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

Tdoc TP-020117

Source: T3

Title: Change Requests to TS 31.121 UICC-Terminal Interface; Application Test specification

Document for: Approval

This document contains several change requests as follows:

T3 Doc	Spec	CR	Rel	Cat	Subject
T3-020400	31.121	006	99	F	Correction of tests using EF (USIM Service Table)
T3-020401	31.121	007	4	F	Correction of tests using EF (USIM Service Table)

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

Tdoc T3-020400

CR-Form-v3

CHANGE REQUEST

⌘ **31.121** **CR** **006** ⌘ rev **-** ⌘ Current version: **3.1.0** ⌘

*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 ☐ ME/UE ☐ Radio Access Network ☐ Core Network ☐

Title:	⌘	Correction of tests using EF (USIM Service Table)
Source:	⌘	T3
Work item code:	⌘	TEI
Date:	⌘	24/05/02
Category:	⌘	**F**
Release:	⌘	REL-99

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:	⌘	The description of the binary coding is not correct.
Summary of change:	⌘	The description of the binary coding is corrected
Consequences if not approved:	⌘	The test cannot be performed correctly.

Clauses affected:	⌘	4.1.1.8, 8.2.1.4.1, 8.2.2.4.1		
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.

4.1.1.8 EF_{UST} (USIM Service Table)

Logically:

Local Phone Book available
User controlled PLMN selector available
Fixed dialling numbers available
Barred dialling numbers available
The GSM Access available
The Group Identifier level 1 and level 2 not available
Service n 33 (Packed Switched Domain) shall be set to '1'

Coding:	B1	B2	B3	B4	B5
binary	x~~X~~x11~~x~~x xx 11	xxxx xxxx	xxxx 1x00	xxxx x1xx	xxxx xxx1

The coding of EF_{UST} shall conform with the capabilities of the USIM used.

8.2.1 Correct storage of a SMS on the USIM

8.2.1.1 Definition and applicability

Once a SMS is received by the UE, the Terminal shall store the SMS on the USIM, if this is indicated by the class 2 of the SMS (USIM specific SMS). For this it is assumed, that at least one relevant SMS field are available on the USIM and they are indicated as empty. If all SMS data field are full, this shall be indicated in the SMS Status filed.

This test applies to all 3G Terminal accessing UTRAN and supporting "receive SMS" functionality.

8.2.1.2 Conformance requirement

The received class 2 SMS shall be stored on the USIM in EF_{SMS}. The status of a received SMS, which has not been read yet, shall be set to "3" (SMS to be read). After the last empty SMS field is filled with a received SMS, the memory full flag shall be set in the EF_{SMSS}.

TS 23.038, clause 4.

TS 24.040 [13]

TS 31.102, subclause 4.2.25 and 4.2.28

8.2.1.3 Test purpose

1) To verify that the 3G Terminal stored correctly the class 2 SMS on the USIM.

2) To verify that the 3G Terminal sets the status of a received, and not yet read SMS to "3" (SMS to be read).

3) To verify that the 3G Terminal sets the memory full flag in EF_{SMSS}.

8.2.1.4 Method of test

8.2.1.4.1 Initial conditions

The default UICC is used with the following exception:

EF_{UST} (USIM Service Table)

Logically:
Local Phone Book available
User controlled PLMN selector available
Fixed dialling numbers available
Barred dialling numbers available
The GSM Access available
The Group Identifier level 1 and level 2 not available
SMS available
SMS Status available
Service n 33 (Packed Switched Domain) shall be set to '1'

Coding:	B1	B2	B3	B4	B5
binary	~~x~~X~~x~~11~~x~~x xx 11	x11x xxxx	xxxx 1x00	xxxx x1xx	xxxx xxx1

The coding of EF_{UST} shall conform with the capabilities of the USIM used.

EF_{SMS} (Short Message Service)

At least 10 records.

Record 1 shall be empty.
Logically: Status byte set to empty.

Record 1:

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	...	B176
Hex	00	00	00	00	00	00	00	00	00	00	00	00	...	FF

All other Record shall be full.
Logically: Status byte set to SMS read.
The text body of the record shall be filled with any appropriate text.

Records

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	...	B176
Hex	01	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	...	xx

Note: "xx" shall be the appropriate text using the SMS default 7-bit coded alphabet as defined in 3G TS 23.038 which represents the received SMS.

