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**Technical Document – Confidential**

**GSM PROTOCOL STACK**

**MULTILAYER TEST SPECIFICATION**

**CELL SELECTION**

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## 1.2 Abbreviations

AGCH	Access Grant Channel
BCCH	Broadcast Control Channel
BS	Base Station
BSIC	Base Station Identification Code
CBCH	Cell Broadcast Channel
CBQ	Cell Bar Qualify
CC	Call Control
CCCH	Common Control Channel
CCD	Condat Coder Decoder
CKSN	Ciphering Key Sequence Number

C/R	Command / Response
C1	Path Loss Criterion
C2	Reselection Criterion
DCCH	Dedicated Control Channel
DISC	Disconnect Frame
DL	Data Link Layer
DM	Disconnected Mode Frame
EA	Extension Bit Address Field
EL	Extension Bit Length Field
EMMI	Electrical Man Machine Interface
F	Final Bit
FACCH	Fast Associated Control Channel
FHO	Forced Handover
GP	Guard Period
GSM	Global System for Mobile Communication
HPLMN	Home Public Land Mobile Network
I	Information Frame
IMEI	International Mobile Equipment Identity
IMSI	International Mobile Subscriber Identity
Kc	Authentication Key
L	Length Indicator
LAI	Location Area Information
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
NCC	National Colour Code
NECI	New Establishment Causes included
N(R)	Receive Number
N(S)	Send Number
OTD	Observed Time Difference
P	Poll Bit
PCH	Paging Channel
PDU	Protocol Description Unit
P/F	Poll / Final Bit
PL	Physical Layer
PLMN	Public Land Mobile Network
RACH	Random Access Channel
REJ	Reject Frame
RNR	Receive Not Ready Frame
RR	Radio Resource Management
RR	Receive Ready Frame
RTD	Real Time Difference
SABM	Set Asynchronous Balanced Mode
SACCH	Slow Associated Control Channel
SAP	Service Access Point
SAPI	Service Access Point Identifier
SDCCH	Slow Dedicated Control Channel
SIM	Subscriber Identity Module
SMS	Short Message Service
SMSCB	Short Message Service Cell Broadcast
SS	Supplementary Services
TCH	Traffic Channel
TCH/F	Traffic Channel Full Rate
TCH/H	Traffic Channel Half Rate



TDMA	Time Division Multiple Access
TMSI	Temporary Mobile Subscriber Identity
UA	Unnumbered Acknowledgement Frame
UI	Unnumbered Information Frame
VPLMN	Visiting Public Land Mobile Network
V(A)	Acknowledgement State Variable
V(R)	Receive State Variable
V(S)	Send State Variable

## 1.3 Terms

Entity:	Program which executes the functions of a layer
Message:	A message is a data unit which is transferred between the entities of the same layer (peer-to-peer) of the mobile and infrastructure side. Message is used as a synonym to protocol data unit (PDU). A message may contain several information elements.
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.
Service Access Point	A Service Access Point is a data interface between two layers on one component (mobile station or infrastructure).

## 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 base of the Protocol Stack rests on the physical layer.

The Data Link Layer (DL) is used to handle an acknowledged connection between mobile and base station. The LAPDm protocol is used.

Radio Resource (RR) manages the resources of the air-interface. That means configuration of physical layer, cell selection and cell reselection, data transfer, RR-Connection handling.

Mobility Management (MM) handles registration aspects for the mobile station. It detects changes of location areas and updates a mobile station in the new location area.

Call Control (CC) provides the call functionality. This includes call establishment, call maintenance procedures like Hold, Retrieve or Modify, and call disconnection.

Supplementary Services (SS) handles all call independent supplementary services like call forwarding or call barring.

Short Message Services (SMS) is used for sending and receiving point-to-point short messages. Additionally the reception of cell broadcast short messages is included.

The man machine interface (MMI) is the interface to the user. Normally it is connected with a keypad as input device and a display as output device.

Between the several entities data interfaces are defined. These data interfaces are called Service Access Points (SAPs), indicating that an upper layer uses the services of a lower layer.

The GSM specification do not set out any implementation of the Protocol Stack. The following diagrams show the implementation described in all these documents for the mobile station. All entities except the Man Machine Interface and Physical Layer are implemented as part of the Protocol Stack.

**Fehler! Es ist nicht möglich, durch die Bearbeitung von Feldfunktionen Objekte zu erstellen.**

Figure 1: Mobile-station protocol architecture

This document describes the mulilayer tests ... as set out in GSM 11.10-1, §20.

### 3 Parameters

```

/* QUESTIONABLE ITEMS ARE MARKED '???' */

#include <tcs1.h>
#include <tcs1_gsm.h>

/*-----*\
| System Information IEs (GSM 11.10, 26.6.14 and 26.1.1)
\*-----*/
#define BCC 0x5 /* note : GSM 11.10, 26.6.14, IMMEDIATE ASSIGNMENT */
#define ARFCN_BCCH 20

IE_BEGIN( cbch_channel_description ) /* Ref.: [1], §10.5.2.5; [2], 26.6.14 */
  BF( 8, 0x64, ACT_CHECK, iei, SILENT )
  BF( 5, M5(0,0,1,0,1), ACT_CHECK, channel_type, "SDCCH/SACCH 4(1) " )
  BF( 3, 0, ACT_CHECK, time_slot_number, "zero " )
  BF( 3, BCC, ACT_CHECK, training_sequence_code, "same as BCCH " )
  BF( 1, 0, ACT_CHECK, hopping, "No hopping" )
  BF( 2, 0, ACT_CHECK, spare, SILENT )
  BF( 10, ARFCN_BCCH, ACT_CHECK, arfcn, "ARFCN of the BCCH" )
IE_END( cbch_channel_description )

IE_BEGIN( cbch_mobile_allocation ) /* Ref.: [1], §10.5.2.21; [2], §26.6.14 */
  BF( 8, 0x72, ACT_CHECK, iei, SILENT )
  BF( 8, 0, ACT_CHECK, length, "length 0 due to hopping disabled" )
IE_END( cbch_mobile_allocation )

/*
** cell_channel_description
** definition : GSM 04.08, 10.5.2.1b
** values : GSM 11.10, 26.6.14
** usage : system_information_type_1
*/
IE_BEGIN( cell_channel_description )
  BF( 2, 0, ACT_CHECK, format_id, "bit map 0 " )
  BF( 2, 0, ACT_CHECK, spare, " " )
  BF( 28, 0x0000000, ACT_CHECK, chan_124_thru_097, " " )
  BF( 32, 0x00000020, ACT_CHECK, chan_096_thru_065, " 70 " )
  BF( 32, 0x00020000, ACT_CHECK, chan_064_thru_033, " 50 " )
  BF( 32, 0x20080000, ACT_CHECK, chan_032_thru_001, " 30 20 " )
IE_END( cell_channel_description )

/*
** cell_identity
** definition : GSM 04.08, 10.5.1.1
** values : GSM 11.10, 26.6.14
** usage : system_information_type_3 (cell A)
** usage : system_information_type_6 (cell A)
*/
IE_BEGIN( cell_identity_1 )
  BF( 16, 0x0001, ACT_CHECK, ci, "0001H" )
IE_END( cell_identity_1 )
IE_BEGIN( cell_identity_2 )
  BF( 16, 0x0001, ACT_CHECK, ci, "0002H" )
IE_END( cell_identity_2 )
IE_BEGIN( cell_identity_3 )
  BF( 16, 0x0003, ACT_CHECK, ci, "0003H" )
IE_END( cell_identity_3 )
IE_BEGIN( cell_identity_4 )
  BF( 16, 0x0004, ACT_CHECK, ci, "0004H" )
IE_END( cell_identity_4 )
IE_BEGIN( cell_identity_5 )
  BF( 16, 0x0005, ACT_CHECK, ci, "0005H" )
IE_END( cell_identity_5 )
IE_BEGIN( cell_identity_6 )
  BF( 16, 0x0006, ACT_CHECK, ci, "0006H" )
IE_END( cell_identity_6 )
IE_BEGIN( cell_identity_7 )
  BF( 16, 0x0007, ACT_CHECK, ci, "0007H" )
IE_END( cell_identity_7 )

/*
** cell_options_bcch
** definition : GSM 04.08, 10.5.2.3

```

```

** values      : GSM 11.10, 26.6.14
** usage       : system_information_type_3
*/
IE_BEGIN(cell_options_bcch)
  BF(1,0,ACT_CHECK,ANONYMOUS           ,"spare")
  BF(1,0,ACT_CHECK,pwrc                 ,"power control indicator is not set")
  BF(2,2,ACT_CHECK,dtx                  ,"MS shall not use DTX")
  BF(4,1,ACT_CHECK,radio_link_timeout  ,"8 SACCH blocks")
IE_END(cell_options_bcch)
/*
** cell_selection_parameter
** definition : GSM 04.08, 10.5.2.4
** values     : GSM 11.10, 26.6.14
** usage      : system_information_type_3
** usage      : system_information_type_4
*/
IE_BEGIN(cell_selection_parameter)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                     ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                    ,"New establishment cause not supported")
  BF(6,          20,ACT_CHECK,rxlev_access_min       ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter)
IE_BEGIN(cell_selection_parameter_1_001)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                     ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                    ,"New establishment cause not supported")
  BF(6,          20,ACT_CHECK,rxlev_access_min       ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_1_001)
IE_BEGIN(cell_selection_parameter_2_001)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                     ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                    ,"New establishment cause not supported")
  BF(6,          43,ACT_CHECK,rxlev_access_min       ,"minimum level (-67 dBm)")
IE_END(cell_selection_parameter_2_001)
IE_BEGIN(cell_selection_parameter_3_001)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                     ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                    ,"New establishment cause not supported")
  BF(6,          20,ACT_CHECK,rxlev_access_min       ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_3_001)
IE_BEGIN(cell_selection_parameter_4_001)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                     ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                    ,"New establishment cause not supported")
  BF(6,          22,ACT_CHECK,rxlev_access_min       ,"minimum level (-88 dBm)")
IE_END(cell_selection_parameter_4_001)
IE_BEGIN(cell_selection_parameter_5_001)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                     ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                    ,"New establishment cause not supported")
  BF(6,          12,ACT_CHECK,rxlev_access_min       ,"minimum level (-98 dBm)")
IE_END(cell_selection_parameter_5_001)
IE_BEGIN(cell_selection_parameter_1_002)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                     ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                    ,"New establishment cause not supported")
  BF(6,          10,ACT_CHECK,rxlev_access_min       ,"minimum level (-100 dBm)")
IE_END(cell_selection_parameter_1_002)
IE_BEGIN(cell_selection_parameter_2_002)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                     ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                    ,"New establishment cause not supported")
  BF(6,          10,ACT_CHECK,rxlev_access_min       ,"minimum level (-100 dBm)")
IE_END(cell_selection_parameter_2_002)
IE_BEGIN(cell_selection_parameter_1_003)
  BF(3,M3(1,0,1),ACT_CHECK,cell_reselect_hysteresis,"10 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")

