



Technical Document

G23-GSM PROTOCOL STACK

ALR

ENTITY TEST SPECIFICATION

Document Number:	6301.400.02.110
Version:	0.13
Status:	Draft
Approval Authority:	
Creation Date:	1999-Sep-22
Last changed:	2015-Mar-08 by XGUTTEFE
File Name:	alr.doc

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Change History

Date	Changed by	Approved by	Version	Status	Notes
1999-Sep-22	MPA		0.1	Being Processed	1
2001-Jun-20	MSB		0.2	Being Processed	
2001-Jul-18	MSB		0.3	Being Processed	
2001-Nov-02	SBK		0.4	Being Processed	
2002-Feb-08	LG		0.5	Being	

				Processed	
2002-Feb-18	OT		0.6	Being Processed	
2002-May-17	MSB		0.7	Being Processed	
2002-Jun-28	MSB		0.8	Being Processed	
2002-Sep-26	DL		0.9	Being Processed	
2002-Dec-12	VK		0.10	Being Processed	
2003-Feb-04	LG		0.11	Being Processed	
2003-Apr-07	MSB		0.12	Being Processed	
2003-May-12	XGUTTEFE		0.13	Draft	

Notes:

1. Initial version

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[ISO 9000:2000]	International Organization for Standardization. Quality management systems - Fundamentals and vocabulary. December 2000
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1.1 References

[C_7010.801]	7010.801, References and Vocabulary, Condat AG
[CDD]	6147.706, Technical Documentation CCD, Condat AG
[TI.S922]	Upper layers / L1 Circuit Switched interfaces, TI Nice
[SAP_RR]	6147.107, Service Access Point RR, Condat AG
[MSG_RR]	6147.604, Message Specification RR, Condat AG

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 / Result
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
NEC	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 Introduction

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.

This document describes the tests for the ALR functionality.

3 Parameters

```
#define RR    CCDENT_RR
```

```
DECLARATION (ARFCN_11b)
DECLARATION (ARFCN_124a)
DECLARATION (ARFCN_124b)
DECLARATION (ARFCN_14a)
DECLARATION (ARFCN_14b)
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DECLARATION (ARFCN_DUAL)
DECLARATION (ARFCN_DUAL_WITH_STD)
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```

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DECLARATION (CHANNEL_DESC_4)
DECLARATION (CHANNEL_DESC_ASS_AFTER)
DECLARATION (CHANNEL_DESC_ASS_BEFORE)
DECLARATION (CHANNEL_DESC_CBCH_4)
DECLARATION (CHANNEL_DESC_CBCH_8)
DECLARATION (CHANNEL_DESC_FR)
DECLARATION (CHANNEL_DESC_IA)
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DECLARATION (CHLIST_1_11_14_25_87_512)
DECLARATION (CHLIST_1_124)
DECLARATION (CHLIST_1_14)
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DECLARATION (CHLIST_1_14_0_124_512_580_1023_FFFF)
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DECLARATION (CHLIST_1_14_124_23)
DECLARATION (CHLIST_1_14_124_512_580_637_1023_0)
DECLARATION (CHLIST_1_14_124_512_580_637_1023_FFFF)
DECLARATION (CHLIST_1_14_124_512_580_637_885_FFFF)
DECLARATION (CHLIST_1_14_124_FFFF)
DECLARATION (CHLIST_1_14_15)
DECLARATION (CHLIST_1_14_23_124_512_580_885_FFFF)
DECLARATION (CHLIST_1_14_23_124_FFFF)
DECLARATION (CHLIST_1_14_25_124_512_580_637_885_FFFF)
DECLARATION (CHLIST_1_14_512_513_600_700_810_885_FFFF)
DECLARATION (CHLIST_1_14_512_885)
DECLARATION (CHLIST_1_14_512_885_FFFF)
DECLARATION (CHLIST_1_15_FFFF)
DECLARATION (CHLIST_2_30_FFFF)
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DECLARATION (CHLIST_10_20_40_80_90_100_110_120_FFFF)
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DECLARATION (CHLIST_10_52_59_73_108_114_FFFF)
DECLARATION (CHLIST_10_FFFF)

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DECLARATION (CHLIST_14_124_FFFF)
DECLARATION (CHLIST_14_2_8)
DECLARATION (CHLIST_14_23_1_124)
DECLARATION (CHLIST_14_23_69_115)
DECLARATION (CHLIST_14_23_69_115_FFFF)
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DECLARATION (CHLIST_14_512_637_885_FFFF)
DECLARATION (CHLIST_14_513_600_700_810_885)
DECLARATION (CHLIST_2_8_FFFF)
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DECLARATION (CHLIST_23_1_124_FFFF)
DECLARATION (CHLIST_23_1_14_124)
DECLARATION (CHLIST_23_1_14_124_512_580_637_885)
DECLARATION (CHLIST_23_1_14_124_FFFF)
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DECLARATION (CHLIST_23_10)
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DECLARATION (CHLIST_46_52_59_66_73_74)
DECLARATION (CHLIST_46_52_59_66_73_74_FFFF)
DECLARATION (CHLIST_512_580_810_637)
DECLARATION (CHLIST_512_580_810_FFFF)
DECLARATION (CHLIST_512_580_885_FFFF)
DECLARATION (CHLIST_512_637_810_FFFF)
DECLARATION (CHLIST_512_637_885_FFFF)
DECLARATION (CHLIST_512_810_FFFF)
DECLARATION (CHLIST_512_885_FFFF)
DECLARATION (CHLIST_1_14_25_124_512_580_637_885_578)
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DECLARATION (CHLIST_580_512_637_810)
DECLARATION (CHLIST_580_512_637_885)
DECLARATION (CHLIST_637)
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DECLARATION (CHLIST_637_1_14_512_885)
DECLARATION (CHLIST_637_512_580_885)
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DECLARATION (CHLIST_73_74_75_76_FFFF)
DECLARATION (CHLIST_975)
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DECLARATION (CIPH_PARAM_KC)
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DECLARATION (CLASS_DUAL)
DECLARATION (CLASS_GSM_1800)
DECLARATION (CLASS_GSM_1900)
DECLARATION (CLASS_GSM_900)
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DECLARATION (EMPTY_FRAME)
DECLARATION (EMPTY_NCELL_LIST)

DECLARATION (EMPTY_SCELL_NBCCH)
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DECLARATION (FREQ_LIST_ASS_BEFORE)
DECLARATION (FREQ_LIST_ASS_BEFORE_NO)
DECLARATION (FREQ_LIST_FR)
DECLARATION (FREQ_LIST_FR_NO)
DECLARATION (FREQ_LIST_IA)
DECLARATION (FREQ_LIST_IA_FREQ)
DECLARATION (FREQ_LIST_IA_NO)
DECLARATION (FREQ_LIST_NO)
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DECLARATION (FULL_READ_ARRAY)
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DECLARATION (HO_PARAM_1)
DECLARATION (I_SMS)
DECLARATION (IMM_ASS)
DECLARATION (IMM_ASS_HOP)
DECLARATION (IMM_ASS_REJ)
DECLARATION (IMSI)
DECLARATION (IMSI2)
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DECLARATION (L2_IMM_ASS_ARRAY)
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DECLARATION (L2_IMM_ASS_EXT_REO_ARRAY)
DECLARATION (L2_IMM_ASS_HOP)
DECLARATION (L2_IMM_ASS_HOP_ARRAY)
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DECLARATION (L2_IMM_ASS_REJ_ARRAY)
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DECLARATION (L2_PAG_1_I1_A_ARRAY)
DECLARATION (L2_PAG_1_I1_S)
DECLARATION (L2_PAG_1_I1_S_ARRAY)
DECLARATION (L2_PAG_1_I2_A)
DECLARATION (L2_PAG_1_I2_A_ARRAY)
DECLARATION (L2_PAG_1_I2_S)
DECLARATION (L2_PAG_1_I2_S_ARRAY)
DECLARATION (L2_PAG_1_SI1_S)
DECLARATION (L2_PAG_1_SI1_S_ARRAY)
DECLARATION (L2_PAG_1_SI2_D)
DECLARATION (L2_PAG_1_SI2_D_ARRAY)
DECLARATION (L2_PAG_1_SI2_T4)
DECLARATION (L2_PAG_1_SI2_T4_ARRAY)
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DECLARATION (L2_PAG_1_ST1_A1_ARRAY)
DECLARATION (L2_PAG_1_ST1_A2)

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DECLARATION (L2_PAG_1_ST2_T4)
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DECLARATION (L2_PAG_1_T1_D)
DECLARATION (L2_PAG_1_T1_D_ARRAY)
DECLARATION (L2_PAG_1_T1_T)
DECLARATION (L2_PAG_1_T1_T_ARRAY)
DECLARATION (L2_PAG_1_T2_D)
DECLARATION (L2_PAG_1_T2_D_ARRAY)
DECLARATION (L2_PAG_1_T2_T)
DECLARATION (L2_PAG_1_T2_T_ARRAY)
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DECLARATION (L2_PAG_1_WI2)
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DECLARATION (L2_PAG_1_WT2)
DECLARATION (L2_PAG_1_WT2_ARRAY)
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DECLARATION (L2_PAG_2_I3_D)
DECLARATION (L2_PAG_2_I3_D_ARRAY)
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DECLARATION (L2_PAG_2_I3_S)
DECLARATION (L2_PAG_2_I3_S_ARRAY)
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DECLARATION (L2_PAG_2_T1_T_ARRAY)
DECLARATION (L2_PAG_2_T2_A)

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DECLARATION (L2_PAG_3_T1_S)
DECLARATION (L2_PAG_3_T1_S_ARRAY)
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DECLARATION (L2_PAG_3_T2_A_ARRAY)
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DECLARATION (L2_PAG_3_T2_D_ARRAY)
DECLARATION (L2_PAG_3_T2_S)
DECLARATION (L2_PAG_3_T2_S_ARRAY)
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DECLARATION (L2_PAG_3_T3_D)
DECLARATION (L2_PAG_3_T3_D_ARRAY)
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DECLARATION (L2_PAG_3_T3_S)
DECLARATION (L2_PAG_3_T3_S_ARRAY)
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DECLARATION (L2_PAG_3_T4_D)
DECLARATION (L2_PAG_3_T4_D_ARRAY)
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DECLARATION (L2_PAG_3_T4_S)

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DECLARATION (L2_PAGING_REQ_1_REO_ARRAY)
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DECLARATION (L2_SYS_INFO_1_NEW_ARRAY)
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DECLARATION (L2_SYS_INFO_5BIS_ARRAY)
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DECLARATION (L2_SYS_INFO_6_ARRAY)
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DECLARATION (L2_SYS_INFO_7_ARRAY)
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DECLARATION (LOC_AREA_IDENT_2)
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DECLARATION (MCC_1)
DECLARATION (MCC_2)
DECLARATION (MNC_1)
DECLARATION (MNC_2)
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DECLARATION (MS_ID_SHORT_IMSI_TMSI)
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DECLARATION (MSG_ID_3_7_11_TO_13)
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DECLARATION (NCELL_1_L1_N23_CONTENT)
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DECLARATION (NCELL_RES_14d)
DECLARATION (NCELL_RES_14y)
DECLARATION (NCELL_RES_14z)
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DECLARATION (NCELL_RES_1d)
DECLARATION (NCELL_RES_1z)
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DECLARATION (NCELL_RES_23a)
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DECLARATION (NCELL_RES_25a)
DECLARATION (NCELL_RES_25y)
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DECLARATION (NCELL_RES_512d)
DECLARATION (NCELL_RES_512y)
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DECLARATION (NCELL_RES_513d)
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DECLARATION (NCELL_RES_580y)
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DECLARATION (NCELL_RES_637y)
DECLARATION (NCELL_RES_700d)
DECLARATION (NCELL_RES_810d)
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DECLARATION (NCELL_RES_885y)
DECLARATION (NCELL_RES_885z)
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DECLARATION (NCELL_RES_SC_23_8_1)
DECLARATION (NCELL_RES_SC_23_8_1_CONTENT)
DECLARATION (NCELL_RES_SC_578_8)
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DECLARATION (NCELL_RES_SC_637_8_1)
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DECLARATION (NCELL_RESULT_124a)
DECLARATION (NCELL_RESULT_14a)
DECLARATION (NCELL_RESULT_1a)
DECLARATION (NCELL_RESULT_23a)
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DECLARATION (NCELL_RESULT_NO_CONTENT_1)
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DECLARATION (NCELLS_1_124_FO)
DECLARATION (NCELLS_1_124_RXLEVS)
DECLARATION (NCELLS_1_124_TA)
DECLARATION (NCELLS_1_14_124)
DECLARATION (NCELLS_1_14_124_BSICS)
DECLARATION (NCELLS_1_14_124_FO)
DECLARATION (NCELLS_1_14_124_RXLEVS)
DECLARATION (NCELLS_1_14_124_TA)
DECLARATION (NCELLS_1_14_NCC)
DECLARATION (NCELLS_1_14_NCC_BSICS)
DECLARATION (NCELLS_1_14_NCC_FO)
DECLARATION (NCELLS_1_14_NCC_RXLEVS)
DECLARATION (NCELLS_1_14_NCC_TA)
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DECLARATION (NCELLS_RES_SC_23_16_2B)
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DECLARATION (NCELLS_SC_1800_4_1_FO)
DECLARATION (NCELLS_SC_1800_4_1_RXLEVS)
DECLARATION (NCELLS_SC_1800_4_1_TA)
DECLARATION (NCELLS_SC_1800_8_1)
DECLARATION (NCELLS_SC_1800_8_1_BSICS)
DECLARATION (NCELLS_SC_1800_8_1_FO)
DECLARATION (NCELLS_SC_1800_8_1_RXLEVS)
DECLARATION (NCELLS_SC_1800_8_1_TA)
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DECLARATION (NCELLS_SC_900_16_2)
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DECLARATION (NCELLS_SC_900_4_1_FO)
DECLARATION (NCELLS_SC_900_4_1_RXLEVS)
DECLARATION (NCELLS_SC_900_4_1_TA)
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DECLARATION (NCELLS_SC_900_8_1)
DECLARATION (NCELLS_SC_900_8_1_BSICS)
DECLARATION (NCELLS_SC_900_8_1_FO)
DECLARATION (NCELLS_SC_900_8_1_RXLEVS)
DECLARATION (NCELLS_SC_900_8_1_TA)
DECLARATION (NCELLS_SC_900_8_BSICS)
DECLARATION (NCELLS_SC_900_8_FO)
DECLARATION (NCELLS_SC_900_8_RXLEVS)
DECLARATION (NCELLS_SC_900_8_TA)
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DECLARATION (NEIGH_CELL_DESC_2)
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DECLARATION (NO_NCELLS)
DECLARATION (NO_STARTING_TIME)
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DECLARATION (NULL_MESSAGE_CONTENT)
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DECLARATION (PAGING_REQ_1)
DECLARATION (PAGING_REQ_1_EXT)

DECLARATION (PAGING_REQ_1_REO)
DECLARATION (PAGING_REQ_1_SAB)
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DECLARATION (PCK_CHAN_DESC_1)
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DECLARATION (REQ_REF_1)
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DECLARATION (RF_1_14_0_124_512_580_1023_FFFF)
DECLARATION (RF_1_14_124_23)
DECLARATION (RF_1_14_124_512_580_637_1023_0)
DECLARATION (RF_1_14_124_512_580_637_1023_FFFF)
DECLARATION (RF_1_14_15)
DECLARATION (RF_1_14_23_124_FFFF)
DECLARATION (RF_10_20_40_80_90_100_110_120)
DECLARATION (RF_10_20_40_80_90_100_110_120_FFFF)
DECLARATION (RF_10_FFFF)
DECLARATION (RF_14)
DECLARATION (RF_14_2_8)
DECLARATION (RF_14_23_1_124)
DECLARATION (RF_2_8_FFFF)
DECLARATION (RF_23)
DECLARATION (RF_1_11_14_25_87_124_512_885_23)
DECLARATION (RF_23_1_14_124)
DECLARATION (RF_23_1_14_124_512_580_637_885)
DECLARATION (RF_1_14_25_124_512_580_637_885_23)
DECLARATION (RF_23_1_14_512_885)
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DECLARATION (RF_23_10)
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DECLARATION (RF_512_580_810_FFFF)
DECLARATION (RF_512_637_810_FFFF)
DECLARATION (RF_1_14_25_124_512_580_637_885_578)
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DECLARATION (RF_580_512_637_810)
DECLARATION (RF_580_512_637_885)
DECLARATION (RF_637)
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DECLARATION (RF_1_14_512_513_600_700_810_885_637)
DECLARATION (RF_637_1_14_512_885)
DECLARATION (RF_637_512_580_885)
DECLARATION (RF_975)
DECLARATION (RF_CHANNEL_1)
DECLARATION (RF_CHANNEL_10)
DECLARATION (RF_CHANNEL_11)
DECLARATION (RF_CHANNEL_12)
DECLARATION (RF_CHANNEL_2)
DECLARATION (RF_CHANNEL_3)
DECLARATION (RF_CHANNEL_4)
DECLARATION (RF_CHANNEL_5)
DECLARATION (RF_CHANNEL_6)
DECLARATION (RF_CHANNEL_7)
DECLARATION (RF_CHANNEL_8)

DECLARATION (RF_CHANNEL_9)
DECLARATION (RXLEV_23_14_124_1)
DECLARATION (RXLEV_637_580_810_512)
DECLARATION (RXLEV_637_580_885_512)
DECLARATION (RXLEV_DUAL)
DECLARATION (RXLEV_EGSM)
DECLARATION (RXLEV_EXT_MEAS_000)
DECLARATION (S_TIME_MPHC)
DECLARATION (S_TIME_MPHC_ST)
DECLARATION (S_TIME_T1)
DECLARATION (S_TIME_T1_ST)
DECLARATION (S_TIME_T2)
DECLARATION (S_TIME_T2_ST)
DECLARATION (CELL_TC0)
DECLARATION (CELL_TC1)
DECLARATION (CELL_TC2)
DECLARATION (CELL_TC3)
DECLARATION (CELL_TC4)
DECLARATION (CELL_TC5)
DECLARATION (CELL_TC6)
DECLARATION (CELL_TC7)
DECLARATION (SCHEDULE_1_A)
DECLARATION (SCHEDULE_1_A_CONTENT)
DECLARATION (SCHEDULE_1_B)
DECLARATION (SCHEDULE_1_B_CONTENT)
DECLARATION (SCHEDULE_2)
DECLARATION (SCHEDULE_2_CONTENT)
DECLARATION (SCHEDULE_3)
DECLARATION (SCHEDULE_3_CONTENT)
DECLARATION (SCHEDULE_4)
DECLARATION (SCHEDULE_4_CONTENT)
DECLARATION (SI6_REST_OCT_1)
DECLARATION (SI7_REST_OCT_1)
DECLARATION (SI8_REST_OCT_1)
DECLARATION (STARTING_TIME)
DECLARATION (STARTING_TIME_T1)
DECLARATION (STARTING_TIME_T2)
DECLARATION (STOP_ARRAY_1)
DECLARATION (STOP_ARRAY_11)
DECLARATION (STOP_ARRAY_124)
DECLARATION (STOP_ARRAY_14)
DECLARATION (STOP_ARRAY_25)
DECLARATION (STOP_ARRAY_512)
DECLARATION (STOP_ARRAY_513)
DECLARATION (STOP_ARRAY_580)
DECLARATION (STOP_ARRAY_600)
DECLARATION (STOP_ARRAY_637)
DECLARATION (STOP_ARRAY_700)
DECLARATION (STOP_ARRAY_810)
DECLARATION (STOP_ARRAY_87)
DECLARATION (STOP_ARRAY_885)
DECLARATION (STOP_ARRAY_EMPTY_6)
DECLARATION (STOP_ARRAY_EMPTY_12)
DECLARATION (STOP_BURSTS)

DECLARATION (SYS_INFO_4_ACS)
DECLARATION (SYS_INFO_6)
DECLARATION (SYS_INFO_7)
DECLARATION (SYS_INFO_8)
DECLARATION (T123_BURST_1)
DECLARATION (TIME_ADVANCE_1)
DECLARATION (TIME_ADVANCE_2)
DECLARATION (TMSI)
DECLARATION (TMSI2)
DECLARATION (TR_PARAM)
DECLARATION (TWO_BURSTS)
DECLARATION (VBS_VGCS_OPT_1)

/* AMR */

DECLARATION (S_AMR_CONF_4_ICMI)
DECLARATION (SA_COD_PROP_4)
DECLARATION (S_COD_PROP_1)
DECLARATION (S_COD_PROP_2)
DECLARATION (S_COD_PROP_3)
DECLARATION (S_AMR_CONFIGURATION)
DECLARATION (A_THRESHOLD)
DECLARATION (A_HYSTERESIS)

/* EMO */

DECLARATION (A_ARFCN_EMO_000)
DECLARATION (CHAN_LIST_100)
DECLARATION (CHAN_LIST_101)
DECLARATION (RADIO_FREQ_100)
DECLARATION (RADIO_FREQ_101)
DECLARATION (NCELL_MEAS_100)
DECLARATION (NCELL_MEAS_102)
DECLARATION (S_EMO_MEAS_RES_000)
DECLARATION (S_EMO_MEAS_RES_000_000)
DECLARATION (S_EMO_MEAS_RES_000_001)
DECLARATION (S_EMO_MEAS_RES_000_002)
DECLARATION (S_EMO_MEAS_RES_000_003)
DECLARATION (S_EMO_MEAS_RES_000_004)
DECLARATION (RES_LIST_100_000)
DECLARATION (RES_LIST_100_001)
DECLARATION (RES_LIST_100_002)
DECLARATION (RES_LIST_100_003)
DECLARATION (RES_LIST_100_004)
DECLARATION (RES_LIST_100_NULL)
DECLARATION (RES_LIST_100)
DECLARATION (RES_LIST_102_000)
DECLARATION (RES_LIST_102_001)
DECLARATION (RES_LIST_102_002)
DECLARATION (RES_LIST_102_003)
DECLARATION (RES_LIST_102_004)
DECLARATION (RES_LIST_102_NULL)
DECLARATION (RES_LIST_102)

/* DL/26.09.02: EOTD */

/* DECLARATIONS: arrays */

DECLARATION (EOTD_CROSSCOR_6)

DECLARATION (EOTD_CROSSCOR_9)
DECLARATION (EOTD_CROSSCOR_12)
DECLARATION (NCELL_LIST_EOTD)
DECLARATION (ARFCN_LIST_EOTD_1)
DECLARATION (RX_LEV_LIST_EOTD_1)
DECLARATION (BSIC_LIST_EOTD_1)
DECLARATION (TIME_ALIGN_LIST_EOTD_1)
DECLARATION (FRAME_OFS_LIST_EOTD_1)
DECLARATION (ARFCN_LIST_EOTD_2)
DECLARATION (RX_LEV_LIST_EOTD_2)
DECLARATION (BSIC_LIST_EOTD_2)
DECLARATION (TIME_ALIGN_LIST_EOTD_2)
DECLARATION (FRAME_OFS_LIST_EOTD_2)
DECLARATION (NCELLS_SC_900_8_FO_EOTD)

/* DECLARATIONS: structs – primitives */

DECLARATION (CHAN_LIST_EOTD)
DECLARATION (NCELL_RESULT_1023a)
DECLARATION (NCELL_RESULT_114a)
DECLARATION (NCELL_RESULT_46a)
DECLARATION (NCELL_RESULT_22a)
DECLARATION (NCELL_RESULT_15a)
DECLARATION (NCELL_RESULT_74a)
DECLARATION (NCELL_RESULT_30a)
DECLARATION (NCELL_RESULT_526a)
DECLARATION (ARFCN_23_EOTD)
DECLARATION (ARFCN_637_EOTD)
DECLARATION (ARFCN_25_EOTD)
DECLARATION (ARFCN_14_EOTD)
DECLARATION (ARFCN_512_EOTD)
DECLARATION (ARFCN_516_EOTD)
DECLARATION (ARFCN_525_EOTD)
DECLARATION (ARFCN_580_EOTD)
DECLARATION (ARFCN_885_EOTD)
DECLARATION (EOTD_SC_RES_OK)
DECLARATION (EOTD_SC_RES1_OK)
DECLARATION (EOTD_NC_RES_637)
DECLARATION (EOTD_NC_RES_25)
DECLARATION (EOTD_NC_RES_14)
DECLARATION (EOTD_NC_RES_512)
DECLARATION (EOTD_NC_RES_516)
DECLARATION (EOTD_NC_RES_525)
DECLARATION (EOTD_NC_RES_580)
DECLARATION (EOTD_NC_RES_885)
DECLARATION (NCELL_ARFCN_1)
DECLARATION (NCELL_ARFCN_14)
DECLARATION (NCELL_ARFCN_23)
DECLARATION (NCELL_ARFCN_25)
DECLARATION (NCELL_ARFCN_124)
DECLARATION (NCELL_ARFCN_512)
DECLARATION (NCELL_ARFCN_516)
DECLARATION (NCELL_ARFCN_525)
DECLARATION (NCELL_ARFCN_580)
DECLARATION (NCELL_ARFCN_637)
DECLARATION (NCELL_ARFCN_885)

DECLARATION (NCELL_ARFCN_EMPTY)

/* DECLARATIONS: struct arrays */

DECLARATION (NCELLS_SC_900_EOTD)
DECLARATION (NCELL_EOTD_7)
DECLARATION (NCELL_EOTD_9)
DECLARATION (EOTD_RESULT_6)
DECLARATION (EOTD_RESULT_8)
DECLARATION (NCELL_LIST_1_EOTD)
DECLARATION (NCELL_LIST_3_EOTD)
DECLARATION (NCELL_LIST_5_EOTD_IDLE)
DECLARATION (NCELL_LIST_6_EOTD_IDLE)
DECLARATION (NCELL_LIST_6_EOTD_DEDI)
DECLARATION (NCELL_LIST_8_EOTD_DEDI)
DECLARATION (NCELL_RESULT_EOTD_1)
DECLARATION (NCELL_RESULT_EOTD_2)
DECLARATION (NCELLS_EOTD_BSIC_1)
DECLARATION (NCELLS_EOTD_BSIC_2)

/*

BYTE TV_INVALID_TIMING_INFO 0
BYTE TV_VALID_TIMING_INFO 2
BYTE SM_WIDE_MODE 0
BYTE L2_CHANNEL_NBCCH 6
BYTE PGM_NORMAL 0
BYTE PGM_EXTENDED 1
BYTE PGM_REORG 2
SHORT NCELL_BCCH_SI_3_4 0x00CC
SHORT NCELL_BCCH_SI_2_3_4 0x00CE
SHORT NCELL_BCCH_SI_2 0x0002
SHORT NCELL_BCCH_SI_3_7_8 0x8844
BYTE NO_OF_CELLS_4 4
BYTE HO_COMPLETE 0
BYTE HO_TIMEOUT 1
BYTE HO_TIMEOUT 1
BYTE CBCH_READ_NORM 0
BYTE CBCH_READ_EXT 1
BYTE CBCH_NORM_BLOCK234 7
BYTE MAX_SCHED_SIZE 10
*/
BYTE NO_OF_CELLS_3 3
BYTE RAND_BURSTS_2 2
BYTE TI_0 0
BYTE TI_1 1
BYTE TI_2 2
BYTE TI_3 3
BYTE TI_4 4
BYTE TI_5 5
BYTE TI_6 6
BYTE TI_7 7
BYTE TI_8 8
BYTE TI_9 9
BYTE NCC_PERMIT_1 0x01
BYTE NCC_PERMIT_2 0x00
SHORT CELL_IDENT_1 0x3748
SHORT CELL_IDENT_2 0x0004
SHORT CELL_IDENT_3 0x0104
SHORT ACC_0005 0x0040


```

BYTE PAGE_NORM0
BYTE MODE_CBCH_CONFIG    10
BYTE CBCH_ACCEPT         0
BYTE CBCH_READ_SUCCESS   1
BYTE CH_TYPE_CBCH        7
BYTE HO_REF              23
BYTE HO_POW              10
BYTE RXLEV_IDX_1         0
BYTE RXLEV_IDX_2         1
BYTE RXLEV_IDX_3_1800    2
BYTE RXLEV_IDX_DUAL      3
BYTE RXLEV_IDX_2_DUAL    1
BYTE RXLEV_IDX_7         7
BYTE SCHED_SIZE_1        1
BYTE SCHED_LEN_0         0
BYTE CHAN_LIST_IDX_0     0
SHORT  ONE_ELEM          1
SHORT  PERIODIC_SCELL_BCCH_ARRAY_SIZE  8
BYTE CBCH_LEN_22         22
BYTE CBCH_LEN_44         44
BYTE CBCH_LEN_66         66
BYTE CBCH_LEN_88         88

```

BYTE TEST 0x7C

```

BYTE ENTITY      0x01
LONG  Bitm_L     0x0040
SHORT Bitm_H     0x0000

```

/* Constants */

```

SHORTARFCN_0      0
SHORTARFCN_1      1
SHORTARFCN_1_STD_900  2049 /* 1 | (1<<11) */
SHORTARFCN_1_STD_DUAL 10241 /* 1 | (5<<11) */
SHORTARFCN_2      2
SHORTARFCN_3      3
SHORTARFCN_4      4
SHORTARFCN_5      5
SHORTARFCN_6      6
SHORTARFCN_7      7
SHORTARFCN_8      8
SHORTARFCN_9      9
SHORTARFCN_10     10
SHORTARFCN_11     11
SHORTARFCN_12     12
SHORTARFCN_13     13
SHORTARFCN_14     14
SHORTARFCN_14_STD_900  2062 /* 14 | (1<<11) */
SHORTARFCN_14_STD_DUAL 10254 /* 14 | (5<<11) */
SHORTARFCN_15     15
SHORTARFCN_16     16
SHORTARFCN_17     17
SHORTARFCN_18     18
SHORTARFCN_19     19

```

SHORTARFCN_20 20
 SHORTARFCN_21 21
 SHORTARFCN_22 22
 SHORTARFCN_23 23
 SHORTARFCN_23_STD_900 2071 /* 23 | (1<<11) */
 SHORTARFCN_23_STD_DUAL 10263 /* 23 | (5<<11) */
 SHORTARFCN_24 24
 SHORTARFCN_24_STD_900 2072 /* 24 | (1<<11) */
 SHORTARFCN_24_STD_DUAL 10264 /* 24 | (5<<11) */
 SHORTARFCN_25 25
 SHORTARFCN_26 26
 SHORTARFCN_27 27
 SHORTARFCN_28 28
 SHORTARFCN_29 29
 SHORTARFCN_30 30
 SHORTARFCN_32 32
 SHORTARFCN_34 34
 SHORTARFCN_40 40
 SHORTARFCN_42 42
 SHORTARFCN_42_STD_900 2090 /* 42 | (1<<11) */
 SHORTARFCN_46 46
 SHORTARFCN_52 52
 SHORTARFCN_59 59
 SHORTARFCN_64 64
 SHORTARFCN_66 66
 SHORTARFCN_69 69
 SHORTARFCN_73 73
 SHORTARFCN_74 74
 SHORTARFCN_75 75
 SHORTARFCN_76 76
 SHORTARFCN_80 80
 SHORTARFCN_87 87
 SHORTARFCN_90 90
 SHORTARFCN_100 100
 SHORTARFCN_108 108
 SHORTARFCN_110 110
 SHORTARFCN_114 114
 SHORTARFCN_115 115
 SHORTARFCN_120 120
 SHORTARFCN_124 124
 SHORTARFCN_124_STD_900 2172 /* 124 | (1<<11) */
 SHORTARFCN_124_STD_DUAL 10364 /* 124 | (5<<11) */
 SHORTARFCN_512 512
 SHORTARFCN_512_STD_1800 8704 /* 512 | (4<<11) */
 SHORTARFCN_512_STD_DUAL 10752 /* 512 | (5<<11) */
 SHORTARFCN_513 513
 SHORTARFCN_514 514
 SHORTARFCN_515 515
 SHORTARFCN_516 516
 SHORTARFCN_517 517
 SHORTARFCN_518 518
 SHORTARFCN_519 519
 SHORTARFCN_520 520
 SHORTARFCN_521 521
 SHORTARFCN_522 522
 SHORTARFCN_523 523
 SHORTARFCN_524 524
 SHORTARFCN_525 525
 SHORTARFCN_526 526

SHORTARFCN_527	527	
SHORTARFCN_528	528	
SHORTARFCN_529	529	
SHORTARFCN_530	530	
SHORTARFCN_531	531	
SHORTARFCN_532	532	
SHORTARFCN_533	533	
SHORTARFCN_534	534	
SHORTARFCN_535	535	
SHORTARFCN_536	536	
SHORTARFCN_537	537	
SHORTARFCN_538	538	
SHORTARFCN_539	539	
SHORTARFCN_540	540	
SHORTARFCN_541	541	
SHORTARFCN_542	542	
SHORTARFCN_543	543	
SHORTARFCN_544	544	
SHORTARFCN_545	545	
SHORTARFCN_546	546	
SHORTARFCN_547	547	
SHORTARFCN_548	548	
SHORTARFCN_549	549	
SHORTARFCN_550	550	
SHORTARFCN_551	551	
SHORTARFCN_570	570	
SHORTARFCN_578	578	
SHORTARFCN_580	580	
SHORTARFCN_580_STD_1800		8772 /* 580 (4<<11) */
SHORTARFCN_580_STD_DUAL		10820 /* 580 (5<<11) */
SHORTARFCN_588	588	
SHORTARFCN_600	600	
SHORTARFCN_637	637	
SHORTARFCN_637_STD_1800		8829 /* 637 (4<<11) */
SHORTARFCN_637_STD_DUAL		10877 /* 637 (5<<11) */
SHORTARFCN_687	687	
SHORTARFCN_700	700	
SHORTARFCN_810	810	
SHORTARFCN_810_STD_1800		9002 /* 810 (4<<11) */
SHORTARFCN_810_STD_DUAL		11050 /* 810 (5<<11) */
SHORTARFCN_853	853	
SHORTARFCN_883	883	
SHORTARFCN_885	885	
SHORTARFCN_885_STD_1800		9077 /* 885 (4<<11) */
SHORTARFCN_885_STD_DUAL		11125 /* 885 (5<<11) */
SHORTARFCN_975	975	
SHORTARFCN_1023	1023	
BYTE BA_ID_1	1	
BYTE BA_ID_2	2	
BYTE BA_ID_3	3	
BYTE BA_ID_4	4	
BYTE BS_AG_BLKs_RES_2	2	
BYTE BS_AG_BLKs_RES_3	3	
BYTE BS_AG_BLKs_RES_5	5	
BYTE BS_AG_BLKs_RES_7	7	
BYTE BS_PA_MFRMS_0	0	
BYTE BS_PA_MFRMS_1	1	
BYTE BS_PA_MFRMS_2	2	
BYTE BS_PA_MFRMS_3	3	

BYTE	BS_PA_MFRMS_4	4	
BYTE	BS_PA_MFRMS_5	5	
BYTE	BS_PA_MFRMS_6	6	
BYTE	BS_PA_MFRMS_7	7	
BYTE	BS_PA_MFRMS_8	8	
BYTE	BS_PA_MFRMS_9	9	
BYTE	BSIC_0	0	
BYTE	BSIC_1	1	
BYTE	BSIC_2	2	
BYTE	BSIC_10	10	
BYTE	BSIC_16	16	
BYTE	CCCH_GROUP_0	0	
BYTE	CCCH_GROUP_2	2	
BYTE	CHANNEL_REQUEST_1		0xA0
BYTE	CHANNEL_REQUEST_2		0xA3
BYTE	CHANNELS_0	0	
BYTE	CHANNELS_1	1	
BYTE	CHANNELS_2	2	
BYTE	CHANNELS_3	3	
BYTE	CHANNELS_4	4	
BYTE	CHANNELS_5	5	
BYTE	CHANNELS_8	8	
BYTE	CHANNELS_9	9	
BYTE	CHANNELS_17	17	
BYTE	CHANNELS_10	10	

SHORT	CONST_0	0
SHORT	CONST_1	1
SHORT	CONST_2	2
SHORT	CONST_3	3
SHORT	CONST_4	4
SHORT	CONST_5	5
SHORT	CONST_6	6
SHORT	CONST_7	7
SHORT	CONST_8	8
SHORT	CONST_9	9
SHORT	CONST_10	10
SHORT	CONST_11	11
SHORT	CONST_12	12
SHORT	CONST_13	13
SHORT	CONST_14	14
SHORT	CONST_15	15
SHORT	CONST_16	16
SHORT	CONST_17	17
SHORT	CONST_17	17
SHORT	CONST_18	18
SHORT	CONST_19	19
SHORT	CONST_20	20
SHORT	CONST_21	21
SHORT	CONST_22	22
SHORT	CONST_23	23
SHORT	CONST_24	24
SHORT	CONST_25	25
SHORT	CONST_26	26
SHORT	CONST_27	27
SHORT	CONST_28	28

SHORT	CONST_29	29
SHORT	CONST_30	30
SHORT	CONST_31	31
SHORT	CONST_32	32
SHORT	CONST_33	33
SHORT	CONST_34	34
SHORT	CONST_35	35
SHORT	CONST_36	36
SHORT	CONST_37	37
SHORT	CONST_38	38
SHORT	CONST_39	39
SHORT	CONST_40	40
SHORT	CONST_41	41
SHORT	CONST_42	42
SHORT	CONST_43	43
SHORT	CONST_44	44
SHORT	CONST_45	45
SHORT	CONST_46	46
SHORT	CONST_47	47
SHORT	CONST_48	48
SHORT	CONST_49	49
SHORT	CONST_50	50
SHORT	CONST_51	51
SHORT	CONST_52	52
SHORT	CONST_53	53
SHORT	CONST_54	54
SHORT	CONST_55	55
SHORT	CONST_56	56
SHORT	CONST_57	57
SHORT	CONST_58	58
SHORT	CONST_59	59
SHORT	CONST_60	60
SHORT	CONST_61	61
SHORT	CONST_62	62
SHORT	CONST_63	63
SHORT	CONST_75	75
SHORT	CONST_123	123
SHORT	CONST_124	124
SHORT	CONST_125	125
SHORT	CONST_126	126
SHORT	CONST_127	127
SHORT	CONST_128	128
SHORT	CONST_129	129
SHORT	CONST_130	130
SHORT	CONST_131	131
SHORT	CONST_132	132
SHORT	CONST_133	133
SHORT	CONST_134	134
SHORT	CONST_135	135
SHORT	CONST_136	136
SHORT	CONST_137	137
SHORT	CONST_138	138
SHORT	CONST_139	130
SHORT	CONST_974	974

```

SHORT      CONST_975 975
SHORT      CONST_1022 1022
SHORT      CONST_1023 1023

BYTE DLT_10      10
BYTE DLT_24      24
SHORT      FN_BURST_161434
SHORT      FN_OFFSET_0      0
SHORT      FN_OFFSET_1      101
SHORT      FN_OFF_1      1
SHORT      FN_OFF_2      2
SHORT      FN_OFF_3      3
SHORT      FN_OFF_4      4
SHORT      FN_OFF_16      16
SHORT      FN_OFFSET_14      114
SHORT      FN_OFFSET_102      10*102
SHORT      FN_OFFSET_124      224
SHORT      FN_OFFSET_153      7*153
SHORT      FN_OFFSET_204      5*204
SHORT      FN_OFFSET_255      4*255
SHORT      FN_OFFSET_306      3*306
SHORT      FN_OFFSET_357      3*357
SHORT      FN_OFFSET_408      2*408
SHORT      FN_OFFSET_459      2*459
SHORT      FN_OFFSET_10      10
SHORT      FN_OFFSET_11      11
SHORT      FN_OFFSET_23      23
SHORT      FN_OFFSET_25      25
SHORT      FN_OFFSET_87      87
SHORT      FN_OFFSET_512      512
SHORT      FN_OFFSET_513      513
SHORT      FN_OFFSET_540      540
SHORT      FN_OFFSET_570      570
SHORT      FN_OFFSET_580      580
SHORT      FN_OFFSET_600      600
SHORT      FN_OFFSET_637      637
SHORT      FN_OFFSET_700      700
SHORT      FN_OFFSET_810      810
SHORT      FN_OFFSET_816      816
SHORTFN_OFFSET_874      874
SHORTFN_OFFSET_885      885
SHORT      FN_OFFSET_918      918
SHORT      FN_OFFSET_1020      1020
SHORT      FN_OFFSET_1071      1071
BYTE MF51_0      0
BYTE MF51_2      2
BYTE MF51_3      3
BYTE MF51_4      4
BYTE MF51_5      5
BYTE MF51_7      7
BYTE NCC_PERMITTED_44
BYTE PBI_0      0
BYTE PBI_1      1
BYTE PBI_2      2

```

```

BYTE PBI_4 4
BYTE PG_0 0
BYTE PG_1 1
BYTE PG_11 11
BYTE PG_20 20
BYTE PG_23 23
BYTE PGROUP_1 1
BYTE PGROUP_3 3
BYTE POWER_12 12
BYTE POWER_1 1
/*
BYTE POWER_CLASS_2 2
BYTE POWER_CLASS_3 3
BYTE POWER_CLASS_4 4
BYTE POWER_CLASS_5 5
*/
BYTE RAND_BURST_1 6
BYTE RAND_BURST_2 8
BYTE RXLEV_11 11
BYTE RXLEV_12 12
BYTE RXLEV_23 23
BYTE RXLEV_25 25
BYTE RXLEV_43 43
BYTE RXLEV_44 44
BYTE RXLEV_55 55
BYTE RXLEV_56 56
SHORT NORMAL_BCCH_BITMAP 0x00FF
SHORT SYS_12342BIS 0x030F
SHORT SYS_2342BIS 0x030E
SHORT SYS_34 0x000C
BYTE TC_0 0
BYTE TC_1 1
BYTE TC_2 2
BYTE TC_3 3
BYTE TC_4 4
BYTE TC_5 5
BYTE TC_6 6
BYTE TC_7 7
LONG TIME_ALIGNMT_0 0
LONG TIME_ALIGNMT_1 1
SHORT TIME_ALIGNMT_2 2
SHORT TIME_ALIGNMT_3 3
SHORT TIME_ALIGNMT_4 4
SHORT TIME_ALIGNMT_10 10
SHORT TIME_ALIGNMT_11 11
SHORT TIME_ALIGNMT_14 14
SHORT TIME_ALIGNMT_16 16
SHORT TIME_ALIGNMT_124 124
SHORT TIME_ALIGNMT_23 23
SHORT TIME_ALIGNMT_25 25
SHORT TIME_ALIGNMT_87 87
SHORT TIME_ALIGNMT_512 512
SHORT TIME_ALIGNMT_513 513
SHORT TIME_ALIGNMT_540 540

```

```

SHORT      TIME_ALIGNMT_570570
SHORT      TIME_ALIGNMT_580580
SHORT      TIME_ALIGNMT_600600
SHORT      TIME_ALIGNMT_637637
SHORT      TIME_ALIGNMT_700700
SHORT      TIME_ALIGNMT_810810
SHORT      TIME_ALIGNMT_885885
BYTE TIMING_ADVANCE 0x1E
BYTE TN_0 0
BYTE TN_4 4
BYTE LOOP_0 0
BYTE LOOP_2 2
BYTE LOOP_4 4
BYTE LOOP_6 6
BYTE LOOP_8 8
BYTE LOOP_10 10
BYTE LOOP_12 12
BYTE LOOP_14 14
BYTE LOOP_16 16
BYTE LOOP_18 18
BYTE LOOP_20 20
BYTE LOOP_22 22
BYTE LOOP_24 24
BYTE LOOP_26 26
BYTE LOOP_28 28
BYTE LOOP_30 30
BYTE LOOP_A 0
BYTE LOOP_B 1
BYTE LOOP_C 2
BYTE LOOP_D 3
BYTE LOOP_E 4
BYTE LOOP_F 5
BYTE SUB_CHANNEL_0 0
BYTE TXPWR0 10
BYTE VALID_REPORT 1
BYTE TV_VALID_TIMING_INFO_SB 2
BYTE STOP_SIZE_1 1
BYTE STOP_SIZE_0 0
LONG FIRST_BLOCKS_0_B 0x032042
BYTE SCHED_LEN_5 5
LONG FIRST_BLOCKS_1_B 0

BEGIN_STRUCT_ARRAY(NCELL_LIST_1_EOTD, 12)
    NCELL_ARFCN_14,
    NCELL_ARFCN_EMPTY,
    NCELL_ARFCN_EMPTY,
    NCELL_ARFCN_EMPTY,
    NCELL_ARFCN_EMPTY,
    NCELL_ARFCN_EMPTY,
    NCELL_ARFCN_EMPTY,
    NCELL_ARFCN_EMPTY,
    NCELL_ARFCN_EMPTY,
    NCELL_ARFCN_EMPTY,
    NCELL_ARFCN_EMPTY,
    NCELL_ARFCN_EMPTY,

```


NCELL_ARFCN_EMPTY
ENDARRAY

BEGIN_STRUCT_ARRAY (NCELL_LIST_3_EOTD, 12)
NCELL_ARFCN_1,
NCELL_ARFCN_14,
NCELL_ARFCN_124,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
ENDARRAY

BEGIN_STRUCT_ARRAY (NCELL_LIST_5_EOTD_IDLE, 12)
NCELL_ARFCN_14,
NCELL_ARFCN_25,
NCELL_ARFCN_512,
NCELL_ARFCN_580,
NCELL_ARFCN_637,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
ENDARRAY

BEGIN_STRUCT_ARRAY (NCELL_LIST_6_EOTD_IDLE, 12)
NCELL_ARFCN_14,
NCELL_ARFCN_25,
NCELL_ARFCN_512,
NCELL_ARFCN_580,
NCELL_ARFCN_637,
NCELL_ARFCN_885,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
NCELL_ARFCN_EMPTY,
ENDARRAY

BEGIN_STRUCT_ARRAY (NCELL_LIST_6_EOTD_DEDI, 12)
NCELL_ARFCN_637,
NCELL_ARFCN_25,
NCELL_ARFCN_14,
NCELL_ARFCN_512,
NCELL_ARFCN_580,

```

        NCELL_ARFCN_885,
        NCELL_ARFCN_EMPTY,
        NCELL_ARFCN_EMPTY,
        NCELL_ARFCN_EMPTY,
        NCELL_ARFCN_EMPTY,
        NCELL_ARFCN_EMPTY,
        NCELL_ARFCN_EMPTY
    ENDARRAY
BEGIN_STRUCT_ARRAY(NCELL_LIST_8_EOTD_DEDI, 12)
    NCELL_ARFCN_637,
    NCELL_ARFCN_25,
    NCELL_ARFCN_14,
    NCELL_ARFCN_512,
    NCELL_ARFCN_580,
    NCELL_ARFCN_885,
    NCELL_ARFCN_516,
    NCELL_ARFCN_525,
    NCELL_ARFCN_EMPTY,
    NCELL_ARFCN_EMPTY,
    NCELL_ARFCN_EMPTY,
    NCELL_ARFCN_EMPTY
ENDARRAY

/* used for stopping NCELL BCCH and SYNC requests */
BEGIN_SHORT_ARRAY(STOP_ARRAY_EMPTY_6, 6)  0, 0, 0, 0, 0, 0 ENDARRAY
BEGIN_SHORT_ARRAY(STOP_ARRAY_EMPTY_12, 12)
    0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0
ENDARRAY
BEGIN_SHORT_ARRAY(STOP_ARRAY_14, 6)  ARFCN_14,0,0,0,0,0 ENDARRAY
BEGIN_SHORT_ARRAY(STOP_ARRAY_124, 6) ARFCN_124,0,0,0,0,0 ENDARRAY
BEGIN_SHORT_ARRAY(STOP_ARRAY_25,6)  ARFCN_25,0,0,0,0,0 ENDARRAY
BEGIN_SHORT_ARRAY(STOP_ARRAY_512, 6) ARFCN_512,0,0,0,0,0 ENDARRAY
BEGIN_SHORT_ARRAY(STOP_ARRAY_580,6)  ARFCN_580,0,0,0,0,0 ENDARRAY
BEGIN_SHORT_ARRAY(STOP_ARRAY_637,6)  ARFCN_637,0,0,0,0,0 ENDARRAY
BEGIN_SHORT_ARRAY(STOP_ARRAY_885,6)  ARFCN_885,0,0,0,0,0 ENDARRAY
BEGIN_SHORT_ARRAY(STOP_ARRAY_87,6)   ARFCN_87,0,0,0,0,0 ENDARRAY
BEGIN_SHORT_ARRAY(STOP_ARRAY_11,6)   ARFCN_11,0,0,0,0,0 ENDARRAY
BEGIN_SHORT_ARRAY(STOP_ARRAY_700,6)  ARFCN_700,0,0,0,0,0 ENDARRAY
BEGIN_SHORT_ARRAY(STOP_ARRAY_600,6)  ARFCN_600,0,0,0,0,0 ENDARRAY
BEGIN_SHORT_ARRAY(STOP_ARRAY_513,6)  ARFCN_513,0,0,0,0,0 ENDARRAY
BEGIN_SHORT_ARRAY(STOP_ARRAY_810,6)  ARFCN_810,0,0,0,0,0 ENDARRAY
BEGIN_SHORT_ARRAY(STOP_ARRAY_1,6)    ARFCN_1,0,0,0,0,0 ENDARRAY

/* AMR */

BYTE    CHANNEL_MODE_AMR 0x41
BYTE    CHM_AFS           0x0B
BYTE    CHM_AHS           0x0A
BYTE    NSCB              0x00
BYTE    ICM_I_S           0x01
BYTE    ST_MODE_1         0x01
BYTE    ACS_4             0x0F
BYTE    V_COD_PROP        0x01
    
```

```
BYTE      C_COD_PROP_4      0x03

BEGINARRAY(A_THRESHOLD,3)
    0x01,0x03,0x05
ENDARRAY
BEGINARRAY(A_HYSTERESIS,3)
    0x01,0x03,0x05
ENDARRAY

BEGIN_PSTRUCT_ARRAY (SA_COD_PROP_4, 3)
    S_COD_PROP_1,
    S_COD_PROP_2,
    S_COD_PROP_3
ENDARRAY

BEGIN_PSTRUCT ("cod_prop", S_COD_PROP_1)
    SET_COMP ("codec_thr", 0x01)
    SET_COMP ("codec_hyst",      0x01)
ENDSTRUCT
BEGIN_PSTRUCT ("cod_prop", S_COD_PROP_2)
    SET_COMP ("codec_thr", 0x03)
    SET_COMP ("codec_hyst",      0x03)
ENDSTRUCT
BEGIN_PSTRUCT ("cod_prop", S_COD_PROP_3)
    SET_COMP ("codec_thr", 0x05)
    SET_COMP ("codec_hyst",      0x05)
ENDSTRUCT

BEGIN_PSTRUCT ("amr_conf", S_AMR_CONF_4_ICMI)
    SET_COMP ("nscb",      NSCB)
    SET_COMP ("icmi",      ICMI_S)
    SET_COMP ("st_mode",   ST_MODE_1)
    SET_COMP ("acs",       ACS_4)
    SET_COMP ("v_cod_prop",      V_COD_PROP)
    SET_COMP ("c_cod_prop",      C_COD_PROP_4)
    SET_COMP ("cod_prop", SA_COD_PROP_4)
ENDSTRUCT

BEGIN_PSTRUCT ("amr_configuration", S_AMR_CONFIGURATION)
    SET_COMP ("noise_suppression_control_bit", NSCB)
    SET_COMP ("initial_codec_mode_indicator", ICMI_S)
    SET_COMP ("initial_codec_mode",   ST_MODE_1)
    SET_COMP ("active_codec_set", ACS_4)
    SET_COMP ("threshold", A_THRESHOLD)
    SET_COMP ("hysteresis",      A_HYSTERESIS)
ENDSTRUCT

/* requests full SCELL BCCH reading */
BEGIN_PSTRUCT_ARRAY(FULL_READ, MAX_SCHED_SIZE)
    FULL_READ_ARRAY,
    EMPTY_SCELL_NBCCH,
    EMPTY_SCELL_NBCCH,
    EMPTY_SCELL_NBCCH,
    EMPTY_SCELL_NBCCH,
```

```
        EMPTY_CELL_NBCCH,
        EMPTY_CELL_NBCCH,
        EMPTY_CELL_NBCCH,
        EMPTY_CELL_NBCCH,
        EMPTY_CELL_NBCCH
    ENDARRAY

    BEGIN_PSTRUCT("schedule_array", FULL_READ_ARRAY)
        SET_COMP("modulus", 1)
        SET_COMP("relative_position", 0)
    ENDSTRUCT

    BEGIN_PSTRUCT("schedule_array", EMPTY_CELL_NBCCH)
        SET_COMP("modulus", 0)
        SET_COMP("relative_position", 0)
    ENDSTRUCT

    /* requests periodic 30sec SCELL BCCH reading */
    BEGIN_PSTRUCT_ARRAY(PERIODIC_SCELL_BCCH_ARRAY, MAX_SCHED_SIZE)
        SCELL_TC0,
        SCELL_TC1,
        SCELL_TC2,
        SCELL_TC3,
        SCELL_TC4,
        SCELL_TC5,
        SCELL_TC6,
        SCELL_TC7,
        EMPTY_CELL_NBCCH,
        EMPTY_CELL_NBCCH
    ENDARRAY

    BEGIN_PSTRUCT("schedule_array", SCELL_TC0)
        SET_COMP("modulus", 128)
        SET_COMP("relative_position", 0)
    ENDSTRUCT

    BEGIN_PSTRUCT("schedule_array", SCELL_TC1)
        SET_COMP("modulus", 128)
        SET_COMP("relative_position", 1)
    ENDSTRUCT

    BEGIN_PSTRUCT("schedule_array", SCELL_TC2)
        SET_COMP("modulus", 128)
        SET_COMP("relative_position", 2)
    ENDSTRUCT

    BEGIN_PSTRUCT("schedule_array", SCELL_TC3)
        SET_COMP("modulus", 128)
        SET_COMP("relative_position", 3)
    ENDSTRUCT

    BEGIN_PSTRUCT("schedule_array", SCELL_TC4)
        SET_COMP("modulus", 128)
```

```
        SET_COMP("relative_position", 4)
    ENDSTRUCT

    BEGIN_PSTRUCT("schedule_array", SCELL_TC5)
        SET_COMP("modulus", 128)
        SET_COMP("relative_position", 5)
    ENDSTRUCT

    BEGIN_PSTRUCT("schedule_array", SCELL_TC6)
        SET_COMP("modulus", 128)
        SET_COMP("relative_position", 6)
    ENDSTRUCT

    BEGIN_PSTRUCT("schedule_array", SCELL_TC7)
        SET_COMP("modulus", 128)
        SET_COMP("relative_position", 7)
    ENDSTRUCT

    BEGINARRAY(IMSI,15)
        0,0,1,0,1,3,8,2,3,3,0,5,9,4,5
    ENDARRAY

    LONG TMSI 0x05223366L

    BEGIN_PSTRUCT ("mid", MS_ID_IMSI_TMSI)
        SET_COMP("len_imsi",15)
        SET_COMP("imsi", IMSI)
        SET_COMP("v_tmsi", 1)
        SET_COMP("tmsi",TMSI)
        SKIP_COMP("v_ptmsi")
        SKIP_COMP("ptmsi")
    ENDSTRUCT

    BEGINARRAY(IMSI2,15)
        0,0,1,0,1,3,8,2,3,3,0xF,0xF,0xF,0xF,0xF
    ENDARRAY

    LONG TMSI2 142L

    BEGIN_PSTRUCT ("mid", MS_ID_SHORT_IMSI_TMSI)
        SET_COMP("len_imsi",10)
        SET_COMP("imsi", IMSI2)
        SET_COMP("v_tmsi", 1)
        SET_COMP("tmsi", TMSI2)
        SKIP_COMP("v_ptmsi")
        SKIP_COMP("ptmsi")
    ENDSTRUCT

/*
0x04  Power Class GSM 900
0x00  Power Class DCS 1800 (not
      used)
*/
```

```
BEGIN_PSTRUCT("classmark", CLASS_GSM_900)
    SET_COMP("pclass", 4)
    SET_COMP("pclass2", 0)
ENDSTRUCT
```

/*

0x04	Power Class DCS 1800
------	----------------------

0x00	(not used)
------	------------

*/

```
BEGIN_PSTRUCT("classmark", CLASS_GSM_1800)
    SET_COMP("pclass", 2)
    SET_COMP("pclass2", 0)
ENDSTRUCT
```

/*

0x03	Power Class PCS 1900
------	----------------------

0x00	(not used)
------	------------

*/

```
BEGIN_PSTRUCT("classmark", CLASS_GSM_1900)
    SET_COMP("pclass", 3)
    SET_COMP("pclass2", 0)
ENDSTRUCT
```

/*

0x03	Power Class GSM 900
------	---------------------

0x01	Power Class DCS 1800
------	----------------------

*/

```
BEGIN_PSTRUCT("classmark", CLASS_DUAL)
    SET_COMP("pclass", CLASS_4)
    SET_COMP("pclass2", CLASS_2)
ENDSTRUCT
```

/*

0x03,	message identifier for
0x03	CBCH

0x07,	message identifier for
0x07	CBCH

0x0B,	message identifier for
0x0D	CBCH

0xFF, ...	other fields not used
-----------	-----------------------

*/

```
BEGINARRAY (MSG_ID_3_7_11_TO_13, 40)
    3, 0, 3, 0,
    7, 0, 7, 0,
    11, 0, 13, 0,
    0xFF, 0xFF, 0xFF, 0xFF,
    0xFF, 0xFF, 0xFF, 0xFF,
    0xFF, 0xFF, 0xFF, 0xFF,
    0xFF, 0xFF, 0xFF, 0xFF,
    0xFF, 0xFF, 0xFF, 0xFF,
    0xFF, 0xFF, 0xFF, 0xFF,
    0xFF, 0xFF, 0xFF, 0xFF
```

```
ENDARRAY
```

BEGINARRAY (MSG_ID_1_TO_20, 40)

1, 0, 20, 0,
0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF

ENDARRAY

/*

0xFF, 0xFF	data coding scheme for
...	CBCH
0xFF, ...	other fields not used

*/

BEGINARRAY (DCS_ID_EMPTY, 40)

0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF,
0xFF, 0xFF, 0xFF, 0xFF

ENDARRAY

/*

0x00	First block
0x00, 0x00	Serial number
0x00, 0x05	Message identifier
0x00	Data coding scheme
0x01	Page
0xAA, ...	Content

*/

BEGIN_PSTRUCT ("l2_frame", CBCH_1_7)

SET_COMP ("content", CBCH_1_7_CONTENT)

ENDSTRUCT

BEGINARRAY_PART (CBCH_1_7_CONTENT, 23)

0x00,
0x00, 0x00,
0x00, 0x07,
0x00,
0x01,
0xAA, 0xAB, 0xAC, 0xAD,
0xAE, 0xAF, 0xB0, 0xB1,
0xB2, 0xB3, 0xB4, 0xB5,

```
    0xB6, 0xB7, 0xB8, 0xB9  
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", CBCH_1_7_B)  
    SET_COMP ("content", CBCH_1_7_B_CONTENT)  
ENDSTRUCT
```

```
BEGINARRAY_PART (CBCH_1_7_B_CONTENT, 23)  
    0x00,  
    0x00, 0x01,  
    0x00, 0x07,  
    0x00,  
    0x01,  
    0xAA, 0xAB, 0xAC, 0xAD,  
    0xAE, 0xAF, 0xB0, 0xB1,  
    0xB2, 0xB3, 0xB4, 0xB5,  
    0xB6, 0xB7, 0xB8, 0xB9  
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", CBCH_1_2)  
    SET_COMP ("content", CBCH_1_2_CONTENT)  
ENDSTRUCT
```

```
BEGINARRAY_PART (CBCH_1_2_CONTENT, 23)  
    0x00,  
    0x00, 0x00,  
    0x00, 0x02,  
    0x00,  
    0x01,  
    0xAA, 0xAB, 0xAC, 0xAD,  
    0xAE, 0xAF, 0xB0, 0xB1,  
    0xB2, 0xB3, 0xB4, 0xB5,  
    0xB6, 0xB7, 0xB8, 0xB9  
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", CBCH_1_3)  
    SET_COMP ("content", CBCH_1_3_CONTENT)  
ENDSTRUCT
```

```
BEGINARRAY_PART (CBCH_1_3_CONTENT, 23)  
    0x00,  
    0x00, 0x00,  
    0x00, 0x03,  
    0x00,  
    0x01,  
    0xAA, 0xAB, 0xAC, 0xAD,  
    0xAE, 0xAF, 0xB0, 0xB1,  
    0xB2, 0xB3, 0xB4, 0xB5,  
    0xB6, 0xB7, 0xB8, 0xB9  
ENDARRAY
```



```
BEGIN_PSTRUCT ("l2_frame", CBCH_1_8)
    SET_COMP ("content", CBCH_1_8_CONTENT)
ENDSTRUCT
```

```
BEGINARRAY_PART (CBCH_1_8_CONTENT, 23)
    0x00,
    0x00, 0x00,
    0x00, 0x08,
    0x00,
    0x01,
    0xAA, 0xAB, 0xAC, 0xAD,
    0xAE, 0xAF, 0xB0, 0xB1,
    0xB2, 0xB3, 0xB4, 0xB5,
    0xB6, 0xB7, 0xB8, 0xB9
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", CBCH_1_11)
    SET_COMP ("content", CBCH_1_11_CONTENT)
ENDSTRUCT
```

```
BEGINARRAY_PART (CBCH_1_11_CONTENT, 23)
    0x00,
    0x00, 0x00,
    0x00, 0x0B,
    0x00,
    0x01,
    0xAA, 0xAB, 0xAC, 0xAD,
    0xAE, 0xAF, 0xB0, 0xB1,
    0xB2, 0xB3, 0xB4, 0xB5,
    0xB6, 0xB7, 0xB8, 0xB9
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", CBCH_1_12)
    SET_COMP ("content", CBCH_1_12_CONTENT)
ENDSTRUCT
```

```
BEGINARRAY_PART (CBCH_1_12_CONTENT, 23)
    0x00,
    0x00, 0x00,
    0x00, 0x0C,
    0x00,
    0x01,
    0xAA, 0xAB, 0xAC, 0xAD,
    0xAE, 0xAF, 0xB0, 0xB1,
    0xB2, 0xB3, 0xB4, 0xB5,
    0xB6, 0xB7, 0xB8, 0xB9
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", CBCH_1_13)
    SET_COMP ("content", CBCH_1_13_CONTENT)
```

ENDSTRUCT

BEGINARRAY_PART (CBCH_1_13_CONTENT, 23)

0x00,
0x00, 0x00,
0x00, 0x0D,
0x00,
0x01,
0xAA, 0xAB, 0xAC, 0xAD,
0xAE, 0xAF, 0xB0, 0xB1,
0xB2, 0xB3, 0xB4, 0xB5,
0xB6, 0xB7, 0xB8, 0xB9

ENDARRAY

BEGIN_PSTRUCT ("I2_frame", CBCH_1_14)

SET_COMP ("content", CBCH_1_14_CONTENT)

ENDSTRUCT

BEGINARRAY_PART (CBCH_1_14_CONTENT, 23)

0x00,
0x00, 0x00,
0x00, 0x0E,
0x00,
0x01,
0xAA, 0xAB, 0xAC, 0xAD,
0xAE, 0xAF, 0xB0, 0xB1,
0xB2, 0xB3, 0xB4, 0xB5,
0xB6, 0xB7, 0xB8, 0xB9

ENDARRAY

BEGIN_PSTRUCT ("I2_frame", NULL_MESSAGE)

SET_COMP ("content", NULL_MESSAGE_CONTENT)

ENDSTRUCT

BEGINARRAY_PART (NULL_MESSAGE_CONTENT, 23)

0x0F,
0x2B, 0x2B, 0x2B, 0x2B,
0x2B, 0x2B, 0x2B, 0x2B,
0x2B, 0x2B, 0x2B, 0x2B,
0x2B, 0x2B, 0x2B, 0x2B,
0x2B, 0x2B, 0x2B, 0x2B,
0x2B, 0x2B

ENDARRAY

BEGIN_PSTRUCT ("I2_frame", SCHEDULE_1_A)

SET_COMP ("content", SCHEDULE_1_A_CONTENT)

ENDSTRUCT

BEGINARRAY_PART (SCHEDULE_1_A_CONTENT, 23)

0x08,
0x01, 0x12,

```

    0x12, 0x04, 0x80,
    0x00, 0x00, 0x00,
    0x80, 0x05,
    0x41,
    0x80, 0x07,
    0x41,
    0x40,
    0x80, 0x03,
    0x40, 0x40, 0x40, 0x40, 0x40
ENDARRAY

/* unscheduled schedule msg
    beg_sched: 11
    end_sched: 18
    msg map:    4, msg_id 5 wrong msg_id    -> not read
               7, optional, read advised    -> read
               14, msg_id 7                 -> read
               17 optional, read advised    -> read
if old msgs are also read:
    msg map:    2, msg_id 3                 -> read
               16, msg_id 8 wrong id        -> not read
               18, repeat of 2              -> read
*/

```

```

BEGIN_PSTRUCT ("l2_frame", SCHEDULE_1_B)
    SET_COMP ("content", SCHEDULE_1_B_CONTENT)
ENDSTRUCT

```

```

BEGINARRAY_PART (SCHEDULE_1_B_CONTENT, 23)
    0x08,
    0x0B, 0x12,
    0x12, 0x04, 0x80,
    0x00, 0x00, 0x00,
    0x80, 0x05,
    0x41,
    0x80, 0x07,
    0x41,
    0x40,
    0x80, 0x03,
    0x40, 0x40, 0x40, 0x40, 0x40
ENDARRAY

```

```

/*


|           |              |
|-----------|--------------|
| 0x01      | Second block |
| 0xBA, ... | Content      |


*/

```

```

BEGIN_PSTRUCT ("l2_frame", CBCH_2)
    SET_COMP ("content", CBCH_2_CONTENT)
ENDSTRUCT

```

```

BEGINARRAY_PART (CBCH_2_CONTENT, 23)
    0x01,

```

```

        0xBA, 0xBB, 0xBC, 0xBD,
        0xBE, 0xBF, 0xC0, 0xC1,
        0xC2, 0xC3, 0xC4, 0xC5,
        0xC6, 0xC7, 0xC8, 0xC9,
        0xCA, 0xCB, 0xCC, 0xCD,
        0xCE, 0xCF
    ENDARRAY

    BEGIN_PSTRUCT ("l2_frame", SCHEDULE_2)
        SET_COMP ("content", SCHEDULE_2_CONTENT)
    ENDSTRUCT

    BEGINARRAY_PART (SCHEDULE_2_CONTENT, 23)
        0x01,
        0x40, 0x40, 0x40, 0x40, 0x40,
        0x80, 0x08,
        0x02,
        0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
        0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
        0x2B, 0x2B, 0x2B, 0x2B
    ENDARRAY

/*


|           |             |
|-----------|-------------|
| 0x02      | third block |
| 0xD0, ... | content     |


*/

    BEGIN_PSTRUCT ("l2_frame", CBCH_3)
        SET_COMP ("content", CBCH_3_CONTENT)
    ENDSTRUCT

    BEGINARRAY_PART (CBCH_3_CONTENT, 23)
        0x02,
        0xD0, 0xD1, 0xD2, 0xD3,
        0xD4, 0xD5, 0xD6, 0xD7,
        0xD8, 0xD9, 0xDA, 0xDB,
        0xDC, 0xDD, 0xDE, 0xDF,
        0xE0, 0xE1, 0xE2, 0xE3,
        0xE4, 0xE5
    ENDARRAY

    BEGIN_PSTRUCT ("l2_frame", SCHEDULE_3)
        SET_COMP ("content", SCHEDULE_3_CONTENT)
    ENDSTRUCT

    BEGINARRAY_PART (SCHEDULE_3_CONTENT, 23)
        0x02,
        0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
        0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
        0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
        0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
        0x2B, 0x2B
    ENDARRAY

```

```

/*
0x03          fourth block
0xE6, ...    content
*/

```

```

BEGIN_PSTRUCT ("l2_frame", CBCH_4)
    SET_COMP ("content", CBCH_4_CONTENT)
ENDSTRUCT

```

```

BEGINARRAY_PART (CBCH_4_CONTENT, 23)
    0x03,
    0xE6, 0xE7, 0xE8, 0xE9,
    0xEA, 0xEB, 0xEC, 0xED,
    0xEE, 0xEF, 0xF0, 0xF1,
    0xF2, 0xF3, 0xF4, 0xF5,
    0xF6, 0xF7, 0xF8, 0xF9,
    0xFA, 0xFB
ENDARRAY

```

```

BEGIN_PSTRUCT ("l2_frame", SCHEDULE_4)
    SET_COMP ("content", SCHEDULE_4_CONTENT)
ENDSTRUCT

```

```

BEGINARRAY_PART (SCHEDULE_4_CONTENT, 23)
    0x13,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B
ENDARRAY

```

```

/*
0x58,          Length of field
0x00, 0x00    serial number
0x00, 0x05    message identifier
0x00          data coding scheme
0x01          Page
0xAA, ...     Content
*/

```

```

BEGINARRAY (CBCH_MSG_3, 88)
    0x00, 0x00,
    0x00, 0x03,
    0x00,
    0x01,
    0xAA, 0xAB, 0xAC, 0xAD,
    0xAE, 0xAF, 0xB0, 0xB1,
    0xB2, 0xB3, 0xB4, 0xB5,
    0xB6, 0xB7, 0xB8, 0xB9,
    0xBA, 0xBB, 0xBC, 0xBD,
    0xBE, 0xBF, 0xC0, 0xC1,
    0xC2, 0xC3, 0xC4, 0xC5,
    0xC6, 0xC7, 0xC8, 0xC9,

```

0xCA, 0xCB, 0xCC, 0xCD,
0xCE, 0xCF,
0xD0, 0xD1, 0xD2, 0xD3,
0xD4, 0xD5, 0xD6, 0xD7,
0xD8, 0xD9, 0xDA, 0xDB,
0xDC, 0xDD, 0xDE, 0xDF,
0xE0, 0xE1, 0xE2, 0xE3,
0xE4, 0xE5,
0xE6, 0xE7, 0xE8, 0xE9,
0xEA, 0xEB, 0xEC, 0xED,
0xEE, 0xEF, 0xF0, 0xF1,
0xF2, 0xF3, 0xF4, 0xF5,
0xF6, 0xF7, 0xF8, 0xF9,
0xFA, 0xFB

ENDARRAY

BEGINARRAY (CBCH_MSG_7, 88)

0x00, 0x00,
0x00, 0x07,
0x00,
0x01,
0xAA, 0xAB, 0xAC, 0xAD,
0xAE, 0xAF, 0xB0, 0xB1,
0xB2, 0xB3, 0xB4, 0xB5,
0xB6, 0xB7, 0xB8, 0xB9,
0xBA, 0xBB, 0xBC, 0xBD,
0xBE, 0xBF, 0xC0, 0xC1,
0xC2, 0xC3, 0xC4, 0xC5,
0xC6, 0xC7, 0xC8, 0xC9,
0xCA, 0xCB, 0xCC, 0xCD,
0xCE, 0xCF,
0xD0, 0xD1, 0xD2, 0xD3,
0xD4, 0xD5, 0xD6, 0xD7,
0xD8, 0xD9, 0xDA, 0xDB,
0xDC, 0xDD, 0xDE, 0xDF,
0xE0, 0xE1, 0xE2, 0xE3,
0xE4, 0xE5,
0xE6, 0xE7, 0xE8, 0xE9,
0xEA, 0xEB, 0xEC, 0xED,
0xEE, 0xEF, 0xF0, 0xF1,
0xF2, 0xF3, 0xF4, 0xF5,
0xF6, 0xF7, 0xF8, 0xF9,
0xFA, 0xFB

ENDARRAY

BEGINARRAY (CBCH_MSG_7_B, 88)

0x00, 0x01,
0x00, 0x07,
0x00,
0x01,
0xAA, 0xAB, 0xAC, 0xAD,
0xAE, 0xAF, 0xB0, 0xB1,
0xB2, 0xB3, 0xB4, 0xB5,

0xB6, 0xB7, 0xB8, 0xB9,
0xBA, 0xBB, 0xBC, 0xBD,
0xBE, 0xBF, 0xC0, 0xC1,
0xC2, 0xC3, 0xC4, 0xC5,
0xC6, 0xC7, 0xC8, 0xC9,
0xCA, 0xCB, 0xCC, 0xCD,
0xCE, 0xCF,
0xD0, 0xD1, 0xD2, 0xD3,
0xD4, 0xD5, 0xD6, 0xD7,
0xD8, 0xD9, 0xDA, 0xDB,
0xDC, 0xDD, 0xDE, 0xDF,
0xE0, 0xE1, 0xE2, 0xE3,
0xE4, 0xE5,
0xE6, 0xE7, 0xE8, 0xE9,
0xEA, 0xEB, 0xEC, 0xED,
0xEE, 0xEF, 0xF0, 0xF1,
0xF2, 0xF3, 0xF4, 0xF5,
0xF6, 0xF7, 0xF8, 0xF9,
0xFA, 0xFB

ENDARRAY

BEGINARRAY (CBCH_MSG_11, 88)

0x00, 0x00,
0x00, 0x0B,
0x00,
0x01,
0xAA, 0xAB, 0xAC, 0xAD,
0xAE, 0xAF, 0xB0, 0xB1,
0xB2, 0xB3, 0xB4, 0xB5,
0xB6, 0xB7, 0xB8, 0xB9,
0xBA, 0xBB, 0xBC, 0xBD,
0xBE, 0xBF, 0xC0, 0xC1,
0xC2, 0xC3, 0xC4, 0xC5,
0xC6, 0xC7, 0xC8, 0xC9,
0xCA, 0xCB, 0xCC, 0xCD,
0xCE, 0xCF,
0xD0, 0xD1, 0xD2, 0xD3,
0xD4, 0xD5, 0xD6, 0xD7,
0xD8, 0xD9, 0xDA, 0xDB,
0xDC, 0xDD, 0xDE, 0xDF,
0xE0, 0xE1, 0xE2, 0xE3,
0xE4, 0xE5,
0xE6, 0xE7, 0xE8, 0xE9,
0xEA, 0xEB, 0xEC, 0xED,
0xEE, 0xEF, 0xF0, 0xF1,
0xF2, 0xF3, 0xF4, 0xF5,
0xF6, 0xF7, 0xF8, 0xF9,
0xFA, 0xFB

ENDARRAY

BEGINARRAY (CBCH_MSG_12, 88)

0x00, 0x00,

```
0x00, 0x0C,  
0x00,  
0x01,  
0xAA, 0xAB, 0xAC, 0xAD,  
0xAE, 0xAF, 0xB0, 0xB1,  
0xB2, 0xB3, 0xB4, 0xB5,  
0xB6, 0xB7, 0xB8, 0xB9,  
0xBA, 0xBB, 0xBC, 0xBD,  
0xBE, 0xBF, 0xC0, 0xC1,  
0xC2, 0xC3, 0xC4, 0xC5,  
0xC6, 0xC7, 0xC8, 0xC9,  
0xCA, 0xCB, 0xCC, 0xCD,  
0xCE, 0xCF,  
0xD0, 0xD1, 0xD2, 0xD3,  
0xD4, 0xD5, 0xD6, 0xD7,  
0xD8, 0xD9, 0xDA, 0xDB,  
0xDC, 0xDD, 0xDE, 0xDF,  
0xE0, 0xE1, 0xE2, 0xE3,  
0xE4, 0xE5,  
0xE6, 0xE7, 0xE8, 0xE9,  
0xEA, 0xEB, 0xEC, 0xED,  
0xEE, 0xEF, 0xF0, 0xF1,  
0xF2, 0xF3, 0xF4, 0xF5,  
0xF6, 0xF7, 0xF8, 0xF9,  
0xFA, 0xFB  
ENDARRAY
```

BEGINARRAY (CBCH_MSG_13, 88)

```
0x00, 0x00,  
0x00, 0x0D,  
0x00,  
0x01,  
0xAA, 0xAB, 0xAC, 0xAD,  
0xAE, 0xAF, 0xB0, 0xB1,  
0xB2, 0xB3, 0xB4, 0xB5,  
0xB6, 0xB7, 0xB8, 0xB9,  
0xBA, 0xBB, 0xBC, 0xBD,  
0xBE, 0xBF, 0xC0, 0xC1,  
0xC2, 0xC3, 0xC4, 0xC5,  
0xC6, 0xC7, 0xC8, 0xC9,  
0xCA, 0xCB, 0xCC, 0xCD,  
0xCE, 0xCF,  
0xD0, 0xD1, 0xD2, 0xD3,  
0xD4, 0xD5, 0xD6, 0xD7,  
0xD8, 0xD9, 0xDA, 0xDB,  
0xDC, 0xDD, 0xDE, 0xDF,  
0xE0, 0xE1, 0xE2, 0xE3,  
0xE4, 0xE5,  
0xE6, 0xE7, 0xE8, 0xE9,  
0xEA, 0xEB, 0xEC, 0xED,  
0xEE, 0xEF, 0xF0, 0xF1,  
0xF2, 0xF3, 0xF4, 0xF5,  
0xF6, 0xF7, 0xF8, 0xF9,
```


0xFA, 0xFB
ENDARRAY

BEGIN_SHORT_ARRAY_PART (ARFCN_23_14_124_1, 4)
ARFCN_23, ARFCN_14, ARFCN_124, ARFCN_1
ENDARRAY

BEGIN_SHORT_ARRAY_PART (ARFCN_23_14_124_1_WITH_STD, 4)
ARFCN_23_STD_900, ARFCN_14_STD_900, ARFCN_124_STD_900,
ARFCN_1_STD_900
ENDARRAY

BEGINARRAY_PART (RXLEV_23_14_124_1, 4)
56, 44, 25, 21
ENDARRAY

BEGIN_SHORT_ARRAY_PART (ARFCN_637_580_885_512, 4)
ARFCN_637,
ARFCN_580,
ARFCN_885,
ARFCN_512
ENDARRAY

BEGIN_SHORT_ARRAY_PART (ARFCN_637_580_885_512_WITH_STD, 4)
ARFCN_637_STD_1800,
ARFCN_580_STD_1800,
ARFCN_885_STD_1800,
ARFCN_512_STD_1800
ENDARRAY

BEGIN_SHORT_ARRAY_PART (ARFCN_EXT_MEAS_000,10)
CONST_20,
CONST_0,
CONST_974,
CONST_10,
CONST_1,
CONST_1023,
CONST_124,
CONST_1022,
CONST_123,
CONST_975
ENDARRAY

BEGIN_SHORT_ARRAY_PART (ARFCN_EXT_MEAS_SORT_000,10)
(CONST_1023|0x1000),
(CONST_1022|0x1000),
(CONST_0|0x1000),
(CONST_974|0x1000),
(CONST_124|0x1000),

```
(CONST_123|0x1000),
(CONST_20|0x1000),
(CONST_10|0x1000),
(CONST_1|0x1000),
(CONST_975|0x1000)
ENDARRAY

BEGINARRAY_PART (RXLEV_EXT_MEAS_000,10)
    80,70,60,50,40,30,20,10,0,-10
ENDARRAY

BEGINARRAY_PART (RXLEV_637_580_885_512,4)
    56, 44, 25, 21
ENDARRAY

BEGIN_SHORT_ARRAY_PART (ARFCN_637_580_810_512_WITH_STD, 4)
    ARFCN_637_STD_1800,
    ARFCN_580_STD_1800,
    ARFCN_810_STD_1800,
    ARFCN_512_STD_1800
ENDARRAY

BEGINARRAY_PART (RXLEV_637_580_810_512,4)
    56, 44, 25, 12
ENDARRAY

BEGIN_SHORT_ARRAY_PART (ARFCN_DUAL, 8)
    ARFCN_23,
    ARFCN_637,
    ARFCN_14,
    ARFCN_580,
    ARFCN_124,
    ARFCN_885,
    ARFCN_1,
    ARFCN_512
ENDARRAY

BEGIN_SHORT_ARRAY_PART (ARFCN_DUAL_WITH_STD, 8)
    ARFCN_23_STD_DUAL,
    ARFCN_637_STD_DUAL,
    ARFCN_14_STD_DUAL,
    ARFCN_580_STD_DUAL,
    ARFCN_124_STD_DUAL,
    ARFCN_885_STD_DUAL,
    ARFCN_1_STD_DUAL,
    ARFCN_512_STD_DUAL
ENDARRAY

BEGINARRAY_PART (RXLEV_DUAL, 8)
```

56, 55, 44, 43, 25, 23, 21, 11
ENDARRAY

BEGIN_SHORT_ARRAY_PART (ARFCN_EGSM, 8)
0,
ARFCN_975,
ARFCN_1023,
ARFCN_580,
ARFCN_124,
ARFCN_885,
ARFCN_1,
ARFCN_512
ENDARRAY

BEGINARRAY (RXLEV_EGSM, 8)
56, 55, 44, 43, 25, 23, 12, 11
ENDARRAY

/*

0x59	l2 pseudo length (=22 Byte)
0x06	protocol discriminator, transaction identifier
0x19	message type
0x00, ...	cell channel description
0x00, ...	
0x00,	rach control parameter
0x2B	rest octet

*/

BEGIN_PSTRUCT("l2_frame", L2_SYS_INFO_1)
SET_COMP("content", L2_SYS_INFO_1_ARRAY)
ENDSTRUCT

BEGINARRAY (L2_SYS_INFO_1_ARRAY, 23)
0x59,
0x06,
0x19,
0x00, 0x04, 0x00, 0x00, 0x00, 0x02, 0x00, 0x01,
0x00, 0x08, 0x00, 0x00, 0x81, 0x00, 0x00, 0x00,
0x00, 0x00, 0x40,
0x2B
ENDARRAY

BEGIN_PSTRUCT("l2_frame", L2_SYS_INFO_1_NEW)
SET_COMP("content", L2_SYS_INFO_1_NEW_ARRAY)
ENDSTRUCT

BEGINARRAY (L2_SYS_INFO_1_NEW_ARRAY, 23)
0x59,

```

    0x06,
    0x19,
    0x00, 0x04, 0x00, 0x00, 0x00, 0x02, 0x00, 0x01,
    0x00, 0x18, 0x00, 0x00, 0x81, 0x00, 0x00, 0x00,
    0x00, 0x00, 0x40,
    0x2B
ENDARRAY

```

/*

0x59	l2 pseudo length (=22 Byte)
0x06	protocol discriminator, transaction identifier
0x1A	message type
0x00,	neighbour cell description
...	
0x00,	
...	
0x01,	ncc permitted
0x00,	rach control parameter

*/

```

BEGIN_PSTRUCT("l2_frame", L2_SYS_INFO_2)
    SET_COMP("content", L2_SYS_INFO_2_ARRAY)
ENDSTRUCT

```

```

BEGINARRAY(L2_SYS_INFO_2_ARRAY,23)
    0x59,
    0x06,
    0x1A,
    0x00, 0x00, 0x00, 0x04, 0x00, 0x00, 0x00, 0x00,
    0x00, 0x00, 0x00, 0x00, 0x00, 0x80, 0x00, 0x04,
    0x01,
    0x00, 0x00, 0x40
ENDARRAY

```

/*

0x59	l2 pseudo length (=22 Byte)
0x06	protocol discriminator, transaction identifier
0x1B	message type
0x37,0x48	cell identity
0x21, ...	location area identification
0x28, ...	control channel description
0x5F	cell options BCCH
0x42, 0x56	cell selection parameter
0x00,	rach control parameter
0x2B	rest octets

*/

```

BEGIN_PSTRUCT("l2_frame", L2_SYS_INFO_3)
    SET_COMP("content", L2_SYS_INFO_3_ARRAY)
ENDSTRUCT

```

BEGINARRAY (L2_SYS_INFO_3_ARRAY, 23)

0x59,
0x06,
0x1B,
0x37, 0x48,
0x21, 0xF3, 0x33, 0x21, 0x47,
0x28, 0x02, 0x06,
0x5F,
0x42, 0x56,
0x00, 0x00, 0x40,
0x2B, 0x2B, 0x2B, 0x2B

ENDARRAY

/*

0x59	l2 pseudo length (=22 Byte)
0x06	protocol discriminator, transaction identifier
0x1C	message type
0x21, ...	location area identification
0x42, 0x56	cell selection parameter
0x00,	rach control parameter
0x2B	rest octets

*/

BEGIN_PSTRUCT("l2_frame", L2_SYS_INFO_4)

SET_COMP("content", L2_SYS_INFO_4_ARRAY)

ENDSTRUCT

BEGINARRAY (L2_SYS_INFO_4_ARRAY, 23)

0x59,
0x06,
0x1C,
0x21, 0xF3, 0x33, 0x21, 0x47,
0x42, 0x56,
0x00, 0x00, 0x40,
0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
0x2B, 0x2B, 0x2B, 0x2B, 0x2B

ENDARRAY

BEGIN_PSTRUCT("l2_frame", L2_SYS_INFO_4_ACS)

SET_COMP("content", L2_SYS_INFO_4_ACS_ARRAY)

ENDSTRUCT

BEGINARRAY (L2_SYS_INFO_4_ACS_ARRAY, 23)

0x59,
0x06,
0x1C,
0x21, 0xF3, 0x33, 0x21, 0x47,
0x42, 0xD6,
0x00, 0x00, 0x40,

```
        0x2B, 0x2B, 0x2B, 0x2B, 0x2B,  
        0x2B, 0x2B, 0x2B, 0x2B, 0x2B  
ENDARRAY
```

```
BEGIN_PSTRUCT("I2_frame", L2_SYS_INFO_5)  
    SET_COMP("content", L2_SYS_INFO_5_ARRAY)  
ENDSTRUCT
```

```
BEGINARRAY (L2_SYS_INFO_5_ARRAY, 23)  
    0xFF, 0xAA,  
    0x03, 0x03, 0x01,  
    0x06,  
    0x1D,  
    0x00, 0x04, 0x00, 0x00, 0x00, 0x02, 0x00, 0x01,  
    0x00, 0x08, 0x00, 0x00, 0x81, 0x00, 0x00, 0x00  
ENDARRAY
```

```
BEGIN_PSTRUCT("I2_frame", L2_SYS_INFO_5BIS)  
    SET_COMP("content", L2_SYS_INFO_5BIS_ARRAY)  
ENDSTRUCT
```

```
BEGINARRAY (L2_SYS_INFO_5BIS_ARRAY,23)  
    0xFF, 0xAA,  
    0x03, 0x03, 0x01,  
    0x06,  
    0x05,  
    0x00, 0x04, 0x00, 0x00, 0x00, 0x02, 0x00, 0x01,  
    0x00, 0x08, 0x00, 0x00, 0x81, 0x00, 0x00, 0x00  
ENDARRAY
```

```
BEGIN_PSTRUCT("I2_frame", L2_SYS_INFO_6)  
    SET_COMP("content", L2_SYS_INFO_6_ARRAY)  
ENDSTRUCT
```

```
BEGINARRAY (L2_SYS_INFO_6_ARRAY,23)  
    0xFF, 0xAA,  
    0x03, 0x03, 0x01,  
    0x06,  
    0x1E,  
    0x00, 0x04, 0x00, 0x00, 0x00, 0x02, 0x00, 0x01,  
    0x00, 0x08, 0x00, 0x00, 0x81, 0x00, 0x00, 0x00  
ENDARRAY
```

```
BEGIN_PSTRUCT("I2_frame", L2_CHANGED_SYS_INFO_6)  
    SET_COMP("content", L2_CHANGED_SYS_INFO_6_ARRAY)  
ENDSTRUCT
```

```
BEGINARRAY (L2_CHANGED_SYS_INFO_6_ARRAY,23)
    0xFF, 0xAA,
    0x03, 0x03, 0x01,
    0x06,
    0x1E,
    0x01, 0x04, 0x00, 0x00, 0x00, 0x02, 0x00, 0x01,
    0x00, 0x08, 0x00, 0x00, 0x81, 0x00, 0x00, 0x00
ENDARRAY
```

```
BEGIN_PSTRUCT("l2_frame", L2_SYS_INFO_7)
    SET_COMP("content", L2_SYS_INFO_7_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_SYS_INFO_7_ARRAY, 23)
    0x59,
    0x06,
    0x1F,
    0x2b, 0x2b, 0x2b, 0x2b, 0x2b,
    0x2b, 0x2b,
    0x2b, 0x2b, 0x2b,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B
ENDARRAY
```

```
BEGIN_PSTRUCT("l2_frame", L2_SYS_INFO_8)
    SET_COMP("content", L2_SYS_INFO_8_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_SYS_INFO_8_ARRAY, 23)
    0x59,
    0x06,
    0x18,
    0x2b, 0x2b, 0x2b, 0x2b, 0x2b,
    0x2b, 0x2b,
    0x2b, 0x2b, 0x2b,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B
ENDARRAY
```

```
BEGIN_PSTRUCT("l2_frame", L2_I_SMS)
    SET_COMP("content", L2_I_SMS_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_I_SMS_ARRAY,12)
    0xFF, 0xAA,
    0x0F,
    0x02,
    0x19,
    0x3A, 0x3B, 0x3C, 0x3D, 0x3E, 0x3F,
    0x2B
ENDARRAY
```

```
BEGIN_MSTRUCT ("loc_area_ident", LOC_AREA_IDENT_2)
    SET_COMP ("mcc", MCC_2)
    SET_COMP ("mnc", MNC_2)
    SET_COMP ("lac", 0x0200)
ENDSTRUCT