EF_{SMSS} (SMS Status)

Logically: Last used TP-MR not defined.
Memory capacity available (flag unset b1="1").

Coding:	B1	B2
Hex	FF	FF

The USS transmits on the BCCH, with the following network parameters:

Attach/detach:	disabled
LAI (MCC/MNC/LAC):	246/081/0001
Access control:	unrestricted.

User Equipment:

The UE is in MM-state "idle, updated".

8.2.1.4.2 Procedure

a) After the UE is set to idle mode, a defined SMS with 160 characters shall be send to the UE.

b) After the UE has indicated that a SMS was received, the SMS shall not be read. The UE is powered off.

8.2.1.5 Acceptance criteria

1) After step b) the record of the EF_{SMS} which was empty, shall contain the following values:

Logically: Status byte set to SMS to be read
The text of the received SMS shall be present in the record.

Record 1:

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	...	B176
Hex	03	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	...	xx

Note: "xx" shall be the appropriate text using the SMS default 7-bit coded alphabet as defined in 3G TS 23.038 which represents the received SMS.

2) After step b) the memory flag in the EF_{SMSS} shall be set to full.

EF_{SMSS} (SMS Status)

Logically: Last used TP-MR shall be set to any appropriate value.
Memory capacity available (flag set b1="0").

Coding:	B1	B2
Hex	FE	xx

8.2.2 Correct reading of a SMS on the USIM

8.2.2.1 Definition and applicability

A SMS which is stored but not yet read, is indicated as Status "3" (SMS to be read) on EF_{SMS}. The Terminal may indicate the user this status. After the SMS is read by the user, the status of the SMS shall be changed to "1" (SMS read).

This test applies to all 3G Terminal accessing UTRAN and supporting "receive SMS" functionality.

8.2.2.2 Conformance requirement

A received shall be stored on the USIM in EF_{SMS}. At the time the SMS is read by the user, the status of a received SMS, shall be changed to "1" (SMS read).

TS 23.038, clause 4.

TS 23.040 [13]

TS 31.102, subclause 4.2.25 and subclause 4.2.28.

8.2.2.3 Test purpose

1) To verify that the 3G Terminal read correctly the SMS on the USIM.

2) To verify that the 3G Terminal changes the status of a read SMS to "1" (SMS read).

8.2.2.4 Method of test

8.2.2.4.1 Initial conditions

The default UICC is used with the following exception:

EF_{UST} (USIM Service Table)

Logically:
Local Phone Book available
User controlled PLMN selector available
Fixed dialling numbers available
Barred dialling numbers available
The GSM Access available
The Group Identifier level 1 and level 2 not available
SMS available
SMS Status available
Service n 33 (Packed Switched Domain) shall be set to '1'

Coding:	B1	B2	B3	B4	B5
binary	~~x~~X~~x~~11~~xx~~ xx 11	x11x xxxx	xxxx 1x00	xxxx x1xx	xxxx xxx1

The coding of EF_{UST} shall conform with the capabilities of the USIM used.

EF_{SMSS} (SMS Status)

Logically: Last used TP-MR not set.
Memory capacity available (flag unset b1="1").

Coding:	B1	B2
Hex	FF	FF

EF_{SMS} (Short Message Service)

Logically: Status byte set to SMS to be read.
A chosen test is written in the text body of the EF_{SMS}.

Record 1:

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	...	B176
Hex	03	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	...	xx

Note: "xx" shall be the appropriate text using the SMS default 7-bit coded alphabet as defined in 3G TS 23.038 which represents the stored SMS.

At least 9 records.
Logically: Status byte set to empty
no text is written (Remainder Bytes set to "00").

Record:

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	...	B176
Hex	00	00	00	00	00	00	00	00	00	00	00	00	...	FF

A USS is only needed to bring the UE into a defined idle mode. The USS transmit on the BCCH:

Attach/detach: disabled
LAI (MCC/MNC/LAC):246/081/0001
Access control: unrestricted.

User Equipment:

The UE is in MM-state "idle, updated".

8.2.2.4.2 Procedure

a) After the UE has brought in idle state, the SMS shall be read.

b) The UE is powered off.

8.2.2.5 Acceptance criteria

1) After a) the correct text of the SMS shall be read from the UE display.

2) After step b) the EF_{SMS} record 1 shall contains the following values:

Logically: Status byte set to SMS read.
the text of the SMS shall be unchanged.