```

```

BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
BF(1,          0,ACT_CHECK,neci                      ,"New establishment cause not supported")
BF(6,          25,ACT_CHECK,rxlev_access_min         ,"minimum level (-85 dBm)")
IE_END(cell_selection_parameter_1_003)
IE_BEGIN(cell_selection_parameter_2_003)
  BF(3,M3(0,0,0),ACT_CHECK,cell_reselect_hysteresis,"0 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch       ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                      ,"New establishment cause not supported")
  BF(6,          20,ACT_CHECK,rxlev_access_min         ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_2_003)
IE_BEGIN(cell_selection_parameter_3_003)
  BF(3,M3(0,0,0),ACT_CHECK,cell_reselect_hysteresis,"0 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch       ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                      ,"New establishment cause not supported")
  BF(6,          20,ACT_CHECK,rxlev_access_min         ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_3_003)
IE_BEGIN(cell_selection_parameter_4_003)
  BF(3,M3(0,0,0),ACT_CHECK,cell_reselect_hysteresis,"0 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch       ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                      ,"New establishment cause not supported")
  BF(6,          25,ACT_CHECK,rxlev_access_min         ,"minimum level (-85 dBm)")
IE_END(cell_selection_parameter_4_003)
IE_BEGIN(cell_selection_parameter_5_003)
  BF(3,M3(0,0,0),ACT_CHECK,cell_reselect_hysteresis,"0 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch       ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                      ,"New establishment cause not supported")
  BF(6,          43,ACT_CHECK,rxlev_access_min         ,"minimum level (-67 dBm)")
IE_END(cell_selection_parameter_5_003)
IE_BEGIN(cell_selection_parameter_1_004)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch       ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                      ,"New establishment cause not supported")
  BF(6,          30,ACT_CHECK,rxlev_access_min         ,"minimum level (-80 dBm)")
IE_END(cell_selection_parameter_1_004)
IE_BEGIN(cell_selection_parameter_2_004)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch       ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                      ,"New establishment cause not supported")
  BF(6,          10,ACT_CHECK,rxlev_access_min         ,"minimum level (-100 dBm)")
IE_END(cell_selection_parameter_2_004)
IE_BEGIN(cell_selection_parameter_3_004)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch       ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                      ,"New establishment cause not supported")
  BF(6,          25,ACT_CHECK,rxlev_access_min         ,"minimum level (-85 dBm)")
IE_END(cell_selection_parameter_3_004)
IE_BEGIN(cell_selection_parameter_4_004)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch       ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                      ,"New establishment cause not supported")
  BF(6,          25,ACT_CHECK,rxlev_access_min         ,"minimum level (-85 dBm)")
IE_END(cell_selection_parameter_4_004)
IE_BEGIN(cell_selection_parameter_1_005)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch       ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"no add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                      ,"New establishment cause not supported")
  BF(6,          20,ACT_CHECK,rxlev_access_min         ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_1_005)
IE_BEGIN(cell_selection_parameter_2_005)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch       ,"minimum level (5 dBm)")
  BF(1,          1,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                      ,"New establishment cause not supported")
  BF(6,          20,ACT_CHECK,rxlev_access_min         ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_2_005)

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IE_BEGIN(cell_selection_parameter_1_006)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,31,ACT_CHECK,ms_txpwr_max_cch,"minimum level (5 dBm)")
    BF(1,0,ACT_CHECK,acs,"add cell params (SI4)")
    BF(1,0,ACT_CHECK,neci,"New establishment cause not supported")
    BF(6,26,ACT_CHECK,rxlev_access_min,"minimum level (-84 dBm)")
IE_END(cell_selection_parameter_1_006)
IE_BEGIN(cell_selection_parameter_2_006)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,31,ACT_CHECK,ms_txpwr_max_cch,"minimum level (5 dBm)")
    BF(1,0,ACT_CHECK,acs,"add cell params (SI4)")
    BF(1,0,ACT_CHECK,neci,"New establishment cause not supported")
    BF(6,30,ACT_CHECK,rxlev_access_min,"minimum level (-80 dBm)")
IE_END(cell_selection_parameter_2_006)
IE_BEGIN(cell_selection_parameter_1_007)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,31,ACT_CHECK,ms_txpwr_max_cch,"minimum level (5 dBm)")
    BF(1,0,ACT_CHECK,acs,"add cell params (SI4)")
    BF(1,0,ACT_CHECK,neci,"New establishment cause not supported")
    BF(6,0,ACT_CHECK,rxlev_access_min,"minimum level (-110 dBm)")
IE_END(cell_selection_parameter_1_007)
IE_BEGIN(cell_selection_parameter_2_007)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,31,ACT_CHECK,ms_txpwr_max_cch,"minimum level (5 dBm)")
    BF(1,0,ACT_CHECK,acs,"add cell params (SI4)")
    BF(1,0,ACT_CHECK,neci,"New establishment cause not supported")
    BF(6,20,ACT_CHECK,rxlev_access_min,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_2_007)
IE_BEGIN(cell_selection_parameter_3_007)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,31,ACT_CHECK,ms_txpwr_max_cch,"minimum level (5 dBm)")
    BF(1,0,ACT_CHECK,acs,"add cell params (SI4)")
    BF(1,0,ACT_CHECK,neci,"New establishment cause not supported")
    BF(6,10,ACT_CHECK,rxlev_access_min,"minimum level (-100 dBm)")
IE_END(cell_selection_parameter_3_007)
IE_BEGIN(cell_selection_parameter_4_007)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,31,ACT_CHECK,ms_txpwr_max_cch,"minimum level (5 dBm)")
    BF(1,0,ACT_CHECK,acs,"add cell params (SI4)")
    BF(1,0,ACT_CHECK,neci,"New establishment cause not supported")
    BF(6,10,ACT_CHECK,rxlev_access_min,"minimum level (-100 dBm)")
IE_END(cell_selection_parameter_4_007)
IE_BEGIN(cell_selection_parameter_1_008)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,31,ACT_CHECK,ms_txpwr_max_cch,"minimum level (5 dBm)")
    BF(1,0,ACT_CHECK,acs,"add cell params (SI4)")
    BF(1,0,ACT_CHECK,neci,"New establishment cause not supported")
    BF(6,20,ACT_CHECK,rxlev_access_min,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_1_008)
IE_BEGIN(cell_selection_parameter_2_008)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,31,ACT_CHECK,ms_txpwr_max_cch,"minimum level (5 dBm)")
    BF(1,0,ACT_CHECK,acs,"add cell params (SI4)")
    BF(1,0,ACT_CHECK,neci,"New establishment cause not supported")
    BF(6,20,ACT_CHECK,rxlev_access_min,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_2_008)
IE_BEGIN(cell_selection_parameter_1_009)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,31,ACT_CHECK,ms_txpwr_max_cch,"minimum level (5 dBm)")
    BF(1,0,ACT_CHECK,acs,"add cell params (SI4)")
    BF(1,0,ACT_CHECK,neci,"New establishment cause not supported")
    BF(6,20,ACT_CHECK,rxlev_access_min,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_1_009)
IE_BEGIN(cell_selection_parameter_2_009)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,31,ACT_CHECK,ms_txpwr_max_cch,"minimum level (5 dBm)")
    BF(1,0,ACT_CHECK,acs,"add cell params (SI4)")
    BF(1,0,ACT_CHECK,neci,"New establishment cause not supported")
    BF(6,20,ACT_CHECK,rxlev_access_min,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_2_009)
IE_BEGIN(cell_selection_parameter_1_010)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,31,ACT_CHECK,ms_txpwr_max_cch,"minimum level (5 dBm)")
    BF(1,0,ACT_CHECK,acs,"add cell params (SI4)")
    BF(1,0,ACT_CHECK,neci,"New establishment cause not supported")

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    BF(6,          20,ACT_CHECK,rxlev_access_min          ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_1_010)
IE_BEGIN(cell_selection_parameter_2_010)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,          31,ACT_CHECK,ms_txpwr_max_cch          ,"minimum level (5 dBm)")
    BF(1,          0,ACT_CHECK,acs                          ,"add cell params (SI4)")
    BF(1,          0,ACT_CHECK,neci                        ,"New establishment cause not supported")
    BF(6,          20,ACT_CHECK,rxlev_access_min          ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_2_010)
IE_BEGIN(cell_selection_parameter_1_011)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,          31,ACT_CHECK,ms_txpwr_max_cch          ,"minimum level (5 dBm)")
    BF(1,          0,ACT_CHECK,acs                          ,"add cell params (SI4)")
    BF(1,          0,ACT_CHECK,neci                        ,"New establishment cause not supported")
    BF(6,          20,ACT_CHECK,rxlev_access_min          ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_1_011)
IE_BEGIN(cell_selection_parameter_2_011)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,          31,ACT_CHECK,ms_txpwr_max_cch          ,"minimum level (5 dBm)")
    BF(1,          0,ACT_CHECK,acs                          ,"add cell params (SI4)")
    BF(1,          0,ACT_CHECK,neci                        ,"New establishment cause not supported")
    BF(6,          20,ACT_CHECK,rxlev_access_min          ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_2_011)
IE_BEGIN(cell_selection_parameter_3_011)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,          31,ACT_CHECK,ms_txpwr_max_cch          ,"minimum level (5 dBm)")
    BF(1,          0,ACT_CHECK,acs                          ,"add cell params (SI4)")
    BF(1,          0,ACT_CHECK,neci                        ,"New establishment cause not supported")
    BF(6,          20,ACT_CHECK,rxlev_access_min          ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_3_011)
IE_BEGIN(cell_selection_parameter_4_011)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,          31,ACT_CHECK,ms_txpwr_max_cch          ,"minimum level (5 dBm)")
    BF(1,          0,ACT_CHECK,acs                          ,"add cell params (SI4)")
    BF(1,          0,ACT_CHECK,neci                        ,"New establishment cause not supported")
    BF(6,          20,ACT_CHECK,rxlev_access_min          ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_4_011)
IE_BEGIN(cell_selection_parameter_5_011)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,          31,ACT_CHECK,ms_txpwr_max_cch          ,"minimum level (5 dBm)")
    BF(1,          0,ACT_CHECK,acs                          ,"add cell params (SI4)")
    BF(1,          0,ACT_CHECK,neci                        ,"New establishment cause not supported")
    BF(6,          20,ACT_CHECK,rxlev_access_min          ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_5_011)
IE_BEGIN(cell_selection_parameter_6_011)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,          31,ACT_CHECK,ms_txpwr_max_cch          ,"minimum level (5 dBm)")
    BF(1,          0,ACT_CHECK,acs                          ,"add cell params (SI4)")
    BF(1,          0,ACT_CHECK,neci                        ,"New establishment cause not supported")
    BF(6,          20,ACT_CHECK,rxlev_access_min          ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_6_011)
IE_BEGIN(cell_selection_parameter_7_011)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,          31,ACT_CHECK,ms_txpwr_max_cch          ,"minimum level (5 dBm)")
    BF(1,          0,ACT_CHECK,acs                          ,"add cell params (SI4)")
    BF(1,          0,ACT_CHECK,neci                        ,"New establishment cause not supported")
    BF(6,          0,ACT_CHECK,rxlev_access_min          ,"minimum level (-110 dBm)")
IE_END(cell_selection_parameter_7_011)
IE_BEGIN(cell_selection_parameter_1_012)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,          31,ACT_CHECK,ms_txpwr_max_cch          ,"minimum level (5 dBm)")
    BF(1,          0,ACT_CHECK,acs                          ,"add cell params (SI4)")
    BF(1,          0,ACT_CHECK,neci                        ,"New establishment cause not supported")
    BF(6,          20,ACT_CHECK,rxlev_access_min          ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_1_012)
IE_BEGIN(cell_selection_parameter_2_012)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,          31,ACT_CHECK,ms_txpwr_max_cch          ,"minimum level (5 dBm)")
    BF(1,          0,ACT_CHECK,acs                          ,"add cell params (SI4)")
    BF(1,          0,ACT_CHECK,neci                        ,"New establishment cause not supported")
    BF(6,          20,ACT_CHECK,rxlev_access_min          ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_2_012)
IE_BEGIN(cell_selection_parameter_2_012_B)
    BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
    BF(5,          31,ACT_CHECK,ms_txpwr_max_cch          ,"minimum level (5 dBm)")

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BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
BF(1,          0,ACT_CHECK,neci                     ,"New establishment cause not supported")
BF(6,          10,ACT_CHECK,rxlev_access_min        ,"minimum level (-100 dBm)")
IE_END(cell_selection_parameter_2_012_B)
IE_BEGIN(cell_selection_parameter_1_013)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                     ,"New establishment cause not supported")
  BF(6,          20,ACT_CHECK,rxlev_access_min        ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_1_013)
IE_BEGIN(cell_selection_parameter_2_013)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                     ,"New establishment cause not supported")
  BF(6,          20,ACT_CHECK,rxlev_access_min        ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_2_013)
IE_BEGIN(cell_selection_parameter_2_013B)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                     ,"New establishment cause not supported")
  BF(6,          10,ACT_CHECK,rxlev_access_min        ,"minimum level (-100 dBm)")
IE_END(cell_selection_parameter_2_013B)
IE_BEGIN(cell_selection_parameter_1_014)
  BF(3,M3(0,0,0),ACT_CHECK,cell_reselect_hysteresis,"0 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                     ,"New establishment cause not supported")
  BF(6,          20,ACT_CHECK,rxlev_access_min        ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_1_014)
IE_BEGIN(cell_selection_parameter_2_014)
  BF(3,M3(0,0,0),ACT_CHECK,cell_reselect_hysteresis,"0 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                     ,"New establishment cause not supported")
  BF(6,          40,ACT_CHECK,rxlev_access_min        ,"minimum level (-70 dBm)")
IE_END(cell_selection_parameter_2_014)
IE_BEGIN(cell_selection_parameter_3_014)
  BF(3,M3(1,1,1),ACT_CHECK,cell_reselect_hysteresis,"14 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                     ,"New establishment cause not supported")
  BF(6,          20,ACT_CHECK,rxlev_access_min        ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_3_014)
IE_BEGIN(cell_selection_parameter_1_015)
  BF(3,M3(1,1,1),ACT_CHECK,cell_reselect_hysteresis,"14 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                     ,"New establishment cause not supported")
  BF(6,          50,ACT_CHECK,rxlev_access_min        ,"minimum level (-60 dBm)")
IE_END(cell_selection_parameter_1_015)
IE_BEGIN(cell_selection_parameter_2_015)
  BF(3,M3(0,0,0),ACT_CHECK,cell_reselect_hysteresis,"0 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                     ,"New establishment cause not supported")
  BF(6,          32,ACT_CHECK,rxlev_access_min        ,"minimum level (-78 dBm)")
IE_END(cell_selection_parameter_2_015)
IE_BEGIN(cell_selection_parameter_3_015)
  BF(3,M3(1,0,1),ACT_CHECK,cell_reselect_hysteresis,"10 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                     ,"New establishment cause not supported")
  BF(6,          26,ACT_CHECK,rxlev_access_min        ,"minimum level (-84 dBm)")
IE_END(cell_selection_parameter_3_015)
IE_BEGIN(cell_selection_parameter_1_018)
  BF(3,M3(0,0,0),ACT_CHECK,cell_reselect_hysteresis,"0 dB")
  BF(5,          31,ACT_CHECK,ms_txpwr_max_cch      ,"minimum level (5 dBm)")
  BF(1,          0,ACT_CHECK,acs                      ,"add cell params (SI4)")
  BF(1,          0,ACT_CHECK,neci                     ,"New establishment cause not supported")
  BF(6,          20,ACT_CHECK,rxlev_access_min        ,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_1_018)

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IE_BEGIN(cell_selection_parameter_2_018)
  BF(3,M3(0,0,0),ACT_CHECK,cell_reselect_hysteresis,"0 dB")
  BF(5,31,ACT_CHECK,ms_txpwr_max_cch,"minimum level (5 dBm)")
  BF(1,0,ACT_CHECK,acs,"add cell params (SI4)")
  BF(1,0,ACT_CHECK,neci,"New establishment cause not supported")
  BF(6,20,ACT_CHECK,rxlev_access_min,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_2_018)
IE_BEGIN(cell_selection_parameter_1_020)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,7,ACT_CHECK,ms_txpwr_max_cch,SILENT)
  BF(1,0,ACT_CHECK,acs,"add cell params (SI4)")
  BF(1,0,ACT_CHECK,neci,"New establishment cause not supported")
  BF(6,20,ACT_CHECK,rxlev_access_min,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_1_020)
IE_BEGIN(cell_selection_parameter_2_020)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,7,ACT_CHECK,ms_txpwr_max_cch,SILENT)
  BF(1,0,ACT_CHECK,acs,"add cell params (SI4)")
  BF(1,0,ACT_CHECK,neci,"New establishment cause not supported")
  BF(6,41,ACT_CHECK,rxlev_access_min,"minimum level (-69 dBm)")
IE_END(cell_selection_parameter_2_020)
IE_BEGIN(cell_selection_parameter_3_020)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,28,ACT_CHECK,ms_txpwr_max_cch,"minimum level (0 dBm)")
  BF(1,0,ACT_CHECK,acs,"add cell params (SI4)")
  BF(1,0,ACT_CHECK,neci,"New establishment cause not supported")
  BF(6,20,ACT_CHECK,rxlev_access_min,"minimum level (-90 dBm)")
IE_END(cell_selection_parameter_3_020)
IE_BEGIN(cell_selection_parameter_4_020)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,7,ACT_CHECK,ms_txpwr_max_cch,SILENT)
  BF(1,0,ACT_CHECK,acs,"add cell params (SI4)")
  BF(1,0,ACT_CHECK,neci,"New establishment cause not supported")
  BF(6,22,ACT_CHECK,rxlev_access_min,"minimum level (-88 dBm)")
IE_END(cell_selection_parameter_4_020)
IE_BEGIN(cell_selection_parameter_5_020)
  BF(3,M3(0,1,0),ACT_CHECK,cell_reselect_hysteresis,"4 dB")
  BF(5,28,ACT_CHECK,ms_txpwr_max_cch,"minimum level (0 dBm)")
  BF(1,0,ACT_CHECK,acs,"add cell params (SI4)")
  BF(1,0,ACT_CHECK,neci,"New establishment cause not supported")
  BF(6,12,ACT_CHECK,rxlev_access_min,"minimum level (-98 dBm)")
IE_END(cell_selection_parameter_5_020)
/*
** control_channel_description
** definition : GSM 04.08, 10.5.2.11
** values : GSM 11.10, 26.6.14
** usage : system_information_type_3
*/
IE_BEGIN(control_channel_description)
  BF(1,0,ACT_CHECK,ANONYMOUS,"spare")
  BF(1,0,ACT_CHECK,att,"no attach/detach")
  BF(3,0,ACT_CHECK,bs_ag_blks_res,"0 blocks reserved for access grant")
  BF(3,M3(0,0,1),ACT_CHECK,ccch_conf,"1 basic physical channel,combined with SDCCHs")
  BF(5,0,ACT_CHECK,ANONYMOUS,"spare")
  BF(3,3,ACT_CHECK,bs_pa_mfrms,"5 multiframe periods for transmission "
    "of paging messages")
  BF(8,0,ACT_CHECK,t3212,"Infinite")
IE_END(control_channel_description)
IE_BEGIN(control_channel_description_att)
  BF(1,0,ACT_CHECK,ANONYMOUS,"spare")
  BF(1,1,ACT_CHECK,att,"attach/detach")
  BF(3,0,ACT_CHECK,bs_ag_blks_res,"0 blocks reserved for access grant")
  BF(3,M3(0,0,1),ACT_CHECK,ccch_conf,"1 basic physical channel,combined with SDCCHs")
  BF(5,0,ACT_CHECK,ANONYMOUS,"spare")
  BF(3,3,ACT_CHECK,bs_pa_mfrms,"5 multiframe periods for transmission "
    "of paging messages")
  BF(8,0,ACT_CHECK,t3212,"Infinite")
IE_END(control_channel_description_att)
/*
** l2_pseudo_length_9
** definition : GSM 04.08, 10.5.2.16
** values : GSM 04.08, 10.5.2.16
** usage : paging_request_type_1
*/
IE_BEGIN(l2_pseudo_length_9)

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        BF(6,9,ACT_CHECK,ANONYMOUS,SILENT)
        BF(1,0,ACT_CHECK,ANONYMOUS,SILENT)
        BF(1,1,ACT_CHECK,ANONYMOUS,SILENT)
    IE_END(l2_pseudo_length_9)
/*
** l2_pseudo_length_12
** definition : GSM 04.08, 10.5.2.19
** values : GSM 04.08, 10.5.2.19
** usage : system_information_type_4
*/
    IE_BEGIN(l2_pseudo_length_12)
        BF(6,12,ACT_CHECK,ANONYMOUS,SILENT)
        BF(1,0,ACT_CHECK,ANONYMOUS,SILENT)
        BF(1,1,ACT_CHECK,ANONYMOUS,SILENT)
    IE_END(l2_pseudo_length_12)
/*
** l2_pseudo_length_18
** definition : GSM 04.08, 10.5.2.19
** values : GSM 04.08, 10.5.2.19
** usage : system_information_type_3
** usage : immediate_assignment_extended
*/
    IE_BEGIN(l2_pseudo_length_18)
        BF(6,18,ACT_CHECK,ANONYMOUS,SILENT)
        BF(1,0,ACT_CHECK,ANONYMOUS,SILENT)
        BF(1,1,ACT_CHECK,ANONYMOUS,SILENT)
    IE_END(l2_pseudo_length_18)
/*
** l2_pseudo_length_21
** definition : GSM 04.08, 10.5.2.19
** values : GSM 04.08, 10.5.2.19
** usage : system_information_type_1
** usage : immediate_assignment
*/
    IE_BEGIN(l2_pseudo_length_21)
        BF(6,21,ACT_CHECK,ANONYMOUS,SILENT)
        BF(1,0,ACT_CHECK,ANONYMOUS,SILENT)
        BF(1,1,ACT_CHECK,ANONYMOUS,SILENT)
    IE_END(l2_pseudo_length_21)
/*
** l2_pseudo_length_22
** definition : GSM 04.08, 10.5.2.19
** values : GSM 04.08, 10.5.2.19
** usage : system_information_type_2
*/
    IE_BEGIN(l2_pseudo_length_22)
        BF(6,22,ACT_CHECK,ANONYMOUS,SILENT)
        BF(1,0,ACT_CHECK,ANONYMOUS,SILENT)
        BF(1,1,ACT_CHECK,ANONYMOUS,SILENT)
    IE_END(l2_pseudo_length_22)
/*
** location_area_identification
** definition : GSM 04.08, 10.5.1.3
** values : GSM 04.08, 26.6.14
** usage : system_information_type_4
** usage : system_information_type_6
** usage : location_updating_request
*/
    IE_BEGIN(location_area_identification)
        BF(4,6,ACT_CHECK,mcc_dig_2,"digit 2 of mobile country code")
        BF(4,2,ACT_CHECK,mcc_dig_1,"digit 1 of mobile country code")
        BF(4,0xF,ACT_CHECK,ANONYMOUS,"end of MCC")
        BF(4,2,ACT_CHECK,mcc_dig_3,"digit 3 of mobile country code")
        BF(4,1,ACT_CHECK,mnc_dig_2,"digit 2 of mobile network code")
        BF(4,0,ACT_CHECK,mnc_dig_1,"digit 1 of mobile network code")
        BF(16,0x0001,ACT_CHECK,lac,"Location area code")
    IE_END(location_area_identification)
    IE_BEGIN(location_area_identification_001)
        BF(4,6,ACT_CHECK,mcc_dig_2,"digit 2 of mobile country code")
        BF(4,2,ACT_CHECK,mcc_dig_1,"digit 1 of mobile country code")
        BF(4,0xF,ACT_CHECK,ANONYMOUS,"end of MCC")
        BF(4,2,ACT_CHECK,mcc_dig_3,"digit 3 of mobile country code")
        BF(4,2,ACT_CHECK,mnc_dig_2,"digit 2 of mobile network code")
        BF(4,0,ACT_CHECK,mnc_dig_1,"digit 1 of mobile network code")

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    BF(16,0x0001,ACT_CHECK,lac,"Location area code")
IE_END(location_area_identification_001)
IE_BEGIN(location_area_identification_003)
    BF(4,6,ACT_CHECK,mcc_dig_2,"digit 2 of mobile country code")
    BF(4,2,ACT_CHECK,mcc_dig_1,"digit 1 of mobile country code")
    BF(4,0xF,ACT_CHECK,ANONYMOUS,"end of MCC")
    BF(4,2,ACT_CHECK,mcc_dig_3,"digit 3 of mobile country code")
    BF(4,1,ACT_CHECK,mnc_dig_2,"digit 2 of mobile network code")
    BF(4,0,ACT_CHECK,mnc_dig_1,"digit 1 of mobile network code")
    BF(16,0x0002,ACT_CHECK,lac,"Location area code")
IE_END(location_area_identification_003)
IE_BEGIN(location_area_identification_002)
    BF(4,6,ACT_CHECK,mcc_dig_2,"digit 2 of mobile country code")
    BF(4,2,ACT_CHECK,mcc_dig_1,"digit 1 of mobile country code")
    BF(4,0xF,ACT_CHECK,ANONYMOUS,"end of MCC")
    BF(4,3,ACT_CHECK,mcc_dig_3,"digit 3 of mobile country code")
    BF(4,1,ACT_CHECK,mnc_dig_2,"digit 2 of mobile network code")
    BF(4,0,ACT_CHECK,mnc_dig_1,"digit 1 of mobile network code")
    BF(16,0x0001,ACT_CHECK,lac,"Location area code")
IE_END(location_area_identification_002)
IE_BEGIN(location_area_identification_2_005)
    BF(4,6,ACT_CHECK,mcc_dig_2,"digit 2 of mobile country code")
    BF(4,2,ACT_CHECK,mcc_dig_1,"digit 1 of mobile country code")
    BF(4,0xF,ACT_CHECK,ANONYMOUS,"end of MCC")
    BF(4,2,ACT_CHECK,mcc_dig_3,"digit 3 of mobile country code")
    BF(4,1,ACT_CHECK,mnc_dig_2,"digit 2 of mobile network code")
    BF(4,0,ACT_CHECK,mnc_dig_1,"digit 1 of mobile network code")
    BF(16,0x0002,ACT_CHECK,lac,"Location area code")
IE_END(location_area_identification_2_005)
IE_BEGIN(location_area_identification_014)
    BF(4,3,ACT_CHECK,mcc_dig_2,"digit 2 of mobile country code")
    BF(4,2,ACT_CHECK,mcc_dig_1,"digit 1 of mobile country code")
    BF(4,0xF,ACT_CHECK,ANONYMOUS,"end of MCC")
    BF(4,4,ACT_CHECK,mcc_dig_3,"digit 3 of mobile country code")
    BF(4,1,ACT_CHECK,mnc_dig_2,"digit 2 of mobile network code")
    BF(4,0,ACT_CHECK,mnc_dig_1,"digit 1 of mobile network code")
    BF(16,0x1111,ACT_CHECK,lac,"Location area code")
IE_END(location_area_identification_014)
IE_BEGIN(location_area_identification_1_015)
    BF(4,6,ACT_CHECK,mcc_dig_2,"digit 2 of mobile country code")
    BF(4,2,ACT_CHECK,mcc_dig_1,"digit 1 of mobile country code")
    BF(4,0xF,ACT_CHECK,ANONYMOUS,"end of MCC")
    BF(4,2,ACT_CHECK,mcc_dig_3,"digit 3 of mobile country code")
    BF(4,1,ACT_CHECK,mnc_dig_2,"digit 2 of mobile network code")
    BF(4,0,ACT_CHECK,mnc_dig_1,"digit 1 of mobile network code")
    BF(16,0x1111,ACT_CHECK,lac,"Location area code")
IE_END(location_area_identification_1_015)
IE_BEGIN(location_area_identification_2_015)
    BF(4,6,ACT_CHECK,mcc_dig_2,"digit 2 of mobile country code")
    BF(4,2,ACT_CHECK,mcc_dig_1,"digit 1 of mobile country code")
    BF(4,0xF,ACT_CHECK,ANONYMOUS,"end of MCC")
    BF(4,2,ACT_CHECK,mcc_dig_3,"digit 3 of mobile country code")
    BF(4,1,ACT_CHECK,mnc_dig_2,"digit 2 of mobile network code")
    BF(4,0,ACT_CHECK,mnc_dig_1,"digit 1 of mobile network code")
    BF(16,0x2222,ACT_CHECK,lac,"Location area code")
IE_END(location_area_identification_2_015)
IE_BEGIN(location_area_identification_3_015)
    BF(4,6,ACT_CHECK,mcc_dig_2,"digit 2 of mobile country code")
    BF(4,2,ACT_CHECK,mcc_dig_1,"digit 1 of mobile country code")
    BF(4,0xF,ACT_CHECK,ANONYMOUS,"end of MCC")
    BF(4,2,ACT_CHECK,mcc_dig_3,"digit 3 of mobile country code")
    BF(4,1,ACT_CHECK,mnc_dig_2,"digit 2 of mobile network code")
    BF(4,0,ACT_CHECK,mnc_dig_1,"digit 1 of mobile network code")
    BF(16,0x1111,ACT_CHECK,lac,"Location area code")
IE_END(location_area_identification_3_015)
IE_BEGIN(location_area_identification_1_018)
    BF(4,6,ACT_CHECK,mcc_dig_2,"digit 2 of mobile country code")
    BF(4,2,ACT_CHECK,mcc_dig_1,"digit 1 of mobile country code")
    BF(4,0xF,ACT_CHECK,ANONYMOUS,"end of MCC")
    BF(4,2,ACT_CHECK,mcc_dig_3,"digit 3 of mobile country code")
    BF(4,2,ACT_CHECK,mnc_dig_2,"digit 2 of mobile network code")
    BF(4,0,ACT_CHECK,mnc_dig_1,"digit 1 of mobile network code")
    BF(16,0x1111,ACT_CHECK,lac,"Location area code")
IE_END(location_area_identification_1_018)

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IE_BEGIN(location_area_identification_2_018)
    BF( 4,      6,ACT_CHECK,mcc_dig_2,"digit 2 of mobile country code")
    BF( 4,      2,ACT_CHECK,mcc_dig_1,"digit 1 of mobile country code")
    BF( 4,      0xF,ACT_CHECK,ANONYMOUS,"end of MCC")
    BF( 4,      2,ACT_CHECK,mcc_dig_3,"digit 3 of mobile country code")
    BF( 4,      2,ACT_CHECK,mnc_dig_2,"digit 2 of mobile network code")
    BF( 4,      0,ACT_CHECK,mnc_dig_1,"digit 1 of mobile network code")
    BF(16,0x2222,ACT_CHECK,lac,"Location area code")
IE_END(location_area_identification_2_018)
IE_BEGIN(location_area_identification_del)
    BF( 4,      6,ACT_CHECK,mcc_dig_2,"digit 2 of mobile country code")
    BF( 4,      2,ACT_CHECK,mcc_dig_1,"digit 1 of mobile country code")
    BF( 4,      0xF,ACT_CHECK,ANONYMOUS,"end of MCC")
    BF( 4,      2,ACT_CHECK,mcc_dig_3,"digit 3 of mobile country code")
    BF( 4,      1,ACT_CHECK,mnc_dig_2,"digit 2 of mobile network code")
    BF( 4,      0,ACT_CHECK,mnc_dig_1,"digit 1 of mobile network code")
    BF(16,0xFFFE,ACT_CHECK,lac,"Location area code")
IE_END(location_area_identification_del)
/*
** ncc_permitted
** definition : GSM 04.08, 10.5.2.27
** values : GSM 11.10, 26.6.14
** usage : system_information_type_2
*/
IE_BEGIN(ncc_permitted)
    BF(8,M8(0,0,0,0,0,0,1,0),ACT_CHECK,ncc_permit,"0000 0010 (NCC==1 only)")
IE_END(ncc_permitted)
/*
** neighbour_cell_description
** definition : GSM 04.08, 10.5.2.22
** values : GSM 11.10, 26.6.14
** usage : system_information_type_2
** usage : system_information_type_5
*/
IE_BEGIN(neighbour_cell_description)
    BF( 2,      0,ACT_CHECK,format_id,"bit map 0")
    BF( 1,      0,ACT_CHECK,ext_ind,"this IE carries the complete BA")
    BF( 1,      0,ACT_CHECK,ba_ind,"BCCH allocation sequence")
    BF(28,0x0802008,ACT_CHECK,ba_124_097,"channel numbers: 120 110 100")
    BF(32,0x02008000,ACT_CHECK,ba_096_065,"channel numbers: 90 80")
    BF(32,0x00000080,ACT_CHECK,ba_064_033,"channel numbers: 40")
    BF(32,0x00080200,ACT_CHECK,ba_032_001,"channel numbers: 20 10")
IE_END(neighbour_cell_description)
IE_BEGIN(neighbour_cell_description_005A)
    BF( 2,      0,ACT_CHECK,format_id,"bit map 0")
    BF( 1,      1,ACT_CHECK,ext_ind,"this IE carries no complete BA")
    BF( 1,      0,ACT_CHECK,ba_ind,"BCCH allocation sequence")
    BF(28,0x0802008,ACT_CHECK,ba_124_097,"channel numbers: 120 110 100")
    BF(32,0x02008000,ACT_CHECK,ba_096_065,"channel numbers: 90 80")
    BF(32,0x00000080,ACT_CHECK,ba_064_033,"channel numbers: 40")
    BF(32,0x00080200,ACT_CHECK,ba_032_001,"channel numbers: 20 10")
IE_END(neighbour_cell_description_005A)
IE_BEGIN(neighbour_cell_description_005B)
    BF( 2,      0,ACT_CHECK,format_id,"bit map 0")
    BF( 1,      1,ACT_CHECK,ext_ind,"this IE carries no complete BA")
    BF( 1,      0,ACT_CHECK,ba_ind,"BCCH allocation sequence")
    BF(28,0x0802008,ACT_CHECK,ba_124_097,"channel numbers: 120 110 100")
    BF(32,0x02008000,ACT_CHECK,ba_096_065,"channel numbers: 90 80")
    BF(32,0x00000080,ACT_CHECK,ba_064_033,"channel numbers: 40")
    BF(32,0x00080200,ACT_CHECK,ba_032_001,"channel numbers: 20 10")
IE_END(neighbour_cell_description_005B)
IE_BEGIN(neighbour_cell_description_013)
    BF( 2,      0,ACT_CHECK,format_id,"bit map 0")
    BF( 1,      0,ACT_CHECK,ext_ind,"this IE carries the complete BA")
    BF( 1,      0,ACT_CHECK,ba_ind,"BCCH allocation sequence")
    BF(28,0x0802008,ACT_CHECK,ba_124_097,"channel numbers: 120 110 100")
    BF(32,0x02008000,ACT_CHECK,ba_096_065,"channel numbers: 90 80")
    BF(32,0x00000080,ACT_CHECK,ba_064_033,"channel numbers: 40")
    BF(32,0x00000200,ACT_CHECK,ba_032_001,"channel numbers: 10")
IE_END(neighbour_cell_description_013)
IE_BEGIN(neighbour_cell_description_020)
    BF( 2,      0,ACT_CHECK,format_id,"bit map 0")
    BF( 1,      0,ACT_CHECK,ext_ind,"this IE carries the complete BA")
    BF( 1,      0,ACT_CHECK,ba_ind,"BCCH allocation sequence")
    BF(28,0x0000000,ACT_CHECK,ba_124_097,"channel numbers: ")

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BF(32,0x00000000,ACT_CHECK,ba_096_065,"channel numbers: ")
BF(32,0x00000000,ACT_CHECK,ba_064_033,"channel numbers: ")
BF(32,0x00000000,ACT_CHECK,ba_032_001,"channel numbers: ")
IE_END(neighbour_cell_description_020)
IE_BEGIN(neighbour_cell_description_empty)
  BF( 2, 0,ACT_CHECK,format_id,"bit map 0 ")
  BF( 1, 0,ACT_CHECK,ext_ind,"this IE carries the complete BA ")
  BF( 1, 0,ACT_CHECK,ba_ind,"BCCH allocation sequence ")
  BF(28, 0x00000000,ACT_CHECK,ba_124_097,"channel numbers: ")
  BF(32,0x00000000,ACT_CHECK,ba_096_065,"channel numbers: ")
  BF(32,0x00000000,ACT_CHECK,ba_064_033,"channel numbers: ")
  BF(32,0x00000000,ACT_CHECK,ba_032_001,"channel numbers: ")
IE_END(neighbour_cell_description_empty)
/*
** rach_control_parameter
** definition : GSM 04.08, 10.5.2.29
** values : GSM 11.10, 26.6.14
** usage : system_information_type_1
** usage : system_information_type_2
** usage : system_information_type_3
** usage : system_information_type_4
*/
IE_BEGIN(rach_control_parameter)
  BF( 2, 0,ACT_CHECK,max_retrans,"max 1 retrans ")
  BF( 4,M4(0,0,1,0),ACT_CHECK,tx_integer,"5 slots used ")
  BF( 1, 0,ACT_CHECK,cell_bar_access,"cell is not barred ")
  BF( 1, 0,ACT_CHECK,call_re_establishment,"Allowed ")
  BF( 5, 0,ACT_CHECK,access_control_class_15_11,"access is not barred")
  BF( 1, 0,ACT_CHECK,emergency_call,"allowed ")
  BF(10, 0,ACT_CHECK,access_control_class_09_00,"access is not barred")
IE_END(rach_control_parameter)
IE_BEGIN(rach_control_parameter_007_0)
  BF( 2, 0,ACT_CHECK,max_retrans,"max 1 retrans ")
  BF( 4,M4(0,0,1,0),ACT_CHECK,tx_integer,"5 slots used ")
  BF( 1, 0,ACT_CHECK,cell_bar_access,"cell is not barred ")
  BF( 1, 0,ACT_CHECK,call_re_establishment,"Allowed ")
  BF( 5, 0x10,ACT_CHECK,access_control_class_15_11,"access is not barred")
  BF( 1, 0,ACT_CHECK,emergency_call,"allowed ")
  BF(10, 0,ACT_CHECK,access_control_class_09_00,"access is not barred")
IE_END(rach_control_parameter_007_0)
IE_BEGIN(rach_control_parameter_007_1)
  BF( 2, 0,ACT_CHECK,max_retrans,"max 1 retrans ")
  BF( 4,M4(0,0,1,0),ACT_CHECK,tx_integer,"5 slots used ")
  BF( 1, 1,ACT_CHECK,cell_bar_access,"cell is barred ")
  BF( 1, 0,ACT_CHECK,call_re_establishment,"Allowed ")
  BF( 5, 0x10,ACT_CHECK,access_control_class_15_11,"access is not barred")
  BF( 1, 0,ACT_CHECK,emergency_call,"allowed ")
  BF(10, 0,ACT_CHECK,access_control_class_09_00,"access is not barred")
IE_END(rach_control_parameter_007_1)
IE_BEGIN(rach_control_parameter_020)
  BF( 2, 0,ACT_CHECK,max_retrans,"max 1 retrans ")
  BF( 4,M4(0,0,1,0),ACT_CHECK,tx_integer,"5 slots used ")
  BF( 1, 1,ACT_CHECK,cell_bar_access,"cell is barred ")
  BF( 1, 0,ACT_CHECK,call_re_establishment,"Allowed ")
  BF( 5, 0x10,ACT_CHECK,access_control_class_15_11,"access is not barred")
  BF( 1, 0,ACT_CHECK,emergency_call,"allowed ")
  BF(10, 0,ACT_CHECK,access_control_class_09_00,"access is not barred")
IE_END(rach_control_parameter_020)
IE_BEGIN(rach_control_parameter_CBA)
  BF( 2, 0,ACT_CHECK,max_retrans,"max 1 retrans ")
  BF( 4,M4(0,0,1,0),ACT_CHECK,tx_integer,"5 slots used ")
  BF( 1, 1,ACT_CHECK,cell_bar_access,"cell is barred ")
  BF( 1, 0,ACT_CHECK,call_re_establishment,"Allowed ")
  BF( 5, 0,ACT_CHECK,access_control_class_15_11,"access is not barred")
  BF( 1, 0,ACT_CHECK,emergency_call,"allowed ")
  BF(10, 0,ACT_CHECK,access_control_class_09_00,"access is not barred")
IE_END(rach_control_parameter_CBA)
/*
** si_1_rest_octets
** definition : GSM 04.08, 10.5.2.32
** values : GSM 11.10, 26.6.14
** usage : system_information_type_1
*/
IE_BEGIN(si_1_rest_octets)

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    BF(8,REST_OCTET,ACT_CHECK,spare,"not used (all bits are set to spare)")
IE_END(si_1_rest_octets)
/*
** si_3_rest_octets
** definition : GSM 04.08, 10.5.2.34
** values     : GSM 11.10, 26.6.14
** usage      : system_information_type_3
*/
IE_BEGIN(si_3_rest_octets)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
IE_END(si_3_rest_octets)
IE_BEGIN(si_3_rest_octets_2_004)
    BF(8,0x88,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,0x1F,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
IE_END(si_3_rest_octets_2_004)
IE_BEGIN(si_3_rest_octets_3_004)
    BF(8,0x8A,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,0x41,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
IE_END(si_3_rest_octets_3_004)
IE_BEGIN(si_3_rest_octets_4_004)
    BF(8,0x8A,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,0x42,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
IE_END(si_3_rest_octets_4_004)
IE_BEGIN(si_3_rest_octets_0_007)
    BF(8,0x88,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,0x42,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
IE_END(si_3_rest_octets_0_007)
IE_BEGIN(si_3_rest_octets_1_007)
    BF(8,0xC8,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,0x1F,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
IE_END(si_3_rest_octets_1_007)
IE_BEGIN(si_3_rest_octets_1_008)
    BF(8,0x8F,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,0x00,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
IE_END(si_3_rest_octets_1_008)
/*
** si_4_rest_octets
** definition : GSM 04.08, 10.5.2.35
** values     : GSM 11.10, 26.6.14
** usage      : system_information_type_4
*/
IE_BEGIN(si_4_rest_octets)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
IE_END(si_4_rest_octets)
IE_BEGIN(si_4_rest_octets_2_004)
    BF(8,0x88,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,0x1F,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)

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BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
IE_END(si_4_rest_octets_2_004)
IE_BEGIN(si_4_rest_octets_3_004)
BF(8,0x8A,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,0x41,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
IE_END(si_4_rest_octets_3_004)
IE_BEGIN(si_4_rest_octets_4_004)
BF(8,0x8A,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,0x42,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
IE_END(si_4_rest_octets_4_004)
IE_BEGIN(si_4_rest_octets_0_007)
BF(8,0x88,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,0x42,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
IE_END(si_4_rest_octets_0_007)
IE_BEGIN(si_4_rest_octets_1_007)
BF(8,0xC8,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,0x1F,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
IE_END(si_4_rest_octets_1_007)
IE_BEGIN(si_4_rest_octets_1_008)
BF(8,0x8F,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,0x00,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
IE_END(si_4_rest_octets_1_008)
IE_BEGIN(si_7_rest_octets)
BF(8,0x88,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,0x00,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)

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    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT)
    IE_END(si_7_rest_octets)

/*-----*\
| System Information Messages (GSM 11.10, 26.6.14 and 26.1.1)
\*-----*/
/*
 * TESTCASE 001
 */

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_001)
    IE(12_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter_CBA)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_001)

MSG3_BEGIN(system_information_type_1_2_001)
    IE(12_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_001)

MSG3_BEGIN(system_information_type_1_3_001)
    IE(12_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_3_001)

MSG3_BEGIN(system_information_type_1_4_001)
    IE(12_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_4_001)

MSG3_BEGIN(system_information_type_1_5_001)
    IE(12_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_5_001)