BEGINARRAY (MCC_2, 3)
    0, 0, 0
ENDARRAY

BEGINARRAY (MNC_2, 3)
    0, 0, 0
ENDARRAY

BEGIN_MSTRUCT ("cell_opt_sacch", CELL_OPT_SACCH_1)
    SET_COMP ("dtx2_s", 0)
    SET_COMP ("pow_ctrl", POW_CTRL_NO)
    SET_COMP ("dtx_s", S_DTX_F_MAYUSE_H_DONTUSE)
    SET_COMP ("rlt", 1)
ENDSTRUCT

BEGIN_MSTRUCT ("si6_rest_oct", SI6_REST_OCT_1)
    SET_COMP ("pch_nch_info", PCH_NCH_INFO_1)
    SET_COMP ("vbs_vgcs_opt", VBS_VGCS_OPT_1)
ENDSTRUCT

BEGIN_MSTRUCT ("pch_nch_info", PCH_NCH_INFO_1)
    SET_COMP ("pch_restruct", PCH_RESTRUCT_NO)
    SET_COMP ("nln_sacch", 0)
    SET_COMP ("call_prio", CALL_PRIO_LEV_3)
    SET_COMP ("nln_status", 0)
ENDSTRUCT

BEGIN_MSTRUCT ("vbs_vgcs_opt", VBS_VGCS_OPT_1)
    SET_COMP ("inband_not", IN_BAND_NOT_NCH)
    SET_COMP ("inband_pag", IN_BAND_PAG_PCH)
ENDSTRUCT

BEGINARRAY (CHANGED_SYS_INFO_6, 23)
    0x90, 0x00,
    0x08, 0x00,
    0x00,
    0x06,
    0x1E,
    0x01, 0x04, 0x00, 0x00, 0x00, 0x02, 0x00, 0x01,
    0x00, 0x08, 0x00, 0x00, 0x81, 0x00, 0x00, 0x00
ENDARRAY

BEGINARRAY (I_SMS, 16)
    0xA8, 0x00,
    0x10, 0x00,
```



```

    0xFF, 0xAA,
    0x0F,
    0x02,
    0x19,
    0x3A, 0x3B, 0x3C, 0x3D, 0x3E, 0x3F,
    0x2B
ENDARRAY

```

/*

0xB0,0x00	Length in bits
0x08, 0x00	Offset in bits
0x59	l2 pseudo length (=22 Byte)
0x06	Protocol discriminator, transaction identifier
0x19	Message type
0x00, ...	cell channel description
0x00, ...	
0x00,	rach control parameter
0x2B	rest octet

*/

```

SET_BITBUF ("cell_chan_desc", CELL_CHAN_DESC_1, 128)
    0x00, 0x04, 0x00, 0x00, 0x00, 0x02, 0x00, 0x01,
    0x00, 0x08, 0x00, 0x00, 0x81, 0x00, 0x00, 0x00
ENDBITBUF

```

```

BEGIN_MSTRUCT ("rach_ctrl", RACH_CTRL_1)
    SET_COMP ("max_retrans", MAX_RETRANS_1)
    SET_COMP ("tx_integer", SPREAD_TRANS_3)
    SET_COMP ("cell_bar_access", BARRED_NO)
    SET_COMP ("re", REESTAB_YES)
    SET_COMP ("ac", ACC_0005)
ENDSTRUCT

```

```

SET_BITBUF ("cell_chan_desc", CELL_CHAN_DESC_1_NEW, 128)
    0x00, 0x04, 0x00, 0x00, 0x00, 0x02, 0x00, 0x01,
    0x00, 0x18, 0x00, 0x00, 0x81, 0x00, 0x00, 0x00
ENDBITBUF

```

/*

0xB0,0x00	length in bits
0x08, 0x00	offset in bits
0x59	l2 pseudo length (=22 Byte)
0x06	protocol discriminator, transaction identifier
0x1A	message type
0x00, ...	neighbour cell description
0x00, ...	

0x01,	ncc permitted
0x00,	rach control parameter

*/

```
SET_BITBUF ("neigh_cell_desc", NEIGH_CELL_DESC_1, 128)
    0x00, 0x00, 0x00, 0x04, 0x00, 0x00, 0x00, 0x00,
    0x00, 0x00, 0x00, 0x00, 0x00, 0x80, 0x00, 0x04
ENDBITBUF
```

```
SET_BITBUF ("neigh_cell_desc", NEIGH_CELL_DESC_2, 128)
    0x00, 0x04, 0x00, 0x00, 0x00, 0x02, 0x00, 0x01,
    0x00, 0x08, 0x00, 0x00, 0x81, 0x00, 0x00, 0x00
ENDBITBUF
```

/*

0xB0,0x00	length in bits
0x08, 0x00	offset in bits
0x59	l2 pseudo length (=22 Byte)
0x06	protocol discriminator, transaction identifier
0x1B	message type
0x37,0x48	cell identity
0x21, ...	location area identification
0x28, ...	control channel description
0x5F	cell options BCCH
0x42, 0x56	cell selection parameter
0x00,	rach control parameter
0x2B	rest octets

*/

```
BEGIN_MSTRUCT ("loc_area_ident", LOC_AREA_IDENT_1)
    SET_COMP ("mcc", MCC_1)
    SET_COMP ("mnc", MNC_1)
    SET_COMP ("lac", 0x2147)
ENDSTRUCT
```

```
BEGINARRAY (MCC_1, 3)
    1,2,3
ENDARRAY
```

```
BEGINARRAY (MNC_1, 2)
    3,3
ENDARRAY
```

```
BEGIN_MSTRUCT ("ctrl_chan_desc", CTRL_CHAN_DESC_1)
    SET_COMP ("att", CCD_ATT_NO)
    SET_COMP ("bs_ag_blks_res", 5 )
    SET_COMP ("ccch_conf", CCD_CCCH_1_NOT_COMB )
    SET_COMP ("bs_pa_mfms", 2)
```

```
        SET_COMP ("t3212", 6)
ENDSTRUCT
```

```
BEGIN_MSTRUCT ("cell_opt_bcch", CELL_OPT_BCCH_1)
    SET_COMP ("pow_ctrl", POW_CTRL_YES)
    SET_COMP ("dtx_b", B_DTX_SHALL_USE)
    SET_COMP ("rlt", 15)
ENDSTRUCT
```

```
BEGIN_MSTRUCT ("cell_select", CELL_SELECT_1)
    SET_COMP ("cell_resele_hyst", CELL_HYST_4_DB)
    SET_COMP ("ms_txpwr_max_cch", 2)
    SET_COMP ("acs", ACS_USE_SI4 )
    SET_COMP ("neci", NECI_YES)
    SET_COMP ("rxlev_access_min", 22)
ENDSTRUCT
```

```
BEGIN_MSTRUCT ("cell_select", CELL_SELECT_2)
    SET_COMP ("cell_resele_hyst", CELL_HYST_4_DB)
    SET_COMP ("ms_txpwr_max_cch", 2)
    SET_COMP ("acs", ACS_USE_SI7 )
    SET_COMP ("neci", NECI_YES)
    SET_COMP ("rxlev_access_min", 22)
ENDSTRUCT
```

```
BEGIN_MSTRUCT ("si7_rest_oct", SI7_REST_OCT_1)
    SKIP_COMP ("opt_sel_par")
    SKIP_COMP ("pow_offs")
    SKIP_COMP ("gprs_indic")
    SKIP_COMP ("lsa_param")
    SKIP_COMP ("cell_ident")
    SKIP_COMP ("lsa_id_info")
ENDSTRUCT
```

```
BEGIN_MSTRUCT ("si8_rest_oct", SI8_REST_OCT_1)
    SKIP_COMP ("opt_sel_par")
    SKIP_COMP ("pow_offs")
    SKIP_COMP ("gprs_indic")
    SKIP_COMP ("lsa_param")
    SKIP_COMP ("cell_ident")
    SKIP_COMP ("lsa_id_info")
ENDSTRUCT
```

/*

0x19	l2 pseudo length (= 6 Byte)
0x06	protocol discriminator, transaction identifier
0x21	message type
PAGING_NO	page mode normal

```
RM
0x00      not empty mobile identity
*/
BEGIN_PSTRUCT("l2_frame", L2_PAGING_REQ_1)
    SET_COMP("content", L2_PAGING_REQ_1_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAGING_REQ_1_ARRAY, 23)
    0x11,
    0x06,
    0x21,
    PAGING_NORM,
    0x00,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B
ENDARRAY
```

```
/*
0x19      l2 pseudo length (= 6 Byte)
0x06      protocol discriminator, transaction
           identifier
0x21      message type
PAGING_SA page mode same as before
ME
0x00      not empty mobile identity
*/
```

```
BEGIN_PSTRUCT("l2_frame", L2_PAGING_REQ_1_SAB)
    SET_COMP("content", L2_PAGING_REQ_1_SAB_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAGING_REQ_1_SAB_ARRAY, 23)
    0x11,
    0x06,
    0x21,
    PAGING_SAME,
    0x00,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B
ENDARRAY
```

```
/*
0x19      l2 pseudo length (= 6 Byte)
0x06      protocol discriminator, transaction
           identifier
0x21      message type
PAGING_E  page mode extended
XT
0x00      not empty mobile identity
*/
```

```
*/
BEGIN_PSTRUCT("l2_frame", L2_PAGING_REQ_1_EXT)
    SET_COMP("content", L2_PAGING_REQ_1_EXT_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAGING_REQ_1_EXT_ARRAY, 23)
    0x11,
    0x06,
    0x21,
    PAGING_EXT,
    0x00,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B
ENDARRAY
```

```
/*
```

0x19	l2 pseudo length (= 6 Byte)
0x06	protocol discriminator, transaction identifier
0x21	message type
PAGING_REORG	page mode reorganization
0x00	not empty mobile identity

```
*/
```

```
BEGIN_PSTRUCT("l2_frame", L2_PAGING_REO_1)
    SET_COMP("content", L2_PAGING_REO_1_ARRAY)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAGING_REQ_1_REO)
    SET_COMP ("content", L2_PAGING_REQ_1_REO_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAGING_REQ_1_REO_ARRAY, 23)
    0x11,
    0x06,
    0x21,
    PAGING_REORG,
    0x00,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B
ENDARRAY
```

```
/*
```

0xB0,0x00	length in bits
0	
0x08,0x00	offset in bits

0x19	I2 pseudo length (= 6 Byte)
0x06	protocol discriminator, transaction identifier
0x21	message type
0x00	page mode normal
0x00	not empty mobile identity

*/

BEGINARRAY (PAGING_REQ_1, 9)

0xB0, 0x00,
0x08, 0x00,
0x19,
0x06,
0x21,
0x00,
0x00

ENDARRAY

/*

0xB0,0x00	length in bits
0	
0x08, 0x00	offset in bits
0x19	I2 pseudo length (= 6 Byte)
0x06	protocol discriminator, transaction identifier
0x21	message type
0x01	page mode extended
0x00	not empty mobile identity

*/

BEGINARRAY (PAGING_REQ_1_EXT, 9)

0xB0, 0x00,
0x08, 0x00,
0x19,
0x06,
0x21,
0x01,
0x00

ENDARRAY

/*

0xB0,0x00	length in bits
0	
0x08, 0x00	offset in bits
0x19	I2 pseudo length (= 6 Byte)
0x06	protocol discriminator, transaction identifier
0x21	message type
0x02	page mode reorganization
0x00	empty mobile identity

*/

```
BEGINARRAY (PAGING_REQ_1_REO, 9)
    0xB0, 0x00,
    0x08, 0x00,
    0x19,
    0x06,
    0x21,
    0x02,
    0x00
ENDARRAY
```

/*

0xB0,0x00	length in bits
0	
0x08, 0x00	offset in bits
0x19	l2 pseudo length (= 6 Byte)
0x06	protocol discriminator, transaction identifier
0x21	message type
0x03	page mode same as before
0x00	empty mobile identity

*/

```
BEGINARRAY (PAGING_REQ_1_SAB, 9)
    0xB0, 0x00,
    0x08, 0x00,
    0x19,
    0x06,
    0x21,
    0x03,
    0x00
ENDARRAY
```

/*

0x11	l2 pseudo length (= 4 Byte)
0x06	protocol discriminator, transaction identifier
0x21	message type
0x00	page mode normal
0x00	empty mobile identity

*/

```
BEGIN_PSTRUCT("l2_frame", L2_PAG_1_EMPTY)
    SET_COMP("content", L2_PAG_1_EMPTY_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_1_EMPTY_ARRAY, 23)
    0x11,
    0x06,
    0x21,
    0x00,
    0x00,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
```

0x2B, 0x2B, 0x2B
ENDARRAY

/*

0x31	I2 pseudo length (= 12 Bytes)
0x06	protocol discriminator, transaction identifier
0x21	message type
0x00	page mode normal
0x09	mobile identity 1

*/

BEGIN_PSTRUCT("I2_frame", L2_PAG_1_I1_A)
 SET_COMP("content", L2_PAG_1_I1_A_ARRAY)
ENDSTRUCT

BEGINARRAY (L2_PAG_1_I1_A_ARRAY, 23)
 0x31,
 0x06,
 0x21,
 0x00,
 0x08,
 0x09, 0x10, 0x10, 0x83, 0x32,
 0x03, 0x95, 0x54, 0x2B, 0x2B,
 0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
 0x2B, 0x2B, 0x2B
ENDARRAY

/*

0x59	I2 pseudo length (= 22 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0x00	Page mode normal
0x09	Mobile identity 1

*/

BEGIN_PSTRUCT("I2_frame", L2_PAG_1_I2_A)
 SET_COMP("content", L2_PAG_1_I2_A_ARRAY)
ENDSTRUCT

BEGINARRAY (L2_PAG_1_I2_A_ARRAY, 23)
 0x59,
 0x06,
 0x21,
 0x00,
 0x08,
 0x09, 0x10, 0x10, 0x83, 0x23,
 0x03, 0x95, 0x54, 0x17, 0x08,
 0x09, 0x10, 0x10, 0x83, 0x32,
 0x03, 0x95, 0x54
ENDARRAY

/*

0x1D	l2 pseudo length (= 7 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0x23	normal page mode, TCH F
0x09	Mobile identity 1

*/

```
BEGIN_PSTRUCT("l2_frame", L2_PAG_1_T1_T)
    SET_COMP("content", L2_PAG_1_T1_T_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_1_T1_T_ARRAY, 23)
```

```
    0x1D,
    0x06,
    0x21,
    0x20,
    0x05,
    0xF4, 0x05, 0x22, 0x33, 0x66,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B
```

```
ENDARRAY
```

/*

0x41	l2 pseudo length (= 16 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0x80	normal page mode , TCH F
0x09	Mobile identity 1

*/

```
BEGIN_PSTRUCT("l2_frame", L2_PAG_1_T2_T)
    SET_COMP("content", L2_PAG_1_T2_T_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_1_T2_T_ARRAY, 23)
```

```
    0x41,
    0x06,
    0x21,
    0x80,
    0x05,
    0xF4, 0x06, 0x22, 0x33, 0x66,
    0x17, 0x05, 0xF4, 0x05, 0x22,
    0x33, 0x66, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B
```

```
ENDARRAY
```

/*

0x31	l2 pseudo length (= 12 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type

0x01	page mode normal, SDCCH
0x09	Mobile identity 1

*/

```
BEGIN_PSTRUCT ("I2_frame", L2_PAG_1_I1_S)
    SET_COMP ("content", L2_PAG_1_I1_S_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_1_I1_S_ARRAY, 23)
    0x31,
    0x06,
    0x21,
    0x10,
    0x08,
    0x09, 0x10, 0x10, 0x83, 0x32,
    0x03, 0x95, 0x54, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B
```

```
ENDARRAY
```

/*

0x59	I2 pseudo length (= 22 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0x04	Page mode normal, SDCCH
0x09	Mobile identity 1

*/

```
BEGIN_PSTRUCT ("I2_frame", L2_PAG_1_I2_S)
    SET_COMP ("content", L2_PAG_1_I2_S_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_1_I2_S_ARRAY, 23)
    0x59,
    0x06,
    0x21,
    0x40,
    0x08,
    0x09, 0x10, 0x10, 0x83, 0x23,
    0x03, 0x95, 0x54, 0x17, 0x08,
    0x09, 0x10, 0x10, 0x83, 0x32,
    0x03, 0x95, 0x54
```

```
ENDARRAY
```

/*

0x1D	I2 pseudo length (= 7 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0x30	page mode normal, Dual
0x09	Mobile identity 1

*/

```
BEGIN_PSTRUCT ("I2_frame", L2_PAG_1_T1_D)
    SET_COMP ("content", L2_PAG_1_T1_D_ARRAY)
ENDSTRUCT
```

BEGINARRAY (L2_PAG_1_T1_D_ARRAY, 23)

0x1D,
0x06,
0x21,
0x30,
0x05,
0xF4, 0x05, 0x22, 0x33, 0x66,
0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
0x2B, 0x2B, 0x2B

ENDARRAY

/*

0x41	I2 pseudo length (= 16 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0xC0	page mode normal, Dual
0x09	Mobile identity 1

*/

BEGIN_PSTRUCT ("I2_frame", L2_PAG_1_T2_D)
SET_COMP ("content", L2_PAG_1_T2_D_ARRAY)
ENDSTRUCT

BEGINARRAY (L2_PAG_1_T2_D_ARRAY, 23)

0x41,
0x06,
0x21,
0xC0,
0x05,
0xF4, 0x06, 0x22, 0x33, 0x66,
0x17, 0x05, 0xF4, 0x05, 0x22,
0x33, 0x66, 0x2B, 0x2B, 0x2B,
0x2B, 0x2B, 0x2B

ENDARRAY

/*

0x31	I2 pseudo length (= 12 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0x01	page mode normal, SDCCH
0x09	Mobile identity 1

*/

BEGIN_PSTRUCT ("I2_frame", L2_PAG_1_WI1)
SET_COMP ("content", L2_PAG_1_WI1_ARRAY)
ENDSTRUCT

BEGINARRAY (L2_PAG_1_WI1_ARRAY, 23)

0x31,
0x06,
0x21,

```

        0x10,
        0x08,
        0x09, 0x12, 0x10, 0x83, 0x32,
        0x03, 0x95, 0x54, 0x2B, 0x2B,
        0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
        0x2B, 0x2B, 0x2B
    ENDARRAY

```

/*

0x59	I2 pseudo length (= 22 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0x04	Page mode normal, SDCCH
0x09	Mobile identity 1

*/

```

BEGIN_PSTRUCT ("I2_frame", L2_PAG_1_WI2)
    SET_COMP ("content", L2_PAG_1_WI2_ARRAY)
ENDSTRUCT

```

```

BEGINARRAY (L2_PAG_1_WI2_ARRAY, 23)

```

```

    0x59,
    0x06,
    0x21,
    0x40,
    0x08,
    0x09, 0x10, 0x10, 0x83, 0x23,
    0x03, 0x95, 0x54, 0x17, 0x08,
    0x09, 0x12, 0x10, 0x83, 0x32,
    0x03, 0x95, 0x54

```

```

ENDARRAY

```

/*

0x1D	I2 pseudo length (= 7 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0x30	page mode normal, Dual
0x09	Mobile identity 1

*/

```

BEGIN_PSTRUCT ("I2_frame", L2_PAG_1_WT1)
    SET_COMP ("content", L2_PAG_1_WT1_ARRAY)
ENDSTRUCT

```

```

BEGINARRAY (L2_PAG_1_WT1_ARRAY, 23)

```

```

    0x1D,
    0x06,
    0x21,
    0x30,
    0x05,
    0xF4, 0x06, 0x22, 0x33, 0x66,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,

```

0x2B, 0x2B, 0x2B
ENDARRAY

/*

0x41	l2 pseudo length (= 16 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0xC0	page mode normal, Dual
0x09	Mobile identity 1

*/

BEGIN_PSTRUCT ("l2_frame", L2_PAG_1_WT2)
 SET_COMP ("content", L2_PAG_1_WT2_ARRAY)
ENDSTRUCT

BEGINARRAY (L2_PAG_1_WT2_ARRAY, 23)
 0x41,
 0x06,
 0x21,
 0xC0,
 0x05,
 0xF4, 0x06, 0x22, 0x33, 0x66,
 0x17, 0x05, 0xF4, 0x05, 0x23,
 0x33, 0x66, 0x2B, 0x2B, 0x2B,
 0x2B, 0x2B, 0x2B
ENDARRAY

/*

0x31	l2 pseudo length (= 12 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0x01	page mode normal, SDCCH
0x0B	Mobile identity 1 (unknown type)

*/

BEGIN_PSTRUCT ("l2_frame", L2_PAG_1_WTYPE)
 SET_COMP ("content", L2_PAG_1_WTYPE_ARRAY)
ENDSTRUCT

BEGINARRAY (L2_PAG_1_WTYPE_ARRAY, 23)
 0x31,
 0x06,
 0x21,
 0x10,
 0x08,
 0x0B, 0x12, 0x10, 0x83, 0x32,
 0x03, 0x95, 0x54, 0x2B, 0x2B,
 0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
 0x2B, 0x2B, 0x2B
ENDARRAY

/*

0x19	l2 pseudo length (= 6 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0xC0	page mode normal, any channel
0x09	Mobile identity 1

*/

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_1_ST1_A1)
    SET_COMP ("content", L2_PAG_1_ST1_A1_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_1_ST1_A1_ARRAY, 23)
```

```
    0x19,
    0x06,
    0x21,
    0x00,
    0x02,
    0xF4, 142, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B
```

```
ENDARRAY
```

/*

0x2D	l2 pseudo length (= 11 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0x80	page mode normal, TCH F
0x09	Mobile identity 1

*/

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_1_ST2_T3)
    SET_COMP ("content", L2_PAG_1_ST2_T3_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_1_ST2_T3_ARRAY, 23)
```

```
    0x2D,
    0x06,
    0x21,
    0x80,
    0x02,
    0xF4, 143, 0x17, 0x03, 0xF4,
    0x00, 142, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B
```

```
ENDARRAY
```

/*

0x29	l2 pseudo length (= 10 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0xC0	page mode normal, Dual

0x09 Mobile identity 1

*/

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_1_SI1_S)
    SET_COMP ("content", L2_PAG_1_SI1_S_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_1_SI1_S_ARRAY, 23)
```

```
    0x29,
    0x06,
    0x21,
    0x10,
    0x06,
    0x01, 0x10, 0x10, 0x83, 0x32,
    0xF3, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B
```

```
ENDARRAY
```

/*

0x39	l2 pseudo length (= 14 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0xC0	page mode normal, Dual
0x09	Mobile identity 1

*/

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_1_SI2_D)
    SET_COMP ("content", L2_PAG_1_SI2_D_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_1_SI2_D_ARRAY, 23)
```

```
    0x39,
    0x06,
    0x21,
    0xC0,
    0x02,
    0xF4, 143, 0x17, 0x06, 0x01,
    0x10, 0x10, 0x83, 0x32, 0xF3,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B
```

```
ENDARRAY
```

/*

0x1D	l2 pseudo length (= 7 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0x00	page mode normal, any channel
0x09	Mobile identity 1

*/

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_1_ST1_A2)
    SET_COMP ("content", L2_PAG_1_ST1_A2_ARRAY)
ENDSTRUCT
```

BEGINARRAY (L2_PAG_1_ST1_A2_ARRAY, 23)

0x1D,
0x06,
0x21,
0x00,
0x03,
0xF4, 0, 142, 0x2B, 0x2B, 0x2B,
0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
0x2B, 0x2B

ENDARRAY

/*

0x35	I2 pseudo length (= 13 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0x80	page mode normal, TCH F
0x09	Mobile identity 1

*/

BEGIN_PSTRUCT ("I2_frame", L2_PAG_1_ST2_T4)
SET_COMP ("content", L2_PAG_1_ST2_T4_ARRAY)
ENDSTRUCT

BEGINARRAY (L2_PAG_1_ST2_T4_ARRAY, 23)

0x35,
0x06,
0x21,
0x80,
0x02,
0xF4, 143, 0x17, 0x05, 0xF4,
0x00, 0x00, 0x00, 142, 0x2B,
0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
0x2B, 0x2B, 0x2B

ENDARRAY

/*

0x11	I2 pseudo length (= 4 Byte)
0x06	protocol discriminator, transaction identifier
0x22	message type
0x00	page mode normal
0x00	empty mobile identity

*/

BEGIN_PSTRUCT ("I2_frame", L2_PAG_2_EMPTY)
SET_COMP ("content", L2_PAG_2_EMPTY_ARRAY)
ENDSTRUCT

BEGINARRAY (L2_PAG_2_EMPTY_ARRAY, 23)

0x11,
0x06,
0x22,


```

        0x00,
        0x00,
        0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
        0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
        0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
        0x2B, 0x2B, 0x2B
    ENDARRAY

```

/*

0x1D	I2 pseudo length (= 7 Byte)
0x06	Protocol discriminator, transaction identifier
0x22	Message type
0x00	page mode normal
0x00	Mobile identity

*/

```

BEGIN_PSTRUCT ("I2_frame", L2_PAG_2_T1_A)
    SET_COMP ("content", L2_PAG_2_T1_A_ARRAY)
ENDSTRUCT

```

```

BEGINARRAY (L2_PAG_2_T1_A_ARRAY, 23)
    0x1D,
    0x06,
    0x22,
    0x00,
    0x05, 0x22, 0x33, 0x66,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B
ENDARRAY

```

```

BEGIN_PSTRUCT ("I2_frame", L2_PAG_2_T1_S)
    SET_COMP ("content", L2_PAG_2_T1_S_ARRAY)
ENDSTRUCT

```

```

BEGINARRAY (L2_PAG_2_T1_S_ARRAY, 23)
    0x1D,
    0x06,
    0x22,
    0x10,
    0x05, 0x22, 0x33, 0x66,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B
ENDARRAY

```

```

BEGIN_PSTRUCT ("I2_frame", L2_PAG_2_T1_T)
    SET_COMP ("content", L2_PAG_2_T1_T_ARRAY)
ENDSTRUCT

```

```

BEGINARRAY (L2_PAG_2_T1_T_ARRAY, 23)
    0x1D,

```

```

    0x06,
    0x22,
    0x20,
    0x05, 0x22, 0x33, 0x66,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B
ENDARRAY

```

```

BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_T1_D)
    SET_COMP ("content", L2_PAG_2_T1_D_ARRAY)
ENDSTRUCT

```

```

BEGINARRAY (L2_PAG_2_T1_D_ARRAY, 23)
    0x1D,
    0x06,
    0x22,
    0x30,
    0x05, 0x22, 0x33, 0x66,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B
ENDARRAY

```

/*

0x2D	l2 pseudo length (= 11 Byte)
0x06	Protocol discriminator, transaction identifier
0x22	Message type
0x00	page mode normal
0x00	Mobile identity

*/

```

BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_T2_A)
    SET_COMP ("content", L2_PAG_2_T2_A_ARRAY)
ENDSTRUCT

```

```

BEGINARRAY (L2_PAG_2_T2_A_ARRAY, 23)
    0x2D,
    0x06,
    0x22,
    0x00,
    0x06, 0x22, 0x33, 0x66,
    0x05, 0x22, 0x33, 0x66,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B
ENDARRAY

```

```

BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_T2_S)
    SET_COMP ("content", L2_PAG_2_T2_S_ARRAY)
ENDSTRUCT

```

```
BEGINARRAY (L2_PAG_2_T2_S_ARRAY, 23)
    0x2D,
    0x06,
    0x22,
    0x40,
    0x05, 0x23, 0x33, 0x66,
    0x05, 0x22, 0x33, 0x66,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_T2_T)
    SET_COMP ("content", L2_PAG_2_T2_T_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_2_T2_T_ARRAY, 23)
    0x2D,
    0x06,
    0x22,
    0x80,
    0x05, 0x22, 0x31, 0x66,
    0x05, 0x22, 0x33, 0x66,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_T2_D)
    SET_COMP ("content", L2_PAG_2_T2_D_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_2_T2_D_ARRAY, 23)
    0x2D,
    0x06,
    0x22,
    0xC0,
    0x05, 0x22, 0x33, 0x65,
    0x05, 0x22, 0x33, 0x66,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_WRONG)
    SET_COMP ("content", L2_PAG_2_WRONG_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_2_WRONG_ARRAY, 23)
    0x2D,
    0x06,
```

```

    0x22,
    0x30,
    0x01, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B
ENDARRAY

```

/*

0x55	I2 pseudo length (= 11 Byte)
0x06	Protocol discriminator, transaction identifier
0x22	Message type
0x00	page mode normal
0x00	Mobile identity

*/

```

BEGIN_PSTRUCT ("I2_frame", L2_PAG_2_I3_A)
    SET_COMP ("content", L2_PAG_2_I3_A_ARRAY)
ENDSTRUCT

```

```

BEGINARRAY (L2_PAG_2_I3_A_ARRAY, 23)

```

```

    0x55,
    0x06,
    0x22,
    0x00,
    0x01, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x17, 0x08, 0x09, 0x10, 0x10,
    0x83, 0x32, 0x03, 0x95, 0x54,
    0x8B

```

```

ENDARRAY

```

```

BEGIN_PSTRUCT ("I2_frame", L2_PAG_2_I3_S)
    SET_COMP ("content", L2_PAG_2_I3_S_ARRAY)
ENDSTRUCT

```

```

BEGINARRAY (L2_PAG_2_I3_S_ARRAY, 23)

```

```

    0x55,
    0x06,
    0x22,
    0x00,
    0x01, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x17, 0x08, 0x09, 0x10, 0x10,
    0x83, 0x32, 0x03, 0x95, 0x54,
    0xAB

```

```

ENDARRAY

```

```

BEGIN_PSTRUCT ("I2_frame", L2_PAG_2_I3_T)
    SET_COMP ("content", L2_PAG_2_I3_T_ARRAY)
ENDSTRUCT

```

BEGINARRAY (L2_PAG_2_I3_T_ARRAY, 23)

0x55,
0x06,
0x22,
0x00,
0x01, 0x22, 0x33, 0x66,
0x04, 0x22, 0x33, 0x65,
0x17, 0x08, 0x09, 0x10, 0x10,
0x83, 0x32, 0x03, 0x95, 0x54,
0xCB

ENDARRAY

BEGIN_PSTRUCT ("I2_frame", L2_PAG_2_I3_D)

SET_COMP ("content", L2_PAG_2_I3_D_ARRAY)

ENDSTRUCT

BEGINARRAY (L2_PAG_2_I3_D_ARRAY, 23)

0x55,
0x06,
0x22,
0x00,
0x01, 0x22, 0x33, 0x66,
0x04, 0x22, 0x33, 0x65,
0x17, 0x08, 0x09, 0x10, 0x10,
0x83, 0x32, 0x03, 0x95, 0x54,
0xEB

ENDARRAY

BEGIN_PSTRUCT ("I2_frame", L2_PAG_2_I3_N)

SET_COMP ("content", L2_PAG_2_I3_N_ARRAY)

ENDSTRUCT

BEGINARRAY (L2_PAG_2_I3_N_ARRAY, 23)

0x55,
0x06,
0x22,
0x00,
0x01, 0x22, 0x33, 0x66,
0x04, 0x22, 0x33, 0x65,
0x17, 0x08, 0x09, 0x10, 0x10,
0x83, 0x32, 0x03, 0x95, 0x54,
0x2B

ENDARRAY

/*

0x49	I2 pseudo length (= 18 Byte)
0x06	Protocol discriminator, transaction identifier
0x22	Message type
0x00	Page mode normal
0x00	Mobile identity

```
*/
BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_T3_A)
    SET_COMP ("content", L2_PAG_2_T3_A_ARRAY)
ENDSTRUCT

BEGINARRAY (L2_PAG_2_T3_A_ARRAY, 23)
    0x49,
    0x06,
    0x22,
    0x00,
    0x01, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x17, 0x05, 0xF4, 0x05, 0x22,
    0x33, 0x66, 0x8B, 0x2B, 0x2B,
    0x2B
ENDARRAY

BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_T3_S)
    SET_COMP ("content", L2_PAG_2_T3_S_ARRAY)
ENDSTRUCT

BEGINARRAY (L2_PAG_2_T3_S_ARRAY, 23)
    0x49,
    0x06,
    0x22,
    0x00,
    0x01, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x17, 0x05, 0xF4, 0x05, 0x22,
    0x33, 0x66, 0xAB, 0x2B, 0x2B,
    0x2B
ENDARRAY

BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_T3_T)
    SET_COMP ("content", L2_PAG_2_T3_T_ARRAY)
ENDSTRUCT

BEGINARRAY (L2_PAG_2_T3_T_ARRAY, 23)
    0x49,
    0x06,
    0x22,
    0x00,
    0x01, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x17, 0x05, 0xF4, 0x05, 0x22,
    0x33, 0x66, 0xCB, 0x2B, 0x2B,
    0x2B
ENDARRAY

BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_T3_D)
    SET_COMP ("content", L2_PAG_2_T3_D_ARRAY)
```

ENDSTRUCT

BEGINARRAY (L2_PAG_2_T3_D_ARRAY, 23)

0x49,
0x06,
0x22,
0x00,
0x01, 0x22, 0x33, 0x66,
0x04, 0x22, 0x33, 0x65,
0x17, 0x05, 0xF4, 0x05, 0x22,
0x33, 0x66, 0xEB, 0x2B, 0x2B,
0x2B

ENDARRAY

BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_T3_N)

SET_COMP ("content", L2_PAG_2_T3_N_ARRAY)

ENDSTRUCT

BEGINARRAY (L2_PAG_2_T3_N_ARRAY, 23)

0x49,
0x06,
0x22,
0x00,
0x01, 0x22, 0x33, 0x66,
0x04, 0x22, 0x33, 0x65,
0x17, 0x05, 0xF4, 0x05, 0x22,
0x33, 0x66, 0x2B, 0x2B, 0x2B,
0x2B

ENDARRAY

/*

0x4D	l2 pseudo length (= 19 Byte)
0x06	Protocol discriminator, transaction identifier
0x22	Message type
0x00	page mode normal
0x00	Mobile identity

*/

BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_SI3_A)

SET_COMP ("content", L2_PAG_2_SI3_A_ARRAY)

ENDSTRUCT

BEGINARRAY (L2_PAG_2_SI3_A_ARRAY, 23)

0x4D,
0x06,
0x22,
0x00,
0x01, 0x22, 0x33, 0x66,
0x04, 0x22, 0x33, 0x65,
0x17, 0x06, 0x01, 0x10, 0x10,
0x83, 0x32, 0xF3, 0x8B, 0x2B,
0x2B

ENDARRAY

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_ST3_S)  
    SET_COMP ("content", L2_PAG_2_ST3_S_ARRAY)  
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_2_ST3_S_ARRAY, 23)  
    0x3D,  
    0x06,  
    0x22,  
    0x00,  
    0x01, 0x22, 0x33, 0x66,  
    0x04, 0x22, 0x33, 0x65,  
    0x17, 0x02, 0xF4, 142, 0xAB,  
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,  
    0x2B  
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_ST3_T)  
    SET_COMP ("content", L2_PAG_2_ST3_T_ARRAY)  
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_2_ST3_T_ARRAY, 23)  
    0x41,  
    0x06,  
    0x22,  
    0x00,  
    0x01, 0x22, 0x33, 0x66,  
    0x04, 0x22, 0x33, 0x65,  
    0x17, 0x03, 0xF4, 0, 142, 0xCB,  
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B  
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_ST3_D)  
    SET_COMP ("content", L2_PAG_2_ST3_D_ARRAY)  
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_2_ST3_D_ARRAY, 23)  
    0x45,  
    0x06,  
    0x22,  
    0x00,  
    0x01, 0x22, 0x33, 0x66,  
    0x04, 0x22, 0x33, 0x65,  
    0x17, 0x04, 0xF4, 0,0,142, 0xEB,  
    0x2B, 0x2B, 0x2B, 0x2B  
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_ST3_N)  
    SET_COMP ("content", L2_PAG_2_ST3_N_ARRAY)  
ENDSTRUCT
```


BEGINARRAY (L2_PAG_2_ST3_N_ARRAY, 23)

0x49,
0x06,
0x22,
0x00,
0x01, 0x22, 0x33, 0x66,
0x04, 0x22, 0x33, 0x65,
0x17, 0x05, 0xF4, 0, 0, 0, 142, 0x2B,
0x2B, 0x2B, 0x2B

ENDARRAY

/*

0x11	l2 pseudo length (= 4 Byte)
0x06	protocol discriminator, transaction identifier
0x24	message type
0x00	page mode normal
0x00	empty mobile identity

*/

BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_EMPTY)
SET_COMP ("content", L2_PAG_3_EMPTY_ARRAY)
ENDSTRUCT

BEGINARRAY (L2_PAG_3_EMPTY_ARRAY, 23)

0x11,
0x06,
0x24,
0x00,
0x00,
0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
0x2B, 0x2B, 0x2B

ENDARRAY

/*

0x4D	l2 pseudo length (= 19 Byte)
0x06	Protocol discriminator, transaction identifier
0x24	Message type
0x00	Page mode normal
0x00	Mobile identity

*/

BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T1_A)
SET_COMP ("content", L2_PAG_3_T1_A_ARRAY)
ENDSTRUCT

BEGINARRAY (L2_PAG_3_T1_A_ARRAY, 23)

0x4D,
0x06,
0x24,
0x00,

```
    0x05, 0x22, 0x33, 0x66,  
    0x04, 0x22, 0x33, 0x65,  
    0x03, 0x22, 0x33, 0x65,  
    0x02, 0x22, 0x33, 0x65,  
    0x2B, 0x2B, 0x2B  
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T1_S)  
    SET_COMP ("content", L2_PAG_3_T1_S_ARRAY)  
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_3_T1_S_ARRAY, 23)  
    0x4D,  
    0x06,  
    0x24,  
    0x10,  
    0x05, 0x22, 0x33, 0x66,  
    0x04, 0x22, 0x33, 0x65,  
    0x03, 0x22, 0x33, 0x65,  
    0x02, 0x22, 0x33, 0x65,  
    0x2B, 0x2B, 0x2B  
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T1_T)  
    SET_COMP ("content", L2_PAG_3_T1_T_ARRAY)  
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_3_T1_T_ARRAY, 23)  
    0x4D,  
    0x06,  
    0x24,  
    0x20,  
    0x05, 0x22, 0x33, 0x66,  
    0x04, 0x22, 0x33, 0x65,  
    0x03, 0x22, 0x33, 0x65,  
    0x02, 0x22, 0x33, 0x65,  
    0x2B, 0x2B, 0x2B  
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T1_D)  
    SET_COMP ("content", L2_PAG_3_T1_D_ARRAY)  
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_3_T1_D_ARRAY, 23)  
    0x4D,  
    0x06,  
    0x24,  
    0x30,  
    0x05, 0x22, 0x33, 0x66,  
    0x04, 0x22, 0x33, 0x65,  
    0x03, 0x22, 0x33, 0x65,
```

```
    0x02, 0x22, 0x33, 0x65,  
    0x2B, 0x2B, 0x2B  
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T2_A)  
    SET_COMP ("content", L2_PAG_3_T2_A_ARRAY)  
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_3_T2_A_ARRAY, 23)  
    0x4D,  
    0x06,  
    0x24,  
    0x00,  
    0x04, 0x22, 0x33, 0x66,  
    0x05, 0x22, 0x33, 0x66,  
    0x03, 0x22, 0x33, 0x65,  
    0x02, 0x22, 0x33, 0x65,  
    0x2B, 0x2B, 0x2B  
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T2_S)  
    SET_COMP ("content", L2_PAG_3_T2_S_ARRAY)  
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_3_T2_S_ARRAY, 23)  
    0x4D,  
    0x06,  
    0x24,  
    0x40,  
    0x04, 0x22, 0x33, 0x66,  
    0x05, 0x22, 0x33, 0x66,  
    0x03, 0x22, 0x33, 0x65,  
    0x02, 0x22, 0x33, 0x65,  
    0x2B, 0x2B, 0x2B  
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T2_T)  
    SET_COMP ("content", L2_PAG_3_T2_T_ARRAY)  
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_3_T2_T_ARRAY, 23)  
    0x4D,  
    0x06,  
    0x24,  
    0x80,  
    0x04, 0x22, 0x33, 0x66,  
    0x05, 0x22, 0x33, 0x66,  
    0x03, 0x22, 0x33, 0x65,  
    0x02, 0x22, 0x33, 0x65,  
    0x2B, 0x2B, 0x2B  
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T2_D)
    SET_COMP ("content", L2_PAG_3_T2_D_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_3_T2_D_ARRAY, 23)
    0x4D,
    0x06,
    0x24,
    0xC0,
    0x04, 0x22, 0x33, 0x66,
    0x05, 0x22, 0x33, 0x66,
    0x03, 0x22, 0x33, 0x65,
    0x02, 0x22, 0x33, 0x65,
    0x2B, 0x2B, 0x2B
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T3_A)
    SET_COMP ("content", L2_PAG_3_T3_A_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_3_T3_A_ARRAY, 23)
    0x4D,
    0x06,
    0x24,
    0x00,
    0x04, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x05, 0x22, 0x33, 0x66,
    0x02, 0x22, 0x33, 0x65,
    0x83, 0x2B, 0x2B
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T3_S)
    SET_COMP ("content", L2_PAG_3_T3_S_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_3_T3_S_ARRAY, 23)
    0x4D,
    0x06,
    0x24,
    0x00,
    0x04, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x05, 0x22, 0x33, 0x66,
    0x02, 0x22, 0x33, 0x65,
    0xA3, 0x2B, 0x2B
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T3_T)
```

```
        SET_COMP ("content", L2_PAG_3_T3_T_ARRAY)
    ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_3_T3_T_ARRAY, 23)
    0x4D,
    0x06,
    0x24,
    0x00,
    0x04, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x05, 0x22, 0x33, 0x66,
    0x02, 0x22, 0x33, 0x65,
    0xC3, 0x2B, 0x2B
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T3_D)
    SET_COMP ("content", L2_PAG_3_T3_D_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_3_T3_D_ARRAY, 23)
    0x4D,
    0x06,
    0x24,
    0x00,
    0x04, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x05, 0x22, 0x33, 0x66,
    0x02, 0x22, 0x33, 0x65,
    0xE3, 0x2B, 0x2B
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T3_N)
    SET_COMP ("content", L2_PAG_3_T3_N_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_3_T3_N_ARRAY, 23)
    0x4D,
    0x06,
    0x24,
    0x10,
    0x04, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x05, 0x22, 0x33, 0x66,
    0x02, 0x22, 0x33, 0x65,
    0x2B, 0x2B, 0x2B
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T4_A)
    SET_COMP ("content", L2_PAG_3_T4_A_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_3_T4_A_ARRAY, 23)
    0x4D,
    0x06,
    0x24,
    0x00,
    0x04, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x04, 0x22, 0x33, 0x67,
    0x05, 0x22, 0x33, 0x66,
    0xA3, 0x2B, 0x2B
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T4_S)
    SET_COMP ("content", L2_PAG_3_T4_S_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_3_T4_S_ARRAY, 23)
    0x4D,
    0x06,
    0x24,
    0x00,
    0x04, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x04, 0x22, 0x33, 0x67,
    0x05, 0x22, 0x33, 0x66,
    0x8B, 0x2B, 0x2B
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T4_T)
    SET_COMP ("content", L2_PAG_3_T4_T_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_3_T4_T_ARRAY, 23)
    0x4D,
    0x06,
    0x24,
    0x00,
    0x04, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x04, 0x22, 0x33, 0x67,
    0x05, 0x22, 0x33, 0x66,
    0x93, 0x2B, 0x2B
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T4_D)
    SET_COMP ("content", L2_PAG_3_T4_D_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_3_T4_D_ARRAY, 23)
    0x4D,
    0x06,
```

```

    0x24,
    0x00,
    0x04, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x04, 0x22, 0x33, 0x67,
    0x05, 0x22, 0x33, 0x66,
    0x9B, 0x2B, 0x2B
ENDARRAY

```

```

BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T4_N)
    SET_COMP ("content", L2_PAG_3_T4_N_ARRAY)
ENDSTRUCT

```

```

BEGINARRAY (L2_PAG_3_T4_N_ARRAY, 23)
    0x4D,
    0x06,
    0x24,
    0x50,
    0x04, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x04, 0x22, 0x33, 0x67,
    0x05, 0x22, 0x33, 0x66,
    0x2B, 0x2B, 0x2B
ENDARRAY

```

```

BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_WRONG)
    SET_COMP ("content", L2_PAG_3_WRONG_ARRAY)
ENDSTRUCT

```

```

BEGINARRAY (L2_PAG_3_WRONG_ARRAY, 23)
    0x4D,
    0x06,
    0x24,
    0x50,
    0x04, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x04, 0x22, 0x33, 0x67,
    0x02, 0x22, 0x33, 0x65,
    0x2B, 0x2B, 0x2B
ENDARRAY

```

/*

0x31	l2 pseudo length (= 12 Byte)
0x06	protocol discriminator, transaction identifier
0x3F	message type
0x00	page mode
0x2B, ..	channel description
0xA0	request reference
0x1B	timing advance
0x01,	mobile allocation

0x16	
------	--

*/

```
BEGIN_PSTRUCT ("l2_frame", L2_IMM_ASS)
    SET_COMP ("content", L2_IMM_ASS_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_IMM_ASS_ARRAY, 13)
    0x31,
    0x06,
    0x3F,
    0x00,
    0x2B, 0x54, 0x94,
    0xFB, 0x21, 0x06,
    0x1B,
    0x01, 0x16
ENDARRAY
```

/*

0x49	l2 pseudo length (= 18 Byte)
0x06	protocol discriminator, transaction identifier
0x39	message type
0x02	page mode
0x20, ..	channel description
0x00	request reference
0x00	timing advance
0x01, 0x16	mobile allocation

*/

```
BEGIN_PSTRUCT ("l2_frame", L2_IMM_ASS_EXT_REO)
    SET_COMP ("content", L2_IMM_ASS_EXT_REO_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_IMM_ASS_EXT_REO_ARRAY, 23)
    0x49,
    0x06,
    0x39,
    0x02,
    0x20, 0xA0, 0x14,
    0x00, 0x00, 0x00,
    0x00,
    0x20, 0xA0, 0x14,
    0x00, 0x00, 0x00,
    0x00,
    0x00,
    0x2b, 0x2b, 0x2b, 0x2b
ENDARRAY
```

/*

0x31	l2 pseudo length (= 12 Byte)
0x06	protocol discriminator, transaction identifier

0x3F	message type
0x00	page mode
0x40, 0x10, 0x40	channel description (hopping)
0xA0	request reference (???)
0x1E	timing advance (30 bits)
0x01, 0x16	mobile allocation (00010110) (->Freq 1,2,4) (0x01 = length of ma)
0x2B,..	spare bits
0x2B,..	spare bits

*/

```
BEGIN_PSTRUCT ("l2_frame", L2_IMM_ASS_HOP)
    SET_COMP ("content", L2_IMM_ASS_HOP_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_IMM_ASS_HOP_ARRAY, 23)
```

```
    0x31,
    0x06,
    0x3F,
    0x00,
    0x40, 0x10, 0x40,
    0xFB, 0x21, 0x06,
    0x1E,
    0x01, 0x16,
    0x2B,0x2B,0x2B,0x2B,0x2B,
    0x2B,0x2B,0x2B,0x2B,0x2B
```

```
ENDARRAY
```

/*

0xB0,0x0 0	length in bits (184/8 = 23 bytes)
0x08, 0x00	offset in bits
0x31	l2 pseudo length (= 12 Byte)
0x06	protocol discriminator, transaction identifier
0x3F	message type
0x00	page mode
0x40, ..	channel description
0xFB, ..	request reference
0x1E	timing advance
0x16	mobile allocation
0x2B,..	spare bits
0x2B,..	spare bits

*/

```
BEGIN_MSTRUCT ("page_mode", PAGE_MODE_1)
    SET_COMP ("pm", PAGING_NORM)
ENDSTRUCT
```

```
BEGIN_MSTRUCT ("chan_desc", CHAN_DESC_1)
    SET_COMP ("chan_type", SDCCH_8_S0)
```

```

        SET_COMP ("tn", 0)
        SET_COMP ("tsc", 0)
        SET_COMP ("hop", HOP_YES)
        SKIP_COMP ("arfcn")
        SET_COMP ("maio", 1)
        SET_COMP ("hsn", 0)
    ENDSTRUCT

```

```

BEGIN_MSTRUCT ("pck_chan_desc", PCK_CHAN_DESC_1)
    SET_COMP ("pck_chan_type", 1)
    SET_COMP ("tn", 1)
    SET_COMP ("tsc", 5)
    SET_COMP ("hop", 0)
    SKIP_COMP ("indir")
    SKIP_COMP ("arfcn")
    SKIP_COMP ("maio")
    SKIP_COMP ("ma_num")
    SKIP_COMP ("flag")
    SKIP_COMP ("ch_mark1")
    SKIP_COMP ("hsn")
ENDSTRUCT

```

```

BEGIN_MSTRUCT ("req_ref", REQ_REF_1)
    SET_COMP ("ra", 0xFB)
    SET_COMP ("t1", 4)
    SET_COMP ("t3", 8)
    SET_COMP ("t2", 6)
ENDSTRUCT

```

```

BEGIN_MSTRUCT ("time_advance", TIME_ADVANCE_1)
    SET_COMP ("ta", 0x1E)
ENDSTRUCT

```

```

BEGIN_MSTRUCT ("mob_alloc", MOB_ALLOC_1)
    SET_COMP ("mac", MAC_1)
ENDSTRUCT

```

```

BEGINARRAY_PART (MAC_1, 1)
    0x16
ENDARRAY

```

/*

0x31	I2 pseudo length (= 12 Byte)
0x06	protocol discriminator, transaction identifier
0x3F	message type
0x00	page mode
0x2B, ..	any content

*/

```
BEGIN_PSTRUCT ("l2_frame", L2_IMM_ASS_REJ)
    SET_COMP ("content", L2_IMM_ASS_REJ_ARRAY)
ENDSTRUCT
```

```
BEGINARRAY (L2_IMM_ASS_REJ_ARRAY, 13)
    0x31,
    0x06,
    0x3F,
    0x00,
    0x2B, 0x54, 0x94,
    0xFB, 0x21, 0x06,
    0x1B,
    0x01, 0x16
ENDARRAY
```

/*

0xB0,0x00	length in bits
0x08, 0x00	offset in bits
0x31	l2 pseudo length (= 12 Byte)
0x06	protocol discriminator, transaction identifier
0x3F	message type
0x00	page mode
0x2B, ..	any content

*/

```
BEGIN_MSTRUCT ("chan_desc", CHAN_DESC_2)
    SET_COMP ("chan_type", SDCCH_4_S1)
    SET_COMP ("tn", 3)
    SET_COMP ("tsc", 2)
    SET_COMP ("hop", HOP_YES)
    SKIP_COMP ("arfcn")
    SET_COMP ("maio", 18)
    SET_COMP ("hsn", 20)
ENDSTRUCT
```

```
BEGIN_MSTRUCT ("time_advance", TIME_ADVANCE_2)
    SET_COMP ("ta", 0x1B)
ENDSTRUCT
```

/*

14, 0	ncell 14
124, 0	ncell 124
0xFF, 0xFF	end of actual description list

*/

```
BEGIN_SHORT_ARRAY (CHLIST_14_124_FFFF, 3)
    14,
    124,
    NOT_PRESENT_16BIT
ENDARRAY
```

/*

0, 2	ncell 512
0x75, 3	ncell 885
0xFF, 0xFF	end of actual description list

*/

```
BEGIN_SHORT_ARRAY (CHLIST_512_885_FFFF, 3)
    ARFCN_512,
    ARFCN_885,
    NOT_PRESENT_16BIT
ENDARRAY
```

/*

0, 2	ncell 512
0x2a, 3	ncell 810
0xFF, 0xFF	end of actual description list

*/

```
BEGIN_SHORT_ARRAY (CHLIST_512_810_FFFF, 3)
    ARFCN_512,
    ARFCN_810,
    NOT_PRESENT_16BIT
ENDARRAY
```

/*

14, 0	ncell 14
0,2	ncell 512
0x7d,2	ncell 637
0x75, 3	ncell 885
0xFF, 0xFF	end of actual description list

*/

```
BEGIN_SHORT_ARRAY (CHLIST_14_512_637_885_FFFF, 5)
    ARFCN_14,
    ARFCN_512,
    ARFCN_637,
    ARFCN_885,
    NOT_PRESENT_16BIT
ENDARRAY
```

/*

1, 0	ncell 1
14, 0	ncell 14
124, 0	ncell 124
0xFF, 0xFF	end of neighbour cell list

*/

```
BEGIN_SHORT_ARRAY_PART (CHLIST_1_14_124_FFFF, 4)
    ARFCN_1,
    ARFCN_14,
    ARFCN_124,
```

NOT_PRESENT_16BIT
ENDARRAY

BEGIN_PSTRUCT ("chan_list", CHLIST_1_14_23_124_FFFF)
SET_COMP("radio_freq", RF_1_14_23_124_FFFF)
ENDSTRUCT

BEGIN_SHORT_ARRAY_PART (RF_1_14_23_124_FFFF, 5)
ARFCN_1,
ARFCN_14,
ARFCN_23,
ARFCN_124,
NOT_PRESENT_16BIT
ENDARRAY

/*

23, 0	serving cell 23
1, 0	ncell 1
14, 0	ncell 14
124,0	ncell 124

*/

BEGIN_PSTRUCT ("chan_list", CHLIST_23_1_14_124)
SET_COMP("radio_freq", RF_23_1_14_124)
ENDSTRUCT

BEGIN_SHORT_ARRAY_PART (RF_23_1_14_124, 4)
ARFCN_23,
ARFCN_1,
ARFCN_14,
ARFCN_124
ENDARRAY

/*

23, 0	Ncell 23
1, 0	Ncell 1
124, 0	Ncell 124
0xFF, 0xFF	end of neighbour cell list

*/

BEGIN_SHORT_ARRAY_PART (CHLIST_23_1_124_FFFF, 4)
ARFCN_23,
ARFCN_1,
ARFCN_124,
NOT_PRESENT_16BIT
ENDARRAY

/*

0, 2	ncell 512
0x44, 2	ncell 580
0x75, 3	ncell 885
0xFF, 0xFF	end of neighbour cell list

```
*/
BEGIN_SHORT_ARRAY_PART (CHLIST_512_580_885_FFFF, 4)
    ARFCN_512,
    ARFCN_580,
    ARFCN_885,
    NOT_PRESENT_16BIT
ENDARRAY
```

/*

0x7D, 2	serving cell 637
0, 2	ncell 512
0x44, 2	ncell 580
0x75, 3	ncell 885

*/

```
BEGIN_PSTRUCT ("chan_list", CHLIST_637_512_580_885)
    SET_COMP ("radio_freq", RF_637_512_580_885)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_637_512_580_885, 4)
    ARFCN_637,
    ARFCN_512,
    ARFCN_580,
    ARFCN_885
ENDARRAY
```

/*

0,2	ncell 518
0x7d,2	ncell 637
0x75,3	ncell 885
0xFF, 0xFF	end of neighbour cell list

*/

```
BEGIN_SHORT_ARRAY_PART (CHLIST_512_637_885_FFFF, 4)
    ARFCN_512,
    ARFCN_637,
    ARFCN_885,
    NOT_PRESENT_16BIT
ENDARRAY
```

/*

0, 2	ncell 512
0x44, 2	ncell 580
0x2a, 3	ncell 810
0xFF, 0xFF	end of neighbour cell list

*/

```
BEGIN_PSTRUCT ("chan_list", CHLIST_512_580_810_FFFF)
    SET_COMP ("radio_freq", RF_512_580_810_FFFF)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_512_580_810_FFFF, 4)
    ARFCN_512,
    ARFCN_580,
```

```

        ARFCN_810,
        NOT_PRESENT_16BIT
    ENDARRAY

```

/*

0, 2	ncell 512
0x44, 2	ncell 580
0x2a, 3	ncell 810
0x7D, 2	serving cell 637

*/

```

BEGIN_PSTRUCT ("chan_list", CHLIST_512_580_810_637)
    SET_COMP("radio_freq", RF_512_580_810_637)
ENDSTRUCT

```

```

BEGIN_SHORT_ARRAY_PART (RF_512_580_810_637, 4)
    ARFCN_512,
    ARFCN_580,
    ARFCN_810,
    ARFCN_637
ENDARRAY

```

/*

0,2	ncell 518
0x7d,2	ncell 637
0x2a,3	ncell 810
0xFF, 0xFF	end of neighbour cell list

*/

```

BEGIN_PSTRUCT ("chan_list", CHLIST_512_637_810_FFFF)
    SET_COMP("radio_freq", RF_512_637_810_FFFF)
ENDSTRUCT

```

```

BEGIN_SHORT_ARRAY_PART (RF_512_637_810_FFFF, 4)
    ARFCN_512,
    ARFCN_637,
    ARFCN_810,
    NOT_PRESENT_16BIT
ENDARRAY

```

/*

1, 0	ncell 1
14, 0	ncell 14
124, 0	ncell 124
0,2	ncell 512
0x44, 2	ncell 580
0x7d,2	ncell 637
0x75, 3	ncell 885
0xFF, 0xFF	end of neighbour cell list

*/

```

BEGIN_SHORT_ARRAY_PART (CHLIST_1_14_124_512_580_637_885_FFFF, 8)
    ARFCN_1,

```

```

        ARFCN_14,
        ARFCN_124,
        ARFCN_512,
        ARFCN_580,
        ARFCN_637,
        ARFCN_885,
        NOT_PRESENT_16BIT
    ENDARRAY

```

```

BEGIN_PSTRUCT ("chan_list", CHLIST_1_14_124_512_580_637_1023_FFFF)
    SET_COMP("radio_freq", RF_1_14_124_512_580_637_1023_FFFF)
ENDSTRUCT

```

```

BEGIN_SHORT_ARRAY_PART (RF_1_14_124_512_580_637_1023_FFFF, 8)
    ARFCN_1,
    ARFCN_14,
    ARFCN_124,
    ARFCN_512,
    ARFCN_580,
    ARFCN_637,
    ARFCN_1023,
    NOT_PRESENT_16BIT
ENDARRAY

```

/*

1, 0	ncell 1
14, 0	ncell 14
124, 0	ncell 124
0,2	ncell 512
0x44, 2	ncell 580
0x7d,2	ncell 637
0x75, 3	ncell 885
23,0	serving cell 23

*/

```

BEGIN_PSTRUCT ("chan_list", CHLIST_23_1_14_124_512_580_637_885)
    SET_COMP("radio_freq", RF_23_1_14_124_512_580_637_885)
ENDSTRUCT

```

```

BEGIN_SHORT_ARRAY_PART (RF_23_1_14_124_512_580_637_885, 8)
    ARFCN_23,
    ARFCN_1,
    ARFCN_14,
    ARFCN_124,
    ARFCN_512,
    ARFCN_580,
    ARFCN_637,
    ARFCN_885
ENDARRAY

```

```

BEGIN_PSTRUCT ("chan_list", CHLIST_1_14_124_512_580_637_1023_0)
    SET_COMP("radio_freq", RF_1_14_124_512_580_637_1023_0)

```


ENDSTRUCT

BEGIN_SHORT_ARRAY_PART (RF_1_14_124_512_580_637_1023_0, 8)

ARFCN_1,
ARFCN_14,
ARFCN_124,
ARFCN_512,
ARFCN_580,
ARFCN_637,
ARFCN_1023,
ARFCN_0

ENDARRAY

/*

1, 0	ncell 1
14, 0	ncell 14
23, 0	ncell 23
124, 0	ncell 124
0,2	ncell 512
0x44, 2	ncell 580
0x75, 3	ncell 885
0xFF, 0xFF	end of neighbour cell list

*/

BEGIN_SHORT_ARRAY_PART (CHLIST_1_14_23_124_512_580_885_FFFF, 8)

ARFCN_1,
ARFCN_14,
ARFCN_23,
ARFCN_124,
ARFCN_512,
ARFCN_580,
ARFCN_885,
NOT_PRESENT_16BIT

ENDARRAY

/*

1, 0	ncell 1
14, 0	ncell 14
0, 0	ncell 0
124, 0	ncell 124
0,2	ncell 512
0x44, 2	ncell 580
0xFF, 3	ncell 1023
0xFF, 0xFF	end of neighbour cell list

*/

BEGIN_PSTRUCT ("chan_list", CHLIST_1_14_0_124_512_580_1023_FFFF)

SET_COMP("radio_freq", RF_1_14_0_124_512_580_1023_FFFF)

ENDSTRUCT

BEGIN_SHORT_ARRAY_PART (RF_1_14_0_124_512_580_1023_FFFF, 8)

ARFCN_1,
ARFCN_14,

```

        ARFCN_0,
        ARFCN_124,
        ARFCN_512,
        ARFCN_580,
        ARFCN_1023,
        NOT_PRESENT_16BIT
    ENDARRAY

```

/*

0x7d, 2	serving cell 637
1, 0	ncell 1
14, 0	ncell 14
23, 0	ncell 23
124, 0	ncell 124
0,2	ncell 512
0x44, 2	ncell 580
0x75, 3	ncell 885

*/

```

BEGIN_PSTRUCT ("chan_list", CHLIST_637_1_14_23_124_512_580_885)
    SET_COMP ("radio_freq", RF_637_1_14_23_124_512_580_885)
ENDSTRUCT

```

```

BEGIN_SHORT_ARRAY_PART (RF_637_1_14_23_124_512_580_885, 8)
    ARFCN_637,
    ARFCN_1,
    ARFCN_14,
    ARFCN_23,
    ARFCN_124,
    ARFCN_512,
    ARFCN_580,
    ARFCN_885
ENDARRAY

```

```

BEGIN_PSTRUCT ("chan_list", CHLIST_1_14_0_124_512_580_1023_975)
    SET_COMP ("radio_freq", RF_1_14_0_124_512_580_1023_975)
ENDSTRUCT

```

```

BEGIN_SHORT_ARRAY_PART (RF_1_14_0_124_512_580_1023_975, 8)
    ARFCN_1,
    ARFCN_14,
    ARFCN_0,
    ARFCN_124,
    ARFCN_512,
    ARFCN_580,
    ARFCN_1023,
    ARFCN_975
ENDARRAY

```

```

BEGIN_SHORT_ARRAY_PART (EMPTY_NCELL_LIST,1)
    NOT_PRESENT_16BIT
ENDARRAY

```

```
BEGIN_PSTRUCT ("chan_list", CHLIST_10_20_40_80_90_100_110_120_FFFF)  
    SET_COMP("radio_freq", RF_10_20_40_80_90_100_110_120_FFFF)  
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_10_20_40_80_90_100_110_120_FFFF, 9)  
    ARFCN_10,  
    ARFCN_20,  
    ARFCN_40,  
    ARFCN_80,  
    ARFCN_90,  
    ARFCN_100,  
    ARFCN_110,  
    ARFCN_120,  
    NOT_PRESENT_16BIT  
ENDARRAY
```

```
BEGIN_SHORT_ARRAY_PART (CHLIST_1_15_FFFF, 3)  
    ARFCN_1,  
    ARFCN_15,  
    NOT_PRESENT_16BIT  
ENDARRAY
```

```
BEGIN_SHORT_ARRAY_PART (CHLIST_2_30_FFFF, 3)  
    ARFCN_2,  
    ARFCN_30,  
    NOT_PRESENT_16BIT  
ENDARRAY
```

```
BEGIN_PSTRUCT ("chan_list", CHLIST_10_20_40_80_90_100_110_120)  
    SET_COMP("radio_freq", RF_10_20_40_80_90_100_110_120)  
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_10_20_40_80_90_100_110_120, 8)  
    ARFCN_10,  
    ARFCN_20,  
    ARFCN_40,  
    ARFCN_80,  
    ARFCN_90,  
    ARFCN_100,  
    ARFCN_110,  
    ARFCN_120  
ENDARRAY
```

```
BEGIN_PSTRUCT ("chan_list", CHLIST_1_14_15)  
    SET_COMP("radio_freq", RF_1_14_15)  
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_1_14_15, 3)  
    ARFCN_1,  
    ARFCN_14,
```

ARFCN_15
ENDARRAY

BEGIN_PSTRUCT ("chan_list", CHLIST_23_1_15)
SET_COMP("radio_freq", RF_23_1_15)
ENDSTRUCT

BEGIN_PSTRUCT ("chan_list", CHLIST_42_2_30)
SET_COMP("radio_freq", RF_42_2_30)
ENDSTRUCT

BEGIN_SHORT_ARRAY_PART (RF_23_1_15, 3)
ARFCN_23,
ARFCN_1,
ARFCN_15
ENDARRAY

BEGIN_SHORT_ARRAY_PART (RF_42_2_30, 3)
ARFCN_42,
ARFCN_2,
ARFCN_30
ENDARRAY

BEGIN_PSTRUCT ("chan_list", CHLIST_1_14_124_23)
SET_COMP("radio_freq", RF_1_14_124_23)
ENDSTRUCT

BEGIN_SHORT_ARRAY_PART (RF_1_14_124_23, 4)
ARFCN_1,
ARFCN_14,
ARFCN_124,
ARFCN_23
ENDARRAY

BEGIN_PSTRUCT ("chan_list", CHLIST_10_FFFF)
SET_COMP("radio_freq", RF_10_FFFF)
ENDSTRUCT

BEGIN_SHORT_ARRAY_PART (RF_10_FFFF, 2)
ARFCN_10,
NOT_PRESENT_16BIT
ENDARRAY

BEGIN_PSTRUCT ("chan_list", CHLIST_23_10)
SET_COMP("radio_freq", RF_23_10)
ENDSTRUCT

BEGIN_SHORT_ARRAY_PART (RF_23_10, 2)
ARFCN_23,
ARFCN_10
ENDARRAY

```
BEGIN_PSTRUCT ("chan_list", CHLIST_2_8_FFFF)
    SET_COMP("radio_freq", RF_2_8_FFFF)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_2_8_FFFF, 3)
    ARFCN_2,
    ARFCN_8,
    NOT_PRESENT_16BIT
ENDARRAY
```

```
BEGIN_PSTRUCT ("chan_list", CHLIST_14_2_8)
    SET_COMP("radio_freq", RF_14_2_8)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_14_2_8, 3)
    ARFCN_14,
    ARFCN_2,
    ARFCN_8
ENDARRAY
```

```
BEGIN_PSTRUCT("chan_list", CHLIST_14_23_1_124)
    SET_COMP("radio_freq", RF_14_23_1_124)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_14_23_1_124, 4)
    ARFCN_14,
    ARFCN_23,
    ARFCN_1,
    ARFCN_124
ENDARRAY
```

```
BEGIN_PSTRUCT ("chan_list", CHLIST_14)
    SET_COMP("radio_freq", RF_14)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_14, 1)
    ARFCN_14
ENDARRAY
```

```
BEGIN_PSTRUCT ("chan_list", CHLIST_975)
    SET_COMP("radio_freq", RF_975)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_975, 1)
    ARFCN_975
ENDARRAY
```

/*

0,2	ncell 512
0x7d, 2	ncell 637
0x75, 3	ncell 885
0x44, 2	serving cell 580

*/

```
BEGIN_PSTRUCT ("chan_list", CHLIST_580_512_637_885)
    SET_COMP ("radio_freq", RF_580_512_637_885)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_580_512_637_885, 4)
    ARFCN_580,
    ARFCN_512,
    ARFCN_637,
    ARFCN_885
ENDARRAY
```

/*

0x44, 2	serving cell 580
0,2	ncell 512
0x7d, 2	ncell 637
0x2a, 3	ncell 810

*/

```
BEGIN_PSTRUCT ("chan_list", CHLIST_580_512_637_810)
    SET_COMP ("radio_freq", RF_580_512_637_810)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_580_512_637_810, 4)
    ARFCN_580,
    ARFCN_512,
    ARFCN_637,
    ARFCN_810
ENDARRAY
```

```
BEGIN_PSTRUCT ("chan_list", CHLIST_580)
    SET_COMP ("radio_freq", RF_580)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_580, 1)
    ARFCN_580
ENDARRAY
```

```
BEGIN_PSTRUCT ("chan_list", CHLIST_23)
    SET_COMP ("radio_freq", RF_23)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_23, 1)
    ARFCN_23
ENDARRAY
```

```
BEGIN_PSTRUCT ("chan_list", CHLIST_637)
```

```
        SET_COMP ("radio_freq", RF_637)
    ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_637, 1)
    ARFCN_637
ENDARRAY
```

```
BEGIN_SHORT_ARRAY_PART (CHLIST_23_1_14_124_FFFF, 5)
    ARFCN_23,
    ARFCN_1,
    ARFCN_14,
    ARFCN_124,
    NOT_PRESENT_16BIT
ENDARRAY
```

/*

1, 0	ncell 1
14, 0	ncell 14
25, 0	ncell 25
124, 0	ncell 124
0, 2	ncell 512
0x44, 2	ncell 580
0x7D, 2	ncell 637
0x75, 3	ncell 885
0xFF, 0xFF	end of neighbour cell list

*/

```
BEGIN_SHORT_ARRAY (CHLIST_1_14_25_124_512_580_637_885_FFFF, 9)
    ARFCN_1,
    ARFCN_14,
    ARFCN_25,
    ARFCN_124,
    ARFCN_512,
    ARFCN_580,
    ARFCN_637,
    ARFCN_885,
    NOT_PRESENT_16BIT
ENDARRAY
```

```
BEGIN_PSTRUCT ("chan_list", CHLIST_1_14_25_124_512_580_637_885_23)
    SET_COMP ("radio_freq", RF_1_14_25_124_512_580_637_885_23)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_1_14_25_124_512_580_637_885_23, 9)
    ARFCN_1,
    ARFCN_14,
    ARFCN_25,
    ARFCN_124,
    ARFCN_512,
    ARFCN_580,
    ARFCN_637,
```

```
        ARFCN_885,  
        ARFCN_23  
ENDARRAY
```

```
BEGIN_PSTRUCT("result", NCELL_RES_23a)  
    SET_COMP("radio_freq", ARFCN_23)  
    SET_COMP("rxlev", 30)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_14a)  
    SET_COMP("radio_freq", ARFCN_14)  
    SET_COMP("rxlev", 44)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_25a)  
    SET_COMP("radio_freq", ARFCN_25)  
    SET_COMP("rxlev", 55)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_124a)  
    SET_COMP("radio_freq", ARFCN_124)  
    SET_COMP("rxlev", 12)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_512a)  
    SET_COMP("radio_freq", ARFCN_512)  
    SET_COMP("rxlev", 43)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_580a)  
    SET_COMP("radio_freq", ARFCN_580)  
    SET_COMP("rxlev", 25)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_637a)  
    SET_COMP("radio_freq", ARFCN_637)  
    SET_COMP("rxlev", 56)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_885a)  
    SET_COMP("radio_freq", ARFCN_885)  
    SET_COMP("rxlev", 25)  
ENDSTRUCT
```



```
BEGIN_PSTRUCT_ARRAY (NCELL_RES_SC_23_8, 8)
    NCELL_RES_23a,
    NCELL_RES_14a,
    NCELL_RES_25a,
    NCELL_RES_124a,
    NCELL_RES_512a,
    NCELL_RES_580a,
    NCELL_RES_637a,
    NCELL_RES_885a
ENDARRAY
```

```
BEGIN_SHORT_ARRAY (CHLIST_14_25_512_580_637_885, 6)
    ARFCN_14,
    ARFCN_25,
    ARFCN_512,
    ARFCN_580,
    ARFCN_637,
    ARFCN_885
ENDARRAY
```

```
BEGINARRAY(NCELLS_SC_900_8_RXLEVS, 6)
    44, 55, 43, 25, 56, 25
ENDARRAY
```

```
BEGINARRAY(NCELLS_SC_900_8_BSICS, 6)
    1, 1, 1, 1, 1, 1
ENDARRAY
```

```
BEGIN_LONG_ARRAY(NCELLS_SC_900_8_TA,6)
    TIME_ALIGNMT_14,
    TIME_ALIGNMT_14,
    TIME_ALIGNMT_14,
    TIME_ALIGNMT_14,
    TIME_ALIGNMT_14,
    TIME_ALIGNMT_14
ENDARRAY
```

```
BEGIN_LONG_ARRAY(NCELLS_SC_900_8_FO,6)
    FN_OFFSET_14,
    FN_OFFSET_14,
    FN_OFFSET_14,
    FN_OFFSET_14,
    FN_OFFSET_14,
    FN_OFFSET_14
ENDARRAY
```

```
BEGIN_LONG_ARRAY(NCELLS_SC_900_8_FO_EOTD,6)
    FN_OFFSET_124,
    FN_OFFSET_102,
```

```
        FN_OFFSET_153,
        FN_OFFSET_204,
        FN_OFFSET_14,
        FN_OFFSET_255
    ENDARRAY

    BEGIN_PSTRUCT("ncells", NCELLS_SC_900_8)
        SET_COMP("no_of_ncells", 6)
        SET_COMP("arfcn", CHLIST_14_25_512_580_637_885)
        SET_COMP("rx_lev", NCELLS_SC_900_8_RXLEVS)
        SET_COMP("bsic", NCELLS_SC_900_8_BSICS)
        SET_COMP("time_alignmt", NCELLS_SC_900_8_TA)
        SET_COMP("frame_offset", NCELLS_SC_900_8_FO)
    ENDSTRUCT

    BEGIN_PSTRUCT("ncells", NCELLS_SC_900_EOTD)
        SET_COMP("no_of_ncells", 6)
        SET_COMP("arfcn", CHLIST_14_25_512_580_637_885)
        SET_COMP("rx_lev", NCELLS_SC_900_8_RXLEVS)
        SET_COMP("bsic", NCELLS_SC_900_8_BSICS)
        SET_COMP("time_alignmt", NCELLS_SC_900_8_TA)
        SET_COMP("frame_offset", NCELLS_SC_900_8_FO_EOTD)
    ENDSTRUCT

    BEGIN_SHORT_ARRAY_PART (CHLIST_1_11_14_25_87_124_512_885_FFFF, 9)
        ARFCN_1,
        ARFCN_11,
        ARFCN_14,
        ARFCN_25,
        ARFCN_87,
        ARFCN_124,
        ARFCN_512,
        ARFCN_885,
        NOT_PRESENT_16BIT
    ENDARRAY

    BEGIN_PSTRUCT ("chan_list", CHLIST_1_11_14_25_87_124_512_885_23)
        SET_COMP ("radio_freq", RF_1_11_14_25_87_124_512_885_23)
    ENDSTRUCT

    BEGIN_SHORT_ARRAY_PART (RF_1_11_14_25_87_124_512_885_23, 9)
        ARFCN_1,
        ARFCN_11,
        ARFCN_14,
        ARFCN_25,
        ARFCN_87,
        ARFCN_124,
        ARFCN_512,
        ARFCN_885,
        ARFCN_23
    ENDARRAY
```

```
BEGIN_PSTRUCT("result", ARFCN_14b)
    SET_COMP("radio_freq", ARFCN_14)
    SET_COMP("rxlev", 44)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", ARFCN_1b)
    SET_COMP("radio_freq", ARFCN_1)
    SET_COMP("rxlev", 11)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", ARFCN_11b)
    SET_COMP("radio_freq", ARFCN_11)
    SET_COMP("rxlev", 22)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", ARFCN_25b)
    SET_COMP("radio_freq", ARFCN_25)
    SET_COMP("rxlev", 15)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", ARFCN_87b)
    SET_COMP("radio_freq", ARFCN_87)
    SET_COMP("rxlev", 21)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", ARFCN_124b)
    SET_COMP("radio_freq", ARFCN_124)
    SET_COMP("rxlev", 3)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", ARFCN_512b)
    SET_COMP("radio_freq", ARFCN_512)
    SET_COMP("rxlev", 43)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", ARFCN_885b)
    SET_COMP("radio_freq", ARFCN_885)
    SET_COMP("rxlev", 23)
ENDSTRUCT
```

```
BEGIN_PSTRUCT_ARRAY(NCELL_RES_SC_23_8_1, 8)
    ARFCN_14b,
    ARFCN_1b,
    ARFCN_11b,
    ARFCN_25b,
```

```
        ARFCN_87b,  
        ARFCN_124b,  
        ARFCN_512b,  
        ARFCN_885b  
ENDARRAY  
  
BEGIN_SHORT_ARRAY(CHLIST_1_11_14_25_87_512, 6)  
    ARFCN_1,  
    ARFCN_11,  
    ARFCN_14,  
    ARFCN_25,  
    ARFCN_87,  
    ARFCN_512  
ENDARRAY  
  
BEGINARRAY(NCELLS_SC_900_8_1_RXLEVS, 6)  
    11, 22, 44, 15, 21, 43  
ENDARRAY  
  
BEGINARRAY(NCELLS_SC_900_8_1_BSICS, 6)  
    1, 1, 1, 1, 1, 1  
ENDARRAY  
  
BEGIN_LONG_ARRAY(NCELLS_SC_900_8_1_TA,6)  
    TIME_ALIGNMT_14,  
    TIME_ALIGNMT_14,  
    TIME_ALIGNMT_14,  
    TIME_ALIGNMT_14,  
    TIME_ALIGNMT_14,  
    TIME_ALIGNMT_14  
ENDARRAY  
  
BEGIN_LONG_ARRAY(NCELLS_SC_900_8_1_FO,6)  
    FN_OFFSET_14,  
    FN_OFFSET_14,  
    FN_OFFSET_14,  
    FN_OFFSET_14,  
    FN_OFFSET_14,  
    FN_OFFSET_14  
ENDARRAY  
  
BEGIN_PSTRUCT("ncells", NCELLS_SC_900_8_1)  
    SET_COMP("no_of_ncells", 6)  
    SET_COMP("arfcn", CHLIST_1_11_14_25_87_512)  
    SET_COMP("rx_lev", NCELLS_SC_900_8_1_RXLEVS)  
    SET_COMP("bsic", NCELLS_SC_900_8_1_BSICS)  
    SET_COMP("time_alignmt", NCELLS_SC_900_8_1_TA)  
    SET_COMP("frame_offset", NCELLS_SC_900_8_1_FO)  
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY (CHLIST_1_14_512_885_FFFF, 5)
    ARFCN_1,
    ARFCN_14,
    ARFCN_512,
    ARFCN_885,
    NOT_PRESENT_16BIT
ENDARRAY
```

```
BEGIN_PSTRUCT ("chan_list", CHLIST_23_1_14_512_885)
    SET_COMP ("radio_freq", RF_23_1_14_512_885)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_23_1_14_512_885, 5)
    ARFCN_23,
    ARFCN_1,
    ARFCN_14,
    ARFCN_512,
    ARFCN_885
ENDARRAY
```

```
BEGIN_PSTRUCT("result", NCELL_RES_1c)
    SET_COMP("radio_freq", ARFCN_1)
    SET_COMP("rxlev", 11)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_14c)
    SET_COMP("radio_freq", ARFCN_14)
    SET_COMP("rxlev", 44)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_512c)
    SET_COMP("radio_freq", ARFCN_512)
    SET_COMP("rxlev", 43)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_885c)
    SET_COMP("radio_freq", ARFCN_885)
    SET_COMP("rxlev", 23)
ENDSTRUCT
```

```
BEGIN_PSTRUCT_ARRAY (NCELL_RES_SC_23_4_1, 8)
    NCELL_RES_1c,
    NCELL_RES_14c,
    NCELL_RES_512c,
    NCELL_RES_885c,
```

```
        NCELL_RESULT_NO_CONTENT_1,  
        NCELL_RESULT_NO_CONTENT_1,  
        NCELL_RESULT_NO_CONTENT_1,  
        NCELL_RESULT_NO_CONTENT_1  
ENDARRAY
```

```
BEGIN_SHORT_ARRAY_PART (CHLIST_1_14_512_885, 4)  
    ARFCN_1,  
    ARFCN_14,  
    ARFCN_512,  
    ARFCN_885  
ENDARRAY
```

```
BEGINARRAY_PART (NCELLS_SC_900_4_1_RXLEVS, 4)  
    11, 44, 43, 23  
ENDARRAY
```

```
BEGINARRAY_PART (NCELLS_SC_900_4_1_BSICS, 4)  
    1, 1, 1, 1, 1, 1  
ENDARRAY
```

```
BEGIN_LONG_ARRAY_PART (NCELLS_SC_900_4_1_TA, 4)  
    TIME_ALIGNMT_14,  
    TIME_ALIGNMT_14,  
    TIME_ALIGNMT_14,  
    TIME_ALIGNMT_14  
ENDARRAY
```

```
BEGIN_LONG_ARRAY_PART (NCELLS_SC_900_4_1_FO,4)  
    FN_OFFSET_14,  
    FN_OFFSET_14,  
    FN_OFFSET_14,  
    FN_OFFSET_14  
ENDARRAY
```

```
BEGIN_PSTRUCT("ncells", NCELLS_SC_900_4_1)  
    SET_COMP("no_of_ncells", 4)  
    SET_COMP("arfcn", CHLIST_1_14_512_885)  
    SET_COMP("rx_lev", NCELLS_SC_900_4_1_RXLEVS)  
    SET_COMP("bsic", NCELLS_SC_900_4_1_BSICS)  
    SET_COMP("time_alignmt", NCELLS_SC_900_4_1_TA)  
    SET_COMP("frame_offset", NCELLS_SC_900_4_1_FO)  
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY (CHLIST_1_14_512_513_600_700_810_885_FFFF, 9)  
    ARFCN_1,
```

```
        ARFCN_14,  
        ARFCN_512,  
        ARFCN_513,  
        ARFCN_600,  
        ARFCN_700,  
        ARFCN_810,  
        ARFCN_885,  
        NOT_PRESENT_16BIT  
    ENDARRAY
```

```
BEGIN_PSTRUCT("chan_list", CHLIST_1_14_512_513_600_700_810_885_637)  
    SET_COMP("radio_freq", RF_1_14_512_513_600_700_810_885_637)  
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART(RF_1_14_512_513_600_700_810_885_637, 9)  
    ARFCN_1,  
    ARFCN_14,  
    ARFCN_512,  
    ARFCN_513,  
    ARFCN_600,  
    ARFCN_700,  
    ARFCN_810,  
    ARFCN_885,  
    ARFCN_637  
ENDARRAY
```

```
BEGIN_PSTRUCT("result", NCELL_RES_1d)  
    SET_COMP("radio_freq", ARFCN_1)  
    SET_COMP("rxlev", 33)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_14d)  
    SET_COMP("radio_freq", ARFCN_14)  
    SET_COMP("rxlev", 44)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_512d)  
    SET_COMP("radio_freq", ARFCN_512)  
    SET_COMP("rxlev", 12)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_513d)  
    SET_COMP("radio_freq", ARFCN_513)  
    SET_COMP("rxlev", 21)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_600d)  
    SET_COMP("radio_freq", ARFCN_600)
```

```
        SET_COMP("rxlev", 24)
    ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_700d)
    SET_COMP("radio_freq", ARFCN_700)
    SET_COMP("rxlev", 27)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_810d)
    SET_COMP("radio_freq", ARFCN_810)
    SET_COMP("rxlev", 18)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_885d)
    SET_COMP("radio_freq", ARFCN_885)
    SET_COMP("rxlev", 15)
ENDSTRUCT
```

```
BEGIN_PSTRUCT_ARRAY(NCELL_RES_SC_637_8_1, 8)
    NCELL_RES_1d,
    NCELL_RES_14d,
    NCELL_RES_512d,
    NCELL_RES_513d,
    NCELL_RES_600d,
    NCELL_RES_700d,
    NCELL_RES_810d,
    NCELL_RES_885d
ENDARRAY
```

```
BEGIN_SHORT_ARRAY(CHLIST_14_513_600_700_810_885,6)
    ARFCN_14,
    ARFCN_513,
    ARFCN_600,
    ARFCN_700,
    ARFCN_810,
    ARFCN_885
ENDARRAY
```

```
BEGINARRAY(NCELLS_SC_1800_8_1_RXLEVS,6)
    44,21,24,27,18,15
ENDARRAY
```

```
BEGINARRAY(NCELLS_SC_1800_8_1_BSICS,6)
    1,1,1,1,1,1
ENDARRAY
```



```
BEGIN_LONG_ARRAY(NCELLS_SC_1800_8_1_TA,6)
    TIME_ALIGNMT_14,
    TIME_ALIGNMT_14,
    TIME_ALIGNMT_14,
    TIME_ALIGNMT_14,
    TIME_ALIGNMT_14,
    TIME_ALIGNMT_14
ENDARRAY
```

```
BEGIN_LONG_ARRAY(NCELLS_SC_1800_8_1_FO,6)
    FN_OFFSET_14,
    FN_OFFSET_14,
    FN_OFFSET_14,
    FN_OFFSET_14,
    FN_OFFSET_14,
    FN_OFFSET_14
ENDARRAY
```

```
BEGIN_PSTRUCT("ncells", NCELLS_SC_1800_8_1)
    SET_COMP("no_of_ncells", 6)
    SET_COMP("arfcn",CHLIST_14_513_600_700_810_885)
    SET_COMP("rx_lev", NCELLS_SC_1800_8_1_RXLEVS)
    SET_COMP("bsic",NCELLS_SC_1800_8_1_BSICS)
    SET_COMP("time_alignmt",NCELLS_SC_1800_8_1_TA)
    SET_COMP("frame_offset",NCELLS_SC_1800_8_1_FO)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("chan_list", CHLIST_637_1_14_512_885)
    SET_COMP ("radio_freq", RF_637_1_14_512_885)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_637_1_14_512_885,5)
    ARFCN_637,
    ARFCN_1,
    ARFCN_14,
    ARFCN_512,
    ARFCN_885
ENDARRAY
```

/*

14, 0	ncell 14
44	rxlev 44
1, 0	ncell 1
11	rxlev 11
0, 2	ncell 512
43	rxlev 43
0x75, 3	ncell 885
23	rxlev 23
0, 0, ...	not used

*/

```
BEGIN_PSTRUCT("result", NCELL_RES_14z)
    SET_COMP("radio_freq", ARFCN_14)
    SET_COMP("rxlev", 44)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_1z)
    SET_COMP("radio_freq", ARFCN_1)
    SET_COMP("rxlev", 11)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_512z)
    SET_COMP("radio_freq", ARFCN_512)
    SET_COMP("rxlev", 43)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_885z)
    SET_COMP("radio_freq", ARFCN_885)
    SET_COMP("rxlev", 23)
ENDSTRUCT
```

```
BEGIN_PSTRUCT_ARRAY (NCELL_RES_SC_637_4_1, 8)
    NCELL_RES_14z,
    NCELL_RES_1z,
    NCELL_RES_512z,
    NCELL_RES_885z,
    NCELL_RESULT_NO_CONTENT_1,
    NCELL_RESULT_NO_CONTENT_1,
    NCELL_RESULT_NO_CONTENT_1,
    NCELL_RESULT_NO_CONTENT_1
ENDARRAY
```

```
BEGINARRAY_PART (NCELLS_SC_1800_4_1_RXLEVS, 4)
    11,44,43,23
ENDARRAY
```

```
BEGINARRAY_PART (NCELLS_SC_1800_4_1_BSICS, 4)
    1,1,1,1
ENDARRAY
```

```
BEGIN_LONG_ARRAY_PART (NCELLS_SC_1800_4_1_TA, 4)
    TIME_ALIGNMT_14,
    TIME_ALIGNMT_14,
    TIME_ALIGNMT_14,
    TIME_ALIGNMT_14
ENDARRAY
```

```
BEGIN_LONG_ARRAY_PART (NCELLS_SC_1800_4_1_FO, 4)
    FN_OFFSET_14,
    FN_OFFSET_14,
    FN_OFFSET_14,
    FN_OFFSET_14
ENDARRAY
```

```
BEGIN_PSTRUCT("ncells", NCELLS_SC_1800_4_1)
    SET_COMP("no_of_ncells", 4)
    SET_COMP("arfcn", CHLIST_1_14_512_885)
    SET_COMP("rx_lev", NCELLS_SC_1800_4_1_RXLEVS)
    SET_COMP("bsic", NCELLS_SC_1800_4_1_BSICS)
    SET_COMP("time_alignmt", NCELLS_SC_1800_4_1_TA)
    SET_COMP("frame_offset", NCELLS_SC_1800_4_1_FO)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("chan_list", CHLIST_1_14_25_124_512_580_637_885_578)
    SET_COMP("radio_freq", RF_1_14_25_124_512_580_637_885_578)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_1_14_25_124_512_580_637_885_578, 9)
    ARFCN_1,
    ARFCN_14,
    ARFCN_25,
    ARFCN_124,
    ARFCN_512,
    ARFCN_580,
    ARFCN_637,
    ARFCN_885,
    ARFCN_578
ENDARRAY
```

/*

0x42, 2	serving cell 578
30	rxlev 30
14, 0	ncell 14
44	rxlev 44
25, 0	ncell 25
55	rxlev 55
124, 0	ncell 124
12	rxlev 12
0, 2	ncell 512
43	rxlev 43
0x44, 2	ncell 580
25	rxlev 25
0x7d, 2	ncell 637
56	rxlev 56
0x75, 3	ncell 885
25	rxlev 25

*/

```
BEGIN_PSTRUCT("result", NCELL_RES_578y)
    SET_COMP("radio_freq", ARFCN_578)
    SET_COMP("rxlev", 30)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_14y)
    SET_COMP("radio_freq", ARFCN_14)
    SET_COMP("rxlev", 44)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_25y)
    SET_COMP("radio_freq", ARFCN_25)
    SET_COMP("rxlev", 55)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_124y)
    SET_COMP("radio_freq", ARFCN_124)
    SET_COMP("rxlev", 12)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_512y)
    SET_COMP("radio_freq", ARFCN_512)
    SET_COMP("rxlev", 43)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_580y)
    SET_COMP("radio_freq", ARFCN_580)
    SET_COMP("rxlev", 25)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_637y)
    SET_COMP("radio_freq", ARFCN_637)
    SET_COMP("rxlev", 56)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RES_885y)
    SET_COMP("radio_freq", ARFCN_885)
    SET_COMP("rxlev", 25)
ENDSTRUCT
```