Record 1:

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	...	B176
Hex	01	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	...	xx

Note: "xx" shall be the appropriate text using the SMS default 7-bit coded alphabet as defined in 3G TS 23.038 which represents the stored SMS.

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

Tdoc T3-020401

CR-Form-v3

CHANGE REQUEST

⌘ **31.121** **CR** **007** ⌘ rev **-** ⌘ Current version: **4.0.0** ⌘

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

Title:	⌘	Correction of tests using EF (USIM Service Table)
Source:	⌘	T3
Work item code:	⌘	TEI
Date:	⌘	24/05/02
Category:	⌘	**F**
Release:	⌘	REL-4

Use one of the following categories:
F *(essential correction)*
A *(corresponds to a correction in an earlier release)*
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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 description of the binary coding is not correct.
Summary of change:	⌘	The description of the binary coding is corrected
Consequences if not approved:	⌘	The test cannot be performed correctly.

Clauses affected:	⌘	4.1.1.8, 8.2.1.4.1, 8.2.2.4.1		
Other specs Affected:	⌘	☐ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	
Other comments:	⌘			

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4.1.1.8 EF_{UST} (USIM Service Table)

Logically:

Local Phone Book available
User controlled PLMN selector available
Fixed dialling numbers available
Barred dialling numbers available
The GSM Access available
The Group Identifier level 1 and level 2 not available
Service n 33 (Packed Switched Domain) shall be set to '1'

Coding:	B1	B2	B3	B4	B5
binary	x~~X~~x11~~x~~x xx 11	xxxx xxxx	xxxx 1x00	xxxx x1xx	xxxx xxx1

The coding of EF_{UST} shall conform with the capabilities of the USIM used.

8.2.1 Correct storage of a SMS on the USIM

8.2.1.1 Definition and applicability

Once a SMS is received by the UE, the Terminal shall store the SMS on the USIM, if this is indicated by the class 2 of the SMS (USIM specific SMS). For this it is assumed, that at least one relevant SMS field are available on the USIM and they are indicated as empty. If all SMS data field are full, this shall be indicated in the SMS Status filed.

This test applies to all 3G Terminal accessing UTRAN and supporting "receive SMS" functionality.

8.2.1.2 Conformance requirement

The received class 2 SMS shall be stored on the USIM in EF_{SMS}. The status of a received SMS, which has not been read yet, shall be set to "3" (SMS to be read). After the last empty SMS field is filled with a received SMS, the memory full flag shall be set in the EF_{SMSS}.

TS 23.038, clause 4.

TS 24.040 [13]

TS 31.102, subclause 4.2.25 and 4.2.28

8.2.1.3 Test purpose

1) To verify that the 3G Terminal stored correctly the class 2 SMS on the USIM.

2) To verify that the 3G Terminal sets the status of a received, and not yet read SMS to "3" (SMS to be read).

3) To verify that the 3G Terminal sets the memory full flag in EF_{SMSS}.

8.2.1.4 Method of test

8.2.1.4.1 Initial conditions

The default UICC is used with the following exception:

EF_{UST} (USIM Service Table)

Logically:
Local Phone Book available
User controlled PLMN selector available
Fixed dialling numbers available
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The GSM Access available
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Service n 33 (Packed Switched Domain) shall be set to '1'

Coding:	B1	B2	B3	B4	B5
binary	~~x~~X~~x~~11~~x~~x xx 11	x11x xxxx	xxxx 1x00	xxxx x1xx	xxxx xxx1

The coding of EF_{UST} shall conform with the capabilities of the USIM used.

EF_{SMS} (Short Message Service)

At least 10 records.

Record 1 shall be empty.
Logically: Status byte set to empty.

Record 1:

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	...	B176
Hex	00	00	00	00	00	00	00	00	00	00	00	00	...	FF

All other Record shall be full.
Logically: Status byte set to SMS read.
The text body of the record shall be filled with any appropriate text.

Records

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	...	B176
Hex	01	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	...	xx

Note: "xx" shall be the appropriate text using the SMS default 7-bit coded alphabet as defined in 3G TS 23.038 which represents the received SMS.

EF_{SMSS} (SMS Status)

Logically: Last used TP-MR not defined.
Memory capacity available (flag unset b1="1").

Coding:	B1	B2
Hex	FF	FF

The USS transmits on the BCCH, with the following network parameters:

Attach/detach:	disabled
LAI (MCC/MNC/LAC):	246/081/0001
Access control:	unrestricted.