```



```
/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values    : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2_1_001)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description_empty)
    IE(ncc_permitted)
    IE(rach_control_parameter_CBA)
MSG3_END(system_information_type_2_1_001)

MSG3_BEGIN(system_information_type_2_2_001)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description_empty)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_001)

MSG3_BEGIN(system_information_type_2_3_001)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description_empty)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_3_001)

MSG3_BEGIN(system_information_type_2_4_001)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description_empty)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_4_001)

MSG3_BEGIN(system_information_type_2_5_001)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description_empty)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_5_001)

/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values    : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_3_1_001)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_001)
    IE(rach_control_parameter_CBA)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_001)

MSG3_BEGIN(system_information_type_3_2_001)
```

```
IE(l2_pseudo_length_18)
IE(skip_indicator)
IE(rr_management_protocol_discriminator)
IE(system_information_type_3_message_type)
IE(cell_identity_2)
IE(location_area_identification)
IE(control_channel_description)
IE(cell_options_bcch)
IE(cell_selection_parameter_2_001)
IE(rach_control_parameter)
IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_001)

MSG3_BEGIN(system_information_type_3_3_001)
IE(l2_pseudo_length_18)
IE(skip_indicator)
IE(rr_management_protocol_discriminator)
IE(system_information_type_3_message_type)
IE(cell_identity_3)
IE(location_area_identification_001)
IE(control_channel_description)
IE(cell_options_bcch)
IE(cell_selection_parameter_3_001)
IE(rach_control_parameter)
IE(si_3_rest_octets)
MSG3_END(system_information_type_3_3_001)

MSG3_BEGIN(system_information_type_3_4_001)
IE(l2_pseudo_length_18)
IE(skip_indicator)
IE(rr_management_protocol_discriminator)
IE(system_information_type_3_message_type)
IE(cell_identity_4)
IE(location_area_identification)
IE(control_channel_description)
IE(cell_options_bcch)
IE(cell_selection_parameter_4_001)
IE(rach_control_parameter)
IE(si_3_rest_octets)
MSG3_END(system_information_type_3_4_001)

MSG3_BEGIN(system_information_type_3_5_001)
IE(l2_pseudo_length_18)
IE(skip_indicator)
IE(rr_management_protocol_discriminator)
IE(system_information_type_3_message_type)
IE(cell_identity_5)
IE(location_area_identification)
IE(control_channel_description)
IE(cell_options_bcch)
IE(cell_selection_parameter_5_001)
IE(rach_control_parameter)
IE(si_3_rest_octets)
MSG3_END(system_information_type_3_5_001)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_4_1_001)
IE(l2_pseudo_length_12)
IE(skip_indicator)
IE(rr_management_protocol_discriminator)
IE(system_information_type_4_message_type)
IE(location_area_identification)
IE(cell_selection_parameter_1_001)
IE(rach_control_parameter_CBA)
IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_001)

MSG3_BEGIN(system_information_type_4_2_001)
IE(l2_pseudo_length_12)
IE(skip_indicator)
IE(rr_management_protocol_discriminator)
```

```
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_2_001)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_001)

MSG3_BEGIN(system_information_type_4_3_001)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification_001)
    IE(cell_selection_parameter_3_001)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_3_001)

MSG3_BEGIN(system_information_type_4_4_001)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_4_001)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_4_001)

MSG3_BEGIN(system_information_type_4_5_001)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_5_001)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_5_001)

/*
 * TESTCASE 002
 */

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values    : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_002)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_002)

MSG3_BEGIN(system_information_type_1_2_002)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_002)

/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values    : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2_1_002)
```

```

    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description_empty)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_1_002)

MSG3_BEGIN(system_information_type_2_2_002)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description_empty)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_002)

/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values     : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_3_1_002)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_002)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_002)

MSG3_BEGIN(system_information_type_3_2_002)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_002)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_002)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values     : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_4_1_002)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_1_002)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_002)

MSG3_BEGIN(system_information_type_4_2_002)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_2_002)

```

```
        IE(rach_control_parameter)
        IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_002)

/*
 * TESTCASE 003
 */

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_003)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_003)

MSG3_BEGIN(system_information_type_1_2_003)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_003)

MSG3_BEGIN(system_information_type_1_3_003)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_3_003)

MSG3_BEGIN(system_information_type_1_4_003)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_4_003)

MSG3_BEGIN(system_information_type_1_5_003)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_5_003)

MSG3_BEGIN(system_information_type_1_1_003_CBA)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter_CBA)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_003_CBA)

MSG3_BEGIN(system_information_type_1_2_003_CBA)
    IE(l2_pseudo_length_21)
```

```
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter_CBA)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_003_CBA)

MSG3_BEGIN(system_information_type_1_3_003_CBA)
    IE(12_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter_CBA)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_3_003_CBA)

MSG3_BEGIN(system_information_type_1_4_003_CBA)
    IE(12_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter_CBA)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_4_003_CBA)

MSG3_BEGIN(system_information_type_1_5_003_CBA)
    IE(12_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter_CBA)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_5_003_CBA)

/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2_1_003)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_1_003)

MSG3_BEGIN(system_information_type_2_2_003)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_003)

MSG3_BEGIN(system_information_type_2_3_003)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_3_003)

MSG3_BEGIN(system_information_type_2_4_003)
    IE(12_pseudo_length_22)
```

```
        IE(skip_indicator)
        IE(rr_management_protocol_discriminator)
        IE(system_information_type_2_message_type)
        IE(neighbour_cell_description)
        IE(ncc_permitted)
        IE(rach_control_parameter)
MSG3_END(system_information_type_2_4_003)

MSG3_BEGIN(system_information_type_2_5_003)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_5_003)

MSG3_BEGIN(system_information_type_2_1_003_CBA)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter_CBA)
MSG3_END(system_information_type_2_1_003_CBA)

MSG3_BEGIN(system_information_type_2_2_003_CBA)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter_CBA)
MSG3_END(system_information_type_2_2_003_CBA)

MSG3_BEGIN(system_information_type_2_3_003_CBA)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter_CBA)
MSG3_END(system_information_type_2_3_003_CBA)

MSG3_BEGIN(system_information_type_2_4_003_CBA)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter_CBA)
MSG3_END(system_information_type_2_4_003_CBA)

MSG3_BEGIN(system_information_type_2_5_003_CBA)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter_CBA)
MSG3_END(system_information_type_2_5_003_CBA)

/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values     : GSM 11.10, 26.6.14
**/
MSG3_BEGIN(system_information_type_3_1_003)
    IE(12_pseudo_length_18)
```

```
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_003)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_003)

MSG3_BEGIN(system_information_type_3_2_003)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_3_004)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_003)

MSG3_BEGIN(system_information_type_3_3_003)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_3)
    IE(location_area_identification_003)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_3_003)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_3_003)

MSG3_BEGIN(system_information_type_3_4_003)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_4)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_4_003)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_4_003)

MSG3_BEGIN(system_information_type_3_5_003)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_5)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_5_003)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_5_003)

MSG3_BEGIN(system_information_type_3_1_003_CBA)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
```



```

        IE(control_channel_description)
        IE(cell_options_bcch)
        IE(cell_selection_parameter_1_003)
        IE(rach_control_parameter_CBA)
        IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_003_CBA)

MSG3_BEGIN(system_information_type_3_2_003_CBA)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_003)
    IE(rach_control_parameter_CBA)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_003_CBA)

MSG3_BEGIN(system_information_type_3_3_003_CBA)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_3)
    IE(location_area_identification_003)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_3_003)
    IE(rach_control_parameter_CBA)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_3_003_CBA)

MSG3_BEGIN(system_information_type_3_4_003_CBA)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_4)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_4_003)
    IE(rach_control_parameter_CBA)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_4_003_CBA)

MSG3_BEGIN(system_information_type_3_5_003_CBA)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_5)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_5_003)
    IE(rach_control_parameter_CBA)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_5_003_CBA)
/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_4_1_003)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_1_003)
    IE(rach_control_parameter)

```

```
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_003)

MSG3_BEGIN(system_information_type_4_2_003)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_2_003)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_003)

MSG3_BEGIN(system_information_type_4_3_003)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification_003)
    IE(cell_selection_parameter_3_003)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_3_003)

MSG3_BEGIN(system_information_type_4_4_003)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_4_003)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_4_003)

MSG3_BEGIN(system_information_type_4_5_003)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_5_003)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_5_003)

MSG3_BEGIN(system_information_type_4_1_003_CBA)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_1_003)
    IE(rach_control_parameter_CBA)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_003_CBA)

MSG3_BEGIN(system_information_type_4_2_003_CBA)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_2_003)
    IE(rach_control_parameter_CBA)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_003_CBA)

MSG3_BEGIN(system_information_type_4_3_003_CBA)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification_003)
```

```
        IE(cell_selection_parameter_3_003)
        IE(rach_control_parameter_CBA)
        IE(si_4_rest_octets)
MSG3_END(system_information_type_4_3_003_CBA)

MSG3_BEGIN(system_information_type_4_4_003_CBA)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_4_003)
    IE(rach_control_parameter_CBA)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_4_003_CBA)

MSG3_BEGIN(system_information_type_4_5_003_CBA)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_5_003)
    IE(rach_control_parameter_CBA)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_5_003_CBA)

/*
 * TESTCASE 004
 */

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_004)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_004)

MSG3_BEGIN(system_information_type_1_2_004)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_004)

MSG3_BEGIN(system_information_type_1_3_004)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_3_004)

MSG3_BEGIN(system_information_type_1_4_004)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_4_004)
```

```

/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values    : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2_1_004)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_1_004)

MSG3_BEGIN(system_information_type_2_2_004)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_004)

MSG3_BEGIN(system_information_type_2_3_004)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_3_004)

MSG3_BEGIN(system_information_type_2_4_004)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_4_004)

/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values    : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_3_1_004)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_004)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_004)

MSG3_BEGIN(system_information_type_3_2_004)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_004)

```

```
        IE(rach_control_parameter)
        IE(si_3_rest_octets_2_004)
MSG3_END(system_information_type_3_2_004)

MSG3_BEGIN(system_information_type_3_3_004)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_3)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_3_004)
    IE(rach_control_parameter)
    IE(si_3_rest_octets_3_004)
MSG3_END(system_information_type_3_3_004)

MSG3_BEGIN(system_information_type_3_4_004)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_4)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_4_004)
    IE(rach_control_parameter)
    IE(si_3_rest_octets_4_004)
MSG3_END(system_information_type_3_4_004)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_4_1_004)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_1_004)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_004)

MSG3_BEGIN(system_information_type_4_2_004)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_2_004)
    IE(rach_control_parameter)
    IE(si_4_rest_octets_2_004)
MSG3_END(system_information_type_4_2_004)

MSG3_BEGIN(system_information_type_4_3_004)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_3_004)
    IE(rach_control_parameter)
    IE(si_4_rest_octets_3_004)
MSG3_END(system_information_type_4_3_004)

MSG3_BEGIN(system_information_type_4_4_004)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
```

```
        IE(location_area_identification)
        IE(cell_selection_parameter_4_004)
        IE(rach_control_parameter)
        IE(si_4_rest_octets_4_004)
MSG3_END(system_information_type_4_4_004)

/*
 * TESTCASE 005
 */

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_005)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_005)

MSG3_BEGIN(system_information_type_1_2_005)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_005)

/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2_1_005)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description_005A)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_1_005)

MSG3_BEGIN(system_information_type_2_2_005)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_005)

/*
** system_information_type_2bis
** definition : GSM 04.08, 9.1.33
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2bis_1_005)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2bis_message_type)
    IE(neighbour_cell_description_005B)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2bis_1_005)
```

```
/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values    : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_3_1_005)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_005)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_005)

MSG3_BEGIN(system_information_type_3_2_005)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification_2_005)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_005)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_005)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values    : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_4_1_005)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_1_005)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_005)

MSG3_BEGIN(system_information_type_4_2_005)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification_2_005)
    IE(cell_selection_parameter_2_005)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_005)

/*
** system_information_type_7
** definition : GSM 04.08, 9.1.41
** values    : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_7_2_005)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_7_message_type)
    IE(si_7_rest_octets)
MSG3_END(system_information_type_7_2_005)

/*
** system_information_type_8
```

```
** definition : GSM 04.08, 9.1.42
** values    : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_8_2_005)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_8_message_type)
    IE(si_7_rest_octets)
MSG3_END(system_information_type_8_2_005)

/*
* TESTCASE 006
*/

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values    : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_006)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_006)

MSG3_BEGIN(system_information_type_1_2_006)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_006)

/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values    : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2_1_006)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_1_006)

MSG3_BEGIN(system_information_type_2_2_006)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_006)

/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values    : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_3_1_006)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
```



```
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_006)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_006)

MSG3_BEGIN(system_information_type_3_2_006)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_006)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_006)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values     : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_4_1_006)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_1_006)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_006)

MSG3_BEGIN(system_information_type_4_2_006)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_2_006)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_006)

MSG3_BEGIN(system_information_type_4_1_006_CB)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_1_006)
    IE(rach_control_parameter)
    IE(cbch_channel_description)
    IE(cbch_mobile_allocation)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_006_CB)

/*
* TESTCASE 007
*/

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values     : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_007)
    IE(l2_pseudo_length_21)
```

```

        IE(skip_indicator)
        IE(rr_management_protocol_discriminator)
        IE(system_information_type_1_message_type)
        IE(cell_channel_description)
        IE(rach_control_parameter_007_0)
        IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_007)

MSG3_BEGIN(system_information_type_1_2_007)
    IE(12_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter_007_1)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_007)

MSG3_BEGIN(system_information_type_1_3_007)
    IE(12_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter_007_1)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_3_007)

MSG3_BEGIN(system_information_type_1_4_007)
    IE(12_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter_007_0)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_4_007)

/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2_1_007)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter_007_0)
MSG3_END(system_information_type_2_1_007)

MSG3_BEGIN(system_information_type_2_2_007)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter_007_1)
MSG3_END(system_information_type_2_2_007)

MSG3_BEGIN(system_information_type_2_3_007)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter_007_1)
MSG3_END(system_information_type_2_3_007)

MSG3_BEGIN(system_information_type_2_4_007)
    IE(12_pseudo_length_22)