```
BEGIN_PSTRUCT_ARRAY(NCELL_RES_SC_578_8,8)
    NCELL_RES_578y,
    NCELL_RES_14y,
    NCELL_RES_25y,
    NCELL_RES_124y,
    NCELL_RES_512y,
```

```

        NCELL_RES_580y,
        NCELL_RES_637y,
        NCELL_RES_885y
    ENDARRAY

```

/*

0	status inactive
---	-----------------

*/

```

BEGIN_PSTRUCT ("cbch", NO_CBCH)
    SKIP_COMP ("stat")
    SKIP_COMP ("ch")
    SKIP_COMP ("tn")
    SKIP_COMP ("tsc")
    SKIP_COMP ("h")
    SKIP_COMP ("arfcn")
    SKIP_COMP ("maio")
    SKIP_COMP ("hsn")
    SKIP_COMP ("ma")
ENDSTRUCT

```

/*

1	status active
8	channel type SDCCH/8(5)
3	timeslot number
3	training sequence code
1	hopping
0,0	channel number (only h=0)
1	mobile allocation index offset
0	hopping sequence number
0E,00,...	mobile allocation list

*/

```

BEGIN_PSTRUCT ("cbch", CBCH_DESCRIPTION_8)
    SET_COMP ("stat", STAT_ACT)
    SET_COMP ("ch", CH_SDCCH_8_0)
    SET_COMP ("tn", 3)
    SET_COMP ("tsc", 3)
    SET_COMP ("h", H_FREQ)
    SET_COMP ("arfcn", 0)
    SET_COMP ("maio", 1)
    SET_COMP ("hsn", 0)
    SET_COMP ("ma", CBCH_DESCRIPTION_8_MA)
ENDSTRUCT

```

```

BEGIN_SHORT_ARRAY_PART (CBCH_DESCRIPTION_8_MA, 5)
    0x0E,
    0x17,
    0x45,
    0x73,
    NOT_PRESENT_16BIT
ENDARRAY

```

/*

1	status active
---	---------------

4	channel type SDCCH/4(3)
0	timeslot number
3	training sequence code
1	hopping
0,0	channel number (only h=0)
1	mobile allocation index offset
0	hopping sequence number
0E,00,...	mobile allocation list

*/

```
BEGIN_PSTRUCT ("cbch", CBCH_DESCRIPTION_4)
    SET_COMP ("stat", STAT_ACT)
    SET_COMP ("ch", 4 ) /*CH_SDCCH_4_0) */
    SET_COMP ("tn", 0)
    SET_COMP ("tsc", 3)
    SET_COMP ("h", H_FREQ)
    SET_COMP ("arfcn", 0)
    SET_COMP ("maio", 1)
    SET_COMP ("hsn", 0)
    SET_COMP ("ma", CBCH_DESCRIPTION_4_MA)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (CBCH_DESCRIPTION_4_MA, 5)
    0x0E, 0x17, 0x45, 0x73, NOT_PRESENT_16BIT
ENDARRAY
```

/*

0	empty neighbour cell results
---	------------------------------

*/

```
BEGIN_PSTRUCT ("l2_frame", L2_NO_CONTENT)
    SET_COMP ("content", EMPTY_FRAME)
ENDSTRUCT
```

```
BEGINARRAY_PART (EMPTY_FRAME, 1)
    0
ENDARRAY
```

```
BEGIN_PSTRUCT ("ncells", NCELLS_NO_CONTENT)
    SKIP_COMP("no_of_ncells")
    SKIP_COMP("arfcn")
    SKIP_COMP("rx_lev")
    SKIP_COMP("bsic")
    SKIP_COMP("time_alignmt")
    SKIP_COMP("frame_offset")
ENDSTRUCT
```

/*

23, 0	serving cell 23
56	rxlev 56
1, 0	ncell 1
12	rxlev 12
14, 0	ncell 14

44	rxlev 44
124, 0	ncell 124
25	rxlev 25
23, 0	serving cell 23
56	rxlev 56
1, 0	ncell 1
12	rxlev 12
14, 0	ncell 14
44	rxlev 44
124, 0	ncell 124
25	rxlev 25

*/

```
BEGIN_PSTRUCT("result", NCELL_RESULT_NO_CONTENT_1)
    SKIP_COMP("radio_freq")
    SKIP_COMP("rxlev")
ENDSTRUCT
```

```
BEGIN_PSTRUCT_ARRAY (NCELL_RESULT_NO_CONTENT, 8)
    NCELL_RESULT_NO_CONTENT_1,
    NCELL_RESULT_NO_CONTENT_1,
    NCELL_RESULT_NO_CONTENT_1,
    NCELL_RESULT_NO_CONTENT_1,
    NCELL_RESULT_NO_CONTENT_1,
    NCELL_RESULT_NO_CONTENT_1,
    NCELL_RESULT_NO_CONTENT_1,
    NCELL_RESULT_NO_CONTENT_1
ENDARRAY
```

```
BEGIN_PSTRUCT("result", NCELL_RESULT_23a)
    SET_COMP("radio_freq", ARFCN_23)
    SET_COMP("rxlev", 56)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RESULT_1a)
    SET_COMP("radio_freq", ARFCN_1)
    SET_COMP("rxlev", 12)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RESULT_14a)
    SET_COMP("radio_freq", ARFCN_14)
    SET_COMP("rxlev", 44)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("result", NCELL_RESULT_124a)
    SET_COMP("radio_freq", ARFCN_124)
    SET_COMP("rxlev", 25)
ENDSTRUCT
```

```
BEGIN_PSTRUCT_ARRAY (NCELL_RESULT_1, 8)
    NCELL_RESULT_23a,
    NCELL_RESULT_1a,
    NCELL_RESULT_14a,
    NCELL_RESULT_124a,
    NCELL_RESULT_23a,
    NCELL_RESULT_1a,
    NCELL_RESULT_14a,
    NCELL_RESULT_124a
ENDARRAY
```

/*

3	number of neighbour cells
1, 0	ncell 1
14, 0	ncell 14
124, 0	ncell 124
0, 0, ...	not used (three channel numbers)
12, 44, 25	rxlev ncell 1, 14, 124
0, 0, 0	not used (rxlev three channel numbers)
1, 1, 1	bsic ncell 1, 14, 124
0, 0, 0	not used (bsic three channel numbers)
1, 0, 14, 0, 124, 0	timing advance ncell 1, 14, 124
0, 0, 0, 0, 0, 0	not used (timing advance three channel numbers)

*/

```
BEGIN_SHORT_ARRAY_PART (CHLIST_1_14_124, 3)
    ARFCN_1,
    ARFCN_14,
    ARFCN_124
ENDARRAY
```

```
BEGINARRAY_PART(NCELLS_1_14_124_RXLEVS, 3)
    12,44,25
ENDARRAY
```

```
BEGINARRAY_PART(NCELLS_1_14_124_BSICS, 3)
    1,1,1
ENDARRAY
```

```
BEGIN_LONG_ARRAY(NCELLS_1_14_124_TA, 6)
    1,14,124,0,0,0
ENDARRAY
```

```
BEGIN_LONG_ARRAY(NCELLS_1_14_124_FO, 6)
    0x65,0x72,0xE0,0x00,0x00,0x00
ENDARRAY
```



```
BEGIN_PSTRUCT("ncells", NCELLS_1_14_124)
    SET_COMP("no_of_ncells", NO_OF_CELLS_3)
    SET_COMP("arfcn", CHLIST_1_14_124)
    SET_COMP("rx_lev", NCELLS_1_14_124_RXLEVS)
    SET_COMP("bsic", NCELLS_1_14_124_BSICS)
    SET_COMP("time_alignmt", NCELLS_1_14_124_TA)
    SET_COMP("frame_offset", NCELLS_1_14_124_FO)
ENDSTRUCT
```

```
BEGIN_PSTRUCT("ncells", NO_NCELLS)
    SET_COMP("no_of_ncells", 0)
    SKIP_COMP("arfcn")
    SKIP_COMP("rx_lev")
    SKIP_COMP("bsic")
    SKIP_COMP("time_alignmt")
    SKIP_COMP("frame_offset")
ENDSTRUCT
```

/*

2	number of neighbour cells
1, 0	ncell 1
14, 0	ncell 14
0, 0, ...	not used (four channel numbers)
12, 44	rxlev ncell 1, 14
0, 0, 0, 0	not used (rxlev four channel numbers)
16, 16	bsic ncell 1, 14
0, 0, 0, 0	not used (bsic four channel numbers)
1, 0, 14, 0	timing advance ncell 1, 14
0, 0, ...	not used (timing advance four channel numbers)

*/

```
BEGIN_SHORT_ARRAY_PART(CHLIST_1_14, 2)
    ARFCN_1,
    ARFCN_14
ENDARRAY
```

```
BEGINARRAY_PART(NCELLS_1_14_NCC_RXLEVS, 2)
    12, 44
ENDARRAY
```

```
BEGINARRAY_PART(NCELLS_1_14_NCC_BSICS, 2)
    16, 16
ENDARRAY
```

```
BEGIN_LONG_ARRAY_PART(NCELLS_1_14_NCC_TA, 2)
    1, 14
ENDARRAY
```

```
BEGIN_LONG_ARRAY_PART(NCELLS_1_14_NCC_FO, 2)
    101, 114    /* not interpreted in old TAP */
ENDARRAY
```

```
BEGIN_PSTRUCT("ncells", NCELLS_1_14_NCC)
    SET_COMP("no_of_ncells", 2)
    SET_COMP("arfcn", CHLIST_1_14)
    SET_COMP("rx_lev", NCELLS_1_14_NCC_RXLEVS)
    SET_COMP("bsic", NCELLS_1_14_NCC_BSICS)
    SET_COMP("time_alignmt", NCELLS_1_14_NCC_TA)
    SET_COMP("frame_offset", NCELLS_1_14_NCC_FO)
ENDSTRUCT
```

/*

2	number of neighbour cells
1, 0, 124, 0	ncell 1 and 124
0, 0, ...	not used (four channel numbers)
12, 25	rxlev ncell 1 and 124
0, 0, ...	not used (rxlev four channel numbers)
1,1	bsic ncell 1 and 124
0, 0, ...	not used (bsic four channel numbers)
1, 0, 124, 0	timing advance ncell 1 and 124
0, 0, ...	not used (timing advance four channel numbers)

*/

```
BEGIN_SHORT_ARRAY_PART(CHLIST_1_124, 2)
    ARFCN_1,
    ARFCN_124
ENDARRAY
```

```
BEGINARRAY_PART(NCELLS_1_124_RXLEVS, 2)
    12, 25
ENDARRAY
```

```
BEGINARRAY_PART(NCELLS_1_124_BSICS, 2)
    1,1
ENDARRAY
```

```
BEGIN_LONG_ARRAY_PART(NCELLS_1_124_TA, 2)
    1, 124
ENDARRAY
```

```
BEGIN_LONG_ARRAY_PART(NCELLS_1_124_FO, 2)
    101, 224    /* not interpreted in old tap → wrong field length */
ENDARRAY
```

```
BEGIN_PSTRUCT("ncells", NCELLS_1_124)
    SET_COMP("no_of_ncells", 2)
    SET_COMP("arfcn", CHLIST_1_124)
    SET_COMP("rx_lev", NCELLS_1_124_RXLEVS)
    SET_COMP("bsic", NCELLS_1_124_BSICS)
    SET_COMP("time_alignmt", NCELLS_1_124_TA)
    SET_COMP("frame_offset", NCELLS_1_124_FO)
ENDSTRUCT
```

/*

0	not continous
2	2 random bursts
5, 7	delta (two random bursts)
0, 0, ...	not used (six random bursts)
0xA0, 0xA3	channel request content (two random bursts)
0, 0, ...	not used (six random bursts)

*/

```
BEGIN_PSTRUCT ("send_mode", TWO_BURSTS)
    SKIP_COMP ("c")
    SET_COMP ("no", RAND_BURSTS_2)
    SET_COMP ("delta", BURST_DELTA)
    SET_COMP ("rach", BURST_RACH)
ENDSTRUCT
```

```
BEGINARRAY (BURST_DELTA, 8)
    5,7,0,0,0,0,0,0
ENDARRAY
```

```
BEGINARRAY (BURST_RACH, 8)
    0xA0,0xA3,0,0,0,0,0,0
ENDARRAY
```

/*

0	no starting time present
0	n32
0	n51
0	n26

*/

```
BEGIN_PSTRUCT ("starting_time", NO_STARTING_TIME)
    SET_COMP ("start_time_present", 0)
    SKIP_COMP ("start_time")
ENDSTRUCT
```

/*

1	starting time present
11	t1
22	t2
33	t3

*/

```
BEGIN_PSTRUCT ("start", STARTING_TIME)
    SET_COMP ("v_start", 1)
    SET_COMP ("t1", 11)
    SET_COMP ("t2", 22)
    SET_COMP ("t3", 33)
ENDSTRUCT
```

/*

1	starting time present
11	n32
33	n51
22	n26

*/

```
BEGIN_PSTRUCT ("starting_time", S_TIME_MPHC)
    SET_COMP ("start_time_present", 1)
    SET_COMP ("start_time", S_TIME_MPHC_ST)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("start_time", S_TIME_MPHC_ST)
    SET_COMP ("t1", 11)
    SET_COMP ("t3", 33)
    SET_COMP ("t2", 22)
ENDSTRUCT
```

/*

1	starting time present
11	t1
22	t2
33	t3

*/

```
BEGIN_PSTRUCT ("start", STARTING_TIME_T1)
    SET_COMP ("v_start", 1)
    SET_COMP ("t1", 11)
    SET_COMP ("t2", 22)
    SET_COMP ("t3", 33)
ENDSTRUCT
```

/*

1	starting time present
11	n32
33	n51
22	n26

*/

```
BEGIN_PSTRUCT ("starting_time", S_TIME_T1)
    SET_COMP ("start_time_present", 1)
    SET_COMP ("start_time", S_TIME_T1_ST)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("start_time", S_TIME_T1_ST)
    SET_COMP ("t1", 11)
    SET_COMP ("t3", 33)
    SET_COMP ("t2", 22)
```

ENDSTRUCT

/*

1	starting time present
45	t1
22	t2
33	t3

*/

```
BEGIN_PSTRUCT ("start", STARTING_TIME_T2)
    SET_COMP ("v_start", 1)
    SET_COMP ("t1", 45)
    SET_COMP ("t2", 22)
    SET_COMP ("t3", 33)
ENDSTRUCT
```

/*

1	starting time present
45	n32
33	n51
22	n26

*/

```
BEGIN_PSTRUCT ("starting_time", S_TIME_T2)
    SET_COMP ("start_time_present", 1)
    SET_COMP ("start_time", S_TIME_T2_ST)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("start_time", S_TIME_T2_ST)
    SET_COMP ("t1", 45)
    SET_COMP ("t3", 33)
    SET_COMP ("t2", 22)
ENDSTRUCT
```

/*

0	not continous
0	0 random bursts (equal stop burst send- ing)
0, 0, ...	not used (eight random bursts)
0, 0, ...	not used (eight random bursts)

*/

```
BEGIN_PSTRUCT ("send_mode", STOP_BURSTS)
    SKIP_COMP ("c")
    SKIP_COMP ("no")
    SKIP_COMP ("delta")
    SKIP_COMP ("rach")
ENDSTRUCT
```

/*

14	T1
22	T2
30	T3

*/

```
BEGIN_PSTRUCT ("frame_no", T123_BURST_1)
    SET_COMP ("t1", 14)
    SET_COMP ("t2", 22)
    SET_COMP ("t3", 30)
ENDSTRUCT
```

/*

0x0D	channel type SDCCH/8(5) → SDCCH/8(0) used
0	timeslot number
0	training sequence code
1	hopping
0,0	channel number (only h=0)
1	mobile allocation index offset
0	hopping sequence number
0E,00,...	mobile allocation list

*/

```
BEGIN_PSTRUCT ("ch_type", CH_TYPE_HOP)
    SET_COMP ("ch", CH_SDCCH_8_0) /* see TABLE */
    SET_COMP ("tn", 0)
    SET_COMP ("tsc", 0)
    SET_COMP ("h", 1)
    SET_COMP ("arfcn", 0)
    SET_COMP ("maio", 1)
    SET_COMP ("hsn", 0)
    SET_COMP ("ma", CHLIST_14_23_69_115_FFFF)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (CHLIST_14_23_69_115_FFFF, 5)
    ARFCN_14,
    ARFCN_23,
    ARFCN_69,
    ARFCN_115,
    NOT_PRESENT_16BIT
ENDARRAY
```

/*

0x0D	channel type SDCCH/8(5)
1	timeslot number
0	training sequence code
1	hopping
0,0	channel number (only h=0)
1	mobile allocation index offset
0	hopping sequence number
0E,00,...	mobile allocation list

*/

```
BEGINARRAY (CH_TYPE_SDCCH2, 138)
    8,1,0,1,0,0,1,0,
    0x0E,0x00,
    0x17,0x00,
    0x45,0x00,
    0x73,0x00,
    0xFF,0xFF,
```

```
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00
```

ENDARRAY

/*

0x0D	channel type SDCCH/8(5)
3	timeslot number
0	training sequence code
1	hopping
0,0	channel number (only h=0)
1	mobile allocation index offset
0	hopping sequence number
0E,00,...	mobile allocation list

*/

BEGINARRAY (CH_TYPE_SDCCH3, 138)

```
8,3,0,1,0,0,1,0,
0x0E,0x00,
0x17,0x00,
0x45,0x00,
0x73,0x00,
0xFF,0xFF,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00
```

ENDARRAY

/*

8	channel type SDCCH/8
4	timeslot number
0	training sequence code
1	hopping
0,0	channel number (only h=0)
1	mobile allocation index offset
0	hopping sequence number

0E,00,...	mobile allocation list
-----------	------------------------

*/

```
BEGIN_PSTRUCT ("ch_type", CH_TYPE_SDCCH4)
    SET_COMP ("ch", CH_SDCCH_8_0)      /* see TABLE */
    SET_COMP ("tn", 4)
    SET_COMP ("tsc", 0)
    SET_COMP ("h", 1)
    SET_COMP ("arfcn", 0)
    SET_COMP ("maio", 1)
    SET_COMP ("hsn", 0)
    SET_COMP ("ma", CHLIST_14_23_69_115_FFFF)
ENDSTRUCT
```

/*

0x01	channel type TCH
1	timeslot number
0	training sequence code
1	hopping
0,0	channel number (only h=0)
1	mobile allocation index offset
0	hopping sequence number
0E,00,...	mobile allocation list

*/

```
BEGIN_PSTRUCT ("ch_type", CH_TYPE_TCH2)
    SET_COMP ("ch", 0x01)
    SET_COMP ("tn", 1)
    SET_COMP ("tsc", 0)
    SET_COMP ("h", 1)
    SET_COMP ("arfcn", 0)
    SET_COMP ("maio", 1)
    SET_COMP ("hsn", 0)
    SET_COMP ("ma", CHLIST_14_23_69_115_FFFF)
ENDSTRUCT
```

/*

0x1	channel type TCH
3	timeslot number
0	training sequence code
1	hopping
0,0	channel number (only h=0)
1	mobile allocation index offset
0	hopping sequence number
0E,00,...	mobile allocation list

*/

```
BEGIN_PSTRUCT ("ch_type", CH_TYPE_TCH3)
    SET_COMP ("ch", 0x01)
    SET_COMP ("tn", 3)
    SET_COMP ("tsc", 0)
    SET_COMP ("h", 1)
    SET_COMP ("arfcn", 0)
    SET_COMP ("maio", 1)
```



```

        SET_COMP ("hsn", 0)
        SET_COMP ("ma", CHLIST_14_23_69_115_FFFF)
    ENDSTRUCT

```

/*

0x0	channel type
3	timeslot number
6	training sequence code
0	hopping
0	channel number (only h=0)
0	mobile allocation index offset
0	hopping sequence number
00,00,...	mobile allocation list

*/

```

BEGIN_PSTRUCT ("ch_type", CH_TYPE2)
    SET_COMP ("ch", 0x00)
    SET_COMP ("tn", 3)
    SET_COMP ("tsc", 6)
    SET_COMP ("h", 0)
    SET_COMP ("arfcn", 0)
    SET_COMP ("maio", 0)
    SET_COMP ("hsn", 0)
    SET_COMP ("ma", CHLIST_0)
ENDSTRUCT

```

```

BEGIN_SHORT_ARRAY_PART (CHLIST_0, 1)
    0x00
ENDARRAY

```

/*

1	channel type TCH
1	timeslot number
5	training sequence code
1	hopping
0,0	channel number (only h=0)
0	mobile allocation index offset
1	hopping sequence number
....	mobile allocation list

*/

```

BEGIN_PSTRUCT ("ch_type", CH_TYPE_IMM_ASS)
    SET_COMP ("ch", CH_TCH_F)
    SET_COMP ("tn", 1)
    SET_COMP ("tsc", 5)
    SET_COMP ("h", H_FREQ)
    SET_COMP ("arfcn", 0)
    SET_COMP ("maio", 0)
    SET_COMP ("hsn", 1)
    SET_COMP ("ma", CHLIST_26_34_42_52_59_FFFF)
ENDSTRUCT

```

```

BEGIN_SHORT_ARRAY_PART (CHLIST_26_34_42_52_59_FFFF, 6)
    ARFCN_26,
    ARFCN_34,

```

```

        ARFCN_42,
        ARFCN_52,
        ARFCN_59,
        NOT_PRESENT_16BIT
    ENDARRAY

```

/*

1	channel type TCH
1	timeslot number
5	training sequence code
1	hopping
0,0	channel number (only h=0)
1	mobile allocation index offset
1	hopping sequence number
....	mobile allocation list

*/

```

BEGIN_PSTRUCT ("ch_type", CH_TYPE_FREQ_REDEF)
    SET_COMP ("ch", CH_TCH_F)
    SET_COMP ("tn", 1)
    SET_COMP ("tsc", 5)
    SET_COMP ("h", H_FREQ)
    SET_COMP ("arfcn", 0)
    SET_COMP ("maio", 1)
    SET_COMP ("hsn", 1)
    SET_COMP ("ma", CHLIST_10_52_59_73_108_114_FFFF)
ENDSTRUCT

```

```

BEGIN_SHORT_ARRAY_PART (CHLIST_10_52_59_73_108_114_FFFF, 7)
    ARFCN_10,
    ARFCN_52,
    ARFCN_59,
    ARFCN_73,
    ARFCN_108,
    ARFCN_114,
    NOT_PRESENT_16BIT
ENDARRAY

```

/*

1	channel type TCH
0	timeslot number
5	training sequence code
1	hopping
0,0	channel number (only h=0)
0	mobile allocation index offset
1	hopping sequence number
....	mobile allocation list

*/

```

BEGIN_PSTRUCT ("ch_type", CH_TYPE_ASS_AFTER)
    SET_COMP ("ch", CH_TCH_F)
    SET_COMP ("tn", 0)
    SET_COMP ("tsc", 5)
    SET_COMP ("h", H_FREQ)
    SET_COMP ("arfcn", 0)

```

```

        SET_COMP ("maio", 0)
        SET_COMP ("hsn", 1)
        SET_COMP ("ma", CHLIST_73_74_75_76_FFFF)
    ENDSTRUCT

    BEGIN_SHORT_ARRAY_PART (CHLIST_73_74_75_76_FFFF, 5)
        ARFCN_73,
        ARFCN_74,
        ARFCN_75,
        ARFCN_76,
        NOT_PRESENT_16BIT
    ENDARRAY

```

/*

1	channel type TCH
0	timeslot number
5	training sequence code
1	hopping
0,0	channel number (only h=0)
1	mobile allocation index offset
7	hopping sequence number
....	mobile allocation list

*/

```

    BEGIN_PSTRUCT ("ch_type", CH_TYPE_ASS_BEFORE)
        SET_COMP ("ch", CH_TCH_F)
        SET_COMP ("tn", 0)
        SET_COMP ("tsc", 5)
        SET_COMP ("h", H_FREQ)
        SET_COMP ("arfcn", 0)
        SET_COMP ("maio", 1)
        SET_COMP ("hsn", 7)
        SET_COMP ("ma", CHLIST_46_52_59_66_73_74_FFFF)
    ENDSTRUCT

    BEGIN_SHORT_ARRAY_PART (CHLIST_46_52_59_66_73_74_FFFF, 7)
        ARFCN_46,
        ARFCN_52,
        ARFCN_59,
        ARFCN_66,
        ARFCN_73,
        ARFCN_74,
        NOT_PRESENT_16BIT
    ENDARRAY

```

/*

0	ho_ref
0	ho_pow
0	ho_acc_type
0	ho_nci

*/

```

    BEGIN_PSTRUCT ("ho_param", HO_PARAM)
        SET_COMP ("ho_ref", NCI_TA_OUT_OF_RANGE_OK)

```

```

        SET_COMP ("ho_pow", 0)
        SET_COMP ("ho_acc_type", 0)
        SET_COMP ("ho_nci", 0)
    ENDSTRUCT

```

/*

23	ho_ref
10	ho_pow
0	ho_acc_type
0	ho_nci

*/

```

BEGIN_PSTRUCT ("ho_param", HO_PARAM_1)
    SET_COMP ("ho_ref", HO_REF)
    SET_COMP ("ho_pow", HO_POW)
    SET_COMP ("ho_acc_type", 0)
    SET_COMP ("ho_nci", 0)
ENDSTRUCT

```

/*

10	power
0	dtx
5	rlt
30	tav
0	pwr
MODE_SPEECH_VER1	mode

*/

```

BEGIN_PSTRUCT ("tr_param", TR_PARAM)
    SET_COMP ("power", 10)
    SET_COMP ("dtx", DTX_NOT_USED)
    SET_COMP ("rlt", 5)
    SET_COMP ("tav", 30)
    SET_COMP ("pwr", PWRC_NOT_SET)
    SET_COMP ("mode", MODE_SPEECH_VER1)
ENDSTRUCT

```

/*

0	stat
0	algo
0,1,2,3,4,5,6,7	kc

*/

```

BEGIN_PSTRUCT ("ciph", CIPH_PARAM)
    SET_COMP ("stat", STAT_CIPH_OFF)
    SET_COMP ("algo", ALGO_A5_1)
    SET_COMP ("kc", CIPH_PARAM_KC)
ENDSTRUCT

```

```

BEGINARRAY (CIPH_PARAM_KC, 8)
    0,1,2,3,4,5,6,7
ENDARRAY

```

/*

0x01	h
0x01	maio
0x00	hsn
0x04	channel_type (SDCCH/8)
0x05	sub_channel 5
0x03	timeslot_no
0x06	tsc

*/

```
BEGIN_PSTRUCT ("channel_desc", CHANNEL_DESC_1)
    SET_COMP ("chan_sel", CHAN_SEL_1)
    SET_COMP ("channel_type", 0x04)
    SET_COMP ("sub_channel", 0)
    SET_COMP ("timeslot_no", 0)
    SET_COMP ("tsc", 0)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("chan_sel", CHAN_SEL_1)
    SET_COMP ("h", 1)
    SET_COMP ("rf_channel", RF_CHANNEL_1)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("rf_channel", RF_CHANNEL_1)
    SET_COMP ("maio", 1)
    SET_COMP ("hsn", 0)
ENDSTRUCT
```

/*

0x01	h
0x01	maio
0x00	hsn
0x04	channel_type (SDCCH/8)
0x00	sub_channel 0
0x01	timeslot_no
0x00	tsc

*/

```
BEGIN_PSTRUCT ("channel_desc", CHANNEL_DESC_2)
    SET_COMP ("chan_sel", CHAN_SEL_10)
    SET_COMP ("channel_type", 0x04)
    SET_COMP ("sub_channel", 0)
    SET_COMP ("timeslot_no", 1)
    SET_COMP ("tsc", 0)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("chan_sel", CHAN_SEL_10)
    SET_COMP ("h", 1)
    SET_COMP ("rf_channel", RF_CHANNEL_10)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("rf_channel", RF_CHANNEL_10)
    SET_COMP ("maio", 1)
    SET_COMP ("hsn", 0)
```

ENDSTRUCT

/*

0x01	h
0x01	maio
0x00	hsn
0x04	channel_type (SDCCH/8)
0x00	sub_channel 0
0x03	timeslot_no
0x00	tsc

*/

```
BEGIN_PSTRUCT ("channel_desc", CHANNEL_DESC_3)
    SET_COMP ("chan_sel", CHAN_SEL_9)
    SET_COMP ("channel_type", 0x04)
    SET_COMP ("sub_channel", 0)
    SET_COMP ("timeslot_no", 3)
    SET_COMP ("tsc", 0)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("chan_sel", CHAN_SEL_9)
    SET_COMP ("h", 1)
    SET_COMP ("rf_channel", RF_CHANNEL_9)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("rf_channel", RF_CHANNEL_9)
    SET_COMP ("maio", 1)
    SET_COMP ("hsn", 0)
ENDSTRUCT
```

/*

0x01	h
0x01	maio
0x00	hsn
0x04	channel_type (SDCCH/8)
0x00	sub_channel 0
0x04	timeslot_no
0x00	tsc

*/

```
BEGIN_PSTRUCT ("channel_desc", CHANNEL_DESC_4)
    SET_COMP ("chan_sel", CHAN_SEL_8)
    SET_COMP ("channel_type", 0x04)
    SET_COMP ("sub_channel", 0)
    SET_COMP ("timeslot_no", 4)
    SET_COMP ("tsc", 0)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("chan_sel", CHAN_SEL_8)
    SET_COMP ("h", 1)
    SET_COMP ("rf_channel", RF_CHANNEL_8)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("rf_channel", RF_CHANNEL_8)
    SET_COMP ("maio", 1)
    SET_COMP ("hsn", 0)
ENDSTRUCT
```

/*

0x01	h
0x01	maio
0x00	hsn
0x01	channel_type (TCH)
0x00	sub_channel 0
0x01	timeslot_no
0x00	tsc

*/

```
BEGIN_PSTRUCT ("channel_desc", CHANNEL_DESC_2_TCH)
    SET_COMP ("chan_sel", CHAN_SEL_7)
    SET_COMP ("channel_type", 0x01)
    SET_COMP ("sub_channel", 0)
    SET_COMP ("timeslot_no", 1)
    SET_COMP ("tsc", 0)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("chan_sel", CHAN_SEL_7)
    SET_COMP ("h", 1)
    SET_COMP ("rf_channel", RF_CHANNEL_7)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("rf_channel", RF_CHANNEL_7)
    SET_COMP ("maio", 1)
    SET_COMP ("hsn", 0)
ENDSTRUCT
```

/*

0x01	h
0x01	maio
0x00	hsn
0x01	channel_type (TCH)
0x00	sub_channel 0
0x03	timeslot_no
0x00	tsc

*/

```
BEGIN_PSTRUCT ("channel_desc", CHANNEL_DESC_3_TCH)
    SET_COMP ("chan_sel", CHAN_SEL_11)
    SET_COMP ("channel_type", 0x01)
    SET_COMP ("sub_channel", 0)
    SET_COMP ("timeslot_no", 3)
    SET_COMP ("tsc", 0)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("chan_sel", CHAN_SEL_11)
    SET_COMP ("h", 1)
    SET_COMP ("rf_channel", RF_CHANNEL_11)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("rf_channel", RF_CHANNEL_11)
    SET_COMP ("maio", 1)
    SET_COMP ("hsn", 0)
ENDSTRUCT
```

/*

0x01	h
0x01	maio
0x00	hsn
0x04	channel_type (SDCCH/8)
0x00	sub_channel 0
0x03	timeslot_no
0x03	tsc

*/

```
BEGIN_PSTRUCT ("cbch_desc", CHANNEL_DESC_CBCH_8)
    SET_COMP ("chan_sel", CHAN_SEL_4 )
    SET_COMP ("channel_type", 0x04)
    SET_COMP ("sub_channel", 0)
    SET_COMP ("timeslot_no", 3)
    SET_COMP ("tsc", 3)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("chan_sel", CHAN_SEL_4)
    SET_COMP ("h", 1)
    SET_COMP ("rf_channel", RF_CHANNEL_4)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("rf_channel", RF_CHANNEL_4)
    SET_COMP ("maio", 1)
    SET_COMP ("hsn", 0)
ENDSTRUCT
```

/*

0x01	h
0x01	maio
0x00	hsn
0x03	channel_type (SDCCH/4)
0x00	sub_channel 0
0x00	timeslot_no
0x03	tsc

*/

```
BEGIN_PSTRUCT ("cbch_desc", CHANNEL_DESC_CBCH_4)
    SET_COMP ("chan_sel", CHAN_SEL_5)
    SET_COMP ("channel_type", 0x03)
    SET_COMP ("sub_channel", 0)
```



```

        SET_COMP ("timeslot_no", 0)
        SET_COMP ("tsc", 3)
    ENDSTRUCT

    BEGIN_PSTRUCT ("chan_sel", CHAN_SEL_5)
        SET_COMP ("h", 1)
        SET_COMP ("rf_channel", RF_CHANNEL_5)
    ENDSTRUCT

    BEGIN_PSTRUCT ("rf_channel", RF_CHANNEL_5)
        SET_COMP ("maio", 1)
        SET_COMP ("hsn", 0)
    ENDSTRUCT

```

/*

0	ncc
1	mcc
14, 0	arfcn

*/

```

    BEGIN_PSTRUCT ("cell_description", CELL_DESCRIPTION_2)
        SET_COMP ("ncc", 0)
        SET_COMP ("bcc", 1)
        SET_COMP ("bcch_carrier", 14)
    ENDSTRUCT

    BEGIN_PSTRUCT ("cell_description", CELL_DESCRIPTION_3)
        SET_COMP ("ncc", 0)
        SET_COMP ("bcc", 1)
        SET_COMP ("bcch_carrier", 30)
    ENDSTRUCT

```

/*

0x01	h
0x00	maio
0x01	hsn
0x01	channel_type (TCH)
0x00	sub_channel 0
0x01	timeslot_no
0x05	tsc

*/

```

    BEGIN_PSTRUCT ("channel_desc", CHANNEL_DESC_IA)
        SET_COMP ("chan_sel", CHAN_SEL_2)
        SET_COMP ("channel_type", CH_TCH_F)
        SET_COMP ("sub_channel", 0)
        SET_COMP ("timeslot_no", 1)
        SET_COMP ("tsc", 5)
    ENDSTRUCT

    BEGIN_PSTRUCT ("chan_sel", CHAN_SEL_2)
        SET_COMP ("h", 1)
        SET_COMP ("rf_channel", RF_CHANNEL_2)

```

ENDSTRUCT

```
BEGIN_PSTRUCT ("rf_channel", RF_CHANNEL_2)
    SET_COMP ("maio", 0)
    SET_COMP ("hsn", 1)
ENDSTRUCT
```

/*

5	# channels
26, 0	1st hopping channel
34 ,0	2nd hopping channel
42, 0	3rd hopping channel
52, 0	4th hopping channel
59, 0	5th hopping channel
0, ...	rest of list

*/

```
BEGIN_PSTRUCT ("frequency_list", FREQ_LIST_IA)
    SET_COMP ("rf_chan_cnt", 5)
    SET_COMP ("rf_chan_no", FREQ_LIST_IA_NO)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("rf_chan_no", FREQ_LIST_IA_NO)
    SET_COMP ("radio_freq", FREQ_LIST_IA_FREQ)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (FREQ_LIST_IA_FREQ, 5)
    26, 34,      42, 52,      59
ENDARRAY
```

/*

0x01	h
0x01	maio
0x01	hsn
0x01	channel_type (TCH)
0x00	sub_channel 0
0x01	timeslot_no
0x05	tsc

*/

```
BEGIN_PSTRUCT ("channel_desc", CHANNEL_DESC_FR)
    SET_COMP ("chan_sel", CHAN_SEL_3)
    SET_COMP ("channel_type", CH_TCH_F)
    SET_COMP ("sub_channel", 0)
    SET_COMP ("timeslot_no", 1)
    SET_COMP ("tsc", 5)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("chan_sel", CHAN_SEL_3)
```

```

        SET_COMP ("h", 1)
        SET_COMP ("rf_channel", RF_CHANNEL_3)
    ENDSTRUCT

```

```

BEGIN_PSTRUCT ("rf_channel", RF_CHANNEL_3)
    SET_COMP ("maio", 1)
    SET_COMP ("hsn", 1)
ENDSTRUCT

```

/*

6	# channels
10, 0	1st hopping channel
52, 0	2nd hopping channel
59, 0	3rd hopping channel
73, 0	4th hopping channel
108, 0	5th hopping channel
114, 0	6th hopping channel
0, ...	rest of list

*/

```

BEGIN_PSTRUCT ("frequency_list", FREQ_LIST_FR)
    SET_COMP ("rf_chan_cnt", 6)
    SET_COMP ("rf_chan_no", FREQ_LIST_FR_NO)
ENDSTRUCT

```

```

BEGIN_PSTRUCT ("rf_chan_no", FREQ_LIST_FR_NO)
    SET_COMP ("radio_freq", CHLIST_10_52_59_73_108_114)
ENDSTRUCT

```

```

BEGIN_SHORT_ARRAY_PART (CHLIST_10_52_59_73_108_114, 6)
    ARFCN_10,
    ARFCN_52,
    ARFCN_59,
    ARFCN_73,
    ARFCN_108,
    ARFCN_114
ENDARRAY

```

/*

0x01	h
0x00	maio
0x01	hsn
0x01	channel_type (TCH)
0x00	sub_channel 0
0x00	timeslot_no
0x05	tsc

*/

```
BEGIN_PSTRUCT ("cbch_desc", CHANNEL_DESC_ASS_AFTER)
    SET_COMP ("chan_sel", CHAN_SEL_6)
    SET_COMP ("channel_type", CH_TCH_F)
    SET_COMP ("sub_channel", 0)
    SET_COMP ("timeslot_no", 0)
    SET_COMP ("tsc", 5)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("chan_sel", CHAN_SEL_6)
    SET_COMP ("h", 1)
    SET_COMP ("rf_channel", RF_CHANNEL_6)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("rf_channel", RF_CHANNEL_6)
    SET_COMP ("maio", 0)
    SET_COMP ("hsn", 1)
ENDSTRUCT
```

/*

4	# channels
73, 0	1st hopping channel
74 ,0	2nd hopping channel
75, 0	3rd hopping channel
76, 0	4th hopping channel
0, ...	rest of list

*/

```
BEGIN_PSTRUCT ("frequency_list", FREQ_LIST_ASS_AFTER)
    SET_COMP ("rf_chan_cnt", 4)
    SET_COMP ("rf_chan_no", FREQ_LIST_ASS_AFTER_NO)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("rf_chan_no", FREQ_LIST_ASS_AFTER_NO)
    SET_COMP ("radio_freq", CHLIST_73_74_75_76)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (CHLIST_73_74_75_76, 4)
    ARFCN_73,
    ARFCN_74,
    ARFCN_75,
    ARFCN_76
ENDARRAY
```

/*

0x01	h
0x01	maio
0x07	hsn
0x01	channel_type (TCH)
0x00	sub_channel 0

0x00	timeslot_no
0x05	tsc

*/

```
BEGIN_PSTRUCT ("channel_desc", CHANNEL_DESC_ASS_BEFORE)
    SET_COMP ("chan_sel", CHAN_SEL_12)
    SET_COMP ("channel_type", CH_TCH_F)
    SET_COMP ("sub_channel", 0)
    SET_COMP ("timeslot_no", 0)
    SET_COMP ("tsc", 5)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("chan_sel", CHAN_SEL_12)
    SET_COMP ("h", 1)
    SET_COMP ("rf_channel", RF_CHANNEL_12)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("rf_channel", RF_CHANNEL_12)
    SET_COMP ("maio", 1)
    SET_COMP ("hsn", 7)
ENDSTRUCT
```

/*

6	# channels
46, 0	1st hopping channel
52, 0	2nd hopping channel
59, 0	3rd hopping channel
66, 0	4th hopping channel
73, 0	5th hopping channel
74, 0	6th hopping channel
0, ...	rest of list

*/

```
BEGIN_PSTRUCT ("frequency_list", FREQ_LIST_ASS_BEFORE)
    SET_COMP ("rf_chan_cnt", 6)
    SET_COMP ("rf_chan_no", FREQ_LIST_ASS_BEFORE_NO)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("rf_chan_no", FREQ_LIST_ASS_BEFORE_NO)
    SET_COMP ("radio_freq", CHLIST_46_52_59_66_73_74)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (CHLIST_46_52_59_66_73_74, 6)
    ARFCN_46,
    ARFCN_52,
    ARFCN_59,
    ARFCN_66,
    ARFCN_73,
```

ARFCN_74
ENDARRAY

/*

0x04	# channels
0x01,0x00	1st hopping channel
0x17,0x00	2nd hopping channel
0x45,0x00	3rd hopping channel
0x73,0x00	4th hopping channel
0x00,...	rest of list

*/

```
BEGIN_PSTRUCT ("frequency_list", FREQ_LIST)
    SET_COMP ("rf_chan_cnt", 0x04)
    SET_COMP ("rf_chan_no", FREQ_LIST_NO)
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("rf_chan_no", FREQ_LIST_NO)
    SET_COMP ("radio_freq", CHLIST_14_23_69_115)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (CHLIST_14_23_69_115, 4)
    ARFCN_14,
    ARFCN_23,
    ARFCN_69,
    ARFCN_115
ENDARRAY
```

```
BEGIN_PSTRUCT ("handover_command", ASYNC_HO_CMD)
    SET_COMP ("cell_description", CELL_DESCRIPTION_2 )
    SET_COMP ("channel_desc_1", CHANNEL_DESC_2_TCH )
    SET_COMP ("channel_mode_1", MODE_SPEECH_VER1 )
    SKIP_COMP ("starting_time" )
    SET_COMP ("ho_acc", HO_REF )
    SET_COMP ("txpwr", HO_POW )
    SKIP_COMP ("report_time_diff" )
    SET_COMP ("frequency_list", FREQ_LIST )
    SKIP_COMP ("channel_desc_2" )
    SKIP_COMP ("channel_mode_2" )
    SKIP_COMP ("frequency_list_bef_sti" )
    SKIP_COMP ("channel_desc_1_bef_sti" )
    SKIP_COMP ("channel_desc_2_bef_sti" )
    SKIP_COMP ("cipher_mode" )
    SKIP_COMP ("a5_algorithm" )
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("handover_command", ASYNC_HO_CMD_2)
    SET_COMP ("cell_description", CELL_DESCRIPTION_2)
```

```

    SET_COMP ("channel_desc_1", CHANNEL_DESC_2_TCH)
    SET_COMP ("channel_mode_1", MODE_SPEECH_VER1)
    SET_COMP ("starting_time", S_TIME_MPHC)
    SET_COMP ("ho_acc", HO_REF)
    SET_COMP ("txpwr", HO_POW)
    SKIP_COMP ("report_time_diff")
    SET_COMP ("frequency_list", FREQ_LIST)
    SKIP_COMP ("channel_desc_2")
    SKIP_COMP ("channel_mode_2")
    SET_COMP ("frequency_list_bef_sti", FREQ_LIST)
    SET_COMP ("channel_desc_1_bef_sti", CHANNEL_DESC_3_TCH)
    SKIP_COMP ("channel_desc_2_bef_sti")
    SKIP_COMP ("cipher_mode")
    SKIP_COMP ("a5_algorithm")
ENDSTRUCT

```

```

BEGIN_PSTRUCT ("handover_command", ASYNC_HO_CMD_3)
    SET_COMP ("cell_description", CELL_DESCRIPTION_3)
    SET_COMP ("channel_desc_1", CHANNEL_DESC_2_TCH)
    SET_COMP ("channel_mode_1", MODE_SPEECH_VER1)
    SET_COMP ("starting_time", S_TIME_MPHC)
    SET_COMP ("ho_acc", HO_REF)
    SET_COMP ("txpwr", HO_POW)
    SKIP_COMP ("report_time_diff")
    SET_COMP ("frequency_list", FREQ_LIST)
    SKIP_COMP ("channel_desc_2")
    SKIP_COMP ("channel_mode_2")
    SET_COMP ("frequency_list_bef_sti", FREQ_LIST)
    SET_COMP ("channel_desc_1_bef_sti", CHANNEL_DESC_3_TCH)
    SKIP_COMP ("channel_desc_2_bef_sti")
    SKIP_COMP ("cipher_mode")
    SKIP_COMP ("a5_algorithm")
ENDSTRUCT

```

```

BEGIN_PSTRUCT ("classmark", CLASS_DCS_1800)
    SET_COMP ("pclass", CLASS_1)
    SET_COMP ("pclass2", CLASS_1)
ENDSTRUCT

```

```

/* DL/26.09.02: EOTD */
/* BYTES */

```

BYTE	NO_NCELLS_1	0x01
BYTE	NO_NCELLS_2	0x02
BYTE	NO_NCELLS_3	0x03
BYTE	NO_NCELLS_5	0x05
BYTE	NO_NCELLS_6	0x06
BYTE	NO_NCELLS_8	0x08
BYTE	SB_TRUE	0x01
BYTE	STOP_SIZE_12	0x0C
BYTE	MFRM_OFFSET_44	0x2C
BYTE	SB_TRUE	0x01
BYTE	TIME_ALIGN_0	0x00

```

BYTE      EOTD_00                      0x00
BYTE      RX_0                        0x00

/* SHORTS */
SHORT     REQ_ID_0                     0x0000
SHORT     REQ_ID_1                     0x0001
SHORT     REQ_ID_FFFF                  0xFFFF
SHORT     REQ_ID_8                     0x0008
SHORT     EOTD_DELAY_8                 0x0008
SHORT     EOTD_DELAY_16                0x0010
SHORT     OTD_666                      0x029A
SHORT     EOTD_0000                    0x0000
SHORT     OTD_0                        0x0000

/* LONGS */
LONG      TIME_ALIGNMENT_1000          0x000003E8
LONG      TIME_ALIGNMENT_2000          0x000007D0
LONG      NOM_POS_1000                 0x000003E8
LONG      NOM_POS_2000                 0x000007D0
LONG      SUM_AMPLITUDE_128            0x00000080
LONG      RSSI_61440                   0x0000F000
LONG      RSSI_61952                   0x0000F200
LONG      EOTD_0L                      0x00000000
LONG      FN_OFFSET_114                 0x00000072
LONG      TIME_ALIGN_14                 0x0000000E
LONG      TIME_ALIGN_2664               0x00000A68

/* frame number */
LONG      FN_OFFSET_2                   0x00000002
LONG      FN_OFFSET_3                   0x00000003
LONG      FN_OFFSET_4                   0x00000004
LONG      FN_OFFSET_5                   0x00000005
LONG      FN_OFFSET_6                   0x00000006
LONG      FN_OFFSET_7                   0x00000007

/* Arrays */
BEGIN_SHORT_ARRAY (EOTD_CROSSCOR_6, 18)
    0x01FF, 0x00FF, 0x007F, 0x003F, 0x001F, 0x000F, 0x0000, 0x0000,
    0x0000, 0x0000, 0x0000, 0x0000, 0x0000, 0x0000, 0x0000, 0x0000,
    0x0000, 0x0000
ENDARRAY
BEGIN_SHORT_ARRAY (EOTD_CROSSCOR_9, 18)
    0x000F, 0x07FF, 0x001F, 0x007F, 0x003F, 0x00FF, 0x03FF, 0x01FF,
    0x0FFF, 0x0000, 0x0000, 0x0000, 0x0000, 0x0000, 0x0000, 0x0000,
    0x0000, 0x0000
ENDARRAY
BEGIN_SHORT_ARRAY (EOTD_CROSSCOR_12, 18)
    0x000F, 0x001F, 0x003F, 0x007F, 0x00FF, 0x01FF, 0x03FF, 0x07FF,
    0x0FFF, 0x1FFF, 0x3FFF, 0x7FFF, 0x0000, 0x0000, 0x0000, 0x0000,
    0x0000, 0x0000
ENDARRAY

BEGIN_SHORT_ARRAY (ARFCN_LIST_EOTD_1, 6)
    ARFCN_14, 0x0000, 0x0000, 0x0000, 0x0000, 0x0000
ENDARRAY
BEGIN_SHORT_ARRAY (ARFCN_LIST_EOTD_2, 6)
    ARFCN_14, ARFCN_124, 0x0000, 0x0000, 0x0000, 0x0000
ENDARRAY

```



```
BEGINARRAY (RX_LEV_LIST_EOTD_1, 6)
    RXLEV_44, 0x00, 0x00, 0x00, 0x00, 0x00
ENDARRAY
BEGINARRAY (RX_LEV_LIST_EOTD_2, 6)
    RXLEV_44, RXLEV_25, 0x00, 0x00, 0x00, 0x00
ENDARRAY

BEGINARRAY (BSIC_LIST_EOTD_1, 6)
    BSIC_1, 0x00, 0x00, 0x00, 0x00, 0x00
ENDARRAY
BEGINARRAY (BSIC_LIST_EOTD_2, 6)
    BSIC_1, BSIC_2, 0x00, 0x00, 0x00, 0x00
ENDARRAY

BEGIN_LONG_ARRAY (TIME_ALIGN_LIST_EOTD_1, 6)
    TIME_ALIGNMT_14, 0x00000000, 0x00000000, 0x00000000, 0x00000000, 0x00000000
ENDARRAY
BEGIN_LONG_ARRAY (TIME_ALIGN_LIST_EOTD_2, 6)
    TIME_ALIGNMT_14, TIME_ALIGNMT_14, 0x00000000, 0x00000000, 0x00000000,
0x00000000
ENDARRAY

BEGIN_LONG_ARRAY (FRAME_OFS_LIST_EOTD_1, 6)
    FN_OFFSET_14, 0x00000000, 0x00000000, 0x00000000, 0x00000000, 0x00000000
ENDARRAY
BEGIN_LONG_ARRAY (FRAME_OFS_LIST_EOTD_2, 6)
    FN_OFFSET_14, FN_OFFSET_14, 0x00000000, 0x00000000, 0x00000000,
0x00000000
ENDARRAY

BEGIN_SHORT_ARRAY (NCELL_LIST_EOTD, 9)
    ARFCN_1,
    ARFCN_14,
    ARFCN_25,
    ARFCN_124,
    ARFCN_512,
    ARFCN_580,
    ARFCN_637,
    ARFCN_885,
    NOT_PRESENT_16BIT
ENDARRAY

/* Primitive Structures */
BEGIN_PSTRUCT ("chan_list", CHAN_LIST_EOTD)
    SET_COMP ("radio_freq", RF_1_14_25_124_512_580_637_885_23)
ENDSTRUCT

BEGIN_PSTRUCT ("result", NCELL_RESULT_1023a)
    SET_COMP ("radio_freq", ARFCN_1023)
    SET_COMP ("rxlev", 6)
ENDSTRUCT
BEGIN_PSTRUCT ("result", NCELL_RESULT_114a)
    SET_COMP ("radio_freq", ARFCN_114)
    SET_COMP ("rxlev", 5)
ENDSTRUCT
BEGIN_PSTRUCT ("result", NCELL_RESULT_46a)
    SET_COMP ("radio_freq", ARFCN_46)
```

```
        SET_COMP("rxlev", 11)
    ENDSTRUCT
    BEGIN_PSTRUCT("result", NCELL_RESULT_22a)
        SET_COMP("radio_freq", ARFCN_22)
        SET_COMP("rxlev", 3)
    ENDSTRUCT
    BEGIN_PSTRUCT("result", NCELL_RESULT_15a)
        SET_COMP("radio_freq", ARFCN_15)
        SET_COMP("rxlev", 9)
    ENDSTRUCT
    BEGIN_PSTRUCT("result", NCELL_RESULT_74a)
        SET_COMP("radio_freq", ARFCN_74)
        SET_COMP("rxlev", 5)
    ENDSTRUCT
    BEGIN_PSTRUCT("result", NCELL_RESULT_30a)
        SET_COMP("radio_freq", ARFCN_30)
        SET_COMP("rxlev", 7)
    ENDSTRUCT
    BEGIN_PSTRUCT("result", NCELL_RESULT_526a)
        SET_COMP("radio_freq", ARFCN_526)
        SET_COMP("rxlev", 8)
    ENDSTRUCT

    BEGIN_PSTRUCT("ncell_eotd", ARFCN_23_EOTD)
        SET_COMP("arfcn", ARFCN_23)
        SET_COMP("bsic", BSIC_1)
        SET_COMP("mfrm_offset", MFRM_OFFSET_44)
        SET_COMP("otd_type", EXPECTED_OTD)
        SET_COMP("exp_otd", OTD_666)
        SET_COMP("uncertainty", UNC_MAX_2BIT)
        SET_COMP("rough_rtd", OTD_666)
    ENDSTRUCT
    BEGIN_PSTRUCT("ncell_eotd", ARFCN_637_EOTD)
        SET_COMP("arfcn", ARFCN_637)
        SET_COMP("bsic", BSIC_1)
        SET_COMP("mfrm_offset", MFRM_OFFSET_44)
        SET_COMP("otd_type", EXPECTED_OTD)
        SET_COMP("exp_otd", OTD_666)
        SET_COMP("uncertainty", UNC_MAX_2BIT)
        SET_COMP("rough_rtd", OTD_666)
    ENDSTRUCT
    BEGIN_PSTRUCT("ncell_eotd", ARFCN_25_EOTD)
        SET_COMP("arfcn", ARFCN_25)
        SET_COMP("bsic", BSIC_1)
        SET_COMP("mfrm_offset", MFRM_OFFSET_44)
        SET_COMP("otd_type", EXPECTED_OTD)
        SET_COMP("exp_otd", OTD_666)
        SET_COMP("uncertainty", UNC_MAX_2BIT)
        SET_COMP("rough_rtd", OTD_666)
    ENDSTRUCT
    BEGIN_PSTRUCT("ncell_eotd", ARFCN_14_EOTD)
        SET_COMP("arfcn", ARFCN_14)
        SET_COMP("bsic", BSIC_1)
        SET_COMP("mfrm_offset", MFRM_OFFSET_44)
        SET_COMP("otd_type", EXPECTED_OTD)
        SET_COMP("exp_otd", OTD_666)
        SET_COMP("uncertainty", UNC_MAX_2BIT)
        SET_COMP("rough_rtd", OTD_666)
    ENDSTRUCT
```

```
BEGIN_PSTRUCT ("ncell_eotd", ARFCN_512_EOTD)
    SET_COMP ("arfcn", ARFCN_512)
    SET_COMP ("bsic", BSIC_1)
    SET_COMP ("mfrm_offset", MFRM_OFFSET_44)
    SET_COMP ("otd_type", EXPECTED_OTD)
    SET_COMP ("exp_otd", OTD_666)
    SET_COMP ("uncertainty", UNC_MAX_2BIT)
    SET_COMP ("rough_rtd", OTD_666)
ENDSTRUCT
BEGIN_PSTRUCT ("ncell_eotd", ARFCN_580_EOTD)
    SET_COMP ("arfcn", ARFCN_580)
    SET_COMP ("bsic", BSIC_1)
    SET_COMP ("mfrm_offset", MFRM_OFFSET_44)
    SET_COMP ("otd_type", EXPECTED_OTD)
    SET_COMP ("exp_otd", OTD_666)
    SET_COMP ("uncertainty", UNC_MAX_2BIT)
    SET_COMP ("rough_rtd", OTD_666)
ENDSTRUCT
BEGIN_PSTRUCT ("ncell_eotd", ARFCN_885_EOTD)
    SET_COMP ("arfcn", ARFCN_885)
    SET_COMP ("bsic", BSIC_2)
    SET_COMP ("mfrm_offset", MFRM_OFFSET_44)
    SET_COMP ("otd_type", EXPECTED_OTD)
    SET_COMP ("exp_otd", OTD_666)
    SET_COMP ("uncertainty", UNC_MAX_2BIT)
    SET_COMP ("rough_rtd", OTD_666)
ENDSTRUCT
BEGIN_PSTRUCT ("ncell_eotd", ARFCN_516_EOTD)
    SET_COMP ("arfcn", ARFCN_516)
    SET_COMP ("bsic", BSIC_10)
    SET_COMP ("mfrm_offset", MFRM_OFFSET_44)
    SET_COMP ("otd_type", EXPECTED_OTD)
    SET_COMP ("exp_otd", OTD_666)
    SET_COMP ("uncertainty", UNC_MAX_2BIT)
    SET_COMP ("rough_rtd", OTD_666)
ENDSTRUCT
BEGIN_PSTRUCT ("ncell_eotd", ARFCN_525_EOTD)
    SET_COMP ("arfcn", ARFCN_525)
    SET_COMP ("bsic", BSIC_10)
    SET_COMP ("mfrm_offset", MFRM_OFFSET_44)
    SET_COMP ("otd_type", EXPECTED_OTD)
    SET_COMP ("exp_otd", OTD_666)
    SET_COMP ("uncertainty", UNC_MAX_2BIT)
    SET_COMP ("rough_rtd", OTD_666)
ENDSTRUCT

BEGIN_PSTRUCT ("eotd_sc_res", EOTD_SC_RES_OK)
    SET_COMP ("sb_flag", SB_TRUE)
    SET_COMP ("bsic", BSIC_1)
    SET_COMP ("arfcn", ARFCN_23)
    SET_COMP ("eotd_crosscor", EOTD_CROSSCOR_12)
    SET_COMP ("d_eotd_nrj", RSSI_61440)
    SET_COMP ("time_tag", NOM_POS_1000)
ENDSTRUCT
BEGIN_PSTRUCT ("eotd_sc_res1", EOTD_SC_RES1_OK)
    SET_COMP ("sb_flag", SB_TRUE)
    SET_COMP ("bsic", BSIC_1)
    SET_COMP ("arfcn", ARFCN_23)
    SET_COMP ("eotd_crosscor", EOTD_CROSSCOR_12)
```

```
        SET_COMP ("d_eotd_nrj",          RSSI_61440)
        SET_COMP ("time_tag",            NOM_POS_2000)
ENDSTRUCT

BEGIN_PSTRUCT ("eotd_nc_res", EOTD_NC_RES_637)
    SET_COMP ("sb_flag",                SB_TRUE)
    SET_COMP ("bsic",                    BSIC_1)
    SET_COMP ("arfcn",                    ARFCN_637)
    SET_COMP ("eotd_crosscor",            EOTD_CROSSCOR_9)
    SET_COMP ("d_eotd_nrj",              RSSI_61952)
    SET_COMP ("time_tag",                NOM_POS_2000)
ENDSTRUCT
BEGIN_PSTRUCT ("eotd_nc_res", EOTD_NC_RES_25)
    SET_COMP ("sb_flag",                SB_TRUE)
    SET_COMP ("bsic",                    BSIC_1)
    SET_COMP ("arfcn",                    ARFCN_25)
    SET_COMP ("eotd_crosscor",            EOTD_CROSSCOR_6)
    SET_COMP ("d_eotd_nrj",              RSSI_61440)
    SET_COMP ("time_tag",                NOM_POS_2000)
ENDSTRUCT
BEGIN_PSTRUCT ("eotd_nc_res", EOTD_NC_RES_14)
    SET_COMP ("sb_flag",                SB_TRUE)
    SET_COMP ("bsic",                    BSIC_1)
    SET_COMP ("arfcn",                    ARFCN_14)
    SET_COMP ("eotd_crosscor",            EOTD_CROSSCOR_9)
    SET_COMP ("d_eotd_nrj",              RSSI_61952)
    SET_COMP ("time_tag",                NOM_POS_1000)
ENDSTRUCT
BEGIN_PSTRUCT ("eotd_nc_res", EOTD_NC_RES_512)
    SET_COMP ("sb_flag",                SB_TRUE)
    SET_COMP ("bsic",                    BSIC_1)
    SET_COMP ("arfcn",                    ARFCN_512)
    SET_COMP ("eotd_crosscor",            EOTD_CROSSCOR_6)
    SET_COMP ("d_eotd_nrj",              RSSI_61440)
    SET_COMP ("time_tag",                NOM_POS_2000)
ENDSTRUCT
BEGIN_PSTRUCT ("eotd_nc_res", EOTD_NC_RES_516)
    SET_COMP ("sb_flag",                SB_TRUE)
    SET_COMP ("bsic",                    BSIC_10)
    SET_COMP ("arfcn",                    ARFCN_516)
    SET_COMP ("eotd_crosscor",            EOTD_CROSSCOR_6)
    SET_COMP ("d_eotd_nrj",              RSSI_61440)
    SET_COMP ("time_tag",                NOM_POS_1000)
ENDSTRUCT
BEGIN_PSTRUCT ("eotd_nc_res", EOTD_NC_RES_525)
    SET_COMP ("sb_flag",                SB_TRUE)
    SET_COMP ("bsic",                    BSIC_10)
    SET_COMP ("arfcn",                    ARFCN_525)
    SET_COMP ("eotd_crosscor",            EOTD_CROSSCOR_9)
    SET_COMP ("d_eotd_nrj",              RSSI_61952)
    SET_COMP ("time_tag",                NOM_POS_2000)
ENDSTRUCT
BEGIN_PSTRUCT ("eotd_nc_res", EOTD_NC_RES_580)
    SET_COMP ("sb_flag",                SB_TRUE)
    SET_COMP ("bsic",                    BSIC_1)
    SET_COMP ("arfcn",                    ARFCN_580)
    SET_COMP ("eotd_crosscor",            EOTD_CROSSCOR_9)
    SET_COMP ("d_eotd_nrj",              RSSI_61952)
```

```
        SET_COMP ("time_tag",          NOM_POS_1000)
ENDSTRUCT
BEGIN_PSTRUCT ("eotd_nc_res", EOTD_NC_RES_885)
    SET_COMP ("sb_flag",              SB_TRUE)
    SET_COMP ("bsic",                 BSIC_2)
    SET_COMP ("arfcn",                ARFCN_885)
    SET_COMP ("eotd_crosscor",        EOTD_CROSSCOR_6)
    SET_COMP ("d_eotd_nrj",           RSSI_61440)
    SET_COMP ("time_tag",              NOM_POS_2000)
ENDSTRUCT

BEGIN_PSTRUCT ("ncell_list", NCELL_ARFCN_1)
    SET_COMP ("radio_freq",           ARFCN_1)
    SET_COMP ("fn_offset",             FN_OFFSET_124)
    SET_COMP ("time_alignment",        TIME_ALIGN_14)
    SET_COMP ("timing_validity",        TV_VALID_TIMING_INFO)
ENDSTRUCT
BEGIN_PSTRUCT ("ncell_list", NCELL_ARFCN_14)
    SET_COMP ("radio_freq",           ARFCN_14)
    SET_COMP ("fn_offset",             FN_OFFSET_124)
    SET_COMP ("time_alignment",        TIME_ALIGN_14)
    SET_COMP ("timing_validity",        TV_VALID_TIMING_INFO)
ENDSTRUCT
BEGIN_PSTRUCT ("ncell_list", NCELL_ARFCN_23)
    SET_COMP ("radio_freq",           ARFCN_23)
    SET_COMP ("fn_offset",             FN_OFFSET_114)
    SET_COMP ("time_alignment",        TIME_ALIGN_14)
    SET_COMP ("timing_validity",        TV_VALID_TIMING_INFO)
ENDSTRUCT
BEGIN_PSTRUCT ("ncell_list", NCELL_ARFCN_124)
    SET_COMP ("radio_freq",           ARFCN_124)
    SET_COMP ("fn_offset",             FN_OFFSET_114)
    SET_COMP ("time_alignment",        TIME_ALIGN_14)
    SET_COMP ("timing_validity",        TV_VALID_TIMING_INFO)
ENDSTRUCT
BEGIN_PSTRUCT ("ncell_list", NCELL_ARFCN_25)
    SET_COMP ("radio_freq",           ARFCN_25)
    SET_COMP ("fn_offset",             FN_OFFSET_102)
    SET_COMP ("time_alignment",        TIME_ALIGN_14)
    SET_COMP ("timing_validity",        TV_VALID_TIMING_INFO)
ENDSTRUCT
BEGIN_PSTRUCT ("ncell_list", NCELL_ARFCN_512)
    SET_COMP ("radio_freq",           ARFCN_512)
    SET_COMP ("fn_offset",             FN_OFFSET_153)
    SET_COMP ("time_alignment",        TIME_ALIGN_14)
    SET_COMP ("timing_validity",        TV_VALID_TIMING_INFO)
ENDSTRUCT
BEGIN_PSTRUCT ("ncell_list", NCELL_ARFCN_516)
    SET_COMP ("radio_freq",           ARFCN_516)
    SET_COMP ("fn_offset",             FN_OFFSET_874)
    SET_COMP ("time_alignment",        TIME_ALIGN_2664)
    SET_COMP ("timing_validity",        TV_VALID_TIMING_INFO)
ENDSTRUCT
BEGIN_PSTRUCT ("ncell_list", NCELL_ARFCN_525)
    SET_COMP ("radio_freq",           ARFCN_525)
    SET_COMP ("fn_offset",             FN_OFFSET_874)
    SET_COMP ("time_alignment",        TIME_ALIGN_2664)
    SET_COMP ("timing_validity",        TV_VALID_TIMING_INFO)
```

```
ENDSTRUCT
BEGIN_PSTRUCT ("ncell_list", NCELL_ARFCN_580)
    SET_COMP ("radio_freq",          ARFCN_580)
    SET_COMP ("fn_offset",           FN_OFFSET_204)
    SET_COMP ("time_alignment",      TIME_ALIGN_14)
    SET_COMP ("timing_validity",     TV_VALID_TIMING_INFO)
ENDSTRUCT
BEGIN_PSTRUCT ("ncell_list", NCELL_ARFCN_637)
    SET_COMP ("radio_freq",          ARFCN_637)
    SET_COMP ("fn_offset",           FN_OFFSET_14)
    SET_COMP ("time_alignment",      TIME_ALIGN_14)
    SET_COMP ("timing_validity",     TV_VALID_TIMING_INFO)
ENDSTRUCT
BEGIN_PSTRUCT ("ncell_list", NCELL_ARFCN_885)
    SET_COMP ("radio_freq",          ARFCN_885)
    SET_COMP ("fn_offset",           FN_OFFSET_255)
    SET_COMP ("time_alignment",      TIME_ALIGN_14)
    SET_COMP ("timing_validity",     TV_VALID_TIMING_INFO)
ENDSTRUCT
BEGIN_PSTRUCT ("ncell_list", NCELL_ARFCN_EMPTY)
    SET_COMP ("radio_freq",          0)
    SET_COMP ("fn_offset",           0)
    SET_COMP ("time_alignment",      0)
    SET_COMP ("timing_validity",     0)
ENDSTRUCT

BEGIN_PSTRUCT ("ncells", NCELLS_EOTD_BSIC_1)
    SET_COMP ("no_of_ncells",        NO_NCELLS_1)
    SET_COMP ("arfcn",               ARFCN_LIST_EOTD_1)
    SET_COMP ("rx_lev",              RX_LEV_LIST_EOTD_1)
    SET_COMP ("bsic",               BSIC_LIST_EOTD_1)
    SET_COMP ("time_alignmt",        TIME_ALIGN_LIST_EOTD_1)
    SET_COMP ("frame_offset",        FRAME_OFS_LIST_EOTD_1)
ENDSTRUCT
BEGIN_PSTRUCT ("ncells", NCELLS_EOTD_BSIC_2)
    SET_COMP ("no_of_ncells",        NO_NCELLS_2)
    SET_COMP ("arfcn",               ARFCN_LIST_EOTD_2)
    SET_COMP ("rx_lev",              RX_LEV_LIST_EOTD_2)
    SET_COMP ("bsic",               BSIC_LIST_EOTD_2)
    SET_COMP ("time_alignmt",        TIME_ALIGN_LIST_EOTD_2)
    SET_COMP ("frame_offset",        FRAME_OFS_LIST_EOTD_2)
ENDSTRUCT

/* Primitive Arrays */
BEGIN_STRUCT_ARRAY (NCELL_EOTD_7, 7)
    ARFCN_23_EOTD,
    ARFCN_637_EOTD,
    ARFCN_25_EOTD,
    ARFCN_14_EOTD,
    ARFCN_512_EOTD,
    ARFCN_580_EOTD,
    ARFCN_885_EOTD
ENDARRAY
BEGIN_STRUCT_ARRAY (NCELL_EOTD_9, 9)
    ARFCN_23_EOTD,
    ARFCN_637_EOTD,
    ARFCN_25_EOTD,
    ARFCN_14_EOTD,
    ARFCN_512_EOTD,
```

```
        ARFCN_516_EOTD,  
        ARFCN_525_EOTD,  
        ARFCN_580_EOTD,  
        ARFCN_885_EOTD  
ENDARRAY  
  
BEGIN_STRUCT_ARRAY (EOTD_RESULT_6, 6)  
    EOTD_NC_RES_637,  
    EOTD_NC_RES_25,  
    EOTD_NC_RES_14,  
    EOTD_NC_RES_512,  
    EOTD_NC_RES_580,  
    EOTD_NC_RES_885  
ENDARRAY  
BEGIN_STRUCT_ARRAY (EOTD_RESULT_8, 8)  
    EOTD_NC_RES_637,  
    EOTD_NC_RES_25,  
    EOTD_NC_RES_14,  
    EOTD_NC_RES_512,  
    EOTD_NC_RES_580,  
    EOTD_NC_RES_885,  
    EOTD_NC_RES_516,  
    EOTD_NC_RES_525  
ENDARRAY  
  
BEGIN_PSTRUCT_ARRAY (NCELL_RESULT_EOTD_1, 8)  
    NCELL_RESULT_23a,  
    NCELL_RESULT_1a,  
    NCELL_RESULT_14a,  
    NCELL_RESULT_124a,  
    NCELL_RESULT_1023a,  
    NCELL_RESULT_114a,  
    NCELL_RESULT_46a,  
    NCELL_RESULT_22a  
ENDARRAY  
BEGIN_PSTRUCT_ARRAY (NCELL_RESULT_EOTD_2, 8)  
    NCELL_RESULT_15a,  
    NCELL_RESULT_74a,  
    NCELL_RESULT_30a,  
    NCELL_RESULT_526a,  
    NCELL_RESULT_23a,  
    NCELL_RESULT_1a,  
    NCELL_RESULT_14a,  
    NCELL_RESULT_124a  
ENDARRAY  
  
BEGIN_SHORT_ARRAY (A_ARFCN_EMO_000,4)  
    1,46,47,124  
ENDARRAY  
BEGIN_SHORT_ARRAY (RADIO_FREQ_100,33)  
    1,46,47,124,23,0,0,0,  
    0,0,0,0,0,0,0,0,  
    0,0,0,0,0,0,0,0,  
    0,0,0,0,0,0,0,0,  
    0  
ENDARRAY  
BEGIN_PSTRUCT("chan_list",CHAN_LIST_100)
```

```
        SET_COMP ("radio_freq", RADIO_FREQ_100)
    ENDSTRUCT
    BEGIN_SHORT_ARRAY (RADIO_FREQ_101,33)
        23,1,14,124,0,0,0,0,
        0,0,0,0,0,0,0,0,
        0,0,0,0,0,0,0,0,
        0,0,0,0,0,0,0,0,
        0
    ENDARRAY
    BEGIN_PSTRUCT("chan_list",CHAN_LIST_101)
        SET_COMP ("radio_freq", RADIO_FREQ_101)
    ENDSTRUCT
```

```
    BEGIN_PSTRUCT("res_list",RES_LIST_100_000)
        SET_COMP ("bcch_freq", CONST_1)
        SET_COMP ("rxlev_acc", CONST_30)
        SET_COMP ("rxlev_nbr_meas", CONST_1)
    ENDSTRUCT
    BEGIN_PSTRUCT("res_list",RES_LIST_100_001)
        SET_COMP ("bcch_freq", CONST_46)
        SET_COMP ("rxlev_acc", CONST_6)
        SET_COMP ("rxlev_nbr_meas", CONST_1)
    ENDSTRUCT
    BEGIN_PSTRUCT("res_list",RES_LIST_100_002)
        SET_COMP ("bcch_freq", CONST_47)
        SET_COMP ("rxlev_acc", CONST_53)
        SET_COMP ("rxlev_nbr_meas", CONST_1)
    ENDSTRUCT
    BEGIN_PSTRUCT("res_list",RES_LIST_100_003)
        SET_COMP ("bcch_freq", CONST_124)
        SET_COMP ("rxlev_acc", CONST_13)
        SET_COMP ("rxlev_nbr_meas", CONST_1)
    ENDSTRUCT
    BEGIN_PSTRUCT("res_list",RES_LIST_100_004)
        SET_COMP ("bcch_freq", CONST_23)
        SET_COMP ("rxlev_acc", CONST_1)
        SET_COMP ("rxlev_nbr_meas", CONST_1)
    ENDSTRUCT
    BEGIN_PSTRUCT("res_list",RES_LIST_100_NULL)
        SET_COMP ("bcch_freq", CONST_0)
        SET_COMP ("rxlev_acc", CONST_0)
        SET_COMP ("rxlev_nbr_meas", CONST_0)
    ENDSTRUCT
    BEGIN_PSTRUCT_ARRAY (RES_LIST_100, 33)
        RES_LIST_100_000, RES_LIST_100_001,
    RES_LIST_100_002,RES_LIST_100_003,
        RES_LIST_100_004,
        RES_LIST_100_NULL, RES_LIST_100_NULL, RES_LIST_100_NULL,
    RES_LIST_100_NULL,
        RES_LIST_100_NULL, RES_LIST_100_NULL, RES_LIST_100_NULL,
    RES_LIST_100_NULL,
        RES_LIST_100_NULL, RES_LIST_100_NULL, RES_LIST_100_NULL,
    RES_LIST_100_NULL,
```



```
        RES_LIST_100_NULL, RES_LIST_100_NULL, RES_LIST_100_NULL,  
RES_LIST_100_NULL,  
        RES_LIST_100_NULL, RES_LIST_100_NULL, RES_LIST_100_NULL,  
RES_LIST_100_NULL,  
        RES_LIST_100_NULL, RES_LIST_100_NULL, RES_LIST_100_NULL,  
RES_LIST_100_NULL,  
        RES_LIST_100_NULL, RES_LIST_100_NULL, RES_LIST_100_NULL,  
RES_LIST_100_NULL  
ENDARRAY
```

```
BEGIN_PSTRUCT("ncell_meas",NCELL_MEAS_100)  
    SET_COMP ("res_list", RES_LIST_100)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT("res_list",RES_LIST_102_000)  
    SET_COMP ("bcch_freq", CONST_1)  
    SET_COMP ("rxlev_acc", CONST_30)  
    SET_COMP ("rxlev_nbr_meas", CONST_1)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT("res_list",RES_LIST_102_001)  
    SET_COMP ("bcch_freq", CONST_46)  
    SET_COMP ("rxlev_acc", CONST_6)  
    SET_COMP ("rxlev_nbr_meas", CONST_1)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT("res_list",RES_LIST_102_002)  
    SET_COMP ("bcch_freq", CONST_47)  
    SET_COMP ("rxlev_acc", CONST_53)  
    SET_COMP ("rxlev_nbr_meas", CONST_1)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT("res_list",RES_LIST_102_003)  
    SET_COMP ("bcch_freq", CONST_124)  
    SET_COMP ("rxlev_acc", CONST_13)  
    SET_COMP ("rxlev_nbr_meas", CONST_1)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT("res_list",RES_LIST_102_004)  
    SET_COMP ("bcch_freq", CONST_23)  
    SET_COMP ("rxlev_acc", CONST_1)  
    SET_COMP ("rxlev_nbr_meas", CONST_1)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT("res_list",RES_LIST_102_NULL)  
    SET_COMP ("bcch_freq", CONST_0)  
    SET_COMP ("rxlev_acc", CONST_0)  
    SET_COMP ("rxlev_nbr_meas", CONST_0)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT_ARRAY (RES_LIST_102, 33)  
    RES_LIST_102_000, RES_LIST_102_001,  
RES_LIST_102_002,RES_LIST_102_003,  
    RES_LIST_102_004,  
    RES_LIST_102_NULL, RES_LIST_102_NULL, RES_LIST_102_NULL,  
RES_LIST_102_NULL,  
    RES_LIST_102_NULL, RES_LIST_102_NULL, RES_LIST_102_NULL,  
RES_LIST_102_NULL,
```

```
        RES_LIST_102_NULL, RES_LIST_102_NULL, RES_LIST_102_NULL,  
RES_LIST_102_NULL,  
        RES_LIST_102_NULL, RES_LIST_102_NULL, RES_LIST_102_NULL,  
RES_LIST_102_NULL,  
        RES_LIST_102_NULL, RES_LIST_102_NULL, RES_LIST_102_NULL,  
RES_LIST_102_NULL,  
        RES_LIST_102_NULL, RES_LIST_102_NULL, RES_LIST_102_NULL,  
RES_LIST_102_NULL,  
        RES_LIST_102_NULL, RES_LIST_102_NULL, RES_LIST_102_NULL,  
RES_LIST_102_NULL  
ENDARRAY
```

```
BEGIN_PSTRUCT("ncell_meas", NCELL_MEAS_102)  
    SET_COMP ("res_list", RES_LIST_102)  
ENDSTRUCT
```

```
BEGIN_PSTRUCT ("meas_results", S_EMO_MEAS_RES_000_000)  
    SET_COMP ("arfcn",  CONST_1)  
    SET_COMP ("rx_lev",  CONST_30)  
ENDSTRUCT  
BEGIN_PSTRUCT ("meas_results", S_EMO_MEAS_RES_000_001)  
    SET_COMP ("arfcn",  CONST_46)  
    SET_COMP ("rx_lev",  CONST_6)  
ENDSTRUCT  
BEGIN_PSTRUCT ("meas_results", S_EMO_MEAS_RES_000_002)  
    SET_COMP ("arfcn",  CONST_47)  
    SET_COMP ("rx_lev",  CONST_53)  
ENDSTRUCT  
BEGIN_PSTRUCT ("meas_results", S_EMO_MEAS_RES_000_003)  
    SET_COMP ("arfcn",  CONST_124)  
    SET_COMP ("rx_lev",  CONST_13)  
ENDSTRUCT  
BEGIN_PSTRUCT ("meas_results", S_EMO_MEAS_RES_000_004)  
    SET_COMP ("arfcn",  CONST_23)  
    SET_COMP ("rx_lev",  CONST_1)  
ENDSTRUCT  
BEGIN_STRUCT_ARRAY (S_EMO_MEAS_RES_000,5)  
    S_EMO_MEAS_RES_000_000,  
    S_EMO_MEAS_RES_000_001,  
    S_EMO_MEAS_RES_000_002,  
    S_EMO_MEAS_RES_000_003,  
    S_EMO_MEAS_RES_000_004  
ENDARRAY
```

4 TEST CASES

4.1 Configuration

4.1.1 ALR000: Filter and Routings (GSM 900)

Description: The ALR is configured.

Preamble: None

RR/DL	ALR	PL
COMMAND (TAP RESET)		
COMMAND (MMI RESET)		
COMMAND (CC RESET)		
COMMAND (SS RESET)		
COMMAND (SMS RESET)		
COMMAND (MM RESET)		
COMMAND (RR RESET)		
COMMAND (DL RESET)		
COMMAND (SIM RESET)		
COMMAND (PL RESET)		
COMMAND (TAP REDIRECT CLEAR)		
COMMAND (MMI REDIRECT CLEAR)		
COMMAND (CC REDIRECT CLEAR)		
COMMAND (SS REDIRECT CLEAR)		
COMMAND (SMS REDIRECT CLEAR)		
COMMAND (MM REDIRECT CLEAR)		
COMMAND (RR REDIRECT CLEAR)		
COMMAND (DL REDIRECT CLEAR)		
COMMAND (SIM REDIRECT CLEAR)		
COMMAND (PL REDIRECT CLEAR)		
COMMAND (MMI REDIRECT MM NULL)		
COMMAND (MMI REDIRECT CC NULL)		
COMMAND (MMI REDIRECT SS NULL)		
COMMAND (MMI REDIRECT SMS NULL)		
COMMAND (MMI REDIRECT PL NULL)		
COMMAND (CC REDIRECT MMI NULL)		
COMMAND (CC REDIRECT MM NULL)		
COMMAND (SS REDIRECT MMI NULL)		
COMMAND (SS REDIRECT MM NULL)		
COMMAND (SMS REDIRECT MMI NULL)		
COMMAND (SMS REDIRECT MM NULL)		
COMMAND (MM REDIRECT MMI NULL)		
COMMAND (MM REDIRECT CC NULL)		
COMMAND (MM REDIRECT SS NULL)		
COMMAND (MM REDIRECT SMS NULL)		
COMMAND (MM REDIRECT SIM NULL)		
COMMAND (MM REDIRECT RR NULL)		
COMMAND (MM REDIRECT DL NULL)		
COMMAND (RR REDIRECT PL NULL)		
COMMAND (RR REDIRECT DL NULL)		
COMMAND (RR REDIRECT MM NULL)		
COMMAND (DL REDIRECT RR NULL)		
COMMAND (DL REDIRECT MM NULL)		
COMMAND (DL REDIRECT PL NULL)		
COMMAND (PL REDIRECT RR TAP)		
COMMAND (PL REDIRECT DL TAP)		
COMMAND (PL REDIRECT MMI TAP)		
COMMAND (PL REDIRECT L1 TAP)		

COMMAND (SIM REDIRECT MM NULL)		
COMMAND (TAP REDIRECT TAP PL)		

Parametrization

Primitive	Parameter	Value
History:	22.09.99	MPA Initial

4.1.2 ALR200: Filter and Routings (DCS 1800)

Description: The ALR is configured for DCS 1800.

Preamble: None

RR/DL	ALR	PL
COMMAND (TAP RESET)		
COMMAND (MMI RESET)		
COMMAND (CC RESET)		
COMMAND (SS RESET)		
COMMAND (SMS RESET)		
COMMAND (MM RESET)		
COMMAND (RR RESET)		
COMMAND (DL RESET)		
COMMAND (SIM RESET)		
COMMAND (PL RESET)		
COMMAND (TAP REDIRECT CLEAR)		
COMMAND (MMI REDIRECT CLEAR)		
COMMAND (CC REDIRECT CLEAR)		
COMMAND (SS REDIRECT CLEAR)		
COMMAND (SMS REDIRECT CLEAR)		
COMMAND (MM REDIRECT CLEAR)		
COMMAND (RR REDIRECT CLEAR)		
COMMAND (DL REDIRECT CLEAR)		
COMMAND (SIM REDIRECT CLEAR)		
COMMAND (PL REDIRECT CLEAR)		
COMMAND (MMI REDIRECT MM NULL)		
COMMAND (MMI REDIRECT CC NULL)		
COMMAND (MMI REDIRECT SS NULL)		
COMMAND (MMI REDIRECT SMS NULL)		
COMMAND (MMI REDIRECT PL NULL)		
COMMAND (CC REDIRECT MMI NULL)		
COMMAND (CC REDIRECT MM NULL)		
COMMAND (SS REDIRECT MMI NULL)		
COMMAND (SS REDIRECT MM NULL)		
COMMAND (SMS REDIRECT MMI NULL)		
COMMAND (SMS REDIRECT MM NULL)		
COMMAND (MM REDIRECT MMI NULL)		
COMMAND (MM REDIRECT CC NULL)		
COMMAND (MM REDIRECT SS NULL)		
COMMAND (MM REDIRECT SMS NULL)		
COMMAND (MM REDIRECT SIM NULL)		
COMMAND (MM REDIRECT RR NULL)		

COMMAND (MM REDIRECT DL NULL)		
COMMAND (RR REDIRECT PL NULL)		
COMMAND (RR REDIRECT DL NULL)		
COMMAND (RR REDIRECT MM NULL)		
COMMAND (DL REDIRECT RR NULL)		
COMMAND (DL REDIRECT MM NULL)		
COMMAND (DL REDIRECT PL NULL)		
COMMAND (PL REDIRECT RR TAP)		
COMMAND (PL REDIRECT DL TAP)		
COMMAND (PL REDIRECT MMI TAP)		
COMMAND (PL REDIRECT L1 TAP)		
COMMAND (SIM REDIRECT MM NULL)		
COMMAND (TAP REDIRECT TAP PL)		
COMMAND (PL CONFIG STD=4)		

Parameterization

Primitive	Parameter	Value
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History: 22.09.99 MPA Initial

4.1.3 ALR400: Filter and Routings (PCS 1900)

Description: The ALR is configured for PCS 1900.

Preamble: None

RR/DL	ALR	PL
COMMAND (TAP RESET)		
COMMAND (MMI RESET)		
COMMAND (CC RESET)		
COMMAND (SS RESET)		
COMMAND (SMS RESET)		
COMMAND (MM RESET)		
COMMAND (RR RESET)		
COMMAND (DL RESET)		
COMMAND (SIM RESET)		
COMMAND (PL RESET)		
COMMAND (TAP REDIRECT CLEAR)		
COMMAND (MMI REDIRECT CLEAR)		
COMMAND (CC REDIRECT CLEAR)		
COMMAND (SS REDIRECT CLEAR)		
COMMAND (SMS REDIRECT CLEAR)		
COMMAND (MM REDIRECT CLEAR)		
COMMAND (RR REDIRECT CLEAR)		
COMMAND (DL REDIRECT CLEAR)		
COMMAND (SIM REDIRECT CLEAR)		
COMMAND (PL REDIRECT CLEAR)		
COMMAND (MMI REDIRECT MM NULL)		
COMMAND (MMI REDIRECT CC NULL)		
COMMAND (MMI REDIRECT SS NULL)		
COMMAND (MMI REDIRECT SMS NULL)		
COMMAND (MMI REDIRECT PL NULL)		

COMMAND (CC REDIRECT MMI NULL)		
COMMAND (CC REDIRECT MM NULL)		
COMMAND (SS REDIRECT MMI NULL)		
COMMAND (SS REDIRECT MM NULL)		
COMMAND (SMS REDIRECT MMI NULL)		
COMMAND (SMS REDIRECT MM NULL)		
COMMAND (MM REDIRECT MMI NULL)		
COMMAND (MM REDIRECT CC NULL)		
COMMAND (MM REDIRECT SS NULL)		
COMMAND (MM REDIRECT SMS NULL)		
COMMAND (MM REDIRECT SIM NULL)		
COMMAND (MM REDIRECT RR NULL)		
COMMAND (MM REDIRECT DL NULL)		
COMMAND (RR REDIRECT PL NULL)		
COMMAND (RR REDIRECT DL NULL)		
COMMAND (RR REDIRECT MM NULL)		
COMMAND (DL REDIRECT RR NULL)		
COMMAND (DL REDIRECT MM NULL)		
COMMAND (DL REDIRECT PL NULL)		
COMMAND (PL REDIRECT RR TAP)		
COMMAND (PL REDIRECT DL TAP)		
COMMAND (PL REDIRECT MMI TAP)		
COMMAND (PL REDIRECT L1 TAP)		
COMMAND (SIM REDIRECT MM NULL)		
COMMAND (TAP REDIRECT TAP PL)		
COMMAND (PL CONFIG STD=3)		

Parameterization

Primitive	Parameter	Value
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History:	22.09.99	MPA	Initial
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4.1.4 ALR600: Filter and Routings (Dualband GSM 900 / DCS 1800)

Description: The ALR is configured for Dualband GSM 900 / DCS 1800.

Preamble: None

RR/DL	ALR	PL
COMMAND (TAP RESET)		
COMMAND (MMI RESET)		
COMMAND (CC RESET)		
COMMAND (SS RESET)		
COMMAND (SMS RESET)		
COMMAND (MM RESET)		
COMMAND (RR RESET)		
COMMAND (DL RESET)		
COMMAND (SIM RESET)		
COMMAND (PL RESET)		
COMMAND (TAP REDIRECT CLEAR)		
COMMAND (MMI REDIRECT CLEAR)		

COMMAND (CC REDIRECT CLEAR)		
COMMAND (SS REDIRECT CLEAR)		
COMMAND (SMS REDIRECT CLEAR)		
COMMAND (MM REDIRECT CLEAR)		
COMMAND (RR REDIRECT CLEAR)		
COMMAND (DL REDIRECT CLEAR)		
COMMAND (SIM REDIRECT CLEAR)		
COMMAND (PL REDIRECT CLEAR)		
COMMAND (MMI REDIRECT MM NULL)		
COMMAND (MMI REDIRECT CC NULL)		
COMMAND (MMI REDIRECT SS NULL)		
COMMAND (MMI REDIRECT SMS NULL)		
COMMAND (MMI REDIRECT PL NULL)		
COMMAND (CC REDIRECT MMI NULL)		
COMMAND (CC REDIRECT MM NULL)		
COMMAND (SS REDIRECT MMI NULL)		
COMMAND (SS REDIRECT MM NULL)		
COMMAND (SMS REDIRECT MMI NULL)		
COMMAND (SMS REDIRECT MM NULL)		
COMMAND (MM REDIRECT MMI NULL)		
COMMAND (MM REDIRECT CC NULL)		
COMMAND (MM REDIRECT SS NULL)		
COMMAND (MM REDIRECT SMS NULL)		
COMMAND (MM REDIRECT SIM NULL)		
COMMAND (MM REDIRECT RR NULL)		
COMMAND (MM REDIRECT DL NULL)		
COMMAND (RR REDIRECT PL NULL)		
COMMAND (RR REDIRECT DL NULL)		
COMMAND (RR REDIRECT MM NULL)		
COMMAND (DL REDIRECT RR NULL)		
COMMAND (DL REDIRECT MM NULL)		
COMMAND (DL REDIRECT PL NULL)		
COMMAND (PL REDIRECT RR TAP)		
COMMAND (PL REDIRECT DL TAP)		
COMMAND (PL REDIRECT MMI TAP)		
COMMAND (PL REDIRECT L1 TAP)		
COMMAND (SIM REDIRECT MM NULL)		
COMMAND (TAP REDIRECT TAP PL)		
COMMAND (PL CONFIG STD=5)		

Parametrization

Primitive	Parameter	Value
History:	22.09.99	MPA Initial

4.1.5 ALR849: Filter and Routings (Dualband GSM 900 / E-GSM / DCS 1800)

Description: The ALR is configured for Dualband GSM 900 / E-GSM / DCS 1800.

Preamble: None

RR/DL	ALR	PL
COMMAND (TAP RESET)		
COMMAND (MMI RESET)		
COMMAND (CC RESET)		
COMMAND (SS RESET)		
COMMAND (SMS RESET)		
COMMAND (MM RESET)		
COMMAND (RR RESET)		
COMMAND (DL RESET)		
COMMAND (SIM RESET)		
COMMAND (PL RESET)		
COMMAND (TAP REDIRECT CLEAR)		
COMMAND (MMI REDIRECT CLEAR)		
COMMAND (CC REDIRECT CLEAR)		
COMMAND (SS REDIRECT CLEAR)		
COMMAND (SMS REDIRECT CLEAR)		
COMMAND (MM REDIRECT CLEAR)		
COMMAND (RR REDIRECT CLEAR)		
COMMAND (DL REDIRECT CLEAR)		
COMMAND (SIM REDIRECT CLEAR)		
COMMAND (PL REDIRECT CLEAR)		
COMMAND (MMI REDIRECT MM NULL)		
COMMAND (MMI REDIRECT CC NULL)		
COMMAND (MMI REDIRECT SS NULL)		
COMMAND (MMI REDIRECT SMS NULL)		
COMMAND (MMI REDIRECT PL NULL)		
COMMAND (CC REDIRECT MMI NULL)		
COMMAND (CC REDIRECT MM NULL)		
COMMAND (SS REDIRECT MMI NULL)		
COMMAND (SS REDIRECT MM NULL)		
COMMAND (SMS REDIRECT MMI NULL)		
COMMAND (SMS REDIRECT MM NULL)		
COMMAND (MM REDIRECT MMI NULL)		
COMMAND (MM REDIRECT CC NULL)		
COMMAND (MM REDIRECT SS NULL)		
COMMAND (MM REDIRECT SMS NULL)		
COMMAND (MM REDIRECT SIM NULL)		
COMMAND (MM REDIRECT RR NULL)		
COMMAND (MM REDIRECT DL NULL)		
COMMAND (RR REDIRECT PL NULL)		
COMMAND (RR REDIRECT DL NULL)		
COMMAND (RR REDIRECT MM NULL)		
COMMAND (DL REDIRECT RR NULL)		
COMMAND (DL REDIRECT MM NULL)		
COMMAND (DL REDIRECT PL NULL)		
COMMAND (PL REDIRECT RR TAP)		
COMMAND (PL REDIRECT DL TAP)		
COMMAND (PL REDIRECT MMI TAP)		
COMMAND (PL REDIRECT L1 TAP)		

COMMAND (SIM REDIRECT MM NULL)

COMMAND (TAP REDIRECT TAP PL)

COMMAND (PL CONFIG STD=6)

Parametrization

Primitive	Parameter	Value
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History:	22.09.99	MPA	Initial
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4.2 Cell Selection (GSM 900)

4.2.1 ALR001: Initiation by RR, 4 channels available

Description: RR starts a cell selection with power measurements with interruption. Four channels in the order 23, 14, 124, 1 have acceptable fieldstrength values.

Preamble: ALR000

	RR/DL	ALR	PL
(1)	MPH_POWER_REQ		
	=====>		
(2)		MPHC_INIT_L1_REQ	
		=====>	
(3)		MPHC_INIT_L1_CON	
		<=====	
(4)		MPHC_RXLEV_REQ	
		=====>	
(5)		MPHC_RXLEV_IND	
		<=====	
(6)		MPHC_RXLEV_REQ	
		=====>	
(7)		MPHC_RXLEV_IND	
		<=====	
(8)		MPHC_RXLEV_REQ	
		=====>	
(9)		MPHC_RXLEV_IND	
		<=====	
(10)		MPHC_RXLEV_REQ	
		=====>	
(11)		MPHC_RXLEV_IND	
		<=====	
(12)		MPHC_RXLEV_REQ	
		=====>	
(13)		MPHC_RXLEV_IND	
		<=====	
(14)	MPH_POWER_CNF		
	<=====		

Parametrization

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

(1) MPH_POWER_REQ	pch_interrupt	PCH_INTERRUPT
	freq_bands	BAND_GSM_900

(2) MPHC_INIT_L1_REQ	radio_band_config	STD_900
(3) MPHC_INIT_L1_CON	param	NOT_USED
(4) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(5) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(6) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(7) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(9) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(10) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(11) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(12) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(13) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(14) MPH_POWER_CNF	num_of_chan arfcn rx_lev	CHANNELS_4 NOT_USED NOT_USED

History: 22.09.99 MPA Initial
17.05.02 MSB add MPHC_INIT_L1_REQ/CON

4.2.2 ALR002: Initiation by RR, no channels available

Description: RR starts a cell selection. No suitable channel is available.

Preamble: ALR000

RR/DL	ALR	PL
(1) MPH_POWER_REQ		
=====>		
(2)	MPHC_INIT_L1_REQ	
	=====>	
(3)	MPHC_INIT_L1_CON	
	<=====	
(4)	MPHC_RXLEV_REQ	
	=====>	
(5)	MPHC_RXLEV_IND	
	<=====	
(6)	MPHC_RXLEV_REQ	
	=====>	
(7)	MPHC_RXLEV_IND	

