# 3GPP TSG-CT Meeting #28 Quebec, 1-3 June 2005

Agenda Item:	7.16
Source:	CT6
Title:	R99 CRs and mirror CRs
Document for:	Approval

This document contains the following change requests that are agreed by 3GPP TSG CT WG6 and forwarded to 3GPP TSG CT plenary for approval:

CT doc	CT6 Doc	Spec	CR	Rev	Rel	Title	Sour	Cat	WI	Agenda	Status
							ce				
CP-050137	C6-050359	31.121	062		R99	Correction of the content for Class 1 short messages in TC 8.2.1	CT6	F	TEI	14.1.1	Agreed
CP-050137	C6-050360	31.121	063		Rel-4	Correction of the content for Class 1 short messages in TC 8.2.1	CT6	А	TEI	14.1.1	Agreed
CP-050137	C6-050361	31.121	064		Rel-5	Correction of the content for Class 1 short messages in TC 8.2.1	CT6	А	TEI	14.1.1	Agreed
CP-050137	C6-050362	31.121	065		R99	Essential correction of TC 8.1.2	CT6	F	TEI	14.1.1	Agreed
CP-050137	C6-050363	31.121	066		Rel-4	Essential correction of TC 8.1.2	CT6	А	TEI	14.1.1	Agreed
CP-050137	C6-050364	31.121	067		Rel-5	Essential correction of TC 8.1.2	CT6	А	TEI	14.1.1	Agreed
CP-050137	C6-050429	31.121	069		R99	Deletion of BDN tests	CT6	F	TEI	14.1.1	Agreed
CP-050137	C6-050430	31.121	070		Rel-4	Deletion of BDN tests	CT6	А	TEI	14.1.1	Agreed
CP-050137	C6-050431	31.121	071		Rel-5	Deletion of BDN tests	CT6	А	TEI	14.1.1	Agreed

# Table of TEI CRs

H	31.121 CR 062 <b>⊮ rev</b> - <sup>ℋ</sup> Current version: 3.12.0 <sup>ℋ</sup>
For <u>HELP</u>	on using this form, see bottom of this page or look at the pop-up text over the X symbols.
Proposed cha	nge affects: UICC apps# ME X Radio Access Network Core Network
Title:	# CR 31.121 R99: Correction of the content for Class 1 short messages in TC 8.2.1
Source:	ж CT6
Work item cod	le: ೫ TEI Date: ೫ 26/04/2005
Category:	<b>F</b> Release: <b>%</b> R99Use one of the following categories: F (correction)Use one of the following releases: Ph2 (GSM Phase 2)A (corresponds to a correction in an earlier release)Ph2 (GSM Phase 2)B (addition of feature), C (functional modification of feature)R96 (Release 1996)D (editorial modification)R98 (Release 1998)D (editorial modification)R99 (Release 1999)Detailed explanations of the above categories can be found in 3GPP TR 21.900.Rel-4 (Release 4)Rel-6 (Release 6) Rel-7 (Release 7)
Reason for ch	ange:  # The current specification of TC 8.2.1 proposes to use the same time stamp for all Class 1 SMs send to the ME. Considering 3GPP TS 23.040 sections 3.1 and 6.2, there is the potential risk that a ME may discard all Class 1 short messages as it i allowed inside the ME to discard two short messages received in sequence

	there is the potential risk that a ME may discard all Class 1 short messages as it is allowed inside the ME to discard two short messages received in sequence having the same SC Timestamp. Therefore the TP-Service-Centre-Time-Stamp should be updated to simulate a more realistic scenario in this TC, furthermore the system simulator should indicate that more SMs are waiting to be sent to the ME using the IE TP-More-Messages-to-Send inside the SMS-DELIVER PDU
Summary of change: ೫	The SMS-DELIVER PDUs for the Class 1 SMs includes for the TP-Service- Centre-Time-Stamp always the current time from the system simulator and the TP-More-Messages-to-Send will indicate that more messages for the ME are waiting in the Service Centre
Consequences if # not approved:	Some correctly implemented MEs will fail the test.

Clauses affected:	策 <mark>8.2.1.4.1</mark>	
	YN	
Other specs	#     X     Other core specifications     #	

affected:	X Test specifications	
	X O&M Specifications	
Other comments:	X	

## How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

# 8.2 Short message handling report

# 8.2.1 Correct storage of a SM on the USIM

# 8.2.1.1 Definition and applicability

Once a SM is received by the UE, the Terminal shall store the SM on the USIM, if this is indicated by the class 2 of the SMS (USIM specific SM). 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 and furthermore all memory capacity reserved for SMS inside the ME is filled up to maximum and a SM was rejected, then this shall be indicated in the SMS Status file.

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). If the terminal notifies the network that the terminal has been unable to accept a short message because its memory capacity has been exceeded, then the ME shall set the Memory Capacity Exceeded Notification Flag in the  $EF_{SMS}$ .

- TS 23.038, clause 4.
- TS 23.040, subclause 10.1, Operation 6
- TS 24.011, subclause 8.2.2, 8.2.3 and 8.2.5.4, Table 8.4 (part 2)
- TS 31.102, subclauses 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  $EF_{SMSS}$ . if the terminal notifies the network that the terminal has been unable to accept a short message because its memory capacity has been exceeded

# 8.2.1.4 Method of test

# 8.2.1.4.1 Initial conditions

The default UICC is used with the following exception:

#### EF<sub>UST</sub> (USIM Service Table)

Logica	ally:	Local Phone Bo						
		User controlled	PLMN selector	available				
		Fixed dialling nu	umbers available	e				
		Barred dialling 1	numbers availab	le				
		The GSM Acces	s available					
		The Group Ident	tifier level 1 and	level 2 not avai	lable			
		SMS available						
		SMS Status available						
		Service n 33 (Packed Switched Domain) shall be set to '1'.						
		Enabled Service	s Table availabl	e				
Coding:	B1	B2	B3	B4	B5			

binary	xx1x xx11	xxxx x11x	xxxx 1x00	xxxx x1xx	xxxx xx11

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

# EF<sub>SMS</sub> (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            Hex         00         FF         FF	
--	--

All other Record shall be full.

Logicall	y:		s byte s ext bod				filled v	vith any	approp	riate tex	t.		
Records													
Coding: Hex	B1 01	B2 xx	B3 xx	B4 xx	B5 xx	B6 xx	B7 xx	B8 xx	B9 xx	B10 xx	B11 xx	B12 xx	  B176 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<sub>SMSS</sub> (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.

The USS transmits the short messages with the following parameters:

Logically:

#### Class 2 SM:

**TS-Service Centre Address:** 

Bit 8:	1
Type-Of-Number:	International number
Numbering-Plan-Identification:	ISDN/telephony numbering plan
Address value:	112233445566
SMS TPDU:	
TP-Message-Type-Indicator:	SMS-DELIVER (in the direction SC to MS)
TP-More-Messages-to-Send:	No more messages are waiting for the MS in this SC

TP-Reply-Path:	TP-Reply-Path parameter is not set in this SMS-DELIVER
TP-User-Data-Header-Indicator:	The TP-UD field contains only the short message
TP-Status-Report-Indication:	A status report shall be returned to the SME
Bits 4-3:	00
TP-Originating-Address:	
Bit 8:	1
Type-Of-Number:	International number
Numbering-Plan-Identification	n: ISDN/telephony numbering plan
Address value:	012344556677
TP-Protocol-Identifier:	No interworking, but SME-to-SME protocol
TP-Data-Coding-Scheme:	
Bits 8-7:	General Data Coding
Bit 6:	Text is uncompressed
Bit 5:	Bits 2-1 have a message class meaning
Bits 4-3:	GSM 7 bit default alphabet
Bits 2-1:	Class 2: (U)SIM specific message
TP-Service-Centre-Time-Stamp:	02-03-04 09:13:06 GMT + 1
TP-User-Data-Length:	160
TD Ugar Data:	

**TP-User-Data:** 

"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..."

# Class 1 SM:

The same content as for the Class 2 SM except:

#### SMS TPDU:

TP-Data-Coding-Scheme:

Bits 2-1:

 1:
 Class 1: default meaning: ME-specific

TP-Service-Centre-Time-Stamp: Always set to current time of the system simulator

User Equipment:

The UE is in MM-state "idle, updated". If there is ME storage capacity available, the storage for SMS inside the ME shall be able to allow for at least one more mobile terminated (e.g. Class 1) SM.

#### 8.2.1.4.2 Procedure

a) After the UE is set to idle mode, the defined Class 2 SM defined in 8.2.1.4.1 with 160 characters shall be sent to the UE.

- b) After the UE has indicated that a SM was received, the SM shall not be read.
- c) The USS starts sending Class 1 SMs as defined in 8.2.1.4.1 until the UE sends an RP-ERROR message with cause "Memory capacity exceeded".
- d) 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:

#### Record 1:

Logically:

Status:

RFU bits 8-6:	000
Status:	Used space, message received by MS from network, message to be read
TS-Service Centre Address:	
Bit 8:	1
Type-Of-Number:	International number
Numbering-Plan-Identification:	ISDN/telephony numbering plan
Address value:	112233445566
SMS TPDU:	
TP-Message-Type-Indicator:	SMS-DELIVER (in the direction SC to MS)
TP-More-Messages-to-Send:	No more messages are waiting for the MS in this SC
TP-Reply-Path:	TP-Reply-Path parameter is not set in this SMS-DELIVER
TP-User-Data-Header-Indicator:	The TP-UD field contains only the short message
TP-Status-Report-Indication:	A status report shall be returned to the SME
Bits 4-3:	00
TP-Originating-Address:	
Bit 8:	1
Type-Of-Number:	International number
Numbering-Plan-Identification	a: ISDN/telephony numbering plan
Address value:	012344556677
TP-Protocol-Identifier:	No interworking, but SME-to-SME protocol
TP-Data-Coding-Scheme:	
Bits 8-7:	General Data Coding
Bit 6:	Text is uncompressed
Bit 5:	Bits 2-1 have a message class meaning
Bits 4-3:	GSM 7 bit default alphabet
Bits 2-1:	Class 2: (U)SIM specific message

TP-Service-Centre-Time-Stamp: 02-03-04 09:13:06 GMT + 1

TP-User-Data-Length: 160

**TP-User-Data:** 

"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..."

Coding:

Hex	03	07	91	11	22	33	44	55	66	24	0C	91	10	32	44	55
	66	77	00	12	20	30	40	90	31	60	40	A0	4F	F7	B8	0C
	0A	. 83	A6	CD	29	28	3D	07	C9	CB	E3	72	DA	5E	26	83
	C4	- 79	10	1D	5D	06	55	8B	2C	10	1D	5D	06	51	CB	F2
	76	DA	1D	66	83	E6	E8	30	9B	0D	9A	D3	DF	F2	32	88
	8E	2E	83	A6	CD	29	E8	ED	06	D1	D1	65	50	75	9A	6C
	B2	40	69	33	88	8E	4E	CF	41	E9	39	28	ED	26	A7	C7
	61	7A	99	0C	12	E7	41	74	74	19	34	66	87	E7	73	90
	0C	; F4	36	83	E8	E8	32	68	DA	9C	82	50	D5	69	B2	09
	9A	C3	CB	E3	B4	39	3D	06	4D	9B	D3	94	0B	64	7C	СВ
	41	74	74	7A	0E	72	B9	5C								

2) After step d) the Memory Capacity Exceeded Notification Flag in the  $EF_{SMSS}$  shall be set to exceeded.

