
GSM Fax & Data Services

Test Specification

ACIPHB

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Technical realisation of facsimile group 3 transparent;
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Mobile radio interface layer 3 specification;
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1.2 Abbreviations

ACI	AT Command Interpreter
AGCH	Access Grant Channel
AT	Attention sequence "AT" to indicate valid commands of the ACI
BCCH	Broadcast Control Channel
BSC	Binary Coded Signals
BS	Base Station
BSIC	Base Station Identification Code
C/R	Command/Response
Entity:	Program which executes the functions of a layer
C1	Path Loss Criterion
Message:	Reselection Criterion
CBCH	Cell Broadcast Channel
CBQ	Cell Bar Quality
CC	Call Control
Primitive:	A primitive is a data unit which is transferred between layers on one component (mobile station or infrastructure). The primitive has an operation code which identifies the primitive and its parameters.
CCCH	Common Control Channel
CCD	Condat Coder Decoder
Service Access Point	Ciphering Key Sequence Number
CRC	Cyclic Redundancy Check
DCCH	Dedicated Control Channel
DISC	Disconnect Frame
DL	Data Link Layer
DM	Disconnected Mode Frame
DTX	Discontinuous Transmission
EA	Extension Bit Address Field
EL	Extension Bit Length Field
EMMI	Electrical Man Machine Interface
EOL	End Of Line
F	Final Bit
F&D	Fax and Data Protocol Stack
FACCH	Fast Associated Control Channel
FHO	Forced Handover
GP	Guard Period
GSM	Global System for Mobile Communication
HDLC	High level Data Link Control
HISR	High level Interrupt Service Routine
HPLMN	Home Public Land Mobile Network
I	Information Frame
IMEI	International Mobile Equipment Identity
IMSI	International Mobile Subscriber Identity
ITU	International Telecommunication Union
IWF	Interworking Function
Kc	Authentication Key
L	Length Indicator
LAI	Location Area Information
LISR	Low level Interrupt Service Routine
LPD	Link Protocol Discriminator
M	More Data Bit
MCC	Mobile Country Code
MM	Mobility Management
MMI	Man Machine Interface
MNC	Mobile Network Code
MS	Mobile Station
MSG	Message phase in the GSM 3.45 protocol
N(R)	Receive Number
N(S)	Send Number
NCC	National Colour Code
NECI	New Establishment Causes included
OTD	Observed Time Difference
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P	Poll Bit
P/F	Poll/Final Bit
PCH	Paging Channel

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2 Overview

The Protocol Stacks are used to define the functionality of the GSM protocols for interfaces. The GSM specifications are normative when used to describe the functionality of interfaces, but the stacks and the subdivision of protocol layers does not imply or restrict any implementation.

The protocol stack for fax and data transmission consists of several entities. Each entity has one or more service access points, over which the entity provides a service for the upper entity. The entity, which is described in this document, is coloured grey in the following figure.

DECLARATION (A_PIN_1234)
 DECLARATION (EC_CODES)
 DECLARATION (NO_PREF_LANG)
 DECLARATION (SMS_PREF_LANG)
 DECLARATION (SMS_FIELD_DATA)
 DECLARATION (SIM_SERV_ADN_BDN)
 DECLARATION (PREF_PLMN_DATA)
 DECLARATION (DATA_BDN)
 DECLARATION (DATA_ADN34_1)
 DECLARATION (DATA_ADN34_2)
 DECLARATION (DATA_EMPTY_ADN34)
 DECLARATION (DATA_ADN38_1)
 DECLARATION (DATA_ADN38_2)
 DECLARATION (DATA_EMPTY_ADN38)
 DECLARATION (DATA_ADN54_1)
 DECLARATION (DATA_ADN54_2)
 DECLARATION (DATA_EMPTY_ADN54)
 DECLARATION (DATA_ADN94_1)
 DECLARATION (DATA_ADN94_2)
 DECLARATION (DATA_EMPTY_ADN94)
 DECLARATION (EMPTY_FDN)
 DECLARATION (DATA_FDN_1)
 DECLARATION (DATA_FDN_2)
 DECLARATION (DATA_EMPTY_FDN)
 DECLARATION (DATA_SDN)
 DECLARATION (STK_PRO_FILE)
 DECLARATION (SIM_SERV_FDN)
 DECLARATION (DATA_ADN1)
 DECLARATION (DATA_ADN2)
 DECLARATION (DATA_ADN3)
 DECLARATION (PHN_NUM0)
 DECLARATION (SIM_SERV_LND)
 DECLARATION (DATA_LND_1)
 DECLARATION (DATA_LND_2)
 DECLARATION (DATA_LND_3)
 DECLARATION (DATA_EMPTY_LND)
 DECLARATION (S_BS_VOICE)
 DECLARATION (S_BS_NOT_PRESENT)
 DECLARATION (S_CLD_PARTY)
 DECLARATION (S_CLD_PARTY_SUB)
 DECLARATION (S_CLD_NUM)
 DECLARATION (S_CHN_SPEECH)
 DECLARATION (S_CLG_PARTY)
 DECLARATION (S_CLG_NUM)

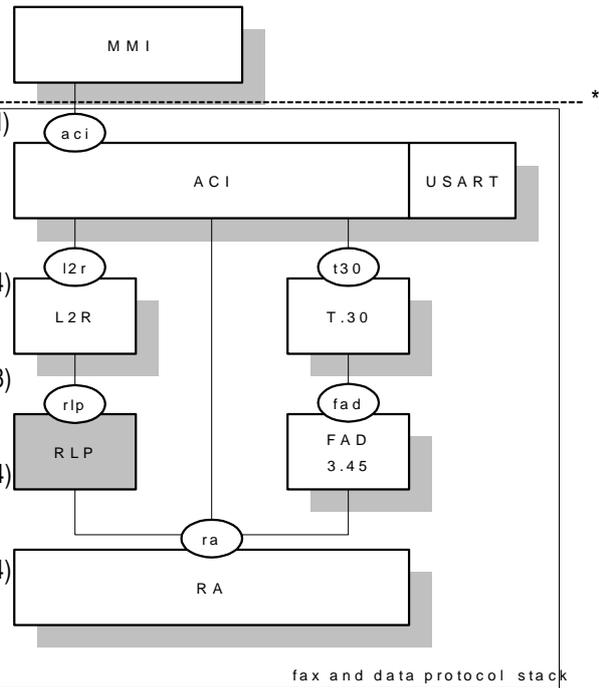


Figure 2-1: Architecture of the fax and data protocol stack

SAPs are called primitives and consists of an operation code and several parameters. See the Users Guide for details.
 The entities of the fax and data protocol stack are:

2.1 RA - Rate Adaption

This entity performs rate adaption between an asynchronous or synchronous data stream with several bit rates on to the fixed bit rate used in the TCH. This is performed by the rate adaption functions RA1' and RA0 described in GSM 04.21.