```

(8) | | *<=====
    | | | MPHC_RXLEV_REQ |
    | | *=====>*
(9) | | | MPHC_RXLEV_IND |
    | | *=====>*
(10) | | | MPHC_RXLEV_REQ |
    | | *=====>*
(11) | | | MPHC_RXLEV_IND |
    | | *=====>*
(12) | | | MPHC_RXLEV_REQ |
    | | *=====>*
(13) | | | MPHC_RXLEV_IND |
    | | *=====>*
(14) | MPH_POWER_CNF |
    | *=====>*
    | |
    | |

```

Parametrization

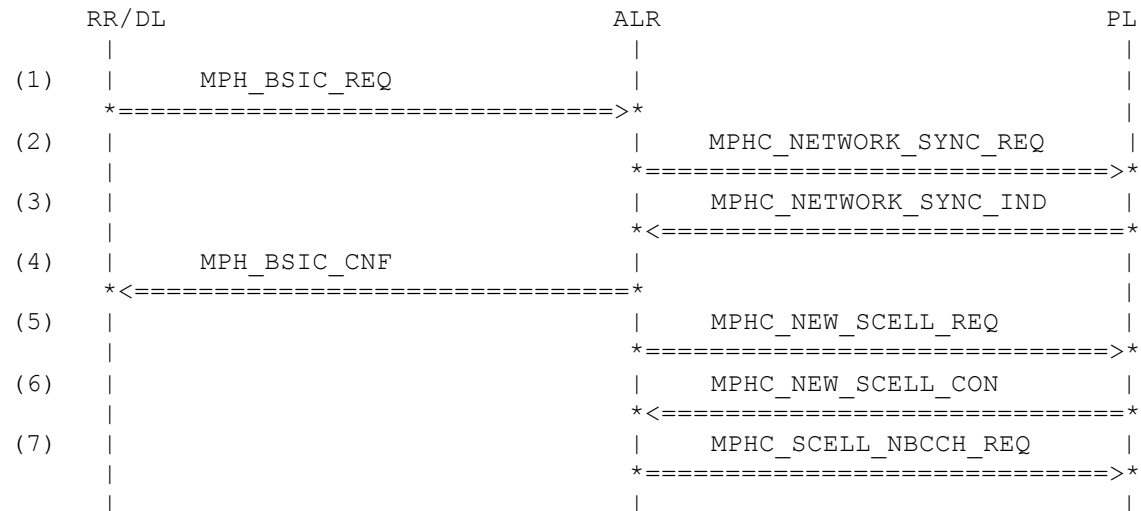
Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_GSM_900
(2) MPHC_INIT_L1_REQ	radio_band_config	STD_900
(3) MPHC_INIT_L1_CON	param	NOT_USED
(4) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(5) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(6) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(7) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(9) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(10) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(11) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(12) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(13) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(14) MPH_POWER_CNF	num_of_chan arfcn rx_lev	CHANNELS_0 NOT_USED NOT_USED

History: 22.09.99 MPA Initial
17.05.02 MSB add MPHC_INIT_L1_REQ/CON

4.2.3 ALR003: Find BCCH carrier, first channel

Description: The carrier with the highest fieldstrength (channel 23) is selected for synchronizing to frequency correction burst and synchron burst.

Preamble: ALR001



Parametrization

Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_23_STD_900
(2) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_23
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(3) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_23
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_1
(4) MPH_BSIC_CNF	arfcn	ARFCN_23_STD_900
	bsic	BSIC_1
	cs	CS_NO_ERROR
(5) MPHC_NEW_SCELL_REQ	radio_freq	ARFCN_23
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	tsc	BSIC_1
(6) MPHC_NEW_SCELL_CON	param	NOT_USED

(7) MPHC_SCELL_NBCCH_REQ

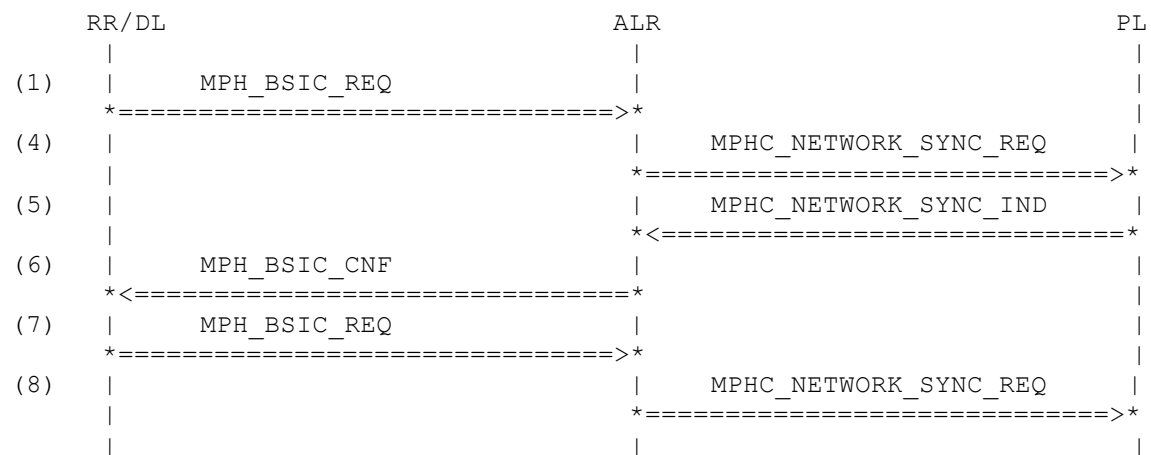
schedule_array_size SCHED_SIZE_1
schedule_array FULL_READ

History: 22.09.99 MPA Initial
17.05.02 MSB adapt MPH_BSIC_REQ/CNF to mul-
tiband
07.04.03 MSB MPHC_SCELL_NBCCH_REQ after
MPHC_START_CCCH_REQ included

4.2.4 ALR004: Find BCCH carrier, first channel failed, then second channel

Description: The carrier with the highest fieldstrength (channel 23) is selected for synchronizing to frequency correction burst and synchron burst. The attempt failed. A second request is started for the next strongest channel (channel 14).

Preamble: ALR001



Parametrization

Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_23_STD_900
(2) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_23
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(3) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_23
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_1
(4) MPH_BSIC_CNF	arfcn	ARFCN_23_STD_900
	bsic	BSIC_1
	cs	CS_NO_BCCH_AVAIL
(5) MPH_BSIC_REQ	arfcn	ARFCN_14_STD_900

(6) MPHC_NETWORK_SYNC_REQ

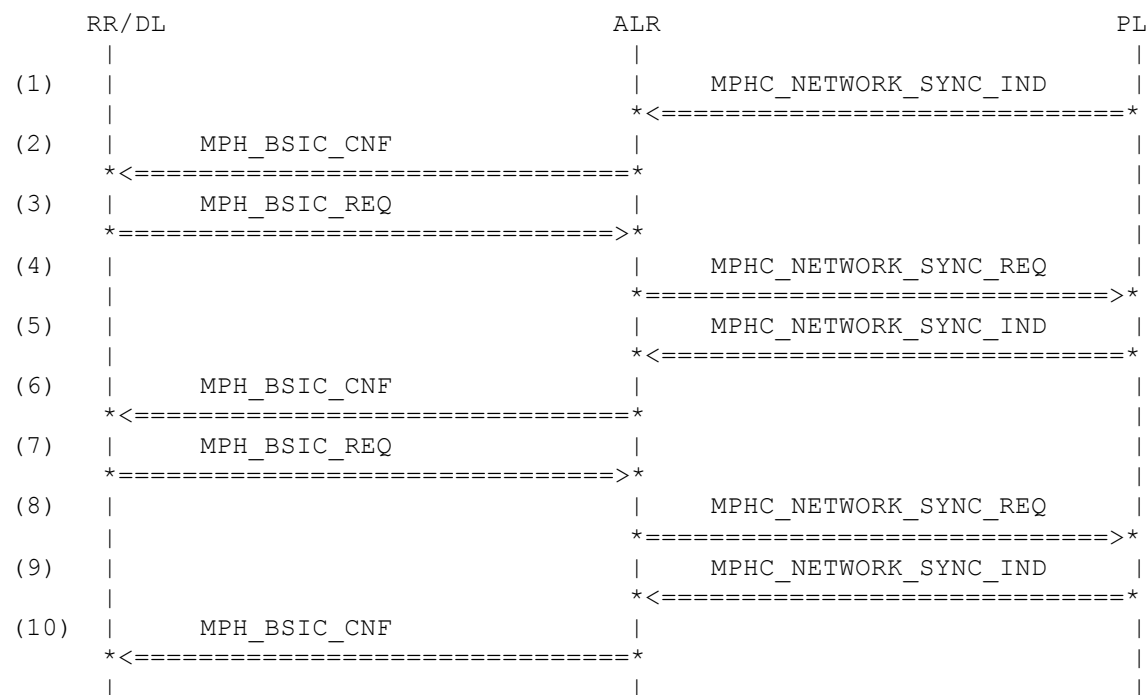
radio_freq	ARFCN_14
fn_offset	NOT_USED
time_alignment	NOT_USED
timing_validity	TV_INVALID_TIMING_INFO
search_mode	SM_WIDE_MODE

History:	22.09.99	MPA	Initial
	17.05.02	MSB	adapt MPH_BSIC_REQ/CNF to mul-
tiband			

4.2.5 ALR005: Find BCCH carrier, all channels failed, then error indication

Description: All synchronization attempts to the available channels are failed. RR is informed by an error indication with the cause no BCCH available.

Preamble: ALR004



Parametrization

Primitive	Parameter	Value
(1) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_14
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(2) MPH_BSIC_CNF	arfcn	ARFCN_14_STD_900
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(3) MPH_BSIC_REQ	arfcn	ARFCN_124_STD_900
(4) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_124

	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(5) MPHC_NETWORK_SYNC_IND		
	radio_freq	ARFCN_124
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(6) MPH_BSIC_CNF		
	arfcn	ARFCN_124_STD_900
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(7) MPH_BSIC_REQ		
	arfcn	ARFCN_1_STD_900
(8) MPHC_NETWORK_SYNC_REQ		
	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(9) MPHC_NETWORK_SYNC_IND		
	radio_freq	ARFCN_1
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(10) MPH_BSIC_CNF		
	arfcn	ARFCN_1_STD_900
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL

History: 22.09.99 MPA Initial
17.05.02 MSB adapt MPH_BSIC_REQ/CNF to mul-
tiband

4.2.6 ALR006: Find BCCH carrier, second channel

Description: The next best channel (channel 14) is selected for synchronizing to frequency correction burst and synchron burst.

Preamble: ALR004

RR/DL	ALR	PL
(1)	MPHC_NETWORK_SYNC_IND	
(2)	MPH_BSIC_CNF	
(3)	MPHC_NEW_SCELL_REQ	
(4)	MPHC_NEW_SCELL_CON	
(5)	MPHC_SCELL_NBCCH_REQ	

		=====>

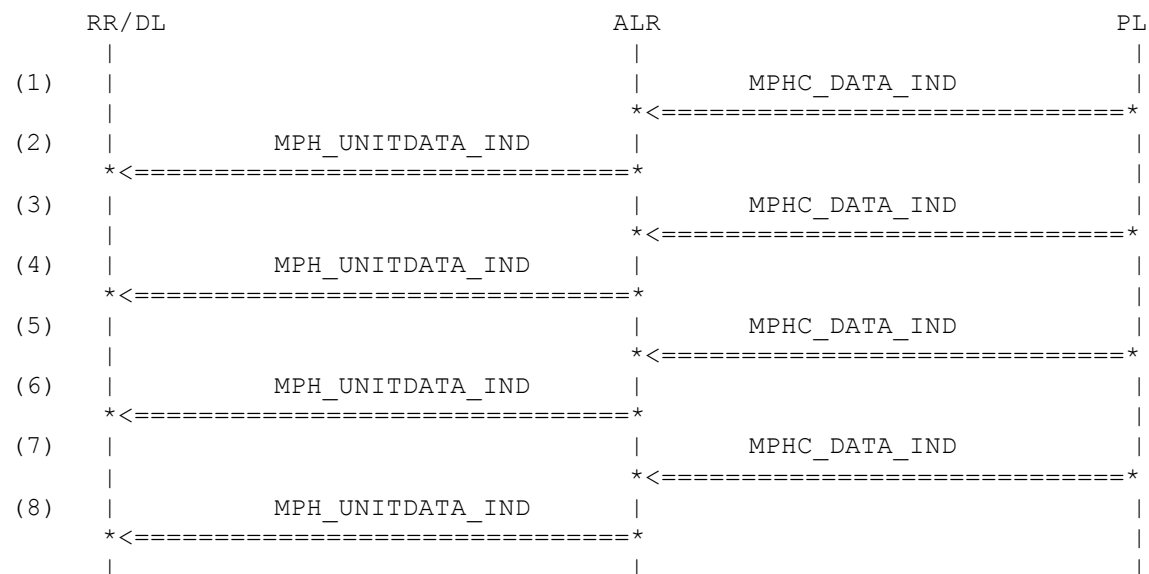
Parametrization

Primitive	Parameter	Value	
(1) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_14	
	sb_flag	SB_FOUND	
	fn_offset	FN_OFFSET_0	
	time_alignment	TIME_ALIGNMT_0	
	bsic	BSIC_0	
(2) MPH_BSIC_CNF	arfcn	ARFCN_14_STD_900	
	bsic	BSIC_0	
	cs	CS_NO_ERROR	
(3) MPHC_NEW_SCELL_REQ	radio_freq	ARFCN_14	
	fn_offset	FN_OFFSET_0	
	time_alignment	TIME_ALIGNMT_0	
	tsc	BSIC_0	
(4) MPHC_NEW_SCELL_CON	param	NOT_USED	
(5) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1	
	schedule_array	FULL_READ	
History:	23.09.99	MPA	Initial
	17.05.02	MSB	adapt MPH_BSIC_REQ/CNF to mul-
			tiband
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.2.7 ALR007: Read BCCH data

Description: The BCCH data blocks are read for the channel 23.

Preamble: ALR003



Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_1 TC_0 NOT_USED FN_OFFSET_0
(2) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_chan_desc rach_ctrl }	ARFCN_23 NOT_USED RR DOWNLINK D_SYS_INFO_1 TI_0 CELL_CHAN_DESC_1 RACH_CTRL_1
(3) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_2 TC_1 NOT_USED FN_OFFSET_0
(4) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti neigh_cell_desc ncc_permit rach_ctrl }	ARFCN_23 NOT_USED RR DOWNLINK D_SYS_INFO_2 TI_0 NEIGH_CELL_DESC_1 NCC_PERMIT_1 RACH_CTRL_1
(5) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_3 TC_2 NOT_USED FN_OFFSET_0
(6) MPH_UNITDATA_IND	arfcn fn sdu {	ARFCN_23 NOT_USED

	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	

(7) MPHC_DATA_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_4
tc	TC_3
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(8) MPH_UNITDATA_IND

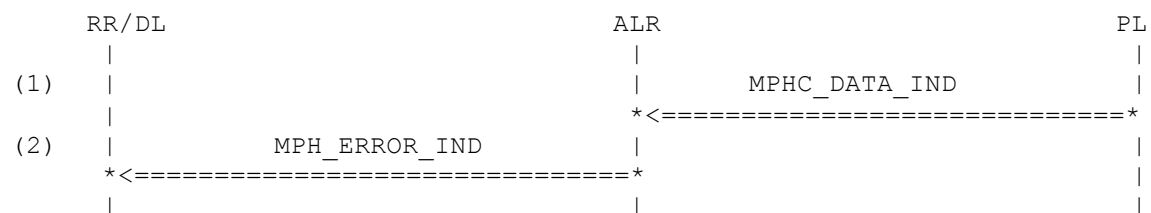
arfcn	ARFCN_23
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_4
ti	TI_0
loc_area_ident	LOC_AREA_IDENT_1
cell_select	CELL_SELECT_1
rach_ctrl	RACH_CTRL_1
}	

History: 23.09.99 MPA Initial

4.2.8 ALR008: Read failed BCCH data

Description: A failed BCCH data block is read.

Preamble: ALR007



Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	INVALID_BLOCK
	l2_frame	L2_NO_CONTENT
	tc	TC_3
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

(2) MPH_ERROR_IND

cs CS_BCCH_READ_ERROR
arfcn ARFCN_23

History: 23.09.99 MPA Initial

4.2.9 ALR009: RR rejects BCCH carrier, try third channel

Description: RR rejects the BCCH carrier. The next best channel (channel 124) is selected for synchronizing to frequency correction burst and synchron burst.

Preamble: ALR006

RR/DL	ALR	PL
(1) MPH_BSIC_REQ		
*=====>		
(2)	MPHC_STOP_SCELL_BCCH_REQ	
*=====>		
(4)	MPHC_NETWORK_SYNC_REQ	
*=====>		
(5)	MPHC_NETWORK_SYNC_IND	
<=====		
(6) MPH_BSIC_CNF		
<=====		
(7)	MPHC_NEW_SCELL_REQ	
*=====>		
(8)	MPHC_NEW_SCELL_CON	
<=====		
(9)	MPHC_SCELL_NBCCH_REQ	
*=====>		
(10)	MPHC_DATA_IND	
<=====		
(11) MPH_UNITDATA_IND		
<=====		

Parametrization

Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_124_STD_900
(2) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(4) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_124
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(5) MPH_BSIC_CNF	arfcn	ARFCN_124_STD_900

	bsic	BSIC_0
	cs	CS_NO_ERROR
(6) MPHC_NEW_SCELL_REQ		
	radio_freq	ARFCN_124
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	tsc	BSIC_0
(7) MPHC_NEW_SCELL_CON		
	param	NOT_USED
(8) MPHC_SCELL_NBCCH_REQ		
	schedule_array_size	SCHED_SIZE_1
	schedule_array	FULL_READ
(9) MPHC_DATA_IND		
	radio_freq	ARFCN_124
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_1
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(9) MPH_UNITDATA_IND		
	arfcn	ARFCN_124
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_1
	ti	TI_0
	cell_chan_desc	CELL_CHAN_DESC_1
	rach_ctrl	RACH_CTRL_1
	}	

History: 23.09.9 MPA Initial
17.05.02 MSB adapt MPH_BSIC_REQ/CNF to multiband

4.2.10 ALR010: RR rejects BCCH carrier, try fourth channel

Description: RR rejects the BCCH carrier. The next best channel (channel 1) is selected for synchronising to frequency correction burst and synchron burst.

Preamble: ALR009

	RR/DL	ALR	PL
(1)	MPH_BSIC_REQ		
	=====>		
(2)		MPHC_STOP_SCELL_BCCH_REQ	
		=====>	
(4)		MPHC_NETWORK_SYNC_REQ	
		=====>	
(5)		MPHC_NETWORK_SYNC_IND	
		<=====	
(6)	MPH_BSIC_CNF		
	<=====		

```

(7) | | MPHC_NEW_SCELL_REQ |
    | | *=====>*
(8) | | MPHC_NEW_SCELL_CON |
    | | *<=====*
(9) | | MPHC_SCELL_NBCCH_REQ |
    | | *=====>*
(10) | | MPHC_DATA_IND |
    | | *<=====*
(11) | MPH_UNITDATA_IND |
    | *<=====*
    |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_1_STD_900
(2) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPHC_NETWORK_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity search_mode	ARFCN_1 NOT_USED NOT_USED TV_INVALID_TIMING_INFO SM_WIDE_MODE
(4) MPHC_NETWORK_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_1 SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(5) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_1_STD_900 BSIC_0 CS_NO_ERROR
(6) MPHC_NEW_SCELL_REQ	radio_freq fn_offset time_alignment tsc	ARFCN_1 FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(7) MPHC_NEW_SCELL_CON	param	NOT_USED
(8) MPHC_SCELL_NBCCH_REQ	schedule_array_size schedule_array	SCHED_SIZE_1 NOT_USED
(9) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_1 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_1 TC_0 NOT_USED FN_OFFSET_0

(10) MPH_UNITDATA_IND

arfcn	ARFCN_1
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_1
ti	TI_0
cell_chan_desc	CELL_CHAN_DESC_1
rach_ctrl	RACH_CTRL_1
}	

History:	23.09.99	MPA	Initial
	17.05.02	MSB	adapt MPH_BSIC_REQ/CNF to multiband

4.2.11 ALR011: RR rejects BCCH carrier, no further channel available

Description: RR rejects the BCCH carrier. No further channel is available.

Preamble: ALR010

	RR/DL		ALR		PL
(1)					
		MPH_BSIC_REQ			
		*=====			
		>*			

Parametrization

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

(1) MPH_BSIC_REQ

arfcn	NOT_PRESENT_16BIT
-------	-------------------

History:	23.09.99	MPA	Initial
	17.05.02	MSB	adapt MPH_BSIC_REQ/CNF to multiband

4.2.12 ALR012: RR select second channel

Description: RR selects the channel 14 after reading the BCCH carrier.

Variant A: with neighbourcell list

Variant B: with empty neighbour cell list

Variant C: like A, but non-combined CCCH

Preamble: ALR006

Variants: <A> .. <C>

	RR/DL		ALR		PL
(1)					
		MPH_CLASSMARK_REQ			
		*=====			
		>*			
(2)		MPH_IDLE_REQ			
		*=====			
		>*			
(3)				MPHC_STOP_SCELL_BCCH_REQ	
				*=====	
				>*	
(4)				MPHC_STOP_SCELL_BCCH_CON	
				*<=====	
				<*	
(5)				MPHC_START_CCCH_REQ	
				*=====	
				>*	
(6)				MPHC_SCELL_NBCCH_REQ	

```

(7)  |                               | *=====>*
      | MPH_IDENTITY_REQ           | |
      | *=====>*                 |
(8)  | MPH_CBCH_REQ               | |
      | *=====>*                 |
(9)  | MPH_NEIGHBOURCELL_REQ      | |
      | *=====>*                 |
(10) |                               | | MPH_RXLEV_PERIODIC_REQ
      |                               | *=====>*
      |                               |

```

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_GSM_900
(2) MPH_IDLE_REQ	mod	MODE_CELL_SELECTION
	arfcn	ARFCN_14
	ext_bcch	NOT_USED
<A>	comb_ccch	COMB_CCCH_COMB
	comb_ccch	COMB_CCCH_COMB
<C>	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLK_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED
(3) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPHC_STOP_SCELL_BCCH_CON	param	NOT_USED
(5) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_8
	bs_ag_blk_res	BS_AG_BLK_RES_3
<A>	bcch_combined	COMB_CCCH_COMB
	bcch_combined	COMB_CCCH_COMB
<C>	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
<A>	page_block_index	PBI_0
	page_block_index	PBI_0
<C>	page_block_index	PBI_2
	page_mode	PGM_REORG
(6) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(7) MPH_IDENTITY_REQ	mid	MS_ID_IMSI_TMSI

(8) MPH_CBCH_REQ

cbch NO_CBCH

(9) MPH_NEIGHBOURCELL_REQ

<A>	multi_band	MULTI_BAND_0
	arfcn	CHLIST_23_1_124_FFFF
	arfcn	EMPTY_NCELL_LIST
<C>	arfcn	CHLIST_23_1_124_FFFF
	sync_only	NOT_USED

(10) MPHC_RXLEV_PERIODIC_REQ

<A>	chan_list	CHLIST_14_23_1_124
	chan_list	CHLIST_14
<C>	chan_list	CHLIST_14_23_1_124
<A>	num_of_chans	CHANNELS_4
	num_of_chans	CHANNELS_1
<C>	num_of_chans	CHANNELS_4
	ba_id	BA_ID_1
	next_radio_freq_measured	CHAN_LIST_IDX_0

History:	23.09.99	MPA	Initial
	12.07.00	DG	MPH_CLASSMARK_REQ:
			class changed into classmark
			(Forum G23M / No 0057)
	19.07.01	MSB	MPHC_SCELL_NBCCH_REQ after
			MPHC_START_CCCH_REQ in-
cluded.			MPHC_STOP_SCELL_BCCH_CON
included.			
	07.02.02	LG	changed value for ba_id
	26.09.02	DL	E-OTD changes (MPH_IDLE_REQ)
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after
			MPHC_START_CCCH_REQ included

4.2.13 ALR013: RR select first channel

Description: RR selects the channel 23 after reading the BCCH carrier.

Preamble: ALR007

	RR/DL	ALR	PL
(1)	MPH_CLASSMARK_REQ		
	=====>		
(2)	MPH_IDLE_REQ		
	=====>		
(3)		MPHC_STOP_SCELL_BCCH_REQ	
		=====>	
(5)		MPHC_START_CCCH_REQ	
		=====>	
(6)		MPHC_SCELL_NBCCH_REQ	
		=====>	
(7)	MPH_IDENTITY_REQ		
	=====>		
(8)	MPH_CBCH_REQ		
	=====>		
(9)	MPH_NEIGHBOURCELL_REQ		
	=====>		
(10)		MPHC_RXLEV_PERIODIC_REQ	

| *=====>*

Parametrization

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_GSM_900
(2) MPH_IDLE_REQ	mod	MODE_CELL_SELECTION
	arfcn	ARFCN_23
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLK_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED
(3) MPH_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPH_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_8
	bs_ag_blk_res	BS_AG_BLK_RES_3
	bcch_combined	COMB_CCCH_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_0
	page_mode	PGM_REORG
(5) MPH_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	FULL_READ
(6) MPH_IDENTITY_REQ	mid	MS_ID_IMSI_TMSI
(7) MPH_CBCH_REQ	cbch	NO_CBCH
(8) MPH_NEIGHBOURCELL_REQ	multi_band	MULTI_BAND_0
	arfcn	CHLIST_1_14_124_FFFF
	sync_only	NOT_USED
(9) MPH_RXLEV_PERIODIC_REQ	chan_list	CHLIST_23_1_14_124
	num_of_chans	CHANNELS_4
	ba_id	BA_ID_1
	next_radio_freq_measured	CHAN_LIST_IDX_0

History: 23.09.99 MPA Initial
12.07.00 DG MPH_CLASSMARK_REQ:
class changed into classmark
(Forum G23M/ No 0057)

21.06.01	MSB	sequence and parameter changed for MPHC_SCELL_NBCCH_REQ: after pagemode set to REORG, full read is necessary
19.07.01	MSB	CHLIST_23_1_14_124 changed
07.02.02	LG	changed value for ba_id
26.09.02	DL	E-OTD changes (MPH_IDLE_REQ)
07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.2.14 ALR015: Re-Initiation of Cell Selection during measurements

Description: RR has started a cell selection. During power measurements a new activation of cell selection is started by RR. The power measurement is restarted.

Preamble: ALR000

	RR/DL	ALR	PL
(1)	MPH_POWER_REQ		
	=====>		
(2)		MPHC_INIT_L1_REQ	
		=====>	
(3)		MPHC_INIT_L1_CON	
		<=====	
(4)		MPHC_RXLEV_REQ	
		=====>	
(5)		MPHC_RXLEV_IND	
		<=====	
(6)		MPHC_RXLEV_REQ	
		=====>	
(7)	MPH_POWER_REQ		
	=====>		
(8)		MPHC_INIT_L1_REQ	
		=====>	
(9)		MPHC_INIT_L1_CON	
		<=====	
(10)		MPHC_RXLEV_REQ	
		=====>	
(11)		MPHC_RXLEV_IND	
		<=====	
(12)		MPHC_RXLEV_REQ	
		=====>	
(13)		MPHC_RXLEV_IND	
		<=====	
(14)		MPHC_RXLEV_REQ	
		=====>	
(15)		MPHC_RXLEV_IND	
		<=====	
(16)		MPHC_RXLEV_REQ	
		=====>	
(17)		MPHC_RXLEV_IND	
		<=====	
(18)		MPHC_RXLEV_REQ	
		=====>	
(19)		MPHC_RXLEV_IND	
		<=====	
(20)	MPH_POWER_CNF		
	<=====		

Parametrization

Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_GSM_900
(2) MPHC_INIT_L1_REQ	radio_band_config	STD_900
(3) MPHC_INIT_L1_CON	param	NOT_USED
(4) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(5) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(6) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(7) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_GSM_900
(8) MPHC_INIT_L1_REQ	radio_band_config	STD_900
(9) MPHC_INIT_L1_CON	param	NOT_USED
(10) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(11) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(12) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(13) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(14) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(15) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(16) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(17) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(18) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(19) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(20) MPH_POWER_CNF	num_of_chan arfcn	CHANNELS_4
ARFCN_23_14_124_1_WITH_STD	rx_lev	RXLEV_23_14_124_1

History: 23.09.99 MPA Initial
17.05.02 MSB add MPHC_INIT_L1_REQ/CON

4.2.15 ALR017: Re-Initiation of Cell Selection during BCCH reading

Description: During BCCH reading RR restarts a cell selection. This leads to a new full power measurement cycle.

Preamble: ALR007

RR/DL	ALR	PL
(1) MPH_SYNC_REQ		
=====>		
(2)	MPHC_STOP_SCELL_BCCH_REQ	
	=====>	
(3) MPH_POWER_REQ		
=====>		
(4)	MPHC_INIT_L1_REQ	
	=====>	
(5)	MPHC_INIT_L1_CON	
	<=====	
(6)	MPHC_RXLEV_REQ	
	=====>	
(7)	MPHC_RXLEV_IND	
	<=====	
(8)	MPHC_RXLEV_REQ	
	=====>	
(9)	MPHC_RXLEV_IND	
	<=====	
(10)	MPHC_RXLEV_REQ	
	=====>	
(11)	MPHC_RXLEV_IND	
	<=====	
(12)	MPHC_RXLEV_REQ	
	=====>	
(13)	MPHC_RXLEV_IND	
	<=====	
(14)	MPHC_RXLEV_REQ	
	=====>	
(15)	MPHC_RXLEV_IND	
	<=====	
(16) MPH_POWER_CNF		
<=====		

Parametrization

Primitive	Parameter	Value
(1) MPH_SYNC_REQ	cs	CS_STOP_BCCH_READING
(2) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_GSM_900
(4) MPHC_INIT_L1_REQ	radio_band_config	STD_900

(5) MPHC_INIT_L1_CON	param	NOT_USED
(6) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(7) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(9) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(10) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(11) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(12) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(13) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(14) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(15) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(16) MPH_POWER_CNF	num_of_chan arfcn	CHANNELS_4
ARFCN_23_14_124_1_WITH_STD	rx_lev	RXLEV_23_14_124_1

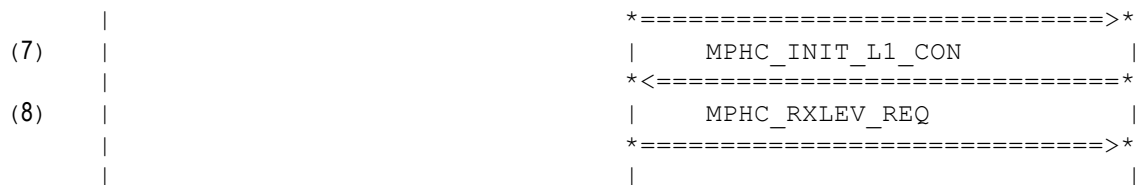
History: 23.09.99 MPA Initial
17.05.02 MSB add MPHC_INIT_L1_REQ/CON,
change arfcn's

4.2.16 ALR044: Stop Idle Mode by Normal Cell Selection

Description: The idle mode is stopped if a normal cell selection is initiated.

Preamble: ALR013

	RR/DL	ALR	PL
(1)	MPH_POWER_REQ		
	=====>		
(2)		MPHC_STOP_SCELL_BCCH_REQ	
		=====>	
(3)		MPHC_STOP_CCCH_REQ	
		=====>	
(4)		MPHC_STOP_RXLEV_PERIODIC_REQ	
		=====>	
(5)		MPHC_STOP_SCELL_BCCH_REQ	
		=====>	
(6)		MPHC_INIT_L1_REQ	



Parametrization

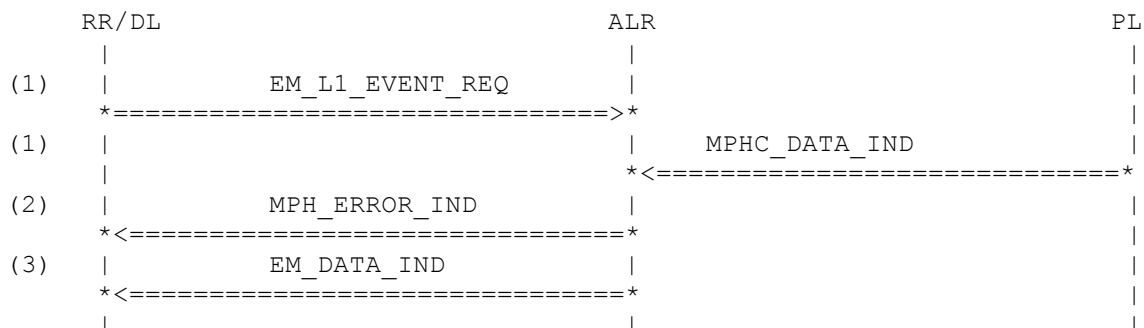
Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_GSM_900
(2) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPHC_STOP_CCCH_REQ	param	NOT_USED
(4) MPHC_STOP_RXLEV_PERIODIC_REQ	param	NOT_USED
(5) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(6) MPHC_INIT_L1_REQ	radio_band_config	STD_900
(7) MPHC_INIT_L1_CON	param	NOT_USED
(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED

History: 23.09.99 MPA Initial
17.05.02 MSB add parameter 'freq_band'
29.10.02 DL
MPHC_STOP_NCELL_SYNC/BCCH_REQ removed

4.2.17 ALR018: ALR008 - Engineering mode

Description: A failed BCCH data block is read.

Preamble: ALR007



Parametrization

Primitive	Parameter	Value
(1) EM_L1_EVENT_REQ	bitmask_l1_h bitmask_l1_l	Bitm_H Bitm_L

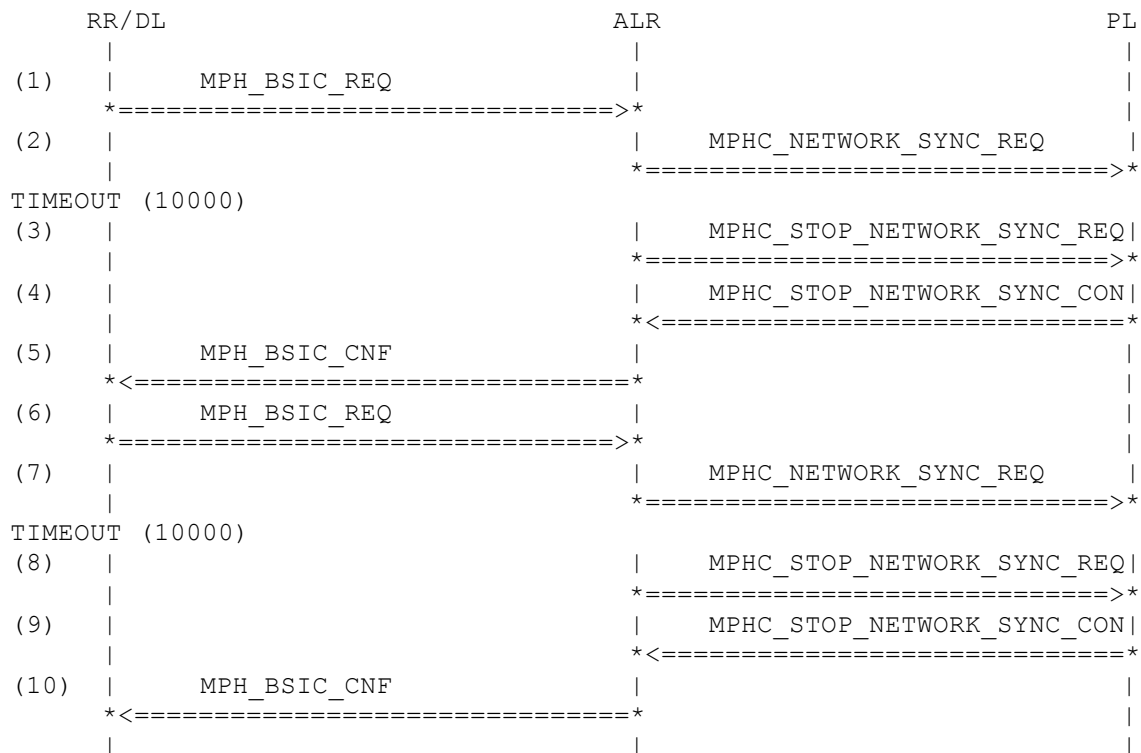
(2) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	INVALID_BLOCK
	l2_frame	L2_NO_CONTENT
	tc	TC_3
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(3) MPH_ERROR_IND	cs	CS_BCCH_READ_ERROR
	arfcn	ARFCN_23
(4) EM_DATA_IND	entity	ENTITY

History: 23-Oct-01 OT Initial

4.2.18 ALR019: Search for BCCH carrier takes too long

Description: A request is made to sync to a network. There is a timeout when no response is received by ALR.
After informing RR that there is no BCCH, RR instructs ALR to check the next BCCH.
This again, fails.
This ensures the timer is correctly set up for subsequent BCCH search's.

Preamble: ALR001



Parametrization

Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_23_STD_900

(2) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_23
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(3) MPHC_STOP_NETWORK_SYNC_REQ	param	NOT_USED
(4) MPHC_STOP_NETWORK_SYNC_CON	param	NOT_USED
(5) MPH_BSIC_CNF	arfcn	NOT_USED
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(6) MPH_BSIC_REQ	arfcn	ARFCN_24_STD_900
(7) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_24
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(8) MPHC_STOP_NETWORK_SYNC_REQ	param	NOT_USED
(9) MPHC_STOP_NETWORK_SYNC_CON	param	NOT_USED
(10) MPH_BSIC_CNF	arfcn	NOT_USED
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL

History: 14.02.03 ZMM Initial
19.03.03 ZMM Sent MPH_BSIC_CNF back to RR
after timeout

4.3 PLMN Selection(GSM 900)

4.3.1 ALR084: Init Ncell data, 4 channels available

Description: RR starts ncell measurements for cells 23, 14, 124, 1.

Preamble: ALR013

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
	<=====	
(2)	MPHC_NCELL_SYNC_REQ	
	=====>	
(3)	MPHC_NCELL_SYNC_REQ	
	=====>	
(4)	MPHC_NCELL_SYNC_REQ	


```

(5) | | | *=====>*
    | | | | MPHC_RXLEV_PERIODIC_IND |
    | | | *<=====*
(6) | MPH_MEASUREMENT_IND | |
    | *<=====*
(7) | | | | MPHC_RXLEV_PERIODIC_IND |
    | | | *<=====*
(8) | | | | MPHC_NCELL_SYNC_IND |
    | | | *<=====*
(9) | | | | MPHC_NCELL_BCCH_REQ |
    | | | *=====>*
(10) | | | | MPHC_NCELL_BCCH_IND |
    | | | *<=====*
(11) | | | | MPHC_STOP_NCELL_BCCH_REQ |
    | | | *=====>*
(12) | | | | MPHC_NCELL_SYNC_IND |
    | | | *<=====*
(13) | | | | MPHC_NCELL_BCCH_REQ |
    | | | *=====>*
(14) | | | | MPHC_NCELL_SYNC_IND |
    | | | *<=====*
(15) | | | | MPHC_NCELL_BCCH_REQ |
    | | | *=====>*
(16) | | | | MPHC_NCELL_BCCH_IND |
    | | | *<=====*
(17) | | | | MPHC_STOP_NCELL_BCCH_REQ |
    | | | *=====>*
(18) | | | | MPHC_NCELL_BCCH_IND |
    | | | *<=====*
(19) | | | | MPHC_STOP_NCELL_BCCH_REQ |
    | | | *=====>*
(20) | | | | MPHC_RXLEV_PERIODIC_IND |
    | | | *<=====*
(21) | MPH_MEASUREMENT_IND | |
    | *<=====*
(22) | MPH_UNITDATA_IND | |
    | *<=====*
(23) | MPH_UNITDATA_IND | |
    | *<=====*
(24) | MPH_UNITDATA_IND | |
    | *<=====*
    | |

```

Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(3) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	NOT_USED

	time_alignment timing_validity	NOT_USED TV_INVALID_TIMING_INFO
(4) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_1 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(5) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(6) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_816 NCELLS_NO_CONTENT NOT_USED
(7) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(8) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic neigh_id attempt pm toa angle snr eotd_data_valid mode d_eotd_first d_eotd_max d_eotd_nrl a_eotd_crosscor time_tag fn_sb_neigh fn_in_sb toa_correction delta_fn delta_qbit	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED EOTD_NOT_PRES NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED
(9) MPHC_NCELL_BCCH_REQ	radio_freq	ARFCN_14

fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(10) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_14
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(11) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_14

(12) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_124
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_124
time_alignment	TIME_ALIGNMT_124
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrj	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(13) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_124
fn_offset	FN_OFFSET_124
time_alignment	TIME_ALIGNMT_124
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(14) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_1
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_1
time_alignment	TIME_ALIGNMT_1
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED

	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(15) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_1
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(16) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_124
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_124
(17) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_124
(18) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_1
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_1
(19) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_1
(20) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(21) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED

	valid	VALID_REPORT
	fn_offset	FN_OFFSET_408
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED
(22) MPH_UNITDATA_IND		
	arfcn	ARFCN_1
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(23) MPH_UNITDATA_IND		
	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(24) MPH_UNITDATA_IND		
	arfcn	ARFCN_124
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	

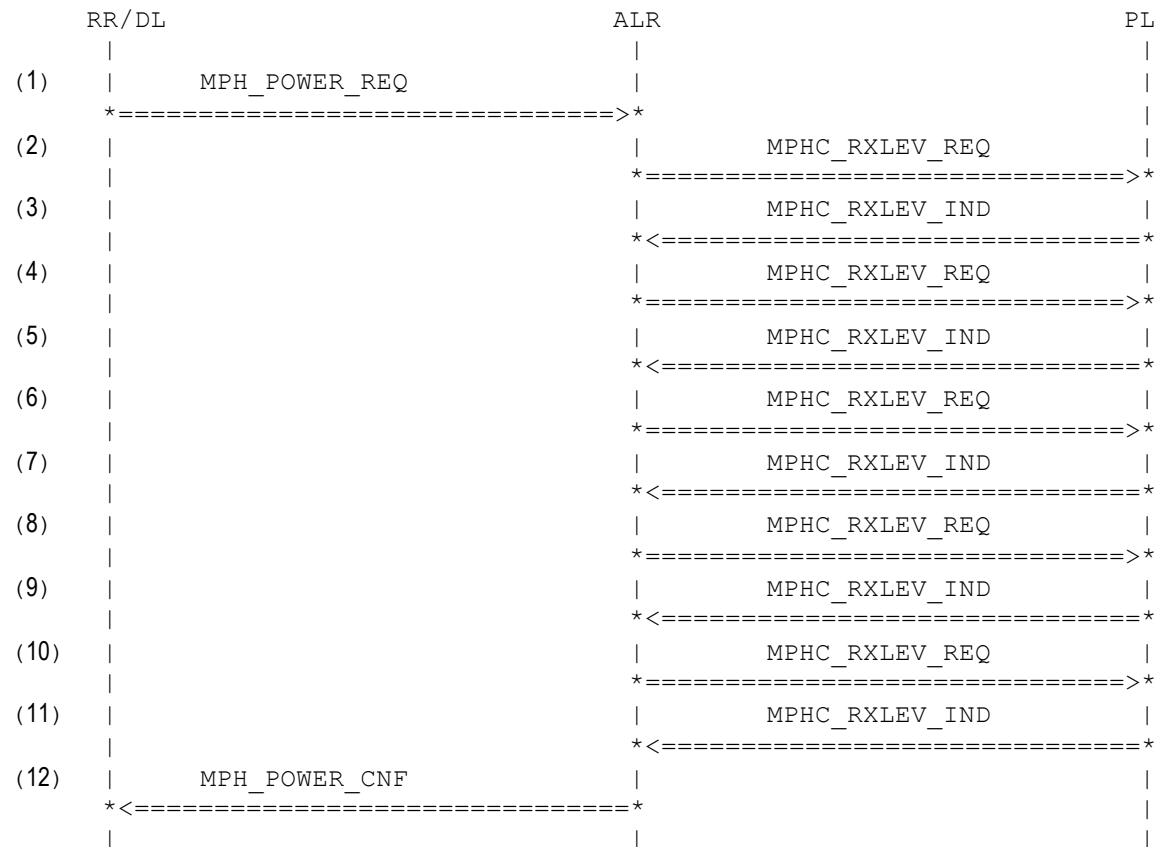
History: 24.09.99 MPA Initial

07.02.02 LG changed value for ba_id
26.09.02 DL E-OTD changes
(MPHC_NCELL_SYNC_IND)

4.3.2 ALR085: Initiation by RR, 4 channels available

Description: RR starts a full list power measurement with power measurements. Four channels in the order 23, 14, 124, 1 have acceptable fieldstrength values.

Preamble: ALR084



Parametrization

Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	NO_PCH_INTERRUPT BAND_GSM_900
(2) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(3) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(4) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(5) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(6) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(7) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1

(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(9) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(10) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(11) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_1
(12) MPH_POWER_CNF	num_of_chan arfcn	CHANNELS_4
ARFCN_23_14_124_1_WITH_STD	rx_lev	RXLEV_23_14_124_1

History: 24.09.99 MPA Initial
17.05.02 MSB change arfcn's
29.10.02 DL
MPHC_STOP_NCELL_SYNC/BCCH_REQ removed

4.3.3 ALR086: Initiation by RR, no channels available

Description: RR starts a full list power measurement. No suitable channel is available.

Preamble: ALR013

RR/DL	ALR	PL
(1) MPH_POWER_REQ		
=====>		
(2)	MPHC_RXLEV_REQ	
	=====>	
(3)	MPHC_RXLEV_IND	
	<=====	
(4)	MPHC_RXLEV_REQ	
	=====>	
(5)	MPHC_RXLEV_IND	
	<=====	
(6)	MPHC_RXLEV_REQ	
	=====>	
(7)	MPHC_RXLEV_IND	
	<=====	
(8)	MPHC_RXLEV_REQ	
	=====>	
(9)	MPHC_RXLEV_IND	
	<=====	
(10)	MPHC_RXLEV_REQ	
	=====>	
(11)	MPHC_RXLEV_IND	
	<=====	
(12) MPH_POWER_CNF		
<=====		

Parametrization

Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	NO_PCH_INTERRUPT BAND_GSM_900

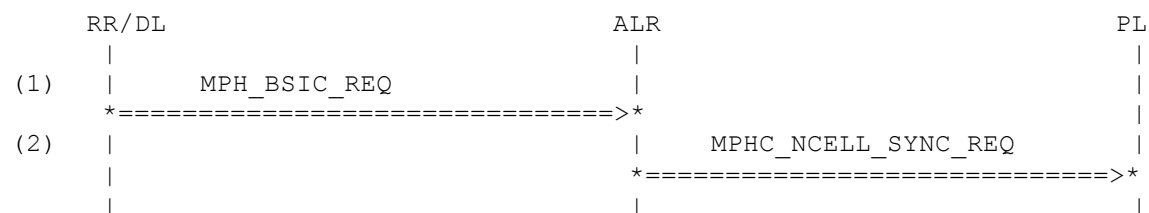
(2) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(3) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(4) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(5) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(6) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(7) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(9) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(10) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(11) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(12) MPH_POWER_CNF	num_of_chan arfcn rx_lev	CHANNELS_0 NOT_USED NOT_USED

History: 22.09.99 MPA Initial
29.10.02 DL
MPHC_STOP_NCELL_SYNC/BCCH_REQ removed

4.3.4 ALR088: Find BCCH carrier, second channel

Description: The non-serving cell carrier with the highest fieldstrength (channel 14) is selected for synchronizing to frequency correction burst and synchron burst.

Preamble: ALR085



Parametrization

Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_14
(2) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset	ARFCN_14 NOT_USED

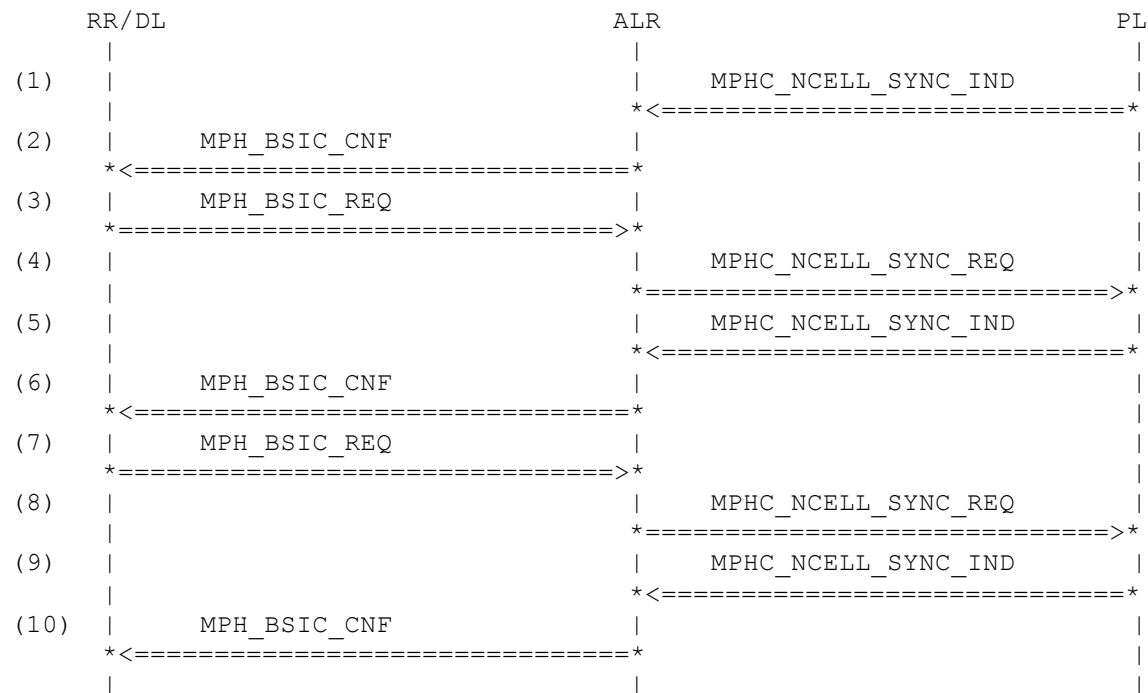
time_alignment NOT_USED
timing_validity TV_INVALID_TIMING_INFO

History: 24.09.99 MPA Initial

4.3.5 ALR089: Find BCCH carrier, all channels failed, then error indication

Description: All synchronization attempts to the available channels fail. RR is informed by an error indication with the cause no BCCH available.

Preamble: ALR088



Parameterization

Primitive	Parameter	Value
(1) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_14
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRESENCE
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED

	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(2) MPH_BSIC_CNF		
	arfcn	ARFCN_14
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(3) MPH_BSIC_REQ		
	arfcn	ARFCN_124
(4) MPH_C_NCELL_SYNC_REQ		
	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(5) MPH_C_NCELL_SYNC_IND		
	radio_freq	ARFCN_124
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(6) MPH_BSIC_CNF		
	arfcn	ARFCN_124
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(7) MPH_BSIC_REQ		
	arfcn	ARFCN_1
(8) MPH_C_NCELL_SYNC_REQ		
	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(9) MPH_C_NCELL_SYNC_IND		
	radio_freq	ARFCN_1
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0

time_alignment	TIME_ALIGNMT_0
bsic	BSIC_0
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrj	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(10) MPH_BSIC_CNF

arfcn	ARFCN_1
bsic	NOT_USED
cs	CS_NO_BCCH_AVAIL

History: 24.09.99 MPA Initial
26.09.02 DL E-OTD changes
(MPHC_NCELL_SYNC_IND)

4.3.6 ALR090: Find BCCH carrier, second channel

Description: The next best channel (channel 14) is selected for synchronizing to frequency correction burst and synchron burst.

Preamble: ALR088

RR/DL	ALR	PL
(1)	MPHC_NCELL_SYNC_IND	
(2)	*<=====*	
(3)	MPHC_NCELL_BCCH_REQ	
	=====>	

Parametrization

Primitive	Parameter	Value
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(1) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_14
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED

eotd_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrij	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(2) MPH_BSIC_CNF

arfcn	ARFCN_14
bsic	BSIC_1
cs	CS_NO_ERROR

(3) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_14
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_2_3_4
gprs_prio	NOT_USED

History: 24.09.99
26.09.02
(MPHC_NCELL_SYNC_IND)

MPA Initial
DL E-OTD changes

4.3.7 ALR091: Read BCCH data

Description: The BCCH data blocks are read for the channel 14.

Preamble: ALR090

	RR/DL	ALR	PL
(1)			
		MPHC_NCELL_BCCH_IND	
		<=====	
(2)			
	MPH_UNITDATA_IND		
	<=====		
(3)			
		MPHC_STOP_NCELL_BCCH_REQ	
		=====>	
(5)			
		MPHC_NCELL_BCCH_REQ	
		=====>	
(6)			
		MPHC_NCELL_BCCH_IND	
		<=====	
(7)			
	MPH_ERROR_IND		
	<=====		
(8)			
		MPHC_STOP_NCELL_BCCH_REQ	
		=====>	
(10)			
		MPHC_NCELL_BCCH_REQ	
		=====>	
(11)			
		MPHC_NCELL_BCCH_IND	
		<=====	
(12)			
	MPH_UNITDATA_IND		
	<=====		
(13)			
		MPHC_STOP_NCELL_BCCH_REQ	

		=====>
Parameterization		
Primitive	Parameter	Value
(1) MPHC_NCELL_BCCH_IND	radio_freq l2_channel error_flag l2_frame tc fn	ARFCN_14 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_2 TC_1 FN_OFFSET_14
(11) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti neigh_cell_desc ncc_permit rach_ctrl }	ARFCN_14 NOT_USED RR DOWNLINK D_SYS_INFO_2 TI_0 NEIGH_CELL_DESC_1 NCC_PERMIT_1 RACH_CTRL_1
(2) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	STOP_SIZE_1 STOP_ARRAY_14
(3) MPHC_NCELL_BCCH_REQ	radio_freq fn_offset time_alignment tsc bcch_blocks_required gprs_prio	ARFCN_14 FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1 NCELL_BCCH_SI_3_4 NOT_USED
(4) MPHC_NCELL_BCCH_IND	radio_freq l2_channel error_flag l2_frame tc fn	ARFCN_14 L2_CHANNEL_NBCCH INVALID_BLOCK L2_SYS_INFO_3 TC_2 FN_OFFSET_14
(5) MPH_ERROR_IND	cs arfcn	CS_BCCH_READ_ERROR ARFCN_14
(6) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	STOP_SIZE_1 STOP_ARRAY_14
(7) MPHC_NCELL_BCCH_REQ	radio_freq fn_offset time_alignment tsc bcch_blocks_required gprs_prio	ARFCN_14 FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1 NCELL_BCCH_SI_3_4 NOT_USED

(8) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_14
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(12) MPH_UNITDATA_IND

arfcn	ARFCN_14
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_3
ti	TI_0
cell_ident	CELL_IDENT_1
loc_area_ident	LOC_AREA_IDENT_1
ctrl_chan_desc	CTRL_CHAN_DESC_1
cell_opt_bcch	CELL_OPT_BCCH_1
cell_select	CELL_SELECT_1
rach_ctrl	RACH_CTRL_1
}	

(9) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	STOP_SIZE_1
radio_freq_array	STOP_ARRAY_14

History: 24.09.99 MPA Initial

4.3.8 ALR093: RR rejects BCCH carrier, try third channel

Description: RR rejects the BCCH carrier. The next best channel (channel 124) is selected for synchronizing to frequency correction burst and synchron burst.

Preamble: ALR091

	RR/DL	ALR	PL
(1)	MPH_BSIC_REQ		
	=====>		
(2)		MPH_NCELL_SYNC_REQ	
		=====>	
(3)		MPH_NCELL_SYNC_IND	
		<=====	
(4)	MPH_BSIC_CNF		
	<=====		
(5)		MPH_NCELL_BCCH_REQ	
		=====>	
(6)		MPH_NCELL_BCCH_IND	
		<=====	
(7)	MPH_UNITDATA_IND		
	<=====		
(8)		MPH_STOP_NCELL_BCCH_REQ	
		=====>	
(9)		MPH_NCELL_BCCH_REQ	
		=====>	

Parametrization

Primitive	Parameter	Value
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(1) MPH_BSIC_REQ	arfcn	ARFCN_124
(2) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(3) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic neigh_id attempt pm toa angle snr eotd_data_valid mode d_eotd_first d_eotd_max d_eotd_nrx a_eotd_crosscor time_tag fn_sb_neigh fn_in_sb toa_correction delta_fn delta_qbit	ARFCN_124 SB_FOUND FN_OFFSET_124 TIME_ALIGNMT_124 BSIC_1 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED EOTD_NOT_PRES NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED
(4) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_124 BSIC_1 CS_NO_ERROR
(5) MPHC_NCELL_BCCH_REQ	radio_freq fn_offset time_alignment tsc bcch_blocks_required gprs_prio	ARFCN_124 FN_OFFSET_124 TIME_ALIGNMT_124 BSIC_1 NCELL_BCCH_SI_2_3_4 NOT_USED
(6) MPHC_NCELL_BCCH_IND	radio_freq l2_channel error_flag l2_frame tc fn	ARFCN_124 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_3 TC_0 FN_OFFSET_124
(13) MPH_UNITDATA_IND	arfcn fn sdu {	ARFCN_124 NOT_USED

component	RR
direction	DOWNLINK
pd	D_SYS_INFO_3
ti	TI_0
cell_ident	CELL_IDENT_1
loc_area_ident	LOC_AREA_IDENT_1
ctrl_chan_desc	CTRL_CHAN_DESC_1
cell_opt_bcch	CELL_OPT_BCCH_1
cell_select	CELL_SELECT_1
rach_ctrl	RACH_CTRL_1
}	

(7) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	STOP_SIZE_1
radio_freq_array	STOP_ARRAY_124

(8) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_124
fn_offset	FN_OFFSET_124
time_alignment	TIME_ALIGNMT_124
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_2
gprs_prio	NOT_USED

History: 24.09.99
26.09.02
(MPHC_NCELL_SYNC_IND)

MPA Initial
DL E-OTD changes

4.3.9 ALR094: RR rejects BCCH carrier, try fourth channel

Description: RR rejects the BCCH carrier. The next best channel (channel 1) is selected for synchronising to frequency correction burst and synchron burst.

Preamble: ALR093

RR/DL	ALR	PL
(1)		
MPH_BSIC_REQ		
=====>		
(2)	MPH_STOP_NCELL_BCCH_REQ	
	=====>	
(4)	MPH_NCELL_SYNC_REQ	
	=====>	
(5)	MPH_NCELL_SYNC_IND	
	<=====	
(6)		
MPH_BSIC_CNF		
<=====		
(7)	MPH_NCELL_BCCH_REQ	
	=====>	
(8)	MPH_NCELL_BCCH_IND	
	<=====	
(9)		
MPH_UNITDATA_IND		
<=====		
(10)	MPH_STOP_NCELL_BCCH_REQ	
	=====>	
(11)	MPH_NCELL_BCCH_REQ	
	=====>	

Parametrization

Primitive	Parameter	Value
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(1) MPH_BSIC_REQ	arfcn	ARFCN_1
(2) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_124
(3) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(4) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_1
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrij	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(5) MPH_BSIC_CNF	arfcn	ARFCN_1
	bsic	BSIC_1
	cs	CS_NO_ERROR
(6) MPHC_NCELL_BCCH_REQ	radio_freq	ARFCN_1
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_2_3_4
	gprs_prio	NOT_USED
(7) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_1
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_2
	tc	TC_0
	fn	FN_OFFSET_1

(14) MPH_UNITDATA_IND

arfcn	ARFCN_1
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_2
ti	TI_0
neigh_cell_desc	NEIGH_CELL_DESC_1
ncc_permit	NCC_PERMIT_1
rach_ctrl	RACH_CTRL_1
}	

(8) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	STOP_SIZE_1
radio_freq_array	STOP_ARRAY_1

(9) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_1
fn_offset	FN_OFFSET_1
time_alignment	TIME_ALIGNMT_1
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

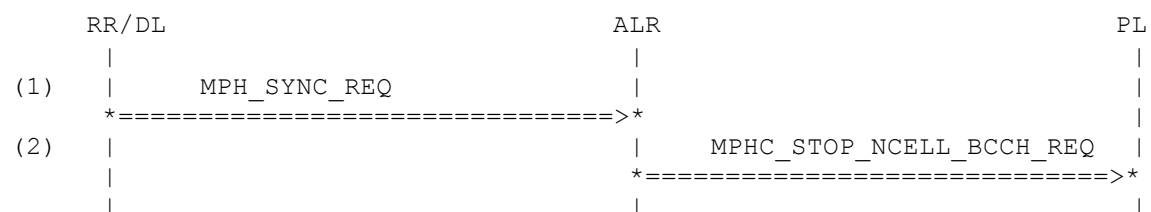
History:	24.09.99	MPA	Initial
	26.09.02	DL	E-OTD changes

(MPHC_NCELL_SYNC_IND)

4.3.10 ALR095: RR rejects BCCH carrier, no further channel available

Description: RR rejects the BCCH carrier. No further channel is available.

Preamble: ALR094



Parametrization

Primitive	Parameter	Value
(17) MPH_SYNC_REQ	cs	CS_STOP_PLMN_SEARCH
(18) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_1

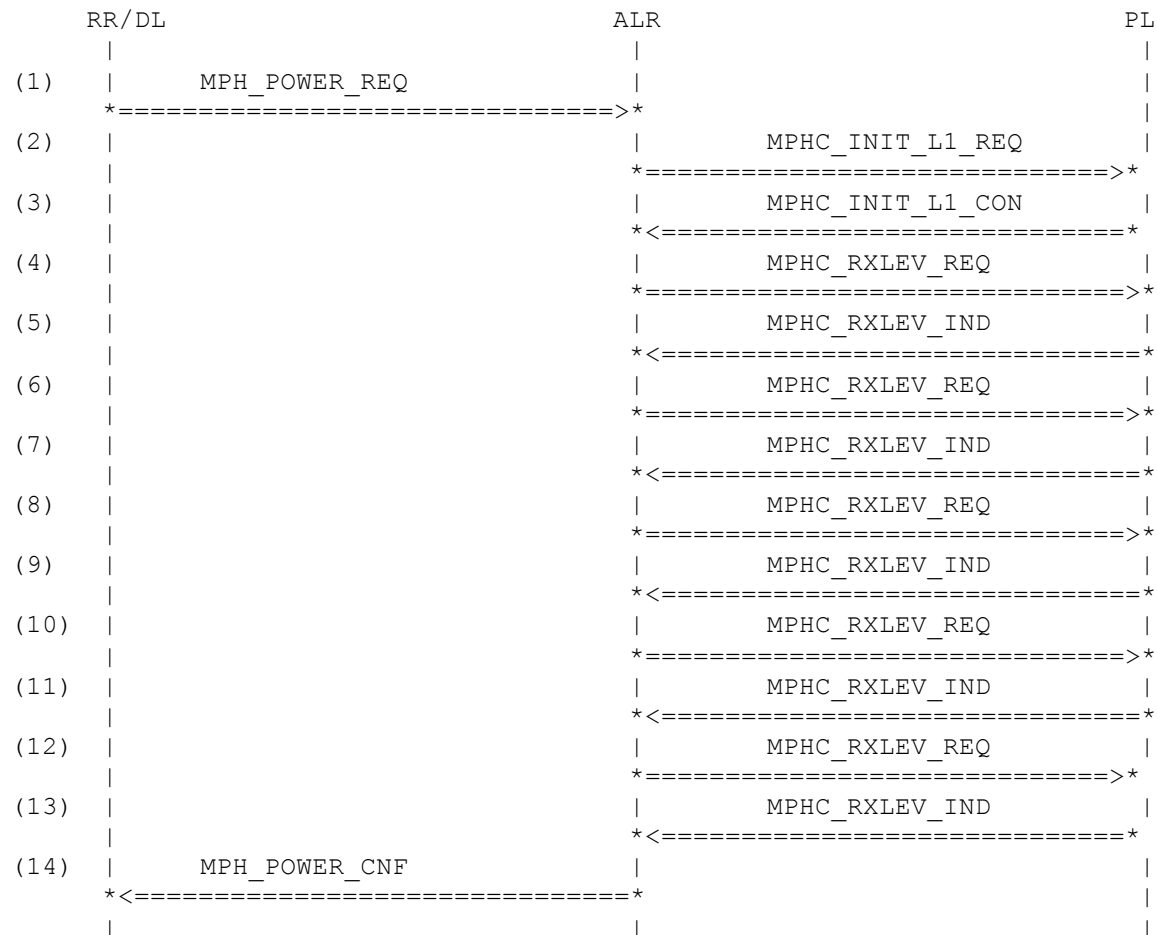
History:	24.09.99	MPA	Initial
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4.4 Cell Selection(DCS 1800)

4.4.1 ALR201: Initiation by RR, 4 channels available

Description: RR starts a cell selection. Four channels in the order 637, 580, 885, 512 have acceptable fieldstrength values.

Preamble: ALR200



Parametrization

Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_DCS_1800
(2) MPHC_INIT_L1_REQ	radio_band_config	STD_1800
(3) MPHC_INIT_L1_CON	param	NOT_USED
(4) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(5) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800
(6) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(7) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800

(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(9) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800
(10) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(11) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800
(12) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(13) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800
(14) MPH_POWER_CNF	num_of_chan arfcn	CHANNELS_4
ARFCN_637_580_885_512_WITH_STD	rx_lev	RXLEV_637_580_885_512

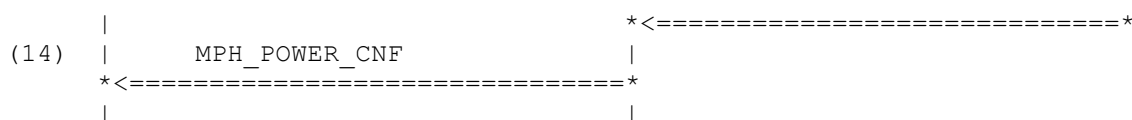
History: 22.09.99 MPA Initial
17.05.02 MSB add MPHC_INIT_L1_REQ/CON,
change arfcn's

4.4.2 ALR202: Initiation by RR, no channels available

Description: RR starts a cell selection. No channel is available. After thirty attempts a failure is signalled to RR.

Preamble: ALR200

RR/DL	ALR	PL
(1) MPH_POWER_REQ		
=====>		
(2)	MPHC_INIT_L1_REQ	
	=====>	
(3)	MPHC_INIT_L1_CON	
	<=====	
(4)	MPHC_RXLEV_REQ	
	=====>	
(5)	MPHC_RXLEV_IND	
	<=====	
(6)	MPHC_RXLEV_REQ	
	=====>	
(7)	MPHC_RXLEV_IND	
	<=====	
(8)	MPHC_RXLEV_REQ	
	=====>	
(9)	MPHC_RXLEV_IND	
	<=====	
(10)	MPHC_RXLEV_REQ	
	=====>	
(11)	MPHC_RXLEV_IND	
	<=====	
(12)	MPHC_RXLEV_REQ	
	=====>	
(13)	MPHC_RXLEV_IND	



Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_DCS_1800
(2) MPHC_INIT_L1_REQ	radio_band_config	STD_1800
(3) MPHC_INIT_L1_CON	param	NOT_USED
(4) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(5) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(6) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(7) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(9) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(10) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(11) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(12) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(13) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(14) MPH_POWER_CNF	num_of_chan arfcn rx_lev	CHANNELS_0 NOT_USED NOT_USED

History:	22.09.99	MPA	Initial
	17.05.02	MSB	add MPHC INIT L1 REQ/CON

Description: The carrier with the highest fieldstrength (channel 637) is selected for synchronizing to frequency correction burst and synchron burst.

	RR/DL		ALR		PL
(1)		MPH BSIC REQ			



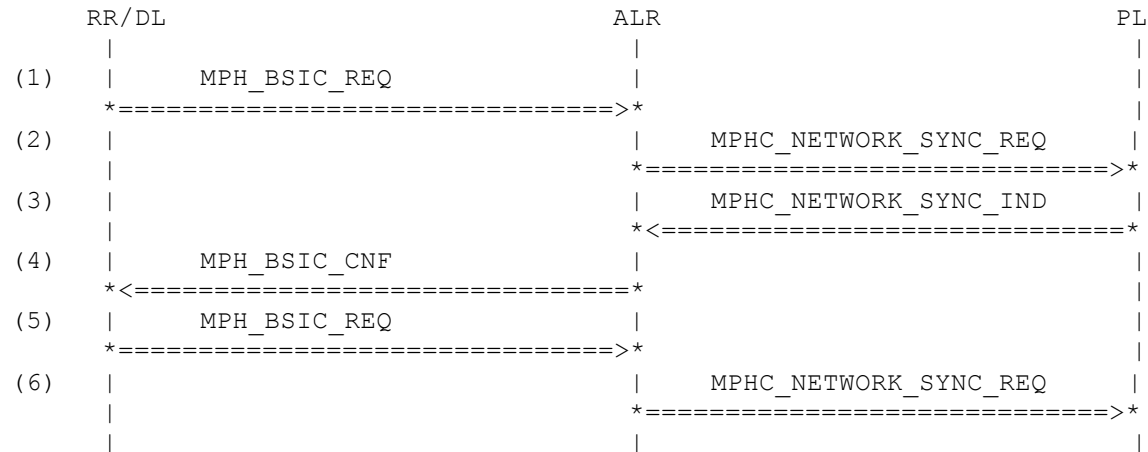
Parametrization

Primitive	Parameter	Value	
(1) MPH_BSIC_REQ	arfcn	ARFCN_637_STD_1800	
(2) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_637	
	fn_offset	NOT_USED	
	time_alignment	NOT_USED	
	timing_validity	TV_INVALID_TIMING_INFO	
	search_mode	SM_WIDE_MODE	
(3) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_637	
	sb_flag	SB_FOUND	
	fn_offset	FN_OFFSET_0	
	time_alignment	TIME_ALIGNMT_0	
	bsic	BSIC_1	
(4) MPH_BSIC_CNF	arfcn	ARFCN_637_STD_1800	
	bsic	BSIC_1	
	cs	CS_NO_ERROR	
(5) MPHC_NEW_SCELL_REQ	radio_freq	ARFCN_637	
	fn_offset	FN_OFFSET_0	
	time_alignment	TIME_ALIGNMT_0	
	tsc	BSIC_1	
(6) MPHC_NEW_SCELL_CON	param	NOT_USED	
(7) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1	
	schedule_array	FULL_READ	
History:	22.09.99	MPA	Initial
	17.05.02	MSB	adapt MPH_BSIC_REQ/CNF to mul-
tiband	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.4.4 ALR204: Find BCCH carrier, first channel failed, then second channel

Description: The carrier with the highest fieldstrength (channel 637) is selected for synchronizing to frequency correction burst and synchron burst. The attempt failed. A second request is started for the next strongest channel (channel 580).

Preamble: ALR201



Parametrization

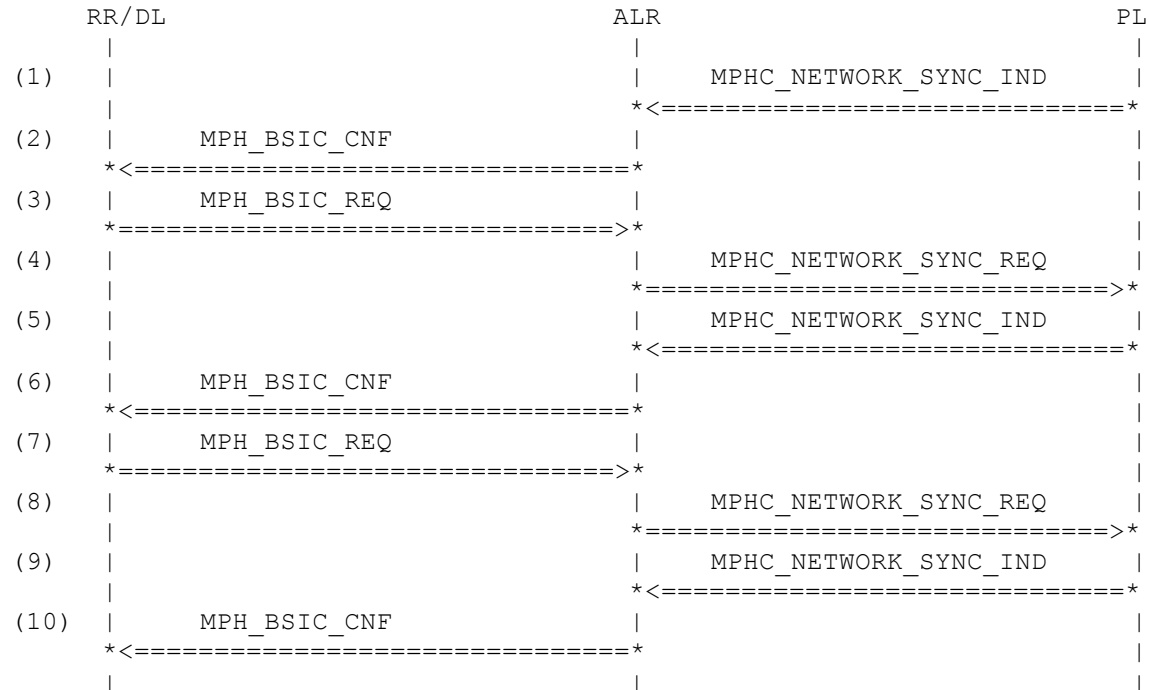
Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_637_STD_1800
(2) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_637
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(3) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_637
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(4) MPH_BSIC_CNF	arfcn	ARFCN_637_STD_1800
	bsic	BSIC_0
	cs	CS_NO_BCCH_AVAIL
(5) MPH_BSIC_REQ	arfcn	ARFCN_580_STD_1800
(6) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_580
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE

History: 22.09.99 MPA Initial
17.05.02 MSB adapt MPH_BSIC_REQ/CNF to mul-
tiband

4.4.5 ALR205: Find BCCH carrier, all channels failed, then error indication

Description: All synchronization attempts to the available channels are failed. RR is informed by an error indication with the cause no BCCH available.

Preamble: ALR204



Parameterization

Primitive	Parameter	Value
(1) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_580
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(2) MPH_BSIC_CNF	arfcn	ARFCN_580_STD_1800
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(3) MPH_BSIC_REQ	arfcn	ARFCN_885_STD_1800
(4) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_885
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(5) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_885
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0

	time_alignment bsic	TIME_ALIGNMT_0 BSIC_0
(6) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_885_STD_1800 NOT_USED CS_NO_BCCH_AVAIL
(7) MPH_BSIC_REQ	arfcn	ARFCN_512_STD_1800
(8) MPHC_NETWORK_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity search_mode	ARFCN_512 NOT_USED NOT_USED TV_INVALID_TIMING_INFO SM_WIDE_MODE
(9) MPHC_NETWORK_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_512 NO_SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(10) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_512_STD_1800 NOT_USED CS_NO_BCCH_AVAIL

History: 22.09.99 MPA Initial
17.05.02 MSB adapt MPH_BSIC_REQ/CNF to mul-
tiband

4.4.6 ALR206: Find BCCH carrier, second channel

Description: The next best channel (channel 14) is selected for synchronizing to frequency correction burst and synchron burst.

Preamble: ALR204

RR/DL	ALR	PL
(1)	MPHC_NETWORK_SYNC_IND	
	<=====	
(2) MPH_BSIC_CNF		
<=====		
(3)	MPHC_NEW_SCELL_REQ	
	=====>	
(4)	MPHC_NEW_SCELL_CON	
	<=====	
(5)	MPHC_SCELL_NBCCH_REQ	
	=====>	

Parametrization

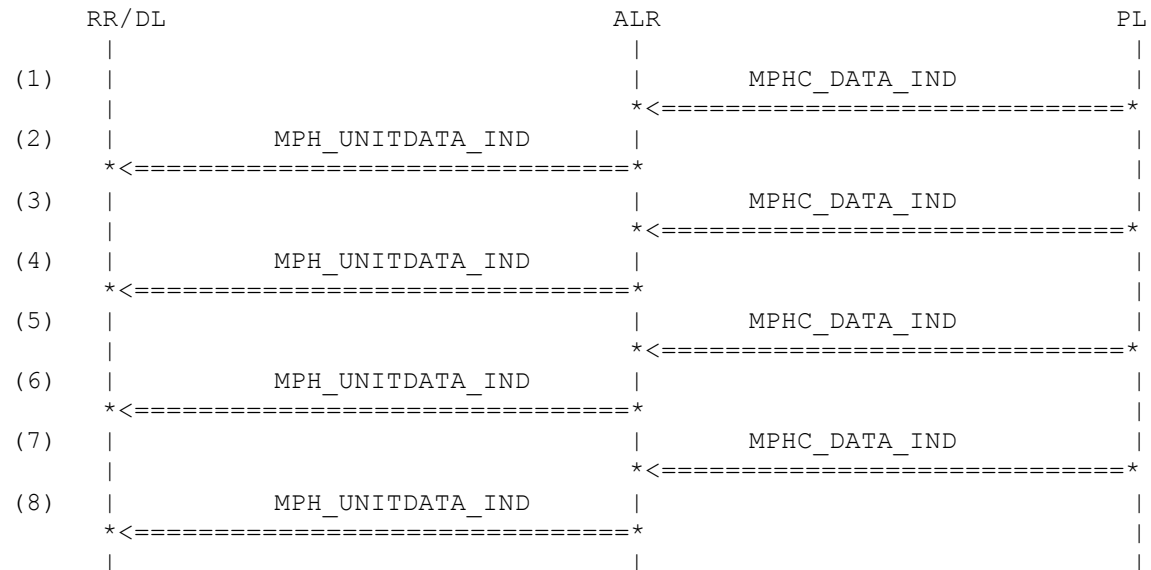
Primitive	Parameter	Value
(1) MPHC_NETWORK_SYNC_IND	radio_freq sb_flag fn_offset	ARFCN_580 SB_FOUND FN_OFFSET_0

		time_alignment	TIME_ALIGNMT_0
		bsic	BSIC_0
(2) MPH_BSIC_CNF			
		arfcn	ARFCN_580_STD_1800
		bsic	BSIC_0
		cs	CS_NO_ERROR
(3) MPHC_NEW_SCELL_REQ			
		radio_freq	ARFCN_580
		fn_offset	FN_OFFSET_0
		time_alignment	TIME_ALIGNMT_0
		tsc	BSIC_0
(4) MPHC_NEW_SCELL_CON			
		param	NOT_USED
(5) MPHC_SCELL_NBCCH_REQ			
		schedule_array_size	SCHED_SIZE_1
		schedule_array	FULL_READ
History:	23.09.99	MPA	Initial
	17.05.02	MSB	adapt MPH_BSIC_REQ/CNF to mul-
tiband			
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after
			MPHC_START_CCCH_REQ included

4.4.7 ALR207: Read BCCH data

Description: The BCCH data blocks are read for the channel 23.

Preamble: ALR203



Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND		
	radio_freq	ARFCN_637
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_1
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

(2) MPH_UNITDATA_IND

arfcn	ARFCN_637
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_1
ti	TI_0
cell_chan_desc	CELL_CHAN_DESC_1
rach_ctrl	RACH_CTRL_1
}	

(3) MPHC_DATA_IND

radio_freq	ARFCN_637
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_2
tc	TC_1
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(4) MPH_UNITDATA_IND

arfcn	ARFCN_637
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_2
ti	TI_0
neigh_cell_desc	NEIGH_CELL_DESC_1
ncc_permit	NCC_PERMIT_1
rach_ctrl	RACH_CTRL_1
}	

(5) MPHC_DATA_IND

radio_freq	ARFCN_637
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(6) MPH_UNITDATA_IND

arfcn	ARFCN_637
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_3
ti	TI_0
cell_ident	CELL_IDENT_1
loc_area_ident	LOC_AREA_IDENT_1
ctrl_chan_desc	CTRL_CHAN_DESC_1
cell_opt_bcch	CELL_OPT_BCCH_1
cell_select	CELL_SELECT_1

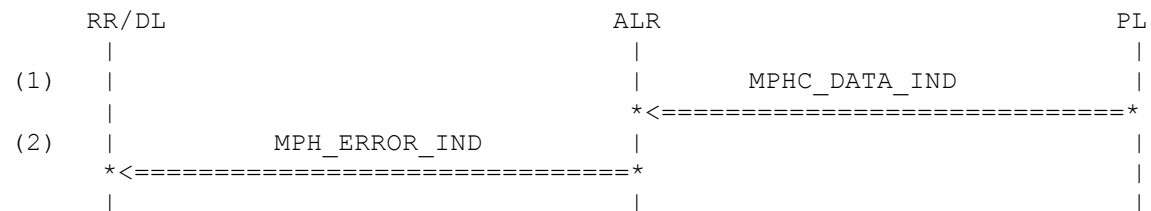
	rach_ctrl }	RACH_CTRL_1
(7) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_637 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_4 TC_3 NOT_USED FN_OFFSET_0
(8) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti loc_area_ident cell_select rach_ctrl }	ARFCN_637 NOT_USED RR DOWNLINK D_SYS_INFO_4 TI_0 LOC_AREA_IDENT_1 CELL_SELECT_1 RACH_CTRL_1

History: 23.09.99 MPA Initial

4.4.8 ALR208: Read failed BCCH data

Description: A failed BCCH data block is read.

Preamble: ALR207



Parametrization

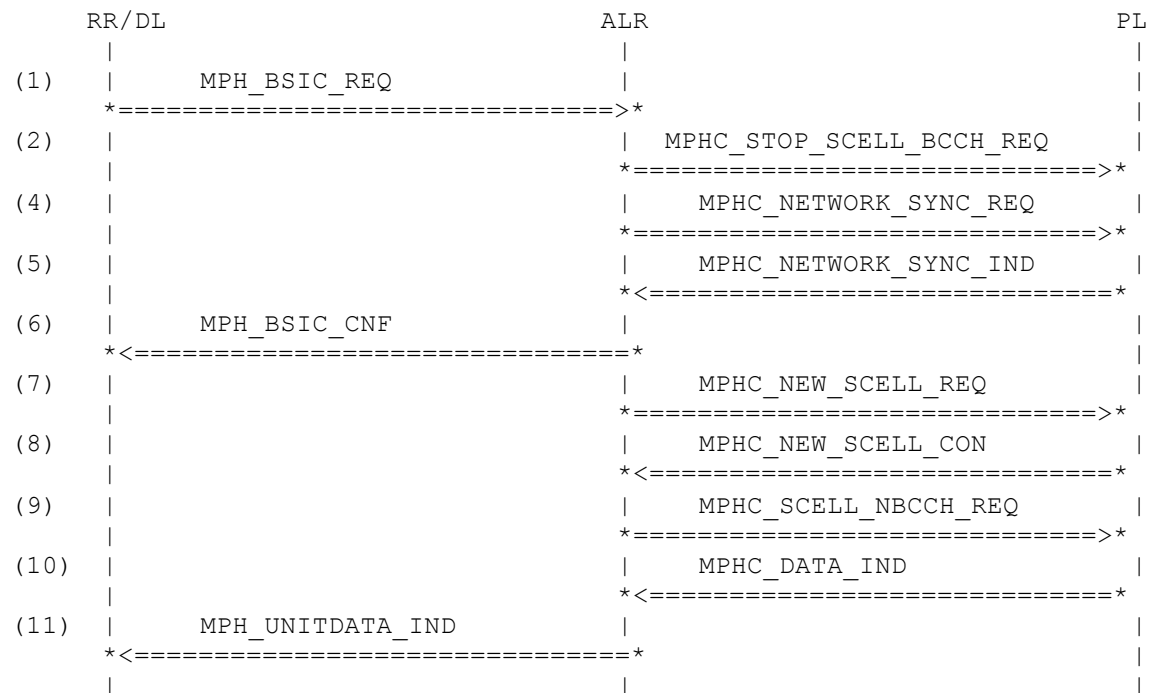
Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_637 L2_CHANNEL_NBCCH INVALID_BLOCK L2_NO_CONTENT TC_3 NOT_USED FN_OFFSET_0
(2) MPH_ERROR_IND	cs arfcn	CS_BCCH_READ_ERROR ARFCN_637

History: 23.09.99 MPA Initial

4.4.9 ALR209: RR rejects BCCH carrier, try third channel

Description: RR rejects the BCCH carrier. The next best channel (channel 124) is selected for synchronizing to frequency correction burst and synchron burst.