```

```
        IE(skip_indicator)
        IE(rr_management_protocol_discriminator)
        IE(system_information_type_2_message_type)
        IE(neighbour_cell_description)
        IE(ncc_permitted)
        IE(rach_control_parameter_007_0)
MSG3_END(system_information_type_2_4_007)
/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values    : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_3_1_007)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_007)
    IE(rach_control_parameter_007_0)
    IE(si_3_rest_octets_1_007)
MSG3_END(system_information_type_3_1_007)

MSG3_BEGIN(system_information_type_3_2_007)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_007)
    IE(rach_control_parameter_007_1)
    IE(si_3_rest_octets_1_007)
MSG3_END(system_information_type_3_2_007)

MSG3_BEGIN(system_information_type_3_3_007)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_3)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_3_007)
    IE(rach_control_parameter_007_1)
    IE(si_3_rest_octets_0_007)
MSG3_END(system_information_type_3_3_007)

MSG3_BEGIN(system_information_type_3_4_007)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_4)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_4_007)
    IE(rach_control_parameter_007_0)
    IE(si_3_rest_octets_0_007)
MSG3_END(system_information_type_3_4_007)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values    : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_4_1_007)
    IE(l2_pseudo_length_12)
```

```
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_1_007)
    IE(rach_control_parameter_007_0)
    IE(si_4_rest_octets_1_007)
MSG3_END(system_information_type_4_1_007)

MSG3_BEGIN(system_information_type_4_2_007)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_2_007)
    IE(rach_control_parameter_007_1)
    IE(si_4_rest_octets_1_007)
MSG3_END(system_information_type_4_2_007)

MSG3_BEGIN(system_information_type_4_3_007)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_3_007)
    IE(rach_control_parameter_007_1)
    IE(si_4_rest_octets_0_007)
MSG3_END(system_information_type_4_3_007)

MSG3_BEGIN(system_information_type_4_4_007)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_4_007)
    IE(rach_control_parameter_007_0)
    IE(si_4_rest_octets_0_007)
MSG3_END(system_information_type_4_4_007)

/*
 * TESTCASE 008
 */

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_008)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_008)

MSG3_BEGIN(system_information_type_1_2_008)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_008)

/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values      : GSM 11.10, 26.6.14
```

```

*/
MSG3_BEGIN(system_information_type_2_1_008)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_1_008)

MSG3_BEGIN(system_information_type_2_2_008)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_008)

/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_3_1_008)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_008)
    IE(rach_control_parameter)
    IE(si_3_rest_octets_1_008)
MSG3_END(system_information_type_3_1_008)

MSG3_BEGIN(system_information_type_3_2_008)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_008)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_008)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_4_1_008)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_1_008)
    IE(rach_control_parameter)
    IE(si_4_rest_octets_1_008)
MSG3_END(system_information_type_4_1_008)

MSG3_BEGIN(system_information_type_4_2_008)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)

```

```
        IE(location_area_identification)
        IE(cell_selection_parameter_2_008)
        IE(rach_control_parameter)
        IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_008)

/*
 * TESTCASE 009
 */

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_009)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_009)

MSG3_BEGIN(system_information_type_1_2_009)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_009)

/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2_1_009)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_1_009)

MSG3_BEGIN(system_information_type_2_2_009)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_009)

/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_3_1_009)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_009)
```

```
        IE(rach_control_parameter)
        IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_009)

MSG3_BEGIN(system_information_type_3_2_009)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_009)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_009)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_4_1_009)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_1_009)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_009)

MSG3_BEGIN(system_information_type_4_2_009)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_2_009)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_009)

/*
* TESTCASE 010
*/

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_010)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_010)

MSG3_BEGIN(system_information_type_1_2_010)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_010)
```

```
/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2_1_010)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_1_010)

MSG3_BEGIN(system_information_type_2_2_010)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_010)

/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_3_1_010)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_010)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_010)

MSG3_BEGIN(system_information_type_3_2_010)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_010)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_010)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_4_1_010)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_1_010)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_010)

MSG3_BEGIN(system_information_type_4_2_010)
```



```
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_2_010)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_010)

/*
 * TESTCASE 011
 */

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_011)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_011)

MSG3_BEGIN(system_information_type_1_2_011)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_011)

MSG3_BEGIN(system_information_type_1_3_011)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_3_011)

MSG3_BEGIN(system_information_type_1_4_011)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_4_011)

MSG3_BEGIN(system_information_type_1_5_011)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_5_011)

MSG3_BEGIN(system_information_type_1_6_011)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
```

```
        IE(rach_control_parameter)
        IE(si_1_rest_octets)
MSG3_END(system_information_type_1_6_011)

MSG3_BEGIN(system_information_type_1_7_011)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_7_011)

/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2_1_011)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_1_011)

MSG3_BEGIN(system_information_type_2_2_011)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_011)

MSG3_BEGIN(system_information_type_2_3_011)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_3_011)

MSG3_BEGIN(system_information_type_2_4_011)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_4_011)

MSG3_BEGIN(system_information_type_2_5_011)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_5_011)

MSG3_BEGIN(system_information_type_2_6_011)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
```

```
        IE(ncc_permitted)
        IE(rach_control_parameter)
MSG3_END(system_information_type_2_6_011)

MSG3_BEGIN(system_information_type_2_7_011)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_7_011)

/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_3_1_011)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_011)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_011)

MSG3_BEGIN(system_information_type_3_2_011)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_011)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_011)

MSG3_BEGIN(system_information_type_3_3_011)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_3)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_3_011)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_3_011)

MSG3_BEGIN(system_information_type_3_4_011)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_4)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_4_011)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_4_011)
```

```
MSG3_BEGIN(system_information_type_3_5_011)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_5)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_5_011)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_5_011)

MSG3_BEGIN(system_information_type_3_6_011)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_6)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_6_011)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_6_011)

MSG3_BEGIN(system_information_type_3_7_011)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_7)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_7_011)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_7_011)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_4_1_011)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_1_011)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_011)

MSG3_BEGIN(system_information_type_4_2_011)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_2_011)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_011)

MSG3_BEGIN(system_information_type_4_3_011)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
```

```
        IE(cell_selection_parameter_3_011)
        IE(rach_control_parameter)
        IE(si_4_rest_octets)
MSG3_END(system_information_type_4_3_011)

MSG3_BEGIN(system_information_type_4_4_011)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_4_011)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_4_011)

MSG3_BEGIN(system_information_type_4_5_011)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_5_011)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_5_011)

MSG3_BEGIN(system_information_type_4_6_011)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_6_011)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_6_011)

MSG3_BEGIN(system_information_type_4_7_011)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_7_011)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_7_011)

/*
 * TESTCASE 012
 */

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_012)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_012)

MSG3_BEGIN(system_information_type_1_2_012)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
```

```
        IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_012)

/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values     : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2_1_012)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_1_012)

MSG3_BEGIN(system_information_type_2_2_012)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_012)

/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values     : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_3_1_012)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_012)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_012)

MSG3_BEGIN(system_information_type_3_2_012)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_012)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_012)

MSG3_BEGIN(system_information_type_3_2_012_B)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_012_B)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_012_B)
```

```
/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_4_1_012)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_1_012)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_012)

MSG3_BEGIN(system_information_type_4_2_012)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_2_012)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_012)

MSG3_BEGIN(system_information_type_4_2_012_B)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_2_012_B)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_012_B)

/*
* TESTCASE 013
*/

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_013)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_013)

MSG3_BEGIN(system_information_type_1_2_013)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_013)

/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2_1_013)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
```

```

        IE(rr_management_protocol_discriminator)
        IE(system_information_type_2_message_type)
        IE(neighbour_cell_description_013)
        IE(ncc_permitted)
        IE(rach_control_parameter)
MSG3_END(system_information_type_2_1_013)

MSG3_BEGIN(system_information_type_2_2_013)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_013)

/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_3_1_013)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_013)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_013)

MSG3_BEGIN(system_information_type_3_2_013)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_013)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_013)

MSG3_BEGIN(system_information_type_3_2_013B)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_013B)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_013B)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_4_1_013)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)

```



```
        IE(cell_selection_parameter_1_013)
        IE(rach_control_parameter)
        IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_013)

MSG3_BEGIN(system_information_type_4_2_013)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_2_013)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_013)

MSG3_BEGIN(system_information_type_4_2_013B)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_2_013B)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_013B)

/*
 * TESTCASE 014
 */

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values     : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_014)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter_CBA)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_014)

MSG3_BEGIN(system_information_type_1_1_014_B)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_014_B)

MSG3_BEGIN(system_information_type_1_2_014)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_014)

MSG3_BEGIN(system_information_type_1_3_014)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_3_014)
```

```
/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2_1_014)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter_CBA)
MSG3_END(system_information_type_2_1_014)

MSG3_BEGIN(system_information_type_2_1_014_B)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_1_014_B)

MSG3_BEGIN(system_information_type_2_2_014)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_014)

MSG3_BEGIN(system_information_type_2_3_014)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_3_014)

/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_3_1_014)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification_014)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_014)
    IE(rach_control_parameter_CBA)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_014)

MSG3_BEGIN(system_information_type_3_1_014_B)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification_014)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_014)
```

```

        IE(rach_control_parameter)
        IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_014_B)

MSG3_BEGIN(system_information_type_3_2_014)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification_014)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_014)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_014)

MSG3_BEGIN(system_information_type_3_3_014)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_3)
    IE(location_area_identification_014)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_3_014)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_3_014)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values      : GSM 11.10, 26.6.14
**/
MSG3_BEGIN(system_information_type_4_1_014)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification_014)
    IE(cell_selection_parameter_1_014)
    IE(rach_control_parameter_CBA)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_014)

MSG3_BEGIN(system_information_type_4_1_014_B)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification_014)
    IE(cell_selection_parameter_1_014)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_014_B)

MSG3_BEGIN(system_information_type_4_2_014)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification_014)
    IE(cell_selection_parameter_2_014)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_014)

MSG3_BEGIN(system_information_type_4_3_014)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)

```

```
        IE(location_area_identification_014)
        IE(cell_selection_parameter_3_014)
        IE(rach_control_parameter)
        IE(si_4_rest_octets)
MSG3_END(system_information_type_4_3_014)

/*
 * TESTCASE 015
 */

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_015)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_015)

MSG3_BEGIN(system_information_type_1_2_015)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_015)

MSG3_BEGIN(system_information_type_1_3_015)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_3_015)

/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2_1_015)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_1_015)

MSG3_BEGIN(system_information_type_2_2_015)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_015)

MSG3_BEGIN(system_information_type_2_3_015)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
```

```
        IE(neighbour_cell_description)
        IE(ncc_permitted)
        IE(rach_control_parameter)
MSG3_END(system_information_type_2_3_015)

/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_3_1_015)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification_1_015)
    IE(control_channel_description_att)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_015)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_015)

MSG3_BEGIN(system_information_type_3_2_015)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification_2_015)
    IE(control_channel_description_att)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_015)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_015)

MSG3_BEGIN(system_information_type_3_3_015)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification_3_015)
    IE(control_channel_description_att)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_3_015)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_3_015)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_4_1_015)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification_1_015)
    IE(cell_selection_parameter_1_015)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_015)

MSG3_BEGIN(system_information_type_4_2_015)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification_2_015)
    IE(cell_selection_parameter_2_015)
```

```

        IE(rach_control_parameter)
        IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_015)

MSG3_BEGIN(system_information_type_4_3_015)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification_3_015)
    IE(cell_selection_parameter_3_015)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_3_015)

/*
 * TESTCASE 016
 */

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values     : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_016)
    IE(12_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_016)

MSG3_BEGIN(system_information_type_1_2_016)
    IE(12_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_016)

/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values     : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2_1_016)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_1_016)

MSG3_BEGIN(system_information_type_2_2_016)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_016)

/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values     : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_3_1_016)

```

```
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_016)

MSG3_BEGIN(system_information_type_3_2_016)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_016)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values     : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_4_1_016)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_016)

MSG3_BEGIN(system_information_type_4_2_016)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_016)

/*
* TESTCASE 017
*/

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values     : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_017)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_017)

MSG3_BEGIN(system_information_type_1_2_017)
    IE(l2_pseudo_length_21)
```

```
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_017)

/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values      : GSM 11.10, 26.6.14
**/
MSG3_BEGIN(system_information_type_2_1_017)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description_empty)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_1_017)

MSG3_BEGIN(system_information_type_2_2_017)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description_empty)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_017)

/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values      : GSM 11.10, 26.6.14
**/
MSG3_BEGIN(system_information_type_3_1_017)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_017)

MSG3_BEGIN(system_information_type_3_2_017)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_017)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values      : GSM 11.10, 26.6.14
**/
MSG3_BEGIN(system_information_type_4_1_017)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
```



```
        IE(system_information_type_4_message_type)
        IE(location_area_identification)
        IE(cell_selection_parameter)
        IE(rach_control_parameter)
        IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_017)

MSG3_BEGIN(system_information_type_4_2_017)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_017)

/*
 * TESTCASE 018
 */

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values     : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_018)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_018)

MSG3_BEGIN(system_information_type_1_2_018)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_018)

/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values     : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2_1_018)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_1_018)

MSG3_BEGIN(system_information_type_2_2_018)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_018)

/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
```

```
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_3_1_018)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification_1_018)
    IE(control_channel_description_att)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_018)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_018)

MSG3_BEGIN(system_information_type_3_2_018)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification_2_018)
    IE(control_channel_description_att)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_018)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_018)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values     : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_4_1_018)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification_1_018)
    IE(cell_selection_parameter_1_018)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_018)

MSG3_BEGIN(system_information_type_4_2_018)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification_2_018)
    IE(cell_selection_parameter_2_018)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_018)

/*
* TESTCASE 019
*/

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values     : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_019)
    IE(12_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_019)
```

```
MSG3_BEGIN(system_information_type_1_2_019)
    IE(12_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_019)

/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_2_1_019)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_1_019)

MSG3_BEGIN(system_information_type_2_2_019)
    IE(12_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_019)

/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_3_1_019)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_1_019)

MSG3_BEGIN(system_information_type_3_2_019)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description)
    IE(cell_options_bcch)
    IE(cell_selection_parameter)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_019)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_4_1_019)
```

```

        IE(l2_pseudo_length_12)
        IE(skip_indicator)
        IE(rr_management_protocol_discriminator)
        IE(system_information_type_4_message_type)
        IE(location_area_identification)
        IE(cell_selection_parameter)
        IE(rach_control_parameter)
        IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_019)

MSG3_BEGIN(system_information_type_4_2_019)
    IE(l2_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_019)

/*
 * TESTCASE 020
 */

/*
** system_information_type_1
** definition : GSM 04.08, 9.1.31
** values      : GSM 11.10, 26.6.14
*/
MSG3_BEGIN(system_information_type_1_1_020)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter_020)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_1_020)

MSG3_BEGIN(system_information_type_1_2_020)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_2_020)

MSG3_BEGIN(system_information_type_1_3_020)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_3_020)

MSG3_BEGIN(system_information_type_1_4_020)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)
    IE(cell_channel_description)
    IE(rach_control_parameter)
    IE(si_1_rest_octets)
MSG3_END(system_information_type_1_4_020)

MSG3_BEGIN(system_information_type_1_5_020)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_1_message_type)

```

```

        IE(cell_channel_description)
        IE(rach_control_parameter)
        IE(si_1_rest_octets)
MSG3_END(system_information_type_1_5_020)
/*
** system_information_type_2
** definition : GSM 04.08, 9.1.32
** values      : GSM 11.10, 26.6.14
**/
MSG3_BEGIN(system_information_type_2_1_020)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description_020)
    IE(ncc_permitted)
    IE(rach_control_parameter_020)
MSG3_END(system_information_type_2_1_020)

MSG3_BEGIN(system_information_type_2_2_020)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description_020)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_2_020)

MSG3_BEGIN(system_information_type_2_3_020)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description_020)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_3_020)

MSG3_BEGIN(system_information_type_2_4_020)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description_020)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_4_020)

MSG3_BEGIN(system_information_type_2_5_020)
    IE(l2_pseudo_length_22)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_2_message_type)
    IE(neighbour_cell_description_020)
    IE(ncc_permitted)
    IE(rach_control_parameter)
MSG3_END(system_information_type_2_5_020)
/*
** system_information_type_3
** definition : GSM 04.08, 9.1.35
** values      : GSM 11.10, 26.6.14
**/
MSG3_BEGIN(system_information_type_3_1_020)
    IE(l2_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_1)
    IE(location_area_identification)
    IE(control_channel_description_att)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_1_020)
    IE(rach_control_parameter_020)
    IE(si_3_rest_octets)

```

```
MSG3_END(system_information_type_3_1_020)

MSG3_BEGIN(system_information_type_3_2_020)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_2)
    IE(location_area_identification)
    IE(control_channel_description_att)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_2_020)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_2_020)

MSG3_BEGIN(system_information_type_3_3_020)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_3)
    IE(location_area_identification_002)
    IE(control_channel_description_att)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_3_020)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_3_020)

MSG3_BEGIN(system_information_type_3_3_020B)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_3)
    IE(location_area_identification)
    IE(control_channel_description_att)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_3_020)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_3_020B)

MSG3_BEGIN(system_information_type_3_4_020)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_4)
    IE(location_area_identification)
    IE(control_channel_description_att)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_4_020)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_4_020)
MSG3_BEGIN(system_information_type_3_5_020)
    IE(12_pseudo_length_18)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_3_message_type)
    IE(cell_identity_5)
    IE(location_area_identification)
    IE(control_channel_description_att)
    IE(cell_options_bcch)
    IE(cell_selection_parameter_5_020)
    IE(rach_control_parameter)
    IE(si_3_rest_octets)
MSG3_END(system_information_type_3_5_020)

/*
** system_information_type_4
** definition : GSM 04.08, 9.1.36
** values      : GSM 11.10, 26.6.14
```

```

*/
MSG3_BEGIN(system_information_type_4_1_020)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_1_020)
    IE(rach_control_parameter_020)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_1_020)

MSG3_BEGIN(system_information_type_4_2_020)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_2_020)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_2_020)

MSG3_BEGIN(system_information_type_4_3_020)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification_002)
    IE(cell_selection_parameter_3_020)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_3_020)

MSG3_BEGIN(system_information_type_4_3_020B)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_3_020)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_3_020B)

MSG3_BEGIN(system_information_type_4_4_020)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_4_020)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_4_020)

MSG3_BEGIN(system_information_type_4_5_020)
    IE(12_pseudo_length_12)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(system_information_type_4_message_type)
    IE(location_area_identification)
    IE(cell_selection_parameter_5_020)
    IE(rach_control_parameter)
    IE(si_4_rest_octets)
MSG3_END(system_information_type_4_5_020)

/*-----*/
| other system settings
/*-----*/
#define NCC 0x1 /* note : ncc_permitted (GSM 04.08, 10.5.2.27) */
#define BSIC ((NCC<<3)|(BCC))
#define RFN 0
#define BCC_NEW 0x3 /* note : GSM 11.10, 26.6.14, IMMEDIATE ASSIGNMENT */
#define BSIC_NEW_BCC ((NCC<<3)|(BCC_NEW))