2.2 RLP - Radio Link Protocol

This entity provides a Layer 2 protocol for asynchronous reliable data transfer as specified in GSM 04.22. It includes error correction, sequence numbers and a mechanism for repeating corrupted and lost messages.

2.3 L2R - Layer 2 Relay Functionality

The L2R provides relay functions in order to adapt the character-oriented data received from the TE via USART to the bit-oriented RLP protocol.

2.4 FAD 03.45 - Fax Adaptation Protocol

The fax adaptation protocol, as specified in GSM 03.45, provides synchronisation with the BCS and MSG modems of the peer entity. It uses byte repetition in conjunction with a voting algorithm to handle corruption on the TCH data stream. The non-transparent fax protocol in accordance with GSM 03.46 is not part of this implementation.

The fax adapter enables T.30 to send BCS at 300 BPS and T.4 MSG in 2400, 4800, 7200 and 9600 BPS.

2.5 T.30 - Fax Protocol Entity

The protocol uses binary coded signals packed in HDLC frames to set up and release a connection in the message phase of the FAX transmission. This entity is specified in the ITU-T.30. The main tasks of this unit are:

- Performing bit stuffing/de-stuffing.
- Executing a sequence of 5 phases: 1.) set up, 2.) pre-message procedures, 3.) transmission/reception, 4.) post message procedures, 5.) waiting for call release.

/* --- structure declarations ----- */

DECLARATION (IMSI_FIELD)
DECLARATION(PREF_PLMN)
DECLARATION (A_ECC_FIELD)

DECLARATION (BC_PARA_SPEECH)
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DECLARATION (BC_PARA_NO_SERVICE)
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DECLARATION(CLED_PARTY)
DECLARATION(CLED_PARTY_SUB_NONE)
DECLARATION(CONNECTED_NUMBER0)
DECLARATION(EMPTY_PHN_NUM)

/* Number definitions */

BYTE NOT_SPEC 255
BYTE MAX_DATAS 0xFF

BYTE NUM_0 0
BYTE NUM_1 1
BYTE NUM_2 2
BYTE NUM_3 3
BYTE NUM_4 4
BYTE NUM_5 5
BYTE NUM_6 6
BYTE NUM_7 7
BYTE NUM_8 8
BYTE NUM_9 9
BYTE NUM_10 10
BYTE NUM_11 11
BYTE NUM_12 12
BYTE NUM_20 20
BYTE NUM_22 22
BYTE NUM_33 33
BYTE NUM_50 50
BYTE NUM_82 82
BYTE NUM_FF 255
SHORT NUM_9600 9600
SHORT NUM_4800 4800

BYTE LDATE_EMPTY 255
BYTE LDATA_BDN 34
BYTE LDATA_ADN34 34
BYTE LDATA_ADN38 38
BYTE LDATA_ADN54 54
BYTE LDATA_ADN94 94
BYTE LDATA_FDN 34
BYTE LDATA_SDN 34
BYTE LDATA_ADNP1 26
BYTE LDATA_ADNP 26

BYTE LDATA_LND 34

/* MMI profile parameter, ADN, FDN, BDN supported */

BYTE MMI_PRO_FILE 0xE0

/*---"OK"---(successful operation) */

// Message:
STRING(M_OK, "OK")
BYTE LM_OK 2

/*---"NO CARRIER"---*/

// Message:
STRING(M_NO_CARRIER, "NO CARRIER")
BYTE LM_NO_CARRIER 10

/*---"NO ANSWER"---*/

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STRING(M_NO_ANSWER, "NO ANSWER")
BYTE LM_NO_ANSWER 9

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Reference source not found.)

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/... "ERROR" — */*

// Message:
STRING(M_ERROR, "ERROR")
BYTE LM_ERROR 5

/ PIN 1234 array */*

```
STRING(C_PLUS_CPIN_1234, "AT+CPIN=\"1234\" ")
BYTE LC_PLUS_CPIN_1234 14
```

```
/*---"CLIR_COLP"---(CLIR_COLP_S) */
```

```
// Command:
```

```
STRING(C_CLIR_COLP_S, "AT+CLIR=2;+COLP=1")
```

```
Byte Reference source not found. Error! Reference source not found. Error! Reference source not found. (Error! Reference source not found.)
```

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```
/*---"CME ERROR"---(verbose error result code) */
```