Preamble: ALR206



Parametrization

Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_885_STD_1800
(2) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_885
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(4) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_885
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(5) MPH_BSIC_CNF	arfcn	ARFCN_885_STD_1800
	bsic	BSIC_0
	cs	CS_NO_ERROR
(6) MPHC_NEW_SCELL_REQ	radio_freq	ARFCN_885
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	tsc	BSIC_0

(7) MPHC_NEW_SCELL_CON

param NOT_USED

(8) MPHC_SCELL_NBCCH_REQ

schedule_array_size SCHED_SIZE_1
schedule_array FULL_READ

(9) MPHC_DATA_IND

radio_freq ARFCN_885
l2_channel L2_CHANNEL_NBCCH
error_flag VALID_BLOCK
l2_frame L2_SYS_INFO_1
tc TC_0
ccch_lev NOT_USED
fn FN_OFFSET_0

(10) MPH_UNITDATA_IND

arfcn ARFCN_885
fn NOT_USED
sdu
{
component RR
direction DOWNLINK
pd D_SYS_INFO_1
ti TI_0
cell_chan_desc CELL_CHAN_DESC_1
rach_ctrl RACH_CTRL_1
}

History: 23.09.9 MPA Initial
17.05.02 MSB adapt MPH_BSIC_REQ/CNF to mul-
tiband

4.4.10 ALR210: RR rejects BCCH carrier, try fourth channel

Description: RR rejects the BCCH carrier. The next best channel (channel 1) is selected for synchronising to frequency correction burst and synchron burst.

Preamble: ALR209

RR/DL	ALR	PL
(1) MPH_BSIC_REQ		
=====>		
(2)	MPH_STOP_SCELL_BCCH_REQ	
	=====>	
(4)	MPH_NETWORK_SYNC_REQ	
	=====>	
(5)	MPH_NETWORK_SYNC_IND	
	<=====	
(6) MPH_BSIC_CNF		
<=====		
(7)	MPH_NEW_SCELL_REQ	
	=====>	
(4)	MPH_NEW_SCELL_CON	
	<=====	
(9)	MPH_SCELL_NBCCH_REQ	
	=====>	
(10)	MPH_DATA_IND	
	<=====	
(11) MPH_UNITDATA_IND		

* <=====*			
Parametrization			
Primitive	Parameter	Value	
(1) MPH_BSIC_REQ	arfcn	ARFCN_512_STD_1800	
(2) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED	
(3) MPHC_NETWORK_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity search_mode	ARFCN_512 NOT_USED NOT_USED TV_INVALID_TIMING_INFO SM_WIDE_MODE	
(4) MPHC_NETWORK_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_512 SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0	
(5) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_512_STD_1800 BSIC_0 CS_NO_ERROR	
(6) MPHC_NEW_SCELL_REQ	radio_freq fn_offset time_alignment tsc	ARFCN_512 FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0	
(7) MPHC_NEW_SCELL_CON	param	NOT_USED	
(8) MPHC_SCELL_NBCCH_REQ	schedule_array_size schedule_array	SCHED_SIZE_1 NOT_USED	
(9) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_512 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_1 TC_0 NOT_USED FN_OFFSET_0	
(10) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_chan_desc	ARFCN_512 NOT_USED RR DOWNLINK D_SYS_INFO_1 TI_0 CELL_CHAN_DESC_1	

rach_ctrl
}

RACH_CTRL_1

History: 23.09.9 MPA Initial
17.05.02 MSB adapt MPH_BSIC_REQ/CNF to mul-
tiband

4.4.11 ALR211: RR rejects BCCH carrier, no further channel available

Description: RR rejects the BCCH carrier. No further channel is available.

Preamble: ALR210

	RR/DL	ALR	PL
(1)	MPH_BSIC_REQ		
	=====>		

Parametrization

	Primitive	Parameter	Value
(1)	MPH_BSIC_REQ	arfcn	NOT_PRESENT_16BIT

History: 23.09.99 MPA Initial

4.4.12 ALR212: RR select second channel

Description: RR selects the channel 14 after reading the BCCH carrier.

Variant A: with neighbourcell list

Variant B: with empty neighbour cell list

Variant C: like A, but non-combined CCCH

Preamble: ALR206

Variants: <A> .. <C>

	RR/DL	ALR	PL
(1)	MPH_CLASSMARK_REQ		
	=====>		
(2)	MPH_IDLE_REQ		
	=====>		
(3)		MPHC_STOP_SCELL_BCCH_REQ	
		=====>	
(4)		MPHC_START_CCCH_REQ	
		=====>	
(5)		MPHC_SCELL_NBCCH_REQ	
		=====>	
(6)	MPH_IDENTITY_REQ		
	=====>		
(7)	MPH_CBCH_REQ		
	=====>		
(8)	MPH_NEIGHBOURCELL_REQ		
	=====>		
(9)		MPHC_RXLEV_PERIODIC_REQ	
		=====>	

Parametrization

	Primitive	Parameter	Value
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(1) MPH_CLASSMARK_REQ

classmark	CLASS_DCS_1800
-----------	----------------

(2) MPH_IDLE_REQ

	mod	MODE_CELL_SELECTION
	arfcn	ARFCN_580
	ext_bcch	NOT_USED
<A>	comb_ccch	COMB_CCCH_COMB
	comb_ccch	COMB_CCCH_COMB
<C>	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLK_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED

(3) MPH_STOP_SCELL_BCCH_REQ

param	NOT_USED
-------	----------

(4) MPH_START_CCCH_REQ

	bs_pa_mfrms	BS_PA_MFRMS_8
	bs_ag_blk_res	BS_AG_BLK_RES_3
<A>	bcch_combined	COMB_CCCH_COMB
	bcch_combined	COMB_CCCH_COMB
<C>	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
<A>	page_block_index	PBI_0
	page_block_index	PBI_0
<C>	page_block_index	PBI_2
	page_mode	PGM_REORG

(5) MPH_STOP_SCELL_NBCCH_REQ

schedule_array_size	SCHED_SIZE_1
schedule_array	NOT_USED

(6) MPH_IDENTITY_REQ

mid	MS_ID_IMSI_TMSI
-----	-----------------

(7) MPH_CBCH_REQ

cbch	NO_CBCH
------	---------

(8) MPH_NEIGHBOURCELL_REQ

<A>	multi_band	MULTI_BAND_0
	arfcn	CHLIST_512_637_885_FFFF
	arfcn	EMPTY_NCELL_LIST
<C>	arfcn	CHLIST_512_637_885_FFFF
	sync_only	NOT_USED

(9) MPH_RXLEV_PERIODIC_REQ

<A>	chan_list	CHLIST_580_512_637_885
	chan_list	CHLIST_580
<C>	chan_list	CHLIST_580_512_637_885
<A>	num_of_chans	CHANNELS_4
	num_of_chans	CHANNELS_1
<C>	num_of_chans	CHANNELS_4

		ba_id	BA_ID_1
		next_radio_freq_measured	CHAN_LIST_IDX_0
History:	23.09.99	MPA	Initial
	12.07.00	DG	MPH_CLASSMARK_REQ: class changed into classmark (Forum G23M / No 0057)
	20.07.01	MSB	channel list adapted
	07.02.02	LG	changed value of ba_id
	26.09.02	DL	E-OTD changes (MPH_IDLE_REQ)
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.4.13 ALR213: RR select first channel

Description: RR selects the channel 23 after reading the BCCH carrier.

Preamble: ALR203

RR/DL	ALR	PL
(1) MPH_CLASSMARK_REQ		
=====>		
(2) MPH_IDLE_REQ		
=====>		
(3)	MPHC_STOP_SCELL_BCCH_REQ	
	=====>	
(4)	MPHC_START_CCCH_REQ	
	=====>	
(5)	MPHC_SCELL_NBCCH_REQ	
	=====>	
(6) MPH_IDENTITY_REQ		
=====>		
(7) MPH_CBCH_REQ		
=====>		
(8) MPH_NEIGHBOURCELL_REQ		
=====>		
(9)	MPHC_RXLEV_PERIODIC_REQ	
	=====>	

Parametrization

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_GSM_900
(2) MPH_IDLE_REQ	mod	MODE_CELL_SELECTION
	arfcn	ARFCN_637
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED

(3) MPHC_STOP_SCELL_BCCH_REQ

param NOT_USED

(4) MPHC_START_CCCH_REQ

bs_pa_mfrms BS_PA_MFRMS_8
bs_ag_blks_res BS_AG_BLK_RES_3
bcch_combined COMB_CCCH_COMB
ccch_group CCCH_GROUP_0
page_group PG_20
page_block_index PBI_0
page_mode PGM_REORG

(5) MPHC_SCELL_NBCCH_REQ

schedule_array_size SCHED_SIZE_1
schedule_array NOT_USED

(6) MPH_IDENTITY_REQ

mid MS_ID_IMSI_TMSI

(7) MPH_CBCH_REQ

cbch NO_CBCH

(8) MPH_NEIGHBOURCELL_REQ

multi_band MULTI_BAND_0
arfcn CHLIST_512_580_885_FFFF
sync_only

NOT_USED

(9) MPHC_RXLEV_PERIODIC_REQ

chan_list CHLIST_637_512_580_885
num_of_chans

CHANNELS_4

ba_id BA_ID_1
next_radio_freq_measured CHAN_LIST_IDX_0

History:	23.09.99	MPA	Initial
	12.07.00	DG	MPH_CLASSMARK_REQ: class changed into classmark (Forum G23M / No 0057)
	20.07.01	MSB	channel list adapted
	07.02.02	LG	changed value of ba_id
	26.09.02	DL	E-OTD changes (MPH_IDLE_REQ)
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.4.14 ALR215: Re-Initiation of Cell Selection during measurements

Description: RR has started a cell selection. During power measurements a new activation of cell selection is started by RR. The power measurement is restarted.

Preamble: ALR200

RR/DL	ALR	PL
(1) MPH_POWER_REQ		
*=====>		
(2)	MPH_INIT_L1_REQ	
	*=====>	
(3)	MPH_INIT_L1_CON	
	<=====	
(4)	MPH_RXLEV_REQ	
	*=====>	

```

(5) | | MPHC_RXLEV_IND |
    | | *<=====* |
(6) | | MPHC_RXLEV_REQ |
    | | *=====>* |
(7) | MPH_POWER_REQ |
    | *=====>* |
(8) | | MPHC_INIT_L1_REQ |
    | | *=====>* |
(9) | | MPHC_INIT_L1_CON |
    | | *<=====* |
(10) | | MPHC_RXLEV_REQ |
    | | *=====>* |
(11) | | MPHC_RXLEV_IND |
    | | *<=====* |
(12) | | MPHC_RXLEV_REQ |
    | | *=====>* |
(10) | | MPHC_RXLEV_IND |
    | | *<=====* |
(14) | | MPHC_RXLEV_REQ |
    | | *=====>* |
(15) | | MPHC_RXLEV_IND |
    | | *<=====* |
(16) | | MPHC_RXLEV_REQ |
    | | *=====>* |
(17) | | MPHC_RXLEV_IND |
    | | *<=====* |
(18) | | MPHC_RXLEV_REQ |
    | | *=====>* |
(19) | | MPHC_RXLEV_IND |
    | | *<=====* |
(20) | MPH_POWER_CNF |
    | *=====>* |
    | | |

```

Parametrization

	Primitive	Parameter	Value
(1)	MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_DCS_1800
(2)	MPHC_INIT_L1_REQ	radio_band_config	STD_1800
(3)	MPHC_INIT_L1_CON	param	NOT_USED
(4)	MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(5)	MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800
(6)	MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(7)	MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_DCS_1800
(8)	MPHC_INIT_L1_REQ	radio_band_config	STD_1800
(9)	MPHC_INIT_L1_CON	param	NOT_USED

(10)	MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(11)	MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800
(12)	MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(13)	MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800
(14)	MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(15)	MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800
(16)	MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(17)	MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800
(18)	MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(19)	MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800
(20)	MPH_POWER_CNF	num_of_chan arfcn	CHANNELS_4
	ARFCN_637_580_885_512_WITH_STD	rx_lev	RXLEV_637_580_885_512

History: 23.09.99 MPA Initial
17.05.02 MSB add MPHC_INIT_L1_REQ/CON,
change arfcn's

4.4.15 ALR217: Re-Initiation of Cell Selection during BCCH reading

Description: During BCCH reading RR restarts a cell selection. This leads to a new full power measurement cycle.

Preamble: ALR207

RR/DL	ALR	PL
(1) MPH_SYNC_REQ		
=====>		
(2)	MPHC_STOP_SCELL_BCCH_REQ	
	=====>	
(4) MPH_POWER_REQ		
=====>		
(5)	MPHC_INIT_L1_REQ	
	=====>	
(6)	MPHC_INIT_L1_CON	
	<=====	
(7)	MPHC_RXLEV_REQ	
	=====>	
(8)	MPHC_RXLEV_IND	
	<=====	
(9)	MPHC_RXLEV_REQ	

```

(10) | | | *=====>*
      | | | | MPHC_RXLEV_IND |
      | | | *<=====*
(11) | | | | MPHC_RXLEV_REQ |
      | | | *=====>*
(12) | | | | MPHC_RXLEV_IND |
      | | | *<=====*
(13) | | | | MPHC_RXLEV_REQ |
      | | | *=====>*
(14) | | | | MPHC_RXLEV_IND |
      | | | *<=====*
(15) | | | | MPHC_RXLEV_REQ |
      | | | *=====>*
(16) | | | | MPHC_RXLEV_IND |
      | | | *<=====*
(17) | | MPH_POWER_CNF |
      | | *<=====*
      | | |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_SYNC_REQ	cs	CS_STOP_BCCH_READING
(2) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_DCS_1800
(4) MPHC_INIT_L1_REQ	radio_band_config	STD_1800
(5) MPHC_INIT_L1_CON	param	NOT_USED
(6) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(7) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800
(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(9) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800
(10) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(11) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800
(12) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(13) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800
(14) MPHC_RXLEV_REQ	shared_ptr	NOT_USED

(15) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800
(16) MPH_POWER_CNF	num_of_chan arfcn	CHANNELS_4
ARFCN_637_580_885_512_WITH_STD	rx_lev	RXLEV_637_580_885_512

History: 23.09.99 MPA Initial
17.05.02 MSB add MPHC_INIT_L1_REQ/CON,
change arfcn's

4.4.16 ALR244: Stop Idle Mode by Normal Cell Selection

Description: The idle mode is stopped if a normal cell selection is initiated.

Preamble: ALR213

RR/DL	ALR	PL
(1) MPH_POWER_REQ		
=====>		
(2)	MPHC_STOP_SCELL_BCCH_REQ	
	=====>	
(3)	MPHC_STOP_CCCH_REQ	
	=====>	
(4)	MPHC_STOP_RXLEV_PERIODIC_REQ	
	=====>	
(5)	MPHC_STOP_SCELL_BCCH_REQ	
	=====>	
(6)	MPHC_INIT_L1_REQ	
	=====>	
(7)	MPHC_INIT_L1_CON	
	<=====	
(8)	MPHC_RXLEV_REQ	
	=====>	

Parametrization

Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_DCS_1800
(2) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPHC_STOP_CCCH_REQ	param	NOT_USED
(4) MPHC_STOP_RXLEV_PERIODIC_REQ	param	NOT_USED
(5) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(6) MPHC_INIT_L1_REQ	radio_band_config	STD_1800

(7) MPHC_INIT_L1_CON	param	NOT_USED
(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED

History:	23.09.99	MPA	Initial
	17.05.02	MSB	add parameter 'freq_band'
	29.10.02	DL	
	MPHC_STOP_NCELL_SYNC/BCCH_REQ removed		

4.5 Cell Selection (Dualband GSM 900 / DCS 1800)

4.5.1 ALR601: Initiation by RR, 8 channels available

Description: RR starts a cell selection. Eight channels in the order 23, 637, 14, 580, 124, 885, 1, 512 have acceptable fieldstrength values.

Preamble: ALR600

RR/DL	ALR	PL
(1) MPH_POWER_REQ		
=====>		
(2)	MPHC_INIT_L1_REQ	
	=====>	
(3)	MPHC_INIT_L1_CON	
	<=====	
(4)	MPHC_RXLEV_REQ	
	=====>	
(5)	MPHC_RXLEV_IND	
	<=====	
(6)	MPHC_RXLEV_REQ	
	=====>	
(7)	MPHC_RXLEV_IND	
	<=====	
(8)	MPHC_RXLEV_REQ	
	=====>	
(9)	MPHC_RXLEV_IND	
	<=====	
(10)	MPHC_RXLEV_REQ	
	=====>	
(11)	MPHC_RXLEV_IND	
	<=====	
(12)	MPHC_RXLEV_REQ	
	=====>	
(13)	MPHC_RXLEV_IND	
	<=====	
(14) MPH_POWER_CNF		
<=====		

Parametrization

Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_DUAL
(2) MPHC_INIT_L1_REQ	radio_band_config	STD_DUAL

(3) MPHC_INIT_L1_CON	param	NOT_USED
(4) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(5) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(6) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(7) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(9) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(10) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(11) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(12) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(13) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(14) MPH_POWER_CNF	num_of_chan arfcn rx_lev	CHANNELS_8 ARFCN_DUAL_WITH_STD RXLEV_DUAL

History: **24.01.00** **MPA** **Initial**
 17.05.02 **MSB** **change arfcn's**

4.5.2 ALR602: Initiation by RR, no channels available

Description: RR starts a cell selection. No channel is available.

Preamble: ALR600

	RR/DL	ALR	PL
(1)	MPH_POWER_REQ		
	=====>		
(2)		MPHC_INIT_L1_REQ	
		=====>	
(3)		MPHC_INIT_L1_CON	
		<=====	
(4)		MPHC_RXLEV_REQ	
		=====>	
(5)		MPHC_RXLEV_IND	
		<=====	
(6)		MPHC_RXLEV_REQ	
		=====>	
(7)		MPHC_RXLEV_IND	

```

(8) | | *<=====
    | | | MPHC_RXLEV_REQ |
    | | *=====>*
(9) | | | MPHC_RXLEV_IND |
    | | *=====>*
(10) | | | MPHC_RXLEV_REQ |
    | | *=====>*
(11) | | | MPHC_RXLEV_IND |
    | | *=====>*
(12) | | | MPHC_RXLEV_REQ |
    | | *=====>*
(13) | | | MPHC_RXLEV_IND |
    | | *=====>*
(14) | MPH_POWER_CNF |
    | *=====>*
    | |
    | |

```

Parametrization

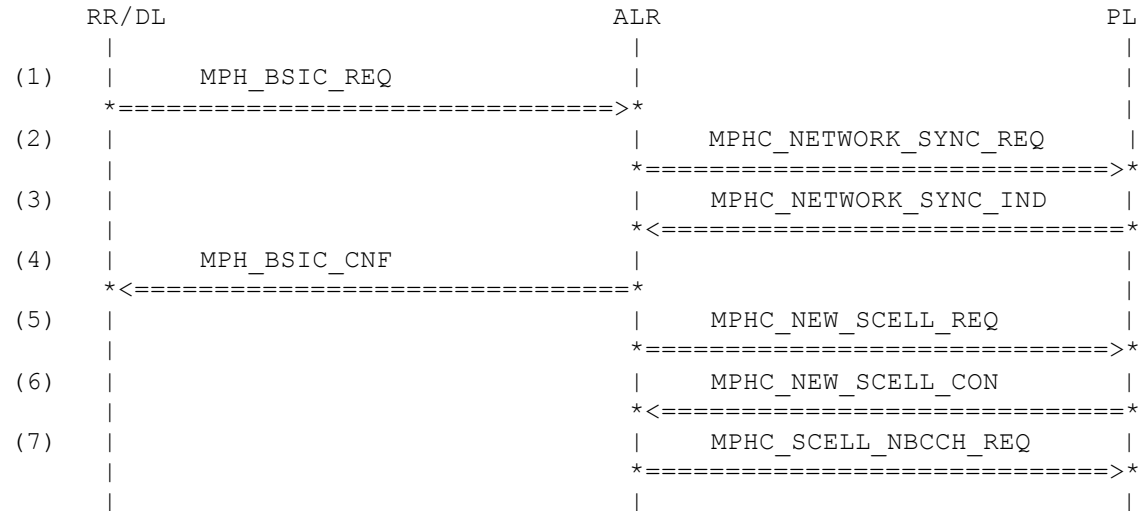
Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_DUAL
(2) MPHC_INIT_L1_REQ	radio_band_config	STD_DUAL
(3) MPHC_INIT_L1_CON	param	NOT_USED
(4) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(5) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2_DUAL
(6) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(7) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2_DUAL
(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(9) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2_DUAL
(10) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(11) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2_DUAL
(12) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(13) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2_DUAL
(14) MPH_POWER_CNF	num_of_chan arfcn rx_lev	CHANNELS_0 NOT_USED NOT_USED

History: 24.01.00 MPA Initial

4.5.3 ALR603: Find BCCH carrier, first channel

Description: The carrier with the highest fieldstrength (channel 23) is selected for synchronizing to frequency correction burst and synchron burst.

Preamble: ALR601



Parametrization

Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_23_STD_DUAL
(2) MPHC_NETWORK_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity search_mode	ARFCN_23 NOT_USED NOT_USED TV_INVALID_TIMING_INFO SM_WIDE_MODE
(3) MPHC_NETWORK_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_23 SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_1
(4) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_23_STD_DUAL BSIC_1 CS_NO_ERROR
(5) MPHC_NEW_SCELL_REQ	radio_freq fn_offset time_alignment tsc	ARFCN_23 FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_1
(6) MPHC_NEW_SCELL_CON	param	NOT_USED

(7) MPHC_SCELL_NBCCH_REQ

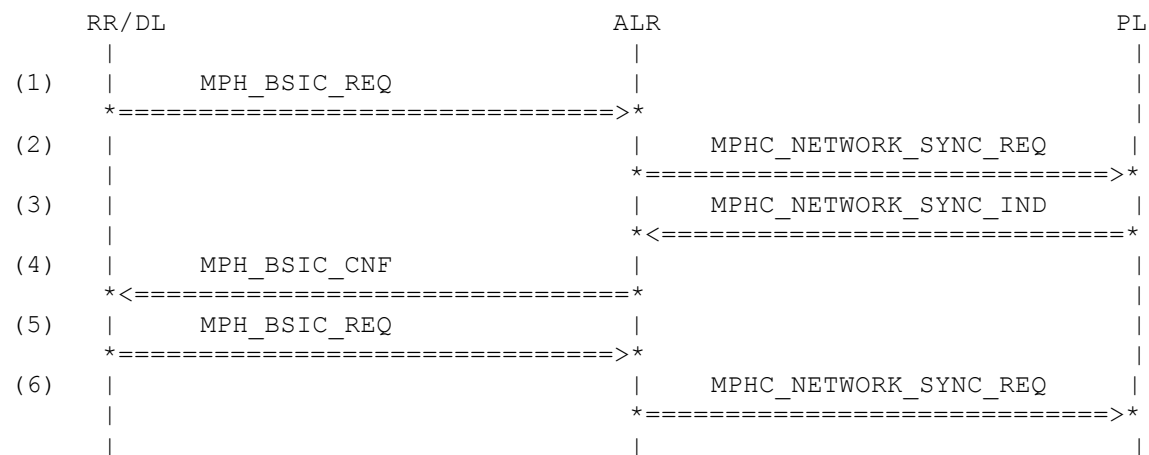
schedule_array_size SCHED_SIZE_1
schedule_array FULL_READ

History: 24.01.00 MPA Initial
17.05.02 MSB adapt MPH_BSIC_REQ/CNF to mul-
tiband

4.5.4 ALR604: Find BCCH carrier, first channel failed, then second channel

Description: The carrier with the highest fieldstrength (channel 23) is selected for synchronizing to frequency correction burst and synchron burst. The attempt failed. A second request is started for the next strongest channel (channel 637).

Preamble: ALR601



Parametrization

Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_23_STD_DUAL
(2) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_23
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(3) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_23
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_1
(4) MPH_BSIC_CNF	arfcn	ARFCN_23_STD_DUAL
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(5) MPH_BSIC_REQ	arfcn	ARFCN_637_STD_DUAL

(6) MPHC_NETWORK_SYNC_REQ

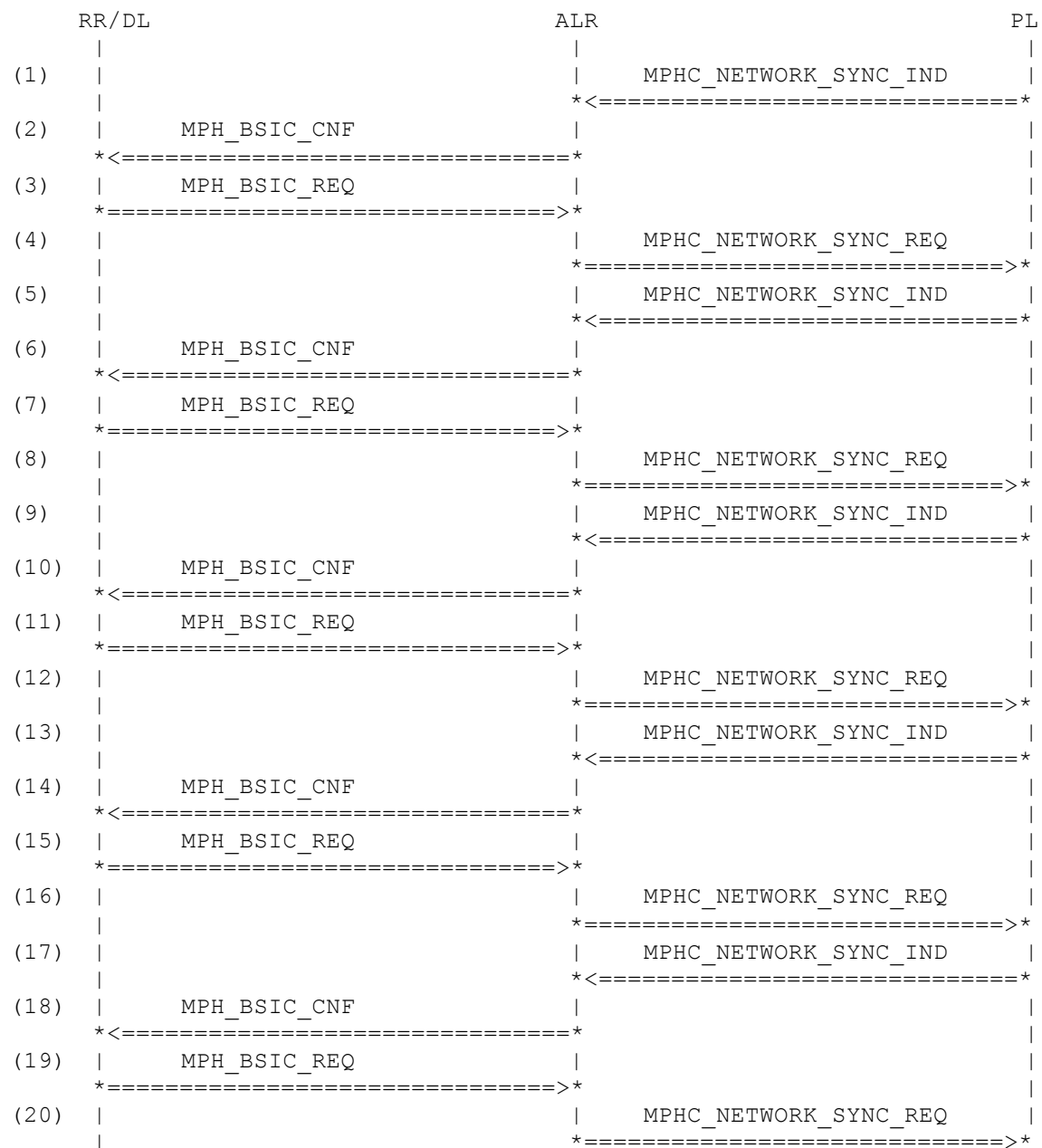
radio_freq	ARFCN_637
fn_offset	NOT_USED
time_alignment	NOT_USED
timing_validity	TV_INVALID_TIMING_INFO
search_mode	SM_WIDE_MODE

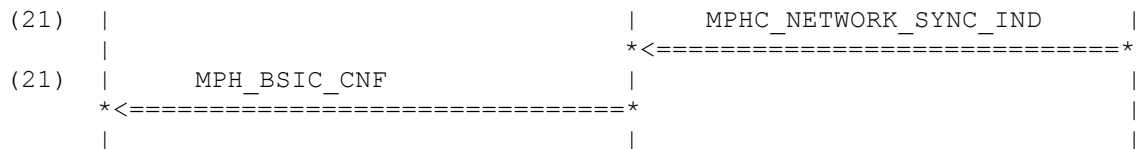
History:	24.01.00	MPA	Initial
	17.05.02	MSB	adapt MPH_BSIC_REQ/CNF to mul-
tiband			

4.5.5 ALR605: Find BCCH carrier, all channels failed, then error indication

Description: All synchronization attempts to the available channels are failed. RR is informed by an error indication with the cause no BCCH available.

Preamble: ALR604





Parametrization

Primitive	Parameter	Value
(1) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_637
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(2) MPH_BSIC_CNF	arfcn	ARFCN_637_STD_DUAL
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(3) MPH_BSIC_REQ	arfcn	ARFCN_14_STD_DUAL
(4) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(5) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_14
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(6) MPH_BSIC_CNF	arfcn	ARFCN_14_STD_DUAL
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(7) MPH_BSIC_REQ	arfcn	ARFCN_580_STD_DUAL
(8) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_580
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(9) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_580
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0

(10) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_580_STD_DUAL NOT_USED CS_NO_BCCH_AVAIL
(11) MPH_BSIC_REQ	arfcn	ARFCN_124_STD_DUAL
(12) MPHC_NETWORK_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity search_mode	ARFCN_124 NOT_USED NOT_USED TV_INVALID_TIMING_INFO SM_WIDE_MODE
(13) MPHC_NETWORK_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_124 NO_SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(14) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_124_STD_DUAL NOT_USED CS_NO_BCCH_AVAIL
(15) MPH_BSIC_REQ	arfcn	ARFCN_885_STD_DUAL
(16) MPHC_NETWORK_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity search_mode	ARFCN_885 NOT_USED NOT_USED TV_INVALID_TIMING_INFO SM_WIDE_MODE
(17) MPHC_NETWORK_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_885 NO_SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(18) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_885_STD_DUAL NOT_USED CS_NO_BCCH_AVAIL
(19) MPH_BSIC_REQ	arfcn	ARFCN_512_STD_DUAL
(20) MPHC_NETWORK_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity search_mode	ARFCN_512 NOT_USED NOT_USED TV_INVALID_TIMING_INFO SM_WIDE_MODE

(21) MPHC_NETWORK_SYNC_IND

radio_freq	ARFCN_512
sb_flag	NO_SB_FOUND
fn_offset	FN_OFFSET_0
time_alignment	TIME_ALIGNMT_0
bsic	BSIC_0

(22) MPH_BSIC_CNF

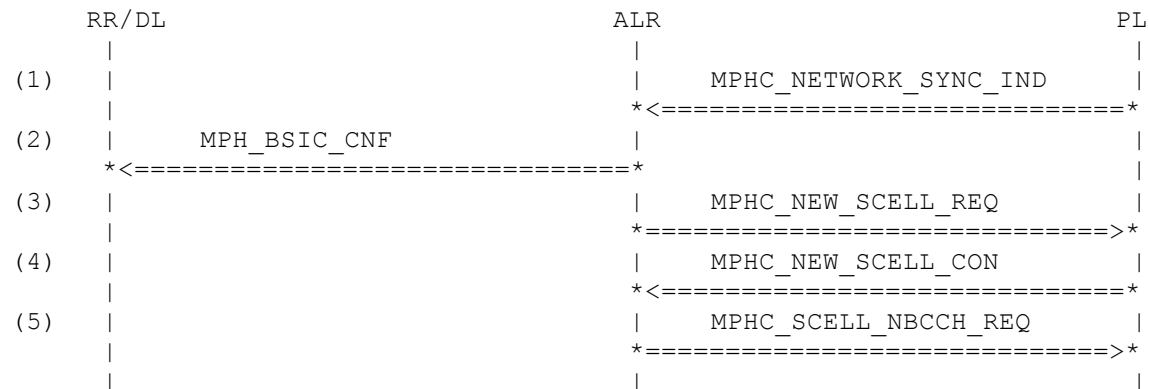
arfcn	ARFCN_512_STD_DUAL
bsic	NOT_USED
cs	CS_NO_BCCH_AVAIL

History:	24.01.00	MPA	Initial
	17.05.02	MSB	adapt MPH_BSIC_REQ/CNF to mul-
tiband			

4.5.6 ALR606: Find BCCH carrier, second channel

Description: The next best channel (channel 637) is selected for synchronizing to frequency correction burst and synchron burst.

Preamble: ALR604



Parametrization

Primitive	Parameter	Value
(1) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_637
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(2) MPH_BSIC_CNF	arfcn	ARFCN_637_STD_DUAL
	bsic	BSIC_0
	cs	CS_NO_ERROR
(3) MPHC_NEW_SCELL_REQ	radio_freq	ARFCN_637
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	tsc	BSIC_0
(4) MPHC_NEW_SCELL_CON	param	NOT_USED

(5) MPHC_SCELL_NBCCH_REQ

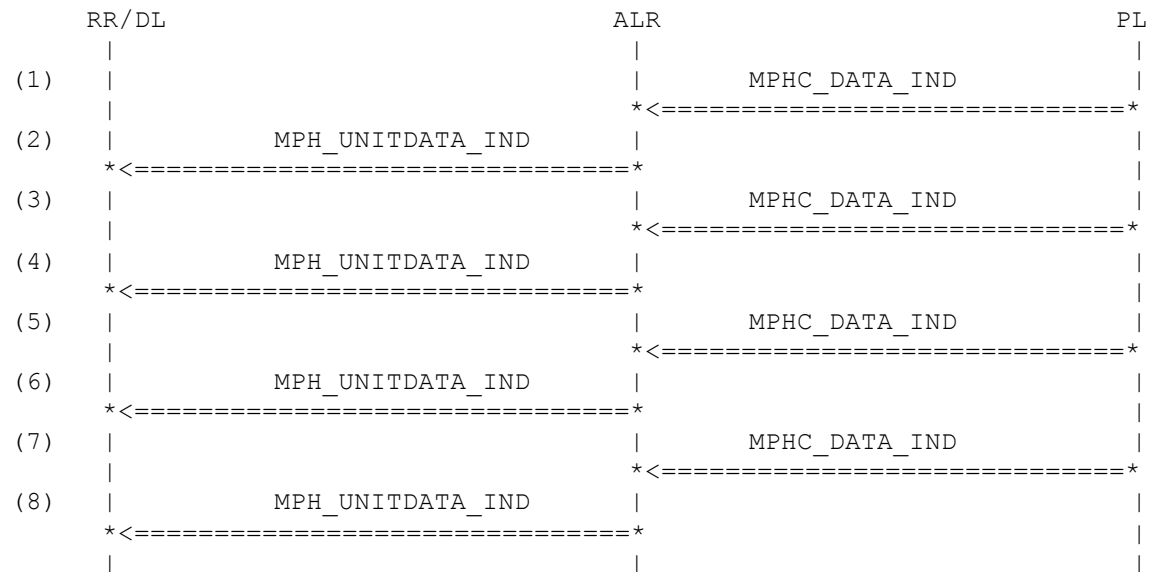
schedule_array_size SCHED_SIZE_1
schedule_array FULL_READ

History: 24.01.00 MPA Initial
17.05.02 MSB adapt MPH_BSIC_REQ/CNF to mul-
tiband

4.5.7 ALR607: Read BCCH data

Description: The BCCH data blocks are read for the channel 23.

Preamble: ALR603



Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_1
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(2) MPH_UNITDATA_IND	arfcn	ARFCN_23
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_1
	ti	TI_0
	cell_chan_desc	CELL_CHAN_DESC_1
	rach_ctrl	RACH_CTRL_1
	}	

(3) MPHC_DATA_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_2
tc	TC_1
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(4) MPH_UNITDATA_IND

arfcn	ARFCN_23
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_2
ti	TI_0
neigh_cell_desc	NEIGH_CELL_DESC_1
ncc_permit	NCC_PERMIT_1
rach_ctrl	RACH_CTRL_1
}	

(5) MPHC_DATA_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(6) MPH_UNITDATA_IND

arfcn	ARFCN_23
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_3
ti	TI_0
cell_ident	CELL_IDENT_1
loc_area_ident	LOC_AREA_IDENT_1
ctrl_chan_desc	CTRL_CHAN_DESC_1
cell_opt_bcch	CELL_OPT_BCCH_1
cell_select	CELL_SELECT_1
rach_ctrl	RACH_CTRL_1
}	

(7) MPHC_DATA_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_4
tc	TC_3
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(8) MPH_UNITDATA_IND

arfcn	ARFCN_23
fn	NOT_USED

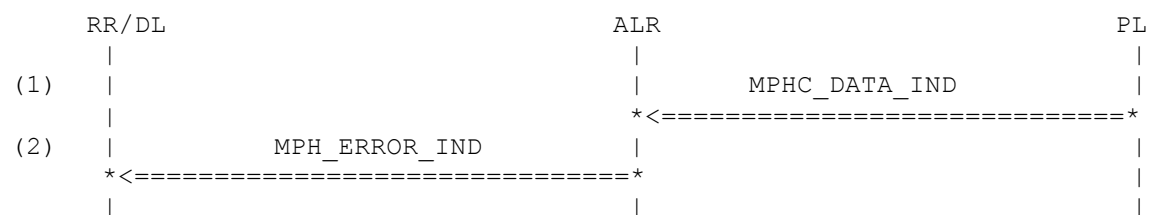
```
sdu
{
  component      RR
  direction      DOWNLINK
  pd             D_SYS_INFO_4
  ti             TI_0
  loc_area_ident LOC_AREA_IDENT_1
  cell_select    CELL_SELECT_1
  rach_ctrl      RACH_CTRL_1
}
```

History: 24.01.00 MPA Initial

4.5.8 ALR608: Read failed BCCH data

Description: A failed BCCH data block is read.

Preamble: ALR607



Parametrization

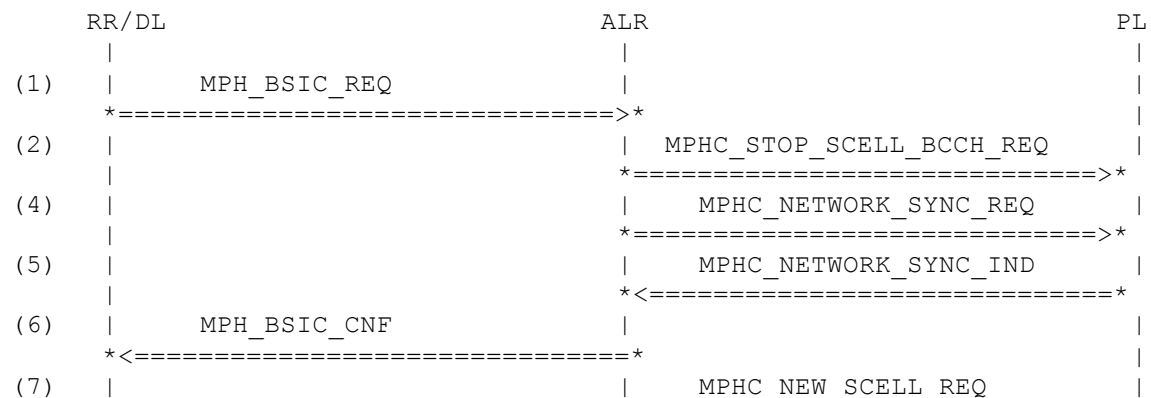
Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	INVALID_BLOCK
	l2_frame	L2_NO_CONTENT
	tc	TC_3
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(2) MPH_ERROR_IND	cs	CS_BCCH_READ_ERROR
	arfcn	ARFCN_23

History: 22.01.00 MPA Initial

4.5.9 ALR609: RR rejects BCCH carrier, try third channel

Description: RR rejects the BCCH carrier. The next best channel (channel 14) is selected for synchronizing to frequency correction burst and synchron burst.

Preamble: ALR606



```

(8) | | | *=====>*
    | | | | MPHC_NEW_SCELL_CON |
    | | | *<=====*
(9) | | | | MPHC_SCELL_NBCCH_REQ |
    | | | *=====>*
(10) | | | | MPHC_DATA_IND |
    | | | *<=====*
(11) | | MPH_UNITDATA_IND |
    | *<=====*
    | | |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_14_STD_DUAL
(2) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPHC_NETWORK_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity search_mode	ARFCN_14 NOT_USED NOT_USED TV_INVALID_TIMING_INFO SM_WIDE_MODE
(4) MPHC_NETWORK_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_14 SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(5) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_14_STD_DUAL BSIC_0 CS_NO_ERROR
(6) MPHC_NEW_SCELL_REQ	radio_freq fn_offset time_alignment tsc	ARFCN_14 FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(7) MPHC_NEW_SCELL_CON	param	NOT_USED
(8) MPHC_SCELL_NBCCH_REQ	schedule_array_size schedule_array	SCHED_SIZE_1 FULL_READ
(9) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_14 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_1 TC_0 NOT_USED FN_OFFSET_0

(10) MPH_UNITDATA_IND

```

arfcn      ARFCN_14
fn          NOT_USED
sdu        {
component   RR
direction  DOWNLINK
pd          D_SYS_INFO_1
ti          TI_0
cell_chan_desc CELL_CHAN_DESC_1
rach_ctrl  RACH_CTRL_1
}

```

History: 24.01.00 MPA Initial
17.05.02 MSB adapt MPH_BSIC_REQ/CNF to mul-
tiband

4.5.10 ALR610: RR rejects BCCH carrier, try fourth channel

Description: RR rejects the BCCH carrier. The next best channel (channel 580) is selected for synchronizing to frequency correction burst and synchron burst.

Preamble: ALR609

	RR/DL	ALR	PL
(1)	MPH_BSIC_REQ		
	=====>		
(2)		MPHC_STOP_SCELL_BCCH_REQ	
		=====>	
(4)		MPHC_NETWORK_SYNC_REQ	
		=====>	
(5)		MPHC_NETWORK_SYNC_IND	
		<=====	
(6)	MPH_BSIC_CNF		
	<=====		
(7)		MPHC_NEW_SCELL_REQ	
		=====>	
(8)		MPHC_NEW_SCELL_CON	
		<=====	
(9)		MPHC_SCELL_NBCCH_REQ	
		=====>	
(10)		MPHC_DATA_IND	
		<=====	
(11)	MPH_UNITDATA_IND		
	<=====		

Parametrization

Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_580_STD_DUAL
(2) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_580

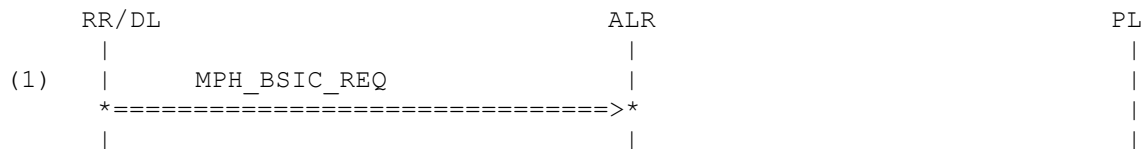
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(4) MPHC_NETWORK_SYNC_IND		
	radio_freq	ARFCN_580
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(5) MPH_BSIC_CNF		
	arfcn	ARFCN_580_STD_DUAL
	bsic	BSIC_0
	cs	CS_NO_ERROR
(6) MPHC_NEW_SCELL_REQ		
	radio_freq	ARFCN_580
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	tsc	BSIC_0
(7) MPHC_NEW_SCELL_CON		
	param	NOT_USED
(8) MPHC_SCELL_NBCCH_REQ		
	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(9) MPHC_DATA_IND		
	radio_freq	ARFCN_580
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_1
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(10) MPH_UNITDATA_IND		
	arfcn	ARFCN_580
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_1
	ti	TI_0
	cell_chan_desc	CELL_CHAN_DESC_1
	rach_ctrl	RACH_CTRL_1
	}	

History: 24.01.00 MPA Initial
17.05.02 MSB adapt MPH_BSIC_REQ/CNF to mul-
tiband

4.5.11 ALR611: RR rejects BCCH carrier, no further channel available

Description: RR rejects the BCCH carrier. No further channel is available.

Preamble: ALR610



Parametrization

Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	NOT_PRESENT_16BIT

History: 24.01.00 MPA Initial

4.5.12 ALR612: RR select second channel

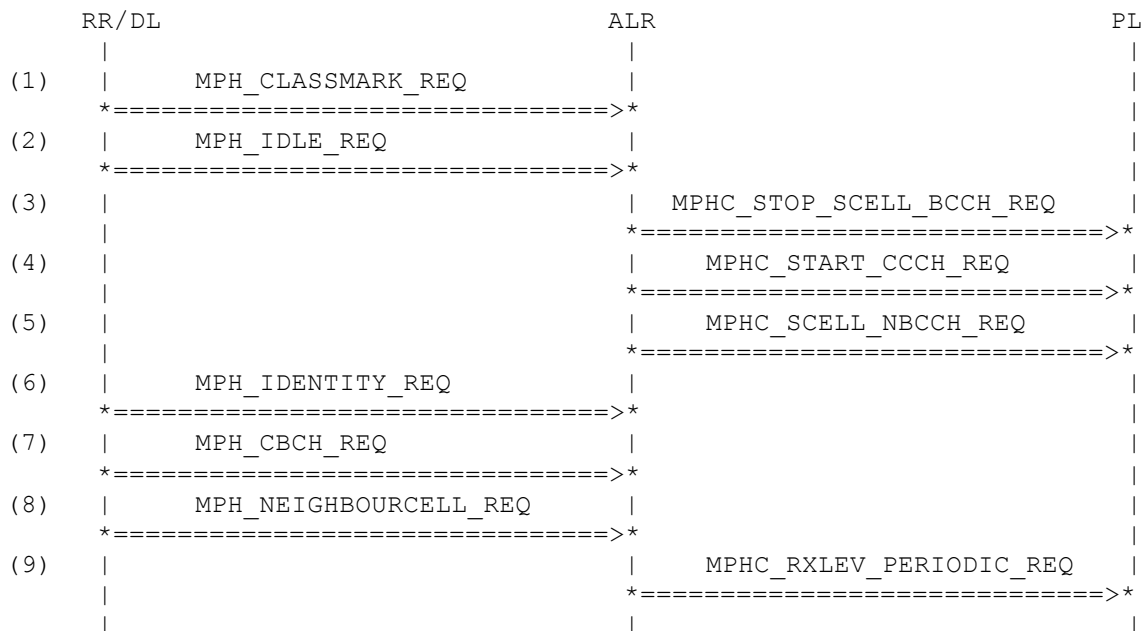
Description: RR selects the channel 637 after reading the BCCH carrier.

Variant A: with neighbourcell list

Variant B: with empty neighbour cell list

Preamble: ALR606

Variants: <A> ..



Parametrization

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_DUAL
(2) MPH_IDLE_REQ	mod	MODE_CELL_SELECTION
	arfcn	ARFCN_637
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED

	eotd_avail	EOTD_NOT_PRES	
	gprs_support	NOT_USED	
(3) MPHC_STOP_SCELL_BCCH_REQ			
	param	NOT_USED	
(4) MPHC_START_CCCH_REQ			
	bs_pa_mfrms	BS_PA_MFRMS_8	
	bs_ag_blks_res	BS_AG_BLKES_RES_3	
	bcch_combined	COMB_CCCH_NOT_COMB	
	ccch_group	CCCH_GROUP_0	
	page_group	PG_20	
	page_block_index	PBI_2	
	page_mode	PGM_REORG	
(5) MPHC_SCELL_NBCCH_REQ			
	schedule_array_size	SCHED_SIZE_1	
	schedule_array	NOT_USED	
(6) MPH_IDENTITY_REQ			
	mid	MS_ID_IMSI_TMSI	
(7) MPH_CBCH_REQ			
	cbch	NO_CBCH	
(8) MPH_NEIGHBOURCELL_REQ			
<A>	multi_band	MULTI_BAND_1	
	arfcn		
	CHLIST_1_14_23_124_512_580_885_FFFF		
	arfcn	EMPTY_NCELL_LIST	
	sync_only	NOT_USED	
(9) MPHC_RXLEV_PERIODIC_REQ			
<A>	chan_list		
	CHLIST_637_1_14_23_124_512_580_885		
	chan_list	CHLIST_637	
<A>	num_of_chans	CHANNELS_8	
	num_of_chans	CHANNELS_1	
	ba_id	BA_ID_1	
	next_radio_freq_measured	CHAN_LIST_IDX_0	
History:	24.01.00	MPA	Initial
	12.07.00	DG	MPH_CLASSMARK_REQ: class changed into classmark (Forum G23M / No 0057)
	20.07.01	MSB	channel list adapted
	07.02.02	LG	changed value of ba_id
	26.09.02	DL	E-OTD changes (MPH_IDLE_REQ)
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.5.13 ALR613: RR select first channel

Description: RR selects the channel 23 after reading the BCCH carrier.

Preamble: ALR603

RR/DL	ALR	PL
(1) MPH_CLASSMARK_REQ		
=====>		


```

(2) | MPH_IDLE_REQ |
    | *=====>* |
(3) | | MPHC_STOP_SCELL_BCCH_REQ |
    | | *=====>* |
(4) | | MPHC_START_CCCH_REQ |
    | | *=====>* |
(5) | | MPHC_SCELL_NBCCH_REQ |
    | | *=====>* |
(6) | MPH_IDENTITY_REQ |
    | *=====>* |
(7) | MPH_CBCH_REQ |
    | *=====>* |
(8) | MPH_NEIGHBOURCELL_REQ |
    | *=====>* |
(9) | | MPHC_RXLEV_PERIODIC_REQ |
    | | *=====>* |
    | | |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_DUAL
(2) MPH_IDLE_REQ	mod	MODE_CELL_SELECTION
	arfcn	ARFCN_23
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLK_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRESENT
	gprs_support	NOT_USED
(3) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_8
	bs_ag_blk_res	BS_AG_BLK_RES_3
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_2
	page_mode	PGM_REORG
(5) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(6) MPH_IDENTITY_REQ	mid	MS_ID_IMSI_TMSI
(7) MPH_CBCH_REQ	cbch	NO_CBCH

(8) MPH_NEIGHBOURCELL_REQ

	multi_band	MULTI_BAND_2
	arfcn	
CHLIST_1_14_124_512_580_637_885_FFFF		sync_only
NOT_USED		

(9) MPHC_RXLEV_PERIODIC_REQ

	chan_list	
CHLIST_23_1_14_124_512_580_637_885		num_of_chans
CHANNELS_8		
	ba_id	BA_ID_1
	next_radio_freq_measured	CHAN_LIST_IDX_0

History:	24.01.00	MPA	Initial
	12.07.00	DG	MPH_CLASSMARK_REQ:
			class changed into classmark
			(Forum G23M / No 0057)
	20.07.01	MSB	channel list adapted
	07.02.02	LG	changed value of ba_id
	26.09.02	DL	E-OTD changes (MPH_IDLE_REQ)
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after
			MPHC_START_CCCH_REQ included

4.5.14 ALR615: Re-Initiation of Cell Selection during measurements

Description: RR has started a cell selection. During power measurements a new activation of cell selection is started by RR. The power measurement is restarted.

Preamble: ALR600

	RR/DL	ALR	PL
(1)	MPH_POWER_REQ		
	=====>		
(2)		MPHC_INIT_L1_REQ	
		=====>	
(3)		MPHC_INIT_L1_CON	
		<=====	
(4)		MPHC_RXLEV_REQ	
		=====>	
(5)		MPHC_RXLEV_IND	
		<=====	
(6)		MPHC_RXLEV_REQ	
		=====>	
(7)	MPH_POWER_REQ		
	=====>		
(8)		MPHC_INIT_L1_REQ	
		=====>	
(9)		MPHC_INIT_L1_CON	
		<=====	
(10)		MPHC_RXLEV_REQ	
		=====>	
(11)		MPHC_RXLEV_IND	
		<=====	
(12)		MPHC_RXLEV_REQ	
		=====>	
(13)		MPHC_RXLEV_IND	
		<=====	
(14)		MPHC_RXLEV_REQ	
		=====>	
(15)		MPHC_RXLEV_IND	

```

(16) | | *<=====
      | | | MPHC_RXLEV_REQ |
      | | *=====>*
(17) | | | MPHC_RXLEV_IND |
      | | *=====>*
(18) | | | MPHC_RXLEV_REQ |
      | | *=====>*
(19) | | | MPHC_RXLEV_IND |
      | | *=====>*
(20) | MPH_POWER_CNF |
      | *=====>*
      | |
      | |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_DUAL
(2) MPHC_INIT_L1_REQ	radio_band_config	STD_DUAL
(3) MPHC_INIT_L1_CON	param	NOT_USED
(4) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(5) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(6) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(7) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_DUAL
(8) MPHC_INIT_L1_REQ	radio_band_config	STD_DUAL
(9) MPHC_INIT_L1_CON	param	NOT_USED
(10) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(11) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(12) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(13) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(14) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(15) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(16) MPHC_RXLEV_REQ	shared_ptr	NOT_USED

(17) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(18) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(19) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(20) MPH_POWER_CNF	num_of_chan arfcn rx_lev	CHANNELS_8 ARFCN_DUAL_WITH_STD RXLEV_DUAL
History:	24.01.00 17.05.02 21.05.02	MPA MSB MSB Initial change arfcn's add MPHC_INIT_L1_REQ/CON

4.5.15 ALR617: Re-Initiation of Cell Selection during BCCH reading

Description: During BCCH reading RR restarts a cell selection. This leads to a new full power measurement cycle.

Preamble: ALR607

	RR/DL	ALR	PL
(1)	MPH_SYNC_REQ		
	*=====>	*	
(2)		MPHC_STOP_SCELL_BCCH_REQ	
		*=====>	*
(4)	MPH_POWER_REQ		
	*=====>	*	
(5)		MPHC_INIT_L1_REQ	
		*=====>	*
(6)		MPHC_INIT_L1_CON	
		<=====	*
(7)		MPHC_RXLEV_REQ	
		*=====>	*
(8)		MPHC_RXLEV_IND	
		<=====	*
(9)		MPHC_RXLEV_REQ	
		*=====>	*
(10)		MPHC_RXLEV_IND	
		<=====	*
(11)		MPHC_RXLEV_REQ	
		*=====>	*
(12)		MPHC_RXLEV_IND	
		<=====	*
(13)		MPHC_RXLEV_REQ	
		*=====>	*
(14)		MPHC_RXLEV_IND	
		<=====	*
(15)		MPHC_RXLEV_REQ	
		*=====>	*
(16)		MPHC_RXLEV_IND	
		<=====	*
(17)	MPH_POWER_CNF		
	<=====	*	

Parametrization

Primitive	Parameter	Value
(1) MPH_SYNC_REQ	cs	CS_STOP_BCCH_READING
(2) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_DUAL
(4) MPHC_INIT_L1_REQ	radio_band_config	STD_DUAL
(5) MPHC_INIT_L1_CON	param	NOT_USED
(6) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(7) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(9) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(10) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(11) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(12) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(13) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(14) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(15) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(16) MPH_POWER_CNF	num_of_chan arfcn rx_lev	CHANNELS_8 ARFCN_DUAL_WITH_STD RXLEV_DUAL

History:	24.01.00	MPA	Initial
	17.05.02	MSB	change arfcn's
	21.05.02	MSB	add MPHC_INIT_L1_REQ/CON

4.5.16 ALR644: Stop Idle Mode by Normal Cell Selection

Description: The idle mode is stopped if a normal cell selection is initiated.

Preamble: ALR613

(1)	MPH_POWER_REQ	
	=====>	
(2)	MPHC_STOP_SCELL_BCCH_REQ	
	=====>	
(3)	MPHC_STOP_CCCH_REQ	
	=====>	
(4)	MPHC_STOP_RXLEV_PERIODIC_REQ	
	=====>	
(5)	MPHC_STOP_SCELL_BCCH_REQ	
	=====>	
(6)	MPHC_INIT_L1_REQ	
	=====>	
(7)	MPHC_INIT_L1_CON	
	<=====	
(8)	MPHC_RXLEV_REQ	
	=====>	

Parametrization

Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_DUAL
(2) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPHC_STOP_CCCH_REQ	param	NOT_USED
(4) MPHC_STOP_RXLEV_PERIODIC_REQ	param	NOT_USED
(5) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(6) MPHC_INIT_L1_REQ	radio_band_config	STD_DUAL
(7) MPHC_INIT_L1_CON	param	NOT_USED
(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED

History:	24.01.00	MPA	Initial
	17.05.02	MSB	add parameter 'freq_bands'
	21.05.02	MSB	add MPHC_INIT_L1_REQ/CON
	29.10.02	DL	MPHC_STOP_NCELL_SYNC/BCCH_REQ removed

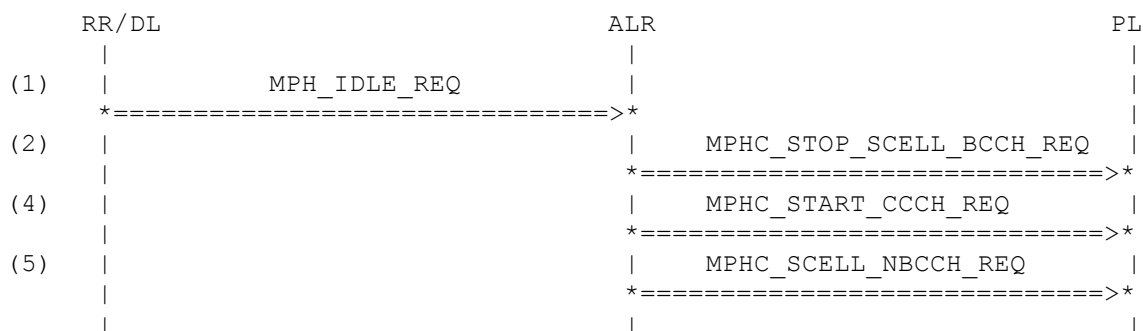
4.6 Page Mode Change

4.6.1 ALR020: Initiation with Paging Reorganisation

Description: The idle mode is configured by RR. Layer 1 is configured with MPHC_START_CCCH_REQ.

Preamble: ALR007

Variants: <A>..



Primitive	Parameter	Value
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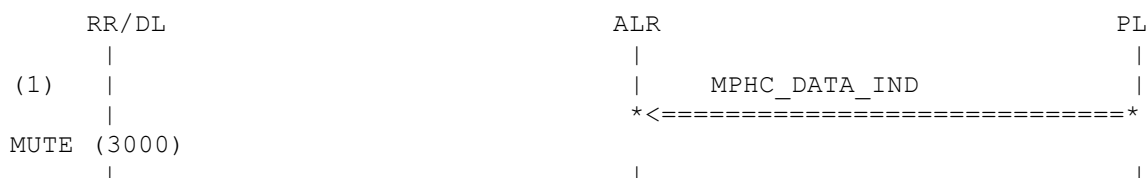
(1) MPH_IDLE_REQ			
		mod	MODE_CELL_SELECTION
		arfcn	ARFCN_23
		ext_bcch	NOT_USED
		comb_ccch	COMB_CCCH_COMB
<A>		tn	TN_0
		tn	TN_4
		dlt	DLT_24
		pg	PG_23
		bs_ag_blocks_res	BS_AG_BLKs_RES_2
		bs_pa_mfrms	BS_PA_MFRMS_5
		power	POWER_12
		ncc_permitted	NOT_PRESENT_8BIT
		reorg_only	NOT_USED
		eotd_avail	EOTD_NOT_PRES
		gprs_support	NOT_USED
(2) MPHC_STOP_SCELL_BCCH_REQ			
		param	NOT_USED
(3) MPHC_START_CCCH_REQ			
		bs_pa_mfrms	BS_PA_MFRMS_7
		bs_ag_blk_s_res	BS_AG_BLKs_RES_2
		bcch_combined	COMB_CCCH_COMB
<A>		ccch_group	CCCH_GROUP_0
		ccch_group	CCCH_GROUP_2
		page_group	PG_23
		page_block_index	PBI_0
		page_mode	PGM_REORG
(4) MPHC_SCELL_NBCCH_REQ			
		schedule_array_size	SCHED_SIZE_1
		schedule_array	NOT_USED
History:			
	07.10.99	MPA	Initial
	19.07.01	MSB	use full sc bcch read MPHC_SCELL_NBCCH_REQ instead of periodical
	26.09.02	DL	E-OTD changes (MPH_IDLE_REQ)
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.6.2 ALR022: Page Mode Change, Paging Reorganisation

Description: The idle mode is configured with Paging Reorganisation. After reception of a new paging mode this information is forwarded to PL. The message contain the following page modi:

Variant A: Extended Paging
Variant B: Paging Reorganisation
Variant C: Same as before
No reaction is expected.

Preamble: ALR020A
Variants: <A>...<C>



Parametrization

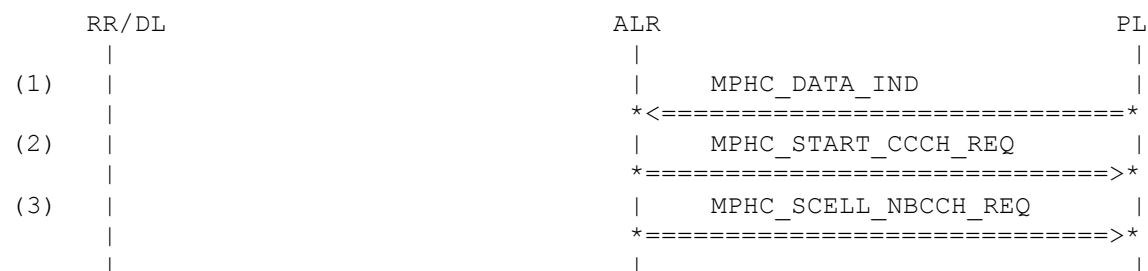
Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
<A>	l2_frame	L2_PAGING_REQ_1_EXT
	l2_frame	L2_PAGING_REQ_1_REO
<C>	l2_frame	L2_PAGING_REQ_1_SAB
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

History: 07.10.99 MPA Initial

4.6.3 ALR023: Page Mode Change, Normal Paging to Extended Paging

Description: The idle mode is configured with Normal Paging. After reception of the new paging mode Extended Paging this information is forwarded to the lower layer. The new paging mode is configured for layer 1.

Preamble: ALR025



Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAGING_REQ_1_EXT
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

(2) MPHC_START_CCCH_REQ

bs_pa_mfrms	BS_PA_MFRMS_7
bs_ag_blks_res	BS_AG_BLKES_RES_2
bcch_combined	COMB_CCCH_COMB
ccch_group	CCCH_GROUP_2
page_group	PG_23
page_block_index	PBI_0
page_mode	PGM_EXTENDED

(3) MPHC_SCELL_NBCCH_REQ

	schedule_array_size
PERIODIC_SCELL_BCCH_ARRAY_SIZE	
	schedule_array
PERIODIC_SCELL_BCCH_ARRAY	

History:	07.10.99	MPA	Initial
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.6.4 ALR024: Page Mode Change, Normal Paging to Paging Reorganisation

Description: The idle mode is configured with Normal Paging. After reception of the new paging mode Paging Reorganisation this information is forwarded to PL. The new paging mode is configured for layer 1.

Preamble: ALR025

RR/DL	ALR	PL
(1)	MPHC_DATA_IND	
(2)	MPHC_START_CCCH_REQ	
(6)	MPHC_SCELL_NBCCH_REQ	

Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAGING_REQ_1_REO
	tc	TC_0
	ccch_leve	NOT_USED
	fn	FN_OFFSET_0
(2) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_2
	bs_ag_blks_res	BS_AG_BLKES_RES_7
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_0
	page_block_index	PBI_0
	page_mode	PGM_REORG
(11) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED

History:	07.10.99	MPA	Initial
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.6.5 ALR025: Page Mode Change, Back to Normal Paging

Description: The idle mode has been configured for normal paging. After a swap to Paging Reorganisation RR re-configures normal paging.

Preamble: ALR020B

RR/DL	ALR	PL
(1)	MPHC_DATA_IND	
(2)	MPHC_START_CCCH_REQ	
(3)	MPHC_SCELL_NBCCH_REQ	

Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAGING_REQ_1
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(2) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_7
	bs_ag_blks_res	BS_AG_BLK_RES_2
	bcch_combined	COMB_CCCH_COMB
	ccch_group	CCCH_GROUP_2
	page_group	PG_23
	page_block_index	PBI_0
	page_mode	PGM_NORMAL
(3) MPHC_SCELL_NBCCH_REQ	schedule_array_size	
	PERIODIC_SCELL_BCCH_ARRAY_SIZE	
	schedule_array	
	PERIODIC_SCELL_BCCH_ARRAY	

History:	07.10.99	MPA	Initial
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.6.6 ALR026: Page Mode Change, Normal Paging

Description: The idle mode is configured with Normal Paging. The messages contain the following page modi:

Variant A: Normal Paging
Variant B: Same as before.
No reaction is expected.

Preamble: ALR025

Variants: <A>...

	RR/DL		ALR		PL
(1)				MPHC_DATA_IND	
				*<=====	
MUTE	(3000)				

Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
<A>	l2_frame	L2_PAGING_REQ_1
	l2_frame	L2_PAGING_REQ_1_SAB
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

History: 07.10.99 MPA Initial

4.6.7 ALR027: Page Mode Change, Extended Paging a second time

Description: The idle mode has been configured for normal paging. After a swap to Extended Paging this mode is configured a second time.

Variant A: Extended Paging

Variant B: Same as before

Layer 1 must not configured the second time, because it's a continues process in ALR(MPHC).

Preamble: ALR025

Variants: <A>...

	RR/DL		ALR		PL
(1)				MPHC_DATA_IND	
				*<=====	
(2)				MPHC_START_CCCH_REQ	
				*=====	
(3)				MPHC_SCELL_NBCCH_REQ	
				*=====	
(4)				MPHC_DATA_IND	
				*<=====	
MUTE	(3000)				

Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAGING_REQ_1_EXT
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(2) MPHC_START_CCCH_REQ		
	bs_pa_mfrms	BS_PA_MFRMS_7
	bs_ag_blks_res	BS_AG_BLKS_RES_2
	bcch_combined	COMB_CCCH_COMB
	ccch_group	CCCH_GROUP_2

	page_group	PG_23
	page_block_index	PBI_0
	page_mode	PGM_EXTENDED
(3) MPHC_SCELL_NBCCH_REQ	schedule_array_size	
PERIODIC_SCELL_BCCH_ARRAY_SIZE	schedule_array	
PERIODIC_SCELL_BCCH_ARRAY		
(4) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
<A>	l2_frame	L2_PAGING_REQ_1_EXT
	l2_frame	L2_PAGING_REQ_1_SAB
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

History:	07.10.99	MPA	Initial
	20.06.01	MSB	Layer 1 must not configured the second time
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.6.8 ALR028: Page Mode Change, Extended Paging to Paging Reorganisation

Description: The idle mode has been configured for normal paging. After a swap to extended paging paging reorganisation is configured.

Preamble: ALR025

RR/DL	ALR	PL
(1)	MPHC_DATA_IND	
(2)	MPHC_START_CCCH_REQ	
(3)	MPHC_SCELL_NBCCH_REQ	
(4)	MPHC_DATA_IND	
(5)	MPHC_START_CCCH_REQ	
(6)	MPHC_SCELL_NBCCH_REQ	

Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAGING_REQ_1_EXT
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(2) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_7
	bs_ag_blks_res	BS_AG_BLK_RES_2

bcch_combined	COMB_CCCH_COMB
ccch_group	CCCH_GROUP_2
page_group	PG_23
page_block_index	PBI_0
page_mode	PGM_EXTENDED

(3) MPHC_SCELL_NBCCH_REQ

PERIODIC_SCELL_BCCH_ARRAY_SIZE	schedule_array_size
PERIODIC_SCELL_BCCH_ARRAY	schedule_array

(4) MPHC_DATA_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_PCH
error_flag	VALID_BLOCK
l2_frame	L2_PAGING_REQ_1_REO
tc	TC_0
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(5) MPHC_START_CCCH_REQ

bs_pa_mfrms	BS_PA_MFRMS_2
bs_ag_blks_res	BS_AG_BLKES_RES_7
bcch_combined	COMB_CCCH_NOT_COMB
ccch_group	CCCH_GROUP_0
page_group	PG_0
page_block_index	PBI_0
page_mode	PGM_REORG

(12) MPHC_SCELL_NBCCH_REQ

schedule_array_size	SCHED_SIZE_1
schedule_array	NOT_USED

History:	07.10.99	MPA	Initial
	20.06.01	MSB	Normal paging will be configure with 025
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.6.9 ALR029: Page Mode Change, Extended Paging to Normal Paging

Description: The idle mode has been configured for normal paging. After reception of the new paging mode normal paging this mode is configured.

Preamble: ALR025

RR/DL	ALR	PL
(1)	MPHC_DATA_IND	
	<=====	
(2)	MPHC_START_CCCH_REQ	
	=====>	
(3)	MPHC_SCELL_NBCCH_REQ	
	=====>	
(4)	MPHC_DATA_IND	
	<=====	
(5)	MPHC_START_CCCH_REQ	
	=====>	
(6)	MPHC_SCELL_NBCCH_REQ	

| | *=====>*

Parametrization

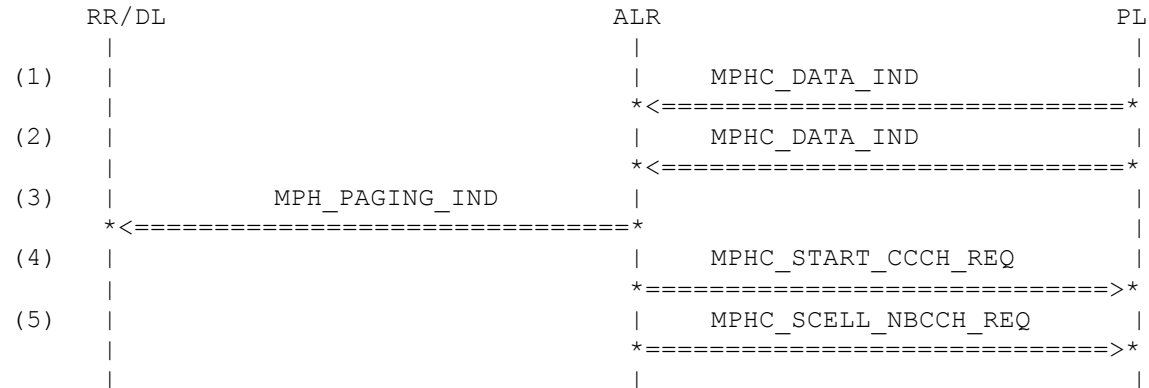
Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAGING_REQ_1_EXT
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(2) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_7
	bs_ag_blks_res	BS_AG_BLK_RES_2
	bcch_combined	COMB_CCCH_COMB
	ccch_group	CCCH_GROUP_2
	page_group	PG_23
	page_block_index	PBI_0
	page_mode	PGM_EXTENDED
(3) MPHC_SCELL_NBCCH_REQ	schedule_array_size	
PERIODIC_SCELL_BCCH_ARRAY_SIZE	schedule_array	
PERIODIC_SCELL_BCCH_ARRAY		
(4) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAGING_REQ_1
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(5) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_7
	bs_ag_blks_res	BS_AG_BLK_RES_2
	bcch_combined	COMB_CCCH_COMB
	ccch_group	CCCH_GROUP_2
	page_group	PG_23
	page_block_index	PBI_0
	page_mode	PGM_NORMAL
(6) MPHC_SCELL_NBCCH_REQ	schedule_array_size	
PERIODIC_SCELL_BCCH_ARRAY_SIZE	schedule_array	
PERIODIC_SCELL_BCCH_ARRAY		

History:	07.10.99	MPA	Initial
	20.06.01	MSB	reconfiguration to normal paging
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.6.10 ALR700: Page Mode Change according 26.6.2.3.1

Description: The idle mode is configured with Paging Reorganisation. After reception of the paging mode Paging Reorganisation no change occurs (received with an immediate assignment extended message. Then the mobile is paged with a paging request 2 message. It is expected that the paging is detected by the mobile.

Preamble: ALR013



Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_IMM_ASS_EXT_REO
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(2) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAG_2_T1_A
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(3) MPH_PAGING_IND	identity_type	ID_TMSI
	channel_needed	CN_ANY_CHAN
(4) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_8
	bs_ag_blks_res	BS_AG_BLKS_RES_3
	bcch_combined	COMB_CCCH_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_0
	page_mode	PGM_NORMAL
(5) MPHC_SCELL_NBCCH_REQ	schedule_array_size	
	PERIODIC_SCELL_BCCH_ARRAY_SIZE	
	schedule_array	
	PERIODIC_SCELL_BCCH_ARRAY	

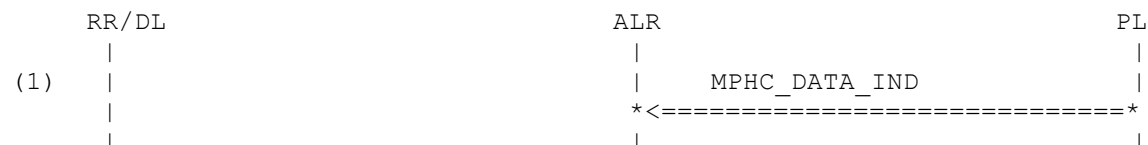
History: 07.10.99 MPA Initial
07.04.03 MSB MPHC_SCELL_NBCCH_REQ after
MPHC_START_CCCH_REQ included

4.7 Paging

4.7.1 ALR070: Paging Req 1, Empty Paging Message

Description: The MS is in idle mode. It receives an empty paging message. The message content is not forwarded to RR.

Preamble: ALR013



Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAG_1_EMPTY
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

History: 08.10.99 MPA Initial

4.7.2 ALR071: Paging Req 1, IMSI / TMSI for MS

Description: The MS is in idle mode. It receives a paging message corresponding to the actual IMSI or TMSI. A paging indication is forwarded to RR.

Variant A: IMSI mobile identity 1, any channel needed

Variant B: IMSI mobile identity 2, any channel needed

Variant C: TMSI mobile identity 1, TCH/F channel needed

Variant D: TMSI mobile identity 2, TCH/F channel needed

Variant E: IMSI mobile identity 1, SDCCH channel needed

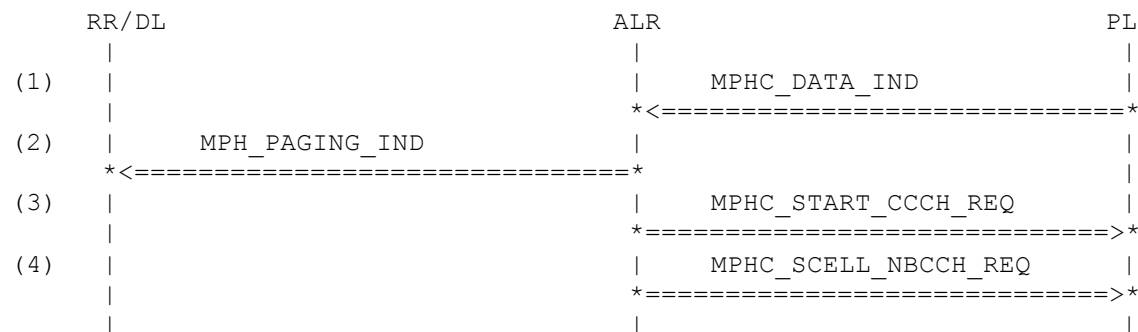
Variant F: IMSI mobile identity 2, SDCCH channel needed

Variant G: TMSI mobile identity 1, Dual Rate channel needed

Variant H: TMSI mobile identity 2, Dual Rate channel needed

Preamble: ALR013

Variants: <A>..<>H>



Parametrization

Primitive	Parameter	Value
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(1) MPHC_DATA_IND

	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
<A>	l2_frame	L2_PAG_1_I1_A
	l2_frame	L2_PAG_1_I2_A
<C>	l2_frame	L2_PAG_1_T1_T
<D>	l2_frame	L2_PAG_1_T2_T
<E>	l2_frame	L2_PAG_1_I1_S
<F>	l2_frame	L2_PAG_1_I2_S
<G>	l2_frame	L2_PAG_1_T1_D
<H>	l2_frame	L2_PAG_1_T2_D
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

(2) MPH_PAGING_IND

<A>	identity_type	ID_TYPE_IMSI
	identity_type	ID_TYPE_IMSI
<C>	identity_type	ID_TYPE_TMSI
<D>	identity_type	ID_TYPE_TMSI
<E>	identity_type	ID_TYPE_IMSI
<F>	identity_type	ID_TYPE_IMSI
<G>	identity_type	ID_TYPE_TMSI
<H>	identity_type	ID_TYPE_TMSI
<A>	channel_needed	CN_ANY_CHAN
	channel_needed	CN_ANY_CHAN
<C>	channel_needed	CN_TCH_F
<D>	channel_needed	CN_TCH_F
<E>	channel_needed	CN_SDCCH
<F>	channel_needed	CN_SDCCH
<G>	channel_needed	CN_TCH
<H>	channel_needed	CN_TCH

(3) MPHC_START_CCCH_REQ

bs_pa_mfrms	BS_PA_MFRMS_8
bs_ag_blks_res	BS_AG_BLK_RES_3
bcch_combined	COMB_CCCH_COMB
ccch_group	CCCH_GROUP_0
page_group	PG_20
page_block_index	PBI_0
page_mode	PGM_NORMAL

(4) MPHC_CELL_NBCCH_REQ

	schedule_array_size
PERIODIC_CELL_BCCH_ARRAY_SIZE	
	schedule_array
PERIODIC_CELL_BCCH_ARRAY	

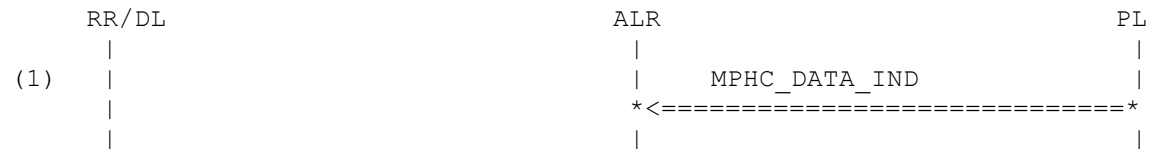
History:	08.10.99	MPA	Initial
	07.04.03	MSB	MPHC_CELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.7.3 ALR072: Paging Req 1, Not for MS

Description: The MS is in idle mode. It receives paging request type 1 messages. The message content is not forwarded to RR, because the message content doesn't match to the MS identities.

Variant A: wrong IMSI mobile identity 1

Variant B: wrong TMSI mobile identity 1
Variant C: wrong IMSI mobile identity 2
Variant D: wrong TMSI mobile identity 2
Variant E: wrong type mobile identity 2
Preamble: ALR013
Variants: <A>..<>E>



Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
<A>	l2_frame	L2_PAG_1_WI1
	l2_frame	L2_PAG_1_WT1
<C>	l2_frame	L2_PAG_1_WI2
<D>	l2_frame	L2_PAG_1_WT2
<E>	l2_frame	L2_PAG_1_WTYPE
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

History: 08.10.99 MPA Initial

4.7.4 ALR073: Paging Req 1, Short IMSI / TMSI for MS

Description: The MS is in idle mode. It receives a paging message corresponding to the actual IMSI or TMSI. A paging indication is forwarded to RR. The IMSI is less than 15 digits and the TMSI has only one valid byte, but is signalled in different ways by the infrastructure

Variant A: Short TMSI mobile identity 1, any channel needed, 1 byte length from the network

Variant B: Short TMSI mobile identity 2, TCH/F needed, 3 bytes length from the network

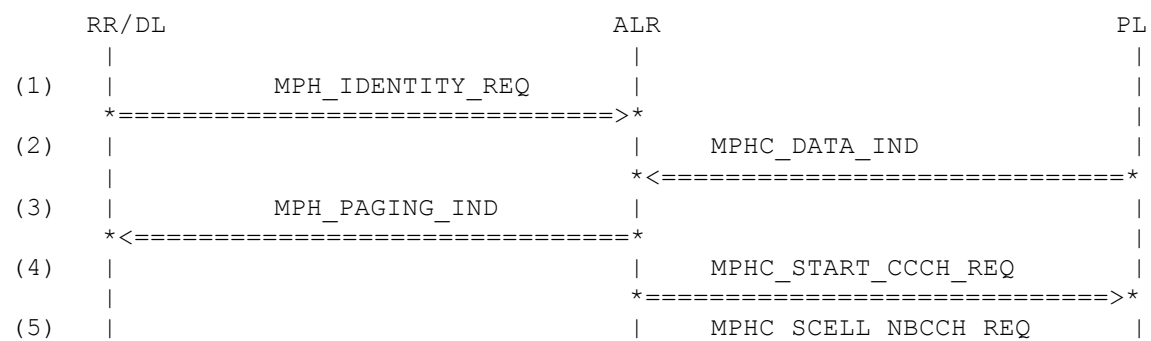
Variant C: Short IMSI mobile identity 1, SDCCH needed, 10 digits

Variant D: Short IMSI mobile identity 2, Dual Rate needed, 10 digits

Variant E: Short TMSI mobile identity 1, any channel needed, 2 bytes length from the network

Variant F: Short TMSI mobile identity 2, TCH/F needed, 4 bytes length from the network

Preamble: ALR013
Variants: <A>..<>F>



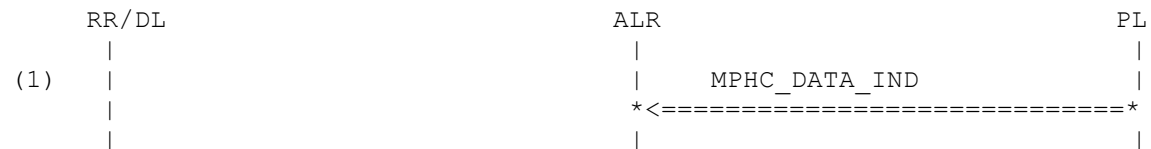
		=====>
Parametrization		
Primitive	Parameter	Value
(1) MPH_IDENTITY_REQ	mid	MS_ID_SHORT_IMSI_TMSI
(2) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
<A>	l2_frame	L2_PAG_1_ST1_A1
	l2_frame	L2_PAG_1_ST2_T3
<C>	l2_frame	L2_PAG_1_SI1_S
<D>	l2_frame	L2_PAG_1_SI2_D
<E>	l2_frame	L2_PAG_1_ST1_A2
<F>	l2_frame	L2_PAG_1_ST2_T4
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(3) MPH_PAGING_IND	identity_type	ID_TYPE_TMSI
<A>	identity_type	ID_TYPE_TMSI
	identity_type	ID_TYPE_TMSI
<C>	identity_type	ID_TYPE_IMSI
<D>	identity_type	ID_TYPE_IMSI
<E>	identity_type	ID_TYPE_TMSI
<F>	identity_type	ID_TYPE_TMSI
<A>	channel_needed	CN_ANY_CHAN
	channel_needed	CN_TCH_F
<C>	channel_needed	CN_SDCCH
<D>	channel_needed	CN_TCH
<E>	channel_needed	CN_ANY_CHAN
<F>	channel_needed	CN_TCH_F
(4) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_8
	bs_ag_blks_res	BS_AG_BLK_RES_3
	bcch_combined	COMB_CCCH_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_0
	page_mode	PGM_NORMAL
(5) MPHC_SCELL_NBCCH_REQ	schedule_array_size	
	PERIODIC_SCELL_BCCH_ARRAY_SIZE	
	schedule_array	
	PERIODIC_SCELL_BCCH_ARRAY	

History:	08.10.99	MPA	Initial
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ moved

4.7.5 ALR074: Paging Req 2, Empty Paging Message

Description: The MS is in idle mode. It receives an empty paging message. The message content is not forwarded to RR.

Preamble: ALR013



Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAG_2_EMPTY
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

History: 08.10.99 MPA Initial

4.7.6 ALR075: Paging Req 2, TMSI for MS (Mobile Identity 1 or 2)

Description: The MS is in idle mode. It receives a paging message corresponding to the actual TMSI in the information elements mobile identity 1 or 2. A paging indication is forwarded to RR.

Variant A: TMSI mobile identity 1, any channel needed

Variant B: TMSI mobile identity 1, SDCCH needed

Variant C: TMSI mobile identity 1, TCH/F needed

Variant D: TMSI mobile identity 1, Dual Rate needed

Variant E: TMSI mobile identity 2, any channel needed

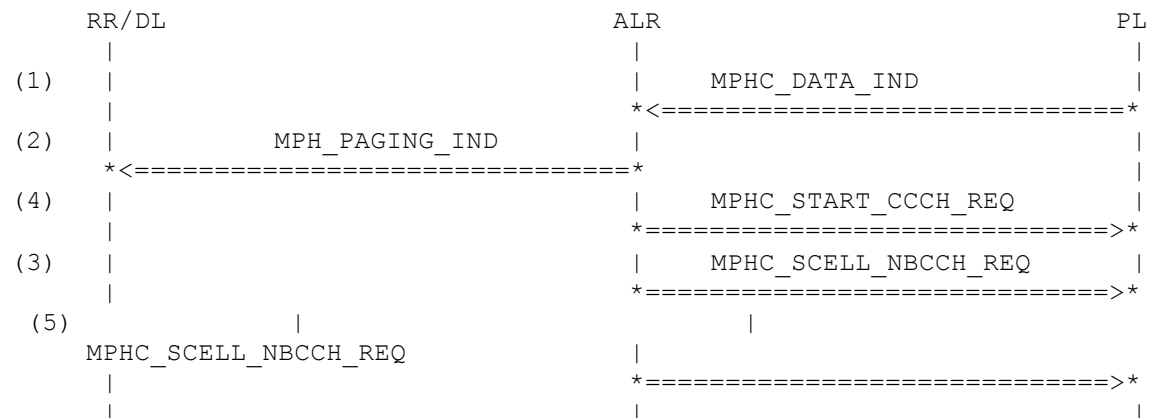
Variant F: TMSI mobile identity 2, SDCCH needed

Variant G: TMSI mobile identity 2, TCH/F needed

Variant H: TMSI mobile identity 2, Dual Rate needed

Preamble: ALR013

Variants: <A>..<>H>



Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
<A>	l2_frame	L2_PAG_2_T1_A
	l2_frame	L2_PAG_2_T1_S
<C>	l2_frame	L2_PAG_2_T1_T
<D>	l2_frame	L2_PAG_2_T1_D
<E>	l2_frame	L2_PAG_2_T2_A

<F>	l2_frame	L2_PAG_2_T2_S
<G>	l2_frame	L2_PAG_2_T2_T
<H>	l2_frame	L2_PAG_2_T2_D
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

(2) MPH_PAGING_IND

	identity_type	ID_TYPE_TMSI
<A>	channel_needed	CN_ANY_CHAN
	channel_needed	CN_SDCCH
<C>	channel_needed	CN_TCH_F
<D>	channel_needed	CN_TCH
<E>	channel_needed	CN_ANY_CHAN
<F>	channel_needed	CN_SDCCH
<G>	channel_needed	CN_TCH_F
<H>	channel_needed	CN_TCH

(3) MPHC_START_CCCH_REQ

bs_pa_mfrms	BS_PA_MFRMS_8
bs_ag_blks_res	BS_AG_BLKES_RES_3
bcch_combined	COMB_CCCH_COMB
ccch_group	CCCH_GROUP_0
page_group	PG_20
page_block_index	PBI_0
page_mode	PGM_NORMAL

(4) MPHC_SCELL_NBCCH_REQ

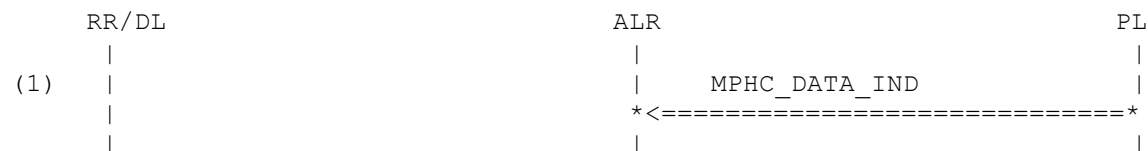
	schedule_array_size
PERIODIC_SCELL_BCCH_ARRAY_SIZE	
	schedule_array
PERIODIC_SCELL_BCCH_ARRAY	

History:	08.10.99	MPA	Initial
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ moved

4.7.7 ALR076: Paging Req 2, Not for MS

Description: The MS is in idle mode. It receives paging request type 2 messages. The message content is not forwarded to RR, because the message content doesn't match to the MS identities.

Preamble: ALR013



Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAG_2_WRONG
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

History: 08.10.99 MPA Initial

4.7.8 ALR077: Paging Req 2, IMSI / TMSI for MS (Mobile Identity 3)

Description: The MS is in idle mode. It receives a paging request type 2 message corresponding to the actual IMSI or TMSI in information element in the information element mobile identity 3. A paging indication is forwarded to RR.