# EF<sub>SMSS</sub> (SMS Status)

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

Coding:	B1	B2
Hex	xx	FE

•		CR-Form-v7.1										
CHANGE REQUEST												
ж	31.121 CR 063	Current version: <b>4.11.0</b> <sup>#</sup>										
For <u>HELP</u>	on using this form, see bottom of this page or look at the	pop-up text over the										
Proposed cha	nnge affects: UICC apps೫ ME <mark>Ⅹ</mark> Radio Acc	cess Network Core Network X										
Title:	※ CR 31.121 Rel-4: Correction of the content for Class	ss 1 short messages in TC 8.2.1										
Source:	ж <mark>СТ6</mark>											
Work item co	de: ೫ TEI	<b>Date:</b>										
Category:	<ul> <li><b>A</b></li> <li>Use <u>one</u> of the following categories:</li> <li><i>F</i> (correction)</li> <li><b>A</b> (corresponds to a correction in an earlier release)</li> <li><b>B</b> (addition of feature),</li> <li><b>C</b> (functional modification of feature)</li> <li><b>D</b> (editorial modification)</li> <li>Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u>.</li> </ul>	Release: # Rel-4 Use <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)										
Reason for cl	nange: # The current specification of TC 8.2.1 proposes Class 1 SMs send to the ME. Considering 3GP there is the potential risk that a ME may discard	P TS 23.040 sections 3.1 and 6.2,										

 Summary of change: #
 The SMS-DELIVER PDUs for the Class 1 SMs includes for the TP-Service-Centre-Time-Stamp always the current time from the system simulator and the TP-More-Messages-to-Send will indicate that more messages for the ME are waiting in the Service Centre

 Consequences if not approved:
 #

Clauses affected:	₩ <mark>8.2.1.4.1</mark>	
	YN	
Other specs	業 X Other core specifications	ж

affected:	X Test specifications	
	X O&M Specifications	
Other comments:	X	

## How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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.
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- 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.

# 8.2 Short message handling report

# 8.2.1 Correct storage of a SM on the USIM

# 8.2.1.1 Definition and applicability

Once a SM is received by the UE, the Terminal shall store the SM on the USIM, if this is indicated by the class 2 of the SMS (USIM specific SM). 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 and furthermore all memory capacity reserved for SMS inside the ME is filled up to maximum and a SM was rejected, then this shall be indicated in the SMS Status file.

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). If the terminal notifies the network that the terminal has been unable to accept a short message because its memory capacity has been exceeded, then the ME shall set the Memory Capacity Exceeded Notification Flag in the  $EF_{SMS}$ .

- TS 23.038, clause 4.
- TS 23.040, subclause 10.1, Operation 6
- TS 24.011, subclause 8.2.2, 8.2.3 and 8.2.5.4, Table 8.4 (part 2)
- TS 31.102, subclauses 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  $EF_{SMSS}$ . if the terminal notifies the network that the terminal has been unable to accept a short message because its memory capacity has been exceeded

# 8.2.1.4 Method of test

# 8.2.1.4.1 Initial conditions

The default UICC is used with the following exception:

xxxx x11x

#### EF<sub>UST</sub> (USIM Service Table)

xx1x xx11

binary

Logica	ally:	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 (Pa	acked Switched l	Domain) shall b	e set to '1'.						
		Enabled Service	s Table availabl	e							
Codina:	B1	B2	B3	B4	B5						

xxxx 1x00

xxxx x1xx

3GPP

xxxx xx11

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

## EF<sub>SMS</sub> (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	FF	FF	FF	 FF								

All other Record shall be full.

Logicall	y:				IS read		filled v	vith any	approp	riate tex	t.		
Records													
Coding: Hex	B1 01	B2 xx	B3 xx	B4 xx	B5 xx	B6 xx	B7 xx	B8 xx	B9 xx	B10 xx	B11 xx	B12 xx	  B176 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<sub>SMSS</sub> (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.

The USS transmits the short messages with the following parameters:

Logically:

#### Class 2 SM:

**TS-Service Centre Address:** 

Bit 8:

Type-Of-Number:	International number
Numbering-Plan-Identification:	ISDN/telephony numbering plan
Address value:	112233445566
SMS TPDU:	
TP-Message-Type-Indicator:	SMS-DELIVER (in the direction SC to MS)
TP-More-Messages-to-Send:	No more messages are waiting for the MS in this SC

1

TP-Reply-Path:	TP-Reply-Path parameter is not set in this SMS-DELIVER		
TP-User-Data-Header-Indicator:	The TP-UD field contains only the short message		
TP-Status-Report-Indication:	A status report shall be returned to the SME		
Bits 4-3:	00		
TP-Originating-Address:			
Bit 8:	1		
Type-Of-Number:	International number		
Numbering-Plan-Identification	ISDN/telephony numbering plan		
Address value:	012344556677		
TP-Protocol-Identifier:	No interworking, but SME-to-SME protocol		
TP-Data-Coding-Scheme:			
Bits 8-7:	General Data Coding		
Bit 6:	Text is uncompressed		
Bit 5:	Bits 2-1 have a message class meaning		
Bits 4-3:	GSM 7 bit default alphabet		
Bits 2-1:	Class 2: (U)SIM specific message		
TP-Service-Centre-Time-Stamp:	02-03-04 09:13:06 GMT + 1		
TP-User-Data-Length:	160		
TP Usor Data:			

**TP-User-Data:** 

"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..."

# Class 1 SM:

The same content as for the Class 2 SM except:

#### SMS TPDU:

TP-Data-Coding-Scheme:

Bits 2-1:

: Class 1: default meaning: ME-specific

TP-Service-Centre-Time-Stamp: Always set to current time of the system simulator

User Equipment:

The UE is in MM-state "idle, updated". If there is ME storage capacity available, the storage for SMS inside the ME shall be able to allow for at least one more mobile terminated (e.g. Class 1) SM.

#### 8.2.1.4.2 Procedure

a) After the UE is set to idle mode, the defined Class 2 SM defined in 8.2.1.4.1 with 160 characters shall be sent to the UE.

- b) After the UE has indicated that a SM was received, the SM shall not be read.
- c) The USS starts sending Class 1 SMs as defined in 8.2.1.4.1 until the UE sends an RP-ERROR message with cause "Memory capacity exceeded".
- d) 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:

#### Record 1:

Logically:

Status:

RFU bits 8-6:	000
Status:	Used space, message received by MS from network, message to be read
TS-Service Centre Address:	
Bit 8:	1
Type-Of-Number:	International number
Numbering-Plan-Identification:	ISDN/telephony numbering plan
Address value:	112233445566
SMS TPDU:	
TP-Message-Type-Indicator:	SMS-DELIVER (in the direction SC to MS)
TP-More-Messages-to-Send:	No more messages are waiting for the MS in this SC
TP-Reply-Path:	TP-Reply-Path parameter is not set in this SMS-DELIVER
TP-User-Data-Header-Indicator:	The TP-UD field contains only the short message
TP-Status-Report-Indication:	A status report shall be returned to the SME
Bits 4-3:	00
TP-Originating-Address:	
Bit 8:	1
Type-Of-Number:	International number
Numbering-Plan-Identification	a: ISDN/telephony numbering plan
Address value:	012344556677
TP-Protocol-Identifier:	No interworking, but SME-to-SME protocol
TP-Data-Coding-Scheme:	
Bits 8-7:	General Data Coding
Bit 6:	Text is uncompressed
Bit 5:	Bits 2-1 have a message class meaning
Bits 4-3:	GSM 7 bit default alphabet
Bits 2-1:	Class 2: (U)SIM specific message

TP-Service-Centre-Time-Stamp: 02-03-04 09:13:06 GMT + 1

TP-User-Data-Length: 160

**TP-User-Data:** 

"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..."

Coding:

Hex	03	07	91	11	22	33	44	55	66	24	0C	91	10	32	44	55
	66	77	00	12	20	30	40	90	31	60	40	A0	4F	F7	B8	0C
	0A	. 83	A6	CD	29	28	3D	07	C9	CB	E3	72	DA	5E	26	83
	C4	- 79	10	1D	5D	06	55	8B	2C	10	1D	5D	06	51	CB	F2
	76	DA	1D	66	83	E6	E8	30	9B	0D	9A	D3	DF	F2	32	88
	8E	2E	83	A6	CD	29	E8	ED	06	D1	D1	65	50	75	9A	6C
	B2	40	69	33	88	8E	4E	CF	41	E9	39	28	ED	26	A7	C7
	61	7A	99	0C	12	E7	41	74	74	19	34	66	87	E7	73	90
	0C	; F4	36	83	E8	E8	32	68	DA	9C	82	50	D5	69	B2	09
	9A	C3	CB	E3	B4	39	3D	06	4D	9B	D3	94	0B	64	7C	СВ
	41	74	74	7A	0E	72	B9	5C								

2) After step d) the Memory Capacity Exceeded Notification Flag in the  $EF_{SMSS}$  shall be set to exceeded.

# EF<sub>SMSS</sub> (SMS Status)

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

Coding:	B1	B2
Hex	хх	FE

								CR-Form-v7.1
		CHANGE	EREQ	UE	ST			
æ	31.121	CR 064	ж <b>rev</b>	-	ж	Current vers	<sup>ion:</sup> 5.1.0	ж
For <u>HELP</u> on u	sing this fo	rm, see bottom of thi	s page or	· look a	at the	e pop-up text	over the  sy	mbols.
Proposed change	affects:	UICC apps೫	ME <mark>X</mark>	Rad	lio A	ccess Networ	k Core N	etwork X
<i>Title:</i> ដ	CR 31.12	1 Rel-5: Correction	of the con	itent fo	or Cla	ass 1 short m	essages in T(	C 8.2.1
Source: ೫	CT6							
Work item code: अ	TEI					<i>Date:</i> ೫	26/04/2005	
Category: ⊮	F (cor A (cor B (add C (fun D (edi Detailed ex	the following categorie rection) responds to a correctio dition of feature), ictional modification of torial modification) planations of the above 3GPP <u>TR 21.900</u> .	on in an ea feature)		lease	Ph2 R96 R97 R98 R99 Rel-4 Rel-5 Rel-6	Rel-5 the following re (GSM Phase 2 (Release 1996) (Release 1997) (Release 1999) (Release 4) (Release 5) (Release 6) (Release 7)	) ) )

Reason for change:      ₩	The current specification of TC 8.2.1 proposes to use the same time stamp for all Class 1 SMs send to the ME. Considering 3GPP TS 23.040 sections 3.1 and 6.2, there is the potential risk that a ME may discard all Class 1 short messages as it is allowed inside the ME to discard two short messages received in sequence having the same SC Timestamp. Therefore the TP-Service-Centre-Time-Stamp should be updated to simulate a more realistic scenario in this TC, furthermore the system simulator should indicate that more SMs are waiting to be sent to the ME using the IE TP-More-Messages-to-Send inside the SMS-DELIVER PDU
Summary of change: ℜ	The SMS-DELIVER PDUs for the Class 1 SMs includes for the TP-Service- Centre-Time-Stamp always the current time from the system simulator and the TP-More-Messages-to-Send will indicate that more messages for the ME are waiting in the Service Centre. Furthermore small editorial changes have been applied to clause 8.2.1.4.1 and 8.2.1.4.2 to keep this spec in line with the R99 and Rel-4 version and TS 23.040.
Consequences if # not approved:	Some correctly implemented MEs will fail the test.

Other specs affected:	æ	Υ	X	Other core specifications # Test specifications O&M Specifications	£
Other comments:	ж				

# How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

# 8.2 Short message handling report

# 8.2.1 Correct storage of a SM on the USIM

# 8.2.1.1 Definition and applicability

Once a SMS is received by the UE, the Terminal shall store the SM on the USIM, if this is indicated by the class 2 of the SMS (USIM specific SM). 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 and furthermore all memory capacity reserved for SMS inside the ME is filled up to maximum and a SM was rejected, then this shall be indicated in the SMS Status file.

This test applies to all Terminal accessing UTRAN or GERAN 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). If the terminal notifies the network that the terminal has been unable to accept a short message because its memory capacity has been exceeded, then the ME shall set the Memory Capacity Exceeded Notification Flag in the  $EF_{SMS}$ .

- TS 23.038 [3], clause 4.
- TS 23.040 [13], subclause 10.1, operation 6;
- TS 24.011, subclause 8.2.2, 8.2.3 and 8.2.5.4, Table 8.4 (part 2)
- TS 31.102 [4], subclauses 4.2.25 and 4.2.28.

# 8.2.1.3 Test purpose

- 1) To verify that the Terminal stored correctly the class 2 SMS on the USIM.
- 2) To verify that the Terminal sets the status of a received, and not yet read SMS to "3" (SMS to be read).
- 3) To verify that the Terminal sets the memory full flag in  $EF_{SMSS}$  if the terminal notifies the network that the terminal has been unable to accept a short message because its memory capacity has been exceeded.