```
// Message:
```

```
STRING(M_CME_ERR_INV_OPP, "+CME ERROR: operation not allowed" )
```

```
BYTE LM_CME_ERR_INV_OPP 33
```

```
STRING(M_CME_ERR_INV_IDX, "+CME ERROR: invalid index" )
```

```
BYTE LM_CME_ERR_INV_IDX 25
```

```
STRING(M_CME_ERR_UNKN, "+CME ERROR: unknown" )
```

```
BYTE LM_CME_ERR_UNKN 19
```

```
STRING(M_CME_ERR_OTHER, "+CME ERROR: other error" )
```

```
BYTE LM_CME_ERR_OTHER 23
```

```
STRING(M_CME_ERR_PIN1_REQ, "+CME ERROR: SIM PIN required" )
```

```
BYTE LM_CME_ERR_PIN1_REQ 28
```

```
STRING(M_CME_ERR_PIN2_REQ, "+CME ERROR: SIM PIN2 required" )
```

```
BYTE LM_CME_ERR_PIN2_REQ 29
```

```
STRING(M_CME_ERR_PUK1_REQ, "+CME ERROR: SIM PUK required" )
```

```
BYTE LM_CME_ERR_PUK1_REQ 28
```

```
STRING(M_CME_ERR_PUK2_REQ, "+CME ERROR: SIM PUK2 required" )
```

```
BYTE LM_CME_ERR_PUK2_REQ 29
```

```
STRING(M_CME_ERR_NO_SIM, "+CME ERROR: SIM not inserted" )
```

```
BYTE LM_CME_ERR_NO_SIM 28
```

```
STRING(M_CME_ERR_SIM_FAIL, "+CME ERROR: SIM failure" )
```

```
BYTE LM_CME_ERR_SIM_FAIL 23
```

```
STRING(M_CME_ERR_SIM_WRONG, "+CME ERROR: SIM wrong" )
```

```
BYTE LM_CME_ERR_SIM_WRONG 21
```

```
STRING(M_CME_ERR_INV_PWD, "+CME ERROR: incorrect password" )
```

```
BYTE LM_CME_ERR_INV_PWD 30
```

```
STRING(M_CME_ERR_NOT_FOUND, "+CME ERROR: not found" )
```

```
BYTE LM_CME_ERR_NOT_FOUND 21
```

```
/*---"CFUN=1"---(CFUN_S) */
```

```
// Command:
```

```
STRING(C_CFUN_S, "AT+CFUN=1" )
```

```
BYTE LC_CFUN_S 10
```

```
/*---"CMEE"---(CMEE_S) */
```

```
// Command:
```

```
STRING(C_CMEE_S2, "AT+CMEE=2" )
```

```
BYTE LC_CMEE_S 10
```

```
/*---"CPBS=?"---(CPBS_T) */
```

```
// Command:
```

```
STRING(C_CPBS_T, "AT+CPBS=?" )
```

```
BYTE LC_CPBS_T 10
```

```
// Message:
```

```
STRING(M_CPBS_T, "+CPBS: (\"EN\", \"BD\", \"FD\", \"LD\", \"LR\", \"AD\", \"SD\", \"LM\", \"AF\" )" )
```

```
BYTE LM_CPBS_T 53
```

```
/*---"CPBS?"---(CPBS_Q) */
```

```
// Command:
```

```
STRING(C_CPBS_Q, "AT+CPBS?" )
```

```
BYTE LC_CPBS_Q 9
```

```
// Message:
```

```
STRING(M_CPBS_EN, "+CPBS: \"EN\",3,4" )
```

```
STRING(M_CPBS_BD, "+CPBS: \"BD\",1,1" )
```

```
STRING(M_CPBS_FD, "+CPBS: \"FD\",2,4" )
```

```
STRING(M_CPBS_LD, "+CPBS: \"LD\",0,10" )
```

```
STRING(M_CPBS_LD0, "+CPBS: \"LD\",0,10" )
```

```
STRING(M_CPBS_LD1, "+CPBS: \"LD\",1,10" )
```

```
STRING(M_CPBS_LD3, "+CPBS: \"LD\",3,10" )
```

```
STRING(M_CPBS_LD4, "+CPBS: \"LD\",4,10" )
```

```
STRING(M_CPBS_LR, "+CPBS: \"LR\",0,10" )
```

```
STRING(M_CPBS_AD, "+CPBS: \"AD\",2,4" )
```

```
/*---"CPBW=?"---(CPBW_T) */
// Command:
STRING(C_CPBW_T, "AT+CPBW=,\\"03076903367\\",129,\\"to\\")
BYTE LC_CPBW_T 33
```

```
String Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. (Error! Reference source not found.)
```

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```
STRING(C_CPBW_S2, "AT+CPBW=,\\"03012345678\\",129,)"
BYTE LC_CPBW_S2 26
```

```
STRING(C_CPBW_P, "AT+CPBW=2,\\"03076903367\\",129,\\"P\\")
BYTE LC_CPBW_P 31
```

```
STRING(C_CPBW_AD1, "AT+CPBW= 1,\\"03012345678\\",129,\\"\\")
BYTE LC_CPBW_AD1 31
```

```
STRING(C_CPBW_AD10, "AT+CPBW= 10,\\"03012345678\\",129,\\"\\")
BYTE LC_CPBW_AD10 32
```

```
STRING(C_CPBW_AD255, "AT+CPBW= 255,\\"03012345678\\",129,\\"\\")
BYTE LC_CPBW_AD255 33
```

```
STRING(C_CPBR_A2, "+CPBR: 1,\\"03012345678\\",129,\\"\\")
BYTE LC_CPBR_A2 29
```

```
STRING(atD_forb, "ATD003076903367;")
BYTE LatD_forb 16
```

```
STRING(atD_ATD_AD, "ATD>AD2;")
BYTE LatD_ATD_AD 8
```

```
STRING(atD_ATD_AD1, "ATD>AD1;")
BYTE LatD_ATD_AD1 8
```

```
STRING(atD_ATD_AD10, "ATD>AD10;")
BYTE LatD_ATD_AD10 9
```

```
STRING(atD_ATD_AD255, "ATD>AD255;")
BYTE LatD_ATD_AD255 10
```

```
// Message:
STRING(M_CPBW_T_EN, "+CPBW: (1-5),20,(128-201),0")
STRING(M_CPBW_T_AD, "+CPBW: (1-4),20,(128-201),20")
STRING(M_CPBW_T_LD, "+CPBW: (1-10),20,(128-201),0")
STRING(M_CPBW_T_LR, "+CPBW: (1-10),20,(128-201),0")
STRING(M_CPBW_T_LM, "+CPBW: (1-10),20,(128-201),0")
BYTE LM_CPBW_T_EN 27
BYTE LM_CPBW_T_AD 28
BYTE LM_CPBW_T_LD 28
BYTE LM_CPBW_T_LR 28
BYTE LM_CPBW_T_LM 28
```

```
STRING(M_D0, "+COLP: \\"03012345678\\",129,,128")
BYTE LM_D0 29
```

```
/*----- fields ----- */
```

```
/* --- phone number "03012345678"--- */
BEGINARRAY_PART (PHN_NUM0, 11)
    0x00, 0x03, 0x00, 0x01, 0x02, 0x03, 0x04, 0x05, 0x06, 0x07, 0x08
ENDARRAY
```

```
BEGINARRAY (STK_PRO_FILE, 12)
    0x0C,
    0x00,
    0x00,
    0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00
```

ENDARRAY

SET_COMP ("c_subaddr", NUM_0)

SKIP_COMP ("subaddr")

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BEGINARRAY (A_ECC_FIELD,12) 0x11, 0xF2, 0xFF, 0x99, 0xF9, 0xFF, 0x21, 0x43, 0x65, 0xFF, 0xFF, 0xFF ENDARRAY

/* PIN 1234 array */

BEGINARRAY (A_PIN_1234,8) 0x31, 0x32, 0x33, 0x34, 0xFF, 0xFF, 0xFF, 0xFF ENDARRAY

/* --- bearer capability info, speech only ----*/

BEGIN_PSTRUCT ("bcpara", BC_PARA_SPEECH)
SET_COMP ("rate", UR_NOT_PRES)
SET_COMP ("bearer_serv", BEARER_SERV_SPEECH)
SET_COMP ("conn_elem", CONN_ELEM_NOT_PRES)
SET_COMP ("stop_bits", STOP_1_BIT)
SET_COMP ("data_bits", DATA_8_BIT)
SET_COMP ("parity", PARITY_NONE)
SET_COMP ("flow_control", NO_FLOW_CONTROL)
SET_COMP ("modem_type", MT_NONE)
ENDSTRUCT