Variant A: IMSI mobile identity 3, any channel needed

Variant B: IMSI mobile identity 3, SDCCH needed

Variant C: IMSI mobile identity 3, TCH/F needed

Variant D: IMSI mobile identity 3, Dual Rate needed

Variant E: IMSI mobile identity 3, no channel indication

Variant F: TMSI mobile identity 3, any channel needed

Variant G: TMSI mobile identity 3, SDCCH needed,

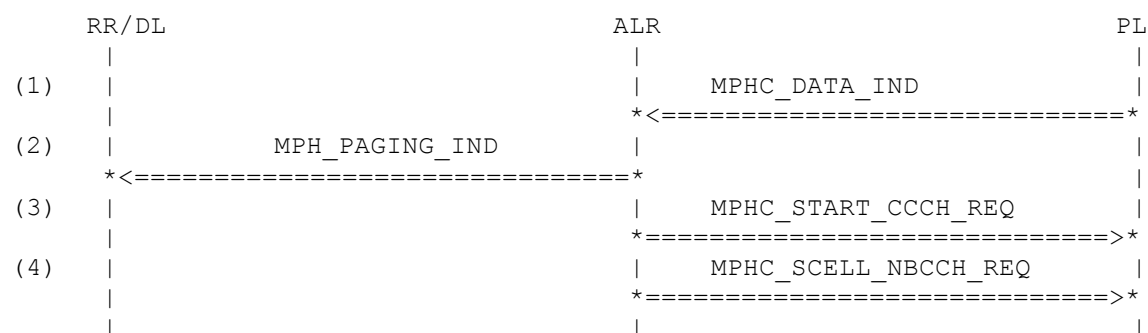
Variant H: TMSI mobile identity 3, TCH/F needed

Variant I: TMSI mobile identity 3, Dual Rate needed

Variant J: TMSI mobile identity 3, no channel indication

Preamble: ALR013

Variants: <A>..<>J>



Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
<A>	l2_frame	L2_PAG_2_I3_A
	l2_frame	L2_PAG_2_I3_S
<C>	l2_frame	L2_PAG_2_I3_T
<D>	l2_frame	L2_PAG_2_I3_D
<E>	l2_frame	L2_PAG_2_I3_N
<F>	l2_frame	L2_PAG_2_T3_A
<G>	l2_frame	L2_PAG_2_T3_S
<H>	l2_frame	L2_PAG_2_T3_T
<I>	l2_frame	L2_PAG_2_T3_D
<J>	l2_frame	L2_PAG_2_T3_N
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(2) MPH_PAGING_IND		
<A>	identity_type	ID_TYPE_IMSI
	identity_type	ID_TYPE_IMSI
<C>	identity_type	ID_TYPE_IMSI
<D>	identity_type	ID_TYPE_IMSI
<E>	identity_type	ID_TYPE_IMSI
<F>	identity_type	ID_TYPE_TMSI
<G>	identity_type	ID_TYPE_TMSI

<H>	identity_type	ID_TYPE_TMSI	
<I>		identity_type ID_TYPE_TMSI	
<J>	identity_type	ID_TYPE_TMSI	
<A>	channel_needed	CN_ANY_CHAN	
	channel_needed	CN_SDCCH	
<C>	channel_needed	CN_TCH_F	
<D>	channel_needed	CN_TCH	
<E>	channel_needed	CN_ANY_CHAN	
<F>	channel_needed	CN_ANY_CHAN	
<G>	channel_needed	CN_SDCCH	
<H>	channel_needed	CN_TCH_F	
<I>		channel_needed	CN_TCH
<J>	channel_needed	CN_ANY_CHAN	

(3) MPHC_START_CCCH_REQ

bs_pa_mfrms	BS_PA_MFRMS_8
bs_ag_blks_res	BS_AG_BLK_RES_3
bcch_combined	COMB_CCCH_COMB
ccch_group	CCCH_GROUP_0
page_group	PG_20
page_block_index	PBI_0
page_mode	PGM_NORMAL

(4) MPHC_SCELL_NBCCH_REQ

	schedule_array_size
PERIODIC_CELL_BCCH_ARRAY_SIZE	
	schedule_array
PERIODIC_CELL_BCCH_ARRAY	

History:	08.10.99	MPA	Initial
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.7.9 ALR078: Paging Req 2, Short IMSI / TMSI for MS (Mobile Identity 3)

Description: The MS is in idle mode. It receives a paging request type 2 message corresponding to the actual IMSI or TMSI in information element in the information element mobile identity 3. A paging indication is forwarded to RR. The IMSI is less than 15 digits and the TMSI has only one valid byte, but is signalled in different ways by the infrastructure

Variant A: Short IMSI mobile identity 3, any channel needed, 10 digits

Variant B: Short TMSI mobile identity 3, SDCCH needed, 1 byte from the network

Variant C: Short TMSI mobile identity 3, TCH/F needed, 2 bytes from the network

Variant D: Short TMSI mobile identity 3, Dual Rate needed, 3 bytes from the network

Variant E: Short TMSI mobile identity 3, No channel indication, 4 bytes from the network

Preamble: ALR013

Variants: <A>..<E>

	RR/DL	ALR	PL
(1)	MPH_IDENTITY_REQ		
	=====>		
(2)		MPHC_DATA_IND	
		<=====	
(3)	MPH_PAGING_IND		
	<=====		
(4)		MPHC_START_CCCH_REQ	
		=====>	
(5)		MPHC_SCELL_NBCCH_REQ	

		=====>
Parameterization		
Primitive	Parameter	Value
(1) MPH_IDENTITY_REQ	mid	MS_ID_SHORT_IMSI_TMSI
(2) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
<A>	l2_frame	L2_PAG_2_SI3_A
	l2_frame	L2_PAG_2_ST3_S
<C>	l2_frame	L2_PAG_2_ST3_T
<D>	l2_frame	L2_PAG_2_ST3_D
<E>	l2_frame	L2_PAG_2_ST3_N
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(3) MPH_PAGING_IND	identity_type	ID_TYPE_IMSI
<A>	identity_type	ID_TYPE_TMSI
	identity_type	ID_TYPE_TMSI
<C>	identity_type	ID_TYPE_TMSI
<D>	identity_type	ID_TYPE_TMSI
<E>	identity_type	ID_TYPE_TMSI
<A>	channel_needed	CN_ANY_CHAN
	channel_needed	CN_SDCCH
<C>	channel_needed	CN_TCH_F
<D>	channel_needed	CN_TCH
<E>	channel_needed	CN_ANY_CHAN
(4) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_8
	bs_ag_blks_res	BS_AG_BLK_RES_3
	bcch_combined	COMB_CCCH_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_0
	page_mode	PGM_NORMAL
(5) MPHC_SCELL_NBCCH_REQ	schedule_array_size	
	PERIODIC_SCELL_BCCH_ARRAY_SIZE	
	schedule_array	
	PERIODIC_SCELL_BCCH_ARRAY	

History: 08.10.99 MPA Initial
07.04.03 MSB MPHC_SCELL_NBCCH_REQ after
MPHC_START_CCCH_REQ included

4.7.10 ALR079: Paging Req 3, Empty Paging Message

Description: The MS is in idle mode. It receives an empty paging message. The message content is not forwarded to RR.

Preamble: ALR013

RR/DL	ALR	PL
(1)	MPHC_DATA_IND	

		<=====
Parametrization		
Primitive	Parameter	Value
(1) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAG_3_EMPTY
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

History: 08.10.99 MPA Initial

4.7.11 ALR080: Paging Req 3, TMSI for MS

Description: The MS is in idle mode. It receives a paging message corresponding to the actual TMSI in the information elements mobile identity 1 to 4. A paging indication is forwarded to RR.

Variant A: TMSI mobile identity 1, any channel needed

Variant B: TMSI mobile identity 1, SDCCH needed

Variant C: TMSI mobile identity 1, TCH/F needed

Variant D: TMSI mobile identity 1, Dual Rate needed

Variant E: TMSI mobile identity 2, any channel needed

Variant F: TMSI mobile identity 2, SDCCH needed

Variant G: TMSI mobile identity 2, TCH/F needed

Variant H: TMSI mobile identity 2, Dual Rate needed

Variant I: TMSI mobile identity 3, any channel needed

Variant J: TMSI mobile identity 3, SDCCH needed

Variant K: TMSI mobile identity 3, TCH/F needed

Variant L: TMSI mobile identity 3, Dual Rate needed

Variant M: TMSI mobile identity 3, no channel indication

Variant N: TMSI mobile identity 4, any channel needed

Variant O: TMSI mobile identity 4, SDCCH needed

Variant P: TMSI mobile identity 4, TCH/F needed

Variant Q: TMSI mobile identity 4, Dual Rate needed

Variant R: TMSI mobile identity 4, no channel indication

Preamble: ALR013

Variants: <A>..

	RR/DL		ALR		PL
(1)				MPHC_DATA_IND	
				<=====	
(2)		MPH_PAGING_IND			
		<=====			
(3)				MPHC_START_CCCH_REQ	
				=====>	
(4)				MPHC_SCELL_NBCCH_REQ	
				=====>	

Parametrization		
Primitive	Parameter	Value
(1) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
<A>	l2_frame	L2_PAG_3_T1_A

	l2_frame	L2_PAG_3_T1_S
<C>	l2_frame	L2_PAG_3_T1_T
<D>	l2_frame	L2_PAG_3_T1_D
<E>	l2_frame	L2_PAG_3_T2_A
<F>	l2_frame	L2_PAG_3_T2_S
<G>	l2_frame	L2_PAG_3_T2_T
<H>	l2_frame	L2_PAG_3_T2_D
<I>		l2_frame L2_PAG_3_T3_A
<J>	l2_frame	L2_PAG_3_T3_S
<K>	l2_frame	L2_PAG_3_T3_T
<L>	l2_frame	L2_PAG_3_T3_D
<M>	l2_frame	L2_PAG_3_T3_N
<N>	l2_frame	L2_PAG_3_T4_A
<O>	l2_frame	L2_PAG_3_T4_S
<P>	l2_frame	L2_PAG_3_T4_T
<Q>	l2_frame	L2_PAG_3_T4_D
<R>	l2_frame	L2_PAG_3_T4_N
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

(2) MPH_PAGING_IND

<A>	identity_type	ID_TYPE_TMSI
	channel_needed	CN_ANY_CHAN
<C>	channel_needed	CN_SDCCH
<D>	channel_needed	CN_TCH_F
<E>	channel_needed	CN_TCH
<F>	channel_needed	CN_ANY_CHAN
<G>	channel_needed	CN_SDCCH
<H>	channel_needed	CN_TCH_F
<I>		CN_TCH
	CN_ANY_CHAN	channel_needed
<J>	channel_needed	CN_SDCCH
<K>	channel_needed	CN_TCH_F
<L>	channel_needed	CN_TCH
<M>	channel_needed	CN_ANY_CHAN
<N>	channel_needed	CN_ANY_CHAN
<O>	channel_needed	CN_SDCCH
<P>	channel_needed	CN_TCH_F
<Q>	channel_needed	CN_TCH
<R>	channel_needed	CN_ANY_CHAN

(3) MPHC_START_CCCH_REQ

bs_pa_mfrms	BS_PA_MFRMS_8
bs_ag_blks_res	BS_AG_BLK_RES_3
bcch_combined	COMB_CCCH_COMB
ccch_group	CCCH_GROUP_0
page_group	PG_20
page_block_index	PBI_0
page_mode	PGM_NORMAL

(4) MPHC_SCELL_NBCCH_REQ

	schedule_array_size
PERIODIC_SCELL_BCCH_ARRAY_SIZE	
	schedule_array
PERIODIC_SCELL_BCCH_ARRAY	

History: 08.10.99 MPA Initial

07.04.03

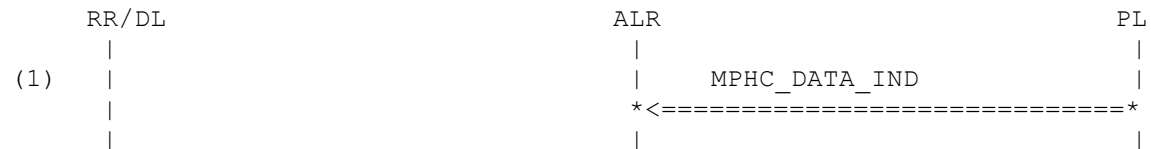
MSB

MPHC_SCELL_NBCCH_REQ after
MPHC_START_CCCH_REQ included

4.7.12 ALR081: Paging Req 3, Not for MS

Description: The MS is in idle mode. It receives paging request type 3 messages. The message content is not forwarded to RR, because the message content doesn't match to the MS identities.

Preamble: ALR013



Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAG_3_WRONG
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

History: 08.10.99 MPA Initial

4.8 Measurement Reporting

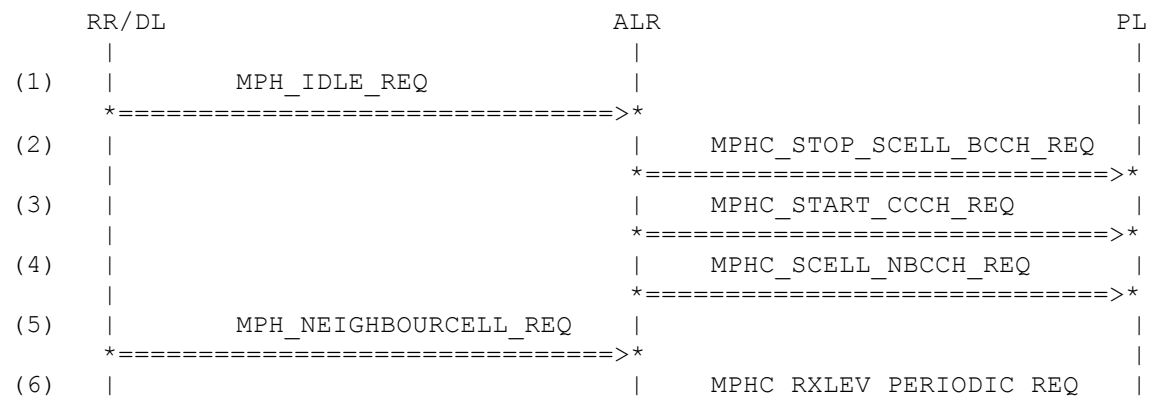
4.8.1 ALR030: Measurement Reporting, Configuration

Description: The idle mode is configured for different multiframe periods.

Variant A: bs_pa_mfrms = 2
Variant B: bs_pa_mfrms = 3
Variant C: bs_pa_mfrms = 4
Variant D: bs_pa_mfrms = 5
Variant E: bs_pa_mfrms = 6
Variant F: bs_pa_mfrms = 7
Variant G: bs_pa_mfrms = 8
Variant H: bs_pa_mfrms = 9

Preamble: ALR007

Variants: <A>...<H>



		=====>
Parameterization		
<u>Primitive</u>	<u>Parameter</u>	<u>Value</u>
(1) MPH_IDLE_REQ		
	mod	NOT_USED
	arfcn	ARFCN_23
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_24
	pg	PG_11
	bs_ag_blocks_res	BS_AG_BLKS_RES_2
<A>	bs_pa_mfrms	BS_PA_MFRMS_0
	bs_pa_mfrms	BS_PA_MFRMS_1
<C>	bs_pa_mfrms	BS_PA_MFRMS_2
<D>	bs_pa_mfrms	BS_PA_MFRMS_3
<E>	bs_pa_mfrms	BS_PA_MFRMS_4
<F>	bs_pa_mfrms	BS_PA_MFRMS_5
<G>	bs_pa_mfrms	BS_PA_MFRMS_6
<H>	bs_pa_mfrms	BS_PA_MFRMS_7
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED
(2) MPHC_STOP_SCELL_BCCH_REQ		
	param	NOT_USED
(3) MPHC_START_CCCH_REQ		
<A>	bs_pa_mfrms	BS_PA_MFRMS_2
	bs_pa_mfrms	BS_PA_MFRMS_3
<C>	bs_pa_mfrms	BS_PA_MFRMS_4
<D>	bs_pa_mfrms	BS_PA_MFRMS_5
<E>	bs_pa_mfrms	BS_PA_MFRMS_6
<F>	bs_pa_mfrms	BS_PA_MFRMS_7
<G>	bs_pa_mfrms	BS_PA_MFRMS_8
<H>	bs_pa_mfrms	BS_PA_MFRMS_9
	bs_ag_blk_res	BS_AG_BLKS_RES_2
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_11
	page_block_index	PBI_4
	page_mode	PGM_REORG
(4) MPHC_SCELL_NBCCH_REQ		
	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(5) MPH_NEIGHBOURCELL_REQ		
	multi_band	MULTI_BAND_0
	arfcn	EMPTY_NCELL_LIST
	sync_only	NOT_USED
(6) MPHC_RXLEV_PERIODIC_REQ		
	chan_list	CHLIST_23
	num_of_chans	CHANNELS_1
	ba_id	BA_ID_1
	next_radio_freq_measured	CHAN_LIST_IDX_0

History:	08.10.99	MPA	Initial
	07.02.02	LG	changed value for ba_id
	26.09.02	DL	E-OTD changes (MPH_IDLE_REQ)
	07.04.03	MSB	MPHC_CELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.8.2 ALR031: Measurement Reporting, BS_PA_MFRMS = 2

Description: Measurement reporting for the serving cell is tested. The multiframe period is set to two multiframes. It is expected that the initial report to RR is send after eleven reports of layer 1 and successive reports are send to RR after ten reports. The number of TDMA frames between measurement reports to RR is 102 TDMA frames which is equal to two multiframes.

Preamble: ALR030A

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
(2)	MPHC_RXLEV_PERIODIC_IND	
(3)	MPHC_RXLEV_PERIODIC_IND	
(4)	MPHC_RXLEV_PERIODIC_IND	
(5)	MPHC_RXLEV_PERIODIC_IND	
(6)	MPHC_RXLEV_PERIODIC_IND	
(7)	MPHC_RXLEV_PERIODIC_IND	
(8)	MPHC_RXLEV_PERIODIC_IND	
(9)	MPHC_RXLEV_PERIODIC_IND	
(10)	MPHC_RXLEV_PERIODIC_IND	
(11)	MPHC_RXLEV_PERIODIC_IND	
(12)	MPH_MEASUREMENT_IND	
(13)	MPHC_RXLEV_PERIODIC_IND	
(14)	MPHC_RXLEV_PERIODIC_IND	
(15)	MPHC_RXLEV_PERIODIC_IND	
(16)	MPHC_RXLEV_PERIODIC_IND	
(17)	MPHC_RXLEV_PERIODIC_IND	
(18)	MPHC_RXLEV_PERIODIC_IND	
(19)	MPHC_RXLEV_PERIODIC_IND	
(20)	MPHC_RXLEV_PERIODIC_IND	
(21)	MPHC_RXLEV_PERIODIC_IND	

```

(22) | | | *<=====
      | | | | MPHC_RXLEV_PERIODIC_IND |
      | | | *<=====
(23) | | MPH_MEASUREMENT_IND | |
      | *<=====
      | | |

```

Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(2) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(3) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(4) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(5) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(6) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(7) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(8) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(9) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1

(10) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(11) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(12) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_1020 NOT_USED NOT_USED
(13) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(14) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(15) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(16) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(17) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(18) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1

(19) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(20) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(21) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(22) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(23) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_102
ncells	NOT_USED
gprs_sync	NOT_USED

History:	08.10.99	MPA	Initial
	08.06.01	MSB	fn_offset in (12) corrected
	07.02.02	LG	changed value for ba_id

4.8.3 ALR032: Measurement Reporting, BS_PA_MFRMS = 3

Description: Measurement reporting for the serving cell is tested. The multiframe period is set to three multiframe. It is expected that the initial report to RR is send after eight reports of layer 1 and successive reports are send to RR after seven reports. The number of TDMA frames between measurement reports to RR is 153 TDMA frames which is equal to three multiframe.

Preamble: ALR030B

	RR/DL	ALR	PL
(1)			
		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(2)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(3)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(4)		MPHC_RXLEV_PERIODIC_IND	


```

(5) | | | *<=====
    | | | | MPHC_RXLEV_PERIODIC_IND |
    | | | *<=====
(6) | | | | MPHC_RXLEV_PERIODIC_IND |
    | | | *<=====
(7) | | | | MPHC_RXLEV_PERIODIC_IND |
    | | | *<=====
(8) | | | | MPHC_RXLEV_PERIODIC_IND |
    | | | *<=====
(9) | | MPH_MEASUREMENT_IND |
    | *<=====
(10) | | | | MPHC_RXLEV_PERIODIC_IND |
    | | | *<=====
(11) | | | | MPHC_RXLEV_PERIODIC_IND |
    | | | *<=====
(12) | | | | MPHC_RXLEV_PERIODIC_IND |
    | | | *<=====
(13) | | | | MPHC_RXLEV_PERIODIC_IND |
    | | | *<=====
(14) | | | | MPHC_RXLEV_PERIODIC_IND |
    | | | *<=====
(15) | | | | MPHC_RXLEV_PERIODIC_IND |
    | | | *<=====
(16) | | | | MPHC_RXLEV_PERIODIC_IND |
    | | | *<=====
(17) | | MPH_MEASUREMENT_IND |
    | *<=====
    | | |

```

Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(2) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(3) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(4) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(5) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1

(6) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(7) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(8) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(9) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_1071 NOT_USED NOT_USED
(10) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(11) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(12) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(13) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(14) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1

(15) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(16) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(17) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_153
ncells	NOT_USED
gprs_sync	NOT_USED

History:	08.10.99	MPA	Initial
	08.06.01	MSB	fn_offset in (9) corrected
	07.02.02	LG	changed value for ba_id

4.8.4 ALR033: Measurement Reporting, BS_PA_MFRMS = 4

Description: Measurement reporting for the serving cell is tested. The multiframe period is set to four multiframes. It is expected that the initial report to RR is send after six reports of layer 1 and successive reports are send to RR after five reports. The number of TDMA frames between measurement reports to RR is 204 TDMA frames which is equal to four multiframes.

Preamble: ALR030C

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
(2)	MPHC_RXLEV_PERIODIC_IND	
(3)	MPHC_RXLEV_PERIODIC_IND	
(4)	MPHC_RXLEV_PERIODIC_IND	
(5)	MPHC_RXLEV_PERIODIC_IND	
(6)	MPHC_RXLEV_PERIODIC_IND	
(7)	MPH_MEASUREMENT_IND	
(8)	MPHC_RXLEV_PERIODIC_IND	
(9)	MPHC_RXLEV_PERIODIC_IND	
(10)	MPHC_RXLEV_PERIODIC_IND	

```

(11) |                                     | MPH_C_RXLEV_PERIODIC_IND |
      |                                     | *<=====*              |
(12) |                                     | MPH_C_RXLEV_PERIODIC_IND |
      |                                     | *<=====*              |
(13) | MPH_MEASUREMENT_IND              |                           |
      | *<=====*                    |                           |
      |                               |                           |

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Parametrization

Primitive	Parameter	Value
(1) MPH_C_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPH_C_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(3) MPH_C_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(4) MPH_C_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(5) MPH_C_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(6) MPH_C_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(7) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_1020
	ncells	NOT_USED
	gprs_sync	NOT_USED
(8) MPH_C_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0

	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(9) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(10) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(11) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(12) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(13) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_204
	ncells	NOT_USED
	gprs_sync	NOT_USED

History:	08.10.99	MPA	Initial
	08.06.01	MSB	fn_offset in (7) corrected
	07.02.02	LG	changed value for ba_id

4.8.5 ALR034: Measurement Reporting, BS_PA_MFRMS = 5

Description: Measurement reporting for the serving cell is tested. The multiframe period is set to five multiframes. It is expected that the initial report to RR is send after five reports of layer 1 and successive reports are send to RR after four reports. The number of TDMA frames between measurement reports to RR is 255 TDMA frames which is equal to five multiframes.

Preamble: ALR030D

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
	<=====	
(2)	MPHC_RXLEV_PERIODIC_IND	
	<=====	
(3)	MPHC_RXLEV_PERIODIC_IND	

		<=====
(4)		MPHC_RXLEV_PERIODIC_IND
		<=====
(5)		MPHC_RXLEV_PERIODIC_IND
		<=====
(6)	MPH_MEASUREMENT_IND	
	<=====	
(7)		MPHC_RXLEV_PERIODIC_IND
		<=====
(8)		MPHC_RXLEV_PERIODIC_IND
		<=====
(9)		MPHC_RXLEV_PERIODIC_IND
		<=====
(10)		MPHC_RXLEV_PERIODIC_IND
		<=====
(11)	MPH_MEASUREMENT_IND	
	<=====	

Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(3) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(4) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(5) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(6) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_1020

	ncells	NOT_USED
	gprs_sync	NOT_USED
(7) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(8) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(9) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(10) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(11) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_255
	ncells	NOT_USED
	gprs_sync	NOT_USED

History:	08.10.99	MPA	Initial
	08.06.01	MSB	fn_offset in (6) corrected
	07.02.02	LG	changed value for ba_id

4.8.6 ALR035: Measurement Reporting, BS_PA_MFRMS = 6

Description: Measurement reporting for the serving cell is tested. The multiframe period is set to six multiframes. It is expected that the initial report to RR is send after five reports of layer 1 and successive reports are send to RR after three reports. The number of TDMA frames between measurement reports to RR is 306 TDMA frames which is equal to six multiframes.

Preamble: ALR030E

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
	<=====	
(2)	MPHC_RXLEV_PERIODIC_IND	
	<=====	
(3)	MPHC_RXLEV_PERIODIC_IND	

		<=====
(4)		MPHC_RXLEV_PERIODIC_IND
		<=====
(5)		MPHC_RXLEV_PERIODIC_IND
		<=====
(6)	MPH_MEASUREMENT_IND	
	<=====	
(7)		MPHC_RXLEV_PERIODIC_IND
		<=====
(8)		MPHC_RXLEV_PERIODIC_IND
		<=====
(9)		MPHC_RXLEV_PERIODIC_IND
		<=====
(10)	MPH_MEASUREMENT_IND	
	<=====	

Parametrization

	Primitive	Parameter	Value
(1)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(2)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(3)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(4)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(5)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(6)	MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_918 NOT_USED NOT_USED

(7) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(8) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(9) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(10) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NOT_USED
gprs_sync	NOT_USED

History:	08.10.99	MPA	Initial
	08.06.01	MSB	fn_offset in (6) corrected
	07.02.02	LG	changed value for ba_id

4.8.7 ALR036: Measurement Reporting, BS_PA_MFRMS = 7

Description: Measurement reporting for the serving cell is tested. The multiframe period is set to seven multiframes. It is expected that the initial report to RR is send after five reports of layer 1 and successive reports are send to RR after three reports. The number of TDMA frames between measurement reports to RR is 357 TDMA frames which is equal to seven multiframes.

Preamble: ALR030F

	RR/DL	ALR	PL
(1)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(2)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(3)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(4)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(5)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(6)	MPH_MEASUREMENT_IND		
	<=====		
(7)		MPHC_RXLEV_PERIODIC_IND	

```

(8) | | *<=====
    | | | MPHC_RXLEV_PERIODIC_IND |
    | | *<=====
(9) | | | MPHC_RXLEV_PERIODIC_IND |
    | | *<=====
(10) | MPH_MEASUREMENT_IND |
    | *<=====
    | |

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Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(2) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(3) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(4) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(5) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(6) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_1071 NOT_USED NOT_USED
(7) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(8) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT

	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(9) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(10) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_357
	ncells	NOT_USED
	gprs_sync	NOT_USED

History:	08.10.99	MPA	Initial
	08.06.01	MSB	fn_offset in (6) corrected
	07.02.02	LG	changed value for ba_id

4.8.8 ALR037: Measurement Reporting, BS_PA_MFRMS = 8

Description: Measurement reporting for the serving cell is tested. The multiframe period is set to eight multiframes. It is expected that the initial report to RR is send after five reports of layer 1 and successive reports are send to RR after two reports. The number of TDMA frames between measurement reports to RR is 408 TDMA frames which is equal to eight multiframes.

Preamble: ALR030G

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
(2)	MPHC_RXLEV_PERIODIC_IND	
(3)	MPHC_RXLEV_PERIODIC_IND	
(4)	MPHC_RXLEV_PERIODIC_IND	
(5)	MPHC_RXLEV_PERIODIC_IND	
(6)	MPH_MEASUREMENT_IND	
(7)	MPHC_RXLEV_PERIODIC_IND	
(8)	MPHC_RXLEV_PERIODIC_IND	
(9)	MPH_MEASUREMENT_IND	

Parametrization

Primitive	Parameter	Value
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(1) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(2) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(3) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(4) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(5) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(6) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_816 NOT_USED NOT_USED
(7) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(8) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(9) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED

otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_408
ncells	NOT_USED
gprs_sync	NOT_USED

History:	08.10.99	MPA	Initial
	08.06.01	MSB	fn_offset in (6) corrected
	07.02.02	LG	changed value for ba_id

4.8.9 ALR038: Measurement Reporting, BS_PA_MFRMS = 9

Description: Measurement reporting for the serving cell is tested. The multiframe period is set to nine multiframe. It is expected that the initial report to RR is send after five reports of layer 1 and successive reports are send to RR after two reports. The number of TDMA frames between measurement reports to RR is 459 TDMA frames which is equal to nine multiframe.

Preamble: ALR030H

	RR/DL	ALR	PL
(1)		MPHC_RXLEV_PERIODIC_IND	
		*<=====	
(2)		MPHC_RXLEV_PERIODIC_IND	
		*<=====	
(3)		MPHC_RXLEV_PERIODIC_IND	
		*<=====	
(4)		MPHC_RXLEV_PERIODIC_IND	
		*<=====	
(5)		MPHC_RXLEV_PERIODIC_IND	
		*<=====	
(6)	MPH_MEASUREMENT_IND		
	*<=====		
(7)		MPHC_RXLEV_PERIODIC_IND	
		*<=====	
(8)		MPHC_RXLEV_PERIODIC_IND	
		*<=====	
(9)	MPH_MEASUREMENT_IND		
	*<=====		

Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(3) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1

(4) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(5) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(6) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_918
ncells	NOT_USED
gprs_sync	NOT_USED

(7) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(8) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(9) MPH_MEASUREMENT_IND

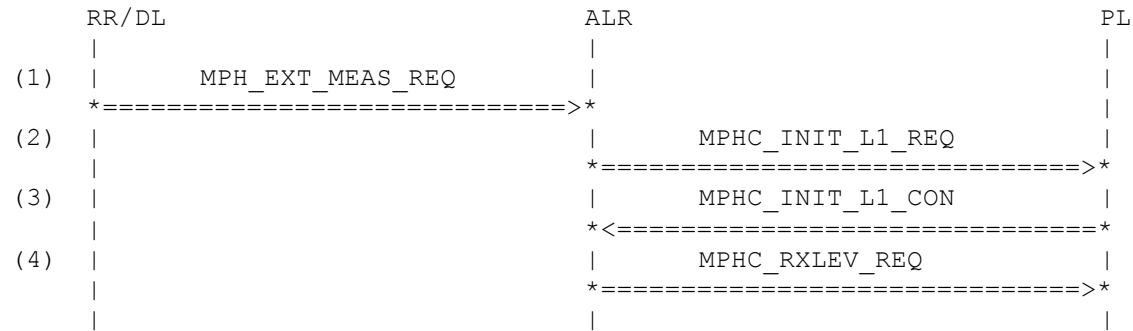
arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_459
ncells	NOT_USED
gprs_sync	NOT_USED

History:	08.10.99	MPA	Initial
	08.06.01	MSB	fn_offset in (6) corrected
	07.02.02	LG	changed value for ba_id

4.8.10 ALR062: Extended Measurement Reporting, start procedure

Description: The extended measurement procedure according GSM 05.08, section 10.1.5 is started.

Preamble: ALR030H



Parametrization

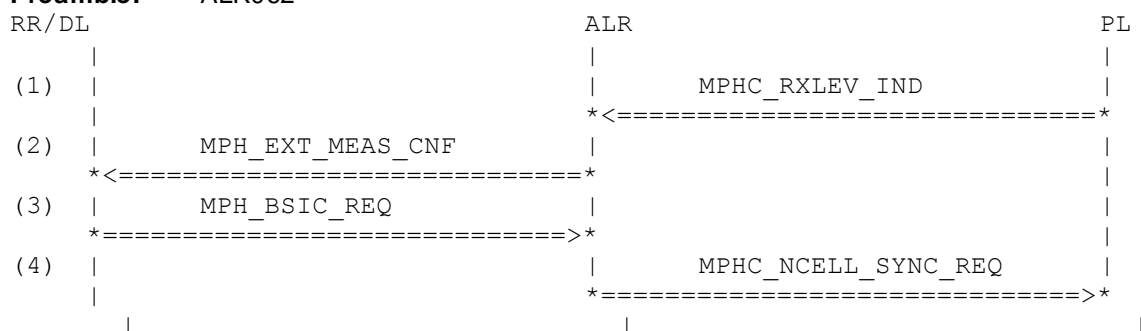
Primitive	Parameter	Value
(1) MPH_EXT_MEAS_REQ	pch_interrupt	NO_PCH_INTERRUPT
	freq_bands	BAND_E_GSM
	num_of_chan	CHANNELS_4
	arfcn	ARFCN_EXT_MEAS_000
(2) MPHC_INIT_L1_REQ	radio_band_config	STD_EGSM
(3) MPHC_INIT_L1_CON	param	NOT_USED
(4) MPHC_RXLEV_REQ	shared_ptr	NOT_USED

History: 12.04.02 VK Initial
29.10.02 DL MPHC_STOP_NCELL_SYNC/BCCH_REQ removed

4.8.11 ALR063: Extended Measurement Reporting, successful power measurement

Description: The extended measurement procedure passes the step of the power measurement.

Preamble: ALR062



Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_7
(2) MPH_EXT_MEAS_CNF	num_of_chan	CHANNELS_10
	arfcn	ARFCN_EXT_MEAS_SORT_000
	rx_lev	RXLEV_EXT_MEAS_000

(3) MPH_BSIC_REQ	arfcn	CONST_1023
(4) MPHC_NCELL_SYNC_REQ	radio_freq	CONST_1023
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO

History: 15.04.02 VK Initial

4.8.12 ALR064: Extended Measurement Reporting, successful end

Description: During the extended measurement procedure the BSIC of a carrier is successfully obtained.

Preamble: ALR063

RR/DL	ALR	PL
(1)	MPHC_NCELL_SYNC_IND	
(2)	MPH_BSIC_CNF	
(3)	MPH_SYNC_REQ	
(4)	MPH_SYNC_IND	

Parametrization

Primitive	Parameter	Value
(1) MPHC_NCELL_SYNC_IND	radio_freq	CONST_1023
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	CONST_12
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(2) MPH_BSIC_CNF	arfcn	CONST_1023
	bsic	CONST_12
	cs	CS_NO_ERROR

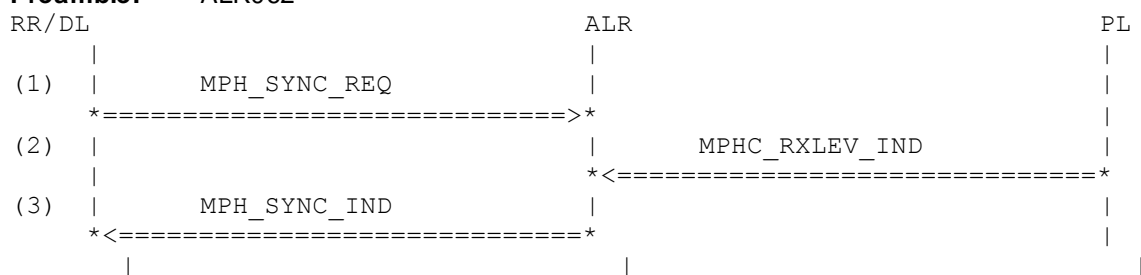
(3) MPH_SYNC_REQ	cs	CS_STOP_PLMN_SEARCH
(4) MPH_SYNC_IND	cs arfcn	CS_STOP_PLMN_SEARCH NOT_USED

History: 15.04.02 VK Initial
26.09.02 DL E-OTD changes (MPHC_NCELL_SYNC_IND)

4.8.13 ALR065: Extended Measurement Reporting, premature end during power measurement

Description: The extended measurement procedure is stopped during the power measurement.

Preamble: ALR062



Parametrization

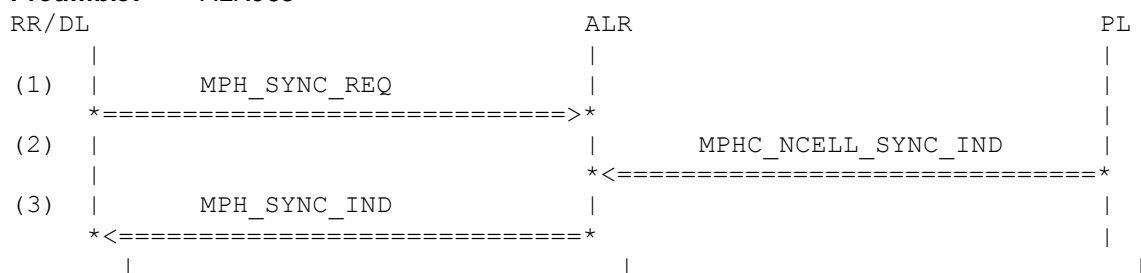
Primitive	Parameter	Value
(1) MPH_SYNC_REQ	cs	CS_STOP_PLMN_SEARCH
(2) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_7
(3) MPH_SYNC_IND	cs arfcn	CS_STOP_PLMN_SEARCH NOT_USED

History: 15.04.02 VK Initial

4.8.14 ALR066: Extended Measurement Reporting, premature end during BSIC scan

Description: The extended measurement procedure is stopped during the carrier synchronisation attempt.

Preamble: ALR063



Parametrization

Primitive	Parameter	Value
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(1) MPH_SYNC_REQ	cs	CS_STOP_PLMN_SEARCH
(2) MPHC_NCELL_SYNC_IND	radio_freq	CONST_1023
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	CONST_12
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRESENCE
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(3) MPH_SYNC_IND	cs	CS_STOP_PLMN_SEARCH
	arfcn	NOT_USED

History: 15.04.02 VK Initial
26.09.02 DL E-OTD changes (MPHC_NCELL_SYNC_IND)

4.9 BCCH Reading

4.9.1 ALR039: BCCH Reading, BS_PA_MFRMS = 5

Description: For a multiframe period of five multiframe it is expected that all 25 reports from layer 1 reading of BCCH information is started. Nine reports are received in the preamble. All four reports a measurement report is send to RR.

Preamble: ALR034

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
(2)	MPHC_RXLEV_PERIODIC_IND	
(3)	MPHC_RXLEV_PERIODIC_IND	
(4)	MPHC_RXLEV_PERIODIC_IND	
(5)	MPH_MEASUREMENT_IND	
(6)	MPHC_RXLEV_PERIODIC_IND	
(7)	MPHC_RXLEV_PERIODIC_IND	

Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(3) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT

	nbr_of_carriers s_rxlev ba_id	CHANNELS_0 RXLEV_56 BA_ID_1
(4) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(5) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_255 NOT_USED NOT_USED
(6) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(7) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(8) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(9) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(10) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_255 NOT_USED NOT_USED
(11) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT

	nbr_of_carriers s_rxlev ba_id	CHANNELS_0 RXLEV_56 BA_ID_1
(12) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(13) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(14) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(15) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_255 NOT_USED NOT_USED
(16) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(17) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(18) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(19) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(20) MPH_MEASUREMENT_IND	arfcn rx_lev_full	ARFCN_23 RXLEV_56

	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_255
	ncells	NOT_USED
	gprs_sync	NOT_USED
(21) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_1
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(22) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_2
	tc	TC_1
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(23) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	INVALID_BLOCK
	l2_frame	L2_NO_CONTENT
	tc	TC_2
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(24) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_4
	tc	TC_3
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(25) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_4
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(26) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	INVALID_BLOCK
	l2_frame	L2_NO_CONTENT
	tc	TC_5

	ccch_lev fn	NOT_USED FN_OFFSET_0
(27) MPHC_DATA_IND		
	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_NBCCH INVALID_BLOCK L2_NO_CONTENT TC_6 NOT_USED FN_OFFSET_0
(28) MPHC_DATA_IND		
	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_NBCCH INVALID_BLOCK L2_NO_CONTENT TC_7 NOT_USED FN_OFFSET_0

History: 14.10.99 MPA Initial
07.02.02 LG changed value for ba_id

4.9.2 ALR040: BCCH Reading, BS_PA_MFRMS = 7

Description: For a multiframe period of seven multiframe it is expected that all 18 reports from layer 1 reading of BCCH information is started. Eight reports are received in the preamble. All three reports a measurement report is send to RR.

Preamble: ALR036

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
(2)	MPHC_RXLEV_PERIODIC_IND	
(3)	MPHC_RXLEV_PERIODIC_IND	
(4)	MPH_MEASUREMENT_IND	
(5)	MPHC_RXLEV_PERIODIC_IND	
(6)	MPHC_RXLEV_PERIODIC_IND	
(7)	MPHC_RXLEV_PERIODIC_IND	
(8)	MPH_MEASUREMENT_IND	
(9)	MPHC_RXLEV_PERIODIC_IND	
(10)	MPHC_RXLEV_PERIODIC_IND	
(11)	MPHC_RXLEV_PERIODIC_IND	
(12)	MPH_MEASUREMENT_IND	
(13)	MPHC_RXLEV_PERIODIC_IND	
(14)	MPHC_DATA_IND	

(15)		*<=====*
		MPHC_DATA_IND
		<=====
(16)		MPHC_DATA_IND
		<=====
(17)		MPHC_DATA_IND
		<=====
(18)		MPHC_DATA_IND
		<=====
(19)		MPHC_DATA_IND
		<=====
(20)		MPHC_DATA_IND
		<=====
(21)		MPHC_DATA_IND
		<=====

Primitive	Parameter	Value
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result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_357
ncells	NOT_USED
gprs_sync	NOT_USED

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(7) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(8) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_357 NOT_USED NOT_USED
(9) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(10) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(11) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(12) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_357 NOT_USED NOT_USED
(13) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(14) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame	ARFCN_23 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_1

	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(15) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_2
	tc	TC_1
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(16) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	INVALID_BLOCK
	l2_frame	L2_NO_CONTENT
	tc	TC_2
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(17) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_4
	tc	TC_3
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(18) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_4
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(19) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	INVALID_BLOCK
	l2_frame	L2_NO_CONTENT
	tc	TC_5
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(20) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	INVALID_BLOCK
	l2_frame	L2_NO_CONTENT
	tc	TC_6
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(21) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH

error_flag	INVALID_BLOCK
l2_frame	L2_NO_CONTENT
tc	TC_7
ccch_lev	NOT_USED
fn	FN_OFFSET_0

History:	14.10.99	MPA	Initial
	07.02.02	LG	changed value for ba_id

4.9.3 ALR041: BCCH Reading, BS_PA_MFRMS = 9

Description: For a multiframe period of nine multiframe it is expected that all 14 reports from layer 1 reading of BCCH information is started. Seven reports are received in the preamble. All two reports a measurement report is send to RR.

Preamble: ALR038

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
(2)	MPHC_RXLEV_PERIODIC_IND	
(3)	MPH_MEASUREMENT_IND	
(4)	MPHC_RXLEV_PERIODIC_IND	
(5)	MPHC_RXLEV_PERIODIC_IND	
(6)	MPH_MEASUREMENT_IND	
(7)	MPHC_RXLEV_PERIODIC_IND	
(8)	MPHC_RXLEV_PERIODIC_IND	
(9)	MPH_MEASUREMENT_IND	
(10)	MPHC_RXLEV_PERIODIC_IND	
(11)	MPHC_DATA_IND	
(12)	MPHC_DATA_IND	
(13)	MPHC_DATA_IND	
(14)	MPHC_DATA_IND	
(15)	MPHC_DATA_IND	
(16)	MPHC_DATA_IND	
(17)	MPHC_DATA_IND	
(18)	MPHC_DATA_IND	

Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT

	nbr_of_carriers s_rxlev ba_id	CHANNELS_0 RXLEV_56 BA_ID_1
(2) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(3) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_459 NOT_USED NOT_USED
(4) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(5) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(6) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_459 NOT_USED NOT_USED
(7) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(8) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(9) MPH_MEASUREMENT_IND	arfcn	ARFCN_23

	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_459
	ncells	NOT_USED
	gprs_sync	NOT_USED
(10) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(11) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_1
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(12) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_2
	tc	TC_1
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(13) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	INVALID_BLOCK
	l2_frame	L2_NO_CONTENT
	tc	TC_2
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(14) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_4
	tc	TC_3
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(15) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_4
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

(16) MPHC_DATA_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_NBCCH
error_flag	INVALID_BLOCK
l2_frame	L2_NO_CONTENT
tc	TC_5
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(17) MPHC_DATA_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_NBCCH
error_flag	INVALID_BLOCK
l2_frame	L2_NO_CONTENT
tc	TC_6
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(18) MPHC_DATA_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_NBCCH
error_flag	INVALID_BLOCK
l2_frame	L2_NO_CONTENT
tc	TC_7
ccch_lev	NOT_USED
fn	FN_OFFSET_0

History:	14.10.99	MPA	Initial
	07.02.02	LG	changed value for ba_id

4.9.4 ALR082: BCCH Reading, Changed Sys Infos

Description: For a multiframe period of five multiframes it is expected that all 25 reports from layer 1 reading of BCCH information is started. Nine reports are received in the preamble. All four reports a measurement report is send to RR. Changed System Information Messages are forwarded to RR.

Preamble: ALR034

	RR/DL	ALR	PL
(1)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(2)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(3)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(4)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(5)	MPH_MEASUREMENT_IND		
	<=====		
(6)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(7)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(8)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(9)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(10)	MPH_MEASUREMENT_IND		
	<=====		

(11)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(12)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(13)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(14)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(15)		MPH_MEASUREMENT_IND		
		*<=====		
(16)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(17)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(18)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(19)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(20)		MPH_MEASUREMENT_IND		
		*<=====		
(21)			MPHC_DATA_IND	
			*<=====	
(22)			MPHC_DATA_IND	
			*<=====	
(23)			MPHC_DATA_IND	
			*<=====	
(24)		MPH_UNITDATA_IND		
		*<=====		
(25)			MPHC_DATA_IND	
			*<=====	
(26)			MPHC_DATA_IND	
			*<=====	
(27)			MPHC_DATA_IND	
			*<=====	
(28)		MPH_UNITDATA_IND		
		*<=====		
(29)			MPHC_DATA_IND	
			*<=====	
(30)			MPHC_DATA_IND	
			*<=====	

Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(3) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1

(4) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(5) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_255 NOT_USED NOT_USED
(6) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(7) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(8) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(9) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(10) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_255 NOT_USED NOT_USED
(11) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1

(12) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(13) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(14) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(15) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_255 NOT_USED NOT_USED
(16) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(17) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(18) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(19) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(20) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED

	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_255
	ncells	NOT_USED
	gprs_sync	NOT_USED
(21) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_1
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(22) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_2
	tc	TC_1
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(23) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_1_NEW
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(24) MPH_UNITDATA_IND		
	arfcn	ARFCN_23
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_1
	ti	TI_0
	cell_chan_desc	CELL_CHAN_DESC_1_NEW
	rach_ctrl	RACH_CTRL_1
	}	
(25) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_4
	tc	TC_3
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(26) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_4

	ccch_lev fn	NOT_USED FN_OFFSET_0
(27) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_1 TC_0 NOT_USED FN_OFFSET_0
(28) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_chan_desc rach_ctrl }	ARFCN_23 NOT_USED RR DOWNLINK D_SYS_INFO_1 TI_0 CELL_CHAN_DESC_1 RACH_CTRL_1
(29) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_NBCCH INVALID_BLOCK L2_NO_CONTENT TC_6 NOT_USED FN_OFFSET_0
(30) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_NBCCH INVALID_BLOCK L2_NO_CONTENT TC_7 NOT_USED FN_OFFSET_0

History: 14.10.99 MPA Initial
 07.02.02 LG changed value for ba_id

4.10 Connection Establishment

4.10.1 ALR055: Start of Sending Channel Request Messages (GSM 900)

Description: RR starts the sending of channel request messages. Idle mode is stopped and the access mode is started. There is one retransmission configured.

Preamble: ALR013

	RR/DL	ALR	PL
(1)			
	MPH_RANDOM_ACCESS_REQ		
	=====>		

```

(2) | | MPHC_STOP_RXLEV_PERIODIC_REQ |
    | | *=====>*
(3) | | MPHC_STOP_SCELL_BCCH_REQ |
    | | *=====>*
(4) | | MPHC_RA_REQ |
    | | *=====>*
(5) | | MPHC_RA_CON |
    | | *<=====*
(6) | MPH_RANDOM_ACCESS_CNF |
    | *<=====*
(7) | | MPHC_RA_REQ |
    | | *=====>*
    | |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_RANDOM_ACCESS_REQ	send_mode	TWO_BURSTS
(2) MPHC_STOP_RXLEV_PERIODIC_REQ	param	NOT_USED
(3) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPHC_RA_REQ	txpwr rand channel_request powerclass_gsm powerclass_dcs	POWER_12 RAND_BURST_1 CHANNEL_REQUEST_1 POWER_CLASS_5 NOT_USED
(5) MPHC_RA_CON	fn channel_request	FN_BURST_1 CHANNEL_REQUEST_1
(6) MPH_RANDOM_ACCESS_CNF	frame_no	T123_BURST_1
(7) MPHC_RA_REQ	txpwr rand channel_request powerclass_gsm powerclass_dcs	POWER_12 RAND_BURST_2 CHANNEL_REQUEST_2 POWER_CLASS_5 NOT_USED

History:

10.11.99	LE	Initial
07.02.02	LG	removed MPHC_START_CCCH_REQ (ALR-FIX-4650)
29.10.02	DL	MPHC_STOP_NCELL_SYNC/BCCH_REQ removed

4.10.2 ALR056: Immediate Assignment for the Mobile Station

Description: An immediate assignment for the mobile station receives. Configuration of the dedicated mode is processed by RR. This stops the access link mode.

Preamble: ALR055

```

RR/DL | ALR | PL
(1) | | MPHC_DATA_IND |
    | | *<=====*

```

```

(2) | MPH_UNITDATA_IND |
    | *<===== |
(3) | MPH_DEDICATED_REQ |
    | *=====> |
(4) | | MPHC_STOP_SCELL_BCCH_REQ |
    | | *=====> |
(5) | | MPHC_STOP_CCCH_REQ |
    | | *=====> |
(6) | | MPHC_STOP_RA_REQ |
    | | *=====> |
(7) | | MPHC_IMMED_ASSIGN_REQ |
    | | *=====> |
(8) | | MPHC_IMMED_ASSIGN_CON |
    | | *<===== |
(9) | MPH_DEDICATED_CNF |
    | *<===== |
    | |

```

Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_CCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_IMM_ASS_HOP
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(2) MPH_UNITDATA_IND	arfcn	ARFCN_23
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_IMM_ASSIGN
	ti	TI_0
	tma	TMA_0
	dl	DL_0
	d_t	D_T_DED
	page_mode	PAGE_MODE_1
	chan_desc	CHAN_DESC_1
	pck_chan_desc	NOT_USED
	req_ref	REQ_REF_1
	time_advance	TIME_ADVANCE_1
	mob_alloc	MOB_ALLOC_1
	}	
(3) MPH_DEDICATED_REQ	mod	MODE_IMM_ASSIGN
	start	STARTING_TIME
	ch_type	CH_TYPE_HOP
	ch_type2	CH_TYPE2
	arfcn	ARFCN_23
	bsic	BSIC_1
	ho_param	HO_PARAM
	tr_para	TR_PARAM
	ciph	CIPH_PARAM
	amr_conf	NOT_USED

(4)	MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(5)	MPHC_STOP_CCCH_REQ	param	NOT_USED
(6)	MPHC_STOP_RA_REQ	param	NOT_USED
(7)	MPHC_IMMED_ASSIGN_REQ	channel_desc timing_advance frequency_list starting_time frequency_list_bef_sti maio_bef_sti dtx_allowed bcch_allocation ba_id pwr	CHANNEL_DESC_1 TIMING_ADVANCE FREQ_LIST S_TIME_MPHC NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED
(8)	MPHC_IMMED_ASSIGN_CON	param	NOT_USED
(9)	MPH_DEDICATED_CNF	dedi_res	DEDI_RES_OK

History: 10.11.99 LE Initial
18.Feb.02 OT Adaptation for AMR

4.10.3 ALR057: Immediate Assignment Reject for the Mobile Station

Description: An immediate assignment reject for the mobile station receives. Sending of channel request bursts is stopped. The mobile station listen to the downlink CCCH. Thereafter an immediate assignment message receives.

Preamble: ALR055

	RR/DL	ALR	PL
(1)		MPHC_DATA_IND	
		<=====	
(2)	MPH_UNITDATA_IND		
	<=====		
(3)	MPH_RANDOM_ACCESS_REQ		
	=====>		
(4)		MPHC_STOP_RA_REQ	
		=====>	
(6)		MPHC_DATA_IND	
		<=====	
(7)	MPH_UNITDATA_IND		
	<=====		
(8)	MPH_DEDICATED_REQ		
	=====>		
(9)		MPHC_STOP_SCELL_BCCH_REQ	
		=====>	
(11)		MPHC_STOP_CCCH_REQ	
		=====>	
(13)		MPHC_IMMED_ASSIGN_REQ	
		=====>	
(14)		MPHC_IMMED_ASSIGN_CON	
		<=====	

```
(15) | MPH_DEDICATED_CNF |
      | *<===== * |
      | | |
```

Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_CCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_IMM_ASS_REJ
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(2) MPH_UNITDATA_IND	arfcn	ARFCN_23
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_IMM_ASSIGN
	ti	TI_0
	tma	TMA_0
	dl	DL_0
	d_t	D_T_DED
	page_mode	PAGE_MODE_1
	chan_desc	CHAN_DESC_2
	pck_chan_desc	NOT_USED
	req_ref	REQ_REF_1
	time_advance	TIME_ADVANCE_2
	mob_alloc	MOB_ALLOC_1
	}	
(3) MPH_RANDOM_ACCESS_REQ	send_mode	STOP_BURSTS
(4) MPHC_STOP_RA_REQ	param	NOT_USED
(5) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_CCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_IMM_ASS
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(6) MPH_UNITDATA_IND	arfcn	ARFCN_23
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_IMM_ASSIGN
	ti	TI_0
	tma	TMA_0
	dl	DL_0
	d_t	D_T_DED

	page_mode	PAGE_MODE_1
	chan_desc	CHAN_DESC_2
	pck_chan_desc	NOT_USED
	req_ref	REQ_REF_1
	time_advance	TIME_ADVANCE_2
	mob_alloc	MOB_ALLOC_1
	}	
(7) MPH_DEDICATED_REQ		
	mod	MODE_IMM_ASSIGN
	start	STARTING_TIME
	ch_type	CH_TYPE_HOP
	ch_type2	CH_TYPE2
	arfcn	ARFCN_23
	bsic	BSIC_1
	ho_param	HO_PARAM
	tr_para	TR_PARAM
	ciph	CIPH_PARAM
	amr_conf	NOT_USED
(8) MPHC_STOP_SCELL_BCCH_REQ		
	param	NOT_USED
(9) MPHC_STOP_CCCH_REQ		
	param	NOT_USED
(10) MPHC_IMMED_ASSIGN_REQ		
	channel_desc	CHANNEL_DESC_1
	timing_advance	TIMING_ADVANCE
	frequency_list	FREQ_LIST
	starting_time	S_TIME_MPHC
	frequency_list_bef_sti	NOT_USED
	maio_bef_sti	NOT_USED
	dtx_allowed	NOT_USED
	bcch_allocation	NOT_USED
	ba_id	NOT_USED
	pwrc	NOT_USED
(11) MPHC_IMMED_ASSIGN_CON		
	param	NOT_USED
(12) MPH_DEDICATED_CNF		
	dedi_res	DEDI_RES_OK

History: 10.11.99 LE Initial
26-Feb-02 OT Adaptations for AMR integration

4.10.4 ALR058: T3126 Expiry, Back to Idle Mode

Description: After timeout of T3126 the mobile station goes back to idle mode.
Preamble: ALR055

	RR/DL	ALR	PL
(1)			
		MPHC_RA_CON	
		<=====	
(2)	MPH_RANDOM_ACCESS_CNF		
	<=====		
(3)	MPH_IDLE_REQ		
	=====>		
(4)		MPHC_STOP_RA_REQ	
		=====>	

(5)			MPHC_START_CCCH_REQ	
			=====>	
(6)			MPHC_SCELL_NBCCH_REQ	
			=====>	

Parametrization

Primitive	Parameter	Value
(1) MPHC_RA_CON	fn	FN_BURST_1
	channel_request	CHANNEL_REQUEST_1
(2) MPH_RANDOM_ACCESS_CNF	frame_no	T123_BURST_1
(3) MPH_IDLE_REQ	mod	NOT_USED
	arfcn	ARFCN_23
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED
(4) MPHC_STOP_RA_REQ	param	NOT_USED
(5) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_8
	bs_ag_blk_res	BS_AG_BLKS_RES_3
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_2
	page_mode	PGM_REORG
(6) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED

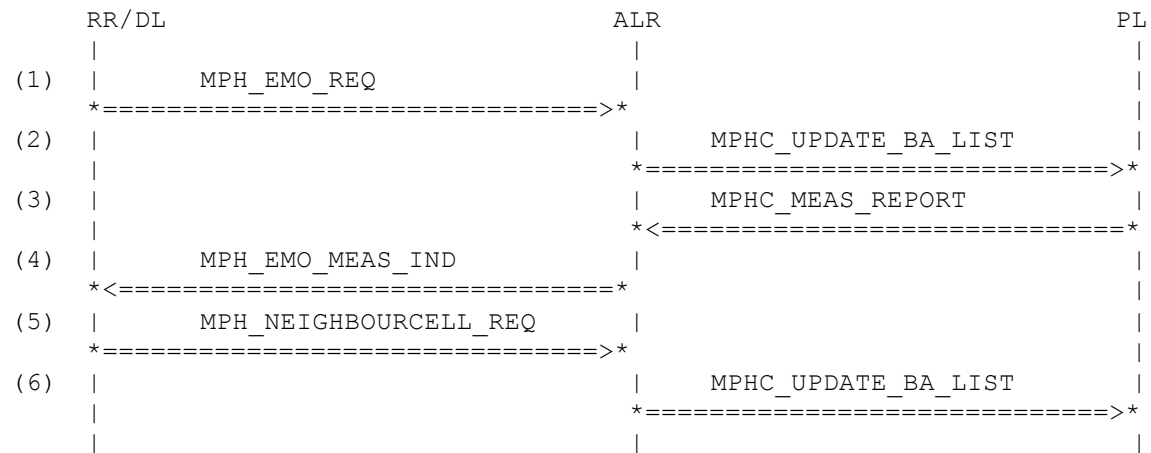
History:	10.11.99	LE	Initial
	26.09.02	DL	E-OTD changes (MPH_IDLE_REQ)
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.11 EMO - Extended Measurement on SACCH

4.11.1 ALR100: EMO, normal case

Description: The successful case of the EMO procedure is performed. No interfering signals are received.

Preamble: ALR056



Parametrization

Primitive	Parameter	Value
(1) MPH_EMO_REQ	ba_id	CONST_129
	arfcn	A_ARFCN_EMO_000
(2) MPHC_UPDATE_BA_LIST	num_of_chans	CONST_5
	chan_list	CHAN_LIST_100
	pwr	PWRC_NOT_SET
	dtx_allowed	DTX_NOTALLOWED
	ba_id	CONST_129
(3) MPHC_MEAS_REPORT	dtx_used	DTX_USED
	meas_valid	MEAS_ARE_VALID
	rxlev_full_acc	CONST_1
	rxlev_full_nbr_meas	CONST_1
	rxlev_sub_acc	CONST_1
	rxlev_sub_nbr_meas	CONST_1
	rxqual_full_acc_errors	CONST_1
	rxqual_full_nbr_bits	CONST_1
	rxqual_sub_acc_errors	CONST_1
	rxqual_sub_nbr_bits	CONST_1
	no_of_ncells_meas	CONST_5
	ncell_meas	NCELL_MEAS_100
	ba_id	CONST_129
	timing_advance	CONST_1
	txpwr_used	CONST_1
(4) MPH_EMO_MEAS_IND	ba_id	CONST_129
	dtx	CONST_1
	meas_results	S_EMO_MEAS_RES_000
(5) MPH_NEIGHBOURCELL_REQ	multi_band	MULTI_BAND_0
	arfcn	CHLIST_1_14_124_FFFF
	sync_only	NOT_USED
(6) MPHC_UPDATE_BA_LIST	num_of_chans	CONST_4
	chan_list	CHAN_LIST_101
	pwr	PWRC_NOT_SET
	dtx_allowed	DTX_NOTALLOWED
	ba_id	CONST_2

History: 07.11.02 VK Initial

4.11.2 ALR101: EMO, delayed, invalid and duplicated ba_id values

Description: The successful case of the EMO procedure is performed.

Preamble: ALR056

RR/DL	ALR	PL
(1) MPH_EMO_REQ		
=====>		
(2)	MPHC_UPDATE_BA_LIST	
	=====>	
(3)	MPHC_MEAS_REPORT	
	<=====	
(4)	MPHC_NCELL_SYNC_REQ	
	=====>	
(5)	MPHC_NCELL_SYNC_REQ	
	=====>	
(6) MPH_MEASUREMENT_IND		
<=====		
(7) MPH_EMO_REQ		
=====>		
(8)	MPHC_UPDATE_BA_LIST	
	=====>	
(9)	MPHC_MEAS_REPORT	
	<=====	
(10)	MPHC_MEAS_REPORT	
	<=====	
(11) MPH_EMO_MEAS_IND		
<=====		
(12) MPH_NEIGHBOURCELL_REQ		
=====>		
(13)	MPHC_UPDATE_BA_LIST	
	=====>	

Parametrization

Primitive	Parameter	Value
(1) MPH_EMO_REQ	ba_id	CONST_129
	arfcn	A_ARFCN_EMO_000
(2) MPHC_UPDATE_BA_LIST	num_of_chans	CONST_5
	chan_list	CHAN_LIST_100
	pwr	PWRC_NOT_SET
	dtx_allowed	DTX_NOTALLOWED
	ba_id	CONST_129
(3) MPHC_MEAS_REPORT	dtx_used	DTX_USED
	meas_valid	MEAS_ARE_VALID
	rxlev_full_acc	CONST_63
	rxlev_full_nbr_meas	CONST_1
	rxlev_sub_acc	CONST_63
	rxlev_sub_nbr_meas	CONST_1
	rxqual_full_acc_errors	CONST_1
	rxqual_full_nbr_bits	CONST_1
	rxqual_sub_acc_errors	CONST_1
	rxqual_sub_nbr_bits	CONST_1
	no_of_ncells_meas	CONST_5

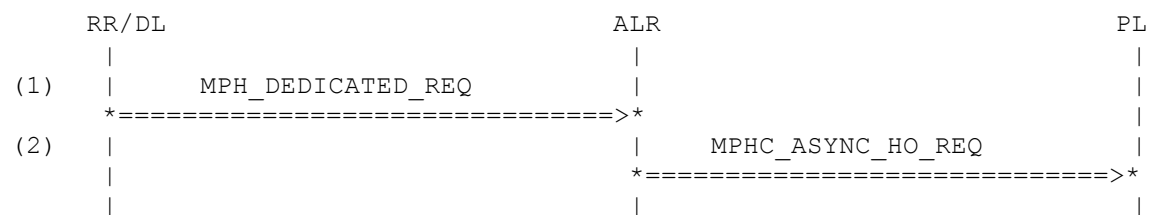
	ncell_meas	NCELL_MEAS_102
	ba_id	CONST_1
	timing_advance	CONST_1
	txpwr_used	CONST_1
(4) MPHC_NCELL_SYNC_REQ		
	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(5) MPHC_NCELL_SYNC_REQ		
	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(6) MPH_MEASUREMENT_IND		
	arfcn	CONST_23
	rx_lev_full	CONST_63
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	NOT_USED
	fn_offset	NOT_USED
	ncells	NOT_USED
	gprs_sync	NOT_USED
(7) MPH_EMO_REQ		
	ba_id	CONST_130
	arfcn	A_ARFCN_EMO_000
(8) MPHC_UPDATE_BA_LIST		
	num_of_chans	CONST_5
	chan_list	CHAN_LIST_100
	pwr	PWRC_NOT_SET
	dtx_allowed	DTX_NOTALLOWED
	ba_id	CONST_130
(9) MPHC_MEAS_REPORT		
	dtx_used	DTX_USED
	meas_valid	MEAS_ARE_VALID
	rxlev_full_acc	CONST_1
	rxlev_full_nbr_meas	CONST_1
	rxlev_sub_acc	CONST_1
	rxlev_sub_nbr_meas	CONST_1
	rxqual_full_acc_errors	CONST_1
	rxqual_full_nbr_bits	CONST_1
	rxqual_sub_acc_errors	CONST_1
	rxqual_sub_nbr_bits	CONST_1
	no_of_ncells_meas	CONST_5
	ncell_meas	NCELL_MEAS_100
	ba_id	CONST_129
	timing_advance	CONST_1
	txpwr_used	CONST_1
(10)MPHC_MEAS_REPORT		
	dtx_used	DTX_USED
	meas_valid	MEAS_ARE_VALID
	rxlev_full_acc	CONST_1
	rxlev_full_nbr_meas	CONST_1

	rxlev_sub_acc	CONST_1
	rxlev_sub_nbr_meas	CONST_1
	rxqual_full_acc_errors	CONST_1
	rxqual_full_nbr_bits	CONST_1
	rxqual_sub_acc_errors	CONST_1
	rxqual_sub_nbr_bits	CONST_1
	no_of_ncells_meas	CONST_5
	ncell_meas	NCELL_MEAS_100
	ba_id	CONST_130
	timing_advance	CONST_1
	txpwr_used	CONST_1
(11) MPH_EMO_MEAS_IND		
	ba_id	CONST_130
	dtx	CONST_1
	meas_results	S_EMO_MEAS_RES_000
(12) MPH_NEIGHBOURCELL_REQ		
	multi_band	MULTI_BAND_0
	arfcn	CHLIST_1_14_124_FFFF
	sync_only	NOT_USED
(13) MPHC_UPDATE_BA_LIST		
	num_of_chans	CONST_4
	chan_list	CHAN_LIST_101
	pwr	PWRC_NOT_SET
	dtx_allowed	DTX_NOTALLOWED
	ba_id	CONST_2
History:	07.11.02	VK Initial

4.12 Handover & Assignment

4.12.1 ALR150: Non-synchronized Handover

Description: A non-synchronized handover for the mobile station is configured without starting time.
Preamble: ALR056



Parametrization

Primitive	Parameter	Value
(1) MPH_DEDICATED_REQ		
	mod	MODE_ASYNC_HANDOVER
	start	NOT_USED
	ch_type	CH_TYPE_TCH2
	ch_type2	NOT_USED
	arfcn	ARFCN_14
	bsic	BSIC_1
	ho_param	HO_PARAM_1
	tr_para	TR_PARAM
	ciph	CIPH_PARAM
	amr_conf	NOT_USED

(2) MPH_C_ASYNC_HO_REQ	handover_command	ASYNC_HO_CMD
	fn_offset	NOT_USED
	time_alignmnt	NOT_USED
	cipher_key	NOT_USED
	amr_configuration	NOT_USED

History: 10.11.99 LE Initial
26-Feb-02 OT Adaptations for AMR integration

4.12.2 ALR151: FTA 26.6.13.3

Description: The type approval testcase 26.6.13.3 is performed.

Preamble: ALR012A

	RR/DL	ALR	PL
(1)	MPH_RANDOM_ACCESS_REQ		
	=====>		
(2)		MPH_C_STOP_RXLEV_PERIODIC_REQ	
		=====>	
(3)		MPH_C_STOP_SCELL_BCCH_REQ	
		=====>	
(4)		MPH_C_RA_REQ	
		=====>	
(5)		MPH_C_RA_CON	
		<=====	
(6)	MPH_RANDOM_ACCESS_CNF		
	<=====		
(7)		MPH_C_RA_REQ	
		=====>	
(8)		MPH_C_DATA_IND	
		<=====	
(9)	MPH_UNITDATA_IND		
	<=====		
(10)	MPH_DEDICATED_REQ		
	=====>		
(11)		MPH_C_STOP_SCELL_BCCH_REQ	
		=====>	
(12)		MPH_C_STOP_CCCH_REQ	
		=====>	
(13)		MPH_C_STOP_RA_REQ	
		=====>	
(14)		MPH_C_IMMED_ASSIGN_REQ	
		=====>	
(15)		MPH_C_IMMED_ASSIGN_CON	
		<=====	
(16)	MPH_DEDICATED_CNF		
	<=====		
(17)	MPH_FREQ_REDEF_REQ		
	=====>		
(18)		MPH_C_CHANGE_FREQUENCY	
		=====>	
(19)	MPH_DEDICATED_REQ		
	=====>		
(20)		MPH_C_CHANNEL_ASSIGN_REQ	
		=====>	
(21)		MPH_C_CHANNEL_ASSIGN_CON	
		<=====	

```

(22) | MPH_DEDICATED_CNF |
      *<=====*>
(23) | MPH_DEDICATED_FAIL_REQ |
      *=====*>
(24) | | MPH_CHANNEL_ASSIGN_REQ |
      | | *=====*>
(25) | | MPH_CHANNEL_ASSIGN_CON |
      | | *<=====*>
(26) | MPH_DEDICATED_FAIL_CNF |
      *<=====*>
      |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_RANDOM_ACCESS_REQ	send_mode	TWO_BURSTS
(2) MPHC_STOP_RXLEV_PERIODIC_REQ	param	NOT_USED
(3) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPHC_RA_REQ	txpwr rand channel_request powerclass_gsm powerclass_dcs	POWER_12 RAND_BURST_1 CHANNEL_REQUEST_1 POWER_CLASS_5 NOT_USED
(5) MPHC_RA_CON	fn channel_request	FN_BURST_1 CHANNEL_REQUEST_1
(6) MPH_RANDOM_ACCESS_CNF	frame_no	T123_BURST_1
(7) MPHC_RA_REQ	txpwr rand channel_request powerclass_gsm powerclass_dcs	POWER_12 RAND_BURST_2 CHANNEL_REQUEST_2 POWER_CLASS_5 NOT_USED
(8) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_leve fn	ARFCN_14 L2_CHANNEL_CCCH VALID_BLOCK L2_IMM_ASS_HOP TC_0 NOT_USED FN_OFFSET_0
(9) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti	ARFCN_14 NOT_USED RR DOWNLINK D_IMM_ASSIGN TI_0

	tma	TMA_0
	dl	DL_0
	d_t	D_T_DED
	page_mode	PAGE_MODE_1
	chan_desc	CHAN_DESC_1
	pck_chan_desc	NOT_USED
	req_ref	REQ_REF_1
	time_advance	TIME_ADVANCE_1
	mob_alloc	MOB_ALLOC_1
	}	
(10) MPH_DEDICATED_REQ		
	mod	MODE_IMM_ASSIGN
	start	NO_STARTING_TIME
	ch_type	CH_TYPE_IMM_ASS
	ch_type2	NOT_USED
	arfcn	ARFCN_14
	bsic	BSIC_1
	ho_param	HO_PARAM
	tr_para	TR_PARAM
	ciph	CIPH_PARAM
	amr_conf	NOT_USED
(11) MPHC_STOP_SCELL_BCCH_REQ		
	param	NOT_USED
(12) MPHC_STOP_CCCH_REQ		
	param	NOT_USED
(13) MPHC_STOP_RA_REQ		
	param	NOT_USED
(14) MPHC_IMMED_ASSIGN_REQ		
	channel_desc	CHANNEL_DESC_IA
	timing_advance	TIMING_ADVANCE
	frequency_list	FREQ_LIST_IA
	starting_time	NO_STARTING_TIME
	frequency_list_bef_sti	NOT_USED
	maio_bef_sti	NOT_USED
	dtx_allowed	NOT_USED
	bcch_allocation	NOT_USED
	ba_id	NOT_USED
	pwrc	NOT_USED
(15) MPHC_IMMED_ASSIGN_CON		
	param	NOT_USED
(16) MPH_DEDICATED_CNF		
	dedi_res	DEDI_RES_OK
(17) MPH_FREQ_REDEF_REQ		
	start	STARTING_TIME_T1
	ch_type	CH_TYPE_FREQ_REDEF
(18) MPHC_CHANGE_FREQUENCY		
	channel_desc	CHANNEL_DESC_FR
	frequency_list	FREQ_LIST_FR
	starting_time	S_TIME_T1
(19) MPH_DEDICATED_REQ		
	mod	MODE_CHAN_ASSIGN
	start	STARTING_TIME_T2
	ch_type	CH_TYPE_ASS_AFTER

	ch_type2	CH_TYPE_ASS_BEFORE
	arfcn	ARFCN_14
	bsic	BSIC_1
	ho_param	NOT_USED
	tr_para	TR_PARAM
	ciph	CIPH_PARAM
	amr_conf	NOT_USED
(20) MPHC_CHANNEL_ASSIGN_REQ		
	channel_desc_1	CHANNEL_DESC_ASS_AFTER
	channel_mode_1	NOT_USED
	txpwr	TXPWR0
	frequency_list	FREQ_LIST_ASS_AFTER
	starting_time	S_TIME_T2
	channel_desc_2	NOT_USED
	channel_mode_2	NOT_USED
	frequency_list_bef_sti	FREQ_LIST_ASS_BEFORE
CHANNEL_DESC_ASS_BEFORE	channel_desc_1_bef_sti	
	channel_desc_2_bef_sti	NOT_USED
	cipher_mode	NOT_USED
	a5_algorithm	NOT_USED
	cipher_key	NOT_USED
	dtx_allowed	NOT_USED
	amr_configuration	NOT_USED
(21) MPHC_CHANNEL_ASSIGN_CON		
	param	NOT_USED
(22) MPH_DEDICATED_CNF		
	dedi_res	DEDI_RES_OK
(23) MPH_DEDICATED_FAIL_REQ		
	param	NOT_USED
(24) MPHC_CHANNEL_ASSIGN_REQ		
	channel_desc_1	CHANNEL_DESC_FR
	channel_mode_1	NOT_USED
	txpwr	POWER_12
	frequency_list	FREQ_LIST_FR
	starting_time	S_TIME_T1
	channel_desc_2	NOT_USED
	channel_mode_2	NOT_USED
	frequency_list_bef_sti	FREQ_LIST_IA
	channel_desc_1_bef_sti	CHANNEL_DESC_IA
	channel_desc_2_bef_sti	NOT_USED
	cipher_mode	NOT_USED
	a5_algorithm	NOT_USED
	cipher_key	NOT_USED
	dtx_allowed	NOT_USED
	amr_configuration	NOT_USED
(25) MPHC_CHANNEL_ASSIGN_CON		
	param	NOT_USED
(26) MPH_DEDICATED_FAIL_CNF		
	param	NOT_USED

History:	10.11.99	LE	Initial
	07.02.02	LG	removed MPHC_START_CCCH_REQ (ALR-FIX-4650)
	26-Feb-02	OT	Adaptations for AMR integration

29.10.02

DL

MPHC_STOP_NCELL_SYNC/BCCH_REQ removed

4.12.3 ALR152: FTA 26.6.13.8

Description: The type approval testcase 26.6.13.8 is performed.

Preamble: ALR056

RR/DL	ALR	PL
(1) MPH_FREQ_REDEF_REQ		
=====>		
(2)	MPHC_CHANGE_FREQUENCY	
	=====>	
(3) MPH_DEDICATED_REQ		
=====>		
(4)	MPHC_ASYNC_HO_REQ	
	=====>	
(5)	MPHC_ASYNC_HO_CON	
	<=====	
(6)	MPHC_HANDOVER_FINISHED	
	<=====	
(7) MPH_DEDICATED_CNF		
<=====		
(8) MPH_DEDICATED_FAIL_REQ		
=====>		
(9)	MPHC_HANDOVER_FAIL_REQ	
	=====>	
(10)	MPHC_HANDOVER_FAIL_CON	
	<=====	
(11) MPH_DEDICATED_FAIL_CNF		
<=====		
(12)	MPHC_CHANGE_FREQUENCY_CON	
	<=====	

Parametrization

Primitive	Parameter	Value
(1) MPH_FREQ_REDEF_REQ	start ch_type	STARTING_TIME CH_TYPE_SDCCH4
(2) MPHC_CHANGE_FREQUENCY	channel_desc frequency_list starting_time	CHANNEL_DESC_4 FREQ_LIST S_TIME_MPHC
(3) MPH_DEDICATED_REQ	mod start ch_type ch_type2 arfcn bsic ho_param tr_para ciph amr_conf	MODE_ASYNC_HANDOVER STARTING_TIME CH_TYPE_TCH2 CH_TYPE_TCH3 ARFCN_14 BSIC_1 HO_PARAM_1 TR_PARAM CIPH_PARAM NOT_USED
(4) MPHC_ASYNC_HO_REQ	handover_command fn_offset time_alignmnt	ASYNC_HO_CMD_2 NOT_USED NOT_USED

	cipher_key	NOT_USED
	amr_configuration	NOT_USED
(5) MPHC_ASYNC_HO_CON	param	NOT_USED
(6) MPHC_HANDOVER_FINISHED	cause	HO_COMPLETE
(7) MPH_DEDICATED_CNF	dedi_res	DEDI_RES_OK
(8) MPH_DEDICATED_FAIL_REQ	param	NOT_USED
(9) MPHC_HANDOVER_FAIL_REQ	param	NOT_USED
(10) MPHC_HANDOVER_FAIL_CON	param	NOT_USED
(11) MPH_DEDICATED_FAIL_CNF	param	NOT_USED
(12) MPHC_CHANGE_FREQUENCY_CON	param	NOT_USED

History: 10.11.99 LE Initial
26-Feb-02 OT Adaptations for AMR integration

4.12.4 ALR153: SACCH Downlink Messages

Description: The MS is in dedicated mode. It receives a system info type 5 message (forwarded to RR), a system info type 5bis message (forwarded to RR), a system info type 6 message (forwarded to RR), an I-frame for SMS (forwarded to DL), the first system info type 5 message again (compared and not forwarded by ALR) and a changed system info type 6 message (forwarded to RR).

Preamble: ALR151

	RR/DL	ALR	PL
(1)		MPHC_DATA_IND (SYS INFO 5)	
		<=====	
(2)	MPH_UNITDATA_IND		
	<=====		
(3)		MPHC_DATA_IND (SYS INFO 5bis)	
		<=====	
(4)	MPH_UNITDATA_IND		
	<=====		
(5)		MPHC_DATA_IND (SYS INFO 6)	
		<=====	
(6)	MPH_UNITDATA_IND		
	<=====		
(7)		MPHC_DATA_IND (I frame)	
		<=====	
(8)	PH_DATA_IND		
	<=====		
(9)		MPHC_DATA_IND (SYS INFO 5)	

```

(10) | | *<=====
| | | MPHC_DATA_IND |
| | | (changed SYS INFO 6) |
| | *<=====
(11) | MPH_UNITDATA_IND |
| *<=====
| |

```

Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_SACCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_5
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(2) MPH_UNITDATA_IND	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_5
	ti	TI_0
	neigh_cell_desc	NEIGH_CELL_DESC_2
	}	
(3) MPHC_DATA_IND	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_SACCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_5BIS
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(4) MPH_UNITDATA_IND	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_5BIS
	ti	TI_0
	neigh_cell_desc	NEIGH_CELL_DESC_2
	}	
(5) MPHC_DATA_IND	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_SACCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_6
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

(6) MPH_UNITDATA_IND

arfcn	ARFCN_14
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_6
ti	TI_0
cell_ident	CELL_IDENT_2
loc_area_ident	LOC_AREA_IDENT_2
cell_opt_sacch	CELL_OPT_SACCH_1
ncc_permit	NCC_PERMIT_2
si6_rest_oct	NOT_USED
}	

(7) MPHC_DATA_IND

radio_freq	ARFCN_14
l2_channel	L2_CHANNEL_SACCH
error_flag	VALID_BLOCK
l2_frame	L2_I_SMS
tc	TC_0
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(8) PH_DATA_IND

ch_type	CH_TYPE_SACCH
dummy	NOT_USED
sdu	I_SMS

(9) MPHC_DATA_IND

radio_freq	ARFCN_14
l2_channel	L2_CHANNEL_SACCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_5
tc	TC_0
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(10) MPHC_DATA_IND

radio_freq	ARFCN_14
l2_channel	L2_CHANNEL_SACCH
error_flag	VALID_BLOCK
l2_frame	L2_CHANGED_SYS_INFO_6
tc	TC_0
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(11) MPH_UNITDATA_IND

arfcn	ARFCN_14
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_6
ti	TI_0
cell_ident	CELL_IDENT_3
loc_area_ident	LOC_AREA_IDENT_2
cell_opt_sacch	CELL_OPT_SACCH_1
ncc_permit	NCC_PERMIT_2

si6_rest_oct NOT_USED
}

History: 10.11.99 LE Initial

4.12.5 ALR154: Handover, Serving Cell Parameter

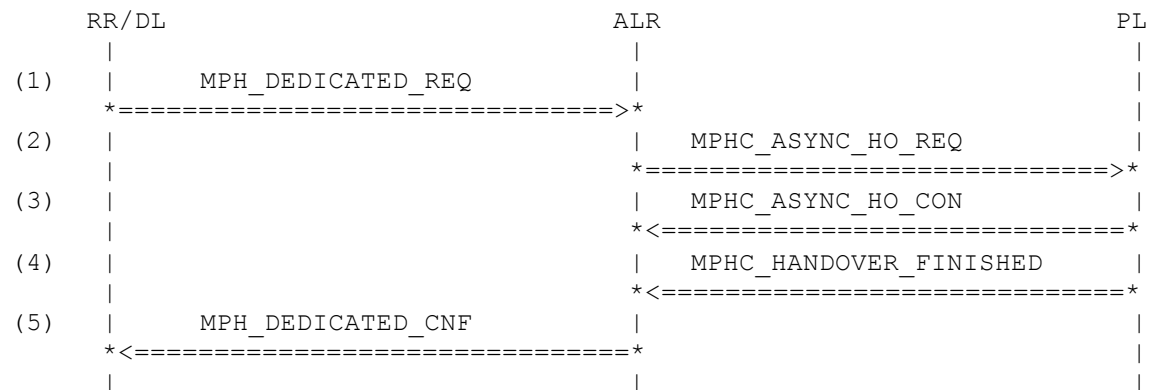
Description: A handover is performed. It is checked that the serving cell channel numbers are correctly set.

<A>: AMR not signalled

: AMR signalled

Variants: <A>....

Preamble: ALR056



Parametrization

Primitive	Parameter	Value
(1) MPH_DEDICATED_REQ		
	mod	MODE_ASYNC_HANDOVER
	start	STARTING_TIME
	ch_type	CH_TYPE_TCH2
	ch_type2	CH_TYPE_TCH3
	arfcn	ARFCN_30
	bsic	BSIC_1
	ho_param	HO_PARAM_1
	tr_para	TR_PARAM
	ciph	CIPH_PARAM
<A>	amr_conf	NOT_USED
	amr_conf	S_AMR_CONF_4_ICMI
(2) MPHC_ASYNC_HO_REQ		
	handover_command	ASYNC_HO_CMD_3
	fn_offset	NOT_USED
	time_alignmnt	NOT_USED
	cipher_key	NOT_USED
<A>	amr_configuration	NOT_USED
	amr_configuration	S_AMR_CONFIGURATION
(3) MPHC_ASYNC_HO_CON		
	param	NOT_USED
(4) MPHC_HANDOVER_FINISHED		
	cause	HO_COMPLETE
(5) MPH_DEDICATED_CNF		
	dedi_res	DEDI_RES_OK

History: 10.11.99 LE Initial

30-Nov-01

OT

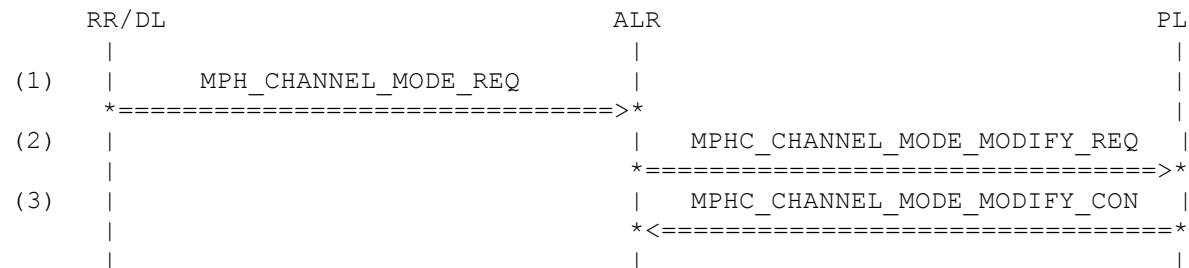
Variants <A>.. introduced, for AMR

4.13 Channel mode modify

4.13.1 ALR701: Channel mode modify request – AMR half rate

Description: A handover is performed. It is checked that the serving cell channel numbers are correctly set.

Preamble: ALR056



Parametrization

Primitive	Parameter	Value
(1) MPH_CHANNEL_MODE_REQ	mode	CHANNEL_MODE_AMR
	ch	CHANNEL_0
	amr_conf	S_AMR_CONF_4_ICMI
(2) MPHC_CHANNEL_MODE_MODIFY_REQ	sub_channel	CHANNEL_0
	channel_mode	CHM_AHS
	amr_configuration	S_AMR_CONFIGURATION
(3) MPHC_CHANNEL_MODE_MODIFY_CON	param	NOT_USED

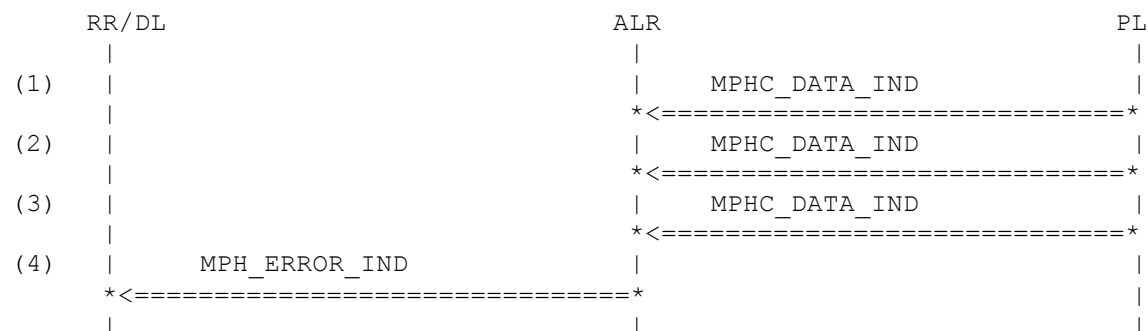
History: 30-Nov-01 OT Initial

4.14 Downlink Failure Detection

4.14.1 ALR042: Receive Invalid Paging Messages

Description: The downlink timeout value is initialised with a value of 10 (bs_pa_mfrms equal to 9). For each invalid paging message the counter is decremented by four. After three invalid messages a downlink error shall be indicated to RR.

Preamble: ALR013



Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	INVALID_BLOCK
	l2_frame	L2_NO_CONTENT
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(2) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	INVALID_BLOCK
	l2_frame	L2_NO_CONTENT
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(3) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	INVALID_BLOCK
	l2_frame	L2_NO_CONTENT
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(4) MPH_ERROR_IND	cs	CS_DOWN_LINK_FAIL
	arfcn	ARFCN_23

History: 10.11.99 LE Initial

4.14.2 ALR043: Test Upper Limit of Downlink Timeout Value

Description: The downlink timeout value is initialised with a value of 10 (bs_pa_mfrms equal to 9). For each invalid paging message the counter is decremented by four. For each valid paging message the counter is incremented by one. It is checked that the counter is not incremented more than the initial value.

Preamble: ALR013

RR/DL	ALR	PL
(1)	MPHC_DATA_IND	
(2)	MPHC_START_CCCH_REQ	
(3)	MPHC_SCELL_NBCCH_REQ	
(4)	MPHC_DATA_IND	
(5)	MPHC_DATA_IND	
(6)	MPHC_DATA_IND	
(7)	MPHC_DATA_IND	
(8)	MPHC_DATA_IND	

(9)	MPH_ERROR_IND	
	<=====	

Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAGING_REQ_1
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(2) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_8
	bs_ag_blks_res	BS_AG_BLK_RES_3
	bcch_combined	COMB_CCCH_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_0
	page_mode	PGM_NORMAL
(3) MPHC_SCELL_NBCCH_REQ	schedule_array_size	PERIODIC_SCELL_BCCH_ARRAY_SIZE
	schedule_array	PERIODIC_SCELL_BCCH_ARRAY
(4) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAGING_REQ_1
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(5) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAGING_REQ_1
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(6) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	INVALID_BLOCK
	l2_frame	L2_NO_CONTENT
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(7) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	INVALID_BLOCK

	l2_frame	L2_NO_CONTENT
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(8) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	INVALID_BLOCK
	l2_frame	L2_NO_CONTENT
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(9) MPH_ERROR_IND		
	cs	CS_DOWN_LINK_FAIL
	arfcn	ARFCN_23

History: 10.11.99 LE Initial

4.15 Cell Reselection

4.15.1 ALR900: Successful Case

Description: The current serving cell is 23, the neighbourcells are 1,14 and 124. RR starts a cell reselection to neighbourcell 14. After the end of cell reselection a new neighbourcell list is forwarded to ALR with the neighbourcells 2 and 15. It is expected that layer 1 is configured with the new serving cell 14 and the neighbourcells 2 and 15.