# 8.2.1.4 Method of test

# 8.2.1.4.1 Initial conditions

The default UICC is used with the following exception:

#### EF<sub>UST</sub> (USIM Service Table)

Logica	ully:	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'									
		Enabled Services Table available									
Codina:	B1	B2	B3	B4	B5						

<b>e</b> e e ag.					
binary	xx1x xx11	xxxx X11x	xxxx 1x00	xxxx x1xx	xxxx xx11

The coding of  $\text{EF}_{\text{UST}}$  shall conform with the capabilities of the USIM used.

#### EF<sub>SMS</sub> (Short Message Service)

At least Record 1 Logicall	l shall t	e empt	y. s byte s	et to em	ipty.									
Record 1:														
Coding: Hex	B1 00	B2 FF	B3 FF	B4 FF	B5 FF	B6 FF	B7 FF	B8 FF	B9 FF	B10 FF	B11 FF	B12 FF	 	B176 FF
All other Logicall		Statu	s byte s				e filled v	with any	approp	oriate tex	.t.			
Records:														
Coding: Hex	B1 01	B2 xx	B3 xx	B4 xx	B5 xx	B6 xx	B7 xx	B8 xx	B9 xx	B10 xx	B11 xx	B12 xx	 	B176 xx
NOTE	"xx"	shall be	the an	nronriat	e text u	sing the	SMS d	lefault 7	-bit cod	led alph	abet as d	lefined	in 3G T	FS 23 038

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

## EF<sub>SMSS</sub> (SMS Status)

Logically:		Last used TP-MR not defined.				
		Memory capacity available (flag unset b1="1").				
Coding: Hex	B1 FF	B2 FF				

The USS (in case of a Terminal accessing UTRAN) /SS (in case of a Terminal accessing a GERAN) transmits on the BCCH, with the following network parameters:

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

The USS/ SS transmits the short messages with the following parameters:

Logically:

# Class 2 SM:

**TS-Service Centre Address:** 

В	it	8:	

Bit 8:	1
Type-Of-Number:	International number
Numbering-Plan-Identification:	ISDN/telephony numbering plan
Address value:	112233445566
SMS TPDU:	
TP-Message-Type-Indicator:	SMS-DELIVER (in the direction SC to $\underline{MSUE}$ )
TP-More-Messages-to-Send:	No more messages are waiting for the $\underline{MSUE}$ in this SC
TP-Reply-Path:	TP-Reply-Path parameter is not set in this SMS-DELIVER

TP-User-Data-Header-Indicator:	The TP-UD field contains only the short message					
TP-Status-Report-Indication:	A status report shall be returned to the SME					
Bits 4-3:	00					
TP-Originating-Address:						
Bit 8:	1					
Type-Of-Number:	International number					
Numbering-Plan-Identification	: ISDN/telephony numbering plan					
Address value:	012344556677					
TP-Protocol-Identifier:	No interworking, but SME-to-SME protocol					
TP-Data-Coding-Scheme:						
Bits 8-7:	General Data Coding					
Bit 6:	Text is uncompressed					
Bit 5:	Bits 2-1 have a message class meaning					
Bits 4-3:	GSM 7 bit default alphabet					
Bits 2-1:	Class 2: (U)SIM specific message					
TP-Service-Centre-Time-Stamp:	02-03-04 09:13:06 GMT + 1					
TP-User-Data-Length:	160					
TP Usor Data:						

TP-User-Data:

"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..."

## Class 1 SMS:

The same content as for the Class 2 SMS except-:

#### SMS TPDU:

TP-More-Messages-to-Send: More messages are waiting for the MS in this SC

TP-Data-Coding-Scheme:

```
Bits 2-1:
```

Class 1: default meaning: ME-specific

TP-Service-Centre-Time-Stamp: Always set to current time of the system simulator

#### User Equipment:

The UE is in MM-state "idle, updated". If there is ME storage capacity available the storage for SMS inside the ME shall be able to allow for at least one more mobile terminated (e.g. Class 1) SM.

# 8.2.1.4.2 Procedure

- a) After the UE is set to idle mode, the defined class 2 SMS defined in 8.2.1.4.1 with 160 characters shall be sent to the UE.
- b) After the UE has indicated that a SMS was received, the SMS shall not be read.

- c) The USS starts sending Class 1 SMSs as defined in 8.2.1.4.1 until the UE sends an RP-ERROR message with cause "Memory capacity exceeded".
- d) The UE is powered off.

Bits 4-3:

# 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:
```

Logically:	
Status:	
RFU bits 8-6:	000
Status:	Used space, message received by UE from network, message to be read
TS-Service Centre Address:	
Bit 8:	1
Type-Of-Number:	International number
Numbering-Plan-Identification:	ISDN/telephony numbering plan
Address value:	112233445566
SMS TPDU:	
TP-Message-Type-Indicator:	SMS-DELIVER (in the direction SC to UE)
TP-More-Messages-to-Send:	No more messages are waiting for the UE in this SC
TP-Reply-Path:	TP-Reply-Path parameter is not set in this SMS-DELIVER
TP-User-Data-Header-Indicator:	The TP-UD field contains only the short message
TP-Status-Report-Indication:	A status report shall be returned to the SME
Bits 4-3:	00
TP-Originating-Address:	
Bit 8:	1
Type-Of-Number:	International number
Numbering-Plan-Identification	n: ISDN/telephony numbering plan
Address value:	012344556677
TP-Protocol-Identifier:	No interworking, but SME-to-SME protocol
TP-Data-Coding-Scheme:	
Bits 8-7:	General Data Coding
Bit 6:	Text is uncompressed
Bit 5:	Bits 2-1 have a message class meaning

GSM 7 bit default alphabet

Bits 2-1:

Class 2: (U)SIM specific message

TP-Service-Centre-Time-Stamp: 02-03-04 09:13:06 GMT + 1

TP-User-Data-Length: 160

**TP-User-Data:** 

"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 ..."

Coding:	
Hex	

lex	03	07	91	11	22	33	44	55	66	24	0C	91	10	32	44	55
	66	77	00	12	20	30	40	90	31	60	40	A0	4F	F7	B8	0C
	0A	83	A6	CD	29	28	3D	07	C9	СВ	E3	72	DA	5E	26	83
	C4	79	10	1D	5D	06	55	8B	2C	10	1D	5D	06	51	CB	F2
	76	DA	1D	66	83	E6	E8	30	9B	0D	9A	D3	DF	F2	32	88
	8E	2E	83	A6	CD	29	E8	ED	06	D1	D1	65	50	75	9A	6C
	B2	40	69	33	88	8E	4E	CF	41	E9	39	28	ED	26	A7	C7
	61	7A	99	0C	12	E7	41	74	74	19	34	66	87	E7	73	90
	0C	F4	36	83	E8	E8	32	68	DA	9C	82	50	D5	69	B2	09
	9A	C3	CB	E3	B4	39	3D	06	4D	9B	D3	94	0B	64	7C	СВ
	41	74	74	7A	0E	72	B9	5C								

2) After step d) the Memory Capacity Exceeded Notification Flag in the  $EF_{SMSS}$  shall be set to exceeded.

#### EF<sub>SMSS</sub> (SMS Status)

Logical	ly:	Last used TP-MR shall be set to any appropriate value. Memory capacity exceeded (flag set b1="0").
Coding:	B1	B2
Hex	xx	FE

	T6 Meeting #35 ico, 26-29 April 2005	C6-050362 (revised C6-050225)
	CHANGE REQUEST	CR-Form-v7.
ж	31.121 CR 065 <b>⊮rev</b> - <sup>ℋ Cur</sup>	rrent version: <mark>3.12.0</mark> <sup>ж</sup>
For <u>HELP</u> o	on using this form, see bottom of this page or look at the po	p-up text over the
Proposed chan	<b>ge affects:</b> UICC apps <b>೫ <mark>Ⅹ</mark>   ME   Radio Acces</b>	s Network Core Network
Title:	CR 31.121 R99: Essential correction of TC 8.1.2	
Source:	ж CT6	
Work item code	e: ೫ TEI	<b>Date:</b>
Category:		lease: # R99 lse <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)

 Reason for change: # 3GPP TS 31.102 doesn't mandate that during phonebook synchronisation only that EF<sub>UID</sub> record, which contains the value "FF FF", is updated. Update of further EF<sub>UID</sub> records is therefore allowed. In conclusion this means that the acceptance criteria of TC 8.1.2 is not compliant to TS 31.102.

 Summary of change: #
 Test purpose and acceptance criteria of TC 8.1.2 corrected.

 Consequences if not approved:
 #

 Terminals updating further EF<sub>UID</sub> records and also updating EF<sub>UID</sub> correspondingly will fail TC 8.1.2

Clauses affected:	業 <mark>8.1.2</mark>
Other specs affected:	Y       N         %       X         Other core specifications       %         X       Test specifications         X       O&M Specifications
Other comments:	ж

### How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. Below is a brief summary:

#### 3GPP TS 31.121 V3.12.0 (2005-03)

- 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

# 8.1.2 Update of the Phonebook Synchronisation Counter (PSC)

# 8.1.2.1 Definition and applicability

The phonebook synchronisation Counter is used to unambiguously identify the status of the phonebook. Every time the phonebook is reset/deleted or the UID and/or the CC has run out of range, the PSC hall be regenerated.

The PSC is a part of the phonebook identifier.

This test applies to all 3G Terminal using either ID-1 UICC or Plug-in UICC.

# 8.1.2.2 Conformance requirement

Every time either the UID or the CC is incremented by the Terminal, the value of the contend of the appropriate EF shall be tested. If either UID or CC has reached "FF FF", the related EF shall be set to "00 01" and the PSC is incremented.

• TS 31.102, subclause 4.4.2.12.2.

# 8.1.2.3 Test purpose

- 1) To verify that the 3G Terminal has recognised that the values of UID and CC has changed.
- 2) To verify that the 3G Terminal resets the maximal-value of EF<sub>UID</sub> and EF<sub>CC</sub> back to "00 01".
- 3) To verify that the 3G Terminal updates  $EF_{PSC}$ .

# 8.1.2.4 Method of test

#### 8.1.2.4.1 Initial conditions

No USS is needed for this test.

The default UICC is used with the following exception:

#### **EF**<sub>UID</sub> (Unique Identifier)

Logically: one record is set to "FF FF".

Coding: B1 B2 Hex FF FF

#### **EF<sub>PUID</sub>** (**Previous Unique Identifier**)

Logically: is set to "FF FF". Coding: B1 B2 Hex FF FF

#### **EF**<sub>CC</sub> (Change Counter)

FF

Hex

Logically: set to "FF FF" Coding: B1 B2

FF

# **EF**<sub>PSC</sub> (Phonebook Synchronisation Counter)

Logic	ally:	set	to "00 (	0 FF FI	<sup>7</sup> ".
Coding:	B1	B2	B3	B4	
Hex	00	00	FF	FF	

At least one phonebook entry shall be empty and available for creating a new entry (e.g. an appropriate ADN record).

The UICC is installed into the Terminal and the UE is powered on and the correct PIN is entered.

#### 8.1.2.4.2 Procedure

a) A new phonebook entry shall be created.

NOTE 1: This may be done by storing a new telephone number in an empty ADN record.

b) The UE shall have given the time to perform the regeneration of the UID records.

NOTE 2: It is assumed that the UE will indicate the time it needs to perform the regeneration by displaying a busy signal to the use.

# 8.1.2.5 Acceptance criteria

1) After step b) the USIM shall contain the following values:

The  $EF_{UID}$  (Unique Identifier) shall have been regenerated and the first value used to update  $EF_{UID}$  shall have been "00 01". The value FF FF shall have been replaced by an appropriate value which shall be distinguishable to the maximum value (e.g. by having only 11 ADN records).  $EF_{PUID}$  shall contain the UID value, which was used for the last update of  $EF_{UID}$ .