```

```
#define CKSN_1 3
#define CKSN_NONE 7

/*-----*\
| Information Elements (GSM 11.10, 26.6.14)
\*-----*/
IE_BEGIN( channel_description ) /* Ref.: [1], §10.5.2.5; [2], 26.6.14 */
    BF( 5, M5(0,0,1,0,1), ACT_CHECK, channel_type, "SDCCH/SACCH 4(1)" )
    BF( 3, 0, ACT_CHECK, time_slot_number, "zero" )
    BF( 3, BCC, ACT_CHECK, training_sequence_code, "same as BCCH" )
    BF( 1, 0, ACT_CHECK, hopping, "No hopping" )
    BF( 2, 0, ACT_CHECK, spare, SILENT )
    BF( 10, ARFCN_BCCH, ACT_CHECK, arfcn, "ARFCN of the BCCH" )
IE_END( channel_description )

/*
** channel_needed
** definition : GSM 04.08, 10.5.2.8 (RR)
** values : GSM 11.10, 26.6.14
** usage : paging_request_type_1
*/
IE_BEGIN( channel_needed )
    BF( 2, 0, ACT_CHECK, second_channel, "spare, any channel" )
    BF( 2, 0, ACT_CHECK, first_channel, "spare, any channel" )
IE_END( channel_needed )
IE_BEGIN( ciphering_key_sequence_number ) /* Ref.: [1], §10.5.1.2; [2], §26.6.14 */
    BF( 1, 0, ACT_CHECK, spare, SILENT )
    BF( 3, CKSN_1, ACT_CHECK, key_sequence, "chosen arbitrarily by the test house" )
IE_END( ciphering_key_sequence_number )

IE_BEGIN( ciphering_key_sequence_number_none )
    BF( 1, 0, ACT_CHECK, spare, SILENT )
    BF( 3, CKSN_NONE, ACT_CHECK, key_sequence, "CKSN not available" )
IE_END( ciphering_key_sequence_number_none )

IE_BEGIN( cm_service_type_ec ) /* Ref.: [1], §10.5.3.3; [2], §26.6.14 */
    BF( 4, M4( 0,0,1,0 ), ACT_CHECK, service, "Emergency Call establishment" )
IE_END( cm_service_type_ec )

IE_BEGIN( follow_on_proceed ) /* Ref.: [1], §10.5.3.7 */
    BF( 8, 0xA1, ACT_CHECK, ANONYMOUS, "" )
IE_END( follow_on_proceed )

IE_BEGIN( ia_rest_octets ) /* Ref.: [1], §10.5.2.16; [2], §26.6.14 */
    BF( 8, REST_OCTET, ACT_CHECK, ANONYMOUS, SILENT ) /* 0 */
    BF( 8, REST_OCTET, ACT_CHECK, ANONYMOUS, SILENT ) /* 1 */
    BF( 8, REST_OCTET, ACT_CHECK, ANONYMOUS, SILENT ) /* 2 */
    BF( 8, REST_OCTET, ACT_CHECK, ANONYMOUS, SILENT ) /* 3 */
    BF( 8, REST_OCTET, ACT_CHECK, ANONYMOUS, SILENT ) /* 4 */
    BF( 8, REST_OCTET, ACT_CHECK, ANONYMOUS, SILENT ) /* 5 */
    BF( 8, REST_OCTET, ACT_CHECK, ANONYMOUS, SILENT ) /* 6 */
    BF( 8, REST_OCTET, ACT_CHECK, ANONYMOUS, SILENT ) /* 7 */
    BF( 8, REST_OCTET, ACT_CHECK, ANONYMOUS, SILENT ) /* 8 */
    BF( 8, REST_OCTET, ACT_CHECK, ANONYMOUS, SILENT ) /* 9 */
    BF( 8, REST_OCTET, ACT_CHECK, ANONYMOUS, SILENT ) /* 10 */
IE_END( ia_rest_octets )

IE_BEGIN( location_updating_type ) /* Ref.: [1], §10.5.3.5 */
    BF( 1, 0, ACT_CHECK, fo_req, "no follow-on request pending" )
    BF( 1, 0, ACT_CHECK, ANONYMOUS, "spare" )
    BF( 2, M2( 0,0 ), ACT_CHECK, lut, "normal location updating" )
IE_END( location_updating_type )

IE_BEGIN( location_updating_type_att ) /* Ref.: [1], §10.5.3.5 */
    BF( 1, 0, ACT_CHECK, fo_req, "no follow-on request pending" )
    BF( 1, 0, ACT_CHECK, ANONYMOUS, "spare" )
    BF( 2, M2( 1,0 ), ACT_CHECK, lut, "IMSI attach" )
IE_END( location_updating_type_att )

IE_BEGIN( mobile_allocation ) /* Ref.: [1], §10.5.2.21; [2], §26.6.14 */
    BF( 8, 0, ACT_CHECK, length, "length 0 due to hopping disabled" )
IE_END( mobile_allocation )

/*
** mobile_identity
** definition : GSM 04.08, 10.5.1.4 (common)
** values : GSM 11.10, 26.6.14
```



```

** length      : 6 octets
** usage       : classmark_change
** usage       : cm_service_request
** usage       : paging_request_type_1
*/
IE_BEGIN(mobile_identity) /* has 8 octets */
  BF(8, 7, ACT_CHECK, length, "seven octets to come")
  BF(4, 2, ACT_CHECK, digit_1, SILENT)
  BF(1, 1, ACT_CHECK, odd_even, SILENT)
  BF(3, M3(0,0,1), ACT_CHECK, type, "IMSI")
  BF(4, 2, ACT_CHECK, digit_3, SILENT)
  BF(4, 6, ACT_CHECK, digit_2, SILENT)
  BF(4, 1, ACT_CHECK, digit_5, SILENT)
  BF(4, 0, ACT_CHECK, digit_4, SILENT)
  BF(4, 7, ACT_CHECK, digit_7, SILENT)
  BF(4, 4, ACT_CHECK, digit_6, SILENT)
  BF(4, 1, ACT_CHECK, digit_9, SILENT)
  BF(4, 1, ACT_CHECK, digit_8, SILENT)
  BF(4, 9, ACT_CHECK, digit_11, SILENT)
  BF(4, 4, ACT_CHECK, digit_10, SILENT)
  BF(4, 2, ACT_CHECK, digit_13, SILENT)
  BF(4, 1, ACT_CHECK, digit_12, SILENT)
IE_END(mobile_identity)

IE_BEGIN( mobile_identity_tmsi_iei )
  BF( 8, 0x17, ACT_CHECK, iei, "Mobile Identity IEI" )
  BF( 8, 5, ACT_CHECK, length, "five octets to come" )
  BF( 4, M4(1,1,1,1 ), ACT_CHECK, ANONYMOUS, "bits 5-8 of octet 3 ='1111' " )
  BF( 1, 0, ACT_CHECK, odd_even, "as applicable for TMSI" )
  BF( 3, M3(1,0,0 ), ACT_CHECK, type, "TMSI" )
  BF( 8, 0x12, ACT_CHECK, tmsi_1, SILENT )
  BF( 8, 0x34, ACT_CHECK, tmsi_2, SILENT )
  BF( 8, 0x56, ACT_CHECK, tmsi_3, SILENT )
  BF( 8, 0x78, ACT_CHECK, tmsi_4, SILENT )
IE_END( mobile_identity_tmsi_iei )

IE_BEGIN( mobile_station_classmark_1 ) /* Ref.: [1], §10.5.1.5 */
  BF( 1, 0, ACT_CHECK, ANONYMOUS, "spare" )
  BF( 2, M2(0,1 ), ACT_CHECK, rev_lev, "Used by phase 2 MSs" )
  BF( 1, 1, ACT_CHECK, es_ind, "Controlled Early Classmark Sending implemented" )
  BF( 1, 0, ACT_CHECK, a5_1, "encryption algorithm A5/1 available" )
  BF( 3, M3(0,0,1 ), ACT_CHECK, rf_pow_cap, "RF power capability = Class 2" )
IE_END( mobile_station_classmark_1 )

IE_BEGIN( mobile_station_classmark_2 ) /* Ref.: [1], §10.5.1.6 ; [2], §26.6.14 */
  BF( 8, 3, ACT_CHECK, length, SILENT )
  BF( 1, 0, ACT_CHECK, spare, SILENT )
  BF( 2, M2(0,1 ), ACT_CHECK, revision_level, "phase 2 MS" )
  BF( 1, 1, ACT_CHECK, es_ind, "Contr. Early Classmark Send." )
  BF( 1, 0, ACT_CHECK, a5_1, "encryption algorithm A5/1 available" )
  BF( 3, M3(0,0,1 ), ACT_CHECK, rf_power_capability, "class 2" )
  BF( 1, 0, ACT_CHECK, spare2, SILENT )
  BF( 1, 1, ACT_CHECK, ps_capability, "pseudo-synch capability" )
  BF( 2, M2(1,1 ), ACT_CHECK, ss_screening_indicator, SILENT )
  BF( 1, 1, ACT_CHECK, sm_capability, "point to point SMS" )
  BF( 1, 0, ACT_CHECK, vbs, "no VBS cap. or no notific. wanted" )
  BF( 1, 0, ACT_CHECK, vgcs, "no VGCS cap. or no notific. wanted" )
  BF( 1, 0, ACT_CHECK, frequency_capability, "no extention band G1" )
  BF( 1, 0, ACT_CHECK, classmark_3, "no add. MS cap. information" )
  BF( 5, 1, ACT_CHECK, ccbs, SILENT )
  BF( 1, 0, ACT_CHECK, a5_3, "A5/3 not available" )
  BF( 1, 0, ACT_CHECK, a5_2, "A5/2 not available" )
IE_END( mobile_station_classmark_2 )

/*
** p1_rest_octets
** definition : GSM 04.08, 10.5.2.23 (RR)
** values     : GSM 11.10, 26.6.14
** usage      : paging_request_type_1
*/
IE_BEGIN(p1_rest_octets)
  /* pag. req. type1 : 22 - 9 (L2 pseud. len) = 13 bytes */
  BF(8, REST_OCTET, ACT_CHECK, ANONYMOUS, SILENT) /* 0 */
  BF(8, REST_OCTET, ACT_CHECK, ANONYMOUS, SILENT) /* 1 */
  BF(8, REST_OCTET, ACT_CHECK, ANONYMOUS, SILENT) /* 2 */
  BF(8, REST_OCTET, ACT_CHECK, ANONYMOUS, SILENT) /* 3 */

```

```

        BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT) /* 4 */
        BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT) /* 5 */
        BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT) /* 6 */
        BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT) /* 7 */
        BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT) /* 8 */
        BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT) /* 9 */
        BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT) /* 10 */
        BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT) /* 11 */
        BF(8,REST_OCTET,ACT_CHECK,ANONYMOUS,SILENT) /* 12 */
    IE_END(pl_rest_octets)

/*
** page_mode
** definition : GSM 04.08, 10.5.2.26 (RR)
** values    : GSM 11.10, 26.6.14
** usage     : immediate_assignment
** usage     : immediate_assignment_extended
** usage     : immediate_assignment_reject
** usage     : paging_request_type_1
** usage     : paging_request_type_2
** usage     : paging_request_type_3
*/
    IE_BEGIN(page_mode)
        BF(2,0,ACT_CHECK,spare,"two spare bits ")
        BF(2,0,ACT_CHECK,pm,"Normal Paging")
    IE_END(page_mode)

/*
** rach
** definition : GSM 04.08, 9.1.8
** values    : GSM 11.10, 26.6.14
** usage     : assignment_complete
** usage     : channel_request
*/
    IE_BEGIN(rach)
        BF(3,M3(1,0,0),ACT_CHECK,establishment_cause,"paging ind. any channel")
        BF(5,0,ACT_SHOW,ref,"not checked")
    IE_END(rach)
    IE_BEGIN(rach_lup)
        BF(3,M3(0,0,0),ACT_CHECK,establishment_cause,"location updating")
        BF(5,0,ACT_SHOW,ref,"not checked")
    IE_END(rach_lup)
    IE_BEGIN(reject_cause) /* Ref.: [1], §10.5.3.6 */
        BF(8,0x21,ACT_CHECK,reject_cause,"Service option not subscribed")
    IE_END(reject_cause)

    IE_BEGIN(request_reference) /* Ref.: [1], §10.5.2.30; [2], §26.6.14 */
        BF(3,M3(1,0,0),ACT_CHECK,random_access_info,"As in CHAN REQ")
        BF(5,M5(1,1,1,1,1),ACT_CHECK,ref,SILENT)
        BF(5,0,ACT_CHECK,t1,SILENT)
        BF(6,0,ACT_CHECK,t3,SILENT)
        BF(5,0,ACT_CHECK,t2,SILENT)
    IE_END(request_reference)

    IE_BEGIN(rr_cause) /* Ref.: [1], §10.5.2.31; [2], 26.6.14 */
        BF(8,M8(0,0,0,0,0,0,0,0),ACT_CHECK,cause,"normal event")
    IE_END(rr_cause)

    IE_BEGIN(timing_advance) /* Ref.: [1], §10.5.2.40; [2], §26.6.14 */
        BF(2,0,ACT_CHECK,spare,SILENT)
        BF(6,30,ACT_CHECK,timing_advance,"30 bit periods")
    IE_END(timing_advance)

/*-----*\
| Messages
\*-----*/
/*
** channel_release
** definition : GSM 04.08, 9.1.7 (RR)
** values    : GSM 11.10, 26.6.14
** usage     : mcs*
*/
    MSG3_BEGIN(channel_release)
        IE(skip_indicator)
        IE(rr_management_protocol_discriminator)

```

```
        IE(channel_release_message_type)
        IE(rr_cause)
MSG3_END(channel_release)

/*
** channel_request
** definition : GSM 04.08, 9.1.8 (RR)
** values    : GSM 11.10, 26.6.14
** usage     : mcs*
*/
MSG3_BEGIN(channel_request)
    IE(rach)
MSG3_END(channel_request)
MSG3_BEGIN(channel_request_lup)
    IE(rach_lup)
MSG3_END(channel_request_lup)

/*
** cm service request
** definition : GSM 04.08, 9.2.6 (MM)
** values    : GSM 11.10, 26.6.14
** usage     : mcs*
*/
MSG3_BEGIN(cm_service_reject)
    IE(skip_indicator)
    IE(mobility_management_protocol_discriminator)
    IE(cm_service_reject_message_type)
    IE(reject_cause)
MSG3_END(cm_service_reject)

/*
** cm service request
** definition : GSM 04.08, 9.2.9 (MM)
** values    : GSM 11.10, 26.6.14
** usage     : mcs*
*/
MSG3_BEGIN(cm_service_request_ec_imsi)
    IE(skip_indicator)
    IE(mobility_management_protocol_discriminator)
    IE(cm_service_request_message_type)
    IE(ciphering_key_sequence_number_none)
    IE(cm_service_type_ec)
    IE(mobile_station_classmark_2)
    IE(mobile_identity)
MSG3_END(cm_service_request_ec_imsi)

/*
** immediate assignment
** definition : GSM 04.08, 9.1.18 (RR)
** values    : GSM 11.10, 26.6.14
** usage     : mcs*
*/
MSG3_BEGIN(immediate_assignment)
    IE(l2_pseudo_length_21)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(immediate_assignment_message_type)
    IE(spare_half_octet)
    IE(page_mode)
    IE(channel_description)
    IE(request_reference)
    IE(timing_advance)
    IE(mobile_allocation)
    IE(ia_rest_octets)
MSG3_END(immediate_assignment)

/*
** location updating accept
** definition : GSM 04.08, 9.2.13 (MM)
** values    : GSM 11.10, 26.6.14
```

```
** usage      : mcs*
*/
MSG3_BEGIN(location_updating_accept_tmsi)
    IE(skip_indicator)
    IE(mobility_management_protocol_discriminator)
    IE(location_updating_accept_message_type)
    IE(location_area_identification)
    IE(mobile_identity_tmsi_iei)
    IE(follow_on_proceed)
MSG3_END(location_updating_accept_tmsi)

/*
** location updating reject
** definition : GSM 04.08, 9.2.14 (MM)
** values    : GSM 11.10, 26.6.14
** usage     : mcs*
*/
MSG3_BEGIN(location_updating_reject)
    IE(skip_indicator)
    IE(mobility_management_protocol_discriminator)
    IE(location_updating_reject_message_type)
    IE(reject_cause)
MSG3_END(location_updating_reject)

/*
** location updating request
** definition : GSM 04.08, 9.2.15 (MM)
** values    : GSM 11.10, 26.6.14
** usage     : mcs*
*/
MSG3_BEGIN(location_updating_request_imsi)
    IE(skip_indicator)
    IE(mobility_management_protocol_discriminator)
    IE(location_updating_request_message_type)
    IE(ciphering_key_sequence_number)
    IE(location_updating_type)
    IE(location_area_identification)
    IE(mobile_station_classmark_1)
    IE(mobile_identity)
MSG3_END(location_updating_request_imsi)

MSG3_BEGIN(location_updating_request_imsi_kc7)
    IE(skip_indicator)
    IE(mobility_management_protocol_discriminator)
    IE(location_updating_request_message_type)
    IE(ciphering_key_sequence_number_none)
    IE(location_updating_type)
    IE(location_area_identification)
    IE(mobile_station_classmark_1)
    IE(mobile_identity)
MSG3_END(location_updating_request_imsi_kc7)

MSG3_BEGIN(location_updating_request_del)
    IE(skip_indicator)
    IE(mobility_management_protocol_discriminator)
    IE(location_updating_request_message_type)
    IE(ciphering_key_sequence_number_none)
    IE(location_updating_type)
    IE(location_area_identification_del)
    IE(mobile_station_classmark_1)
    IE(mobile_identity)
MSG3_END(location_updating_request_del)

/*
** paging_request_type_1
** definition : GSM 04.08, 9.1.22 (RR)
** values    : GSM 11.10, 26.6.14
** usage     : mcs*
*/
MSG3_BEGIN(paging_request_type_1)
    IE(l2_pseudo_length_9)
    IE(skip_indicator)
    IE(rr_management_protocol_discriminator)
    IE(paging_request_type_1_message_type)
```

```
    IE(channel_needed)
    IE(page_mode)
    IE(mobile_identity)
    IE(pl_rest_octets)
MSG3_END(paging_request_type_1)
MSG3_BEGIN( paging_response )/* Ref.: [1], §9.1.25; [2], §26.6.14 */
    IE( skip_indicator )
    IE( rr_management_protocol_discriminator )
    IE( paging_response_message_type )
    IE( spare_half_octet )
    IE( ciphering_key_sequence_number )
    IE( mobile_station_classmark_2 )
    IE( mobile_identity)
MSG3_END( paging_response )

/*
** tmsi reallocation complete
** definition : GSM 04.08, 9.2.18 (MM)
** values      : GSM 11.10, 26.6.14
** usage       : mcs*
*/
MSG3_BEGIN(tmsi_reallocation_complete)
    IE(skip_indicator)
    IE(mobility_management_protocol_discriminator)
    IE(tmsi_reallocation_complete_message_type)
MSG3_END(tmsi_reallocation_complete)
```

## 4 TEST CASES

### 4.1 Cell Selection & Cell Reselection

#### 4.1.1 MCS001: Cell Selection

Description: (Ref.: GSM 11.10-1, §20.1)

Preamble: None

Script:

```
ISS_INIT                ( 5 )

BS_SET_SYS_INFO         ( 0, system_information_type_1_1_001 )
BS_SET_SYS_INFO         ( 0, system_information_type_2_1_001 )
BS_SET_SYS_INFO         ( 0, system_information_type_3_1_001 )
BS_SET_SYS_INFO         ( 0, system_information_type_4_1_001 )

BS_SET_SCH              ( 0, BSIC , RFN )
BS_SET_ARFCN            ( 0, 20 )
BS_SET_POWER            ( 0, -65 )
BS_ON_OFF               ( 0, TRUE )

BS_SET_SYS_INFO         ( 1, system_information_type_1_2_001 )
BS_SET_SYS_INFO         ( 1, system_information_type_2_2_001 )
BS_SET_SYS_INFO         ( 1, system_information_type_3_2_001 )
BS_SET_SYS_INFO         ( 1, system_information_type_4_2_001 )

BS_SET_SCH              ( 1, BSIC , RFN )
BS_SET_ARFCN            ( 1, 80 )
BS_SET_POWER            ( 1, -75 )
BS_ON_OFF               ( 1, TRUE )

BS_SET_SYS_INFO         ( 2, system_information_type_1_3_001 )
BS_SET_SYS_INFO         ( 2, system_information_type_2_3_001 )
BS_SET_SYS_INFO         ( 2, system_information_type_3_3_001 )
BS_SET_SYS_INFO         ( 2, system_information_type_4_3_001 )

BS_SET_SCH              ( 2, BSIC , RFN )
BS_SET_ARFCN            ( 2, 100 )
BS_SET_POWER            ( 2, -70 )
BS_ON_OFF               ( 2, TRUE )

BS_SET_SYS_INFO         ( 3, system_information_type_1_4_001 )
BS_SET_SYS_INFO         ( 3, system_information_type_2_4_001 )
BS_SET_SYS_INFO         ( 3, system_information_type_3_4_001 )
BS_SET_SYS_INFO         ( 3, system_information_type_4_4_001 )

BS_SET_SCH              ( 3, BSIC , RFN )
BS_SET_ARFCN            ( 3, 120 )
BS_SET_POWER            ( 3, -80 )
BS_ON_OFF               ( 3, TRUE )

BS_SET_SYS_INFO         ( 4, system_information_type_1_5_001 )
BS_SET_SYS_INFO         ( 4, system_information_type_2_5_001 )
BS_SET_SYS_INFO         ( 4, system_information_type_3_5_001 )
BS_SET_SYS_INFO         ( 4, system_information_type_4_5_001 )

BS_SET_SCH              ( 4, BSIC , RFN )
BS_SET_ARFCN            ( 4, 110 )
BS_SET_POWER            ( 4, -85 )
BS_ON_OFF               ( 4, TRUE )

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

/*
 * The SS activates the carriers and monitors carriers 2, 4 and 5 for RA requests
 * from the MS. The MS is switched on. The first response from the MS shall be on
 * carrier 4 within 30 seconds. There shall be no response from the MS on carrier 2.
 */
```

```
ISS_DELAY          ( 20000 )

BS_CONFIG_CHANNEL  ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND       ( 1, paging_request_type_1, SILENT )
BS_RACH_EXPECT_TIMEOUT (1, 3000)

BS_CONFIG_CHANNEL  ( 3, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND       ( 3, paging_request_type_1, SILENT )
BS_RACH_AWAIT      ( 3, channel_request, SILENT )

ISS_DELAY (5000)

AT_SEND ("AT+CFUN=0\r\n", "Power Off");

ISS_DELAY (10000)

/*
 * The MS is switched off. The SS monitors carrier 1 and 3 for RA requests from the MS.
 * The MS is switched on. There shall be no response from the MS either carrier 1 or
 * carrier 3 within 33 seconds.
 */

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

ISS_DELAY          ( 20000 )

BS_CONFIG_CHANNEL  ( 0, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND       ( 0, paging_request_type_1, SILENT )
BS_RACH_EXPECT_TIMEOUT (0, 3000)

BS_CONFIG_CHANNEL  ( 2, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND       ( 2, paging_request_type_1, SILENT )
BS_RACH_EXPECT_TIMEOUT (2, 3000)
```

History:            27.04.98            LE            Initial

## 4.1.2 MCS002: Cell Selection with varying signal strength values

**Description:** (Ref.: GSM 11.10-1, §20.2)  
The average building is done below RR. So this test is nice, but does not guarantee that the mobile passes the FTA testcase.

**Preamble:** None

**Script:**

```
ISS_INIT                ( 2 )

BS_SET_SYS_INFO         ( 0, system_information_type_1_1_002 )
BS_SET_SYS_INFO         ( 0, system_information_type_2_1_002 )
BS_SET_SYS_INFO         ( 0, system_information_type_3_1_002 )
BS_SET_SYS_INFO         ( 0, system_information_type_4_1_002 )

BS_SET_SCH              ( 0, BSIC , RFN )
BS_SET_ARFCN            ( 0, 20 )
BS_SET_POWER            ( 0, -90 )
BS_ON_OFF               ( 0, TRUE )

BS_SET_SYS_INFO         ( 1, system_information_type_1_2_002 )
BS_SET_SYS_INFO         ( 1, system_information_type_2_2_002 )
BS_SET_SYS_INFO         ( 1, system_information_type_3_2_002 )
BS_SET_SYS_INFO         ( 1, system_information_type_4_2_002 )

BS_SET_SCH              ( 1, BSIC , RFN )
BS_SET_ARFCN            ( 1, 80 )
BS_SET_POWER            ( 1, -75 )
BS_ON_OFF               ( 1, TRUE )

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

/*
 * The SS activates the carriers and monitors carrier 1 and 2 for RA requests
 * from the MS. The MS is switched on. The first response from the MS shall be on
 * carrier 2 within 33 seconds. There shall be no response from the MS on carrier 1.
 */

ISS_DELAY               ( 20000 )

BS_CONFIG_CHANNEL        ( 0, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND             ( 0, paging_request_type_1, SILENT )
BS_RACH_EXPECT_TIMEOUT   ( 0, 3000 )

BS_CONFIG_CHANNEL        ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND             ( 1, paging_request_type_1, SILENT )
BS_RACH_AWAIT            ( 1, channel_request, SILENT )
```

History: 27.04.98 LE Initial



### 4.1.3 MCS003: Basic Cell Reselection

Description: (Ref.: GSM 11.10-1, §20.3)