/* --- bearer capability info, no service ----*/

BEGIN_PSTRUCT ("bcpara2", BC_PARA_NO_SERVICE)
SET_COMP ("rate", UR_NOT_PRES)
SET_COMP ("bearer_serv", BEARER_SERV_NOT_PRES)
SET_COMP ("conn_elem", CONN_ELEM_NOT_PRES)
SET_COMP ("stop_bits", STOP_1_BIT)
SET_COMP ("data_bits", DATA_8_BIT)
SET_COMP ("parity", PARITY_NONE)
SET_COMP ("flow_control", NO_FLOW_CONTROL)
SET_COMP ("modem_type", MT_NONE)
ENDSTRUCT

/* called_party (Called party BCD number) */

BEGIN_PSTRUCT ("called_party", CLED_PARTY0)
SET_COMP ("ton", TON_UNKNOWN)
SET_COMP ("npi", NPI_ISDN_TEL_NUMB_PLAN)
SET_COMP ("c_called_num", NUM_11)
SET_COMP ("called_num", PHN_NUM0)
ENDSTRUCT

/* called_party_sub (Called party subaddress) */

BEGIN_PSTRUCT ("called_party_sub", CLED_PARTY_SUB_NONE)
SET_COMP ("tos", TOS_NOT_PRES)
SET_COMP ("odd_even", OE_EVEN)
SET_COMP ("c_subaddr", NUM_0)
SET_COMP ("subaddr", EMPTY_PHN_NUM)
ENDSTRUCT

BEGIN_PSTRUCT ("connected_number", CONNECTED_NUMBER0)
SET_COMP ("ton", TON_UNKNOWN)
SET_COMP ("npi", NPI_ISDN_TEL_NUMB_PLAN)
SET_COMP ("present", TOS_NOT_PRES)
SET_COMP ("screen", SCREEN_USER_PROV_NOT_SCREEN)
SET_COMP ("c_num", NUM_11)
SET_COMP ("num", PHN_NUM0)
ENDSTRUCT

/* --- empty phone number ---*/

BEGINARRAY PART (EMPTY_PHN_NUM, 1)

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Error! Reference source not found.

11/35

ENDARRAY

4 TEST CASES

4.1 Initialisation (ACIPHB001 – ACIPHB10)

Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. (Error! Reference source not found.)

Confidential

Description:

Preamble:

APL	None	ACI	PS
COMMAND (TAP RESET)			
COMMAND (CC RESET)			
COMMAND (MM RESET)			
COMMAND (SIM RESET)			
COMMAND (SS RESET)			
COMMAND (MMI RESET)			
COMMAND (SMS RESET)			
COMMAND (RR RESET)			
COMMAND (hCommGRR RESET)			
COMMAND (hCommGMM RESET)			
COMMAND (PL RESET)			
COMMAND (TAP REDIRECT CLEAR)			
COMMAND (CC REDIRECT CLEAR)			
COMMAND (MM REDIRECT CLEAR)			
COMMAND (SIM REDIRECT CLEAR)			
COMMAND (SS REDIRECT CLEAR)			
COMMAND (MMI REDIRECT CLEAR)			
COMMAND (SMS REDIRECT CLEAR)			
COMMAND (RR REDIRECT CLEAR)			
COMMAND (hCommGRR REDIRECT CLEAR)			
COMMAND (hCommGMM REDIRECT CLEAR)			
COMMAND (PL REDIRECT CLEAR)			
COMMAND (MMI REDIRECT CC TAP)			
COMMAND (MMI REDIRECT MM TAP)			
COMMAND (MMI REDIRECT SIM TAP)			
COMMAND (MMI REDIRECT SS TAP)			
COMMAND (MMI REDIRECT MMI TAP)			
COMMAND (MMI REDIRECT SMS TAP)			
COMMAND (MMI REDIRECT T30 TAP)			
COMMAND (MMI REDIRECT L2R TAP)			
COMMAND (MMI REDIRECT RA TAP)			
COMMAND (MMI REDIRECT RR TAP)			
COMMAND (MMI REDIRECT hCommGRR TAP)			
COMMAND (MMI REDIRECT hCommGMM TAP)			
COMMAND (PL REDIRECT MMI NULL)			
COMMAND (TAP REDIRECT TAP MMI)			
COMMAND (MMI REDIRECT MMI TAP)			
COMMAND (PL CONFIG STD=3)			

Parametrization:

Primitive	Parameter	Value
History:	14.12.98	AK Initial

4.1.2 ACIPHB002: initialize phonebook

record	NUM_1
max_record	NUM_1
length	LDATE_BDN
linear_data	DATA_BDN

(18) SIM_READ_RECORD_REQ

Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. (Error! Reference source not found.)

source	SRC_MMI
datafield	SIM_SDN
record	NUM_1
length	LDATE_EMPTY

Confidential

(19) SIM_READ_RECORD_CNF

datafield	SIM_SDN
cause	SIM_NO_ERROR
record	NUM_1
max_record	NUM_1
length	LDATE_SDN
linear_data	DATA_SDN

History: 11.11.99 DAK Initial

4.1.3 ACIPHB003: use verbose <err> values

Description:

Variants:

<A>...<D>

Preamble:

<A> ACIPHB002A
 ACIPHB002B
 <C> ACIPHB002C
 <D> ACIPHB002D

APL		ACI		PS
(1)	ACI_CMD_REQ			
	(cmd: +CMEE=2)			
	*=====>			
(2)	ACI_CMD_IND			
	(cmd: OK)			
	*<=====			

Parametrization:

Primitive	Parameter	Value
(1) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CMEE_S
	cmd_seq	C_CMEE_S2
(2) ACI_CMD_IND	cmd_len	LM_OK
	cmd_seq	M_OK

History: 11.11.99 DAK Initial

4.2 Select phonebook memory storage "+CPBS" (ACIPHB011 – ACIPHB20)

4.2.1 ACIPHB011: getting list of supported memory storages

Description:

Select phonebook memory storage, getting list of supported memory storages

Preamble:

ACIPHB003A		
APL	ACI	PS

```
* <===== *
|                                     |
|                                     |
```

Parametrization:

<u>Primitive</u>	<u>Parameter</u>	<u>Value</u>
(1) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBS_S
<A>	cmd_seq	C_CPBS_EN
	cmd_seq	C_CPBS_LD
<C>	cmd_seq	C_CPBS_LR
<D>	cmd_seq	C_CPBS_AD
<E>	cmd_seq	C_CPBS_LM
<F>	cmd_seq	C_CPBS_AF
(2) ACI_CMD_IND	cmd_len	LM_OK
	cmd_seq	M_OK
(3) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBR_T
	cmd_seq	C_CPBR_T
(4) ACI_CMD_IND	cmd_len	LM_CPBR_T_EN1
<A>	cmd_seq	M_CPBR_T_EN1
	cmd_len	LM_CPBR_T_LD1
	cmd_seq	M_CPBR_T_LD1
<C>	cmd_len	LM_CPBR_T_LR1
<C>	cmd_seq	M_CPBR_T_LR1
<D>	cmd_len	LM_CPBR_T_AD1
<D>	cmd_seq	M_CPBR_T_AD1
<E>	cmd_len	LM_CPBR_T_LM1
<E>	cmd_seq	M_CPBR_T_LM1
<F>	cmd_len	LM_CPBR_T_AF1
<F>	cmd_seq	M_CPBR_T_AF1
(5) ACI_CMD_IND	cmd_len	LM_OK
	cmd_seq	M_OK

(4) ACI_CMD_IND		
<A>	cmd_len	LM_CPBR_T_EN1
<A>	cmd_seq	M_CPBR_T_EN1
	cmd_len	LM_CPBR_T_LD1
	cmd_seq	M_CPBR_T_LD1
<C>	cmd_len	LM_CPBR_T_LR1
<C>	cmd_seq	M_CPBR_T_LR1
<D>	cmd_len	LM_CPBR_T_AD2
<D>	cmd_seq	M_CPBR_T_AD2
<E>	cmd_len	LM_CPBR_T_LM1
<E>	cmd_seq	M_CPBR_T_LM1
<F>	cmd_len	LM_CPBR_T_AF2
<F>	cmd_seq	M_CPBR_T_AF2
(5) ACI_CMD_IND		
	cmd_len	LM_OK
	cmd_seq	M_OK

History: 18.02.2000 DAK Initial

4.3.3 ACIPHB023: getting supported location ranges of phb storage (ADN_Alpha_length=40)

Description:

Select phonebook memory storage, getting supported location ranges of phb storage
AND entries length 54

Variants:

<A>...<F>

Preamble:

ACIPHB003C

APL	ACI	PS
(1) ACI_CMD_REQ		
(cmd: +CPBS=..)		
=====>		
(2) ACI_CMD_IND		
(cmd: OK)		
<=====		
(3) ACI_CMD_REQ		
(cmd: +CPBR=? (...))		
=====>		
(4) ACI_CMD_IND		
(cmd: +CPBR: (...))		
<=====		
(5) ACI_CMD_IND		
(cmd: OK)		
<=====		

Parametrization:

Primitive	Parameter	Value
-----------	-----------	-------

(1) ACI_CMD_REQ		
	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBS_S
<A>	cmd_seq	C_CPBS_EN
	cmd_seq	C_CPBS_LD
<C>	cmd_seq	C_CPBS_LR
<D>	cmd_seq	C_CPBS_AD
<E>	cmd_seq	C_CPBS_LM
<F>	cmd_seq	C_CPBS_AF
(2) ACI_CMD_IND		
	cmd_len	LM_OK
	cmd_seq	M_OK
(3) ACI_CMD_REQ		
	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBR_T
	cmd_seq	C_CPBR_T
(4) ACI_CMD_IND		
<A>	cmd_len	LM_CPBR_T_EN1
<A>	cmd_seq	M_CPBR_T_EN1
	cmd_len	LM_CPBR_T_LD1
	cmd_seq	M_CPBR_T_LD1
<C>	cmd_len	LM_CPBR_T_LR1
<C>	cmd_seq	M_CPBR_T_LR1
<D>	cmd_len	LM_CPBR_T_AD3
<D>	cmd_seq	M_CPBR_T_AD3
<E>	cmd_len	LM_CPBR_T_LM1
<E>	cmd_seq	M_CPBR_T_LM1
<F>	cmd_len	LM_CPBR_T_AF3
<F>	cmd_seq	M_CPBR_T_AF3
(5) ACI_CMD_IND		
	cmd_len	LM_OK
	cmd_seq	M_OK

4.3.4 ACIPHB024: getting supported location ranges of phb storage (ADN_Alpha_length=80)

Description:

Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. (Error! Reference source not found.)

Select phonebook memory storage, getting supported location ranges of phb storage
ADN entries length 94

Confidential

Variants:

<A>...<F>

Preamble:

ACIPHB003D

APL	ACI	PS
(1)	ACI_CMD_REQ	
	(cmd: +CPBS=..)	
	=====>	
(2)	ACI_CMD_IND	
	(cmd: OK)	
	<=====	
(3)	ACI_CMD_REQ	
	(cmd: +CPBR=? (...))	
	=====>	
(4)	ACI_CMD_IND	
	(cmd: +CPBR: (...))	
	<=====	
(5)	ACI_CMD_IND	
	(cmd: OK)	
	<=====	

Parametrization:

Primitive	Parameter	Value
(6) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBS_S
<A>	cmd_seq	C_CPBS_EN
	cmd_seq	C_CPBS_LD
<C>	cmd_seq	C_CPBS_LR
<D>	cmd_seq	C_CPBS_AD
<E>	cmd_seq	C_CPBS_LM
<F>	cmd_seq	C_CPBS_AF
(7) ACI_CMD_IND	cmd_len	LM_OK
	cmd_seq	M_OK
(8) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBR_T
	cmd_seq	C_CPBR_T
(9) ACI_CMD_IND	cmd_len	LM_CPBR_T_EN1
<A>	cmd_seq	M_CPBR_T_EN1
	cmd_len	LM_CPBR_T_LD1
	cmd_seq	M_CPBR_T_LD1
<C>	cmd_len	LM_CPBR_T_LR1
<C>	cmd_seq	M_CPBR_T_LR1
<D>	cmd_len	LM_CPBR_T_AD4
<D>	cmd_seq	M_CPBR_T_AD4
<E>	cmd_len	LM_CPBR_T_LM1
<E>	cmd_seq	M_CPBR_T_LM1
<F>	cmd_len	LM_CPBR_T_AF4
	cmd_seq	M_CPBR_T_AF4

(10) ACI_CMD_IND

cmd_len

LM_OK

(1) ACI_CMD_REQ	cmd_src cmd_len cmd_seq	CMD_SRC_EXT LC_CPBS_S C_CPBS_AD
(2) ACI_CMD_IND	cmd_len cmd_seq	LM_OK M_OK
(3) ACI_CMD_REQ	cmd_src cmd_len <A> cmd_seq cmd_seq	CMD_SRC_EXT LC_CPBR_S C_CPBR_S0 C_CPBR_S1
(4) ACI_CMD_IND	<A> <A> cmd_len cmd_seq cmd_len cmd_seq	LM_CPBR_AD1 M_CPBR_AD1 LM_CPBR_AD2 M_CPBR_AD2
(5) ACI_CMD_IND	cmd_len cmd_seq	LM_OK M_OK

4.3.6 ACIPHB026: reading ad entries (ADN_Alpha_length > 20)

Description:

Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. (Error! Reference source not found.)