```
Logically: set to "xx xx"
Coding: B1 B2
Hex xx xx
```

NOTE: "xx xx" may have any value except "FF FF".

#### **EFPUID** (Previous Unique Identifier)

 Logically:
 set to "00 01"

 Coding:
 B1
 B2

 Hex
 00
 01

## **EF**<sub>CC</sub> (Change Counter)

Logically: set to "00 01" Coding: B1 B2 Hex 00 01

EF<sub>PSC</sub> (Phonebook Synchronisation Counter)

Logically: set to "00 01 00 00"

# 3GPP TS 31.121 V3.12.0 (2005-03)

Coding:	B1	B2	B3	B4
Hex	00	01	00	00

	CT6 Meeting #35 exico, 26-29 April 2005	C6-050363 (revised C6-05022
	CHANGE REQUEST	CR-Form-vi
ж	31.121 CR 066 *rev - *	Current version: 4.11.0 <sup>#</sup>
For <u>HELF</u>	on using this form, see bottom of this page or look at the	pop-up text over the X symbols.
<b>D</b>		
Proposed ch	ange affects: UICC apps <b>೫ <mark>Ⅹ</mark>    ME  </b> Radio Ac	cess Network Core Network
Titlo:	# CR 31 121 Rel-4: Essential correction of TC 8 1 2	
Title:	# CR 31.121 Rel-4: Essential correction of TC 8.1.2	
	<ul> <li>CR 31.121 Rel-4: Essential correction of TC 8.1.2</li> <li>CT6</li> </ul>	
Source:	ж <mark>СТ6</mark>	Date:
Source: Work item co	₩ CT6 ode: ₩ TEI	
Source: Work item co	ж CT6 ode: ж TEI ж А	Release: ೫ Rel-4
Source: Work item co	<ul> <li>CT6</li> <li>Dde: # TEI</li> <li># A Use <u>one</u> of the following categories:</li> </ul>	Release: # Rel-4 Use <u>one</u> of the following releases:
Source: Work item co	<pre>% CT6 pde: % TEI % A Use one of the following categories:</pre>	Release: # Rel-4 Use <u>one</u> of the following releases: Ph2 (GSM Phase 2)
Source: Work item co	<ul> <li>CT6</li> <li>Dde: # TEI</li> <li># A Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release)</li> </ul>	Release: 米 Rel-4 Use <u>one</u> of the following releases: Ph2 (GSM Phase 2) ) R96 (Release 1996)
Source: Work item co	<ul> <li>CT6</li> <li>TEI</li> <li>A Use <u>one</u> of the following categories:</li> <li>F (correction)</li> <li>A (corresponds to a correction in an earlier release)</li> <li>B (addition of feature),</li> </ul>	Release: % Rel-4 Use <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997)
Source: Work item co	<ul> <li>CT6</li> <li>TEI</li> <li>A Use <u>one</u> of the following categories:</li> <li>F (correction)</li> <li>A (corresponds to a correction in an earlier release)</li> <li>B (addition of feature),</li> <li>C (functional modification of feature)</li> </ul>	Release: % Rel-4 Use <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998)
Source: Work item co	<ul> <li>CT6</li> <li>TEI</li> <li>A Use <u>one</u> of the following categories:</li> <li>F (correction)</li> <li>A (corresponds to a correction in an earlier release)</li> <li>B (addition of feature),</li> <li>C (functional modification of feature)</li> <li>D (editorial modification)</li> </ul>	Release: % Rel-4 Use <u>one</u> of the following releases: Ph2 (GSM Phase 2) ) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999)
Source: Work item co	<ul> <li>CT6</li> <li>TEI</li> <li>A Use <u>one</u> of the following categories:</li> <li>F (correction)</li> <li>A (corresponds to a correction in an earlier release,</li> <li>B (addition of feature),</li> <li>C (functional modification of feature)</li> <li>D (editorial modification)</li> <li>Detailed explanations of the above categories can</li> </ul>	Release: % Rel-4 Use <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4)
Title: Source: Work item co Category:	<ul> <li>CT6</li> <li>TEI</li> <li>A Use <u>one</u> of the following categories:</li> <li>F (correction)</li> <li>A (corresponds to a correction in an earlier release)</li> <li>B (addition of feature),</li> <li>C (functional modification of feature)</li> <li>D (editorial modification)</li> </ul>	Release: % Rel-4Use one Ph2of the following releases: Ph2Ph2(GSM Phase 2)R96(Release 1996)R97(Release 1997)R98(Release 1998)R99(Release 1999)

Reason for change: ೫	3GPP TS 31.102 doesn't mandate that during phonebook synchronisation only that $EF_{UID}$ record, which contains the value "FF FF", is updated. Update of further $EF_{UID}$ records is therefore allowed. In conclusion this means that the acceptance criteria of TC 8.1.2 is not compliant to TS 31.102.
Summary of change: ೫	Test purpose and acceptance criteria of TC 8.1.2 corrected.
Consequences if अ not approved:	Terminals updating further $EF_{UID}$ records and also updating $EF_{UID}$ correspondingly will fail TC 8.1.2

Clauses affected:	# 8.1.2
Other specs	Y     N       #     X       Other core specifications     #
affected:	X     Test specifications       X     O&M Specifications
Other comments:	ж

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

#### 3GPP TS 31.121 V4.11.0 (2005-03)

- 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

# 8.1.2 Update of the Phonebook Synchronisation Counter (PSC)

# 8.1.2.1 Definition and applicability

The phonebook synchronisation Counter is used to unambiguously identify the status of the phonebook. Every time the phonebook is reset/deleted or the UID and/or the CC has run out of range, the PSC hall be regenerated.

The PSC is a part of the phonebook identifier.

This test applies to all 3G Terminal using either ID-1 UICC or Plug-in UICC.

# 8.1.2.2 Conformance requirement

Every time either the UID or the CC is incremented by the Terminal, the value of the contend of the appropriate EF shall be tested. If either UID or CC has reached "FF FF", the related EF shall be set to "00 01" and the PSC is incremented.

• TS 31.102, subclause 4.4.2.12.2.

# 8.1.2.3 Test purpose

- 1) To verify that the 3G Terminal has recognised that the values of UID and CC has changed.
- 2) To verify that the 3G Terminal resets the maximal value of EF<sub>UID</sub> and EF<sub>CC</sub> back to "00 01".
- 3) To verify that the 3G Terminal updates  $EF_{PSC}$ .

# 8.1.2.4 Method of test

#### 8.1.2.4.1 Initial conditions

No USS is needed for this test.

The default UICC is used with the following exception:

#### **EF**<sub>UID</sub> (Unique Identifier)

Logically: one record is set to "FF FF".

Coding: B1 B2 Hex FF FF

#### **EF<sub>PUID</sub>** (**Previous Unique Identifier**)

Logically: is set to "FF FF". Coding: B1 B2 Hex FF FF

#### **EF**<sub>CC</sub> (Change Counter)

Logically: set to "FF FF" Coding: B1 B2

Hex FF FF

#### EF<sub>PSC</sub> (Phonebook Synchronisation Counter)

Logic	ally:	set	to "00 (	0 FF FI	<sup>7</sup> ".
Coding:	B1	B2	B3	B4	
Hex	00	00	FF	FF	

At least one phonebook entry shall be empty and available for creating a new entry (e.g. an appropriate ADN record).

The UICC is installed into the Terminal and the UE is powered on and the correct PIN is entered.

#### 8.1.2.4.2 Procedure

a) A new phonebook entry shall be created.

NOTE 1: This may be done by storing a new telephone number in an empty ADN record.

b) The UE shall have given the time to perform the regeneration of the UID records.

NOTE 2: It is assumed that the UE will indicate the time it needs to perform the regeneration by displaying a busy signal to the use.

# 8.1.2.5 Acceptance criteria

1) After step b) the USIM shall contain the following values:

The  $EF_{UID}$  (Unique Identifier) shall have been regenerated and the first value used to update  $EF_{UID}$  shall have been "00 01". The value FF FF shall have been replaced by an appropriate value which shall be distinguishable to the maximum value (e.g. by having only 11 ADN records).  $EF_{PUID}$  shall contain the UID value, which was used for the last update of  $EF_{UID}$ .

```
Logically: set to "xx xx"
Coding: B1 B2
Hox xx xx
```

NOTE: "xx xx" may have any value except "FF FF".

#### **EFPUID** (Previous Unique Identifier)

 Logically:
 set to "00 01"

 Coding:
 B1
 B2

 Hex
 00
 01

## **EF**<sub>CC</sub> (Change Counter)

Logically: set to "00 01" Coding: B1 B2 Hex 00 01

EF<sub>PSC</sub> (Phonebook Synchronisation Counter)

Logically: set to "00 01 00 00"

# 3GPP TS 31.121 V4.11.0 (2005-03)

Coding:	B1	B2	B3	B4
Hex	00	01	00	00

3GPP TSG- Cancun, Me	C6-050364 (revised C6-050227	
	CHANGE REQUEST	CR-Form-v7.
ж	31.121 CR 067	ent version: <b>5.1.0</b> <sup>#</sup>
For <b>HELF</b>	on using this form, see bottom of this page or look at the pop	-up text over the X symbols.
	<u> </u>	
Proposed cha	<b>ange affects:</b> UICC apps <b>೫ <mark>Ⅹ</mark>   ME  Radio Access</b>	Network Core Network
Title:	CR 31.121 Rel-5: Essential correction of TC 8.1.2	
Source:	¥ CT6	
Work item co	de:೫ <mark>TEI ا</mark>	Date: # 26/04/2005
	# A Rele	ease: # Rel-5
		e <u>one</u> of the following releases:
	Use <u>one</u> of the following categories: Use <b>F</b> (correction)	e <u>one</u> of the following releases: Ph2 (GSM Phase 2)
	Use <u>one</u> of the following categories: Use <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release)	ease: # Rel-5 e <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996)
	Use <u>one</u> of the following categories: Use <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature),	e <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997)
	Use <u>one</u> of the following categories: Use <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature)	e <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998)
	Use <u>one</u> of the following categories: Use <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification)	e <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999)
	Use <u>one</u> of the following categories: Use <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can	e <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4)
Category:	Use <u>one</u> of the following categories: Use 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 <u>TR 21.900</u> .	Pase: %Rel-5e one of the following releases:Ph2(GSM Phase 2)R96(Release 1996)R97(Release 1997)R98(Release 1998)R99(Release 1999)Rel-4(Release 4)Rel-5(Release 5)
	Use <u>one</u> of the following categories: <i>F</i> (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 <u>TR 21.900</u> .	e <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4)

Reason for change:	<b>3GPP TS 31.102</b> doesn't mandate that during phonebook synchronisation only that EF <sub>UID</sub> record, which contains the value "FF FF", is updated. Update of further EF <sub>UID</sub> records is therefore allowed. In conclusion this means that the acceptance criteria of TC 8.1.2 is not compliant to TS 31.102.
Summary of change:	# Test purpose and acceptance criteria of TC 8.1.2 corrected.
Consequences if not approved:	# Terminals updating further EF <sub>UID</sub> records and also updating EF <sub>UID</sub> correspondingly will fail TC 8.1.2

Clauses affected:	<b>第</b> 8.1.2
Other specs affected:	#     X     Other core specifications     #       X     Test specifications     #       X     O&M Specifications     #
Other comments:	<u> </u>

How to create CRs using this form: Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

# 8.1.2 Update of the Phonebook Synchronisation Counter (PSC)

# 8.1.2.1 Definition and applicability

The phonebook synchronisation Counter is used to unambiguously identify the status of the phonebook. Every time the phonebook is reset/deleted or the UID and/or the CC has run out of range, the PSC hall be regenerated.

The PSC is a part of the phonebook identifier.

This test applies to all 3G Terminal using either ID-1 UICC or Plug-in UICC.

# 8.1.2.2 Conformance requirement

Every time either the UID or the CC is incremented by the Terminal, the value of the contend of the appropriate EF shall be tested. If either UID or CC has reached "FF FF", the related EF shall be set to "00 01" and the PSC is incremented.

• TS 31.102, subclause 4.4.2.12.2.

# 8.1.2.3 Test purpose

- 1) To verify that the 3G Terminal has recognised that the values of UID and CC has changed.
- 2) To verify that the 3G Terminal resets the maximal value of EF<sub>UID</sub> and EF<sub>CC</sub> back to "00 01".
- 3) To verify that the 3G Terminal updates  $EF_{PSC}$ .

# 8.1.2.4 Method of test

#### 8.1.2.4.1 Initial conditions

No USS is needed for this test.

The default UICC is used with the following exception:

#### **EF**<sub>UID</sub> (Unique Identifier)

Logically: one record is set to "FF FF".

Coding: B1 B2 Hex FF FF

#### **EF<sub>PUID</sub>** (**Previous Unique Identifier**)

Logically: is set to "FF FF". Coding: B1 B2 Hex FF FF

#### **EF**<sub>CC</sub> (Change Counter)

Logically: set to "FF FF" Coding: B1 B2 Hex FF FF

#### **EF**<sub>PSC</sub> (Phonebook Synchronisation Counter)

Logic	ally:	set	to "00 (	00 FF FI	
Coding:	B1	B2	B3	B4	
Hex	00	00	FF	FF	

At least one phonebook entry shall be empty and available for creating a new entry (e.g. an appropriate ADN record).

The UICC is installed into the Terminal and the UE is powered on and the correct PIN is entered.

#### 8.1.2.4.2 Procedure

a) A new phonebook entry shall be created.

NOTE 1: This may be done by storing a new telephone number in an empty ADN record.

b) The UE shall have given the time to perform the regeneration of the UID records.

NOTE 2: It is assumed that the UE will indicate the time it needs to perform the regeneration by displaying a busy signal to the use.

# 8.1.2.5 Acceptance criteria

1) After step b) the USIM shall contain the following values:

The  $EF_{UID}$  (Unique Identifier) shall have been regenerated and the first value used to update  $EF_{UID}$  shall have been "00 01". The value FF FF shall have been replaced by an appropriate value which shall be distinguishable to the maximum value (e.g. by having only 11 ADN records).  $EF_{PUID}$  shall contain the UID value, which was used for the last update of  $EF_{UID}$ .

