffset() method description for SMS-CB.

3GPP TSG-T3 Meeting #23
Espoo, Finland, 21- 24 May 2002

Tdoc T3-020387

CR-Form-v3

CHANGE REQUEST

⌘	**03.19**	**CR**	**A018**	⌘	rev	**-**	⌘	Current version:	**8.2.0**	⌘

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 ☒ ME/UE □ Radio Access Network □ Core Network □

Title:	⌘ Clarification of MEProfile behaviour			
Source:	⌘ T3			
Work item code:	⌘ SIM API		***Date:*** ⌘	24/05/02
Category:	⌘ **F**		***Release:*** ⌘	R99
	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* *R96* *R97* *R98* *R99* *REL-4* *REL-5*	 *(GSM Phase 2)* *(Release 1996)* *(Release 1997)* *(Release 1998)* *(Release 1999)* *(Release 4)* *(Release 5)*

Reason for change:	⌘	Unspecified behaviour of the MEProfile class and correction of errors
Summary of change:	⌘	The behaviour of the MEProfile class is not specified in the following cases: a) Corrects the rule when ToolkitException.BAD_INPUT_PARAMETER is thrown for the check method in case a negative index value is used b) To allow the access to 16 bits for the getValue method c) Define the position of the bits in the MEProfile data in the short returned value for the getValue method d) Define the MEProfile class behaviour when the requested bits are outside of the range of the MEProfile Data for all methods: the requested features are considered as not supported. e) Define the MEProfile class behaviour when a negative startOffset parameter is submitted to the copy method: the Toolkit Exception "BAD_INPUT_PARAMETER is thrown.
Consequences if not approved:	⌘	Different interpretation and misunderstanding of functionality of the MEProfile methods, and thus interoperability issues

Clauses affected:	⌘	Annex A	
Other specs Affected:	⌘	□ Other core specifications □ 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.

```
/**
     * Checks a facility in the handset profile.
     *
     * @param index the number of the facility to check, according to the table above.
     *
     * @return true if the facility is supported, false ~~otherwise~~if facility is not supported,
     *         or if facility-index outside MEProfile data
     *
     * @exception ToolkitException  with the following reason codes: <ul>
     *      <li>ME_PROFILE_NOT_AVAILABLE if Terminal Profile data are not available</ul>
     *      <li>BAD_INPUT_PARAMETER if index has a negative value</ul>
     */
    public static boolean check(byte index) throws ToolkitException {
        return false;
    }

/**
     * Checks a set of facilities in the handset profile.
     * The method checks all the facilities corresponding to bits set to 1 in
     * the mask buffer.
     *
     * <p>
     * Notes:<ul>
     * <li><em>If </em><code>offset</code><em> or </em><code>length</code><em> parameter is negative an 
</em><code>ArrayIndexOutOfBoundsException</code>
     * <em> exception is thrown and no check is performed.</em>
     * <li><em>If </em><code>offset+length</code><em> is greater than </em><code>mask.length</code><em>, the length
     * of the </em><code>mask</code><em> array an </em><code>ArrayIndexOutOfBoundsException</code><em> exception is thrown
     * and no check is performed.</em>
     * </ul>
     *
     * @param mask a byte array containing the mask to compare with the profile
     * @param offset the starting offset of the mask in the byte array
     * @param length the length of the mask (at least 1)
     *.@return true if the bitwise AND of the MEProfile data padded with 0 and the <code>mask</code> is equal to the 
<code>mask</code>~~set of facilities is supported~~, false otherwise. If <code>length</code> is equal to <code>0</code>, true is 
returned.

     * @exception NullPointerException if <code>mask</code> is <code>null</code>
     * @exception ArrayIndexOutOfBoundsException if check would cause access of data outside mask array bounds
     * @exception ToolkitException with the following reason codes: <ul>
     *      <li>ME_PROFILE_NOT_AVAILABLE if Terminal Profile data are not available</ul>
*/
    public static boolean check(byte[] mask,
                                short offset,
                                short length) throws NullPointerException,
                                                     ArrayIndexOutOfBoundsException,
                                                     ToolkitException {
        return false;
    }

    /**
     * Checks a facility in the handset profile.
     *
     * @param index the number of the facility to check, according to the table above.
     *
     * @return true if the facility is supported, false if facility is not supported,
     *         or if facility-index outside MEProfile data~~otherwise~~
     *
     * @exception ToolkitException  with the following reason codes: <ul>
     *      <li>ME_PROFILE_NOT_AVAILABLE if Terminal Profile data are not available</ul>
     *      <li>BAD_INPUT_PARAMETER if index has a negative value</ul>
     */
    public static boolean check(short index) throws ToolkitException {
        return false;
    }

   /**
     * Returns the binary value of a parameter, delimited by two indexes, from the handset profile.
     *
     * @param indexMSB index of the Most Significant Bit of the handset profile .
     * @param indexLSB index of the Lowest Significant Bit of the handset profile .
     *
     * @return binary value of the data field indicated in the handset profile.
The indexLSB bit in the MEProfile data is the Lowest Significant bit in the short returned value. If padding is necessary, the 
returned value is left padded with 0. The values outside the MEProfile data available are considered to bet set to 0.

     *         The return value is according to the following example:<ul>
     *             <li>If indexMSB=108 and indexLSB=104, the return value is the number of
     *             characters down ME display.</li>
     *             <li>If indexMSB=31 and indexLSB=16, the return value is a short built
     *             from the 4th and 3rd byte of the handset profile with the 4th byte as
     *             the Most significant byte.</li></ul>
     *
     * @exception ToolkitException  with the following reason codes: <ul>
     *      <li>ME_PROFILE_NOT_AVAILABLE if Terminal Profile data are not available
     *      <li>BAD_INPUT_PARAMETER if (indexMSB >= indexLSB +16) or (indexMSB < indexLSB) or
     *      (indexMSB < 0) or (indexLSB < 0) </ul>
     */
    public static short getValue(short indexMSB, short indexLSB) throws ToolkitException {
        return 0;
    }

   /**
     * Copies a part of the handset profile in a buffer.
       The values outside the MEProfile data available are considered to bet set to 0.
     *
     * <p>
     * Notes:<ul>
     * <li><em>If </em><code>dstOffset</code><em> or </em><code>dstLength</code><em> parameter is negative an 
</em><code>ArrayIndexOutOfBoundsException</code>
     * <em> exception is thrown and no copy is performed.</em>
     * <li><em>If </em><code>dstOffset+dstLength</code><em> is greater than </em><code>dstBuffer.length</code><em>, the length
     * of the </em><code>dstBuffer</code><em> array an </em><code>ArrayIndexOutOfBoundsException</code><em> exception is thrown
     * and no copy is performed.</em>
     * </ul>
```

```
*
     * @param startOffset offset of the handset profile first byte to be copied
     * @param dstBuffer destination byte array
     * @param dstOffset offset within destination byte array to start copy into
     * @param dstLength byte length to be copy
     *
     * @return dstOffset + dstLength
     *
     * @exception ArrayIndexOutOfBoundsException if copy would cause access of data outside array bounds
     * @exception NullPointerException if <code>dstBuffer<code> is null
     * @exception ToolkitException  with the following reason codes: <ul>
     *      <li>ME_PROFILE_NOT_AVAILABLE if Terminal Profile data are not available</ul>
     *      <li>BAD_INPUT_PARAMETER if the startOffset is negative</ul>
     */
    public static short copy(short  startOffset, byte[] dstBuffer, short dstOffset, short dstLength)
        throws ArrayIndexOutOfBoundsException, NullPointerException, ToolkitException {
        return 0;
    }
```