Confidential

Variants:

<A>...<F>

Preamble:

<A> ACIPHB003B
 ACIPHB003B
 <C> ACIPHB003C
 <D> ACIPHB003C
 <E> ACIPHB003D
 <F> ACIPHB003D

APL	ACI	PS
(1)		
	ACI_CMD_REQ	
	(cmd: +CPBS=..)	
	=====>	
(2)		
	ACI_CMD_IND	
	(cmd: OK)	
	<=====	
(3)		
	ACI_CMD_REQ	
	(cmd: +CPBR=<n>)	
	=====>	
(4)		
	ACI_CMD_IND	
	(cmd: +CPBR: (...))	
	<=====	
(5)		
	ACI_CMD_IND	
	(cmd: OK)	
	<=====	

Parametrization:

Primitive	Parameter	Value
(11) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBS_S
	cmd_seq	C_CPBS_AD
(12) ACI_CMD_IND	cmd_len	LM_OK
	cmd_seq	M_OK
(13) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBR_S
<A>	cmd_seq	C_CPBR_S0
	cmd_seq	C_CPBR_S1
<C>	cmd_seq	C_CPBR_S0
<D>	cmd_seq	C_CPBR_S1
<E>	cmd_seq	C_CPBR_S0
<F>	cmd_seq	C_CPBR_S1
(14) ACI_CMD_IND	cmd_len	LM_CPBR_AD10
<A>	cmd_seq	M_CPBR_AD10
	cmd_seq	M_CPBR_AD11
<C>	cmd_seq	M_CPBR_AD10
<D>	cmd_seq	M_CPBR_AD11
<E>	cmd_seq	M_CPBR_AD10
<F>	cmd_seq	M_CPBR_AD11

(1) ACI_CMD_REQ	cmd_src cmd_len cmd_seq	CMD_SRC_EXT LC_CPBS_S C_CPBS_AD
(2) ACI_CMD_IND	cmd_len cmd_seq	LM_OK M_OK
(3) ACI_CMD_REQ	cmd_src cmd_len cmd_seq	CMD_SRC_EXT LC_CPBR_T C_CPBR_T
(4) ACI_CMD_IND	cmd_len cmd_seq	NOT_USED NOT_USED
(5) ACI_CMD_IND	cmd_len cmd_seq	LM_OK M_OK
(6) ACI_CMD_REQ	cmd_src cmd_len cmd_seq <A> <A> <C> <C>	CMD_SRC_EXT LC_CPBR_S C_CPBR_S2 LC_CPBR_S C_CPBR_S7 LC_CPBR_Q C_CPBR_Q
(7) ACI_CMD_IND	<A> <A> <C> <C>	cmd_len cmd_seq cmd_len cmd_seq cmd_len cmd_seq LM_OK M_OK LM_CME_ERR_INV_IDX M_CME_ERR_INV_IDX LM_CME_ERR_INV_OPP M_CME_ERR_INV_OPP

4.4 find phonebook entries "+CPBF" (ACIPHB031 – ACIPHB40)

Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. (Error! Reference source not found.)

Confidential

4.4.1 ACIPHB031: getting list of supported modes

Description:

find phb entries, getting list of supported modes

Preamble:

ACIPHB003A

```

APL                                ACI                                PS
|                                  |                                  |
(1) |          ACI_CMD_REQ          |                                  |
|          (cmd: +CPBF=?)          |                                  |
| *=====> *                      |                                  |
(2) |          ACI_CMD_IND          |                                  |
|          (cmd: +CPBF: ...)       |                                  |
| *<===== *                      |                                  |
(3) |          ACI_CMD_IND          |                                  |
|          (cmd: OK)               |                                  |
| *<===== *                      |                                  |
|                                  |                                  |

```

Parametrization:

Primitive	Parameter	Value
(16) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBF_T
	cmd_seq	C_CPBF_T
(17) ACI_CMD_IND	cmd_len	LM_CPBF_T
	cmd_seq	M_CPBF_T
(18) ACI_CMD_IND	cmd_len	LM_OK
	cmd_seq	M_OK

History:

09.02.2000

DAK

Initial

4.4.2 ACIPHB032: searching for ADN entities starting with "H"

Description:

find phb entries, searching for ADN entities starting with "H", 2 hints expected

Preamble:

ACIPHB003A

```

APL                                ACI                                PS
|                                  |                                  |
(1) |          ACI_CMD_REQ          |                                  |
|          (cmd: +CPBS="AD")       |                                  |
| *=====> *                      |                                  |
(2) |          ACI_CMD_IND          |                                  |
|          (cmd: OK)               |                                  |
| *<===== *                      |                                  |
(3) |          ACI_CMD_REQ          |                                  |
|          (cmd: +CPBR=1,4)        |                                  |
| *=====> *                      |                                  |
(4) |          ACI_CMD_IND          |                                  |
|          (cmd: +CPBR: 1,....)    |                                  |
| *<===== *                      |                                  |
(5) |          ACI_CMD_IND          |                                  |
|          (cmd: +CPBF: 2,....)    |                                  |

```

(1) ACI_CMD_REQ	cmd_src cmd_len cmd_seq	CMD_SRC_EXT LC_CPBS_S C_CPBS_AD
(2) ACI_CMD_IND	cmd_len cmd_seq	LM_OK M_OK
(3) ACI_CMD_REQ	cmd_src cmd_len cmd_seq	CMD_SRC_EXT LC_CPBR_ALL C_CPBR_ALL
(4) ACI_CMD_IND	cmd_len cmd_seq	NOT_USED NOT_USED
(5) ACI_CMD_IND	cmd_len cmd_seq	NOT_USED NOT_USED
(6) ACI_CMD_IND	cmd_len cmd_seq	LM_OK M_OK
(7) ACI_CMD_REQ	cmd_src cmd_len cmd_seq	CMD_SRC_EXT LC_CPBF_S0 C_CPBF_S0
(8) ACI_CMD_IND	cmd_len cmd_seq	LM_CPBF_S1 M_CPBF_S1
(9) ACI_CMD_IND	cmd_len cmd_seq	LM_CPBF_S0 M_CPBF_S0
(10) ACI_CMD_IND	cmd_len cmd_seq	LM_OK M_OK

4.4.3 ACIPHB033: searching for several ADN entities

Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. (Error! Reference source not found.)