```
Logically: set to "xx xx"
Coding: B1 B2
Hox xx xx
```

NOTE: "xx xx" may have any value except "FF FF".

#### **EFPUID** (**Previous Unique Identifier**)

 Logically:
 set to "00 01"

 Coding:
 B1
 B2

 Hex
 00
 01

## **EF**<sub>CC</sub> (Change Counter)

Logically: set to "00 01" Coding: B1 B2 Hex 00 01

EF<sub>PSC</sub> (Phonebook Synchronisation Counter)

Logically: set to "00 01 00 00"

Coding:	B1	B2	B3	B4
Hex	00	01	00	00

	CT6 Meeting #35 exico, 26-29 April 2005	C6-050429 (revised C6-050228)		
CHANGE REQUEST				
H	31.121 CR 069	Current version: <b>3.12.0</b> <sup>#</sup>		
For <mark>HELF</mark>	on using this form, see bottom of this page or look at the	e pop-up text over the ¥ symbols.		
Proposed ch	<b>ange affects:</b> UICC apps <b>೫ <mark>Ⅹ</mark>   ME<mark> </mark> Radio Ac</b>	ccess Network Core Network		
Title:	# CR 31.121 R99: Deletion of BDN tests			
Source:	ж CT6			
Work item co	ode: ೫ TEI	<b>Date:</b>		
Category:	<ul> <li>F</li> <li>Use <u>one</u> of the following categories:</li> <li>F (correction)</li> <li>A (corresponds to a correction in an earlier release</li> <li>B (addition of feature),</li> <li>C (functional modification of feature)</li> <li>D (editorial modification)</li> <li>Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u>.</li> </ul>	Release: %R99Use one of the following releases: Ph2 (GSM Phase 2)Ph2 (GSM Phase 2)Ph3 (Release 1996) R97 (Release 1997) R98 (Release 1997) R99 (Release 1998) R99 (Release 1999) 		
Reason for c	hange: # According to TS 31.102, cl. 4.2.44, the BDN fe functionality provided by USAT, as defined in 31.124 and as stated during T3#33 (see T3-09 BDN related functionality tested in TS 31.121 BDN tests in 31.124.	TS 31.111. USAT is tested in TS 50174, agenda item T3-040734) the		

To avoid duplication of tests the superfluous BDN tests in TS 31.121 need to be removed.

Summary of change: # Deletion of BDN tests and related default values

Consequences if not approved:
 \* As BDN relies on the USAT feature Call Control, testing BDN in TS 31.121 is out of scope of TS 31.121 and is already tested in the dedicated TS 31.124. This also achieves an alignment with the BDN testing for 2G where BDN testing is performed in TS 11.10-4.
 Furthermore BDN testing in TS 31.121 has an impact on terminal certification at GCF and therefore cause conflicts as USAT testing is out of scope of testing USIM functionality. This has an impact on further certification depending on the current USIM testing status at GCF.

Clauses affected: # 4.3, 6.3

YN

Other specs affected:	ж	X	Other core specifications Test specifications O&M Specifications	Ħ	
Other comments:	ж				

# How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

# 4.3 Definition of BDN UICC Void

The BDN test cases require a different configuration than the one described in subclause 4.1. For that purpose a default BDN UICC is defined. In general the values of the BDN UICC are identical to the default UICC, with the following exceptions.

# 4.3.1 Values of the EF's (BDN UICC)

# 4.3.1.1 EF<sub>UST</sub> (USIM Service Table)

Logicall	l <del>y:</del>	Local Phone Bo	ok available				
		User controlled	PLMN selector	available			
		Fixed dialling n	umbers availabl	e			
		Barred dialling	numbers availat	<del>)le</del>			
		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'.					
		Enabled Service	a Tabla availab	Ía Ó			
<del>Codina:</del>	<del>B1</del>	<del>B2</del>	<del>B3</del>	<del>B4</del>	<del>B5</del>		

Coding:	<del>B1</del>	<del>B2</del>	<del>B3</del>	<del>B4</del>	<del>B5</del>
binary	<del>xx1x xx11</del>	XXXX XXXX	<del>xxxx 1x00</del>	<del>xxxx x1xx</del>	<del>xxxx xx11</del>

- The coding of EF<sub>UST</sub> shall conform with the capabilities of the USIM used.

# 4.3.1.2 EF<sub>EST</sub> (Enable Service Table)

Logically: Fixed Dialling Numbers disabled. Barred Dialling Numbers enabled. APN Control list (ACL) disabled.

# Coding: B1

binary 0000-0010

The coding of EF<sub>EST</sub> shall conform with the capabilities of the USIM, unused Bits are set to '0'.

Lo	<del>gically:</del>												
		<u> </u>	ength of	alpha ide	entifier:	<del>6 charac</del>	<del>eters;</del>						
		A	l <del>pha ide</del>	ntifier:			<del>11";</del>						
		<u> </u>	ength of	BCD nu	mber:	<del>"06";</del>							
						- Telepho	onv and ]	[nternat	ional:				
		D	ialled m	imber:		+13579	24680:		,				
						-None;	,						
			<del>xt2:</del>			-None.							
			<b>11</b> ∠.			Tone.							
<del>Codin</del> ;	<del>g for rec</del>	<del>ord 1:</del>											
	<del>B1</del>	<del>B2</del>	B3	<del>B</del> 4	<del>B5</del>	<del>B6</del>	<del>B7</del>	B8	<del>B9</del>	<del>B10</del>	<b>B11</b>	<del>B12</del>	B13
<del>lex</del>	4 <del>2</del>	44	4 <del>E</del>	<del>31</del>	<del>31</del>	<del>31</del>	<del>06</del>	<del>91</del>	<del>31</del>	<del>75</del>	<del>29</del>	<del>6</del> 4	<del>08</del>
	<del>B</del> 14	<del>B15</del>	<del>B16</del>	<del>B17</del>	<del>B18</del>	<del>B19</del>	<del>B20</del>						
	FF	FF	FF	FF	FF	FF	FF						
		-											
Re	cord 2:					<del>6 charac</del>							
							<del>22.;</del>						
				BCD nu									
							my and	Unknow	<del>/n;</del>				
				imber:		<del>-122;</del>							
		—C	<del>CI:</del>										
		— Ex	<u>kt2:</u>			None.							
Coding	<del>g for rec</del>	<del>ord 2:</del>											
<del>lex</del>	<del>B1</del> 4 <del>2</del>	<del>B2</del> 44	<del>B3</del> 4E	<del>B4</del> 32	<del>B5</del> 32	<del>B6</del> 32	<del>B7</del> 04	<del>B8</del> 81	<del>B9</del> <del>21</del>	<del>B10</del> F2	B11 FF	<del>B12</del> FF	<del>B13</del> FF
Hex								0+	<del>2+</del>	FZ	FF	FF	FF
	<del>B14</del> FF	<del>B15</del> FF	<del>B16</del> FF	<del>B17</del> <del>FF</del>	<del>B18</del> FF	<del>B19</del> <del>FF</del>	<del>B20</del> FF						
Re	cord 3:	L	angth of	alpha ide	entifier:	<del>6 charac</del>	eters:						
				ntifier:									
				BCD nu			55,						
						- Telepho	ny and ]	Unknow	<b>712</b>				
				imber:		<u>-112;</u>	my and	CHRHOV	<del>,</del>				
			CI:	moer.		$-\frac{112}{None}$ ;							
			<del>ci.</del> xt2:										
			<del>\\2</del> :			-None.							
Coding	<del>g for rec</del>	<del>ord 3:</del>											
	<del>B1</del>	<del>B2</del>	<del>B3</del>	<del>B4</del>	<del>B5</del>	<del>B6</del>	<del>B7</del>	<del>B8</del>	<del>B9</del>	<del>B10</del>	<del>B11</del>	<del>B12</del>	<del>B13</del>
<del>lex</del>	4 <del>2</del>	44	4 <del>E</del>	<del>33</del>	<del>33</del>	<del>33</del>	<del>03</del>	<del>81</del>	11	<del>F2</del>	FF	FF	FF
	<del>B14</del>	<del>B15</del>	<del>B16</del>	<del>B17</del>	<del>B18</del>	<del>B19</del>	<del>B20</del>						
	FF	FF	FF	FF	FF	FF	FF						
4. <u>3.</u> 1	Λ	FF-	oo (En	ordon		II Code:	2)						
								221					
Lo	gically:	<u> </u>	nergenc	<del>y call co</del>	de: de alob	identifie		<del>22";</del> FEST";					
						ategory:		<del>FU.</del>					
Codinę			2	<del>B3</del>	₿4	<del>B5</del>		<del>36</del>	<del>87</del>	<del>88</del>			
Hex	<del>21</del>	F	2	FF	<del>54</del>	<del>45</del>	5	3	<del>54</del>	<del>00</del>			

#### 4.3.1.5 Other Values of the USIM

All other values of EFs provided by the USIM shall be set to the default values defined in the annex E of TS 31.102. Some EFs (like the GSM Access files) may necessary for some tests and apply only to those test cases.

# 6.3 Barred Dialling numbers (BDN) handlingVoid

## 6.3.1 Terminal and USIM with BDN enabled

## 6.3.1.1 Definition and applicability

Barred Dialling Numbers (BDN) is a service defined for the USIM. An enabled BDN service results in call restrictions for the UE. The call restrictions are controlled by the Terminal. To ascertain the type of USIM and state of BDN the UE runs the BDN capability request procedure during UICC Terminal initialisation.

This test applies to Terminals accessing UTRAN. Besides of that, this test is applicable only to those Terminals supporting BDN and CS.

## 6.3.1.2 Conformance requirement

- 1) Recognising the state of the USIM (BDN enabled) the UE shall perform the UICC initialisation procedure as specified.
- 2) The UE shall prevent call set up to a any number stored in EF<sub>BDN</sub>.
- 3) The UE allows call set up of an emergency call, even if this number is stored in the USIM.

#### Reference:

- -TS 22.101[11], clause 8 and A.19;
- -TS 31.102[4], subclauses 4.2.44, 4.4.2.3, 5.1.1 and 5.3.2.

#### 6.3.1.3 Test purpose

- 1) To verify that the Terminal rejects call set up to any number that has an entry in EF<sub>BDN</sub>.
- 2) To verify that the Terminal allows call set up to any number not stored in EF<sub>BDN</sub>.
- 3) To verify that the Terminal allows emergency call set up even if the number is stored in EF<sub>BDN</sub>.

#### 6.3.1.4 Method of test

6.3.1.4.1 Initial conditions

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

Attach/detach: disabled.

LAI (MCC/MNC/LAC): 246/081/0001.

Access control: unrestricted.

The default BDN UICC with BDN service enabled is installed into the Terminal.

#### 6.3.1.4.2 Procedure

a) The UE is powered on and PIN is entered.

b) Using the MMI a call set up to the barred dialling number 1 (record 1) is attempted.

c) Using the ADN entry a call set up to the abbreviated dialling number 1 (record 1) end is attempted.

d) Using the MMI a call set up to the number "123456" is attempted.

- e) Using the MMI an emergency call set up is attempted using the emergency call code stored in the Terminal
- f) Using the MMI an emergency call set up is attempted using the emergency call code stored in the USIM (i.e. "122").
- NOTE: For step e) one of the emergency call codes, which are available when a SIM/USIM is present, according to 22.101[11], subclause 8 is used (i.e. "112", or "911").

#### 6.3.1.5 Acceptance criteria

- 1) After step a) the UE is registered and in idle state.
- 2) After step b) the UE shall prevent call set up.
- 3) After steps c) and d) the UE shall allow call set up and send the requested number across the air interface.

4) After steps e) and f) the UE shall allow emergency call by indicating the call setup as "Emergency Call".

## 6.3.2 Terminal and USIM with BDN disabled

#### 6.3.2.1 Definition and applicability

Barred Dialling Numbers (BDN) is a service defined for the USIM. An enabled BDN service results in call restrictions for the UE. No numbers which are stored in the  $EF_{BDN}$  may be dialled by the UE. The call restrictions are controlled by the Terminal. To ascertain the type of USIM and state of BDN the UE runs the BDN capability request procedure during UICC Terminal initialisation. Deactivation of the service by the subscriber is possible under the control of PIN2 and switches the USIM into a "normal", non restrictive USIM. When the BDN is disabled no special controls are specified. The BDN may be read as if they were normal ADN. However a modification or deletion of the a BDN is under PIN2 control.

This test applies to Terminals accessing UTRAN. Besides of that, this test is applicable only to those Terminals supporting BDN and CS.