3GPP T3 Meeting #23
Espoo, Finland, 22 - 24 May 2002

Tdoc T3-020391
Updated T3-020319

CR-Form-v5.1

CHANGE REQUEST

⌘	**03.19**	**CR**	**A019**	⌘**rev**	**-**	⌘	Current version:	**8.3.0**	⌘

*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 ☒ ME/UE □ Radio Access Network □ Core Network □

Title:	⌘	Correction of getSecuredDataOffset() method description for SMS-CB.		
Source:	⌘	T3		
Work item code:	⌘	SIM API	***Date:*** ⌘	24/05/02
Category:	⌘	**F**	***Release:*** ⌘	R99
		Use one of the following categories: ***F*** *(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:	⌘	The 03.19 CR A010 (Tdoc T3-010064) clarified the getSecuredDataOffset() method behaviour. Unfortuanely the clarification did not take into account that in R99 (and subsequent Releases REL-4 & REL-5) support for SMS-CB formatted have been integrated. Therefore the clarification is not enough for Cell Broadcast Page. Indeed the following " If the Secured Data length is zero the value returned shall be the SMS TPDU TLV length." cannot and does not apply for a Cell Broadcast Page.
Summary of change:	⌘	Re-write getSecuredDataOffset() method description, so that it behaves in the same way for both SMS-PP and SMS-CB.
Consequences if not approved:	⌘	The behaviour for SMS-CB is not described when Secured Data length is zero.

Clauses affected:	⌘	Annex A (normative): Java Card SIM API		
Other specs Affected:	⌘	□ Other core specifications □ 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/specs/CR.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://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 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.

Annex A (normative): Java Card SIM API

The attached files "Annex_A_java.zip" and "Annex_A_HTML.zip" contains source files for the Java Card SIM API.

List of changes to the API html and java source files

Class sim.toolkit.EnvelopeHandler

```
/**

    * Looks for the Secured Data from the Command Packet in the first SMS TPDU

    * or Cell Broadcast Page Simple TLV contained in the Envelope handler. This can

    * be used on the events:

    * - EVENT_FORMATTED_SMS_PP_ENV, EVENT_FORMATTED_SMS_PP_UPD, if the SMS TP-UD is formatted

    * according to TS~~GSM~~03.48 Single Short Message.

    * - EVENT_FORMATTED_SMS_CB, if the Cell Broadcast Page is formatted according to GSM 03.48.

    * If the element is available it becomes the TLV selected.

    *

    * @return the offset of the Secured Data first byte in the first SMS TPDU or Cell Broadcast Page TLV element. If the Secured Data length is zero the value returned shall be the offset of the first byte following the TS 03.48 Command Packet structure. ~~If the Secured Data length is zero the value returned shall be the SMS TPDU TLV length~~.

    *

    * @exception ToolkitException with the following reason codes: <ul>

    *      <li><code>UNAVAILABLE_ELEMENT</code> in case of unavailable SMS TPDU or Cell Broadcast Page TLV element or wrong data format </ul>

    */



    public short getSecuredDataOffset() throws ToolkitException {

          return 0;

   }
```