Preamble: None

Script:

```
ISS_INIT                ( 5 )

BS_SET_SYS_INFO         ( 0, system_information_type_1_1_003 )
BS_SET_SYS_INFO         ( 0, system_information_type_2_1_003 )
BS_SET_SYS_INFO         ( 0, system_information_type_3_1_003 )
BS_SET_SYS_INFO         ( 0, system_information_type_4_1_003 )

BS_SET_SCH              ( 0, BSIC , RFN )
BS_SET_ARFCN            ( 0, 20 )
BS_SET_POWER            ( 0, -70 )
BS_ON_OFF               ( 0, TRUE )

BS_SET_SYS_INFO         ( 1, system_information_type_1_2_003 )
BS_SET_SYS_INFO         ( 1, system_information_type_2_2_003 )
BS_SET_SYS_INFO         ( 1, system_information_type_3_2_003 )
BS_SET_SYS_INFO         ( 1, system_information_type_4_2_003 )

BS_SET_SCH              ( 1, BSIC , RFN )
BS_SET_ARFCN            ( 1, 80 )
BS_SET_POWER            ( 1, -80 )
BS_ON_OFF               ( 1, TRUE )

BS_SET_SYS_INFO         ( 2, system_information_type_1_3_003 )
BS_SET_SYS_INFO         ( 2, system_information_type_2_3_003 )
BS_SET_SYS_INFO         ( 2, system_information_type_3_3_003 )
BS_SET_SYS_INFO         ( 2, system_information_type_4_3_003 )

BS_SET_SCH              ( 2, BSIC , RFN )
BS_SET_ARFCN            ( 2, 100 )
BS_SET_POWER            ( 2, -70 )
BS_ON_OFF               ( 2, FALSE )

BS_SET_SYS_INFO         ( 3, system_information_type_1_4_003_CBA )
BS_SET_SYS_INFO         ( 3, system_information_type_2_4_003_CBA )
BS_SET_SYS_INFO         ( 3, system_information_type_3_4_003_CBA )
BS_SET_SYS_INFO         ( 3, system_information_type_4_4_003_CBA )

BS_SET_SCH              ( 3, BSIC , RFN )
BS_SET_ARFCN            ( 3, 120 )
BS_SET_POWER            ( 3, -75 )
BS_ON_OFF               ( 3, TRUE )

BS_SET_SYS_INFO         ( 4, system_information_type_1_5_003 )
BS_SET_SYS_INFO         ( 4, system_information_type_2_5_003 )
BS_SET_SYS_INFO         ( 4, system_information_type_3_5_003 )
BS_SET_SYS_INFO         ( 4, system_information_type_4_5_003 )

BS_SET_SCH              ( 4, BSIC , RFN )
BS_SET_ARFCN            ( 4, 110 )
BS_SET_POWER            ( 4, -75 )
BS_ON_OFF               ( 4, TRUE )

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

/*
 * The SS activates carrier 1,2,4 and 5. The MS is not paged on carrier 1. The
 * SS monitors carrier 2,4 and 5 for RA requests from the MS.
 */

ISS_DELAY                ( 50000 )

BS_CONFIG_CHANNEL        ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND            ( 1, paging_request_type_1, SILENT )
BS_RACH_EXPECT_TIMEOUT   ( 1, 3000 )

ISS_DELAY (10000)
/*
```

```

/*
 * The SS increases the level of carrier 2 to 43 dbuVemf (C2 = 20 dB).
 */

BS_SET_POWER          ( 1, -70 )

ISS_DELAY              ( 20000 )

BS_CONFIG_CHANNEL      ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND           ( 1, paging_request_type_1, SILENT )
BS_RACH_AWAIT          ( 1, channel_request, SILENT )

ISS_DELAY (5000)

AT_SEND ("AT+CFUN=0\r\n", "Power Off");

/*
 * The SS reconfigures and sets CBA=1 on carriers 1 and 5
 */

BS_SET_SYS_INFO        ( 0, system_information_type_1_1_003_CBA )
BS_SET_SYS_INFO        ( 0, system_information_type_2_1_003_CBA )
BS_SET_SYS_INFO        ( 0, system_information_type_3_1_003_CBA )
BS_SET_SYS_INFO        ( 0, system_information_type_4_1_003_CBA )

BS_SET_SYS_INFO        ( 4, system_information_type_1_5_003_CBA )
BS_SET_SYS_INFO        ( 4, system_information_type_2_5_003_CBA )
BS_SET_SYS_INFO        ( 4, system_information_type_3_5_003_CBA )
BS_SET_SYS_INFO        ( 4, system_information_type_4_5_003_CBA )

ISS_DELAY (10000)

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

ISS_DELAY (20000)

/*
 * After 33 seconds the SS starts paging continuously on carrier 1 and sets
 * CBA=1 on carrier 2 and CBA=0 on carrier 1,4, and 5.
 */

BS_SET_SYS_INFO        ( 0, system_information_type_1_1_003 )
BS_SET_SYS_INFO        ( 0, system_information_type_2_1_003 )
BS_SET_SYS_INFO        ( 0, system_information_type_3_1_003 )
BS_SET_SYS_INFO        ( 0, system_information_type_4_1_003 )

BS_SET_SYS_INFO        ( 1, system_information_type_1_2_003_CBA )
BS_SET_SYS_INFO        ( 1, system_information_type_2_2_003_CBA )
BS_SET_SYS_INFO        ( 1, system_information_type_3_2_003_CBA )
BS_SET_SYS_INFO        ( 1, system_information_type_4_2_003_CBA )

BS_SET_SYS_INFO        ( 3, system_information_type_1_4_003 )
BS_SET_SYS_INFO        ( 3, system_information_type_2_4_003 )
BS_SET_SYS_INFO        ( 3, system_information_type_3_4_003 )
BS_SET_SYS_INFO        ( 3, system_information_type_4_4_003 )

BS_SET_SYS_INFO        ( 4, system_information_type_1_5_003 )
BS_SET_SYS_INFO        ( 4, system_information_type_2_5_003 )
BS_SET_SYS_INFO        ( 4, system_information_type_3_5_003 )
BS_SET_SYS_INFO        ( 4, system_information_type_4_5_003 )

ISS_DELAY (33000)

/*
 * When the SS receives a response on carrier 1, it stops paging the MS
 * and waits for 20 seconds.
 */

BS_CONFIG_CHANNEL      ( 0, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND           ( 0, paging_request_type_1, SILENT )
BS_RACH_AWAIT          ( 0, channel_request, SILENT )

ISS_DELAY              ( 20000 )

/*
 * The SS activates carrier 3, pages the MS continuously on this

```

```
* carrier and monitors carrier 3 for RA requests from the MS.
*/

BS_ON_OFF          ( 2,TRUE)

ISS_DELAY (30000)

BS_CONFIG_CHANNEL   ( 2, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND        ( 2, paging_request_type_1, SILENT )
BS_RACH_EXPECT_TIMEOUT (2, 3000)

/*
* The SS increases the level of carrier 3 to -58 dbm (C2= 32)
*/

BS_SET_POWER        ( 2, -58 )

SET_TIMEOUT (30000)

BS_RACH_AWAIT        ( 2, channel_request_lup, SILENT )

History:            27.04.98            LE            Initial
```

## 4.1.4 MCS004: Cell Reselection using C2 Parameter

Description: (Ref.: GSM 11.10-1, §20.4)

Preamble: None

Script:

```
ISS_INIT                ( 4 )

BS_SET_SYS_INFO         ( 0, system_information_type_1_1_004 )
BS_SET_SYS_INFO         ( 0, system_information_type_2_1_004 )
BS_SET_SYS_INFO         ( 0, system_information_type_3_1_004 )
BS_SET_SYS_INFO         ( 0, system_information_type_4_1_004 )

BS_SET_SCH              ( 0, BSIC , RFN )
BS_SET_ARFCN            ( 0, 20 )
BS_SET_POWER            ( 0, -60 )
BS_ON_OFF               ( 0, TRUE )

BS_SET_SYS_INFO         ( 1, system_information_type_1_2_004 )
BS_SET_SYS_INFO         ( 1, system_information_type_2_2_004 )
BS_SET_SYS_INFO         ( 1, system_information_type_3_2_004 )
BS_SET_SYS_INFO         ( 1, system_information_type_4_2_004 )

BS_SET_SCH              ( 1, BSIC , RFN )
BS_SET_ARFCN            ( 1, 80 )
BS_SET_POWER            ( 1, -70 )
BS_ON_OFF               ( 1, TRUE )

BS_SET_SYS_INFO         ( 2, system_information_type_1_3_004 )
BS_SET_SYS_INFO         ( 2, system_information_type_2_3_004 )
BS_SET_SYS_INFO         ( 2, system_information_type_3_3_004 )
BS_SET_SYS_INFO         ( 2, system_information_type_4_3_004 )

BS_SET_SCH              ( 2, BSIC , RFN )
BS_SET_ARFCN            ( 2, 100 )
BS_SET_POWER            ( 2, -65 )
BS_ON_OFF               ( 2, FALSE )

BS_SET_SYS_INFO         ( 3, system_information_type_1_4_004 )
BS_SET_SYS_INFO         ( 3, system_information_type_2_4_004 )
BS_SET_SYS_INFO         ( 3, system_information_type_3_4_004 )
BS_SET_SYS_INFO         ( 3, system_information_type_4_4_004 )

BS_SET_SCH              ( 3, BSIC , RFN )
BS_SET_ARFCN            ( 3, 120 )
BS_SET_POWER            ( 3, -65 )
BS_ON_OFF               ( 3, FALSE )

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

/*
 * The SS activates carrier 1 and 2. The MS is not paged on carrier 1. The
 * SS monitors carrier 2 for RA requests from the MS.
 */

ISS_DELAY                ( 20000 )

BS_CONFIG_CHANNEL        ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND             ( 1, paging_request_type_1, SILENT )
BS_RACH_EXPECT_TIMEOUT   ( 1, 3000 )
```

```
/*  
 * The SS increases the level of carrier 2 to 54 dbuVemf (equal -59 dBm or C2 = 25 dB).  
 */
```

```
BS_SET_POWER      ( 1, -59 )
```

```
ISS_DELAY         ( 20000 )
```

```
BS_CONFIG_CHANNEL ( 1, PCH, UNACK, SAPI_0 )
```

```
BS_MSG3_SEND      ( 1, paging_request_type_1, SILENT )
```

```
BS_RACH_AWAIT     ( 1, channel_request, SILENT )
```

```
ISS_DELAY         ( 20000 )
```

```
/*  
 * The SS activates carriers 3 and 4 and continuously pages the MS on these carriers.  
 * The SS monitors carriers 3 and 4 for RA requests from the MS.  
 */
```

```
BS_ON_OFF         ( 2, TRUE )
```

```
BS_ON_OFF         ( 3, TRUE )
```

```
ISS_DELAY         ( 85000 )
```

```
BS_CONFIG_CHANNEL ( 2, PCH, UNACK, SAPI_0 )
```

```
BS_MSG3_SEND      ( 2, paging_request_type_1, SILENT )
```

```
BS_RACH_AWAIT     ( 2, channel_request, SILENT )
```

```
History:          27.04.98          LE          Initial
```

## 4.1.5 MCS005: Cell Reselection with Sys Info 2bis, 7 and 8

Description: (Ref.: GSM 11.10-1, §20.5)

Preamble: None

Script:

```
ISS_INIT                ( 4 )

BS_SET_SYS_INFO         ( 0, system_information_type_1_1_005 )
BS_SET_SYS_INFO         ( 0, system_information_type_2_1_005 )
BS_SET_SYS_INFO         ( 0, system_information_type_2bis_1_005 )
BS_SET_SYS_INFO         ( 0, system_information_type_3_1_005 )
BS_SET_SYS_INFO         ( 0, system_information_type_4_1_005 )

BS_SET_SCH              ( 0, BSIC , RFN )
BS_SET_ARFCN            ( 0, 20 )
BS_SET_POWER            ( 0, -60 )
BS_ON_OFF               ( 0, TRUE )

BS_SET_SYS_INFO         ( 1, system_information_type_1_2_005 )
BS_SET_SYS_INFO         ( 1, system_information_type_2_2_005 )
BS_SET_SYS_INFO         ( 1, system_information_type_3_2_005 )
BS_SET_SYS_INFO         ( 1, system_information_type_4_2_005 )
BS_SET_SYS_INFO         ( 1, system_information_type_7_2_005 )
BS_SET_SYS_INFO         ( 1, system_information_type_8_2_005 )

BS_SET_SCH              ( 1, BSIC , RFN )
BS_SET_ARFCN            ( 1, 80 )
BS_SET_POWER            ( 1, -81 )
BS_ON_OFF               ( 1, TRUE )

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

/*
 * The SS activates the channels. The MS is not paged on carrier 1.
 */
ISS_DELAY                ( 20000 )

/*
 * After 50 seconds the SS increases the level of carrier 2 to 42dbuVemf.
 */

BS_SET_POWER            ( 1, -71 )

SET_TIMEOUT (60000)

BS_RACH_AWAIT           ( 1, channel_request_lup, SILENT )

History:                27.04.98                LE                Initial
```

## 4.1.6 MCS006: Cell Reselection Timing

Description: (Ref.: GSM 11.10-1, §20.6)

Preamble: None

Script:

```
ISS_INIT          ( 4 )

BS_SET_SYS_INFO   ( 0, system_information_type_1_1_006 )
BS_SET_SYS_INFO   ( 0, system_information_type_2_1_006 )
BS_SET_SYS_INFO   ( 0, system_information_type_3_1_006 )
BS_SET_SYS_INFO   ( 0, system_information_type_4_1_006 )

BS_SET_SCH        ( 0, BSIC , RFN )
BS_SET_ARFCN      ( 0, 20 )
BS_SET_POWER      ( 0, -57 )
BS_ON_OFF         ( 0, TRUE )

BS_SET_SYS_INFO   ( 1, system_information_type_1_2_006 )
BS_SET_SYS_INFO   ( 1, system_information_type_2_2_006 )
BS_SET_SYS_INFO   ( 1, system_information_type_3_2_006 )
BS_SET_SYS_INFO   ( 1, system_information_type_4_2_006 )

BS_SET_SCH        ( 1, BSIC , RFN )
BS_SET_ARFCN      ( 1, 80 )
BS_SET_POWER      ( 1, -67 )
BS_ON_OFF         ( 1, TRUE )

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

/*
 * The SS activates the channels. The MS is not paged on any of this carriers.
 * The MS is switched on. (Step A and B)
 */
NOT_IMPLEMENTED   ( "STEP A+B" )
ISS_DELAY         ( 20000 )

/*
 * After 50 seconds the SS starts paging continuously on carriers 1 and 2 for 20 seconds.
 * The SS monitors carriers 1 and 2 for RA requests from the MS.
 * (Step C)
 */

NOT_IMPLEMENTED   ( "STEP C" )
NOT_IMPLEMENTED   ( "STEP C, check cell 1" )
BS_CONFIG_CHANNEL ( 0, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND      ( 0, paging_request_type_1, SILENT )
BS_RACH_AWAIT     ( 0, channel_request, SILENT )
BS_RACH_AWAIT     ( 0, channel_request, SILENT )
ISS_DELAY (3000)

NOT_IMPLEMENTED   ( "STEP C, check cell 2" )
BS_CONFIG_CHANNEL ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND      ( 1, paging_request_type_1, SILENT )
BS_RACH_AWAIT     ( 1, channel_request, SILENT )
BS_RACH_AWAIT     ( 1, channel_request, SILENT )
ISS_DELAY (3000)

NOT_IMPLEMENTED   ( "STEP C, no RACH in cell 1" )
BS_CONFIG_CHANNEL ( 0, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND      ( 0, paging_request_type_1, SILENT )
BS_RACH_EXPECT_TIMEOUT (0, 500)

NOT_IMPLEMENTED   ( "STEP C, no RACH in cell 2" )
BS_CONFIG_CHANNEL ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND      ( 1, paging_request_type_1, SILENT )
BS_RACH_EXPECT_TIMEOUT (1, 500)

ISS_DELAY (3000)

NOT_IMPLEMENTED   ( "STEP C, Last paging cell 1" )
```

```

BS_CONFIG_CHANNEL    ( 0, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND         ( 0, paging_request_type_1, SILENT )
BS_RACH_AWAIT        ( 0, channel_request, SILENT )
BS_RACH_AWAIT        ( 0, channel_request, SILENT )

/*
 * The SS stops paging on carriers 1 and 2 and waits for 20 seconds.
 * The MS should revert to carrier 1 due to cell reselection. (Step D).
 */

NOT_IMPLEMENTED      ( "STEP D" )
ISS_DELAY             ( 28000 )

/*
 * The SS starts paging continuously on carrier 2.
 * The SS increases the transmit level of carrier 2 to 66 dbuVemf (equal -47 dBm)
 * for a period of 4 seconds and then reduces the level back to the original value.
 * (Step E and F).
 */

NOT_IMPLEMENTED      ( "STEP E+F" )
BS_SET_POWER         ( 1, -47 )
ISS_DELAY            ( 4000 )
BS_SET_POWER         ( 1, -67 )
BS_CONFIG_CHANNEL    ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND         ( 1, paging_request_type_1, SILENT )
BS_RACH_EXPECT_TIMEOUT (1, 3000)

/*
 * The SS increases the transmit level of carrier 2 to 66 dbuVemf (equal -47 dBm)
 * and waits for the MS to access on carrier 2. The SS records the time t from the
 * increase in the level of carrier 2 to the first response from the MS. (Step G)
 */

NOT_IMPLEMENTED      ( "STEP G" )
BS_SET_POWER         ( 1, -47 )
ISS_DELAY            ( 15000 )

BS_CONFIG_CHANNEL    ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND         ( 1, paging_request_type_1, SILENT )
BS_RACH_AWAIT        ( 1, channel_request, SILENT )

/*
 * The SS stops paging on carrier 2 and decreases the transmit level of carrier 2
 * back to the original value. The SS waits for 20 seconds. The MS should revert to
 * to carrier 1 due to cell reselection. (Step H and J)
 */

NOT_IMPLEMENTED      ( "STEP H+J" )
BS_SET_POWER         ( 1, -67 )
ISS_DELAY            ( 30000 )

/*
 * The SS increases the transmit level of carrier 2 to 66 dbuVemf (equal -47 dBm)
 * After t+2 seconds the SS starts paging continuously on carrier 1 and reduces the level
 * level of carrier 2 back to the original level. (Step K).
 */

NOT_IMPLEMENTED      ( "STEP K" )
BS_SET_POWER         ( 1, -47 )
ISS_DELAY            ( 12000 )
BS_SET_POWER         ( 1, -67 )
ISS_DELAY            ( 10000 )
BS_CONFIG_CHANNEL    ( 0, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND         ( 0, paging_request_type_1, SILENT )
BS_RACH_EXPECT_TIMEOUT (0, 3000)
ISS_DELAY            ( 20000 )

History:              27.04.98              LE              Initial
                    09.03.99              VK              wait 30 sec in step H+J

```



## 4.1.7 MCS007: Priority of Cells

Description: (Ref.: GSM 11.10-1, §20.7)

Preamble: None

Script:

```
ISS_INIT                ( 4 )

BS_SET_SYS_INFO         ( 0, system_information_type_1_1_007 )
BS_SET_SYS_INFO         ( 0, system_information_type_2_1_007 )
BS_SET_SYS_INFO         ( 0, system_information_type_3_1_007 )
BS_SET_SYS_INFO         ( 0, system_information_type_4_1_007 )

BS_SET_SCH              ( 0, BSIC , RFN )
BS_SET_ARFCN            ( 0, 20 )
BS_SET_POWER            ( 0, -80 )
BS_ON_OFF               ( 0, TRUE )

BS_SET_SYS_INFO         ( 1, system_information_type_1_2_007 )
BS_SET_SYS_INFO         ( 1, system_information_type_2_2_007 )
BS_SET_SYS_INFO         ( 1, system_information_type_3_2_007 )
BS_SET_SYS_INFO         ( 1, system_information_type_4_2_007 )

BS_SET_SCH              ( 1, BSIC , RFN )
BS_SET_ARFCN            ( 1, 80 )
BS_SET_POWER            ( 1, -70 )
BS_ON_OFF               ( 1, TRUE )

BS_SET_SYS_INFO         ( 2, system_information_type_1_3_007 )
BS_SET_SYS_INFO         ( 2, system_information_type_2_3_007 )
BS_SET_SYS_INFO         ( 2, system_information_type_3_3_007 )
BS_SET_SYS_INFO         ( 2, system_information_type_4_3_007 )

BS_SET_SCH              ( 2, BSIC , RFN )
BS_SET_ARFCN            ( 2, 60 )
BS_SET_POWER            ( 2, -80 )
BS_ON_OFF               ( 2, TRUE )

BS_SET_SYS_INFO         ( 3, system_information_type_1_4_007 )
BS_SET_SYS_INFO         ( 3, system_information_type_2_4_007 )
BS_SET_SYS_INFO         ( 3, system_information_type_3_4_007 )
BS_SET_SYS_INFO         ( 3, system_information_type_4_4_007 )

BS_SET_SCH              ( 3, BSIC , RFN )
BS_SET_ARFCN            ( 3, 110 )
BS_SET_POWER            ( 3, -90 )
BS_ON_OFF               ( 3, TRUE )

COMMAND                 ( "SIM CONFIG MODE=48" )
AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

/*
 * The SS activates the channels. The MS shall be on carrier 4 within 33 seconds.,
 * followed by response on carrier 1 before a response on carrier 2 within 50 seconds.
 */

ISS_DELAY (10000)

BS_CONFIG_CHANNEL       ( 3, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND            ( 3, paging_request_type_1, SILENT )
BS_RACH_AWAIT           ( 3, channel_request, SILENT )
BS_RACH_AWAIT           ( 3, channel_request, SILENT )

ISS_DELAY (15000)

BS_CONFIG_CHANNEL       ( 0, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND            ( 0, paging_request_type_1, SILENT )
BS_RACH_AWAIT           ( 0, channel_request, SILENT )
BS_RACH_AWAIT           ( 0, channel_request, SILENT )

ISS_DELAY (5000)
AT_SEND ("AT+CFUN=0\r\n", "Power Off");
```

```
/*
 * The MS is placed in test operation mode
 */
ISS_DELAY (5000)
COMMAND      ( "SIM CONFIG MODE=51" )
AT_SEND      ("AT+CFUN=1\r\n", "Power On");
AT_SEND      ("AT+COPS=0\r\n", "Start Registration");

/*
 * The SS activates the channels. The MS shall be on carrier 3 within 33 seconds.,
 * followed by response on carrier 1 before a response on carrier 2 within 50 seconds.
 */

ISS_DELAY (25000)

BS_CONFIG_CHANNEL ( 2, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND      ( 2, paging_request_type_1, SILENT )
BS_RACH_AWAIT     ( 2, channel_request, SILENT )
BS_RACH_AWAIT     ( 2, channel_request, SILENT )

ISS_DELAY (10000)

BS_CONFIG_CHANNEL ( 0, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND      ( 0, paging_request_type_1, SILENT )
BS_RACH_AWAIT     ( 0, channel_request, SILENT )
BS_RACH_AWAIT     ( 0, channel_request, SILENT )

ISS_DELAY (5000)

AT_SEND      ("AT+CFUN=0\r\n", "Power Off");
```

History:            27.04.98            LE            Initial

## 4.1.8 MCS008: Cell Reselection when C1(SC) < 0 for 5 Seconds

Description: (Ref.: GSM 11.10-1, §20.8)

Preamble: None

### Script:

```
ISS_INIT                ( 2 )

BS_SET_SYS_INFO         ( 0, system_information_type_1_1_008 )
BS_SET_SYS_INFO         ( 0, system_information_type_2_1_008 )
BS_SET_SYS_INFO         ( 0, system_information_type_3_1_008 )
BS_SET_SYS_INFO         ( 0, system_information_type_4_1_008 )

BS_SET_SCH              ( 0, BSIC , RFN )
BS_SET_ARFCN            ( 0, 20 )
BS_SET_POWER            ( 0, -50 )
BS_ON_OFF               ( 0, TRUE )

BS_SET_SYS_INFO         ( 1, system_information_type_1_2_008 )
BS_SET_SYS_INFO         ( 1, system_information_type_2_2_008 )
BS_SET_SYS_INFO         ( 1, system_information_type_3_2_008 )
BS_SET_SYS_INFO         ( 1, system_information_type_4_2_008 )

BS_SET_SCH              ( 1, BSIC , RFN )
BS_SET_ARFCN            ( 1, 80 )
BS_SET_POWER            ( 1, -80 )
BS_ON_OFF               ( 1, TRUE )

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

/*
 * The SS activates the carriers. The MS is not paged on carrier 1. The SS
 * monitors carrier 1 and 2 for RA requests from the MS. The MS is switched on.(step b)
 * After step b) there shall be no access on carrier 1 or carrier 2, within 50 seconds.
 */

ISS_DELAY                ( 50000 )

BS_CONFIG_CHANNEL        ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND             ( 1, paging_request_type_1, SILENT )
BS_RACH_EXPECT_TIMEOUT   (1, 3000)

/*
 * Step c: The SS reduces signal level on carrier 1 to -80 dBm for 4 seconds. Then, the SS
 * raises the level back to -50 dBm. After step c) there shall be no access on carrier 2
 * within 30 seconds.
 */

BS_SET_POWER            ( 0, -80 )
ISS_DELAY                (4000)
BS_SET_POWER            ( 0, -50 )

ISS_DELAY                (30000)
BS_CONFIG_CHANNEL        ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND             ( 1, paging_request_type_1, SILENT )
BS_RACH_EXPECT_TIMEOUT   (1, 3000)

/*
 * Step d: The SS reduces signal level on carrier 1 to -80 dBm. After
 * step d) the MS shall access non carrier 2 within 20 seconds.
 */

BS_SET_POWER            ( 0, -80 )
ISS_DELAY                (20000)
BS_CONFIG_CHANNEL        ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND             ( 1, paging_request_type_1, SILENT )
BS_RACH_AWAIT            ( 1, channel_request, SILENT )
```