#### 6.3.2.2 Conformance requirement

1) Recognising the state of the USIM (BDN disabled) the UE correctly performs the UICC initialisation procedure.

- 2) The UE allows call set-up to a directory number as stored in EF<sub>BDN</sub>.
- 3) Any change to the EF<sub>BDN</sub> does requests PIN2.

#### Reference:

- -TS 22.101[11], clauses 8 and A.19;
- -TS 31.102[4], subclauses 4.2.44, 5.1.1 and 5.3.2.

#### 6.3.2.3 Test purpose

- 1) To verify that the Terminal as a result of the state of the USIM correctly performs the UICC Terminal initialisation procedure.
- 2) To verify that the Terminal allows call set up to a BDN number.
- 3) The UE shall allow updating of EF<sub>BDN</sub> by the use of PIN2.

#### 6.3.2.4 Method of test

#### 6.3.2.4.1 Initial conditions

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

Attach/detach: disabled.

LAI (MCC/MNC/LAC): 246/081/0001.

Access control: unrestricted.

The default FDN UICC is used with the following exception:

#### EF<sub>EST</sub> (Enable Service Table)

Logically: Fixed Dialling Numbers disabled. Barred Dialling Numbers disabled. APN Control list (ACL) disabled.

Coding: B1 binary 0000-0000

The UICC is installed into the Terminal and the UE is powered on.

#### 6.3.2.4.2 Procedure

a) Using the MMI a call set up to the barred dialling number 1 is attempted.

b) Using the MMI the directory number "+876543210" is stored in EF<sub>BDN</sub> as barred dialling number 1 (record 1). The alpha identifier is not changed. On request of the UE PIN2 is entered.

#### 6.3.2.5 Acceptance criteria

1) After step a) the UE shall allow call set up and send the requested number across the air interface.

#### 2) After step b) record 1 in EF<sub>BDN</sub>, shall contain the following values:

<del>Coding:</del>	<del>B1</del>	<del>B2</del>	<del>B3</del>	<del>B</del> 4	<del>B5</del>	<del>B6</del>	<del>87</del>	<del>B8</del>	<del>B9</del>	<del>B10</del>	<del>B11</del>	<del>B12</del>	<del>B13</del>
<del>Hex</del>	4 <del>2</del>	44	4 <del>E</del>	<del>31</del>	31	<del>31</del>	<del>06</del>	91	<del>78</del>	<del>56</del>	34	<del>12</del>	<del>F0</del>
	<del>B14</del> FF	<del>B15</del> FF	<del>B16</del> FF	<del>B17</del> FF	<del>B18</del> FF	<del>B19</del> FF	<del>B20</del> FF						

3GPP TSG-0	CT6 Meeting #35	C6-050430
Cancun, Me	xico, 26-29 April 2005	(revised C6-050229)
	CHANGE REQUEST	CR-Form-v7.1
ж	31.121 CR 070 <b># rev</b> - <sup># C</sup>	Current version: <mark>4.11.0</mark> <sup>#</sup>
For <u>HELP</u>	on using this form, see bottom of this page or look at the p	oop-up text over the X symbols.
Proposed cha	<b>nge affects:</b> UICC apps <b>೫ <mark>Ⅹ</mark>   ME   Radio Acc</b>	ess Network Core Network
Title:		
Source:	策 CT6	
Work item cod	le: ೫ TEI	<b>Date:</b>
Category:	<ul> <li>A F</li> <li>Use <u>one</u> of the following categories:</li> <li>F (correction)</li> <li>A (corresponds to a correction in an earlier release)</li> <li>B (addition of feature),</li> <li>C (functional modification of feature)</li> <li>D (editorial modification)</li> <li>Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u>.</li> </ul>	Release: X Rel-4 Use <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)
Reason for ch	ange: # According to TS 31.102, cl. 4.2.44, the BDN fea functionality provided by USAT, as defined in TS 31.124 and as stated during T3#33 (see T3-050 BDN related functionality tested in TS 31.121 w BDN tests in 31.124.	S 31.111. USAT is tested in TS 0174, agenda item T3-040734) the

To avoid duplication of tests the superfluous BDN tests in TS 31.121 need to be removed.

Summary of change: # Deletion of BDN tests and related default values

Consequences if not approved:
 # As BDN relies on the USAT feature Call Control, testing BDN in TS 31.121 is out of scope of TS 31.121 and is already tested in the dedicated TS 31.124. This also achieves an alignment with the BDN testing for 2G where BDN testing is performed in TS 11.10-4.
 Furthermore BDN testing in TS 31.121 has an impact on terminal certification at GCF and therefore cause conflicts as USAT testing is out of scope of testing USIM functionality. This has an impact on further certification depending on the current USIM testing status at GCF.

Clauses affected: # 4.3, 6.3

YN

Other specs affected:	ж	X	Other core specifications Test specifications O&M Specifications	Ħ	
Other comments:	Ħ				

#### How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

# 4.3 Definition of BDN UICC Void

The BDN test cases require a different configuration than the one described in subclause 4.1. For that purpose a default BDN UICC is defined. In general the values of the BDN UICC are identical to the default UICC, with the following exceptions.

## 4.3.1 Values of the EF's (BDN UICC)

## 4.3.1.1 EF<sub>UST</sub> (USIM Service Table)

Logically:	Local Phone Bo	<del>ok available</del>			
	User controlled	PLMN selector	<del>available</del>		
	Fixed dialling n	umbers availabl	e		
	Barred dialling	numbers availab	<del>le</del>		
	The GSM Acces	<del>s available</del>			
	The Group Iden	tifier level 1 and	l level 2 not ava	ilable.	
	Service n 33 (Pa	cked Switched	Domain) shall b	e set to '1'	
	Enabled Service	a Tabla availabl	la Ó		
Codina: B1	B2	<del>B3</del>	<del>B4</del>	<del>B5</del>	

Coding:	<del>B1</del>	<del>B2</del>	<del>B3</del>	<del>B4</del>	<del>B5</del>
binary	<del>xx1x xx11</del>	XXXX XXXX	<del>xxxx 1x00</del>	<del>xxxx x1xx</del>	xxxx xx11

- The coding of EF<sub>UST</sub> shall conform with the capabilities of the USIM used.

## 4.3.1.2 EF<sub>EST</sub> (Enable Service Table)

Logically: Fixed Dialling Numbers disabled. Barred Dialling Numbers enabled. APN Control list (ACL) disabled.

## Coding: B1

binary 0000-0010

-The coding of EF<sub>EST</sub> shall conform with the capabilities of the USIM, unused Bits are set to '0'...

	<del>gically:</del>												
Re	<del>cord 1:</del>					<del>6 chara</del>							
							<del>11";</del>						
				BCD nu									
		T(	ON and	NPI:		- Telepho	ony and	Internati	ional;				
		D	ialled m	imber:		<u>+13579</u>	24680;						
			<u>xt2:</u>			-None.							
Codin	<del>g for rec</del>					rone.							
Count	-		De	5.4	55	<b>D</b> o		De	Da	<b>D</b> 4 0	544	<b>D</b> 4 0	<b>D</b> 4 a
	B1	<del>B2</del>	B3	<del>B</del> 4	<del>B5</del>	<del>B6</del>	<del>B7</del>	<del>B8</del>	<del>B9</del>	<del>B10</del>	B11	<del>B12</del>	B13
Hex	4 <del>2</del>	44	4 <del>E</del>	<del>31</del>	<del>31</del>	<del>31</del>	<del>06</del>	<del>91</del>	31	<del>75</del>	<del>29</del>	<del>64</del>	<del>08</del>
	D44	DAC	DAC	D47	D40	<b>D</b> 40	DOO						
	B14	<del>B15</del>	816	B17	B18	819	<del>B20</del>						
	FF	FF	FF	FF	FF	FF	FF						
Re	cord-2:	L	ength of	alpha ide	entifier:	<del>6 chara</del>	<del>cters;</del>						
				ntifier:			<u>22";</u>						
				BCD nu			,						
						- Telepho	my and	Unknow	<u>/n·</u>				
				imber:			Jiry and	CIRIOW	<b>11</b> ,				
		E	<del>xt2:</del>			None.							
Coding	<del>g for ree</del>	<del>ord 2:</del>											
	<del>B1</del>	<del>B2</del>	<del>B3</del>	<del>B4</del>	<del>B5</del>	<del>B6</del>	<del>B7</del>	<del>B8</del>	<del>B9</del>	<del>B10</del>	<del>B11</del>	<del>B12</del>	<del>B13</del>
Hex	4 <del>2</del>	44	4 <del>E</del>	<del>32</del>	<del>32</del>	<del>32</del>	<del>0</del> 4	81	<del>21</del>	<del>F2</del>	FF	FF	FF
	<del>B14</del> FF	<del>B15</del> FF	<del>B16</del> FF	<del>B17</del> FF	<del>B18</del> FF	<del>B19</del> FF	<del>B20</del> FF						
Re	<del>cord 3:</del>	<u> </u>	ength of	alpha ide	entifier:	<del>6 chara</del>	<del>cters;</del>						
		A	l <del>pha ide</del>	ntifier:			<u>33":</u>						
			angth of	BCD nu	mber	"03".	,						
				NPI:			ny and	Unknou	/ <b>n</b> ·				
			ialled m			-112;	Jiry and	CIIKIIOW	, II,				
				moer.									
			CI:			-None;							
	_		<del>xt2:</del>			<u>None.</u>							
Coding	<del>g for rec</del>												
	<del>B1</del>	<del>B2</del>	<del>B3</del>	<del>B4</del>	<del>B5</del>	<del>B6</del>	<del>B7</del>	<del>B8</del>	<del>B9</del>	<del>B10</del>	<del>B11</del>	<del>B12</del>	<del>B13</del>
Hex	4 <del>2</del>	44	4 <del>E</del>	<del>33</del>	<del>33</del>	<del>33</del>	<del>03</del>	<del>81</del>	11	<del>F2</del>	FF	FF	FF
	<del>B14</del>	<del>B15</del>	<del>B16</del>	<del>B17</del>	<del>B18</del>	<del>B19</del>	<del>B20</del>						
	FF	FF	FF	FF	FF	<del>FE</del>	FF						
4. <u>3.</u> 1	.4	<b>EF</b> E	<sub>cc</sub> (En	hergen	<del>cy Ca</del>	II Code	<del>s)</del>						
Ło	<del>gically:</del>			<del>y call co</del>				<del>122";</del>					
		——Ę,	mergenc	v call co	<del>de alnh:</del>	<del>i identifie</del>							
				<del>y call Se</del>					Rescue.				
Codinę Hex	<del>g:</del> B1 21		2	<del>B3</del> FF	<del>B</del> 4 <del>54</del>	<del>B5</del> 4 <del>5</del>		36 53	<del>B7</del> 54	<del>B8</del> <del>10</del>			
	- ·												

## 4.3.1.5 Other Values of the USIM

All other values of EFs provided by the USIM shall be set to the default values defined in the annex E of TS 31.102. Some EFs (like the GSM Access files) may necessary for some tests and apply only to those test cases.

# 6.3 Barred Dialling numbers (BDN) handlingVoid

## 6.3.1 Terminal and USIM with BDN enabled

## 6.3.1.1 Definition and applicability

Barred Dialling Numbers (BDN) is a service defined for the USIM. An enabled BDN service results in call restrictions for the UE. The call restrictions are controlled by the Terminal. To ascertain the type of USIM and state of BDN the UE runs the BDN capability request procedure during UICC Terminal initialisation. At the time an emergency call is setup using the emergency call code read from the EF<sub>ECC</sub>, the UE shall use the category of the emergency service indicated.

This test applies to Terminals accessing UTRAN. Besides of that, this test is applicable only to those Terminals supporting BDN and CS.

## 6.3.1.2 Conformance requirement

- 1) Recognising the state of the USIM (BDN enabled) the UE shall perform the UICC initialisation procedure as specified.
- 2) The UE shall prevent call set up to any number stored in EF<sub>BDN</sub>.
- 3) The UE allows call set up of an emergency call, even if this number is stored in the USIM.

#### Reference:

- -TS 22.101[11], clause 9 and A.20;
- -TS 31.102[4], subclauses 4.2.44, 4.4.2.3, 5.1.1 and 5.3.2;
- <u>TS 24.008[16], subclause 10.5.4.33.</u>

#### 6.3.1.3 Test purpose

- 1) To verify that the Terminal rejects call set up to any number that has an entry in EF<sub>BDN</sub>.
- 2) To verify that the Terminal allows call set up to any number not stored in EF<sub>BDN</sub>.
- 3) To verify that the Terminal allows emergency call set up even if the number is stored in  $EF_{BDN}$ .
- 4) To verify that the Terminal reads correctly the emergency service category stored in EF<sub>ECC</sub>.

#### 6.3.1.4 Method of test

#### 6.3.1.4.1 Initial conditions

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