Description: find phb entries; searching for several ADN entities "H", 1 hint expected

Confidential

Variants:

<A>...

Preamble:

ACIPHB003A

APL	ACI	PS
(1)		
	ACI_CMD_REQ	
	(cmd: +CPBS="AD")	
	=====>	
(2)		
	ACI_CMD_IND	
	(cmd: OK)	
	<=====	
(3)		
	ACI_CMD_REQ	
	(cmd: +CPBF="..")	
	=====>	
(4)		
	ACI_CMD_IND	
	(cmd: +CPBF: ...)	
	<=====	
(5)		
	ACI_CMD_IND	
	(cmd: OK)	
	<=====	

Parametrization:

Primitive	Parameter	Value
(19) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBS_S
	cmd_seq	C_CPBS_AD
(20) ACI_CMD_IND	cmd_len	LM_OK
	cmd_seq	M_OK
(21) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
<A>	cmd_len	LC_CPBF_S1
<A>	cmd_seq	C_CPBF_S1
	cmd_len	LC_CPBF_S2
	cmd_seq	C_CPBF_S2
(22) ACI_CMD_IND	cmd_len	LM_CPBF_S1
<A>	cmd_seq	M_CPBF_S1
	cmd_len	LM_CPBF_S0
	cmd_seq	M_CPBF_S0
(23) ACI_CMD_IND	cmd_len	LM_OK
	cmd_seq	M_OK

History:

22.02.2000

DAK

Initial

4.4.4 ACIPHB034: performe some "illegal" commands (query-command, searchings without hints)

Variants:

proc	SIM_INITIALISATION
mmi_pro_file	NOT_USED
stk_pro_file	NOT_USED

(3) SIM_ACTIVATE_CNF

cause	SIM_NO_ERROR
pin_cnt	NUM_3
Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. (Error! Reference source not found.)	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. (Error! Reference source not found.)
pin2_cnt	NUM_3
puk2_cnt	NUM_3
ec_code	EC_CODES
pref_lang	NO_PREF_LANG

Confidential

(4) SIM_MMI_INSERT_IND

func	SIM_ADN_BDN_ENABLED
sim_serv	SIM_SERV_ADN_BDN
imsi_field	NOT_USED
pref_plmn	NOT_USED
phase	PHASE_2_SIM
access_acm	ACCESS_ALWAYS
access_acmmax	ACCESS_ALWAYS
access_puct	ACCESS_ALWAYS

(5) SIM_READ_REQ

source	SRC_MMI
offset	NUM_0
datafield	SIM_ECC
length	NOT_PRESENT_8BIT
max_length	NUM_0

(6) SIM_READ_CNF

datafield	SIM_ECC
cause	SIM_NO_ERROR
length	NUM_12
trans_data	A_ECC_FIELD

(7) ACI_CMD_IND

cmd_len	LM_OK
cmd_seq	M_OK

(8) MNSMS_REPORT_IND

state	SMS_STATE_READY
-------	-----------------

(9) SIM_READ_RECORD_REQ

source	SRC_MMI
datafield	SIM_ADN
record	NUM_1
length	MAX_DATAS

(10) SIM_READ_RECORD_CNF

datafield	SIM_ADN
cause	SIM_NO_ERROR
record	NUM_1
max_record	NUM_3
length	LDATA_ADNP1
linear_data	DATA_ADNP1

(11) SIM_READ_RECORD_REQ

source	SRC_MMI
datafield	SIM_ADN
record	NUM_2
length	LDATA_ADNP

(12) SIM_READ_RECORD_CNF

datafield	SIM_ADN
cause	SIM_NO_ERROR
record	NUM_2
max_record	NUM_3
length	LDATA_ADNP
linear_data	DATA_ADNP

(13) SIM_READ_RECORD_REQ

source	SRC_MMI
datafield	SIM_ADN
record	NUM_3
length	LDATA_ADNP1

Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. (Error! Reference source not found.)

Confidential

History: 24.03.2003 RM Initial

4.7 test BDN "+" (ACIPHB048 – ACIPHB50)

Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. (Error! Reference source not found.)

Confidential

Description:

Preamble:

ACIPHB003A

APL	ACI	PS
(1)		
	ACI_CMD_REQ	
	(cmd: +CPBS="..")	
	=====>	
(2)		
	ACI_CMD_IND	
	(cmd: OK)	
	<=====	
(3)		
	ACI_CMD_REQ	
	(cmd: atD)	
	=====>	
(5)		
	ACI_CMD_IND	
	(cmd: OK)	
	<=====	

Parametrization:

Primitive	Parameter	Value
(7) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBS_S
	cmd_seq	C_CPBS_BD
(8) ACI_CMD_IND	cmd_len	LM_OK
	cmd_seq	M_OK
(9) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LatD_forb
	cmd_seq	atD_forb
(10) ACI_CMD_IND	cmd_len	LM_OK
	cmd_seq	M_OK
History:	29.05.2000	CLB
		Initial

4.8 test FDN

4.8.1 ACIPHB051: initialize phonebook

Description:

initialize phonebook

Preamble:

ACIPHB001

APL	ACI	PS
(1)		
	ACI_CMD_REQ	
	(cmd: +CPBS="..")	
	=====>	
(2)		
	SIM_ACTIVATE_REQ	
	=====>	

4.8.4 ACIPHB054: reading memory storage info

Description:

Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. (Error! Reference source not found.)

Confidential

Preamble:

ACIPHB053

APL	ACI	PS
(1)		
	ACI_CMD_REQ	
	(cmd: +CPBS?)	
	=====>	
(2)		
	ACI_CMD_IND	
	(cmd: +CPBS: ...)	
	<=====	
(3)		
	ACI_CMD_IND	
	(cmd: OK)	
	<=====	

Parametrization:

Primitive	Parameter	Value
(1) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBS_Q
	cmd_seq	C_CPBS_Q
(2) ACI_CMD_IND	cmd_len	LM_CPBS_FD
	cmd_seq	M_CPBS_FD
(3) ACI_CMD_IND	cmd_len	LM_OK
	cmd_seq	M_OK

History:

27.01.2000

DAK

Initial

4.8.5 ACIPHB055: getting supported location ranges of phb storage

Description:

Select a FDN-Phonebook memory storage and write in it

Preamble:

ACIPHB054

APL	ACI	PS
(1)		
	ACI_CMD_REQ	
	(cmd: +CPBS="..")	
	=====>	
(2)		
	ACI_CMD_IND	
	(cmd: OK)	
	<=====	
(3)		
	ACI_CMD_REQ	
	(cmd: +CPBS?)	
	=====>	
(4)		
	ACI_CMD_IND	
	(cmd: "+CPBS: "FD", ...")	
	<=====	
(5)		
	ACI_CMD_IND	

```

(8) |          ACI_CMD_REQ          |
    |          (cmd: +CPBS?)      |
    | *=====> *                  |
(9) |          ACI_CMD_IND          |
    |          (cmd: ACI_CMD_IND ) |
    | *<===== *                  |
(10)|          ACI_CMD_IND          |
    |          (cmd: OK )         |
    | *<===== *                  |
(11)|          ACI_CMD_REQ          |
    |          (cmd: +CPBR=<n>)   |
    | *=====> *                  |
(12)|          ACI_CMD_IND          |
    |          (cmd: +CPBR: (...)) |
    | *<===== *                  |
(13)|          ACI_CMD_IND          |
    |          (cmd: OK)          |
    | *<===== *                  |
    |                              |

```

Parametrization:

Primitive	Parameter	Value
(1) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBS_S
	cmd_seq	C_CPBS_LD
(2) ACI_CMD_IND	cmd_len	LM_OK
	cmd_seq	M_OK
(3) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBS_Q
	cmd_seq	C_CPBS_Q
(4) ACI_CMD_IND	cmd_len	LM_CPBS_LD0
	cmd_seq	M_CPBS_LD0
(5) ACI_CMD_IND	cmd_len	LM_OK
	cmd_seq	M_OK
(6) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBW_S2
	cmd_seq	C_CPBW_S2
(7) ACI_CMD_IND	cmd_len	LM_OK
	cmd_seq	M_OK
(8) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBS_Q
	cmd_seq	C_CPBS_Q

(9) ACI_CMD_IND	cmd_len	LM_CPBS_LD1
	cmd_seq	M_CPBS_LD1
(10) ACI_CMD_IND	cmd_len	LM_OK
	cmd_seq	M_OK
(11) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBR_S
	cmd_seq	C_CPBR_S0
(12) ACI_CMD_IND	cmd_len	LC_CPBR_A2
	cmd_seq	C_CPBR_A2
(13) ACI_CMD_IND	cmd_len	LM_OK
	cmd_seq	M_OK

History: 07.11.2000 ENZ Initial

4.9 test LDN-entries on SIM (ACIPHB061 – ACIPHB070)

4.9.1 ACIPHB061: initialize phonebook

Description:

initialize phonebook

APL	ACI	PS
Error! Reference source not found. (Error! Reference source not found.)		
Reference source not found. (CFUN=1)		
=====>		
(2)	SIM_ACTIVATE_REQ	
=====>		
(3)	SIM_ACTIVATE_CNF	
<=====		
(4)	SIM_MMI_INSERT_IND	
<=====		
(5)	SIM_READ_REQ	
=====>		
(6)	SIM_READ_CNF	
<=====		
(7)	ACI_CMD_IND (cmd: OK)	
<=====		
(8)	MNSMS_REPORT_IND	
<=====		
(9)	SIM_READ_RECORD_REQ	
=====>		
(10)	SIM_READ_RECORD_CNF	
<=====		
(11)	SIM_READ_RECORD_REQ	
=====>		
(12)	SIM_READ_RECORD_CNF	
<=====		
(13)	SIM_READ_RECORD_REQ	
=====>		
(14)	SIM_READ_RECORD_CNF	
<=====		
(15)	SIM_READ_RECORD_REQ	
=====>		
(16)	SIM_READ_RECORD_CNF	
<=====		
(17)	SIM_READ_RECORD_REQ	
=====>		
(18)	SIM_READ_RECORD_CNF	
<=====		
(19)	SIM_READ_RECORD_REQ	
=====>		
(20)	SIM_READ_RECORD_CNF	
<=====		
(21)	SIM_READ_RECORD_REQ	
=====>		
(22)	SIM_READ_RECORD_CNF	
<=====		
(23)	SIM_READ_RECORD_REQ	
=====>		
(24)	SIM_READ_RECORD_CNF	
<=====		
(25)	SIM_READ_RECORD_REQ	
=====>		
(26)	SIM_READ_RECORD_CNF	
<=====		
(27)	SIM_READ_RECORD_REQ	
=====>		
(28)	SIM_READ_RECORD_CNF	
<=====		
(29)	SIM_READ_RECORD_REQ	Error! Reference source not found.
=====>		
(30)	SIM_READ_RECORD_CNF	
<=====		

4.9.2 ACIPHB062: setting PHB memory storage

Description:

Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. (Error! Reference source not found.)

Confidential

Preamble:

ACIPHB061

```

APL                                ACI                                PS
|                                  |                                  |
(1) |          ACI_CMD_REQ          |                                  |
    |          (cmd: +CPBS=...)    |                                  |
    *=====> *                    |                                  |
(2) |          ACI_CMD_IND          |                                  |
    |          (cmd: OK)           |                                  |
    *<===== *                    |                                  |
    |                                  |                                  |

```

Parametrization:

Primitive	Parameter	Value
(1) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBS_S
	cmd_seq	C_CPBS_LD
(2) ACI_CMD_IND	cmd_len	LM_OK
	cmd_seq	M_OK

History: 16.12.2002

MSC

Initial

4.9.3 ACIPHB063: reading memory storage info

Description:

Select phonebook memory storage, readin memory storage info

Preamble:

ACIPHB062

```

APL                                ACI                                PS
|                                  |                                  |
(1) |          ACI_CMD_REQ          |                                  |
    |          (cmd: +CPBS?)       |                                  |
    *=====> *                    |                                  |
(2) |          ACI_CMD_IND          |                                  |
    |          (cmd: +CPBS: ...)   |                                  |
    *<===== *                    |                                  |
(3) |          ACI_CMD_IND          |                                  |
    |          (cmd: OK)           |                                  |
    *<===== *                    |                                  |
    |                                  |                                  |

```

Parametrization:

Primitive	Parameter	Value
(1) ACI_CMD_REQ	cmd_src	CMD_SRC_EXT
	cmd_len	LC_CPBS_Q
	cmd_seq	C_CPBS_Q

	cmd_len	LM_CPBR_LD3OF4
	cmd_seq	M_CPBR_LD3OF4
(5) ACI_CMD_IND		
	cmd_len	LM_CPBR_LD4OF4
	cmd_seq	M_CPBR_LD4OF4
(6) ACI_CMD_IND		
	cmd_len	LM_OK
	cmd_seq	M_OK
History:	17.12.2000	MSC
		Initial