Preamble: ALR047

	RR/DL	ALR	PL
(1)	MPH_IDLE_REQ		
	=====>		
(2)		MPHC_STOP_RXLEV_PERIODIC_REQ	
		=====>	
(3)		MPHC_STOP_NCELL_SYNC_REQ	
		=====>	
(4)		MPHC_STOP_NCELL_BCCH_REQ	
		=====>	
(5)		MPHC_STOP_SCELL_BCCH_REQ	
		=====>	
(6)		MPHC_NEW_SCELL_REQ	
		=====>	
(7)		MPHC_NEW_SCELL_CON	
		<=====	
(8)		MPHC_START_CCCH_REQ	
		=====>	
(9)		MPHC_SCELL_NBCCH_REQ	
		=====>	
(10)		MPHC_DATA_IND	
		<=====	
(11)	MPH_UNITDATA_IND		
	<=====		
(12)		MPHC_START_CCCH_REQ	
		=====>	
(13)		MPHC_SCELL_NBCCH_REQ	
		=====>	

```

(14) | | MPHC_DATA_IND |
| | * <===== *
(15) | MPH_UNITDATA_IND |
| | * <===== *
(16) | | MPHC_DATA_IND |
| | * <===== *
(17) | | MPHC_START_CCCH_REQ |
| | * =====> *
(18) | | MPHC_SCELL_NBCCH_REQ |
| | * =====> *
(19) | | MPHC_DATA_IND |
| | * <===== *
(20) | MPH_UNITDATA_IND |
| | * <===== *
(19) | MPH_IDLE_REQ |
| | * =====> *
(20) | | MPHC_STOP_SCELL_BCCH_REQ |
| | * =====> *
(21) | | MPHC_SCELL_NBCCH_REQ |
| | * =====> *
(22) | | MPHC_RXLEV_PERIODIC_REQ |
| | * =====> *
(23) | MPH_NEIGHBOURCELL_REQ |
| | * =====> *
(24) | | MPHC_RXLEV_PERIODIC_REQ |
| | * =====> *

```

Parametrization

Primitive	Parameter	Value
(1) MPH_IDLE_REQ	mod	MODE_CELL_RESELECTION
	arfcn	ARFCN_14
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED
(2) MPHC_STOP_RXLEV_PERIODIC_REQ	param	NOT_USED
(3) MPHC_STOP_NCELL_SYNC_REQ	radio_freq_array_size	STOP_SIZE_0
	radio_freq_array	NOT_USED
(4) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_0
	radio_freq_array	NOT_USED
(5) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(6) MPHC_NEW_SCELL_REQ	radio_freq	ARFCN_14

	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
(7) MPHC_NEW_SCELL_CON	param	NOT_USED
(8) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_2
	bs_ag_blks_res	BS_AG_BLKES_RES_7
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_0
	page_block_index	PBI_0
	page_mode	PGM_REORG
(9) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(10) MPHC_DATA_IND	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_1
	ccch_lev	NOT_USED
	fn	FN_OFFSET_14
(11) MPH_UNITDATA_IND	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(12) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_4
	bs_ag_blks_res	BS_AG_BLKES_RES_5
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_1
	page_block_index	PBI_1
	page_mode	PGM_REORG
(13) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(13) MPHC_DATA_IND	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH

	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_1
	tc	TC_1
	ccch_lev	NOT_USED
	fn	FN_OFFSET_14
(14) MPH_UNITDATA_IND		
	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_1
	ti	TI_0
	cell_chan_desc	CELL_CHAN_DESC_1
	rach_ctrl	RACH_CTRL_1
	}	
(15) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAGING_REQ_1
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(16) MPHC_START_CCCH_REQ		
	bs_pa_mfrms	BS_PA_MFRMS_4
	bs_ag_blks_res	BS_AG_BLK_RES_5
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_1
	page_block_index	PBI_1
	page_mode	PGM_NORMAL
(17) MPHC_SCELL_NBCCH_REQ		
	schedule_array_size	
	PERIODIC_SCELL_BCCH_ARRAY_SIZE	
	schedule_array	
	PERIODIC_SCELL_BCCH_ARRAY	
(18) MPHC_DATA_IND		
	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_2
	tc	TC_1
	ccch_lev	NOT_USED
	fn	FN_OFFSET_14
(19) MPH_UNITDATA_IND		
	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_2
	ti	TI_0

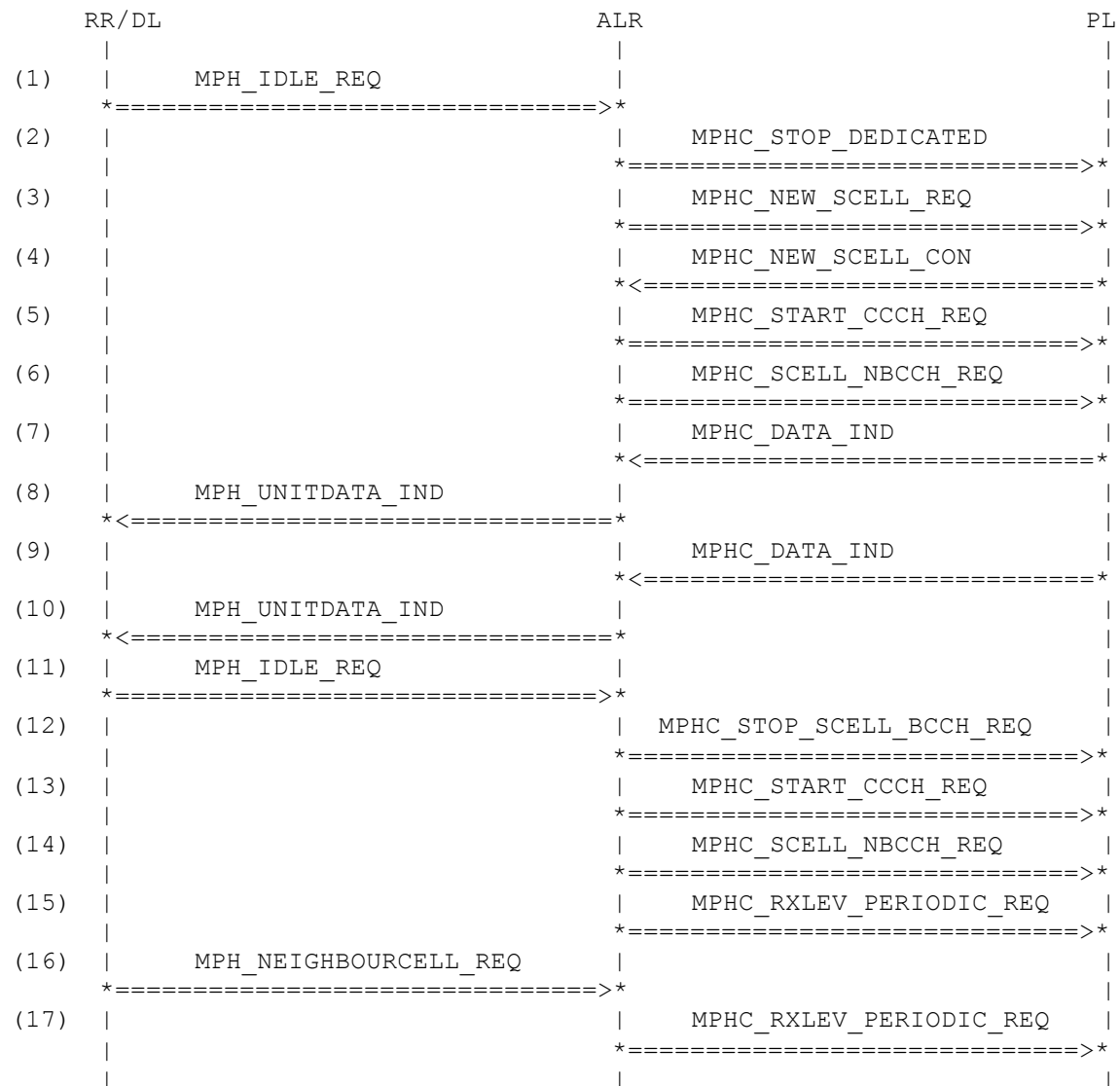
	neigh_cell_desc	NEIGH_CELL_DESC_1
	ncc_permit	NCC_PERMIT_1
	rach_ctrl	RACH_CTRL_1
	}	
(20) MPH_IDLE_REQ		
	mod	MODE_CELL_SELECTION
	arfcn	ARFCN_14
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_1
	bs_ag_blocks_res	BS_AG_BLK_RES_5
	bs_pa_mfrms	BS_PA_MFRMS_2
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED
(21) MPHC_STOP_SCELL_BCCH_REQ		
	param	NOT_USED
(22) MPHC_SCELL_NBCCH_REQ		
	schedule_array_size	
	PERIODIC_SCELL_BCCH_ARRAY_SIZE	
	schedule_array	NOT_USED
(23) MPHC_RXLEV_PERIODIC_REQ		
	chan_list	CHLIST_23_1_14_124
	num_of_chans	CHANNELS_4
	ba_id	BA_ID_2
	next_radio_freq_measured	CHAN_LIST_IDX_0
(24) MPH_NEIGHBOURCELL_REQ		
	multi_band	MULTI_BAND_0
	arfcn	CHLIST_1_15_FFFF
	sync_only	NOT_USED
(25) MPHC_RXLEV_PERIODIC_REQ		
	chan_list	CHLIST_1_14_15
	num_of_chans	CHANNELS_3
	ba_id	BA_ID_3
	next_radio_freq_measured	CHAN_LIST_IDX_0

History:	10.11.99	LE	Initial
	08.02.02	LG	handling of SI3 inserted (ALR-FIX-4650)
	28.06.02	MSB	faster switch to normal paging leads to normal reading of SC BCCH with MPHC_SCELL_NBCCH_REQ (sched_size=8)
	26.09.02	DL	E-OTD changes (MPH_IDLE_REQ)
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.15.2 ALR901: Cell Reselection after dedicated mode

Description: The mobile leaves the dedicated mode to the current serving cell 23. A cell reselection is performed and the idle mode is configured.

Preamble: ALR056



Parametrization

Primitive	Parameter	Value
(1) MPH_IDLE_REQ	mod	MODE_CELL_RESELECTION
	arfcn	ARFCN_23
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLK_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED

(2)	MPHC_STOP_DEDICATED	param	NOT_USED
(3)	MPHC_NEW_SCELL_REQ	radio_freq fn_offset time_alignment tsc	ARFCN_23 FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_1
(4)	MPHC_NEW_SCELL_CON	param	NOT_USED
(5)	MPHC_START_CCCH_REQ	bs_pa_mfrms bs_ag_blks_res bcch_combined ccch_group page_group page_block_index page_mode	BS_PA_MFRMS_2 BS_AG_BLKs_RES_7 COMB_CCCH_NOT_COMB CCCH_GROUP_0 PG_0 PBI_0 PGM_REORG
(6)	MPHC_SCELL_NBCCH_REQ	schedule_array_size schedule_array	SCHED_SIZE_1 NOT_USED
(7)	MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_1 TC_0 NOT_USED FN_OFFSET_0
(8)	MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_chan_desc rach_ctrl }	ARFCN_23 FN_OFFSET_0 RR DOWNLINK D_SYS_INFO_1 TI_0 CELL_CHAN_DESC_1 RACH_CTRL_1
(9)	MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_2 TC_1 NOT_USED FN_OFFSET_0
(10)	MPH_UNITDATA_IND	arfcn fn sdu { component	ARFCN_23 FN_OFFSET_0 RR

	direction	DOWNLINK
	pd	D_SYS_INFO_2
	ti	TI_0
	neigh_cell_desc	NEIGH_CELL_DESC_1
	ncc_permit	NCC_PERMIT_1
	rach_ctrl	RACH_CTRL_1
	}	
(11) MPH_IDLE_REQ		
	mod	MODE_CELL_SELECTION
	arfcn	ARFCN_23
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED
(12) MPHC_STOP_SCELL_BCCH_REQ		
	param	NOT_USED
(13) MPHC_START_CCCH_REQ		
	bs_pa_mfrms	BS_PA_MFRMS_8
	bs_ag_blk_res	BS_AG_BLKS_RES_3
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_2
	page_mode	PGM_REORG
(14) MPHC_SCELL_NBCCH_REQ		
	schedule_array_size	SCHED_SIZE_1
	schedule_array	FULL_READ
(15) MPHC_RXLEV_PERIODIC_REQ		
	chan_list	CHLIST_23_1_14_124
	num_of_chans	CHANNELS_4
	ba_id	BA_ID_2
	next_radio_freq_measured	CHAN_LIST_IDX_0
(16) MPH_NEIGHBOURCELL_REQ		
	multi_band	MULTI_BAND_0
	arfcn	CHLIST_1_15_FFFF
	sync_only	NOT_USED
(17) MPHC_RXLEV_PERIODIC_REQ		
	chan_list	CHLIST_23_1_15
	num_of_chans	CHANNELS_3
	ba_id	BA_ID_3
	next_radio_freq_measured	CHAN_LIST_IDX_0

History: 10.11.99 LE Initial

21.06.02	MSB	sequence and parameter changed for MPHC_SCELL_NBCCH_REQ: after page mode set to REORG, full read is necessary
26.09.02	DL	E-OTD changes (MPH_IDLE_REQ)
07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.15.3 ALR920: PDCH Assignment

Description: In dedicated mode ALR is suspended during a PDCH Assignment procedure.
Reference: TS04.08 V8.10.0, section 3.4.19 Assignment to a Packet Data channel.

Preamble: ALR056

	RR/DL	ALR	PL
(1)	MPH_DEDICATED_REQ		
	=====>		
(2)		MPHC_STOP_SCELL_BCCH_REQ	
		=====>	
(3)		MPHC_STOP_CCCH_REQ	
		=====>	
(4)		MPHC_STOP_DEDICATED	
		=====>	
(5)	MPH_DEDICATED_CNF		
	<=====		

Parametrization

Primitive	Parameter	Value
(1) MPH_DEDICATED_REQ	mod	MODE_PDCH_ASSIGN
	start	NOT_USED
	ch_type	NOT_USED
	ch_type2	NOT_USED
	arfcn	NOT_USED
	bsic	NOT_USED
	ho_param	NOT_USED
	tr_para	NOT_USED
	ciph	NOT_USED
	amr_conf	NOT_USED
(2) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPHC_STOP_CCCH_REQ	param	NOT_USED
(4) MPHC_STOP_DEDICATED	param	NOT_USED
(5) MPH_DEDICATED_CNF	dedi_res	DEDI_RES_OK

History: 12.08.01 VK Initial (copied from ALR930 and adapted)
26-Feb-02 OT Adaptations for AMR integration

4.15.4 ALR921: PDCH Assignment, Success, Start TBF establishment

Description: In dedicated mode ALR is suspended during a PDCH Assignment procedure. After a successful TBF establishment, ALR is requested to enter a mode which is compatible to Packet Transfer Mode.

Preamble: ALR920

	RR/DL	ALR	PL
(1)	MPH_IDLE_REQ		
	*=====>	*	
(2)		MPHC_STOP_SCELL_BCCH_REQ	
		*=====>	*
(3)		MPHC_STOP_CCCH_REQ	
		*=====>	*

Parametrization

Primitive	Parameter	Value
(1) MPH_IDLE_REQ	mod	MODE_PACKET_TRANSFER
	arfcn	ARFCN_23
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLK_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED
(2) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPHC_STOP_CCCH_REQ	param	NOT_USED

History: 13.08.01 VK Initial
26.09.02 DL E-OTD changes (MPH_IDLE_REQ)

4.15.5 ALR922: PDCH Assignment, Error during TBB establishment

Description: After an unsuccessful TBF establishment, ALR is requested to switch back to the 'old' channel.

Preamble: ALR921

	RR/DL	ALR	PL
(1)	MPH_DEDICATED_FAIL_REQ		
	*=====>	*	
(2)		MPHC_IMMED_ASSIGN_REQ	
		*=====>	*
(3)		MPHC_IMMED_ASSIGN_CON	
		<=====	
(4)		MPHC_CHANNEL_ASSIGN_REQ	
		*=====>	*

```

(5) |                                     | MPHCH_CHANNEL_ASSIGN_CON |
    |                                     | *<=====*              |
(6) | MPH_DEDICATED_FAIL_CNF          |                             |
    | *<=====*                      |                             |
    |                                     |                             |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_DEDICATED_FAIL_REQ	param	NOT_USED
(2) MPHCH_IMMED_ASSIGN_REQ	channel_desc	CHANNEL_DESC_1
	timing_advance	TIMING_ADVANCE
	frequency_list	FREQ_LIST
	starting_time	NOT_USED
	frequency_list_bef_sti	NOT_USED
	maio_bef_sti	NOT_USED
	dtx_allowed	NOT_USED
	bcch_allocation	NOT_USED
	ba_id	NOT_USED
	pwrc	NOT_USED
(3) MPHCH_IMMED_ASSIGN_CON	param	NOT_USED
(4) MPHCH_CHANNEL_ASSIGN_REQ	channel_desc_1	NOT_USED
	channel_mode_1	NOT_USED
	txpwr	NOT_USED
	frequency_list	NOT_USED
	starting_time	NOT_USED
	channel_desc_2	NOT_USED
	channel_mode_2	NOT_USED
	frequency_list_bef_sti	NOT_USED
	channel_desc_1_bef_sti	NOT_USED
	channel_desc_2_bef_sti	NOT_USED
	cipher_mode	NOT_USED
	a5_algorithm	NOT_USED
	cipher_key	NOT_USED
	dtx_allowed	NOT_USED
	amr_configuration	NOT_USED
(5) MPHCH_CHANNEL_ASSIGN_CON	param	NOT_USED
(6) MPH_DEDICATED_FAIL_CNF	param	NOT_USED

History: 14.08.01 VK Initial4650)
26-Feb-02 OT Adaptations for AMR integration

4.15.6 ALR925: Cell Selection after dedicated mode

Description: The mobile leaves the dedicated mode after some moments to the current serving cell 23. A cell selection is performed and the idle mode is configured.

Preamble: ALR020B

	RR/DL	ALR	PL
(1)		MPHC_DATA_IND	
		<=====	
(2)		MPHC_START_CCCH_REQ	
		=====>*	
(3)		MPHC_SCELL_NBCCH_REQ	
		=====>*	
(4)		MPHC_DATA_IND	
		<=====	
(5)		MPHC_START_CCCH_REQ	
		=====>*	
(6)	MPH_RANDOM_ACCESS_REQ		
	=====>*		
(7)		MPHC_STOP_RXLEV_PERIODIC_REQ	
		=====>*	
(8)		MPHC_STOP_SCELL_BCCH_REQ	
		=====>*	
(9)		MPHC_RA_REQ	
		=====>*	
(10)		MPHC_RA_CON	
		<=====	
(11)	MPH_RANDOM_ACCESS_CNF		
	<=====		
(12)		MPHC_RA_REQ	
		=====>*	
(13)		MPHC_DATA_IND	
		<=====	
(14)	MPH_UNITDATA_IND		
	<=====		
(15)	MPH_DEDICATED_REQ		
	=====>*		
(16)		MPHC_STOP_SCELL_BCCH_REQ	
		=====>*	
(17)		MPHC_STOP_CCCH_REQ	
		=====>*	
(18)		MPHC_STOP_RA_REQ	
		=====>*	
(19)		MPHC_IMMED_ASSIGN_REQ	
		=====>*	
(20)		MPHC_IMMED_ASSIGN_CON	
		<=====	
(21)	MPH_DEDICATED_CNF		
	<=====		
(22)	MPH_IDLE_REQ		
	=====>*		
(23)		MPHC_STOP_DEDICATED	
		=====>*	
(24)		MPHC_START_CCCH_REQ	
		=====>*	
(25)		MPHC_SCELL_NBCCH_REQ	
		=====>*	
(26)		MPHC_RXLEV_PERIODIC_REQ	
		=====>*	

Parametrization

Primitive	Parameter	Value
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(1) MPHC_DATA_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_PCH
error_flag	VALID_BLOCK
l2_frame	L2_PAGING_REQ_1
tc	TC_0
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(2) MPHC_START_CCCH_REQ

bs_pa_mfrms	BS_PA_MFRMS_7
bs_ag_blks_res	BS_AG_BLK_RES_2
bcch_combined	COMB_CCCH_COMB
ccch_group	CCCH_GROUP_2
page_group	PG_23
page_block_index	PBI_0
page_mode	PGM_NORMAL

(3) MPHC_SCELL_NBCCH_REQ

PERIODIC_SCELL_BCCH_ARRAY_SIZE	schedule_array_size
PERIODIC_SCELL_BCCH_ARRAY	schedule_array

(4) MPHC_DATA_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_PCH
error_flag	VALID_BLOCK
l2_frame	L2_PAGING_REQ_1_EXT
tc	TC_0
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(5) MPHC_START_CCCH_REQ

bs_pa_mfrms	BS_PA_MFRMS_7
bs_ag_blks_res	BS_AG_BLK_RES_2
bcch_combined	COMB_CCCH_COMB
ccch_group	CCCH_GROUP_2
page_group	PG_23
page_block_index	PBI_0
page_mode	PGM_EXTENDED

(6) MPH_RANDOM_ACCESS_REQ

send_mode	TWO_BURSTS
-----------	------------

(7) MPHC_STOP_RXLEV_PERIODIC_REQ

param	NOT_USED
-------	----------

(8) MPHC_STOP_SCELL_BCCH_REQ

param	NOT_USED
-------	----------

(9) MPHC_RA_REQ

txpwr	POWER_12
rand	RAND_BURST_1
channel_request	CHANNEL_REQUEST_1
powerclass_gsm	NOT_USED
powerclass_dcs	NOT_USED

(10) MPHC_RA_CON	fn channel_request	FN_BURST_1 CHANNEL_REQUEST_1
(11) MPH_RANDOM_ACCESS_CNF	frame_no	T123_BURST_1
(12) MPHC_RA_REQ	txpwr rand channel_request powerclass_gsm powerclass_dcs	POWER_12 RAND_BURST_2 CHANNEL_REQUEST_2 NOT_USED NOT_USED
(13) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_CCCH VALID_BLOCK L2_IMM_ASS_HOP TC_0 NOT_USED FN_OFFSET_0
(14) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti tma dl d_t page_mode chan_desc pck_chan_desc req_ref time_advance mob_alloc }	ARFCN_23 NOT_USED RR DOWNLINK D_IMM_ASSIGN TI_0 TMA_0 DL_0 D_T_DED PAGE_MODE_1 CHAN_DESC_1 NOT_USED REQ_REF_1 TIME_ADVANCE_1 MOB_ALLOC_1
(15) MPH_DEDICATED_REQ	mod start ch_type ch_type2 arfcn bsic ho_param tr_para ciph amr_conf	MODE_IMM_ASSIGN STARTING_TIME CH_TYPE_HOP CH_TYPE2 ARFCN_23 BSIC_1 HO_PARAM TR_PARAM CIPH_PARAM NOT_USED
(16) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(17) MPHC_STOP_CCCH_REQ	param	NOT_USED

(18) MPHC_STOP_RA_REQ	param	NOT_USED
(19) MPHC_IMMED_ASSIGN_REQ	channel_desc timing_advance frequency_list starting_time frequency_list_bef_sti maio_bef_sti dtx_allowed bcch_allocation ba_id pwr	CHANNEL_DESC_1 TIMING_ADVANCE FREQ_LIST S_TIME_MPHC NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED
(20) MPHC_IMMED_ASSIGN_CON	param	NOT_USED
(21) MPH_DEDICATED_CNF	dedi_res	DEDI_RES_OK
(22) MPH_IDLE_REQ	mod arfcn ext_bcch comb_ccch tn dlt pg bs_ag_blocks_res bs_pa_mfrms power ncc_permitted reorg_only eotd_avail gprs_support	MODE_CELL_SELECTION ARFCN_23 NOT_USED COMB_CCCH_COMB TN_0 DLT_10 PG_20 BS_AG_BLK_RES_3 BS_PA_MFRMS_6 POWER_12 NOT_PRESENT_8BIT NOT_USED EOTD_NOT_PRESENT NOT_USED
(23) MPHC_STOP_DEDICATED	param	NOT_USED
(24) MPHC_START_CCCH_REQ	bs_pa_mfrms bs_ag_blk_res bcch_combined ccch_group page_group page_block_index page_mode	BS_PA_MFRMS_2 BS_AG_BLK_RES_7 COMB_CCCH_NOT_COMB CCCH_GROUP_0 PG_0 PBI_0 PGM_REORG
(25) MPHC_SCELL_NBCCH_REQ	schedule_array_size schedule_array	SCHED_SIZE_1 NOT_USED
(26) MPHC_RXLEV_PERIODIC_REQ	chan_list num_of_chans ba_id next_radio_freq_measured	NOT_USED NOT_USED NOT_USED NOT_USED

History: 12.02.03 ZMM Initial

07.04.03

MSB

MPHC_CELL_NBCCH_REQ after
MPHC_START_CCCH_REQ included

4.15.7 ALR930: Network Controlled Change Cell

Description: In dedicated mode ALR is requested to synchronize to a new cell. The new cell ARFCN and BSIC is provided by the network.

Preamble: ALR056

RR/DL	ALR	PL
(1) MPH_BSIC_REQ		
=====>		
(2)	MPHC_STOP_SCELL_BCCH_REQ	
	=====>	
(3)	MPHC_STOP_CCCH_REQ	
	=====>	
(4)	MPHC_STOP_RXLEV_PERIODIC_REQ	
	=====>	
(5)	MPHC_STOP_DEDICATED	
	=====>	
(6)	MPHC_NETWORK_SYNC_REQ	
	=====>	
(7)	MPHC_NETWORK_SYNC_IND	
	<=====	
(8) MPH_BSIC_CNF		
<=====		
(9)	MPHC_NEW_SCELL_REQ	
	=====>	
(10)	MPHC_NEW_SCELL_CON	
	<=====	
(11)	MPHC_SCELL_NBCCH_REQ	
	=====>	
(12)	MPHC_DATA_IND	
	<=====	
(13) MPH_UNITDATA_IND		
<=====		
(14)	MPHC_DATA_IND	
	<=====	
(15) MPH_UNITDATA_IND		
<=====		
(16) MPH_IDLE_REQ		
=====>		
(17)	MPHC_STOP_SCELL_BCCH_REQ	
	=====>	
(18)	MPHC_START_CCCH_REQ	
	=====>	
(19)	MPHC_SCELL_NBCCH_REQ	
	=====>	
(20) MPH_NEIGHBOURCELL_REQ		
=====>		
(21)	MPHC_RXLEV_PERIODIC_REQ	
	=====>	

Parametrization

Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_42

(2) MPH_C_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPH_C_STOP_CCCH_REQ	param	NOT_USED
(4) MPH_C_STOP_RXLEV_PERIODIC_REQ	param	NOT_USED
(5) MPH_C_STOP_DEDICATED	param	NOT_USED
(6) MPH_C_NETWORK_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity search_mode	ARFCN_42 NOT_USED NOT_USED TV_INVALID_TIMING_INFO SM_WIDE_MODE
(7) MPH_C_NETWORK_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_42 SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_1
(8) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_42_STD_900 BSIC_1 CS_NO_ERROR
(9) MPH_C_NEW_SCELL_REQ	radio_freq fn_offset time_alignment tsc	ARFCN_42 FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_1
(10) MPH_C_NEW_SCELL_CON	param	NOT_USED
(11) MPH_C_SCELL_NBCCH_REQ	schedule_array_size schedule_array	SCHED_SIZE_1 FULL_READ
(12) MPH_C_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_leve fn	ARFCN_42 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_1 TC_0 NOT_USED FN_OFFSET_0
(13) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_chan_desc rach_ctrl }	ARFCN_42 FN_OFFSET_0 RR DOWNLINK D_SYS_INFO_1 TI_0 CELL_CHAN_DESC_1 RACH_CTRL_1

(14)MPHC_DATA_IND

radio_freq	ARFCN_42
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_2
tc	TC_1
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(15)MPH_UNITDATA_IND

arfcn	ARFCN_42
fn	FN_OFFSET_0
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_2
ti	TI_0
neigh_cell_desc	NEIGH_CELL_DESC_1
ncc_permit	NCC_PERMIT_1
rach_ctrl	RACH_CTRL_1
}	

(16)MPH_IDLE_REQ

mod	MODE_CELL_SELECTION
arfcn	ARFCN_42
ext_bcch	NOT_USED
comb_ccch	COMB_CCCH_NOT_COMB
tn	TN_0
dlt	DLT_10
pg	PG_20
bs_ag_blocks_res	BS_AG_BLK_RES_3
bs_pa_mfrms	BS_PA_MFRMS_6
power	POWER_12
ncc_permitted	NOT_PRESENT_8BIT
reorg_only	NOT_USED
eotd_avail	EOTD_NOT_PRES
gprs_support	NOT_USED

(17)MPHC_STOP_SCELL_BCCH_REQ

param	NOT_USED
-------	----------

(18)MPHC_START_CCCH_REQ

bs_pa_mfrms	BS_PA_MFRMS_8
bs_ag_blks_res	BS_AG_BLK_RES_3
bcch_combined	COMB_CCCH_NOT_COMB
ccch_group	CCCH_GROUP_0
page_group	PG_20
page_block_index	PBI_2
page_mode	PGM_REORG

(19)MPHC_SCELL_NBCCH_REQ

schedule_array_size	SCHED_SIZE_1
schedule_array	FULL_READ

(20)MPH_NEIGHBOURCELL_REQ

multi_band	MULTI_BAND_0
arfcn	CHLIST_2_30_FFFF
sync_only	NOT_USED

(21)MPHC_RXLEV_PERIODIC_REQ

chan_list	CHLIST_42_2_30
num_of_chans	CHANNELS_3

ba_id BA_ID_2
next_radio_freq_measured CHAN_LIST_IDX_0

History: 08.08.01 VK Initial (copied from ALR901)
28.06.02 MSB change ba_id in the last message to 2
26.09.02 DL E-OTD changes (MPH_IDLE_REQ)
07.04.03 MSB MPHC_SCELL_NBCCH_REQ after
MPHC_START_CCCH_REQ included

4.16 Idle Mode Neighbourcells Procedures

4.16.1 ALR046: Definition of BCCH Allocation

Description: RR selects the channel 23 after reading the BCCH carrier.
Variant A: with neighbourcell list (serving cell not included)
Variant B: with neighbourcell list (serving cell included)
Variant C: with empty neighbour cell list.
Variant D: same like A, but with ncc_permitted = 4

Preamble: ALR003

Variants: <A> .. <D>

	RR/DL	ALR	PL
(1)	MPH_CLASSMARK_REQ		
	=====>		
(2)	MPH_IDLE_REQ		
	=====>		
(3)		MPHC_STOP_SCELL_BCCH_REQ	
		=====>	
(4)		MPHC_START_CCCH_REQ	
		=====>	
(5)		MPHC_SCELL_NBCCH_REQ	
		=====>	
(6)	MPH_IDENTITY_REQ		
	=====>		
(7)	MPH_CBCH_REQ		
	=====>		
(8)	MPH_NEIGHBOURCELL_REQ		
	=====>		
(9)		MPHC_RXLEV_PERIODIC_REQ	
		=====>	

Parametrization

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_GSM_900
(2) MPH_IDLE_REQ	mod	NOT_USED
	arfcn	ARFCN_23
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20

	bs_ag_blocks_res	BS_AG_BLKES_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_4
	power	POWER_12
<A>	ncc_permitted	NOT_PRESENT_8BIT
	ncc_permitted	NOT_PRESENT_8BIT
<C>	ncc_permitted	NOT_PRESENT_8BIT
<D>	ncc_permitted	NCC_PERMITTED_4
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED
(3) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_6
	bs_ag_blkres	BS_AG_BLKES_RES_3
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_2
	page_mode	PGM_REORG
(5) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(6) MPH_IDENTITY_REQ	mid	MS_ID_IMSI_TMSI
(7) MPH_CBCH_REQ	cbch	NO_CBCH
(8) MPH_NEIGHBOURCELL_REQ	multi_band	MULTI_BAND_0
<A>	arfcn	CHLIST_1_14_124_FFFF
	arfcn	CHLIST_23_1_14_124_FFFF
<C>	arfcn	EMPTY_NCELL_LIST
<D>	arfcn	CHLIST_1_14_124_FFFF
	sync_only	NOT_USED
(9) MPHC_RXLEV_PERIODIC_REQ	chan_list	CHLIST_23_1_14_124
<A>	chan_list	CHLIST_23_1_14_124
	chan_list	CHLIST_23
<C>	chan_list	CHLIST_23_1_14_124
<D>	num_of_chans	CHANNELS_4
<A>	num_of_chans	CHANNELS_4
	num_of_chans	CHANNELS_1
<C>	num_of_chans	CHANNELS_4
<D>	ba_id	BA_ID_1
	next_radio_freq_measured	CHAN_LIST_IDX_0

History: 10.11.99 LE Initial
12.07.00 DG MPH_CLASSMARK_REQ:
class changed into classmark
(Forum G23M/ No 0057)

07.02.02	LG	changed value for ba_id
26.09.02	DL	E-OTD changes (MPH_IDLE_REQ)
07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included
07.04.03	MSB	Use preamble ALR003 for arfcn=23 as serving cell

4.16.2 ALR047: Synchronisation to Neighbour Cells successful

Description: The BA list contains the serving cell 23 and the neighbour cells 1, 14 and 124. The fieldstrength is 56 for channel 23, 12 for channel 1, 44 for channel 14 and 25 for channel 124 (all values in GSM range). The ranking for the neighbour cells is 14, 124 and channel 1. Each reports contains two fieldstrength values per channel. The multiframe period is set to 6. The first measurement report is send to RR after five reports from PL. Then after each three reports from PL a measurement report is send to RR.

Preamble: ALR046A

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
(2)	MPHC_NCELL_SYNC_REQ	
(3)	MPHC_NCELL_SYNC_REQ	
(4)	MPHC_NCELL_SYNC_REQ	
(5)	MPHC_RXLEV_PERIODIC_IND	
(6)	MPH_MEASUREMENT_IND	
(7)	MPHC_RXLEV_PERIODIC_IND	
(8)	MPHC_NCELL_SYNC_IND	
(9)	MPHC_NCELL_BCCH_REQ	
(10)	MPHC_NCELL_BCCH_IND	
(11)	MPHC_STOP_NCELL_BCCH_REQ	
(12)	MPHC_RXLEV_PERIODIC_IND	
(13)	MPHC_NCELL_SYNC_IND	
(14)	MPHC_NCELL_BCCH_REQ	
(15)	MPHC_NCELL_SYNC_IND	
(16)	MPHC_NCELL_BCCH_REQ	
(17)	MPHC_NCELL_BCCH_IND	
(18)	MPHC_STOP_NCELL_BCCH_REQ	
(19)	MPHC_NCELL_BCCH_IND	
(20)	MPHC_STOP_NCELL_BCCH_REQ	

(21)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(22)		MPH_MEASUREMENT_IND		
			*<=====	
(23)		MPH_UNITDATA_IND		
			*<=====	
(24)		MPH_UNITDATA_IND		
			*<=====	
(25)		MPH_UNITDATA_IND		
			*<=====	
(26)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(27)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(28)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(29)		MPH_MEASUREMENT_IND		
			*<=====	
(30)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(31)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(32)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(33)		MPH_MEASUREMENT_IND		
			*<=====	
(34)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(35)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(36)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(37)		MPH_MEASUREMENT_IND		
			*<=====	
(38)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(39)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(40)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(41)		MPH_MEASUREMENT_IND		
			*<=====	
(42)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(43)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(44)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(45)		MPH_MEASUREMENT_IND		
			*<=====	
(46)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(47)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(48)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(49)		MPH_MEASUREMENT_IND		
			*<=====	
(50)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	

```

(51) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(52) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(53) | | MPHC_NCELL_SYNC_REQ |
| | *=====>*
(54) | | MPHC_NCELL_SYNC_IND |
| | *<=====*
(55) | | MPHC_NCELL_SYNC_REQ |
| | *=====>*
(56) | | MPHC_NCELL_SYNC_REQ |
| | *=====>*
(57) | MPH_MEASUREMENT_IND |
| *<=====*
(58) | | MPHC_NCELL_SYNC_IND |
| | *<=====*
(59) | | MPHC_NCELL_SYNC_IND |
| | *<=====*
(60) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(61) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(62) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(63) | MPH_MEASUREMENT_IND |
| *<=====*
| |

```

Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(3) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(4) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(5) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1

(6) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_918
ncells	NCELLS_NO_CONTENT
gprs_sync	NOT_USED

(7) MPH_C_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(8) MPH_C_NCELL_SYNC_IND

radio_freq	ARFCN_14
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrij	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(9) MPH_C_NCELL_BCCH_REQ

radio_freq	ARFCN_14
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(10) MPH_C_NCELL_BCCH_IND

radio_freq	ARFCN_14
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(11) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_14

(12) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(13) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_124
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_124
time_alignment	TIME_ALIGNMT_124
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eodt_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrj	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(14) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_124
fn_offset	FN_OFFSET_124
time_alignment	TIME_ALIGNMT_124
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(15) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_1
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_1
time_alignment	TIME_ALIGNMT_1
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eodt_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrj	NOT_USED

	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(16) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_1
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(17) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_124
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_124
(18) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_124
(19) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_1
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_1
(20) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_1
(21) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(22) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED
(23) MPH_UNITDATA_IND		
	arfcn	ARFCN_1
	fn	NOT_USED

	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(24) MPH_UNITDATA_IND		
	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(25) MPH_UNITDATA_IND		
	arfcn	ARFCN_124
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(26) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(27) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1

(28) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(29) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NCELLS_1_14_124
gprs_sync	NOT_USED

(30) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(31) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(32) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(33) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NCELLS_1_14_124
gprs_sync	NOT_USED

(34) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(35) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(36) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(37) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NCELLS_1_14_124
gprs_sync	NOT_USED

(38) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(39) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(40) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(41) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NCELLS_1_14_124
gprs_sync	NOT_USED

(42) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(43) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(44) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(45) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NCELLS_1_14_124
gprs_sync	NOT_USED

(46) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(47) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(48) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(49) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NCELLS_1_14_124
gprs_sync	NOT_USED

(50) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(51) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(52) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(53) MPHC_NCELL_SYNC_REQ

radio_freq	ARFCN_14
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
timing_validity	TV_VALID_TIMING_INFO

(54) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_14
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrx	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(55) MPHC_NCELL_SYNC_REQ

radio_freq	ARFCN_124
fn_offset	FN_OFFSET_124
time_alignment	TIME_ALIGNMT_124
timing_validity	TV_VALID_TIMING_INFO

(56) MPHC_NCELL_SYNC_REQ

radio_freq	ARFCN_1
fn_offset	FN_OFFSET_1
time_alignment	TIME_ALIGNMT_1
timing_validity	TV_VALID_TIMING_INFO

(57) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NCELLS_1_14_124
gprs_sync	NOT_USED

(58) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_124
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_124
time_alignment	TIME_ALIGNMT_124
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eodt_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrj	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(59) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_1
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_1
time_alignment	TIME_ALIGNMT_1
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eodt_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrj	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(60) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(61) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8

	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(62) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(63) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED

History:	24.09.99	MPA	Initial
	13.06.01	MSB	fn_offset in (6) corrected
	20.06.01	MSB	numbering of msc corrected
	07.02.02	LG	changed value for ba_id
	26.09.02	DL	E-OTD changes (MPHC_NCELL_SYNC_IND)

4.16.3 ALR048: Synchronisation to Neighbour Cells failed

Description: The BA list contains the serving cell 23 and the neighbour cells 1, 14 and 124. The fieldstrength is 56 for channel 23, 12 for channel 1, 44 for channel 14 and 25 for channel 124 (all values in GSM range). The ranking for the neighbour cells is 14, 124 and at least channel 1. Each reports contains two fieldstrength values per channel. The multiframe period is set to 6. The first measurement report is send to RR after five reports from PL. Then after each three reports from PL a measurement report is send to RR. Synchronisation to channel 14 fails.

Preamble: ALR046A

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
(2)	MPHC_NCELL_SYNC_REQ	
(3)	MPHC_NCELL_SYNC_REQ	
(4)	MPHC_NCELL_SYNC_REQ	
(5)	MPHC_RXLEV_PERIODIC_IND	
(6)	MPH_MEASUREMENT_IND	
(7)	MPHC_RXLEV_PERIODIC_IND	
(8)	MPHC_NCELL_SYNC_IND	

(9)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(10)			MPHC_NCELL_SYNC_IND	
			*<=====	
(11)			MPHC_NCELL_BCCH_REQ	
			*=====>	
(12)			MPHC_NCELL_SYNC_IND	
			*<=====	
(13)			MPHC_NCELL_BCCH_REQ	
			*=====>	
(14)			MPHC_NCELL_BCCH_IND	
			*<=====	
(15)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====>	
(16)			MPHC_NCELL_BCCH_IND	
			*<=====	
(17)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====>	
(18)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(19)		MPH_MEASUREMENT_IND		
		*<=====		
(20)		MPH_UNITDATA_IND		
		*<=====		
(21)		MPH_UNITDATA_IND		
		*<=====		
(22)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(23)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(24)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(25)		MPH_MEASUREMENT_IND		
		*<=====		
(26)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(27)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(28)			MPHC_NCELL_SYNC_REQ	
			*=====>	
(29)			MPHC_NCELL_SYNC_IND	
			*<=====	
(30)			MPHC_NCELL_BCCH_REQ	
			*=====>	
(31)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(32)		MPH_MEASUREMENT_IND		
		*<=====		
(33)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(34)			MPHC_NCELL_BCCH_IND	
			*<=====	
(35)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====>	
(36)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(37)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	

(38)		MPH_MEASUREMENT_IND			
		*<=====			
(39)		MPH_UNITDATA_IND			
		*<=====			
(40)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	
(41)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	
(42)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	
(43)		MPH_MEASUREMENT_IND			
		*<=====			
(44)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	
(45)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	
(46)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	
(47)		MPH_MEASUREMENT_IND			
		*<=====			
(48)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	
(49)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	
(50)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	
(51)		MPH_MEASUREMENT_IND			
		*<=====			
(52)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	
(53)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	
(54)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	
(55)				MPHC_NCELL_SYNC_REQ	
				*=====>	
(56)				MPHC_NCELL_SYNC_REQ	
				*=====>	
(57)		MPH_MEASUREMENT_IND			
		*<=====			
(58)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	
(59)				MPHC_NCELL_SYNC_IND	
				*<=====	
(60)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	
(61)				MPHC_NCELL_SYNC_IND	
				*<=====	
(62)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	
(63)		MPH_MEASUREMENT_IND			
		*<=====			
(64)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	
(65)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	
(66)				MPHC_RXLEV_PERIODIC_IND	
				*<=====	

```

(67) | MPH_MEASUREMENT_IND |
    | *<=====
(68) | | MPH_C_RXLEV_PERIODIC_IND |
    | | *<=====
(69) | | MPH_C_RXLEV_PERIODIC_IND |
    | | *<=====
(70) | | MPH_C_RXLEV_PERIODIC_IND |
    | | *<=====
(71) | | MPH_C_NCELL_SYNC_REQ |
    | | *=====
(72) | MPH_MEASUREMENT_IND |
    | *<=====
(73) | | MPH_C_RXLEV_PERIODIC_IND |
    | | *<=====
(74) | | MPH_C_NCELL_SYNC_IND |
    | | *<=====
    | |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_C_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPH_C_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(3) MPH_C_NCELL_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(4) MPH_C_NCELL_SYNC_REQ	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(5) MPH_C_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(6) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_918

	ncells	NCELLS_NO_CONTENT
	gprs_sync	NOT_USED
(7) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(8) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_14
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrx	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(9) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(10) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_124
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrx	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED

	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(11) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_124
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(12) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_1
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrij	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(13) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_1
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(14) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_1
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_1
(15) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_1
(16) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_124
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK

	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_124
(17) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_124
(18) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rlev	RXLEV_56
	ba_id	BA_ID_1
(19) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_124
	gprs_sync	NOT_USED
(20) MPH_UNITDATA_IND	arfcn	ARFCN_1
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(21) MPH_UNITDATA_IND	arfcn	ARFCN_124
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	

(22) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(23) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(24) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(25) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_124 NOT_USED
(26) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(27) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(28) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(29) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic neigh_id attempt pm toa angle snr	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED

	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(30) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(31) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(32) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_124
	gprs_sync	NOT_USED
(33) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(34) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(35) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_14
(36) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(37) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(38) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(39) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl }	ARFCN_14 NOT_USED RR DOWNLINK D_SYS_INFO_3 TI_0 CELL_IDENT_1 LOC_AREA_IDENT_1 CTRL_CHAN_DESC_1 CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(40) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(41) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(42) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(43) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub	ARFCN_23 RXLEV_56 NOT_USED

	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED
(44) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(45) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(46) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(47) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED
(48) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(49) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(50) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(51) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED

	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED
(52) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(53) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(54) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(55) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	timing_validity	TV_VALID_TIMING_INFO
(56) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_1
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	timing_validity	TV_VALID_TIMING_INFO
(57) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED
(58) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(59) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_124
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_124

	time_alignment	TIME_ALIGNMT_124
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrij	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(60) MPH_C_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(61) MPH_C_NCELL_SYNC_IND		
	radio_freq	ARFCN_1
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrij	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(62) MPH_C_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(63) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56

	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED
(64) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(65) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(66) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(67) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED
(68) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(69) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(70) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(71) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14

	time_alignment	TIME_ALIGNMT_14
	timing_validity	TV_VALID_TIMING_INFO
(72) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED
(73) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(74) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_14
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRESENCE
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED

History:	24.09.99	MPA	Initial
	20.06.01	MSB	fn_offset in (6) corrected,
	20.06.01	MSB	numbering of msc corrected
	07.02.02	LG	changed value for ba_id
	26.09.02	DL	E-OTD changes (MPHC_NCELL_SYNC_IND)

4.16.4 ALR053: Reading of Neighbour Cell BCCH, failed

Description: ALR requests successive reading of BCCH for all neighbour cells. This failed for channel 14.

Preamble: ALR046A

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
(2)	MPHC_NCELL_SYNC_REQ	
(3)	MPHC_NCELL_SYNC_REQ	
(4)	MPHC_NCELL_SYNC_REQ	
(5)	MPHC_RXLEV_PERIODIC_IND	
(6)	MPH_MEASUREMENT_IND	
(7)	MPHC_RXLEV_PERIODIC_IND	
(8)	MPHC_NCELL_SYNC_IND	
(9)	MPHC_NCELL_BCCH_REQ	
(10)	MPHC_NCELL_BCCH_IND	
(11)	MPHC_STOP_NCELL_BCCH_REQ	
(12)	MPHC_NCELL_BCCH_REQ	
(13)	MPHC_NCELL_BCCH_IND	
(14)	MPHC_RXLEV_PERIODIC_IND	
(15)	MPHC_STOP_NCELL_BCCH_REQ	
(16)	MPHC_NCELL_BCCH_REQ	
(17)	MPHC_NCELL_BCCH_IND	
(18)	MPHC_STOP_NCELL_BCCH_REQ	
(19)	MPHC_NCELL_BCCH_REQ	
(20)	MPHC_NCELL_BCCH_IND	
(21)	MPHC_STOP_NCELL_BCCH_REQ	
(22)	MPHC_RXLEV_PERIODIC_IND	
(23)	MPH_MEASUREMENT_IND	
(24)	MPHC_NCELL_SYNC_IND	
(25)	MPHC_RXLEV_PERIODIC_IND	
(26)	MPHC_NCELL_SYNC_IND	
(27)	MPHC_NCELL_BCCH_REQ	
(28)	MPHC_NCELL_BCCH_REQ	
(29)	MPHC_RXLEV_PERIODIC_IND	

```

(30) |                                     | MPHC_RXLEV_PERIODIC_IND |
      |                                     | *<=====*              |
(31) | MPH_MEASUREMENT_IND               |                             |
      | *<=====*                      |                             |
(32) |                                     | MPHC_RXLEV_PERIODIC_IND |
      |                                     | *<=====*              |
(33) |                                     | MPHC_NCELL_BCCH_IND    |
      |                                     | *<=====*              |
(34) |                                     | MPHC_STOP_NCELL_BCCH_REQ |
      |                                     | *=====>*              |
(35) |                                     | MPHC_RXLEV_PERIODIC_IND |
      |                                     | *<=====*              |
(36) |                                     | MPHC_NCELL_BCCH_IND    |
      |                                     | *<=====*              |
(37) |                                     | MPHC_STOP_NCELL_BCCH_REQ |
      |                                     | *=====>*              |
(38) |                                     | MPHC_RXLEV_PERIODIC_IND |
      |                                     | *<=====*              |
(39) |                                     | MPHC_NCELL_SYNC_REQ    |
      |                                     | *=====>*              |
(40) | MPH_MEASUREMENT_IND               |                             |
      | *<=====*                      |                             |
(41) | MPH_UNITDATA_IND                 |                             |
      | *<=====*                      |                             |
(42) | MPH_UNITDATA_IND                 |                             |
      | *<=====*                      |                             |
      |                                     |                             |

```

Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(3) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(4) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(5) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1

(6) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_918
ncells	NCELLS_NO_CONTENT
gprs_sync	NOT_USED

(7) MPH_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(8) MPH_NCELL_SYNC_IND

radio_freq	ARFCN_14
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrij	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(9) MPH_NCELL_BCCH_REQ

radio_freq	ARFCN_14
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(10) MPH_NCELL_BCCH_IND

radio_freq	ARFCN_14
l2_channel	L2_CHANNEL_NBCCH
error_flag	INVALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(11) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size ONE_ELEM
radio_freq_array STOP_ARRAY_14

(12) MPHC_NCELL_BCCH_REQ

radio_freq ARFCN_14
fn_offset FN_OFFSET_14
time_alignment TIME_ALIGNMT_14
tsc BSIC_1
bcch_blocks_required NCELL_BCCH_SI_3_4
gprs_prio NOT_USED

(13) MPHC_NCELL_BCCH_IND

radio_freq ARFCN_14
l2_channel L2_CHANNEL_NBCCH
error_flag INVALID_BLOCK
l2_frame L2_SYS_INFO_3
tc TC_2
fn FN_OFFSET_14

(14) MPHC_RXLEV_PERIODIC_IND

result NCELL_RESULT_1
nbr_of_carriers CHANNELS_8
s_rxlev RXLEV_56
ba_id BA_ID_1

(15) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size ONE_ELEM
radio_freq_array STOP_ARRAY_14

(16) MPHC_NCELL_BCCH_REQ

radio_freq ARFCN_14
fn_offset FN_OFFSET_14
time_alignment TIME_ALIGNMT_14
tsc BSIC_1
bcch_blocks_required NCELL_BCCH_SI_3_4
gprs_prio NOT_USED

(17) MPHC_NCELL_BCCH_IND

radio_freq ARFCN_14
l2_channel L2_CHANNEL_NBCCH
error_flag INVALID_BLOCK
l2_frame L2_SYS_INFO_3
tc TC_2
fn FN_OFFSET_14

(18) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size ONE_ELEM
radio_freq_array STOP_ARRAY_14

(19) MPHC_NCELL_BCCH_REQ

radio_freq ARFCN_14
fn_offset FN_OFFSET_14
time_alignment TIME_ALIGNMT_14
tsc BSIC_1
bcch_blocks_required NCELL_BCCH_SI_3_4
gprs_prio NOT_USED

(20) MPHC_NCELL_BCCH_IND

radio_freq ARFCN_14
l2_channel L2_CHANNEL_NBCCH
error_flag INVALID_BLOCK

	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(21) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_14
(22) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(23) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_NO_CONTENT
	gprs_sync	NOT_USED
(24) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_124
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrij	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(25) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(26) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_1
	sb_flag	SB_FOUND

	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(27) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_124
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(28) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_1
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(29) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(30) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(31) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_NO_CONTENT
	gprs_sync	NOT_USED

(32) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(33) MPHC_NCELL_BCCH_IND	radio_freq l2_channel error_flag l2_frame tc fn	ARFCN_124 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_3 TC_2 FN_OFFSET_124
(34) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	ONE_ELEM STOP_ARRAY_124
(35) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(36) MPHC_NCELL_BCCH_IND	radio_freq l2_channel error_flag l2_frame tc fn	ARFCN_1 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_3 TC_2 FN_OFFSET_1
(37) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	ONE_ELEM STOP_ARRAY_1
(38) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(39) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(40) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_124 NOT_USED

(41) MPH_UNITDATA_IND

arfcn	ARFCN_1
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_3
ti	TI_0
cell_ident	CELL_IDENT_1
loc_area_ident	LOC_AREA_IDENT_1
ctrl_chan_desc	CTRL_CHAN_DESC_1
cell_opt_bcch	CELL_OPT_BCCH_1
cell_select	CELL_SELECT_1
rach_ctrl	RACH_CTRL_1
}	

(42) MPH_UNITDATA_IND

arfcn	ARFCN_124
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_3
ti	TI_0
cell_ident	CELL_IDENT_1
loc_area_ident	LOC_AREA_IDENT_1
ctrl_chan_desc	CTRL_CHAN_DESC_1
cell_opt_bcch	CELL_OPT_BCCH_1
cell_select	CELL_SELECT_1
rach_ctrl	RACH_CTRL_1
}	

History:	08.12.99	MPA	Initial
	20.06.01	MSB	fn_offset in (6) corrected
	07.02.02	LG	changed value for ba_id
	26.09.02	DL	E-OTD changes (MPHC_NCELL_SYNC_IND)

4.16.5 ALR061: Ncell-Synch, NCC permitted Check

Description: The BA list contains the serving cell 23 and the neighbour cells 1, 14 and 124. The fieldstrength is 56 for channel 23, 12 for channel 1, 44 for channel 14 and 25 for channel 124 (all values in GSM range). The ranking for the neighbour cells is 14, 124 and channel 1. Each reports contains two fieldstrength values per channel. The multiframe period is set to 6. The first measurement report is send to RR after five reports from PL. Then after each three reports from PL a measurement report is send to RR. The NCC permitted check for neighbour cell 124 fails. The cell shall be excluded from further attempts.

Preamble: ALR046D

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
	<=====	
(2)	MPHC_NCELL_SYNC_REQ	
	=====>	
(3)	MPHC_NCELL_SYNC_REQ	
	=====>	

(4)			MPHC_NCELL_SYNC_REQ	
			*=====	
(5)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(6)		MPH_MEASUREMENT_IND		
		*=====		
(7)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(8)			MPHC_NCELL_SYNC_IND	
			*=====	
(9)			MPHC_NCELL_BCCH_REQ	
			*=====	
(10)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(11)			MPHC_NCELL_SYNC_IND	
			*=====	
(12)			MPHC_NCELL_SYNC_IND	
			*=====	
(13)			MPHC_NCELL_BCCH_REQ	
			*=====	
(14)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(15)		MPH_MEASUREMENT_IND		
		*=====		
(16)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(17)			MPHC_NCELL_BCCH_IND	
			*=====	
(18)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====	
(20)			MPHC_NCELL_BCCH_IND	
			*=====	
(22)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====	
(24)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(25)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(26)		MPH_MEASUREMENT_IND		
		*=====		
(27)		MPH_UNITDATA_IND		
		*=====		
(28)		MPH_UNITDATA_IND		
		*=====		
(29)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(30)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(31)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(30)		MPH_MEASUREMENT_IND		
		*=====		

Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_1 CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(2) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(3) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(4) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_1 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(5) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(6) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_918 NCELLS_NO_CONTENT NOT_USED
(7) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(8) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic neigh_id attempt pm toa angle snr eotd_data_valid mode d_eotd_first	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_16 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED EOTD_NOT_PRES NOT_USED NOT_USED

	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(9) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_0
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(10) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(11) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_124
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRESENSE
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(12) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_1
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	bsic	BSIC_16
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED

	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(13) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_1
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	tsc	BSIC_0
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(14) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(15) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_NO_CONTENT
	gprs_sync	NOT_USED
(16) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(17) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(18) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_14
(19) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_1
	l2_channel	L2_CHANNEL_NBCCH

	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_1
(20) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_1
(21) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(22) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(23) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_NCC
	gprs_sync	NOT_USED
(24) MPH_UNITDATA_IND	arfcn	ARFCN_1
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(25) MPH_UNITDATA_IND	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1

	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(26) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(27) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(28) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(29) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_NCC
	gprs_sync	NOT_USED

History:	08.12.99	MPA	Initial
	20.06.01	MSB	fn_offset in (6) corrected
	07.02.02	LG	changed value for ba_id
	26.09.02	DL	E-OTD changes (MPHC_NCELL_SYNC_IND)

4.16.6 ALR650: Multiband = 0, Serving Cell is GSM 900, 8 channels

Description: The multiband parameter is set to 0, that means the neighbourcells are ranked after the fieldstrength. The serving cell is 23 (that means in the GSM 900 frequency band). The neighbourcell list contains eight channels : 1, 14, 25, 124, 512 580, 637 and 885. It is expected, that ALR starts synchronization to the six strongest cells 637, 25, 14, 512, 580, 885. This channels must be included in the measurement report to RR.

Preamble: ALR607

	RR/DL	ALR	PL
(1)	MPH_CLASSMARK_REQ		
	*=====>	*	
(2)	MPH_IDLE_REQ		
	*=====>	*	

(3)			MPHC_STOP_SCELL_BCCH_REQ	
			*=====	
(4)			MPHC_START_CCCH_REQ	
			*=====	
(5)			MPHC_SCELL_NBCCH_REQ	
			*=====	
(6)		MPH_NEIGHBOURCELL_REQ		
		*=====		
(7)			MPHC_RXLEV_PERIODIC_REQ	
			*=====	
(8)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(9)			MPHC_NCELL_SYNC_REQ	
			*=====	
(10)			MPHC_NCELL_SYNC_REQ	
			*=====	
(11)			MPHC_NCELL_SYNC_REQ	
			*=====	
(12)			MPHC_NCELL_SYNC_REQ	
			*=====	
(13)			MPHC_NCELL_SYNC_REQ	
			*=====	
(14)			MPHC_NCELL_SYNC_REQ	
			*=====	
(15)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(16)		MPH_MEASUREMENT_IND		
		*<=====		
(17)			MPHC_NCELL_SYNC_IND	
			*<=====	
(18)			MPHC_NCELL_BCCH_REQ	
			*=====	
(19)			MPHC_NCELL_SYNC_IND	
			*<=====	
(20)			MPHC_NCELL_BCCH_REQ	
			*=====	
(21)			MPHC_NCELL_SYNC_IND	
			*<=====	
(22)			MPHC_NCELL_BCCH_REQ	
			*=====	
(23)			MPHC_NCELL_SYNC_IND	
			*<=====	
(24)			MPHC_NCELL_BCCH_REQ	
			*=====	
(25)			MPHC_NCELL_SYNC_IND	
			*<=====	
(26)			MPHC_NCELL_BCCH_REQ	
			*=====	
(27)			MPHC_NCELL_SYNC_IND	
			*<=====	
(28)			MPHC_NCELL_BCCH_REQ	
			*=====	
(29)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(30)			MPHC_NCELL_BCCH_IND	
			*<=====	
(31)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====	
(32)			MPHC_NCELL_BCCH_IND	
			*<=====	

```

(33) | | MPHC_STOP_NCELL_BCCH_REQ |
| | *=====>*
(34) | | MPHC_NCELL_BCCH_IND |
| | *<=====*
(35) | | MPHC_STOP_NCELL_BCCH_REQ |
| | *=====>*
(36) | | MPHC_NCELL_BCCH_IND |
| | *<=====*
(37) | | MPHC_STOP_NCELL_BCCH_REQ |
| | *=====>*
(38) | | MPHC_NCELL_BCCH_IND |
| | *<=====*
(39) | | MPHC_STOP_NCELL_BCCH_REQ |
| | *=====>*
(40) | | MPHC_NCELL_BCCH_IND |
| | *<=====*
(41) | | MPHC_STOP_NCELL_BCCH_REQ |
| | *=====>*
(42) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(43) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(44) | MPH_MEASUREMENT_IND |
| *<=====*
(45) | MPH_UNITDATA_IND |
| *<=====*
(46) | MPH_UNITDATA_IND |
| *<=====*
(47) | MPH_UNITDATA_IND |
| *<=====*
(48) | MPH_UNITDATA_IND |
| *<=====*
(49) | MPH_UNITDATA_IND |
| *<=====*
(50) | MPH_UNITDATA_IND |
| *<=====*
(51) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(52) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(53) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(54) | MPH_MEASUREMENT_IND |
| *<=====*
| |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_DUAL
(2) MPH_IDLE_REQ	mod	NOT_USED
	arfcn	ARFCN_23
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20

	bs_ag_blocks_res	BS_AG_BLKES_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_4
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED
(3) MPHC_STOP_SCELL_BCCH_REQ		
	param	NOT_USED
(4) MPHC_START_CCCH_REQ		
	bs_pa_mfrms	BS_PA_MFRMS_6
	bs_ag_blkres	BS_AG_BLKES_RES_3
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_2
	page_mode	PGM_REORG
(5) MPHC_SCELL_NBCCH_REQ		
	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(6) MPH_NEIGHBOURCELL_REQ		
	multi_band	MULTI_BAND_0
	arfcn	
	CHLIST_1_14_25_124_512_580_637_885_FFFF	
	sync_only	NOT_USED
(7) MPHC_RXLEV_PERIODIC_REQ		
	chan_list	
	CHLIST_1_14_25_124_512_580_637_885_23	
	num_of_chans	CHANNELS_9
	ba_id	BA_ID_1
	next_radio_freq_measured	CHAN_LIST_IDX_0
(8) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_23_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(9) MPHC_NCELL_SYNC_REQ		
	radio_freq	ARFCN_637
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(10) MPHC_NCELL_SYNC_REQ		
	radio_freq	ARFCN_25
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(11) MPHC_NCELL_SYNC_REQ		
	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO

(12) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_512 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(13) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_580 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(14) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_885 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(15) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_23_8 CHANNELS_8 RXLEV_56 BA_ID_1
(16) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_918 NOT_USED NOT_USED
(17) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic neigh_id attempt pm toa angle snr eotd_data_valid mode d_eotd_first d_eotd_max d_eotd_nrj a_eotd_crosscor time_tag fn_sb_neigh fn_in_sb toa_correction delta_fn delta_qbit	ARFCN_637 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED EOTD_NOT_PRES NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED

(18) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_637
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(19) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_25
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrx	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(20) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_25
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(21) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_14
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrx	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED

	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(22) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(23) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_512
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrx	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(24) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_512
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(25) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_580
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED

	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED

(26) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_580
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(27) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_885
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrj	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(28) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_885
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(29) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RES_SC_23_8
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(30) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_637
l2_channel	L2_CHANNEL_NBCCH

	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(31) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_637
(32) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_25
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(33) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_25
(34) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(35) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_14
(36) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_512
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(37) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_512
(38) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_580
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(39) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_580
(40) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_885
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3

	tc	TC_2
	fn	FN_OFFSET_14
(41) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_885
(42) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_23_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(43) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_23_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(44) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_SC_900_8
	gprs_sync	NOT_USED
(45) MPH_UNITDATA_IND	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(46) MPH_UNITDATA_IND	arfcn	ARFCN_25
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1

	cell_opt_bcch cell_select rach_ctrl }	CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(47) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl }	ARFCN_512 NOT_USED RR DOWNLINK D_SYS_INFO_3 TI_0 CELL_IDENT_1 LOC_AREA_IDENT_1 CTRL_CHAN_DESC_1 CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(48) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl }	ARFCN_580 NOT_USED RR DOWNLINK D_SYS_INFO_3 TI_0 CELL_IDENT_1 LOC_AREA_IDENT_1 CTRL_CHAN_DESC_1 CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(49) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl }	ARFCN_637 NOT_USED RR DOWNLINK D_SYS_INFO_3 TI_0 CELL_IDENT_1 LOC_AREA_IDENT_1 CTRL_CHAN_DESC_1 CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(50) MPH_UNITDATA_IND	arfcn fn sdu {	ARFCN_885 NOT_USED

	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(51) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_23_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(52) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_23_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(53) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_23_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(54) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_SC_900_8
	gprs_sync	NOT_USED

History:	22.01.00	MPA	Initial
	12.07.00	DG	MPH_CLASSMARK_REQ: class changed into classmark (Forum G23M/ No 0057)
	20.06.01	MSB	fn_offset in (6) corrected
	20.07.01	MSB	channel list adapted
	07.02.02	LG	changed value of ba_id
	26.09.02	DL	E-OTD changes (MPH_IDLE_REQ/ MPHC_NCELL_SYNC_IND)

4.16.7 ALR651: Multiband = 0, Serving Cell is DCS 1800, 8 channels

Description: The multiband parameter is set to 0, that means the neighbourcells are ranked after the fieldstrength. The serving cell is 578 (that means in the DCS 1800 frequency band). The neighbourcell list contains eight channels : 1, 14, 25, 124, 512 580, 637 and 885. It is expected, that ALR starts synchronization to the six strongest cells 14,

25, 512, 580, 637, 885. This channels must be included in the measurement report to RR.

Preamble: ALR607

	RR/DL	ALR	PL
(1)	MPH_CLASSMARK_REQ		
	*=====	*=====	
(2)	MPH_IDLE_REQ		
	*=====	*=====	
(3)		MPHC_STOP_SCELL_BCCH_REQ	
		*=====	
(4)		MPHC_START_CCCH_REQ	
		*=====	
(5)		MPHC_SCELL_NBCCH_REQ	
		*=====	
(6)	MPH_NEIGHBOURCELL_REQ		
	*=====	*=====	
(7)		MPHC_RXLEV_PERIODIC_REQ	
		*=====	
(8)		MPHC_RXLEV_PERIODIC_IND	
		*<=====	
(9)		MPHC_NCELL_SYNC_REQ	
		*=====	
(10)		MPHC_NCELL_SYNC_REQ	
		*=====	
(11)		MPHC_NCELL_SYNC_REQ	
		*=====	
(12)		MPHC_NCELL_SYNC_REQ	
		*=====	
(13)		MPHC_NCELL_SYNC_REQ	
		*=====	
(14)		MPHC_NCELL_SYNC_REQ	
		*=====	
(15)		MPHC_RXLEV_PERIODIC_IND	
		*<=====	
(16)	MPH_MEASUREMENT_IND		
	*<=====	*=====	
(17)		MPHC_NCELL_SYNC_IND	
		*<=====	
(18)		MPHC_NCELL_BCCH_REQ	
		*=====	
(19)		MPHC_NCELL_SYNC_IND	
		*<=====	
(20)		MPHC_NCELL_BCCH_REQ	
		*=====	
(21)		MPHC_NCELL_SYNC_IND	
		*<=====	
(22)		MPHC_NCELL_BCCH_REQ	
		*=====	
(23)		MPHC_NCELL_SYNC_IND	
		*<=====	
(24)		MPHC_NCELL_BCCH_REQ	
		*=====	
(25)		MPHC_NCELL_SYNC_IND	
		*<=====	
(26)		MPHC_NCELL_BCCH_REQ	
		*=====	
(27)		MPHC_NCELL_SYNC_IND	
		*<=====	
(28)		MPHC_NCELL_BCCH_REQ	
		*=====	

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(29) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(30) | | MPHC_NCELL_BCCH_IND |
| | *<=====*
(31) | | MPHC_STOP_NCELL_BCCH_REQ |
| | *=====>*
(32) | | MPHC_NCELL_BCCH_IND |
| | *<=====*
(33) | | MPHC_STOP_NCELL_BCCH_REQ |
| | *=====>*
(34) | | MPHC_NCELL_BCCH_IND |
| | *<=====*
(35) | | MPHC_STOP_NCELL_BCCH_REQ |
| | *=====>*
(36) | | MPHC_NCELL_BCCH_IND |
| | *<=====*
(37) | | MPHC_STOP_NCELL_BCCH_REQ |
| | *=====>*
(38) | | MPHC_NCELL_BCCH_IND |
| | *<=====*
(39) | | MPHC_STOP_NCELL_BCCH_REQ |
| | *=====>*
(40) | | MPHC_NCELL_BCCH_IND |
| | *<=====*
(41) | | MPHC_STOP_NCELL_BCCH_REQ |
| | *=====>*
(42) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(43) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(44) | MPH_MEASUREMENT_IND |
| | *<=====*
(45) | MPH_UNITDATA_IND |
| | *<=====*
(46) | MPH_UNITDATA_IND |
| | *<=====*
(47) | MPH_UNITDATA_IND |
| | *<=====*
(48) | MPH_UNITDATA_IND |
| | *<=====*
(49) | MPH_UNITDATA_IND |
| | *<=====*
(50) | MPH_UNITDATA_IND |
| | *<=====*
(51) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(52) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(53) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(54) | MPH_MEASUREMENT_IND |
| | *<=====*
| |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_DUAL

(2) MPH_IDLE_REQ

mod	NOT_USED
arfcn	ARFCN_578
ext_bcch	NOT_USED
comb_ccch	COMB_CCCH_NOT_COMB
tn	TN_0
dlt	DLT_10
pg	PG_20
bs_ag_blocks_res	BS_AG_BLKS_RES_3
bs_pa_mfrms	BS_PA_MFRMS_4
power	POWER_12
ncc_permitted	NOT_PRESENT_8BIT
reorg_only	NOT_USED
eotd_avail	EOTD_NOT_PRES
gprs_support	NOT_USED

(3) MPHC_STOP_SCELL_BCCH_REQ

param	NOT_USED
-------	----------

(4) MPHC_START_CCCH_REQ

bs_pa_mfrms	BS_PA_MFRMS_6
bs_ag_blk_res	BS_AG_BLKS_RES_3
bcch_combined	COMB_CCCH_NOT_COMB
ccch_group	CCCH_GROUP_0
page_group	PG_20
page_block_index	PBI_2
page_mode	PGM_REORG

(5) MPHC_SCELL_NBCCH_REQ

schedule_array_size	SCHED_SIZE_1
schedule_array	NOT_USED

(6) MPH_NEIGHBOURCELL_REQ

multi_band	MULTI_BAND_0
arfcn	
CHLIST_1_14_25_124_512_580_637_885_FFFF	
sync_only	NOT_USED

(7) MPHC_RXLEV_PERIODIC_REQ

chan_list	
CHLIST_1_14_25_124_512_580_637_885_578	
num_of_chans	CHANNELS_9
ba_id	BA_ID_1
next_radio_freq_measured	CHAN_LIST_IDX_0

(8) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RES_SC_578_8
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(9) MPHC_NCELL_SYNC_REQ

radio_freq	ARFCN_637
fn_offset	NOT_USED
time_alignment	NOT_USED
timing_validity	TV_INVALID_TIMING_INFO

(10) MPHC_NCELL_SYNC_REQ

radio_freq	ARFCN_25
fn_offset	NOT_USED

	time_alignment timing_validity	NOT_USED TV_INVALID_TIMING_INFO
(11) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(12) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_512 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(13) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_580 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(14) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_885 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(15) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_578_8 CHANNELS_8 RXLEV_56 BA_ID_1
(16) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_578 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_918 NCELLS_NO_CONTENT NOT_USED
(17) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic neigh_id attempt pm toa angle snr eotd_data_valid mode d_eotd_first	ARFCN_637 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED EOTD_NOT_PRES NOT_USED NOT_USED

	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED

(18) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_637
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(19) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_25
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrj	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(20) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_25
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(21) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_14
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED

angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRESENSE
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrj	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(22) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_14
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(23) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_512
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRESENSE
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrj	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(24) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_512
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(25) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_580
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14

	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eodt_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(26) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_580
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(27) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_885
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eodt_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(28) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_885
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED

(29) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_578_8 CHANNELS_8 RXLEV_56 BA_ID_1
(30) MPHC_NCELL_BCCH_IND	radio_freq l2_channel error_flag l2_frame tc fn	ARFCN_637 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_3 TC_2 FN_OFFSET_14
(31) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	ONE_ELEM STOP_ARRAY_637
(32) MPHC_NCELL_BCCH_IND	radio_freq l2_channel error_flag l2_frame tc fn	ARFCN_25 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_3 TC_2 FN_OFFSET_14
(33) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	ONE_ELEM STOP_ARRAY_25
(34) MPHC_NCELL_BCCH_IND	radio_freq l2_channel error_flag l2_frame tc fn	ARFCN_14 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_3 TC_2 FN_OFFSET_14
(35) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	ONE_ELEM STOP_ARRAY_14
(36) MPHC_NCELL_BCCH_IND	radio_freq l2_channel error_flag l2_frame tc fn	ARFCN_512 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_3 TC_2 FN_OFFSET_14
(37) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	ONE_ELEM STOP_ARRAY_512
(38) MPHC_NCELL_BCCH_IND	radio_freq l2_channel error_flag l2_frame tc fn	ARFCN_580 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_3 TC_2 FN_OFFSET_14

(39) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size ONE_ELEM
radio_freq_array STOP_ARRAY_580

(40) MPHC_NCELL_BCCH_IND

radio_freq ARFCN_885
l2_channel L2_CHANNEL_NBCCH
error_flag VALID_BLOCK
l2_frame L2_SYS_INFO_3
tc TC_2
fn FN_OFFSET_14

(41) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size ONE_ELEM
radio_freq_array STOP_ARRAY_885

(42) MPHC_RXLEV_PERIODIC_IND

result NCELL_RES_SC_578_8
nbr_of_carriers CHANNELS_8
s_rxlev RXLEV_56
ba_id BA_ID_1

(43) MPHC_RXLEV_PERIODIC_IND

result NCELL_RES_SC_578_8
nbr_of_carriers CHANNELS_8
s_rxlev RXLEV_56
ba_id BA_ID_1

(44) MPH_MEASUREMENT_IND

arfcn ARFCN_578
rx_lev_full RXLEV_56
rx_lev_sub NOT_USED
rx_qual_full NOT_USED
rx_qual_sub NOT_USED
dtx NOT_USED
otd NOT_USED
valid VALID_REPORT
fn_offset FN_OFFSET_306
ncells NCELLS_SC_900_8
gprs_sync NOT_USED

(45) MPH_UNITDATA_IND

arfcn ARFCN_14
fn NOT_USED
sdu
{
 component RR
 direction DOWNLINK
 pd D_SYS_INFO_3
 ti TI_0
 cell_ident CELL_IDENT_1
 loc_area_ident LOC_AREA_IDENT_1
 ctrl_chan_desc CTRL_CHAN_DESC_1
 cell_opt_bcch CELL_OPT_BCCH_1
 cell_select CELL_SELECT_1
 rach_ctrl RACH_CTRL_1
}

(46) MPH_UNITDATA_IND

arfcn ARFCN_25
fn NOT_USED

	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(47) MPH_UNITDATA_IND		
	arfcn	ARFCN_512
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(48) MPH_UNITDATA_IND		
	arfcn	ARFCN_580
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(49) MPH_UNITDATA_IND		
	arfcn	ARFCN_637
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1

	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(50) MPH_UNITDATA_IND		
	arfcn	ARFCN_885
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(51) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_578_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(52) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_578_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(53) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_578_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(54) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_578
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_SC_900_8
	gprs_sync	NOT_USED

History:	24.01.00	MPA	Initial
	12.07.00	DG	MPH_CLASSMARK_REQ: class changed into classmark (Forum G23M/No 0057)
	20.06.01	MSB	fn_offset in (6) corrected

07.02.02 LG changed value of ba_id
26.09.02 DL E-OTD changes (MPH_IDLE_REQ /
MPHC_NCELL_SYNC_IND)

4.16.8 ALR652: Multiband = 1, Serving Cell is GSM 900, 8 channels

Description: The multiband parameter is set to 1, that means at least one of the neighbourcells is member of the non-serving cell band (that means in the DCS 1800 frequency band). The serving cell is 23 (that means in the GSM 900 frequency band). The neighbourcell list contains eight channels : 1, 11, 14, 25,87, 124, 512 and 885. It is expected, that ALR starts synchronization to the six cells 14, 87, 25, 11, 1 and 512. This channels must be included in the measurement report to RR. ALR shall not synchronize to 885, although the cell has a better fieldstrength than most channels of the GSM 900 frequency band.

Preamble: ALR607

	RR/DL	ALR	PL
(1)	MPH_CLASSMARK_REQ		
	=====>		
(2)	MPH_IDLE_REQ		
	=====>		
(3)		MPHC_STOP_SCELL_BCCH_REQ	
		=====>	
(4)		MPHC_START_CCCH_REQ	
		=====>	
(5)		MPHC_SCELL_NBCCH_REQ	
		=====>	
(6)	MPH_NEIGHBOURCELL_REQ		
	=====>		
(7)		MPHC_RXLEV_PERIODIC_REQ	
		=====>	
(8)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(9)		MPHC_NCELL_SYNC_REQ	
		=====>	
(10)		MPHC_NCELL_SYNC_REQ	
		=====>	
(11)		MPHC_NCELL_SYNC_REQ	
		=====>	
(12)		MPHC_NCELL_SYNC_REQ	
		=====>	
(13)		MPHC_NCELL_SYNC_REQ	
		=====>	
(14)		MPHC_NCELL_SYNC_REQ	
		=====>	
(15)		MPHC_NCELL_SYNC_REQ	
		=====>	
(16)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(17)	MPH_MEASUREMENT_IND		
	<=====		
(18)		MPHC_NCELL_SYNC_IND	
		<=====	
(19)		MPHC_NCELL_BCCH_REQ	
		=====>	
(20)		MPHC_NCELL_SYNC_IND	
		<=====	
(21)		MPHC_NCELL_BCCH_REQ	

		=====>	
(22)			
(23)			
(24)			
(25)			
(26)			
(27)			
(28)			
(29)			
(30)			
(31)			
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(43)			
(44)			
(45)			
(46)			
(47)			
(48)			
(49)			
(50)			

```

* <=====
(51) | MPH_UNITDATA_IND |
* <=====
(52) | | MPHC_RXLEV_PERIODIC_IND |
| | * <=====
(53) | | MPHC_RXLEV_PERIODIC_IND |
| | * <=====
(54) | | MPHC_RXLEV_PERIODIC_IND |
| | * <=====
(55) | MPH_MEASUREMENT_IND |
* <=====
| |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_DUAL
(2) MPH_IDLE_REQ	mod	NOT_USED
	arfcn	ARFCN_23
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_4
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED
(3) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_6
	bs_ag_blk_res	BS_AG_BLKS_RES_3
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_2
	page_mode	PGM_REORG
(5) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(6) MPH_NEIGHBOURCELL_REQ	multi_band	MULTI_BAND_1
	arfcn	
	CHLIST_1_11_14_25_87_124_512_885_FFFF	
	sync_only	NOT_USED
(7) MPHC_RXLEV_PERIODIC_REQ	chan_list	
	CHLIST_1_11_14_25_87_124_512_885_23	
	num_of_chans	CHANNELS_9

	ba_id	BA_ID_1
	next_radio_freq_measured	CHAN_LIST_IDX_0
(8) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_23_8_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(9) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(10) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_512
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(11) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_885
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(12) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_11
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(13) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_87
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(14) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_25
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(15) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(16) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_23_8_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(17) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED

rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_918
ncells	NCELLS_NO_CONTENT
gprs_sync	NOT_USED

(18) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_14
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRESENCE
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrx	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(19) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_14
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(20) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_87
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRESENCE
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrx	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED

	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(21) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_87
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(22) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_25
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrx	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(23) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_25
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(24) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_11
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED

	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED

(25) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_11
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(26) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_1
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrj	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(27) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_1
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(28) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_512
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED

	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(29) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_512
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(30) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_23_8_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(31) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(32) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_14
(33) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_87
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(34) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_87
(35) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_25
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14

(36) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size ONE_ELEM
radio_freq_array STOP_ARRAY_25

(37) MPHC_NCELL_BCCH_IND

radio_freq ARFCN_11
l2_channel L2_CHANNEL_NBCCH
error_flag VALID_BLOCK
l2_frame L2_SYS_INFO_3
tc TC_2
fn FN_OFFSET_14

(38) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size ONE_ELEM
radio_freq_array STOP_ARRAY_11

(39) MPHC_NCELL_BCCH_IND

radio_freq ARFCN_1
l2_channel L2_CHANNEL_NBCCH
error_flag VALID_BLOCK
l2_frame L2_SYS_INFO_3
tc TC_2
fn FN_OFFSET_14

(40) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size ONE_ELEM
radio_freq_array STOP_ARRAY_1

(41) MPHC_NCELL_BCCH_IND

radio_freq ARFCN_512
l2_channel L2_CHANNEL_NBCCH
error_flag VALID_BLOCK
l2_frame L2_SYS_INFO_3
tc TC_2
fn FN_OFFSET_14

(42) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size ONE_ELEM
radio_freq_array STOP_ARRAY_512

(43) MPHC_RXLEV_PERIODIC_IND

result NCELL_RES_SC_23_8_1
nbr_of_carriers CHANNELS_8
s_rxlev RXLEV_56
ba_id BA_ID_1

(44) MPHC_RXLEV_PERIODIC_IND

result NCELL_RES_SC_23_8_1
nbr_of_carriers CHANNELS_8
s_rxlev RXLEV_56
ba_id BA_ID_1

(45) MPH_MEASUREMENT_IND

arfcn ARFCN_23
rx_lev_full RXLEV_56
rx_lev_sub NOT_USED
rx_qual_full NOT_USED
rx_qual_sub NOT_USED
dtx NOT_USED
otd NOT_USED
valid VALID_REPORT
fn_offset FN_OFFSET_306

	ncells	NCELLS_SC_900_8_1
	gprs_sync	NOT_USED
(46) MPH_UNITDATA_IND		
	arfcn	ARFCN_1
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(47) MPH_UNITDATA_IND		
	arfcn	ARFCN_11
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(48) MPH_UNITDATA_IND		
	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(49) MPH_UNITDATA_IND		
	arfcn	ARFCN_25
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK

	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(50) MPH_UNITDATA_IND		
	arfcn	ARFCN_87
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(51) MPH_UNITDATA_IND		
	arfcn	ARFCN_512
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(52) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_23_8_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(53) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_23_8_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(54) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_23_8_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1

(55) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NCELLS_SC_900_8_1
gprs_sync	NOT_USED

History:	24.01.00	MPA	Initial
	12.07.00	DG	MPH_CLASSMARK_REQ: class changed into classmark (Forum G23M/ No 0057)
	20.06.01	MSB	fn_offset in (6) corrected
	07.02.02	LG	changed value of ba_id
	26.09.02	DL	E-OTD changes (MPH_IDLE_REQ / MPHC_NCELL_SYNC_IND)
	29.10.02	DL	Order of NCELL-SYN requests corrected

4.16.9 ALR653: Multiband = 1, Serving Cell is GSM 900, 4 channels

Description: The multiband parameter is set to 1, that at least one of the neighbourcells is member of the non-serving cell band (that means in the DCS 1800 frequency band). The serving cell is 23 (that means in the GSM 900 frequency band). The neighbourcell list contains four channels : 1, 14, 512 and 885. It is expected, that ALR starts synchronization to the six cells 1, 14, 512 and 885. This channels must be included in the measurement report to RR.

Preamble: ALR607

RR/DL	ALR	PL
(1) MPH_CLASSMARK_REQ		
=====>		
(2) MPH_IDLE_REQ		
=====>		
(3)	MPHC_STOP_SCELL_BCCH_REQ	
	=====>	
(4)	MPHC_START_CCCH_REQ	
	=====>	
(5)	MPHC_SCELL_NBCCH_REQ	
	=====>	
(6) MPH_NEIGHBOURCELL_REQ		
=====>		
(7)	MPHC_RXLEV_PERIODIC_REQ	
	=====>	
(8)	MPHC_RXLEV_PERIODIC_IND	
	<=====	
(9)	MPHC_NCELL_SYNC_REQ	
	=====>	
(10)	MPHC_NCELL_SYNC_REQ	
	=====>	
(11)	MPHC_NCELL_SYNC_REQ	
	=====>	
(12)	MPHC_NCELL_SYNC_REQ	
	=====>	

(13)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(14)		MPH_MEASUREMENT_IND		
			*<=====	
(15)			MPHC_NCELL_SYNC_IND	
			*<=====	
(16)			MPHC_NCELL_BCCH_REQ	
			*=====	
(17)			MPHC_NCELL_SYNC_IND	
			*<=====	
(18)			MPHC_NCELL_BCCH_REQ	
			*=====	
(19)			MPHC_NCELL_SYNC_IND	
			*<=====	
(20)			MPHC_NCELL_BCCH_REQ	
			*=====	
(21)			MPHC_NCELL_SYNC_IND	
			*<=====	
(22)			MPHC_NCELL_BCCH_REQ	
			*=====	
(23)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(24)			MPHC_NCELL_BCCH_IND	
			*<=====	
(25)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====	
(26)			MPHC_NCELL_BCCH_IND	
			*<=====	
(27)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====	
(28)			MPHC_NCELL_BCCH_IND	
			*<=====	
(29)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====	
(30)			MPHC_NCELL_BCCH_IND	
			*<=====	
(31)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====	
(32)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(33)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(34)		MPH_MEASUREMENT_IND		
			*<=====	
(35)		MPH_UNITDATA_IND		
			*<=====	
(36)		MPH_UNITDATA_IND		
			*<=====	
(37)		MPH_UNITDATA_IND		
			*<=====	
(38)		MPH_UNITDATA_IND		
			*<=====	
(39)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(40)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(41)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(42)		MPH_MEASUREMENT_IND		

<=====

Parametrization

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_DUAL
(2) MPH_IDLE_REQ	mod	NOT_USED
	arfcn	ARFCN_23
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLK_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_4
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED
(3) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_6
	bs_ag_blk_res	BS_AG_BLK_RES_3
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_2
	page_mode	PGM_REORG
(5) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(6) MPH_NEIGHBOURCELL_REQ	multi_band	MULTI_BAND_1
	arfcn	CHLIST_1_14_512_885_FFFF
	sync_only	NOT_USED
(7) MPHC_RXLEV_PERIODIC_REQ	chan_list	CHLIST_23_1_14_512_885
	num_of_chans	CHANNELS_5
	ba_id	BA_ID_1
	next_radio_freq_measured	CHAN_LIST_IDX_0
(8) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_23_4_1
	nbr_of_carriers	CHANNELS_4
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(9) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED

	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(10) MPHC_NCELL_SYNC_REQ		
	radio_freq	ARFCN_512
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(11) MPHC_NCELL_SYNC_REQ		
	radio_freq	ARFCN_885
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(12) MPHC_NCELL_SYNC_REQ		
	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(13) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_23_4_1
	nbr_of_carriers	CHANNELS_4
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(14) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_918
	ncells	NCELLS_NO_CONTENT
	gprs_sync	NOT_USED
(15) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_14
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrl	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED

	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(16) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(17) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_512
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrij	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(18) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_512
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(19) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_885
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED

	d_eotd_nrij	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(20) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_885
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(21) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_1
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrij	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(22) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_1
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(23) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_23_4_1
	nbr_of_carriers	CHANNELS_4
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(24) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3

	tc	TC_2
	fn	FN_OFFSET_14
(25) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_14
(26) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_512
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(27) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_512
(28) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_885
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(29) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_885
(30) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_1
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(31) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_1
(32) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_23_4_1
	nbr_of_carriers	CHANNELS_4
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(33) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_23_4_1
	nbr_of_carriers	CHANNELS_4
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(34) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED

	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_SC_900_4_1
	gprs_sync	NOT_USED
(35) MPH_UNITDATA_IND		
	arfcn	ARFCN_1
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(36) MPH_UNITDATA_IND		
	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(37) MPH_UNITDATA_IND		
	arfcn	ARFCN_512
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(38) MPH_UNITDATA_IND		
	arfcn	ARFCN_885
	fn	NOT_USED
	sdu	

			<pre> { component RR direction DOWNLINK pd D_SYS_INFO_3 ti TI_0 cell_ident CELL_IDENT_1 loc_area_ident LOC_AREA_IDENT_1 ctrl_chan_desc CTRL_CHAN_DESC_1 cell_opt_bcch CELL_OPT_BCCH_1 cell_select CELL_SELECT_1 rach_ctrl RACH_CTRL_1 } </pre>
(39)	MPHC_RXLEV_PERIODIC_IND		<pre> result NCELL_RES_SC_23_4_1 nbr_of_carriers CHANNELS_4 s_rxlev RXLEV_56 ba_id BA_ID_1 </pre>
(40)	MPHC_RXLEV_PERIODIC_IND		<pre> result NCELL_RES_SC_23_4_1 nbr_of_carriers CHANNELS_4 s_rxlev RXLEV_56 ba_id BA_ID_1 </pre>
(41)	MPHC_RXLEV_PERIODIC_IND		<pre> result NCELL_RES_SC_23_4_1 nbr_of_carriers CHANNELS_4 s_rxlev RXLEV_56 ba_id BA_ID_1 </pre>
(42)	MPH_MEASUREMENT_IND		<pre> arfcn ARFCN_23 rx_lev_full RXLEV_56 rx_lev_sub NOT_USED rx_qual_full NOT_USED rx_qual_sub NOT_USED dtx NOT_USED otd NOT_USED valid VALID_REPORT fn_offset FN_OFFSET_306 ncells NCELLS_SC_900_4_1 gprs_sync NOT_USED </pre>

History:	24.01.00	MPA	Initial
	12.07.00	DG	MPH_CLASSMARK_REQ: class changed into classmark (Forum G23M/ No 0057)
	20.06.01	MSB	fn_offset in (6) corrected
	07.02.02	LG	changed value of ba_id
	26.09.02	DL	E-OTD changes (MPH_IDLE_REQ/ MPHC_NCELL_SYNC_IND)

4.16.10 ALR654: Multiband = 1, Serving Cell is DCS 1800, 8 channels

Description: The multiband parameter is set to 1, that at least one of the neighbourcells is member of the non-serving cell band (that means in the GSM 900 frequency band). The serving cell is 637 (that means in the DCS 1800 frequency band). The neighbourcell list contains eight channels : 1, 14, 512, 513, 600, 700, 810 and 885. It is expected, that

ALR starts synchronization to the six cells 14, 513, 600, 700, 810 and 885. This channels must be included in the measurement report to RR. ALR shall not synchronize to 1, although the cell has a better fieldstrength than the most channels of the DCS 1800 frequency band.