History: 27.04.98 LE Initial

## 4.1.9 MCS009: Running Average of the surrounding cell BCCH carrier signal levels

Description: (Ref.: GSM 11.10-1, §20.9)

Preamble: None

Script:

```
ISS_INIT                ( 2 )

BS_SET_SYS_INFO         ( 0, system_information_type_1_1_009 )
BS_SET_SYS_INFO         ( 0, system_information_type_2_1_009 )
BS_SET_SYS_INFO         ( 0, system_information_type_3_1_009 )
BS_SET_SYS_INFO         ( 0, system_information_type_4_1_009 )

BS_SET_SCH               ( 0, BSIC , RFN )
BS_SET_ARFCN             ( 0, 20 )
BS_SET_POWER             ( 0, -60 )
BS_ON_OFF                ( 0, TRUE )

BS_SET_SYS_INFO         ( 1, system_information_type_1_2_009 )
BS_SET_SYS_INFO         ( 1, system_information_type_2_2_009 )
BS_SET_SYS_INFO         ( 1, system_information_type_3_2_009 )
BS_SET_SYS_INFO         ( 1, system_information_type_4_2_009 )

BS_SET_SCH               ( 1, BSIC , RFN )
BS_SET_ARFCN             ( 1, 80 )
BS_SET_POWER             ( 1, -80 )
BS_ON_OFF                ( 1, TRUE )

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

/*
 * The SS activates the carriers. The MS is not paged on carrier 1. The SS
 * monitors carrier 1 and 2 for RA requests from the MS. The MS is switched on.(step b)
 * After step b) there shall be no access on carrier 1 or carrier 2, within 50 seconds.
 */

ISS_DELAY                ( 50000 )

BS_CONFIG_CHANNEL        ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND             ( 1, paging_request_type_1, SILENT )
BS_RACH_EXPECT_TIMEOUT   ( 1, 3000 )

/*
 * Step c: The SS starts switching the level of carrier 2 between -80 dBm and -57 dBm
 * every 2.7 seconds and continues to do so until end of the test. As a result of the
 * switching the running average on carrier 2 will be between -66 dBm and -71 dBm,
 * assuming that samples are distributed over five consecutive paging blocks. Average
 * building is done in layer 1.
 * After step c) there shall be no access from the MS on carrier 1 or 2 within 25 seconds.
 */

BS_SET_POWER             ( 1, -68 )
ISS_DELAY                ( 25000 )

BS_CONFIG_CHANNEL        ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND             ( 1, paging_request_type_1, SILENT )
BS_RACH_EXPECT_TIMEOUT   ( 1, 3000 )

/*
 * Step d: The SS decreases the level of carrier 1 to -76 dBm.
 * After step d) the MS shall access non carrier 2 within 20 seconds.
 */

BS_SET_POWER             ( 0, -76 )
ISS_DELAY                ( 20000 )
BS_CONFIG_CHANNEL        ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND             ( 1, paging_request_type_1, SILENT )
BS_RACH_AWAIT            ( 1, channel_request, SILENT )
```

History: 27.04.98 LE Initial

## 4.1.10 MCS010: Running Average of the serving cell BCCH carrier signal level

Description: (Ref.: GSM 11.10-1, §20.10)

Preamble: None

Script:

```
ISS_INIT                ( 2 )

BS_SET_SYS_INFO         ( 0, system_information_type_1_1_010 )
BS_SET_SYS_INFO         ( 0, system_information_type_2_1_010 )
BS_SET_SYS_INFO         ( 0, system_information_type_3_1_010 )
BS_SET_SYS_INFO         ( 0, system_information_type_4_1_010 )

BS_SET_SCH              ( 0, BSIC , RFN )
BS_SET_ARFCN            ( 0, 20 )
BS_SET_POWER            ( 0, -50 )
BS_ON_OFF               ( 0, TRUE )

BS_SET_SYS_INFO         ( 1, system_information_type_1_2_010 )
BS_SET_SYS_INFO         ( 1, system_information_type_2_2_010 )
BS_SET_SYS_INFO         ( 1, system_information_type_3_2_010 )
BS_SET_SYS_INFO         ( 1, system_information_type_4_2_010 )

BS_SET_SCH              ( 1, BSIC , RFN )
BS_SET_ARFCN            ( 1, 80 )
BS_SET_POWER            ( 1, -74 )
BS_ON_OFF               ( 1, TRUE )

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

/*
 * The SS activates the carriers. The MS is not paged on carrier 1. The SS
 * monitors carrier 1 and 2 for RA requests from the MS. The MS is switched on.(step b)
 * (step c) After 50 seconds the SS starts switching the level of carrier 1 between
 * -80 dBm and -50 dBm every 3 seconds. As a result of the switching in levels, the
 * running average on carrier 1 will be between -62 dBm and -68 dBm over five
 * consecutive paging blocks.
 * After step c) the MS shall not access on carrier 2 within 25 seconds.
 */

ISS_DELAY               ( 50000 )

BS_SET_POWER            ( 0, -65 )
ISS_DELAY               (25000)

BS_CONFIG_CHANNEL        ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND            ( 1, paging_request_type_1, SILENT )
BS_RACH_EXPECT_TIMEOUT  (1, 3000)

/*
 * Step d: The SS increases the level of carrier 2 to -56 dBm. After
 * step d) the MS shall access on carrier 2 within 30 seconds.
 */
BS_SET_POWER            ( 1, -56 )
ISS_DELAY               (30000)
BS_CONFIG_CHANNEL        ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND            ( 1, paging_request_type_1, SILENT )
BS_RACH_AWAIT           ( 1, channel_request, SILENT )
```

History: 27.04.98 LE Initial

## 4.1.11 MCS011: Updating the 6 strongest Ncells and decoding the BSIC

Description: (Ref.: GSM 11.10-1, §20.11)

Preamble: None

Script:

```
ISS_INIT          ( 7 )

BS_SET_SYS_INFO   ( 0, system_information_type_1_1_011 )
BS_SET_SYS_INFO   ( 0, system_information_type_2_1_011 )
BS_SET_SYS_INFO   ( 0, system_information_type_3_1_011 )
BS_SET_SYS_INFO   ( 0, system_information_type_4_1_011 )

BS_SET_SCH        ( 0,BSIC , RFN )
BS_SET_ARFCN      ( 0, 20 )
BS_SET_POWER      ( 0, -60 )
BS_ON_OFF         ( 0,TRUE )

BS_SET_SYS_INFO   ( 1, system_information_type_1_2_011 )
BS_SET_SYS_INFO   ( 1, system_information_type_2_2_011 )
BS_SET_SYS_INFO   ( 1, system_information_type_3_2_011 )
BS_SET_SYS_INFO   ( 1, system_information_type_4_2_011 )

BS_SET_SCH        ( 1,BSIC , RFN )
BS_SET_ARFCN      ( 1, 10 )
BS_SET_POWER      ( 1, -65 )
BS_ON_OFF         ( 1,TRUE )

BS_SET_SYS_INFO   ( 2, system_information_type_1_3_011 )
BS_SET_SYS_INFO   ( 2, system_information_type_2_3_011 )
BS_SET_SYS_INFO   ( 2, system_information_type_3_3_011 )
BS_SET_SYS_INFO   ( 2, system_information_type_4_3_011 )

BS_SET_SCH        ( 2,BSIC , RFN )
BS_SET_ARFCN      ( 2, 40 )
BS_SET_POWER      ( 2, -70 )
BS_ON_OFF         ( 2,TRUE )

BS_SET_SYS_INFO   ( 3, system_information_type_1_4_011 )
BS_SET_SYS_INFO   ( 3, system_information_type_2_4_011 )
BS_SET_SYS_INFO   ( 3, system_information_type_3_4_011 )
BS_SET_SYS_INFO   ( 3, system_information_type_4_4_011 )

BS_SET_SCH        ( 3,BSIC , RFN )
BS_SET_ARFCN      ( 3, 80 )
BS_SET_POWER      ( 3, -75 )
BS_ON_OFF         ( 3,TRUE )

BS_SET_SYS_INFO   ( 4, system_information_type_1_5_011 )
BS_SET_SYS_INFO   ( 4, system_information_type_2_5_011 )
BS_SET_SYS_INFO   ( 4, system_information_type_3_5_011 )
BS_SET_SYS_INFO   ( 4, system_information_type_4_5_011 )

BS_SET_SCH        ( 4,BSIC , RFN )
BS_SET_ARFCN      ( 4, 90 )
BS_SET_POWER      ( 4, -80 )
BS_ON_OFF         ( 4,TRUE )

BS_SET_SYS_INFO   ( 5, system_information_type_1_6_011 )
BS_SET_SYS_INFO   ( 5, system_information_type_2_6_011 )
BS_SET_SYS_INFO   ( 5, system_information_type_3_6_011 )
BS_SET_SYS_INFO   ( 5, system_information_type_4_6_011 )

BS_SET_SCH        ( 5,BSIC , RFN )
BS_SET_ARFCN      ( 5, 100 )
BS_SET_POWER      ( 5, -80 )
BS_ON_OFF         ( 5,TRUE )

BS_SET_SYS_INFO   ( 6, system_information_type_1_7_011 )
BS_SET_SYS_INFO   ( 6, system_information_type_2_7_011 )
BS_SET_SYS_INFO   ( 6, system_information_type_3_7_011 )
BS_SET_SYS_INFO   ( 6, system_information_type_4_7_011 )

BS_SET_SCH        ( 6,BSIC , RFN )
```

```
BS_SET_ARFCN      ( 6, 110 )
BS_SET_POWER      ( 6, -75 )
BS_ON_OFF         ( 6, FALSE )
```

```
AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");
```

```
/*
 * The SS activates the carriers 1 to 6. The MS is not paged on any of the carriers.
 * The MS is switched on.
 */
```

```
ISS_DELAY (60000)
```

```
/*
 * After 60 seconds the SS activates carrier 7 and pages the MS on this carrier. The
 * SS monitors carrier 72 for RA requests from the MS. The MS shall access on carrier 7
 * within 55 seconds of activating carrier 7.
 */
```

```
BS_ON_OFF         ( 6, TRUE )
ISS_DELAY         (55000)
```

```
BS_CONFIG_CHANNEL ( 6, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND      ( 6, paging_request_type_1, SILENT )
BS_RACH_AWAIT     ( 6, channel_request, SILENT )
```

```
History:          27.04.98          LE          Initial
```

## 4.1.12 MCS012: Decoding the BCCH of the Neighbour Carriers

Description: (Ref.: GSM 11.10-1, §20.12)

Preamble: None

Script:

```
ISS_INIT                ( 2 )

BS_SET_SYS_INFO         ( 0, system_information_type_1_1_012 )
BS_SET_SYS_INFO         ( 0, system_information_type_2_1_012 )
BS_SET_SYS_INFO         ( 0, system_information_type_3_1_012 )
BS_SET_SYS_INFO         ( 0, system_information_type_4_1_012 )

BS_SET_SCH              ( 0, BSIC , RFN )
BS_SET_ARFCN            ( 0, 20 )
BS_SET_POWER            ( 0, -75 )
BS_ON_OFF               ( 0, TRUE )

BS_SET_SYS_INFO         ( 1, system_information_type_1_2_012 )
BS_SET_SYS_INFO         ( 1, system_information_type_2_2_012 )
BS_SET_SYS_INFO         ( 1, system_information_type_3_2_012 )
BS_SET_SYS_INFO         ( 1, system_information_type_4_2_012 )

BS_SET_SCH              ( 1, BSIC , RFN )
BS_SET_ARFCN            ( 1, 80 )
BS_SET_POWER            ( 1, -80 )
BS_ON_OFF               ( 1, TRUE )

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

/*
 * The SS activates the carriers. The MS is not paged on carrier 1. The SS
 * monitors carrier 1 and 2 for RA requests from the MS. The MS is switched on.(step b)
 * After step b) there shall be no access on carrier 2 within 50 seconds.
 */

ISS_DELAY                ( 50000 )

BS_CONFIG_CHANNEL        ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND            ( 1, paging_request_type_1, SILENT )
BS_RACH_EXPECT_TIMEOUT   ( 1, 3000 )

/*
 * Step c: The SS changes the RXLEV_ACCESS_MIN in the BCCH data of
 * carrier 2 to be -100 dBm.increases the level of carrier 2 to -56 dBm.
 * After step c) the MS shall access on carrier 2 within 345 seconds of
 * the change in the BCCH data of carrier 2. In the simulation a time
 * of 60 seconds is enough. Macro BS_SET_SCH is used to trigger N-BCCH
 * sending.
 */

BS_SET_SYS_INFO         ( 1, system_information_type_3_2_012_B )
BS_SET_SYS_INFO         ( 1, system_information_type_4_2_012_B )
BS_SET_SCH              ( 1, BSIC , RFN )

ISS_DELAY                ( 60000 )

BS_CONFIG_CHANNEL        ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND            ( 1, paging_request_type_1, SILENT )
BS_RACH_AWAIT           ( 1, channel_request, SILENT )
```

History: 27.04.98 LE Initial



### 4.1.13 MCS013: Decoding the BSIC of the Neighbour Carriers

Description: (Ref.: GSM 11.10-1, §20.13)

Preamble: None

Script:

```
ISS_INIT                ( 4 )

BS_SET_SYS_INFO         ( 0, system_information_type_1_1_013 )
BS_SET_SYS_INFO         ( 0, system_information_type_2_1_013 )
BS_SET_SYS_INFO         ( 0, system_information_type_3_1_013 )
BS_SET_SYS_INFO         ( 0, system_information_type_4_1_013 )

BS_SET_SCH              ( 0, BSIC , RFN )
BS_SET_ARFCN            ( 0, 20 )
BS_SET_POWER            ( 0, -75 )
BS_ON_OFF               ( 0, TRUE )

BS_SET_SYS_INFO         ( 1, system_information_type_1_2_013 )
BS_SET_SYS_INFO         ( 1, system_information_type_2_2_013 )
BS_SET_SYS_INFO         ( 1, system_information_type_3_2_013 )
BS_SET_SYS_INFO         ( 1, system_information_type_4_2_013 )

BS_SET_SCH              ( 1, BSIC , RFN )
BS_SET_ARFCN            ( 1, 80 )
BS_SET_POWER            ( 1, -80 )
BS_ON_OFF               ( 1, TRUE )

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

/*
 * The SS activates the channels. The MS is not paged on any of this carriers.
 * The MS is switched on. (Step A and B)
 */
NOT_IMPLEMENTED         ( "STEP A+B" )
ISS_DELAY                ( 20000 )

/*
 * The SS changes the BSIC of carrier 2 by changing the base station colour code (BCC)
 * part of the BSIC. The SS also changes the RXLEV ACCESS MIN in the BCCH data of
 * carrier 2 to be -100 dBm.
 * (Step C)
 */

NOT_IMPLEMENTED         ( "STEP C" )
BS_SET_SYS_INFO         ( 1, system_information_type_3_2_013B )
BS_SET_SYS_INFO         ( 1, system_information_type_4_2_013B )

BS_SET_SCH              ( 1, BSIC_NEW_BCC , RFN )

ISS_DELAY (70000)

BS_CONFIG_CHANNEL        ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND            ( 1, paging_request_type_1, SILENT )
BS_RACH_AWAIT           ( 1, channel_request, SILENT )
BS_RACH_AWAIT           ( 1, channel_request, SILENT )
ISS_DELAY (5000)
```

History: 27.04.98 LE Initial

## 4.1.14 MCS014: Emergency Calls

Description: (Ref.: GSM 11.10-1, §20.2)

Preamble: None

Script:

```
ISS_INIT          ( 3 )

BS_SET_SYS_INFO   ( 0, system_information_type_1_1_014 )
BS_SET_SYS_INFO   ( 0, system_information_type_2_1_014 )
BS_SET_SYS_INFO   ( 0, system_information_type_3_1_014 )
BS_SET_SYS_INFO   ( 0, system_information_type_4_1_014 )

BS_SET_SCH        ( 0, BSIC , RFN )
BS_SET_ARFCN      ( 0, 20 )
BS_SET_POWER      ( 0, -75 )
BS_ON_OFF         ( 0, TRUE )

BS_SET_SYS_INFO   ( 1, system_information_type_1_2_014 )
BS_SET_SYS_INFO   ( 1, system_information_type_2_2_014 )
BS_SET_SYS_INFO   ( 1, system_information_type_3_2_014 )
BS_SET_SYS_INFO   ( 1, system_information_type_4_2_014 )

BS_SET_SCH        ( 1, BSIC , RFN )
BS_SET_ARFCN      ( 1, 80 )
BS_SET_POWER      ( 1, -80 )
BS_ON_OFF         ( 1, TRUE )

BS_SET_SYS_INFO   ( 2, system_information_type_1_3_014 )
BS_SET_SYS_INFO   ( 2, system_information_type_2_3_014 )
BS_SET_SYS_INFO   ( 2, system_information_type_3_3_014 )
BS_SET_SYS_INFO   ( 2, system_information_type_4_3_014 )

BS_SET_SCH        ( 2, BSIC , RFN )
BS_SET_ARFCN      ( 2, 100 )
BS_SET_POWER      ( 2, -80 )
BS_ON_OFF         ( 2, TRUE )

COMMAND ("SIM CONFIG MODE=53")

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

/*
 * All the BCCH carriers belong to the same PLMN, which is not the MS HPLMN and is in
 * the SIM forbidden PLMN list (SIM CONFIG MODE=53). The SS activates the carriers.
 * The SS monitors for RA attempts from the MS on carriers 1,2 and 3 for the
 * duration of the test. The MS is switched on. 50 seconds after switch on, an
 * emergency call is initiated on the MS. The first access by the MS shall be on carrier 3.
 */

ISS_DELAY          ( 50000 )

COMMAND            ( "MMI CONFIG KEY_SEQUENCE=<112>" )
BS_RACH_AWAIT_BEGIN ( 2, channel_request, "Establishment cause: Emergency call." )
BF_SET_VAL         ( establishment_cause, M3(1,0,1), "Emergency call" )
BS_RACH_AWAIT_END( )
BS_STORE_RACH_PARAMS ( 2, 0 )
BS_CONFIG_CHANNEL   ( 2, AGCH, UNACK, SAPI_0 )
BS_MSG3_SEND        ( 2, immediate_assignment, SILENT )
BS_CONFIG_CHANNEL   ( 2, SDCCH, ACK, SAPI_0 )
BS_MSG3_AWAIT       ( 2, cm_service_request_ec_imsi, "CM service type: Emergency call")
BS_MSG3_SEND        ( 2, channel_release, "After the sending of this message, the SS
                                         waits for the disconnection of the main
                                         signalling link." )

ISS_DELAY          (5000)

/*
 * The SS changes the CBA of carrier 1 to 0. The MS should reselect to carrier 1
 * because it should not take into account the CELL RESELECT HYST value of 14 but use
 * 0 instead.
 * After 345 seconds an emergency call is initiated on the MS. (Remark: The simulation
```

\* needs less time to detect the changed neighbourcell BCCH.  
\*/

```
BS_SET_SYS_INFO      ( 0, system_information_type_1_1_014_B )
BS_SET_SYS_INFO      ( 0, system_information_type_2_1_014_B )
BS_SET_SYS_INFO      ( 0, system_information_type_3_1_014_B )
BS_SET_SYS_INFO      ( 0, system_information_type_4_1_014_B )
BS_SET_SCH            ( 0,BSIC , RFN )

ISS_DELAY             (60000)

COMMAND              ( "MMI CONFIG KEY_SEQUENCE=<112>" )
BS_RACH_AWAIT_BEGIN  ( 0, channel_request,      "Establishment cause: Emergency call." )
  BF_SET_VAL          ( establishment_cause, M3(1,0,1 ),    "Emergency call" )
BS_RACH_AWAIT_END( )
BS_STORE_RACH_PARAMS ( 0, 0 )
BS_CONFIG_CHANNEL     ( 0, AGCH, UNACK, SAPI_0 )
BS_MSG3_SEND          ( 0, immediate assignment,    SILENT)
BS_CONFIG_CHANNEL     ( 0, SDCCH, ACK, SAPI_0 )
BS_MSG3_AWAIT         ( 0, cm_service_request_ec_imsi,    "CM service type: Emergency call")
BS_MSG3_SEND          ( 0, channel_release,      "After the sending of this message, the SS
                                                    waits for the disconnection of the main
                                                    signalling link." )

ISS_DELAY             (5000)
```

History:            27.04.98            LE            Initial

#### 4.1.15 MCS015: Cell Reselection due to MS Rejection „LA not allowed“

Description: (Ref.: GSM 11.10-1, §20.15)