<u>Attach/detach:</u> disabled.

\_\_\_\_\_LAI (MCC/MNC/LAC): 246/081/0001.

<u>Access control:</u> unrestricted.

#### The default BDN UICC with BDN service enabled is installed into the Terminal.

#### 6.3.1.4.2 Procedure

a) The UE is powered on and PIN is entered.

b) Using the MMI a call set up to the barred dialling number 1 (record 1) is attempted.

c) Using the ADN entry a call set up to the abbreviated dialling number 1 (record 1) end is attempted.

d) Using the MMI a call set up to the number "123456" is attempted.

e) Using the MMI an emergency call set up is attempted using the emergency call code stored in the Terminal

- f) Using the MMI an emergency call set up is attempted using the emergency call code stored in the USIM (i.e. "122").
- NOTE: For step e) one of the emergency call codes, which are available when a SIM/USIM is present, according to TS 22.101[11], subclause 9 is used (i.e. "112", or "911").

#### 6.3.1.5 Acceptance criteria

1) After step a) the UE is registered and in idle state.

2) After step b) the UE shall prevent call set up.

3) After steps c) and d) the UE shall allow call set up and send the requested number across the air interface.

4) After steps e) and f) the UE shall allow an emergency call by indicating the call setup as "Emergency Call".

5) After step f) the UE shall send the emergency service category correctly as "Mountain Rescue".

## 6.3.2 Terminal and USIM with BDN disabled

## 6.3.2.1 Definition and applicability

Barred Dialling Numbers (BDN) is a service defined for the USIM. An enabled BDN service results in call restrictions for the UE. No numbers which are stored in the  $EF_{BDN}$  may be dialled by the UE. The call restrictions are controlled by the Terminal. To ascertain the type of USIM and state of BDN the UE runs the BDN capability request procedure during UICC Terminal initialisation. Deactivation of the service by the subscriber is possible under the control of PIN2 and switches the USIM into a "normal", non restrictive USIM. When the BDN is disabled no special controls are specified. The BDN may be read as if they were normal ADN. However a modification or deletion of the a BDN is under PIN2 control.

This test applies to Terminals accessing UTRAN. Besides of that, this test is applicable only to those Terminals supporting BDN and CS.

#### 6.3.2.2 Conformance requirement

1) Recognising the state of the USIM (BDN disabled) the UE correctly performs the UICC initialisation procedure.

2) The UE allows call set up to a directory number as stored in EF<sub>BDN</sub>.

3) Any change to the EF<sub>BDN</sub> does requests PIN2.

#### Reference:

-TS 22.101[11], clauses 9 and A.20;

-TS 31.102[4], subclauses 4.2.44, 5.1.1 and 5.3.2.

#### 6.3.2.3 Test purpose

1) To verify that the Terminal as a result of the state of the USIM correctly performs the UICC Terminal initialisation procedure.

2) To verify that the Terminal allows call set up to a BDN number.

3) The UE shall allow updating of EF<sub>BDN</sub> by the use of PIN2.

## 6.3.2.4 Method of test

6.3.2.4.1 Initial conditions

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

<u>Attach/detach:</u> disabled.

Access control: unrestricted.

The default FDN UICC is used with the following exception:

#### EF<sub>EST</sub> (Enable Service Table)

Logically: Fixed Dialling Numbers disabled. Barred Dialling Numbers disabled. APN Control list (ACL) disabled.

Coding: B1 binary 0000-0000

The UICC is installed into the Terminal and the UE is powered on.

6.3.2.4.2 Procedure

a) Using the MMI a call set up to the barred dialling number 1 is attempted.

b) Using the MMI the directory number "+876543210" is stored in EF<sub>BDN</sub> as barred dialling number 1 (record 1). The alpha identifier is not changed. On request of the UE PIN2 is entered.

## 6.3.2.5 Acceptance criteria

1) After step a) the UE shall allow call set up and send the requested number across the air interface.

2) After step b) record 1 in EF<sub>BDN</sub>, shall contain the following values:

<del>Coding:</del>	<del>B1</del>	<del>B2</del>	<del>B3</del>	₿4	<del>B5</del>	<del>B6</del>	<del>87</del>	<del>88</del>	<del>B9</del>	<del>B10</del>	<del>В11</del>	<del>B12</del>	<del>B13</del>
<del>Hex</del>	4 <del>2</del>	44	4 <del>E</del>	<del>31</del>	31	<del>31</del>	<del>06</del>	91	<del>78</del>	<del>56</del>	<del>34</del>	<del>12</del>	<del>F0</del>
	B14 FF	<del>B15</del> FF	<del>B16</del> FF	<del>B17</del> <del>FF</del>	<del>B18</del> <del>FF</del>	<del>B19</del> <del>FF</del>	<del>B20</del> FF						

	CT6 Meeting #35 exico, 26-29 April 2005	<b>C6-050431</b> (revised C6-050230)
	CHANGE REQUEST	CR-Form-v7.1
¥	31.121 CR 071	Current version: <b>5.1.0</b> <sup>#</sup>
For <u>HELF</u>	on using this form, see bottom of this page or look at the	⇒ pop-up text over the ℜ symbols.
Proposed ch	a <b>nge affects:</b> UICC apps <b>೫ <mark>Ⅹ</mark>   ME<mark> </mark> Radio Ad</b>	ccess Network Core Network
Title:	# CR 31.121 Rel-5: Deletion of BDN tests	
Source:	ж CT6	
Work item co	ode: ೫ TEI	<b>Date:</b>
Category:	<ul> <li><b>X</b></li> <li><b>A</b></li> <li>Use <u>one</u> of the following categories:</li> <li><b>F</b> (correction)</li> <li><b>A</b> (corresponds to a correction in an earlier release</li> <li><b>B</b> (addition of feature),</li> <li><b>C</b> (functional modification of feature)</li> <li><b>D</b> (editorial modification)</li> <li>Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u>.</li> </ul>	Release: %Rel-5Use one of the following releases: Ph2 (GSM Phase 2)Ph2 (GSM Phase 2)Ph3 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) 
Reason for c	hange: # According to TS 31.102, cl. 4.2.44, the BDN fe functionality provided by USAT, as defined in	TS 31.111. USAT is tested in TS
	31.124 and as stated during T3#33 (see T3-0	50174, agenda item T3-040734) the

31.124 and as stated during T3#33 (see T3-050174, agenda item T3-040734) the BDN related functionality tested in TS 31.121 will be fully covered by the new BDN tests in 31.124.
 To avoid duplication of tests the superfluous BDN tests in TS 31.121 need to be removed.
 Summary of change: # Deletion of BDN tests and related default values
 Consequences if not approved:
 # As BDN relies on the USAT feature Call Control, testing BDN in TS 31.121 is out of scope of TS 31.121 and is already tested in the dedicated TS 31.124. This also achieves an alignment with the BDN testing for 2G where BDN testing is performed in TS 11.10-4.
 Furthermore BDN testing in TS 31.121 has an impact on terminal certification at GCF and therefore cause conflicts as USAT testing is out of scope of testing USIM functionality. This has an impact on further certification depending on the current USIM testing status at GCF.

Clauses affected: % 4.3, 6.3

Other specs affected:	ж	X	Other core specifications Test specifications O&M Specifications	¥	
Other comments:	ж				

#### How to create CRs using this form:

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- 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

# 4.3 Definition of BDN UICC Void

The BDN test cases require a different configuration than the one described in subclause 4.1. For that purpose a default BDN UICC is defined. In general the values of the BDN UICC are identical to the default UICC, with the following exceptions.

# 4.3.1 Values of the EF's (BDN UICC)

## 4.3.1.1 EF<sub>UST</sub> (USIM Service Table)

Logica	<del>ally:</del>	Local Phone Bo	<del>ok available</del>			
		User controlled	PLMN selector	available		
		Fixed dialling n	umbers availabl	e		
		Barred dialling	numbers availat	<del>)le</del>		
		The GSM Acces	<del>ss available</del>			
		The Group Iden	tifier level 1 and	<del>d level 2 not ava</del>	ilable.	
		-Service n 33 (Pa	cked Switched	Domain) shall b	<del>e set to '1'</del>	
		Enabled Service	a Tabla availab	lo		
<del>Coding:</del>	<del>B1</del>	<del>B2</del>	<del>B3</del>	<del>B4</del>	<del>B5</del>	

Coding:	<del>B1</del>	<del>B2</del>	<del>B3</del>	<del>B4</del>	<del>B5</del>
binary	<del>xx1x xx11</del>	XXXX XXXX	<del>xxxx 1x00</del>	<del>xxxx x1xx</del>	xxxx xx11

- The coding of EF<sub>UST</sub> shall conform with the capabilities of the USIM used.

## 4.3.1.2 EF<sub>EST</sub> (Enable Service Table)

Logically: Fixed Dialling Numbers disabled. Barred Dialling Numbers enabled. APN Control list (ACL) disabled.

## Coding: B1

binary 0000-0010

-The coding of EF<sub>EST</sub> shall conform with the capabilities of the USIM, unused Bits are set to '0'.

# 4.3.1.3 EF<sub>BDN</sub> (Barred Dialling Numbers)

$ \begin{array}{ccccc} \mbox{Length of alpha identifier-f c characters;} \\ \mbox{Alpha identifier-f 00c}; \\ \mbox{Length of alpha identifier-f 00c}; \\ TON and NP:$			2			Ŭ		· ·									
Alpha identifier:       "BDN111";         Length of BCD number:       "157924680;         CCt:       None:         Coding-for-record 1;         Bit B2       B3       B4       B5       B6       B7       B8       B4       B12       B13         Hex       42       44       45       31       31       06       91       31       75       29       64       06         B14       B45       B46       B17       B48       B49       B20       FF	Log	<del>gically:</del>															
Longth of BCD number:         "106";           TON and NPI:         Telephony and International;           Dialled number:         11357924680;           CCI:         None;           Ext2:         None;           Coding for record 1:         Hox           Hox         84         82         83         84         85         86         87         88         89         810         844         842         84         45         34         94         96         94         34         75         29         64         93           Bit         845         846         817         849         820         84         95         96         94         34         75         29         64         93           Bit         845         846         84         94         920         84         94 <th>Rec</th> <th colspan="5">Record 1: Length of alpha identifier:</th> <th colspan="9">-6 characters;</th>	Rec	Record 1: Length of alpha identifier:					-6 characters;										
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FF       FF <th< th=""><th>Hex</th><th>4<del>2</del></th><th>44</th><th>4<del>E</del></th><th>31</th><th>31</th><th><del>31</del></th><th><del>06</del></th><th><del>91</del></th><th>31</th><th><del>75</del></th><th><del>29</del></th><th><del>6</del>4</th><th><del>80</del></th></th<>	Hex	4 <del>2</del>	44	4 <del>E</del>	31	31	<del>31</del>	<del>06</del>	<del>91</del>	31	<del>75</del>	<del>29</del>	<del>6</del> 4	<del>80</del>			
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CCI:         None:           Ext2:         None.           Coding for record 2:           Hex         84         82         83         84         85         86         87         88         89         810         811         812         813           Hex         42         44         45         32         32         32         04         81         21         F2         FF				UN and	NPI:	-reception and Unknown;											