User Equipment:

The UE is in MM-state "idle, updated".

8.2.1.4.2 Procedure

a) After the UE is set to idle mode, a defined SMS with 160 characters shall be send to the UE.

b) After the UE has indicated that a SMS was received, the SMS shall not be read. The UE is powered off.

8.2.1.5 Acceptance criteria

1) After step b) the record of the EF_{SMS} which was empty, shall contain the following values:

Logically: Status byte set to SMS to be read
The text of the received SMS shall be present in the record.

Record 1:

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	...	B176
Hex	03	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	...	xx

Note: "xx" shall be the appropriate text using the SMS default 7-bit coded alphabet as defined in 3G TS 23.038 which represents the received SMS.

2) After step b) the memory flag in the EF_{SMSS} shall be set to full.

EF_{SMSS} (SMS Status)

Logically: Last used TP-MR shall be set to any appropriate value.
Memory capacity available (flag set b1="0").

Coding:	B1	B2
Hex	FE	xx

8.2.2 Correct reading of a SMS on the USIM

8.2.2.1 Definition and applicability

A SMS which is stored but not yet read, is indicated as Status "3" (SMS to be read) on EF_{SMS}. The Terminal may indicate the user this status. After the SMS is read by the user, the status of the SMS shall be changed to "1" (SMS read).

This test applies to all 3G Terminal accessing UTRAN and supporting "receive SMS" functionality.

8.2.2.2 Conformance requirement

A received shall be stored on the USIM in EF_{SMS}. At the time the SMS is read by the user, the status of a received SMS, shall be changed to "1" (SMS read).

TS 23.038, clause 4.

TS 23.040 [13]

TS 31.102, subclause 4.2.25 and subclause 4.2.28.

8.2.2.3 Test purpose

1) To verify that the 3G Terminal read correctly the SMS on the USIM.

2) To verify that the 3G Terminal changes the status of a read SMS to "1" (SMS read).

8.2.2.4 Method of test

8.2.2.4.1 Initial conditions

The default UICC is used with the following exception:

EF_{UST} (USIM Service Table)

Logically:
Local Phone Book available
User controlled PLMN selector available
Fixed dialling numbers available
Barred dialling numbers available
The GSM Access available
The Group Identifier level 1 and level 2 not available
SMS available
SMS Status available
Service n 33 (Packed Switched Domain) shall be set to '1'

Coding:	B1	B2	B3	B4	B5
binary	~~x~~X~~x~~11~~xx~~ xx 11	x11x xxxx	xxxx 1x00	xxxx x1xx	xxxx xxx1

The coding of EF_{UST} shall conform with the capabilities of the USIM used.

EF_{SMSS} (SMS Status)

Logically: Last used TP-MR not set.
Memory capacity available (flag unset b1="1").

Coding:	B1	B2
Hex	FF	FF

EF_{SMS} (Short Message Service)

Logically: Status byte set to SMS to be read.
A chosen test is written in the text body of the EF_{SMS}.

Record 1:

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	...	B176
Hex	03	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	...	xx

Note: "xx" shall be the appropriate text using the SMS default 7-bit coded alphabet as defined in 3G TS 23.038 which represents the stored SMS.

At least 9 records.
Logically: Status byte set to empty
no text is written (Remainder Bytes set to "00").

Record:

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	...	B176
Hex	00	00	00	00	00	00	00	00	00	00	00	00	...	FF

A USS is only needed to bring the UE into a defined idle mode. The USS transmit on the BCCH:

Attach/detach: disabled
LAI (MCC/MNC/LAC):246/081/0001
Access control: unrestricted.

User Equipment:

The UE is in MM-state "idle, updated".

8.2.2.4.2 Procedure

a) After the UE has brought in idle state, the SMS shall be read.

b) The UE is powered off.

8.2.2.5 Acceptance criteria

1) After a) the correct text of the SMS shall be read from the UE display.

2) After step b) the EF_{SMS} record 1 shall contains the following values:

Logically: Status byte set to SMS read.
the text of the SMS shall be unchanged.

Record 1:

Coding:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	...	B176
Hex	01	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	...	xx

Note: "xx" shall be the appropriate text using the SMS default 7-bit coded alphabet as defined in 3G TS 23.038 which represents the stored SMS.