Preamble: None

Script:

```
ISS_INIT          ( 4 )

BS_SET_SYS_INFO   ( 0, system_information_type_1_1_015 )
BS_SET_SYS_INFO   ( 0, system_information_type_2_1_015 )
BS_SET_SYS_INFO   ( 0, system_information_type_3_1_015 )
BS_SET_SYS_INFO   ( 0, system_information_type_4_1_015 )

BS_SET_SCH        ( 0, BSIC , RFN )
BS_SET_ARFCN      ( 0, 20 )
BS_SET_POWER      ( 0, -50 )
BS_ON_OFF         ( 0, TRUE )

BS_SET_SYS_INFO   ( 1, system_information_type_1_2_015 )
BS_SET_SYS_INFO   ( 1, system_information_type_2_2_015 )
BS_SET_SYS_INFO   ( 1, system_information_type_3_2_015 )
BS_SET_SYS_INFO   ( 1, system_information_type_4_2_015 )

BS_SET_SCH        ( 1, BSIC , RFN )
BS_SET_ARFCN      ( 1, 80 )
BS_SET_POWER      ( 1, -59 )
BS_ON_OFF         ( 1, TRUE )

BS_SET_SYS_INFO   ( 2, system_information_type_1_3_015 )
BS_SET_SYS_INFO   ( 2, system_information_type_2_3_015 )
BS_SET_SYS_INFO   ( 2, system_information_type_3_3_015 )
BS_SET_SYS_INFO   ( 2, system_information_type_4_3_015 )

BS_SET_SCH        ( 2, BSIC , RFN )
BS_SET_ARFCN      ( 2, 100 )
BS_SET_POWER      ( 2, -69 )
BS_ON_OFF         ( 2, TRUE )

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

/*
 * The SS activates the carriers. The SS monitors all RA requests from MS on carriers
 * 1,2 and 3 until step e) has been completed. Only idle paging is sent on all channels.
 * (Step A and B)
 */

NOT_IMPLEMENTED   ( "STEP A+B" )

/*
 * When the MS perform an IMSI attach onto carrier 1, the SS shall reject it with cause
 * LA not allowed. (Step C).
 */

NOT_IMPLEMENTED   ( "STEP C" )
SET_TIMEOUT       ( 30000 )

BS_RACH_AWAIT_BEGIN ( 0, channel_request, SILENT )
  BF_SET_VAL      ( establishment_cause, M3(0,0,0), "Location updating" )
BS_RACH_AWAIT_END ( )
BS_CONFIG_CHANNEL ( 0, AGCH, UNACK, SAPI_0 )
BS_STORE_RACH_PARAMS ( 0, 0 )
BS_MSG3_SEND      ( 0, immediate_assignment, SILENT )
BS_CONFIG_CHANNEL ( 0, SDCCH, ACK, SAPI_0 )
BS_MSG3_AWAIT     ( 0, location_updating_request_imsi, SILENT )
BS_MSG3_SEND_BEGIN ( 0, location_updating_reject, "Reject cause = LA not allowed." )
  BF_SET_VAL      ( reject_cause, 0x0C, "Location Area not allowed" )
BS_MSG3_SEND_END ( )
BS_MSG3_SEND      ( 0, channel_release, SILENT )
ISS_DELAY         ( 50000 )
```

```

/*
 * 30 Seconds after the MS has returned to idle mode (channel release after
 * LU reject) the MS is manually commanded to set up an emergency call. (Step D)
 */

NOT_IMPLEMENTED      ( "STEP D" )
COMMAND              ( "MMI CONFIG KEY_SEQUENCE=<112>" )
BS_RACH_AWAIT_BEGIN  ( 2, channel_request,      "Establishment cause: Emergency call." )
BF_SET_VAL           ( establishment_cause, M3(1,0,1), "Emergency call" )
BS_RACH_AWAIT_END( )
BS_STORE_RACH_PARAMS ( 2, 0 )
BS_CONFIG_CHANNEL    ( 2, AGCH, UNACK, SAPI_0 )
BS_MSG3_SEND         ( 2, immediate_assignment, SILENT)
BS_CONFIG_CHANNEL    ( 2, SDCCH, ACK, SAPI_0 )
BS_MSG3_AWAIT        ( 2, cm_service_request_ec_imsi, "CM service type: Emergency call")

/*
 * The SS rejects the CM service request from the MS with a CM service reject
 * message with cause #17 network failure (Step E).
 */

NOT_IMPLEMENTED      ( "STEP E" )
BS_MSG3_SEND_BEGIN   ( 2, cm_service_reject,      "cause #17 (network failure )." )
BF_SET_VAL           ( reject_cause, 0x11,        "Network failure (#17)" )
BS_MSG3_SEND_END( )
BS_MSG3_SEND         ( 2, channel_release,        "After the sending of this message, the SS
                                                    waits for the disconnection of the main
                                                    signalling link." )

/*
 * 10 seconds after the MS has returned to idle mode (channel release after CM service
 * reject) the SS increases the level of carrier 2 to 65 dbuVempf() ) (Step F).
 */

NOT_IMPLEMENTED      ( "STEP F" )
ISS_DELAY (20000)
BS_SET_POWER (1, -48)

BS_RACH_AWAIT_BEGIN  ( 1, channel_request,      "Establishment cause: Location updating." )
BF_SET_VAL           ( establishment_cause, M3(0,0,0), "Location updating" )
BS_RACH_AWAIT_END( )
BS_CONFIG_CHANNEL    ( 1, AGCH, UNACK, SAPI_0 )
BS_STORE_RACH_PARAMS ( 1, 0 )
BS_MSG3_SEND         ( 1, immediate_assignment, SILENT )
BS_CONFIG_CHANNEL    ( 1, SDCCH, ACK, SAPI_0 )
BS_MSG3_AWAIT        ( 1, location Updating request_del, SILENT)
BS_MSG3_SEND         ( 1, location Updating accept_tmsi, SILENT)
BS_MSG3_AWAIT        ( 1, tmsi_reallocation_complete, SILENT)
BS_MSG3_SEND         ( 1, channel_release,      SILENT)

```

History:            27.04.98            LE            Initial

## 4.1.16 MCS016: Downlink Signalling Failure

Description: (Ref.: GSM 11.10-1, §20.16)

Preamble: None

Script:

```
ISS_INIT          ( 4 )

BS_SET_SYS_INFO   ( 0, system_information_type_1_1_016 )
BS_SET_SYS_INFO   ( 0, system_information_type_2_1_016 )
BS_SET_SYS_INFO   ( 0, system_information_type_3_1_016 )
BS_SET_SYS_INFO   ( 0, system_information_type_4_1_016 )

BS_SET_SCH        ( 0, BSIC , RFN )
BS_SET_ARFCN      ( 0, 20 )
BS_SET_POWER      ( 0, -70 )
BS_ON_OFF         ( 0, TRUE )

BS_SET_SYS_INFO   ( 1, system_information_type_1_2_016 )
BS_SET_SYS_INFO   ( 1, system_information_type_2_2_016 )
BS_SET_SYS_INFO   ( 1, system_information_type_3_2_016 )
BS_SET_SYS_INFO   ( 1, system_information_type_4_2_016 )

BS_SET_SCH        ( 1, BSIC , RFN )
BS_SET_ARFCN      ( 1, 80 )
BS_SET_POWER      ( 1, -80 )
BS_ON_OFF         ( 1, TRUE )

/*
 * The MS is switched on (Step A)
 */
NOT_IMPLEMENTED   ( "STEP A" )
AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");
ISS_DELAY (20000)

/*
 * Step B and C are located in TI++
 */
NOT_IMPLEMENTED   ( "STEP B+C" )

/*
 * Step D and E: Downlink Failure detection and cell reselection to cell 2. Paging in cell 2.
 */
NOT_IMPLEMENTED   ( "STEP D+E" )
BS_SET_ERROR      ( 0, 7) /* downlink error */
ISS_DELAY (4000)
BS_CONFIG_CHANNEL ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND      ( 1, paging_request_type_1, SILENT)
BS_RACH_AWAIT     ( 1, channel_request, "Est Cause: Answer to paging." )
```

History: 27.04.98 LE Initial

## 4.1.17 MCS017: Cell Selection if no suitable Cell found in 10 Seconds

Description: (Ref.: GSM 11.10-1, §20.17)

Preamble: None

Script:

```
ISS_INIT                ( 2 )

BS_SET_SYS_INFO         ( 0, system_information_type_1_1_017 )
BS_SET_SYS_INFO         ( 0, system_information_type_2_1_017 )
BS_SET_SYS_INFO         ( 0, system_information_type_3_1_017 )
BS_SET_SYS_INFO         ( 0, system_information_type_4_1_017 )

BS_SET_SCH               ( 0, BSIC , RFN )
BS_SET_ARFCN             ( 0, 20 )
BS_SET_POWER             ( 0, -70 )
BS_ON_OFF                ( 0, TRUE )

BS_SET_SYS_INFO         ( 1, system_information_type_1_2_017 )
BS_SET_SYS_INFO         ( 1, system_information_type_2_2_017 )
BS_SET_SYS_INFO         ( 1, system_information_type_3_2_017 )
BS_SET_SYS_INFO         ( 1, system_information_type_4_2_017 )

BS_SET_SCH               ( 1, BSIC , RFN )
BS_SET_ARFCN             ( 1, 80 )
BS_SET_POWER             ( 1, -80 )
BS_ON_OFF                ( 1, FALSE )

/*
 * The MS is switched on. (Step A)
 */
AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

ISS_DELAY (20000)

/*
 * After the MS indicates service the SS reduces the transmit level of carrier 1 to
 * -100 dBm (so that C1 carrier 1 becomes -10) and turns on a new carrier (carrier 2)
 * at a level of -80 dBm. Carrier 2 shall not be in the BA list.
 * (Step B and C). The MS shall camp on carrier 2 after recovery.
 */

BS_SET_POWER             ( 0, -100 )
BS_ON_OFF                ( 1, TRUE )

ISS_DELAY (60000)

BS_CONFIG_CHANNEL        ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND             ( 1, paging_request_type_1, SILENT)
BS_RACH_AWAIT            ( 1, channel_request, "Est Cause: Answer to paging." )
```

History: 27.04.98 LE Initial

#### 4.1.18 MCS018: Cell Reselection due to „Roaming not allowed“

Description: (Ref.: GSM 11.10-1, §20.18)

Preamble: None

Script:

```
ISS_INIT          ( 2 )

BS_SET_SYS_INFO   ( 0, system_information_type_1_1_018 )
BS_SET_SYS_INFO   ( 0, system_information_type_2_1_018 )
BS_SET_SYS_INFO   ( 0, system_information_type_3_1_018 )
BS_SET_SYS_INFO   ( 0, system_information_type_4_1_018 )

BS_SET_SCH        ( 0, BSIC , RFN )
BS_SET_ARFCN      ( 0, 20 )
BS_SET_POWER      ( 0, -50 )
BS_ON_OFF         ( 0, TRUE )

BS_SET_SYS_INFO   ( 1, system_information_type_1_2_018 )
BS_SET_SYS_INFO   ( 1, system_information_type_2_2_018 )
BS_SET_SYS_INFO   ( 1, system_information_type_3_2_018 )
BS_SET_SYS_INFO   ( 1, system_information_type_4_2_018 )

BS_SET_SCH        ( 1, BSIC , RFN )
BS_SET_ARFCN      ( 1, 80 )
BS_SET_POWER      ( 1, -60 )
BS_ON_OFF         ( 1, TRUE )

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

/*
 * The MS is switched on. The SS monitors all RA requests from MS on carriers 1 and 2.
 * The MS performs an IMSI attach on carrier 1. The SS reject it with cause
 * Roaming not allowed in this LA.
 */

BS_RACH_AWAIT_BEGIN ( 0, channel_request, SILENT)
  BF_SET_VAL        ( establishment_cause, M3(0,0,0) ,      "Location updating" )
BS_RACH_AWAIT_END( )
BS_CONFIG_CHANNEL   ( 0, AGCH, UNACK, SAPI_0 )
BS_STORE_RACH_PARAMS ( 0, 0 )
BS_MSG3_SEND        ( 0, immediate_assignment, SILENT)
BS_CONFIG_CHANNEL   ( 0, SDCCH, ACK, SAPI_0 )
BS_MSG3_AWAIT       ( 0, location_updating_request_imsi_kc7, SILENT )
BS_MSG3_SEND_BEGIN  ( 0, location_updating_reject, "Rej cause = Roaming in LA not allowed." )
  BF_SET_VAL        ( reject_cause, 0x0d,      "Roaming in LA not allowed" )
BS_MSG3_SEND_END( )
BS_MSG3_SEND        ( 0, channel_release, SILENT )

ISS_DELAY (2000)

/*
 * After LU reject, the MS shall initiate the Network selection procedure and
 * access onto carrier 2 as part of cell selection within 33 seconds from returning
 * to idle mode after the lu reject.
 */

BS_RACH_AWAIT_BEGIN ( 1, channel_request, SILENT)
  BF_SET_VAL        ( establishment_cause, M3(0,0,0) ,      "Location updating" )
BS_RACH_AWAIT_END( )
BS_CONFIG_CHANNEL   ( 1, AGCH, UNACK, SAPI_0 )
BS_STORE_RACH_PARAMS ( 1, 0 )
BS_MSG3_SEND        ( 1, immediate_assignment, SILENT)
BS_CONFIG_CHANNEL   ( 1, SDCCH, ACK, SAPI_0 )
BS_MSG3_AWAIT       ( 1, location_updating_request_del, SILENT )
```

History: 27.04.98 LE Initial



#### 4.1.19 MCS019: Cell Selection on Release of SDCCH and TCH

Description: (Ref.: GSM 11.10-1, §20.19)

Preamble: None

Script:

```
ISS_INIT                ( 4 )

BS_SET_SYS_INFO         ( 0, system_information_type_1_1_019 )
BS_SET_SYS_INFO         ( 0, system_information_type_2_1_019 )
BS_SET_SYS_INFO         ( 0, system_information_type_3_1_019 )
BS_SET_SYS_INFO         ( 0, system_information_type_4_1_019 )

BS_SET_SCH               ( 0, BSIC , RFN )
BS_SET_ARFCN             ( 0, 20 )
BS_SET_POWER             ( 0, -70 )
BS_ON_OFF                ( 0, TRUE )

BS_SET_SYS_INFO         ( 1, system_information_type_1_2_019 )
BS_SET_SYS_INFO         ( 1, system_information_type_2_2_019 )
BS_SET_SYS_INFO         ( 1, system_information_type_3_2_019 )
BS_SET_SYS_INFO         ( 1, system_information_type_4_2_019 )

BS_SET_SCH               ( 1, BSIC , RFN )
BS_SET_ARFCN             ( 1, 80 )
BS_SET_POWER             ( 1, -80 )
BS_ON_OFF                ( 1, TRUE )

/*
 * The MS is switched on (Step A)
 */
NOT_IMPLEMENTED         ( "STEP A" )
AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");
ISS_DELAY (20000)

/*
 * Step D and E: Downlink Failure detection and cell reselection to cell 2. Paging in cell 2.
 */

NOT_IMPLEMENTED         ( "STEP D+E" )
BS_SET_POWER             ( 1, -50 )
BS_SET_ERROR             ( 1, 7)
ISS_DELAY (10000)
BS_CONFIG_CHANNEL        ( 1, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND             ( 1, paging_request_type_1, SILENT)
BS_CONFIG_CHANNEL        ( 1, BCCH, UNACK, SAPI_0 )
BS_RACH_AWAIT           ( 1, channel_request, "Est Cause: Answer to paging." )
```

History: 27.04.98 LE Initial

## 4.1.20 MCS020: Multiband Cell Selection

Description: (Ref.: GSM 11.10-1, §20.20.1)

Preamble: None

Script:

```
ISS_INIT          ( 5 )

/*
 * STEP A:
 * The SS activates the carriers and monitors carriers 2, 4 and 5 for RA requests from
 * the MS.
 */

BS_SET_SYS_INFO   ( 0, system_information_type_1_1_020 )
BS_SET_SYS_INFO   ( 0, system_information_type_2_1_020 )
BS_SET_SYS_INFO   ( 0, system_information_type_3_1_020 )
BS_SET_SYS_INFO   ( 0, system_information_type_4_1_020 )

BS_SET_SCH        ( 0, BSIC , RFN )
BS_SET_ARFCN      ( 0, 20 )
BS_SET_POWER      ( 0, -65 )
BS_ON_OFF         ( 0, TRUE )

BS_SET_SYS_INFO   ( 1, system_information_type_1_2_020 )
BS_SET_SYS_INFO   ( 1, system_information_type_2_2_020 )
BS_SET_SYS_INFO   ( 1, system_information_type_3_2_020 )
BS_SET_SYS_INFO   ( 1, system_information_type_4_2_020 )

BS_SET_SCH        ( 1, BSIC , RFN )
BS_SET_ARFCN      ( 1, 40 )
BS_SET_POWER      ( 1, -77 )
BS_ON_OFF         ( 1, TRUE )

BS_SET_SYS_INFO   ( 2, system_information_type_1_3_020 )
BS_SET_SYS_INFO   ( 2, system_information_type_2_3_020 )
BS_SET_SYS_INFO   ( 2, system_information_type_3_3_020 )
BS_SET_SYS_INFO   ( 2, system_information_type_4_3_020 )

BS_SET_SCH        ( 2, BSIC , RFN )
BS_SET_ARFCN      ( 2, 512 )
BS_SET_POWER      ( 2, -70 )
BS_ON_OFF         ( 2, TRUE )

BS_SET_SYS_INFO   ( 3, system_information_type_1_4_020 )
BS_SET_SYS_INFO   ( 3, system_information_type_2_4_020 )
BS_SET_SYS_INFO   ( 3, system_information_type_3_4_020 )
BS_SET_SYS_INFO   ( 3, system_information_type_4_4_020 )

BS_SET_SCH        ( 3, BSIC , RFN )
BS_SET_ARFCN      ( 3, 80 )
BS_SET_POWER      ( 3, -80 )
BS_ON_OFF         ( 3, TRUE )

BS_SET_SYS_INFO   ( 4, system_information_type_1_5_020 )
BS_SET_SYS_INFO   ( 4, system_information_type_2_5_020 )
BS_SET_SYS_INFO   ( 4, system_information_type_3_5_020 )
BS_SET_SYS_INFO   ( 4, system_information_type_4_5_020 )

BS_SET_SCH        ( 4, BSIC , RFN )
BS_SET_ARFCN      ( 4, 885 )
BS_SET_POWER      ( 4, -90 )
BS_ON_OFF         ( 4, TRUE )

COMMAND           ("PL CONFIG STD=5"); /* Set Dualband Version */
AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

/*
 * STEP B:
 * The MS is switched on. The first response from the MS shall be on carrier 4
 * within 33 seconds. There shall be no response from the MS on carrier 2.
 */
```

```
SET_TIMEOUT (60000)

BS_RACH_AWAIT      ( 3, channel_request_lup, SILENT )

/*
 * STEP C:
 * The MS is switched off.
 */
ISS_DELAY (5000)
AT_SEND ("AT+CFUN=0\r\n", "Power Off");
ISS_DELAY (10000)

/*
 * STEP D:
 * The MS is switched on.
 */
AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

/*
 * STEP E:
 * The SS monitors carriers 1 and 3 for RA requests from the MS. There shall
 * be no response from the MS on either carrier 1 or carrier 3 within 33 seconds.
 */

BS_RACH_EXPECT_TIMEOUT (0, 15000);
/* BS_RACH_EXPECT_TIMEOUT (2, 15000);*/

/*
 * STEP F:
 * The MS is switched off.
 */
AT_SEND ("ABORT", SILENT);
AT_SEND ("AT+CFUN=0\r\n", "Power On");
ISS_DELAY (10000)

/*
 * STEP G:
 * The SS is reconfigured and sets MCC of carrier 3 to 262 (same as the other carriers).
 */
BS_SET_SYS_INFO      ( 2, system_information_type_3_3_020B )
BS_SET_SYS_INFO      ( 2, system_information_type_4_3_020B )
```

```
/*
 * STEP H+I:
 * The SS activates the carriers and monitors carriers 3,4 and 5 for RA requests
 * from the MS. The MS is switched on. The first response from the MS shall be on
 * carrier 3 within 33 seconds.
 */

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");
BS_RACH_AWAIT      ( 2, channel_request_lup, SILENT )

/*
 * STEP J:
 * The MS is switched off.
 */
ISS_DELAY (5000)
AT_SEND ("AT+CFUN=0\r\n", "Power On");
ISS_DELAY (10000)
```

History:            03.05.99            LE            Initial

## 4.2 Additional Testcases

### 4.2.1 MCS050: Paging after establishment errors

Description:

Preamble: None

Script:

```
ISS_INIT                ( 1 )

BS_SET_SYS_INFO         ( 0, system_information_type_1_1_006 )
BS_SET_SYS_INFO         ( 0, system_information_type_2_1_006 )
BS_SET_SYS_INFO         ( 0, system_information_type_3_1_006 )
BS_SET_SYS_INFO         ( 0, system_information_type_4_1_006 )

BS_SET_SCH              ( 0, BSIC , RFN )
BS_SET_ARFCN            ( 0, 20 )
BS_SET_POWER            ( 0, -57 )
BS_ON_OFF               ( 0, TRUE )

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

ISS_DELAY               ( 20000 )

BS_CONFIG_CHANNEL        ( 0, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND            ( 0, paging_request_type_1, SILENT )
BS_RACH_AWAIT           ( 0, channel_request, SILENT )
BS_RACH_AWAIT           ( 0, channel_request, SILENT )
ISS_DELAY (10000)

BS_SET_ERROR (0, 9) /* generate initial establishment error */
BS_CONFIG_CHANNEL        ( 0, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND            ( 0, paging_request_type_1, SILENT )
BS_RACH_AWAIT           ( 0, channel_request, SILENT )
BS_CONFIG_CHANNEL        ( 0, AGCH, UNACK, SAPI_0 )
BS_STORE_RACH_PARAMS    ( 0, 0 )
BS_MSG3_SEND            ( 0, immediate_assignment, SILENT )
BS_CONFIG_CHANNEL        ( 0, SDCCH, ACK, SAPI_0 )
BS_MSG3_AWAIT           ( 0, paging_response, SILENT )
ISS_DELAY (10000)

BS_SET_ERROR (0, 9) /* generate initial establishment error */
BS_CONFIG_CHANNEL        ( 0, PCH, UNACK, SAPI_0 )
BS_MSG3_SEND            ( 0, paging_request_type_1, SILENT )
BS_RACH_AWAIT           ( 0, channel_request, SILENT )
BS_CONFIG_CHANNEL        ( 0, AGCH, UNACK, SAPI_0 )
BS_STORE_RACH_PARAMS    ( 0, 0 )
BS_MSG3_SEND            ( 0, immediate_assignment, SILENT )
BS_CONFIG_CHANNEL        ( 0, SDCCH, ACK, SAPI_0 )
BS_MSG3_AWAIT           ( 0, paging_response, SILENT )
ISS_DELAY (10000)
```

History: 27.04.98 LE Initial

## 4.2.2 MCS051: Cell Broadcast Messages

**Description:**

**Preamble:** None

**Script:**

```
ISS_INIT                ( 1 )

BS_SET_SYS_INFO         ( 0, system_information_type_1_1_006 )
BS_SET_SYS_INFO         ( 0, system_information_type_2_1_006 )
BS_SET_SYS_INFO         ( 0, system_information_type_3_1_006 )
BS_SET_SYS_INFO         ( 0, system_information_type_4_1_006_CB )

BS_SET_SCH               ( 0, BSIC , RFN )
BS_SET_ARFCN             ( 0, 20 )
BS_SET_POWER             ( 0, -57 )
BS_ON_OFF                ( 0, TRUE )

AT_SEND ("AT+CFUN=1\r\n", "Power On");
AT_SEND ("AT+COPS=0\r\n", "Start Registration");

ISS_DELAY                ( 30000 )
```

History: 27.04.98 LE Initial

## Appendices

### A. Acronyms

**DS-WCDMA** Direct Sequence/Spread Wideband Code Division Multiple Access

### B. Glossary

**International Mobile Telecommunication 2000 (IMT-2000/ITU-2000)** Formerly referred to as FPLMTS (Future Public Land-Mobile Telephone System), this is the ITU's specification/family of standards for 3G. This initiative provides a global infrastructure through both satellite and terrestrial systems, for fixed and mobile phone users. The family of standards is a framework comprising a mix/blend of systems providing global roaming. <URL: <http://www.imt-2000.org/>>