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Coding for record 2:         Hex       84       82       83       84       86       86       87       88       89       840       841       842       842       843         Hex       42       44       4E       32       32       32       04       84       24       F2       FF																	
Hex       B1       B2       B3       B4       B5       B6       B7       B8       B0       B10       B11       B12       B13       EF       FE			<u> </u>	<del>xt2:</del>			None.										
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Record 3: Length of alpha identifier: 6 characters;         Alpha identifier: "BDN333";         Length of BCD number: "03";         TON and NPI: Telephony and Unknown;         Dialled number: 112;         CCI: None;         Ext2: None.         Coding for record 3:         Hex       B4       B2       B3       B4       B5       B6       B7       B8       B9       B40       B41       B42       B43         Hex       42       44       4E       33       33       03       84       41       F2       FF		<del>B14</del>	<del>B15</del>	<del>B16</del>	<del>B17</del>	<del>B18</del>	<del>B19</del>	<del>B20</del>									
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Coding for record 3:HexB1B2B3B4B5B6B7B8B9B10B11B12B13Hex42444E333333038111F2FFFFFFB14B15B16B17B18B19B20FFFFFFFFFFFFFFFFFFFFFFFFFFFFCoding:Emergency call code:"122"; Emergency call code alpha identifier:"122"; Mountain Rescue.Coding:B1B2B3B4B5B6B7B8																	
Hex       B1 42       B2 44       B3 4E       B4 33       B5 33       B6 33       B7 03       B8 81       B9 11       B10 E2       B14 EF       B12 EF       B12 EF       B13 EF         4.3.1.4       EF       EF <th< th=""><th></th><th></th><th>—<u> </u></th><th><del>xť2:</del></th><th></th><th></th><th>None.</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th<>			— <u> </u>	<del>xť2:</del>			None.										
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Hex       42       44       4E       33       33       93       84       44       F2       FE       FE <t< td=""><td></td><td>D1</td><td>PO</td><td>D2</td><td>D4</td><td>DE</td><td>PC</td><td>D7</td><td>Do</td><td>PO</td><td><b>P10</b></td><td>D11</td><td><b>P1</b>2</td><td><b>D12</b></td></t<>		D1	PO	D2	D4	DE	PC	D7	Do	PO	<b>P10</b>	D11	<b>P1</b> 2	<b>D12</b>			
B14       B15       B16       B17       B18       B19       B20         FF       FF       FF       FF       FF       FF       FF         4.3.1.4       EF       ECC (Emergency Call Codes)         Logically:       Emergency call code:       "122";         Emergency call code alpha identifier:       "TEST";         Emergency call Service Category:       Mountain Rescue.         Coding:       B1       B2       B3       B4       B5       B6       B7       B8	Hov																
FF       FF       FF       FF       FF       FF         4.3.1.4       EF       EG       Emergency Call Codes)         Logically:       Emergency call code:       "122";         Emergency call code alpha identifier:       "TEST";         Emergency call Service Category:       Mountain Rescue.         Coding:       B1       B2       B3       B4       B5       B6       B7       B8	HOA				99	99	99	00	01	++							
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Logically:       Emergency call code:       "122";         Emergency call code alpha identifier:       "TEST";         Emergency call Service Category:       Mountain Rescue.         Coding:       B1       B2       B3       B4       B5       B6       B7       B8																	
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### 4.3.1.5 Other Values of the USIM

All other values of EFs provided by the USIM shall be set to the default values defined in the annex E of TS 31.102 [4]. Some EFs (like the GSM Access files) may necessary for some tests and apply only to those test cases.

# 6.3 Barred Dialling numbers (BDN) handlingVoid

## 6.3.1 Terminal and USIM with BDN enabled

### 6.3.1.1 Definition and applicability

Barred Dialling Numbers (BDN) is a service defined for the USIM. An enabled BDN service results in call restrictions for the UE. The call restrictions are controlled by the Terminal. To ascertain the type of USIM and state of BDN the UE runs the BDN capability request procedure during UICC Terminal initialisation. At the time an emergency call is setup using the emergency call code read from the EF<sub>ECC</sub>, the UE shall use the category of the emergency service indicated.

This test applies to Terminals accessing UTRAN and supporting CS and to Terminals accessing a GERAN. Besides of that, this test is applicable only to those Terminals supporting BDN.

#### 6.3.1.2 Conformance requirement

- 1) Recognising the state of the USIM (BDN enabled) the UE shall perform the UICC initialisation procedure as specified.
- 2) The UE shall prevent call set up to any number stored in EF<sub>BDN</sub>.
- 3) The UE allows call set up of an emergency call, even if this number is stored in the USIM.

#### Reference:

- -TS 22.101 [11], clause 10 and A.20;
- -TS 31.102 [4], subclauses 4.2.44, 4.4.2.3, 5.1.1 and 5.3.2;
- -TS 24.008 [16], subclause 10.5.4.33.

#### 6.3.1.3 Test purpose

- 1) To verify that the Terminal rejects call set up to any number that has an entry in EF<sub>BDN</sub>.
- 2) To verify that the Terminal allows call set up to any number not stored in EF<sub>BDN</sub>.
- 3) To verify that the Terminal allows emergency call set up even if the number is stored in EF<sub>BDN</sub>-
- 4) To verify that the Terminal reads correctly the emergency service category stored in EF<sub>ECC</sub>.

#### 6.3.1.4 Method of test

#### 6.3.1.4.1 Initial conditions

The USS (in case of a Terminal accessing UTRAN)/ SS (in case of a Terminal accessing GERAN) transmits on the BCCH, with the following network parameters

<u>Attach/detach:</u><u>disabled.</u>

\_\_\_\_\_LAI (MCC/MNC/LAC): 246/081/0001.

<u>Access control:</u> unrestricted.

The default BDN UICC with BDN service enabled is installed into the Terminal.

#### 6.3.1.4.2 Procedure

- a) The UE is powered on and PIN is entered.
- b) Using the MMI a call set up to the barred dialling number 1 (record 1) is attempted.
- e) Using the ADN entry a call set up to the abbreviated dialling number 1 (record 1) end is attempted.
- d) Using the MMI a call set up to the number "123456" is attempted.
- e) Using the MMI an emergency call set up is attempted using the emergency call code stored in the Terminal
- f) Using the MMI an emergency call set up is attempted using the emergency call code stored in the USIM (i.e. "122").
- NOTE: For step e) one of the emergency call codes, which are available when a USIM is present, according to TS 22.101 [11], subclause 10 is used (i.e. "112", "911" or an emergency number downloaded from the serving network (if any).).

#### 6.3.1.5 Acceptance criteria

- 1) After step a) the UE is registered and in idle state.
- 2) After step b) the UE shall prevent call set up.
- 3) After steps c) and d) the UE shall allow call set up and send the requested number across the air interface.
- 4) After steps e) and f) the UE shall allow an emergency call by indicating the call setup as "Emergency Call".
- 5) After step f) the UE shall send the emergency service category correctly as "Mountain Rescue".

# 6.3.2 Terminal and USIM with BDN disabled

## 6.3.2.1 Definition and applicability

Barred Dialling Numbers (BDN) is a service defined for the USIM. An enabled BDN service results in call restrictions for the UE. No numbers which are stored in the  $EF_{BDN}$  may be dialled by the UE. The call restrictions are controlled by the Terminal. To ascertain the type of USIM and state of BDN the UE runs the BDN capability request procedure during UICC Terminal initialisation. Deactivation of the service by the subscriber is possible under the control of PIN2 and switches the USIM into a "normal", non restrictive USIM. When the BDN is disabled no special controls are specified. The BDN may be read as if they were normal ADN. However a modification or deletion of the a BDN is under PIN2 control.

This test applies to Terminals accessing UTRAN and supporting CS and to Terminals accessing a GERAN. Besides of that, this test is applicable only to those Terminals supporting BDN.

#### 6.3.2.2 Conformance requirement

1) Recognising the state of the USIM (BDN disabled) the UE correctly performs the UICC initialisation procedure.

- 2) The UE allows call set up to a directory number as stored in EF<sub>BDN</sub>-
- 3) Any change to the EF<sub>BDN</sub> does requests PIN2.

#### Reference:

- -TS 22.101 [11], clauses 10 and A.20;
- -TS 31.102 [4], subclauses 4.2.44, 5.1.1 and 5.3.2.

#### 6.3.2.3 Test purpose

- 1) To verify that the Terminal as a result of the state of the USIM correctly performs the UICC Terminal initialisation procedure.
- 2) To verify that the Terminal allows call set up to a BDN number.
- 3) The UE shall allow updating of EF<sub>BDN</sub> by the use of PIN2.

#### 6.3.2.4 Method of test

#### 6.3.2.4.1 Initial conditions

The USS (in case of a Terminal accessing UTRAN)/ SS (in case of a Terminal accessing GERAN) transmits on the BCCH, with the following network parameters

Attach/detach: disabled.

\_\_\_\_\_LAI (MCC/MNC/LAC): 246/081/0001.

-Access control: unrestricted.

The default FDN UICC is used with the following exception:

#### EF<sub>EST</sub> (Enable Service Table)

Logically: Fixed Dialling Numbers disabled. Barred Dialling Numbers disabled. APN Control list (ACL) disabled.

Coding: B1 binary 0000-0000

The UICC is installed into the Terminal and the UE is powered on.

6.3.2.4.2 Procedure

a) Using the MMI a call set up to the barred dialling number 1 is attempted.

b) Using the MMI the directory number "+876543210" is stored in EF<sub>BDN</sub> as barred dialling number 1 (record 1). The alpha identifier is not changed. On request of the UE PIN2 is entered.

#### 6.3.2.5 Acceptance criteria

1) After step a) the UE shall allow call set up and send the requested number across the air interface.

2) After step b) record 1 in EF<sub>BDN</sub>, shall contain the following values:

<del>Coding:</del>	<del>B1</del>	<del>B2</del>	<del>B3</del>	<del>B</del> 4	<del>B5</del>	<del>B6</del>	<del>B7</del>	<del>B8</del>	<del>B9</del>	<del>B10</del>	<del>B11</del>	<del>B12</del>	<del>B13</del>
<del>Hex</del>	4 <del>2</del>	44	4 <del>E</del>	<del>31</del>	31	<del>31</del>	<del>06</del>	<del>91</del>	<del>78</del>	<del>56</del>	<del>34</del>	<del>12</del>	<del>F0</del>
	<del>B14</del> FF	<del>B15</del> FF	<del>B16</del> FF	<del>B17</del> FF	<del>B18</del> FF	<del>B19</del> FF	<del>B20</del> FF						