Preamble: ALR607

	RR/DL	ALR	PL
(1)	MPH_CLASSMARK_REQ		
	=====>		
(2)	MPH_IDLE_REQ		
	=====>		
(3)		MPH_STOP_SCELL_BCCH_REQ	
		=====>	
(4)		MPH_START_CCCH_REQ	
		=====>	
(5)		MPH_SCELL_NBCCH_REQ	
		=====>	
(6)	MPH_NEIGHBOURCELL_REQ		
	=====>		
(7)		MPH_RXLEV_PERIODIC_REQ	
		=====>	
(8)		MPH_RXLEV_PERIODIC_IND	
		<=====	
(9)		MPH_NCELL_SYNC_REQ	
		=====>	
(10)		MPH_NCELL_SYNC_REQ	
		=====>	
(11)		MPH_NCELL_SYNC_REQ	
		=====>	
(12)		MPH_NCELL_SYNC_REQ	
		=====>	
(13)		MPH_NCELL_SYNC_REQ	
		=====>	
(14)		MPH_NCELL_SYNC_REQ	
		=====>	
(15)		MPH_NCELL_SYNC_REQ	
		=====>	
(16)		MPH_NCELL_SYNC_REQ	
		=====>	
(17)		MPH_RXLEV_PERIODIC_IND	
		<=====	
(18)	MPH_MEASUREMENT_IND		
	<=====		
(19)		MPH_NCELL_SYNC_IND	
		<=====	
(20)		MPH_NCELL_BCCH_REQ	
		=====>	
(21)		MPH_NCELL_SYNC_IND	
		<=====	
(22)		MPH_NCELL_BCCH_REQ	
		=====>	
(23)		MPH_NCELL_SYNC_IND	
		<=====	
(24)		MPH_NCELL_BCCH_REQ	
		=====>	
(25)		MPH_NCELL_SYNC_IND	
		<=====	
(26)		MPH_NCELL_BCCH_REQ	

		=====>	
(27)		MPHC_NCELL_SYNC_IND	
		<=====	
(28)		MPHC_NCELL_BCCH_REQ	
		=====>	
(29)		MPHC_NCELL_SYNC_IND	
		<=====	
(30)		MPHC_NCELL_BCCH_REQ	
		=====>	
(31)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(32)		MPHC_NCELL_BCCH_IND	
		<=====	
(33)		MPHC_STOP_NCELL_BCCH_REQ	
		=====>	
(34)		MPHC_NCELL_BCCH_IND	
		<=====	
(35)		MPHC_STOP_NCELL_BCCH_REQ	
		=====>	
(36)		MPHC_NCELL_BCCH_IND	
		<=====	
(37)		MPHC_STOP_NCELL_BCCH_REQ	
		=====>	
(38)		MPHC_NCELL_BCCH_IND	
		<=====	
(39)		MPHC_STOP_NCELL_BCCH_REQ	
		=====>	
(40)		MPHC_NCELL_BCCH_IND	
		<=====	
(41)		MPHC_STOP_NCELL_BCCH_REQ	
		=====>	
(42)		MPHC_NCELL_BCCH_IND	
		<=====	
(43)		MPHC_STOP_NCELL_BCCH_REQ	
		=====>	
(44)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(45)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(46)	MPH_MEASUREMENT_IND		
		<=====	
(47)	MPH_UNITDATA_IND		
		<=====	
(48)	MPH_UNITDATA_IND		
		<=====	
(49)	MPH_UNITDATA_IND		
		<=====	
(50)	MPH_UNITDATA_IND		
		<=====	
(51)	MPH_UNITDATA_IND		
		<=====	
(52)	MPH_UNITDATA_IND		
		<=====	
(53)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(54)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(55)		MPHC_RXLEV_PERIODIC_IND	

```

(56) |                                     * <=====
      | MPH_MEASUREMENT_IND           |                                     |
      | * <=====                     |                                     |
      |                               |                                     |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_DUAL
(2) MPH_IDLE_REQ	mod	NOT_USED
	arfcn	ARFCN_637
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLK_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_4
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED
(3) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_6
	bs_ag_blk_res	BS_AG_BLK_RES_3
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_2
	page_mode	PGM_REORG
(5) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(6) MPH_NEIGHBOURCELL_REQ	multi_band	MULTI_BAND_1
	arfcn	
	CHLIST_1_14_512_513_600_700_810_885_FFFF	
	sync_only	NOT_USED
(7) MPHC_RXLEV_PERIODIC_REQ	chan_list	
	CHLIST_1_14_512_513_600_700_810_885_637	
	num_of_chans	CHANNELS_9
	ba_id	BA_ID_1
	next_radio_freq_measured	CHAN_LIST_IDX_0
(8) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_637_8_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1

(9) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(10) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_1 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(11) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_700 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(12) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_600 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(13) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_513 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(14) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_810 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(15) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_885 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(16) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_512 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(17) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_637_8_1 CHANNELS_8 RXLEV_56 BA_ID_1
(18) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd	ARFCN_637 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED

valid	VALID_REPORT
fn_offset	FN_OFFSET_918
ncells	NCELLS_NO_CONTENT
gprs_sync	NOT_USED

(19) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_700
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRESENCE
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrx	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(20) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_700
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(21) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_600
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRESENCE
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrx	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED

	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(22) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_600
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(23) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_513
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrij	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(24) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_513
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(25) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_810
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrij	NOT_USED

	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(26) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_810
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(27) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_885
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(28) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_885
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(29) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_14
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED

	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrij	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(30) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(31) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_637_8_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(32) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_700
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(33) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_700
(34) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_600
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(35) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_600
(36) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_513
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(37) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_513

(38) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_810
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(39) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_810

(40) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_885
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(41) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_885

(42) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_14
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(43) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_14

(44) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RES_SC_637_8_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(45) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RES_SC_637_8_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(46) MPH_MEASUREMENT_IND

arfcn	ARFCN_637
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NCELLS_SC_1800_8_1
gprs_sync	NOT_USED

(47) MPH_UNITDATA_IND

arfcn	ARFCN_14
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_3
ti	TI_0
cell_ident	CELL_IDENT_1
loc_area_ident	LOC_AREA_IDENT_1
ctrl_chan_desc	CTRL_CHAN_DESC_1
cell_opt_bcch	CELL_OPT_BCCH_1
cell_select	CELL_SELECT_1
rach_ctrl	RACH_CTRL_1
}	

(48) MPH_UNITDATA_IND

arfcn	ARFCN_513
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_3
ti	TI_0
cell_ident	CELL_IDENT_1
loc_area_ident	LOC_AREA_IDENT_1
ctrl_chan_desc	CTRL_CHAN_DESC_1
cell_opt_bcch	CELL_OPT_BCCH_1
cell_select	CELL_SELECT_1
rach_ctrl	RACH_CTRL_1
}	

(49) MPH_UNITDATA_IND

arfcn	ARFCN_600
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_3
ti	TI_0
cell_ident	CELL_IDENT_1
loc_area_ident	LOC_AREA_IDENT_1
ctrl_chan_desc	CTRL_CHAN_DESC_1
cell_opt_bcch	CELL_OPT_BCCH_1
cell_select	CELL_SELECT_1
rach_ctrl	RACH_CTRL_1
}	

(50) MPH_UNITDATA_IND

arfcn	ARFCN_700
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_3
ti	TI_0

	cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl }	CELL_IDENT_1 LOC_AREA_IDENT_1 CTRL_CHAN_DESC_1 CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(51) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl }	ARFCN_810 NOT_USED RR DOWNLINK D_SYS_INFO_3 TI_0 CELL_IDENT_1 LOC_AREA_IDENT_1 CTRL_CHAN_DESC_1 CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(52) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl }	ARFCN_885 NOT_USED RR DOWNLINK D_SYS_INFO_3 TI_0 CELL_IDENT_1 LOC_AREA_IDENT_1 CTRL_CHAN_DESC_1 CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(53) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_637_8_1 CHANNELS_8 RXLEV_56 BA_ID_1
(54) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_637_8_1 CHANNELS_8 RXLEV_56 BA_ID_1
(55) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_637_8_1 CHANNELS_8 RXLEV_56 BA_ID_1

arfcn	ARFCN_637
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NCELLS_SC_1800_8_1
gprs_sync	NOT_USED

	RR/DL	ALR	PL
(1)	MPH_CLASSMARK_REQ		
	=====>		
(2)	MPH_IDLE_REQ		
	=====>		
(3)		MPHC_STOP_SCELL_BCCH_REQ	
		=====>	
(4)		MPHC_START_CCCH_REQ	
		=====>	
(5)		MPHC_SCELL_NBCCH_REQ	
		=====>	
(6)	MPH_NEIGHBOURCELL_REQ		
	=====>		
(7)		MPHC_RXLEV_PERIODIC_REQ	
		=====>	
(8)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(9)		MPHC_NCELL_SYNC_REQ	
		=====>	
(10)		MPHC_NCELL_SYNC_REQ	
		=====>	
(11)		MPHC_NCELL_SYNC_REQ	
		=====>	
(12)		MPHC NCELL SYNC REQ	

			=====>
(13)		MPHC_RXLEV_PERIODIC_IND	
			<=====
(14)		MPH_MEASUREMENT_IND	
			<=====
(15)		MPHC_NCELL_SYNC_IND	
			<=====
(16)		MPHC_NCELL_BCCH_REQ	
			=====>
(17)		MPHC_NCELL_SYNC_IND	
			<=====
(18)		MPHC_NCELL_BCCH_REQ	
			=====>
(19)		MPHC_NCELL_SYNC_IND	
			<=====
(20)		MPHC_NCELL_BCCH_REQ	
			=====>
(21)		MPHC_NCELL_SYNC_IND	
			<=====
(22)		MPHC_NCELL_BCCH_REQ	
			=====>
(23)		MPHC_RXLEV_PERIODIC_IND	
			<=====
(24)		MPHC_NCELL_BCCH_IND	
			<=====
(25)		MPHC_STOP_NCELL_BCCH_REQ	
			=====>
(26)		MPHC_NCELL_BCCH_IND	
			<=====
(27)		MPHC_STOP_NCELL_BCCH_REQ	
			=====>
(28)		MPHC_NCELL_BCCH_IND	
			<=====
(29)		MPHC_STOP_NCELL_BCCH_REQ	
			=====>
(30)		MPHC_NCELL_BCCH_IND	
			<=====
(31)		MPHC_STOP_NCELL_BCCH_REQ	
			=====>
(32)		MPHC_RXLEV_PERIODIC_IND	
			<=====
(33)		MPHC_RXLEV_PERIODIC_IND	
			<=====
(34)		MPH_MEASUREMENT_IND	
			<=====
(35)		MPH_UNITDATA_IND	
			<=====
(36)		MPH_UNITDATA_IND	
			<=====
(37)		MPH_UNITDATA_IND	
			<=====
(38)		MPH_UNITDATA_IND	
			<=====
(39)		MPHC_RXLEV_PERIODIC_IND	
			<=====
(40)		MPHC_RXLEV_PERIODIC_IND	
			<=====
(41)		MPHC_RXLEV_PERIODIC_IND	

```

(42) |                                     * <=====
      |      MPH_MEASUREMENT_IND      |                                     |
      | * <=====                      |                                     |
      |                               |                                     |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_DUAL
(2) MPH_IDLE_REQ	mod	NOT_USED
	arfcn	ARFCN_637
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_4
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED
(3) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_6
	bs_ag_blk_res	BS_AG_BLKS_RES_3
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_2
	page_mode	PGM_REORG
(5) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(6) MPH_NEIGHBOURCELL_REQ	multi_band	MULTI_BAND_1
	arfcn	CHLIST_1_14_512_885_FFFF
	sync_only	NOT_USED
(7) MPHC_RXLEV_PERIODIC_REQ	chan_list	CHLIST_637_1_14_512_885
	num_of_chans	CHANNELS_5
	ba_id	BA_ID_1
	next_radio_freq_measured	CHAN_LIST_IDX_0
(8) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_637_4_1
	nbr_of_carriers	CHANNELS_4
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1

(9) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(10) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_512 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(11) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_885 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(12) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_1 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(13) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_637_4_1 CHANNELS_4 RXLEV_56 BA_ID_1
(14) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_637 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_918 NCELLS_NO_CONTENT NOT_USED
(15) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic neigh_id attempt pm toa angle snr eotd_data_valid mode d_eotd_first d_eotd_max d_eotd_nrx a_eotd_crosscor	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED EOTD_NOT_PRES NOT_USED NOT_USED NOT_USED NOT_USED

	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED

(16) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_14
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(17) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_512
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eodt_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrij	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(18) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_512
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(19) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_885
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eodt_data_valid	EOTD_NOT_PRES

	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(20) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_885
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(21) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_1
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRESENCE
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(22) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_1
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(23) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_637_4_1
	nbr_of_carriers	CHANNELS_4
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(24) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_14

	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(25) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_14
(26) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_512
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(27) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_512
(28) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_885
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(29) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_885
(30) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_1
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(31) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_1
(32) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_637_4_1
	nbr_of_carriers	CHANNELS_4
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(33) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_637_4_1
	nbr_of_carriers	CHANNELS_4
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(34) MPH_MEASUREMENT_IND	arfcn	ARFCN_637
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED

	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_SC_1800_4_1
	gprs_sync	NOT_USED
(35) MPH_UNITDATA_IND		
	arfcn	ARFCN_1
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(36) MPH_UNITDATA_IND		
	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(37) MPH_UNITDATA_IND		
	arfcn	ARFCN_512
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	

(38) MPH_UNITDATA_IND

arfcn	ARFCN_885
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_3
ti	TI_0
cell_ident	CELL_IDENT_1
loc_area_ident	LOC_AREA_IDENT_1
ctrl_chan_desc	CTRL_CHAN_DESC_1
cell_opt_bcch	CELL_OPT_BCCH_1
cell_select	CELL_SELECT_1
rach_ctrl	RACH_CTRL_1
}	

(39) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RES_SC_637_4_1
nbr_of_carriers	CHANNELS_4
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(40) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RES_SC_637_4_1
nbr_of_carriers	CHANNELS_4
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(41) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RES_SC_637_4_1
nbr_of_carriers	CHANNELS_4
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(42) MPH_MEASUREMENT_IND

arfcn	ARFCN_637
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NCELLS_SC_1800_4_1
gprs_sync	NOT_USED

History:	24.01.00	MPA	Initial
	12.07.00	DG	MPH_CLASSMARK_REQ: class changed into classmark (Forum G23M/ No 0057)
	20.06.01	MSB	fn_offset corrected in (14)
	07.02.02	LG	changed value of ba_id
	26.09.02	DL	E-OTD changes (MPH_IDLE_REQ / MPHC_NCELL_SYNC_IND)

4.16.12 ALR902: Synchronisation to Neighbour Cells successful (sys info 4)

Description: The BA list contains the serving cell 23 and the neighbour cells 1, 14 and 124. The fieldstrength is 56 for channel 23, 12 for channel 1, 44 for channel 14 and 25 for channel 124 (all values in GSM range). The ranking for the neighbour cells is 14, 124 and channel 1. Each report contains two fieldstrength values per channel. The multiframe period is set to 6. The first measurement report is send to RR after five reports from PL. Then after each three reports from PL a measurement report is send to RR.

Preamble: ALR046A

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
(2)	*<=====*	
(3)	MPHC_NCELL_SYNC_REQ	
(4)	*=====>*	
(5)	MPHC_NCELL_SYNC_REQ	
(6)	*=====>*	
(7)	MPHC_NCELL_SYNC_REQ	
(8)	*=====>*	
(9)	MPHC_RXLEV_PERIODIC_IND	
(10)	*<=====*	
(11)	MPH_MEASUREMENT_IND	
(12)	*<=====*	
(13)	MPHC_RXLEV_PERIODIC_IND	
(14)	*<=====*	
(15)	MPHC_NCELL_SYNC_IND	
(16)	*<=====*	
(17)	MPHC_NCELL_BCCH_REQ	
(18)	*=====>*	
(19)	MPHC_NCELL_SYNC_IND	
(20)	*<=====*	
(21)	MPHC_NCELL_BCCH_REQ	
(22)	*=====>*	
(23)	MPHC_RXLEV_PERIODIC_IND	
(24)	*<=====*	
(25)	MPH_MEASUREMENT_IND	
(26)	*<=====*	
(27)	MPHC_RXLEV_PERIODIC_IND	
(28)	*<=====*	
(29)	MPHC_NCELL_BCCH_IND	
(30)	*<=====*	
(31)	MPHC_STOP_NCELL_BCCH_REQ	
(32)	*=====>*	
(33)	MPHC_NCELL_BCCH_IND	
(34)	*<=====*	
(35)	MPHC_STOP_NCELL_BCCH_REQ	
(36)	*=====>*	
(37)	MPHC_NCELL_BCCH_IND	
(38)	*<=====*	
(39)	MPHC_STOP_NCELL_BCCH_REQ	
(40)	*=====>*	
(41)	MPHC_RXLEV_PERIODIC_IND	
(42)	*<=====*	

(28)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(29)		MPH_MEASUREMENT_IND		
			*<=====	
(30)		MPH_UNITDATA_IND		
			*<=====	
(31)		MPH_UNITDATA_IND		
			*<=====	
(32)		MPH_UNITDATA_IND		
			*<=====	
(33)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(34)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(35)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(36)		MPH_MEASUREMENT_IND		
			*<=====	
(37)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(38)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(39)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(40)		MPH_MEASUREMENT_IND		
			*<=====	
(41)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(42)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(43)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(44)		MPH_MEASUREMENT_IND		
			*<=====	
(45)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(46)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(47)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(48)		MPH_MEASUREMENT_IND		
			*<=====	
(49)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(50)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(51)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(52)		MPH_MEASUREMENT_IND		
			*<=====	
(53)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(54)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(55)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(56)		MPH_MEASUREMENT_IND		
			*<=====	
(57)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	

```

(58) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(59) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====*
(60) | | MPHC_NCELL_SYNC_REQ |
| | *=====>*
(61) | | MPHC_NCELL_SYNC_REQ |
| | *=====>*
(62) | | MPHC_NCELL_SYNC_REQ |
| | *=====>*
(63) | MPH_MEASUREMENT_IND |
| | *<=====*
| |

```

Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(3) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(4) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(5) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(6) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_918
	ncells	NO_NCELLS
	gprs_sync	NOT_USED
(7) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1

	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(8) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_14
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRESENCE
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrx	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(9) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(10) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(11) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_124
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRESENCE
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrx	NOT_USED
	a_eotd_crosscor	NOT_USED

	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(12) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_124
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(13) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_1
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRESENCE
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrx	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(14) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_1
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(15) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(16) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED

	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NO_NCELLS
	gprs_sync	NOT_USED
(17) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(18) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_4
	tc	TC_2
	fn	FN_OFFSET_14
(19) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_14
(20) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_1
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_4
	tc	TC_2
	fn	FN_OFFSET_1
(21) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_1
(22) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_124
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_4
	tc	TC_2
	fn	FN_OFFSET_124
(23) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_124
(24) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(25) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(26) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED

	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED
(27) MPH_UNITDATA_IND		
	arfcn	ARFCN_1
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_4
	ti	TI_0
	loc_area_ident	LOC_AREA_IDENT_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(28) MPH_UNITDATA_IND		
	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_4
	ti	TI_0
	loc_area_ident	LOC_AREA_IDENT_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(29) MPH_UNITDATA_IND		
	arfcn	ARFCN_124
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_4
	ti	TI_0
	loc_area_ident	LOC_AREA_IDENT_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(30) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(31) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(32) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(33) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(34) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(35) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(36) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(37) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(38) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(39) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_1 CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(40) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(41) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(42) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(43) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(44) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(45) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(46) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(47) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_1 CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(48) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(49) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(50) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(51) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(52) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(53) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(54) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(55) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_1 CHANNELS_8

	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(56) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(57) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_VALID_TIMING_INFO_SB
(58) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_VALID_TIMING_INFO_SB
(59) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_VALID_TIMING_INFO_SB
(60) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED

History:	24.09.99	MPA	Initial
	20.06.01	MSB	fn_offset corrected in (6)
	07.02.02	LG	changed value of ba_id
	26.09.02	DL	E-OTD changes (MPHC_NCELL_SYNC_IND)

4.16.13 ALR903: Synchronisation to Neighbour Cells successful (sys info 4 and 7)

Description: The BA list contains the serving cell 23 and the neighbour cells 1, 14 and 124. The fieldstrength is 56 for channel 23, 12 for channel 1, 44 for channel 14 and 25 for channel 124 (all values in GSM range). The ranking for the neighbour cells is 14, 124 and channel 1. Each report contains two fieldstrength values per channel. The multiframe period is set to 6. The first measurement report is send to RR after five reports from PL. Then after each three reports from PL a measurement report is send to RR.

Preamble: ALR046A

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
(2)	MPHC_NCELL_SYNC_REQ	
(3)	MPHC_NCELL_SYNC_REQ	
(4)	MPHC_NCELL_SYNC_REQ	
(5)	MPHC_RXLEV_PERIODIC_IND	
(6)	MPH_MEASUREMENT_IND	
(7)	MPHC_RXLEV_PERIODIC_IND	
(8)	MPHC_NCELL_SYNC_IND	
(9)	MPHC_NCELL_BCCH_REQ	
(10)	MPHC_RXLEV_PERIODIC_IND	
(11)	MPHC_NCELL_SYNC_IND	
(12)	MPHC_NCELL_BCCH_REQ	
(13)	MPHC_NCELL_SYNC_IND	
(14)	MPHC_NCELL_BCCH_REQ	
(15)	MPHC_RXLEV_PERIODIC_IND	
(16)	MPH_MEASUREMENT_IND	
(17)	MPHC_RXLEV_PERIODIC_IND	
(18)	MPHC_NCELL_BCCH_IND	
(19)	MPHC_STOP_NCELL_BCCH_REQ	
(21)	MPHC_NCELL_BCCH_REQ	
(22)	MPHC_NCELL_BCCH_IND	
(23)	MPHC_STOP_NCELL_BCCH_REQ	
(25)	MPHC_NCELL_BCCH_REQ	

(26)			MPHC_NCELL_BCCH_IND	
			*<=====	
(25)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====>	
(29)			MPHC_NCELL_BCCH_REQ	
			*=====>	
(30)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(31)			MPHC_NCELL_BCCH_IND	
			*<=====	
(32)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====>	
(34)			MPHC_NCELL_BCCH_IND	
			*<=====	
(35)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====>	
(37)			MPHC_NCELL_BCCH_IND	
			*<=====	
(38)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====>	
(40)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(41)		MPH_MEASUREMENT_IND		
		*<=====		
(42)		MPH_UNITDATA_IND		
		*<=====		
(43)		MPH_UNITDATA_IND		
		*<=====		
(44)		MPH_UNITDATA_IND		
		*<=====		
(45)		MPH_UNITDATA_IND		
		*<=====		
(46)		MPH_UNITDATA_IND		
		*<=====		
(47)		MPH_UNITDATA_IND		
		*<=====		
(48)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(49)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(50)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(51)		MPH_MEASUREMENT_IND		
		*<=====		
(52)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(53)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(54)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(55)		MPH_MEASUREMENT_IND		
		*<=====		
(56)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(57)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(58)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(59)		MPH_MEASUREMENT_IND		
		*<=====		

```

(60) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====
(61) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====
(62) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====
(63) | MPH_MEASUREMENT_IND |
| | *<=====
(64) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====
(65) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====
(66) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====
(67) | MPH_MEASUREMENT_IND |
| | *<=====
(68) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====
(69) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====
(70) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====
(71) | MPH_MEASUREMENT_IND |
| | *<=====
(72) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====
(73) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====
(74) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====
(75) | | MPHC_NCELL_SYNC_REQ |
| | *=====
(76) | | MPHC_NCELL_SYNC_REQ |
| | *=====
(77) | | MPHC_NCELL_SYNC_REQ |
| | *=====
(78) | MPH_MEASUREMENT_IND |
| | *<=====
| |

```

Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(3) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO

(4)	MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_1
		fn_offset	NOT_USED
		time_alignment	NOT_USED
		timing_validity	TV_INVALID_TIMING_INFO
(5)	MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
		nbr_of_carriers	CHANNELS_8
		s_rxlev	RXLEV_56
		ba_id	BA_ID_1
(6)	MPH_MEASUREMENT_IND	arfcn	ARFCN_23
		rx_lev_full	RXLEV_56
		rx_lev_sub	NOT_USED
		rx_qual_full	NOT_USED
		rx_qual_sub	NOT_USED
		dtx	NOT_USED
		otd	NOT_USED
		valid	VALID_REPORT
		fn_offset	FN_OFFSET_918
		ncells	NO_NCELLS
		gprs_sync	NOT_USED
(7)	MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
		nbr_of_carriers	CHANNELS_8
		s_rxlev	RXLEV_56
		ba_id	BA_ID_1
(8)	MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_14
		sb_flag	SB_FOUND
		fn_offset	FN_OFFSET_14
		time_alignment	TIME_ALIGNMT_14
		bsic	BSIC_1
		neigh_id	NOT_USED
		attempt	NOT_USED
		pm	NOT_USED
		toa	NOT_USED
		angle	NOT_USED
		snr	NOT_USED
		eotd_data_valid	EOTD_NOT_PRES
		mode	NOT_USED
		d_eotd_first	NOT_USED
		d_eotd_max	NOT_USED
		d_eotd_nrj	NOT_USED
		a_eotd_crosscor	NOT_USED
		time_tag	NOT_USED
		fn_sb_neigh	NOT_USED
		fn_in_sb	NOT_USED
		toa_correction	NOT_USED
		delta_fn	NOT_USED
		delta_qbit	NOT_USED
(9)	MPHC_NCELL_BCCH_REQ	radio_freq	ARFCN_14
		fn_offset	FN_OFFSET_14
		time_alignment	TIME_ALIGNMT_14
		tsc	BSIC_1

	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(10) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(11) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_124
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrx	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(12) MPHC_NCELL_BCCH_REQ	radio_freq	ARFCN_124
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(13) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_1
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrx	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED

	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(14) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_1
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(15) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(16) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NO_NCELLS
	gprs_sync	NOT_USED
(17) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(18) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_4_ACS
	tc	TC_2
	fn	FN_OFFSET_14
(19) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_14
(20) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_7_8
	gprs_prio	NOT_USED
(21) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_1
	l2_channel	L2_CHANNEL_NBCCH

	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_4_ACS
	tc	TC_2
	fn	FN_OFFSET_1
(22) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_1
(23) MPHC_NCELL_BCCH_REQ	radio_freq	ARFCN_1
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_7_8
	gprs_prio	NOT_USED
(24) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_124
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_4_ACS
	tc	TC_2
	fn	FN_OFFSET_124
(25) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_124
(26) MPHC_NCELL_BCCH_REQ	radio_freq	ARFCN_124
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_7_8
	gprs_prio	NOT_USED
(27) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(28) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_7
	tc	TC_2
	fn	FN_OFFSET_14
(29) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_14
(30) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_1
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_7
	tc	TC_2
	fn	FN_OFFSET_1

(31) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	STOP_SIZE_1
radio_freq_array	STOP_ARRAY_1

(32) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_124
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_7
tc	TC_2
fn	FN_OFFSET_124

(33) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	STOP_SIZE_1
radio_freq_array	STOP_ARRAY_124

(34) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(35) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NCELLS_1_14_124
gprs_sync	NOT_USED

(36) MPH_UNITDATA_IND

arfcn	ARFCN_1
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_4
ti	TI_0
loc_area_ident	LOC_AREA_IDENT_1
cell_select	CELL_SELECT_2
rach_ctrl	RACH_CTRL_1
}	

(37) MPH_UNITDATA_IND

arfcn	ARFCN_1
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_7
ti	TI_0
si7_rest_oct	SI7_REST_OCT_1
}	

(38) MPH_UNITDATA_IND

arfcn	ARFCN_14
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_4
ti	TI_0
loc_area_ident	LOC_AREA_IDENT_1
cell_select	CELL_SELECT_2
rach_ctrl	RACH_CTRL_1
}	

(39) MPH_UNITDATA_IND

arfcn	ARFCN_14
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_7
ti	TI_0
si7_rest_oct	SI7_REST_OCT_1
}	

(40) MPH_UNITDATA_IND

arfcn	ARFCN_124
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_4
ti	TI_0
loc_area_ident	LOC_AREA_IDENT_1
cell_select	CELL_SELECT_2
rach_ctrl	RACH_CTRL_1
}	

(41) MPH_UNITDATA_IND

arfcn	ARFCN_124
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_7
ti	TI_0
si7_rest_oct	SI7_REST_OCT_1
}	

(42) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(43) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(44) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(45) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(46) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(47) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(48) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(49) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(50) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(51) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_1 CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(52) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(53) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(54) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(55) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(56) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(57) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(58) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(59) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_1 CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(60) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(61) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(62) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(63) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(64) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(65) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(66) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(67) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_1 CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(68) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(69) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_VALID_TIMING_INFO_SB
(70) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 NOT_USED NOT_USED TV_VALID_TIMING_INFO_SB
(71) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_1 NOT_USED NOT_USED TV_VALID_TIMING_INFO_SB
(72) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED

History:	24.09.99	MPA	Initial
	20.06.01	MSB	fn_offset corrected in (6)
	07.02.02	LG	changed value of ba_id
	26.09.02	DL	E-OTD changes (MPHC_NCELL_SYNC_IND)

4.16.14 ALR904: Synchronisation to Neighbour Cells successful (sys info 4 and 8)

Description: The BA list contains the serving cell 23 and the neighbour cells 1, 14 and 124. The fieldstrength is 56 for channel 23, 12 for channel 1, 44 for channel 14 and 25 for channel 124 (all values in GSM range). The ranking for the neighbour cells is 14, 124 and channel 1. Each report contains two fieldstrength values per channel. The multiframe period is set to 6. The first measurement report is send to RR after five reports from PL. Then after each three reports from PL a measurement report is send to RR.

Preamble: ALR046A

	RR/DL		ALR		PL
(1)				MPHC_RXLEV_PERIODIC_IND	

		<=====
(2)		MPHC_NCELL_SYNC_REQ
		=====>
(3)		MPHC_NCELL_SYNC_REQ
		=====>
(4)		MPHC_NCELL_SYNC_REQ
		=====>
(5)		MPHC_RXLEV_PERIODIC_IND
		<=====
(6)	MPH_MEASUREMENT_IND	
		<=====
(7)		MPHC_RXLEV_PERIODIC_IND
		<=====
(8)		MPHC_NCELL_SYNC_IND
		<=====
(9)		MPHC_NCELL_BCCH_REQ
		=====>
(10)		MPHC_RXLEV_PERIODIC_IND
		<=====
(11)		MPHC_NCELL_SYNC_IND
		<=====
(12)		MPHC_NCELL_BCCH_REQ
		=====>
(13)		MPHC_NCELL_SYNC_IND
		<=====
(14)		MPHC_NCELL_BCCH_REQ
		=====>
(15)		MPHC_RXLEV_PERIODIC_IND
		<=====
(16)	MPH_MEASUREMENT_IND	
		<=====
(17)		MPHC_RXLEV_PERIODIC_IND
		<=====
(18)		MPHC_NCELL_BCCH_IND
		<=====
(19)		MPHC_STOP_NCELL_BCCH_REQ
		=====>
(21)		MPHC_NCELL_BCCH_REQ
		=====>
(22)		MPHC_NCELL_BCCH_IND
		<=====
(23)		MPHC_STOP_NCELL_BCCH_REQ
		=====>
(25)		MPHC_NCELL_BCCH_REQ
		=====>
(26)		MPHC_NCELL_BCCH_IND
		<=====
(25)		MPHC_STOP_NCELL_BCCH_REQ
		=====>
(29)		MPHC_NCELL_BCCH_REQ
		=====>
(30)		MPHC_RXLEV_PERIODIC_IND
		<=====
(31)		MPHC_RXLEV_PERIODIC_IND
		<=====
(32)	MPH_MEASUREMENT_IND	
		<=====
(33)		MPHC_NCELL_BCCH_IND
		<=====
(34)		MPHC_STOP_NCELL_BCCH_REQ

```

(36) | | *=====>*
      | | | MPHC_NCELL_BCCH_IND |
      | | *<=====*
(37) | | | MPHC_STOP_NCELL_BCCH_REQ |
      | | *=====>*
(39) | | | MPHC_NCELL_BCCH_IND |
      | | *<=====*
(40) | | | MPHC_STOP_NCELL_BCCH_REQ |
      | | *=====>*
(42) | | | MPHC_RXLEV_PERIODIC_IND |
      | | *<=====*
(43) | | | MPHC_RXLEV_PERIODIC_IND |
      | | *<=====*
(44) | | | MPHC_RXLEV_PERIODIC_IND |
      | | *<=====*
(45) | | MPH_MEASUREMENT_IND |
      | *<=====*
(46) | | MPH_UNITDATA_IND |
      | *<=====*
(47) | | MPH_UNITDATA_IND |
      | *<=====*
(48) | | MPH_UNITDATA_IND |
      | *<=====*
(49) | | MPH_UNITDATA_IND |
      | *<=====*
(50) | | MPH_UNITDATA_IND |
      | *<=====*
(51) | | MPH_UNITDATA_IND |
      | *<=====*
(52) | | | MPHC_RXLEV_PERIODIC_IND |
      | | *<=====*
(53) | | | MPHC_RXLEV_PERIODIC_IND |
      | | *<=====*
(54) | | | MPHC_RXLEV_PERIODIC_IND |
      | | *<=====*
(55) | | MPH_MEASUREMENT_IND |
      | *<=====*
(56) | | | MPHC_RXLEV_PERIODIC_IND |
      | | *<=====*
(57) | | | MPHC_RXLEV_PERIODIC_IND |
      | | *<=====*
(58) | | | MPHC_RXLEV_PERIODIC_IND |
      | | *<=====*
(59) | | MPH_MEASUREMENT_IND |
      | *<=====*
(60) | | | MPHC_RXLEV_PERIODIC_IND |
      | | *<=====*
(61) | | | MPHC_RXLEV_PERIODIC_IND |
      | | *<=====*
(62) | | | MPHC_RXLEV_PERIODIC_IND |
      | | *<=====*
(63) | | MPH_MEASUREMENT_IND |
      | *<=====*
(64) | | | MPHC_RXLEV_PERIODIC_IND |
      | | *<=====*
(65) | | | MPHC_RXLEV_PERIODIC_IND |
      | | *<=====*
(66) | | | MPHC_RXLEV_PERIODIC_IND |
      | | *<=====*
(67) | | MPH_MEASUREMENT_IND |

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(68) | *<===== | MPHC_RXLEV_PERIODIC_IND |
| | *<===== |
(69) | | MPHC_RXLEV_PERIODIC_IND |
| | *<===== |
(70) | | MPHC_RXLEV_PERIODIC_IND |
| | *<===== |
(71) | MPH_MEASUREMENT_IND |
| *<===== |
(72) | | MPHC_RXLEV_PERIODIC_IND |
| | *<===== |
(73) | | MPHC_RXLEV_PERIODIC_IND |
| | *<===== |
(74) | | MPHC_RXLEV_PERIODIC_IND |
| | *<===== |
(75) | MPH_MEASUREMENT_IND |
| *<===== |
(76) | | MPHC_RXLEV_PERIODIC_IND |
| | *<===== |
(77) | | MPHC_RXLEV_PERIODIC_IND |
| | *<===== |
(78) | | MPHC_RXLEV_PERIODIC_IND |
| | *<===== |
(79) | | MPHC_NCELL_SYNC_REQ |
| | *=====> |
(80) | | MPHC_NCELL_SYNC_REQ |
| | *=====> |
(81) | | MPHC_NCELL_SYNC_REQ |
| | *=====> |
(82) | MPH_MEASUREMENT_IND |
| *<===== |
| |

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Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(2) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(3) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(4) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_1 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(5) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1

	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(6) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_918
	ncells	NO_NCELLS
	gprs_sync	NOT_USED
(7) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(8) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_14
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrij	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(9) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(10) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1

(11) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_124
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_124
time_alignment	TIME_ALIGNMT_124
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrj	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(12) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_124
fn_offset	FN_OFFSET_124
time_alignment	TIME_ALIGNMT_124
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(13) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_1
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_1
time_alignment	TIME_ALIGNMT_1
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrj	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(14) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_1
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	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(15) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(16) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NO_NCELLS
	gprs_sync	NOT_USED
(17) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(18) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_4_ACS
	tc	TC_2
	fn	FN_OFFSET_14
(19) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_14
(20) MPHC_NCELL_BCCH_REQ	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_7_8
	gprs_prio	NOT_USED
(21) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_1
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_4_ACS
	tc	TC_2
	fn	FN_OFFSET_1
(22) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_1

(23) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_1
fn_offset	FN_OFFSET_1
time_alignment	TIME_ALIGNMT_1
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_7_8
gprs_prio	NOT_USED

(24) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_124
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_4_ACS
tc	TC_2
fn	FN_OFFSET_124

(25) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	STOP_SIZE_1
radio_freq_array	STOP_ARRAY_124

(26) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_124
fn_offset	FN_OFFSET_124
time_alignment	TIME_ALIGNMT_124
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_7_8
gprs_prio	NOT_USED

(27) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(28) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(29) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NO_NCELLS
gprs_sync	NOT_USED

(30) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_14
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_8
tc	TC_2
fn	FN_OFFSET_14

(31) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size STOP_SIZE_1
radio_freq_array STOP_ARRAY_14

(32) MPHC_NCELL_BCCH_IND

radio_freq ARFCN_1
l2_channel L2_CHANNEL_NBCCH
error_flag VALID_BLOCK
l2_frame L2_SYS_INFO_8
tc TC_2
fn FN_OFFSET_1

(33) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size STOP_SIZE_1
radio_freq_array STOP_ARRAY_1

(34) MPHC_NCELL_BCCH_IND

radio_freq ARFCN_124
l2_channel L2_CHANNEL_NBCCH
error_flag VALID_BLOCK
l2_frame L2_SYS_INFO_8
tc TC_2
fn FN_OFFSET_124

(35) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size STOP_SIZE_1
radio_freq_array STOP_ARRAY_124

(36) MPHC_RXLEV_PERIODIC_IND

result NCELL_RESULT_1
nbr_of_carriers CHANNELS_8
s_rxlev RXLEV_56
ba_id BA_ID_1

(37) MPHC_RXLEV_PERIODIC_IND

result NCELL_RESULT_1
nbr_of_carriers CHANNELS_8
s_rxlev RXLEV_56
ba_id BA_ID_1

(38) MPHC_RXLEV_PERIODIC_IND

result NCELL_RESULT_1
nbr_of_carriers CHANNELS_8
s_rxlev RXLEV_56
ba_id BA_ID_1

(39) MPH_MEASUREMENT_IND

arfcn ARFCN_23
rx_lev_full RXLEV_56
rx_lev_sub NOT_USED
rx_qual_full NOT_USED
rx_qual_sub NOT_USED
dtx NOT_USED
otd NOT_USED
valid VALID_REPORT
fn_offset FN_OFFSET_306
ncells NCELLS_1_14_124
gprs_sync NOT_USED

(40) MPH_UNITDATA_IND

arfcn ARFCN_1
fn NOT_USED

	sdu { component direction pd ti loc_area_ident cell_select rach_ctrl }	RR DOWNLINK D_SYS_INFO_4 TI_0 LOC_AREA_IDENT_1 CELL_SELECT_2 RACH_CTRL_1
(41) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti si8_rest_oct }	ARFCN_1 NOT_USED RR DOWNLINK D_SYS_INFO_8 TI_0 SI8_REST_OCT_1
(42) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti loc_area_ident cell_select rach_ctrl }	ARFCN_14 NOT_USED RR DOWNLINK D_SYS_INFO_4 TI_0 LOC_AREA_IDENT_1 CELL_SELECT_2 RACH_CTRL_1
(43) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti si8_rest_oct }	ARFCN_14 NOT_USED RR DOWNLINK D_SYS_INFO_8 TI_0 SI8_REST_OCT_1
(44) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti loc_area_ident cell_select	ARFCN_124 NOT_USED RR DOWNLINK D_SYS_INFO_4 TI_0 LOC_AREA_IDENT_1 CELL_SELECT_2

	rach_ctrl }	RACH_CTRL_1
(45) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti si8_rest_oct }	ARFCN_124 NOT_USED RR DOWNLINK D_SYS_INFO_8 TI_0 SI8_REST_OCT_1
(46) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(47) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(48) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(49) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(50) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(51) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(52) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_1 CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(53) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(54) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(55) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(56) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(57) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(58) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(59) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(60) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_1 CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(61) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(62) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(63) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(64) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(65) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(66) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(67) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(68) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_1 CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(69) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(70) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(71) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(72) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(73) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_VALID_TIMING_INFO_SB
(74) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 NOT_USED NOT_USED TV_VALID_TIMING_INFO_SB
(75) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_1 NOT_USED NOT_USED TV_VALID_TIMING_INFO_SB
(76) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306

ncells
gprs_sync

NCELLS_1_14_124
NOT_USED

History:	24.09.99	MPA	Initial
	20.06.01	MSB	fn_offset corrected in (6)
	07.02.02	LG	changed value of ba_id
	26.09.02	DL	E-OTD changes (MPHC_NCELL_SYNC_IND)

4.16.15 ALR905: Synchronisation to Neighbour Cells successful (unexpected msg and sys info 3)

Description: The BA list contains the serving cell 23 and the neighbour cells 1, 14 and 124. The fieldstrength is 56 for channel 23, 12 for channel 1, 44 for channel 14 and 25 for channel 124 (all values in GSM range). The ranking for the neighbour cells is 14, 124 and channel 1. Each report contains two fieldstrength values per channel. The multiframe period is set to 6. The first measurement report is send to RR after five reports from PL. Then after each three reports from PL a measurement report is send to RR.

Preamble: ALR046A

	RR/DL	ALR	PL
(1)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(2)		MPHC_NCELL_SYNC_REQ	
		=====>	
(3)		MPHC_NCELL_SYNC_REQ	
		=====>	
(4)		MPHC_NCELL_SYNC_REQ	
		=====>	
(5)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(6)	MPH_MEASUREMENT_IND		
	<=====		
(7)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(8)		MPHC_NCELL_SYNC_IND	
		<=====	
(9)		MPHC_NCELL_BCCH_REQ	
		=====>	
(10)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(11)		MPHC_NCELL_SYNC_IND	
		<=====	
(12)		MPHC_NCELL_BCCH_REQ	
		=====>	
(13)		MPHC_NCELL_SYNC_IND	
		<=====	
(14)		MPHC_NCELL_BCCH_REQ	
		=====>	
(15)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(16)	MPH_MEASUREMENT_IND		
	<=====		
(17)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
(18)		MPHC_NCELL_BCCH_IND	
		<=====	
(19)		MPHC_STOP_NCELL_BCCH_REQ	
		=====>	
(21)		MPHC_NCELL_BCCH_REQ	
		=====>	
(22)		MPHC_NCELL_BCCH_IND	
		<=====	
(23)		MPHC_STOP_NCELL_BCCH_REQ	
		=====>	
(25)		MPHC_NCELL_BCCH_REQ	
		=====>	

(26)			MPHC_NCELL_BCCH_IND	
			*<=====	
(25)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====>	
(29)			MPHC_NCELL_BCCH_REQ	
			*=====>	
(30)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(31)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(32)		MPH_MEASUREMENT_IND		
		*<=====		
(33)			MPHC_NCELL_BCCH_IND	
			*<=====	
(34)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====>	
(36)			MPHC_NCELL_BCCH_IND	
			*<=====	
(37)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====>	
(39)			MPHC_NCELL_BCCH_IND	
			*<=====	
(40)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====>	
(42)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(43)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(44)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(45)		MPH_MEASUREMENT_IND		
		*<=====		
(46)		MPH_UNITDATA_IND		
		*<=====		
(47)		MPH_UNITDATA_IND		
		*<=====		
(48)		MPH_UNITDATA_IND		
		*<=====		
(49)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(50)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(51)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(52)		MPH_MEASUREMENT_IND		
		*<=====		
(53)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(54)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(55)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(56)		MPH_MEASUREMENT_IND		
		*<=====		
(57)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(58)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(59)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	

```

(60) | MPH_MEASUREMENT_IND |
    *<=====
(61) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(62) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(63) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(64) | MPH_MEASUREMENT_IND |
    *<=====
(65) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(66) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(67) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(68) | MPH_MEASUREMENT_IND |
    *<=====
(69) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(70) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(71) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(72) | MPH_MEASUREMENT_IND |
    *<=====
(73) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(74) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(75) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(76) | | MPH_C_NCELL_SYNC_REQ |
    *=====>
(77) | | MPH_C_NCELL_SYNC_REQ |
    *=====>
(78) | | MPH_C_NCELL_SYNC_REQ |
    *=====>
(79) | MPH_MEASUREMENT_IND |
    *<=====

```

Parametrization

	Primitive	Parameter	Value
(1)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(2)	MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(3)	MPHC_NCELL_SYNC_REQ	radio_freq fn_offset	ARFCN_124 NOT_USED

	time_alignment timing_validity	NOT_USED TV_INVALID_TIMING_INFO
(4) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_1 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(5) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(6) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_918 NO_NCELLS NOT_USED
(7) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(8) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic neigh_id attempt pm toa angle snr eotd_data_valid mode d_eotd_first d_eotd_max d_eotd_nrl a_eotd_crosscor time_tag fn_sb_neigh fn_in_sb toa_correction delta_fn delta_qbit	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED EOTD_NOT_PRES NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED
(9) MPHC_NCELL_BCCH_REQ	radio_freq fn_offset	ARFCN_14 FN_OFFSET_14

	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(10) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(11) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_124
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrij	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(12) MPHC_NCELL_BCCH_REQ	radio_freq	ARFCN_124
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(13) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_1
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrij	NOT_USED

	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(14) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_1
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(15) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(16) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NO_NCELLS
	gprs_sync	NOT_USED
(17) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(18) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_2
	tc	TC_2
	fn	FN_OFFSET_14
(19) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_14
(20) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED

(21) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_1
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_7
tc	TC_2
fn	FN_OFFSET_1

(22) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	STOP_SIZE_1
radio_freq_array	STOP_ARRAY_1

(23) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_1
fn_offset	FN_OFFSET_1
time_alignment	TIME_ALIGNMT_1
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(24) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_124
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_8
tc	TC_2
fn	FN_OFFSET_124

(25) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	STOP_SIZE_1
radio_freq_array	STOP_ARRAY_124

(26) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_124
fn_offset	FN_OFFSET_124
time_alignment	TIME_ALIGNMT_124
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(27) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(28) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(29) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306

	ncells	NO_NCELLS
	gprs_sync	NOT_USED
(30) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(31) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_14
(32) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_1
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_1
(33) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_1
(34) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_124
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_124
(35) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_124
(36) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(37) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(38) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(39) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED

	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED
(40) MPH_UNITDATA_IND		
	arfcn	ARFCN_1
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(41) MPH_UNITDATA_IND		
	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(42) MPH_UNITDATA_IND		
	arfcn	ARFCN_124
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(43) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1

	nbr_of_carriers s_rxlev ba_id	CHANNELS_8 RXLEV_56 BA_ID_1
(44) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(45) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(46) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(47) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(48) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(49) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(50) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(51) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1

	nbr_of_carriers s_rxlev ba_id	CHANNELS_8 RXLEV_56 BA_ID_1
(52) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(53) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(54) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(55) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(56) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(57) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(58) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(59) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1

	nbr_of_carriers s_rxlev ba_id	CHANNELS_8 RXLEV_56 BA_ID_1
(60) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(61) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(62) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(63) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(64) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(65) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(66) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(67) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1

	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(68) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(69) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(70) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_VALID_TIMING_INFO_SB
(71) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_VALID_TIMING_INFO_SB
(72) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_VALID_TIMING_INFO_SB
(73) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED

History:	24.09.99	MPA	Initial
	20.06.01	MSB	fn_offset corrected in (6)
	07.02.02	LG	changed value of ba_id
	26.09.02	DL	E-OTD changes (MPHC_NCELL_SYNC_IND)

4.16.16 ALR906: Synchronisation to Neighbour Cells successful (read error and sys info 3)

Description: The BA list contains the serving cell 23 and the neighbour cells 1, 14 and 124. The fieldstrength is 56 for channel 23, 12 for channel 1, 44 for channel 14 and 25 for channel 124 (all values in GSM range). The ranking for the neighbour cells is 14, 124 and channel 1. Each report contains two fieldstrength values per channel. The multiframe

period is set to 6. The first measurement report is send to RR after five reports from PL. Then after each three reports from PL a measurement report is send to RR.

Preamble: ALR046A

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
(2)	MPHC_NCELL_SYNC_REQ	
(3)	MPHC_NCELL_SYNC_REQ	
(4)	MPHC_NCELL_SYNC_REQ	
(5)	MPHC_RXLEV_PERIODIC_IND	
(6)	MPH_MEASUREMENT_IND	
(7)	MPHC_RXLEV_PERIODIC_IND	
(8)	MPHC_NCELL_SYNC_IND	
(9)	MPHC_NCELL_BCCH_REQ	
(10)	MPHC_RXLEV_PERIODIC_IND	
(11)	MPHC_NCELL_SYNC_IND	
(12)	MPHC_NCELL_BCCH_REQ	
(13)	MPHC_NCELL_SYNC_IND	
(14)	MPHC_NCELL_BCCH_REQ	
(15)	MPHC_RXLEV_PERIODIC_IND	
(16)	MPH_MEASUREMENT_IND	
(17)	MPHC_RXLEV_PERIODIC_IND	
(18)	MPHC_NCELL_BCCH_IND	
(19)	MPHC_STOP_NCELL_BCCH_REQ	
(21)	MPHC_NCELL_BCCH_REQ	
(22)	MPHC_NCELL_BCCH_IND	
(23)	MPHC_STOP_NCELL_BCCH_REQ	
(25)	MPHC_NCELL_BCCH_REQ	
(26)	MPHC_NCELL_BCCH_IND	
(25)	MPHC_STOP_NCELL_BCCH_REQ	
(29)	MPHC_NCELL_BCCH_REQ	
(30)	MPHC_RXLEV_PERIODIC_IND	

(31)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(32)		MPH_MEASUREMENT_IND		
		*<=====		
(33)			MPHC_NCELL_BCCH_IND	
			*<=====	
(34)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====>	
(36)			MPHC_NCELL_BCCH_IND	
			*<=====	
(37)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====>	
(39)			MPHC_NCELL_BCCH_IND	
			*<=====	
(40)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====>	
(42)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(43)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(44)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(45)		MPH_MEASUREMENT_IND		
		*<=====		
(46)		MPH_UNITDATA_IND		
		*<=====		
(47)		MPH_UNITDATA_IND		
		*<=====		
(48)		MPH_UNITDATA_IND		
		*<=====		
(49)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(50)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(51)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(52)		MPH_MEASUREMENT_IND		
		*<=====		
(53)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(54)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(55)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(56)		MPH_MEASUREMENT_IND		
		*<=====		
(57)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(58)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(59)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(60)		MPH_MEASUREMENT_IND		
		*<=====		
(61)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(62)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(63)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	

```

(64) | MPH_MEASUREMENT_IND |
    *<=====
(65) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(66) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(67) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(68) | MPH_MEASUREMENT_IND |
    *<=====
(69) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(70) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(71) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(72) | MPH_MEASUREMENT_IND |
    *<=====
(73) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(74) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(75) | | MPH_C_RXLEV_PERIODIC_IND |
    *<=====
(76) | | MPH_C_NCELL_SYNC_REQ |
    *=====>
(77) | | MPH_C_NCELL_SYNC_REQ |
    *=====>
(78) | | MPH_C_NCELL_SYNC_REQ |
    *=====>
(79) | MPH_MEASUREMENT_IND |
    *<=====
    |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_C_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPH_C_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(3) MPH_C_NCELL_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(4) MPH_C_NCELL_SYNC_REQ	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO

(5) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(6) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_918
	ncells	NO_NCELLS
	gprs_sync	NOT_USED
(7) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(8) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_14
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrij	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(9) MPHC_NCELL_BCCH_REQ	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(10) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8

	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(11) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_124
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(12) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_124
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(13) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_1
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrj	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED

(14) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_1
fn_offset	FN_OFFSET_1
time_alignment	TIME_ALIGNMT_1
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(15) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(16) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NO_NCELLS
gprs_sync	NOT_USED

(17) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(18) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_14
l2_channel	L2_CHANNEL_NBCCH
error_flag	INVALID_BLOCK
l2_frame	L2_NO_CONTENT
tc	TC_2
fn	FN_OFFSET_14

(19) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	STOP_SIZE_1
radio_freq_array	STOP_ARRAY_14

(20) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_14
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(21) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_1
l2_channel	L2_CHANNEL_NBCCH
error_flag	INVALID_BLOCK
l2_frame	L2_NO_CONTENT
tc	TC_2
fn	FN_OFFSET_1

(22) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	STOP_SIZE_1
radio_freq_array	STOP_ARRAY_1

(23) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_1
fn_offset	FN_OFFSET_1
time_alignment	TIME_ALIGNMT_1
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(24) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_124
l2_channel	L2_CHANNEL_NBCCH
error_flag	INVALID_BLOCK
l2_frame	L2_NO_CONTENT
tc	TC_2
fn	FN_OFFSET_124

(25) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	STOP_SIZE_1
radio_freq_array	STOP_ARRAY_124

(26) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_124
fn_offset	FN_OFFSET_124
time_alignment	TIME_ALIGNMT_124
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(27) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(28) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(29) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NO_NCELLS
gprs_sync	NOT_USED

(30) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_14
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3

	tc	TC_2
	fn	FN_OFFSET_14
(31) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_14
(32) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_1
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_1
(33) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_1
(34) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_124
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_124
(35) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_124
(36) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(37) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(38) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(39) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED

(40) MPH_UNITDATA_IND

arfcn	ARFCN_1
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_3
ti	TI_0
cell_ident	CELL_IDENT_1
loc_area_ident	LOC_AREA_IDENT_1
ctrl_chan_desc	CTRL_CHAN_DESC_1
cell_opt_bcch	CELL_OPT_BCCH_1
cell_select	CELL_SELECT_1
rach_ctrl	RACH_CTRL_1
}	

(41) MPH_UNITDATA_IND

arfcn	ARFCN_14
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_3
ti	TI_0
cell_ident	CELL_IDENT_1
loc_area_ident	LOC_AREA_IDENT_1
ctrl_chan_desc	CTRL_CHAN_DESC_1
cell_opt_bcch	CELL_OPT_BCCH_1
cell_select	CELL_SELECT_1
rach_ctrl	RACH_CTRL_1
}	

(42) MPH_UNITDATA_IND

arfcn	ARFCN_124
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_3
ti	TI_0
cell_ident	CELL_IDENT_1
loc_area_ident	LOC_AREA_IDENT_1
ctrl_chan_desc	CTRL_CHAN_DESC_1
cell_opt_bcch	CELL_OPT_BCCH_1
cell_select	CELL_SELECT_1
rach_ctrl	RACH_CTRL_1
}	

(43) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(44) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(45) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(46) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(47) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(48) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(49) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(50) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(51) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(52) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_1 CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(53) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(54) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(55) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(56) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(57) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(58) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(59) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(60) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_1 CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(61) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(62) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(63) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(64) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(65) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(66) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(67) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(68) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_1 CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(69) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(70) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_VALID_TIMING_INFO_SB
(71) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 NOT_USED NOT_USED TV_VALID_TIMING_INFO_SB
(72) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_1 NOT_USED NOT_USED TV_VALID_TIMING_INFO_SB
(73) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED

History:	24.09.99	MPA	Initial
	20.06.01	MSB	fn_offset corrected in (6)
	07.02.02	LG	changed value of ba_id
	26.09.02	DL	E-OTD changes (MPHC_NCELL_SYNC_IND)

4.16.17 ALR907: Synchronisation to Neighbour Cells successful (sys info 3)

Description: The BA list contains the serving cell 23 and the neighbour cells 1, 14 and 124. The fieldstrength is 56 for channel 23, 12 for channel 1, 44 for channel 14 and 25 for channel 124 (all values in GSM range). The ranking for the neighbour cells is 14, 124 and channel 1. Each reports contains two fieldstrength values per channel. The multiframe period is set to 6. The first measurement report is send to RR after five reports from PL. Then after each three reports from PL a measurement report is send to RR.

Preamble: ALR046A

	RR/DL		ALR		PL
(1)				MPHC_RXLEV_PERIODIC_IND	
				<=====	

(2)			MPHC_NCELL_SYNC_REQ	
			*=====	
(3)			MPHC_NCELL_SYNC_REQ	
			*=====	
(4)			MPHC_NCELL_SYNC_REQ	
			*=====	
(5)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(6)		MPH_MEASUREMENT_IND		
		*=====		
(7)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(8)			MPHC_NCELL_SYNC_IND	
			*=====	
(9)			MPHC_NCELL_BCCH_REQ	
			*=====	
(10)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(11)			MPHC_NCELL_SYNC_IND	
			*=====	
(12)			MPHC_NCELL_BCCH_REQ	
			*=====	
(13)			MPHC_NCELL_SYNC_IND	
			*=====	
(14)			MPHC_NCELL_BCCH_REQ	
			*=====	
(15)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(16)		MPH_MEASUREMENT_IND		
		*=====		
(17)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(18)			MPHC_NCELL_BCCH_IND	
			*=====	
(19)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====	
(21)			MPHC_NCELL_BCCH_IND	
			*=====	
(22)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====	
(24)			MPHC_NCELL_BCCH_IND	
			*=====	
(25)			MPHC_STOP_NCELL_BCCH_REQ	
			*=====	
(27)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(28)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(29)		MPH_MEASUREMENT_IND		
		*=====		
(30)		MPH_UNITDATA_IND		
		*=====		
(31)		MPH_UNITDATA_IND		
		*=====		
(32)		MPH_UNITDATA_IND		
		*=====		
(33)			MPHC_RXLEV_PERIODIC_IND	
			*=====	
(34)			MPHC_RXLEV_PERIODIC_IND	
			*=====	

(35)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(36)		MPH_MEASUREMENT_IND		
			*<=====	
(37)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(38)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(39)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(40)		MPH_MEASUREMENT_IND		
			*<=====	
(41)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(42)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(43)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(44)		MPH_MEASUREMENT_IND		
			*<=====	
(45)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(46)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(47)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(48)		MPH_MEASUREMENT_IND		
			*<=====	
(49)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(50)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(51)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(52)		MPH_MEASUREMENT_IND		
			*<=====	
(53)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(54)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(55)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(56)		MPH_MEASUREMENT_IND		
			*<=====	
(57)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(58)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(59)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(60)			MPHC_NCELL_SYNC_REQ	
			*=====>	
(61)			MPHC_NCELL_SYNC_REQ	
			*=====>	
(62)			MPHC_NCELL_SYNC_REQ	
			*=====>	
(63)		MPH_MEASUREMENT_IND		
			*<=====	

Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(3) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(4) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(5) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(6) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_918
	ncells	NO_NCELLS
(7) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(8) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_14
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED

	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrij	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(9) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED
(10) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(11) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_124
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	bsic	BSIC_1
	neigh_id	NOT_USED
	attempt	NOT_USED
	pm	NOT_USED
	toa	NOT_USED
	angle	NOT_USED
	snr	NOT_USED
	eotd_data_valid	EOTD_NOT_PRES
	mode	NOT_USED
	d_eotd_first	NOT_USED
	d_eotd_max	NOT_USED
	d_eotd_nrij	NOT_USED
	a_eotd_crosscor	NOT_USED
	time_tag	NOT_USED
	fn_sb_neigh	NOT_USED
	fn_in_sb	NOT_USED
	toa_correction	NOT_USED
	delta_fn	NOT_USED
	delta_qbit	NOT_USED
(12) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_124
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	NOT_USED

(13) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_1
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_1
time_alignment	TIME_ALIGNMT_1
bsic	BSIC_1
neigh_id	NOT_USED
attempt	NOT_USED
pm	NOT_USED
toa	NOT_USED
angle	NOT_USED
snr	NOT_USED
eotd_data_valid	EOTD_NOT_PRES
mode	NOT_USED
d_eotd_first	NOT_USED
d_eotd_max	NOT_USED
d_eotd_nrij	NOT_USED
a_eotd_crosscor	NOT_USED
time_tag	NOT_USED
fn_sb_neigh	NOT_USED
fn_in_sb	NOT_USED
toa_correction	NOT_USED
delta_fn	NOT_USED
delta_qbit	NOT_USED

(14) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_1
fn_offset	FN_OFFSET_1
time_alignment	TIME_ALIGNMT_1
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(15) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(16) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NO_NCELLS
gprs_sync	NOT_USED

(17) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(18) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_14
l2_channel	L2_CHANNEL_NBCCH

	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(19) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_14
(20) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_1
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_1
(21) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_1
(22) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_124
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_124
(23) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_124
(24) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(25) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(26) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED
(27) MPH_UNITDATA_IND	arfcn	ARFCN_1
	fn	NOT_USED
	sdu	
	{	

	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(28) MPH_UNITDATA_IND		
	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(29) MPH_UNITDATA_IND		
	arfcn	ARFCN_124
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(30) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(31) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(32) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(33) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(34) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(35) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(36) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(37) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(38) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(39) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(40) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_1 CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(41) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(42) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(43) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(44) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(45) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(46) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(47) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(48) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_1 CHANNELS_8

	s_rxlev ba_id	RXLEV_56 BA_ID_1
(49) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(50) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(51) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(52) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(53) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NCELLS_1_14_124 NOT_USED
(54) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(55) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(56) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_1 CHANNELS_8

	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(57) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_VALID_TIMING_INFO_SB
(58) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_VALID_TIMING_INFO_SB
(59) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_VALID_TIMING_INFO_SB
(60) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED

History:	24.09.99	MPA	Initial
	20.06.01	MSB	fn_offset corrected in (16)
	07.02.02	LG	changed value of ba_id
	26.09.02	DL	E-OTD changes (MPHC_NCELL_SYNC_IND)

4.17 Short Message Cell Broadcast

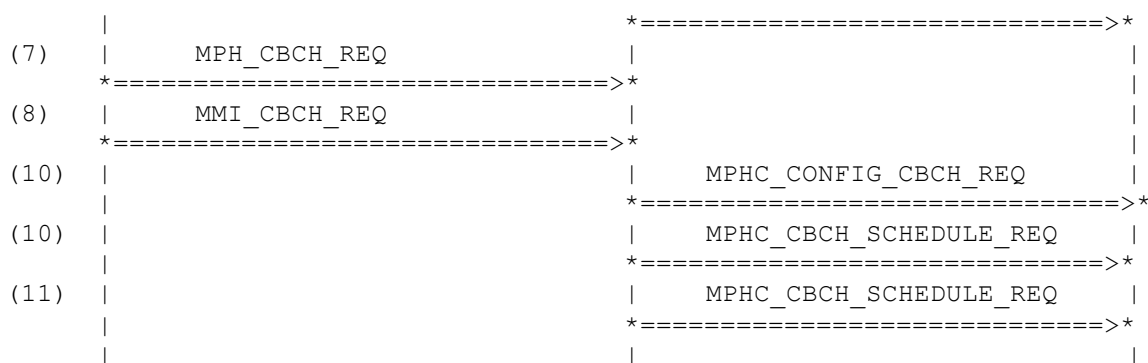
4.17.1 ALR800: Configuration CBCH followed by MMI Request

Description: The CBCH channel is configured. Then MMI requests reading of CBCH for the message identifier 3, 7 and 11 to 13.

Preamble: ALR006

Variants: <A>..****

	RR/DL	ALR	PL
(1)			
	MPH_CLASSMARK_REQ		
	=====>		
(2)			
	MPH_IDLE_REQ		
	=====>		
(3)		MPHC_STOP_SCELL_BCCH_REQ	
		=====>	
(5)		MPHC_START_CCCH_REQ	
		=====>	
(6)		MPHC_SCELL_NBCCH_REQ	



Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_GSM_900
(2) MPH_IDLE_REQ	mod	MODE_CELL_SELECTION
	arfcn	ARFCN_14
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLK_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRESENT
	gprs_support	NOT_USED
(3) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_8
	bs_ag_blk_res	BS_AG_BLK_RES_3
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_2
	page_mode	PGM_REORG
(5) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(6) MPH_CBCH_REQ	<A>	CBCH_DESCRIPTION_4
		CBCH_DESCRIPTION_8
(7) MMI_CBCH_REQ	msg_id	MSG_ID_3_7_11_TO_13
	dcs_id	DCS_ID_EMPTY
	modus	CBCH_ACCEPT
(8) MPHC_CONFIG_CBCH_REQ	<A>	CHANNEL_DESC_CBCH_4

	cbch_desc cbch_freq_list	CHANNEL_DESC_CBCH_8 FREQ_LIST
(9) MPHC_CBCH_SCHEDULE_REQ	cbch_select schedule_length first_blocks_0 first_blocks_1	CBCH_READ_NORM SCHED_LEN_0 NOT_USED NOT_USED
(10) MPHC_CBCH_SCHEDULE_REQ	cbch_select schedule_length first_blocks_0 first_blocks_1	CBCH_READ_EXT SCHED_LEN_0 NOT_USED NOT_USED

History:	10.01.00	MPA	Initial
	12.07.00	DG	MPH_CLASSMARK_REQ: class changed into classmark (Forum G23M/No 0057)
	26.09.02	DL	E-OTD changes (MPH_IDLE_REQ)
	07.04.03	MSB	MPHC_CELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.17.2 ALR801: MMI Request followed by Configuration of CBCH

Description: MMI requests reading of CBCH for the message identifier 3, 7 and 11 to 13. Then the CBCH channel is configured and reading of CBCH starts.

Preamble: ALR006

Variants: <A>..**<C>**

RR/DL	ALR	PL
(1) MPH_CLASSMARK_REQ		
=====>		
(2) MPH_IDLE_REQ		
=====>		
(3)	MPHC_STOP_CELL_BCCH_REQ	
	=====>	
(5)	MPHC_START_CCCH_REQ	
	=====>	
(6)	MPHC_CELL_NBCCH_REQ	
	=====>	
(7) MMI_CBCH_REQ		
=====>		
(8) MPH_CBCH_REQ		
=====>		
(9)	MPHC_CONFIG_CBCH_REQ	
	=====>	
(10)	MPHC_CBCH_SCHEDULE_REQ	
	=====>	
(11)	MPHC_CBCH_SCHEDULE_REQ	
	=====>	

Parametrization

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_GSM_900
(2) MPH_IDLE_REQ	mod arfcn	MODE_CELL_SELECTION ARFCN_14

	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED
(3) MPHC_STOP_SCELL_BCCH_REQ		
	param	NOT_USED
(4) MPHC_START_CCCH_REQ		
	bs_pa_mfrms	BS_PA_MFRMS_8
	bs_ag_blk_res	BS_AG_BLKS_RES_3
	ccch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_2
	page_mode	PGM_REORG
(5) MPHC_SCELL_NBCCH_REQ		
	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(6) MMI_CBCH_REQ		
<A>	msg_id	MSG_ID_3_7_11_TO_13
	msg_id	MSG_ID_3_7_11_TO_13
<C>	msg_id	MSG_ID_1_TO_20
	dcs_id	DCS_ID_EMPTY
	modus	CBCH_ACCEPT
(7) MPH_CBCH_REQ		
<A>	cbch	CBCH_DESCRIPTION_4
	cbch	CBCH_DESCRIPTION_8
<C>	cbch	CBCH_DESCRIPTION_4
(8) MPHC_CONFIG_CBCH_REQ		
<A>	cbch_desc	CHANNEL_DESC_CBCH_4
	cbch_desc	CHANNEL_DESC_CBCH_8
<C>	cbch_desc	CHANNEL_DESC_CBCH_4
	cbch_freq_list	FREQ_LIST
(9) MPHC_CBCH_SCHEDULE_REQ		
	cbch_select	CBCH_READ_NORM
	schedule_length	SCHED_LEN_0
	first_blocks_0	NOT_USED
	first_blocks_1	NOT_USED
(10) MPHC_CBCH_SCHEDULE_REQ		
	cbch_select	CBCH_READ_EXT
	schedule_length	SCHED_LEN_0
	first_blocks_0	NOT_USED
	first_blocks_1	NOT_USED

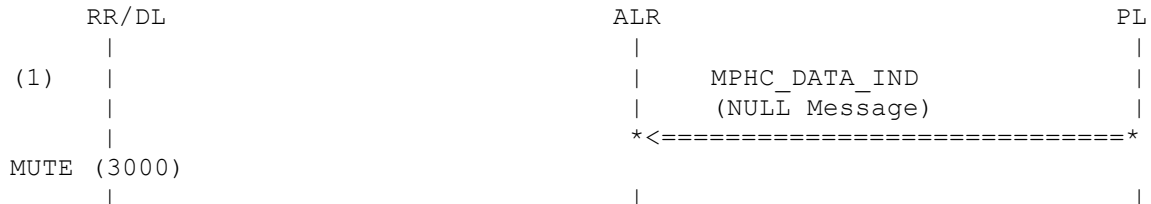
History: 13.1.00 MPA Initial
12.07.00 DG MPH_CLASSMARK_REQ:

class changed into classmark
(Forum G23M/ No 0057)
26.09.02 DL E-OTD changes (MPH_IDLE_REQ)
07.04.03 MSB MPHC_SCELL_NBCCH_REQ after
MPHC_START_CCCH_REQ included

4.17.3 ALR802: Reception of NULL Message

Description: ALR receives a NULL message. No further reaction is expected.

Preamble: ALR801A



Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_CBCH
	error_flag	VALID_BLOCK
	l2_frame	NULL_MESSAGE
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

History: 13.1.00 MPA Initial

4.17.4 ALR803: Reception of expected CBCH Message

Description: ALR receives an expected CBCH message. The content is forwarded to MMI.

Variant A: single message identifier (7)

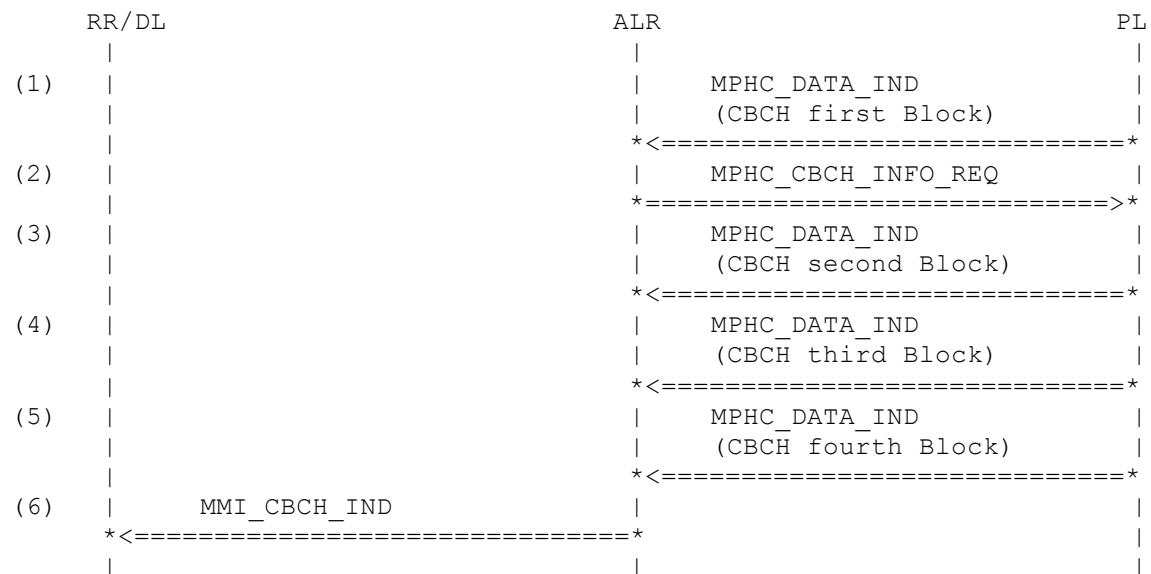
Variant B: message identifier specified by range (11), lower boundary

Variant C: message identifier specified by range (12), middle of the range

Variant D: message identifier specified by range (13), upper boundary

Preamble: ALR801A

Variants: <A>..<>D>



Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_CBCH
	error_flag	VALID_BLOCK
	l2_frame	CBCH_1_7
	l2_frame	CBCH_1_11
	l2_frame	CBCH_1_12
	l2_frame	CBCH_1_13
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(2) MPHC_CBCH_INFO_REQ	tb_bitmap	CBCH_NORM_BLOCK234
(3) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_CBCH
	error_flag	VALID_BLOCK
	l2_frame	CBCH_2
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(4) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_CBCH
	error_flag	VALID_BLOCK
	l2_frame	CBCH_3
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(5) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_CBCH
	error_flag	VALID_BLOCK
	l2_frame	CBCH_4
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(6) MMI_CBCH_IND	cbch_msg	CBCH_MSG_7
	cbch_msg	CBCH_MSG_11
	cbch_msg	CBCH_MSG_12
	cbch_msg	CBCH_MSG_13
	cbch_len	CBCH_LEN_88

History: 13.1.00 MPA Initial

4.17.5 ALR804: Reception of unexpected CBCH Message

Description: ALR receives an unexpected CBCH message. No reaction is expected after receiving the first block.

Preamble: ALR801A

RR/DL
|

ALR
|

PL
|

(1)			MPHC_DATA_IND	
			(CBCH first Block)	
			<=====	
TIMEOUT (3000)				

Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_CBCH
	error_flag	VALID_BLOCK
	l2_frame	CBCH_1_8
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

History: 13.1.00 MPA Initial

4.17.6 ALR805: Reception of unscheduled SCHEDULE Message

Description: ALR receives an unscheduled SCHEDULE message. The content is used for going into DRX mode.

Preamble: ALR801A

	RR/DL		ALR		PL
(1)			MPHC_DATA_IND		
			(SCHEDULE first Block)		
			<=====		
(2)			MPHC_CBCH_INFO_REQ		
			=====>		
(3)			MPHC_DATA_IND		
			(SCHEDULE second Block)		
			<=====		
(4)			MPHC_DATA_IND		
			(SCHEDULE third Block)		
			<=====		
(5)			MPHC_DATA_IND		
			(SCHEDULE fourth Block)		
			<=====		
(6)			MPHC_CBCH_SCHEDULE_REQ		
			=====>		

Parametrization

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_CBCH
	error_flag	VALID_BLOCK
	l2_frame	SCHEDULE_1_B
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(2) MPHC_CBCH_INFO_REQ	tb_bitmap	CBCH_NORM_BLOCK234
(3) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_CBCH

	error_flag	VALID_BLOCK
	l2_frame	SCHEDULE_2
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(4) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_CBCH
	error_flag	VALID_BLOCK
	l2_frame	SCHEDULE_3
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(5) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_CBCH
	error_flag	VALID_BLOCK
	l2_frame	SCHEDULE_4
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(6) MPHC_CBCH_SCHEDULE_REQ		
	cbch_select	CBCH_READ_NORM
	schedule_length	SCHED_LEN_5
	first_blocks_0	FIRST_BLOCKS_0_B
	first_blocks_1	FIRST_BLOCKS_1_B

History: 13.1.00 MPA Initial

4.18E-OTD

4.18.1 ALR950: Power measurement on 3 Neighbour Cells – E-OTD off (IDLE Mode)

Description: After receiving the power levels of the neighbour cells (MPHC-RXLEV-PERIODIC indication primitive), synchronization of neighbour cells begins (MPHC-NCELL-SYNC request/indication primitives). After 30 seconds (third expiry of TIM_NCSYNC timer), synchronization is halted and a list of neighbour cells for synchronization is sent to Layer 1 (MPHC-NCELL-LIST-SYNC request primitive), following which synchronization is recommenced.

Preamble: ALR013

RR	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
	<=====	
START_TIMEOUT (29500)		
(2)	MPHC_NCELL_SYNC_REQ (ARFCN 14)	
	=====>	
(3)	MPHC_NCELL_SYNC_IND (ARFCN 14)	
	<=====	
(4)	MPHC_NCELL_SYNC_REQ (ARFCN 124)	
	=====>	
(5)	MPHC_NCELL_SYNC_IND (ARFCN 124)	
	<=====	
(6)	MPHC_NCELL_SYNC_REQ (ARFCN 1)	
	=====>	
(7)	MPHC_NCELL_SYNC_IND (ARFCN 1)	
	<=====	
(8)	MPHC_NCELL_BCCH_REQ (ARFCN 14)	
	=====>	
(9)	MPHC_NCELL_BCCH_IND (ARFCN 14)	
	<=====	
(10)	MPHC_NCELL_BCCH_REQ (ARFCN 124)	
	=====>	
(11)	MPHC_NCELL_BCCH_IND (ARFCN 124)	
	<=====	
(12)	MPHC_NCELL_BCCH_REQ (ARFCN 1)	
	=====>	
(13)	MPHC_NCELL_BCCH_IND (ARFCN 1)	
	<=====	
(14)	MPHC_STOP_NCELL_BCCH_REQ (ARFCN 14)	
	=====>	
(15)	MPHC_STOP_NCELL_BCCH_REQ (ARFCN 124)	
	=====>	
(16)	MPHC_STOP_NCELL_BCCH_REQ (ARFCN 1)	
	=====>	
(17)	MPHC_RXLEV_PERIODIC_IND	
	<=====	
(18)	MPH_MEASUREMENT_IND (SC - ARFCN 23)	
	<=====	
(19)	MPH_UNITDATA_IND (ARFCN 1)	
	<=====	


```

(20) | MPH_UNITDATA_IND |
      | (ARFCN 14) |
      *<=====
(21) | MPH_UNITDATA_IND |
      | (ARFCN 124) |
      *<=====
WAIT_TIMEOUT
START_TIMEOUT (30000)
(22) | | MPHC_NCELL_LIST_SYNC_REQ |
      | | *=====>

```

Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGN_0
	timing_validity	TV_INVALID_TIMING_INFO
(3) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_14
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	EOTD_00
	attempt	EOTD_00
	pm	EOTD_0L
	toa	EOTD_0L
	angle	EOTD_0L
	snr	EOTD_0L
	eotd_data_valid	EOTD_NOT_PRES
	mode	EOTD_00
	d_eotd_first	EOTD_0000
	d_eotd_max	EOTD_0000
	d_eotd_nrij	EOTD_0L
	a_eotd_crosscor	NOT_USED
	time_tag	EOTD_0L
	fn_sb_neigh	EOTD_0L
	fn_in_sb	EOTD_0L
(4) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGN_0
	timing_validity	TV_INVALID_TIMING_INFO
(5) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_124
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14

	bsic	BSIC_1
	neigh_id	EOTD_00
	attempt	EOTD_00
	pm	EOTD_0L
	toa	EOTD_0L
	angle	EOTD_0L
	snr	EOTD_0L
	eotd_data_valid	EOTD_NOT_PRES
	mode	EOTD_00
	d_eotd_first	EOTD_0000
	d_eotd_max	EOTD_0000
	d_eotd_nrij	EOTD_0L
	a_eotd_crosscor	NOT_USED
	time_tag	EOTD_0L
	fn_sb_neigh	EOTD_0L
	fn_in_sb	EOTD_0L
	delta_fn	EOTD_0L
	delta_qbit	EOTD_0L
(6) MPHC_NCELL_SYNC_REQ		
	radio_freq	ARFCN_1
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGN_0
	timing_validity	TV_INVALID_TIMING_INFO
(7) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_1
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	EOTD_00
	attempt	EOTD_00
	pm	EOTD_0L
	toa	EOTD_0L
	angle	EOTD_0L
	snr	EOTD_0L
	eotd_data_valid	EOTD_NOT_PRES
	mode	EOTD_00
	d_eotd_first	EOTD_0000
	d_eotd_max	EOTD_0000
	d_eotd_nrij	EOTD_0L
	a_eotd_crosscor	NOT_USED
	time_tag	EOTD_0L
	fn_sb_neigh	EOTD_0L
	fn_in_sb	EOTD_0L
	delta_fn	EOTD_0L
	delta_qbit	EOTD_0L
(8) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	GPRS_PRIO_NORM
(9) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK

	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_124
(10) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_124
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	GPRS_PRIO_NORM
(11) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_124
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(12) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_1
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	GPRS_PRIO_NORM
(13) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_1
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_124
(14) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_14
(15) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_124
(16) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_1
(17) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(18) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	RX_0
	rx_qual_full	RX_0
	rx_qual_sub	RX_0
	dtx	RX_0
	otd	OTD_0

	valid	VALID_REPORT
	fn_offset	FN_OFFSET_816
	ncells	NCELLS_NO_CONTENT
	gprs_sync	NORMAL_MEAS_REP
(19) MPH_UNITDATA_IND		
	arfcn	ARFCN_1
	fn	FN_OFFSET_124
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(20) MPH_UNITDATA_IND		
	arfcn	ARFCN_14
	fn	FN_OFFSET_124
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(21) MPH_UNITDATA_IND		
	arfcn	ARFCN_124
	fn	FN_OFFSET_114
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(22) MPHC_NCELL_LIST_SYNC_REQ		
	eotd	NC_MON
	list_size	NO_NCELLS_3
	ncell_list	NCELL_LIST_3_EOTD

History: 26 September 2002 DL Initial

4.18.2 ALR952: Power measurement with change of BS – E-OTD off (IDLE Mode)

Description: After receiving the power levels of the neighbour cells (MPHC-RXLEV-PERIODIC indication primitive), synchronization of neighbour cells begins (MPHC-NCELL-SYNC request/indication primitives). After 30 seconds (third expiry of TIM_NCSYNC timer), synchronization is halted and a list of neighbour cells for synchronization is sent to Layer 1 (MPHC-NCELL-LIST-SYNC request primitive), following which synchronization is recommenced.
Cell reselection is then requested by RR (MPH-IDLE request primitive), nominating a cell which has been reassigned to a different BTS. ALR deselects the current serving cell (MPHC-STOP-SCELL_BCCH request primitive and selects the new serving cell (MPHC-NEW-SCELL request primitive).

Preamble: ALR950

RR	ALR	PL
(1)	MPHC_NCELL_SYNC_IND (ARFCN 14) *<=====*	
(2)	MPHC_NCELL_SYNC_IND (ARFCN 124) *<=====*	
(3)	MPHC_NCELL_SYNC_IND (ARFCN 1 - BS 2) *<=====*	
(4)	MPHC_NCELL_BCCH_REQ (ARFCN 1) *=====>*	
(5)	MPHC_NCELL_BCCH_IND (ARFCN 1) *<=====*	
(6)	MPHC_STOP_NCELL_BCCH_REQ (ARFCN 1) *=====>*	
(7)	MPHC_RXLEV_PERIODIC_IND *<=====*	
(8)	MPHC_RXLEV_PERIODIC_IND *<=====*	
(9)	MPH_MEASUREMENT_IND *<=====*	
(10)	MPH_UNITDATA_IND (ARFCN 1) *<=====*	
WAIT_TIMEOUT		
START_TIMEOUT (30000)		
(11)	MPHC_NCELL_LIST_SYNC_REQ *=====>*	
(12)	MPH_IDLE_REQ (ARFCN 1) *=====>*	
(13)	MPHC_STOP_RXLEV_PERIODIC_REQ *=====>*	
(14)	MPHC_STOP_NCELL_SYNC_REQ *=====>*	
(15)	MPHC_STOP_SCELL_BCCH_REQ *=====>*	
(16)	MPHC_NEW_SCELL_REQ (ARFCN 1 - BS 2) *=====>*	
(17)	MPHC_NEW_SCELL_CON *<=====*	
(18)	MPHC_START_CCCH_REQ *=====>*	
(19)	MPHC_SCELL_NBCCH_REQ *=====>*	

Parametrization

Primitive	Parameter	Value
(1) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_14
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_124

time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_NOT_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrij	EOTD_0L
a_eotd_crosscor	NOT_USED
time_tag	EOTD_0L
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(2) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_124
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_NOT_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrij	EOTD_0L
a_eotd_crosscor	NOT_USED
time_tag	EOTD_0L
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(3) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_1
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_124
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_2
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_NOT_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000

	d_eotd_nrij	EOTD_0L
	a_eotd_crosscor	NOT_USED
	time_tag	EOTD_0L
	fn_sb_neigh	EOTD_0L
	fn_in_sb	EOTD_0L
	delta_fn	EOTD_0L
	delta_qbit	EOTD_0L
(4) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_1
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_2
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	GPRS_PRIO_NORM
(5) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_1
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_124
(6) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_1
(7) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(8) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(9) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	RX_0
	rx_qual_full	RX_0
	rx_qual_sub	RX_0
	dtx	RX_0
	otd	OTD_0
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_816
	ncells	NCELLS_NO_CONTENT
	gprs_sync	NORMAL_MEAS_REP
(10) MPH_UNITDATA_IND		
	arfcn	ARFCN_1
	fn	FN_OFFSET_124
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3

	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(11) MPHC_NCELL_LIST_SYNC_REQ	eotd	NC_MON
	list_size	NO_NCELLS_3
	ncell_list	NCELL_LIST_3_EOTD
(12) MPH_IDLE_REQ	mod	MODE_CELL_RESELECTION
	arfcn	ARFCN_1
	ext_bcch	NORMAL_PGM
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_4
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED
(13) MPHC_STOP_RXLEV_PERIODIC_REQ	param	NOT_USED
(14) MPHC_STOP_NCELL_SYNC_REQ	radio_freq_array_size	STOP_SIZE_12
	radio_freq_array	STOP_ARRAY_EMPTY_12
(15) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(16) MPHC_NEW_SCELL_REQ	radio_freq	ARFCN_1
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGN_14
	tsc	BSIC_2
(17) MPHC_NEW_SCELL_CON	param	NOT_USED
(18) MPHC_START_CCCH_REQ	bs_pa_mfrms	NOT_USED
	bs_ag_blk_res	NOT_USED
	bcch_combined	NOT_USED
	ccch_group	NOT_USED
	page_group	NOT_USED
	page_block_index	NOT_USED
	page_mode	NOT_USED
(19) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	FULL_READ

History: 15 October 2002 DL Initial
07.04.03 MSB MPHC_SCELL_NBCCH_REQ after
MPHC_START_CCCH_REQ included

4.18.3 ALR954: Power measurement on 8 Neighbour Cells – E-OTD off (IDLE Mode)

Description: RR selects Channel 23 as serving cell after reading the BCCH carrier. After receiving the power levels of the neighbour cells (MPHC-RXLEV-PERIODIC indication primitive), synchronization of the six strongest neighbour cells begins (MPHC-NCELL-SYNC request/indication primitives). After 30 seconds (third expiry of TIM_NCSYNC timer), synchronization is halted and a list of neighbour cells for synchronization is sent to Layer 1 (MPHC-NCELL-LIST-SYNC request primitive), following which synchronization is recommenced.

Preamble: ALR607

RR	ALR	PL
(1)	MPH_CLASSMARK_REQ	
	=====>	
(2)	MPH_IDLE_REQ	
	=====>	
(3)	MPHC_STOP_SCELL_BCCH_REQ	
	=====>	
(4)	MPHC_START_CCCH_REQ	
	=====>	
(5)	MPHC_SCELL_NBCCH_REQ	
	=====>	
(6)	MPH_NEIGHBOURCELL_REQ	
	=====>	
(7)	MPHC_RXLEV_PERIODIC_REQ	
	=====>	
(8)	MPHC_RXLEV_PERIODIC_IND	
	<=====	
START_TIMEOUT (29500)		
(9)	MPHC_NCELL_SYNC_REQ (ARFCN 637)	
	=====>	
(10)	MPHC_NCELL_SYNC_REQ (ARFCN 25)	
	=====>	
(11)	MPHC_NCELL_SYNC_REQ (ARFCN 14)	
	=====>	
(12)	MPHC_NCELL_SYNC_REQ (ARFCN 512)	
	=====>	
(13)	MPHC_NCELL_SYNC_REQ (ARFCN 580)	
	=====>	
(14)	MPHC_NCELL_SYNC_REQ (ARFCN 885)	
	=====>	
(15)	MPHC_NCELL_SYNC_REQ (ARFCN 124)	
	=====>	
(16)	MPHC_RXLEV_PERIODIC_IND	
	<=====	

(17)	MPH_MEASUREMENT_IND (ARFCN 23 - SC)	
	<=====	
(18)	MPHC_NCELL_SYNC_IND (ARFCN 637)	
	<=====	
(19)	MPHC_NCELL_BCCH_REQ (ARFCN 637)	
	=====>	
(20)	MPHC_NCELL_SYNC_IND (ARFCN 25)	
	<=====	
(21)	MPHC_NCELL_BCCH_REQ (ARFCN 25)	
	=====>	
(22)	MPHC_NCELL_SYNC_IND (ARFCN 14)	
	<=====	
(23)	MPHC_NCELL_BCCH_REQ (ARFCN 14)	
	=====>	
(24)	MPHC_NCELL_SYNC_IND (ARFCN 512)	
	<=====	
(25)	MPHC_NCELL_BCCH_REQ (ARFCN 512)	
	=====>	
(26)	MPHC_NCELL_SYNC_IND (ARFCN 580)	
	<=====	
(27)	MPHC_NCELL_BCCH_REQ (ARFCN 580)	
	=====>	
(28)	MPHC_NCELL_SYNC_IND (ARFCN 885)	
	<=====	
(29)	MPHC_NCELL_BCCH_REQ (ARFCN 885)	
	=====>	
(30)	MPHC_RXLEV_PERIODIC_IND	
	<=====	
(31)	MPHC_NCELL_BCCH_IND (ARFCN 637)	
	<=====	
(32)	MPHC_STOP_NCELL_BCCH_REQ (ARFCN 637)	
	=====>	
(33)	MPHC_NCELL_BCCH_IND (ARFCN 25)	
	<=====	
(34)	MPHC_STOP_NCELL_BCCH_REQ (ARFCN 25)	
	=====>	
(35)	MPHC_NCELL_BCCH_IND (ARFCN 14)	
	<=====	
(36)	MPHC_STOP_NCELL_BCCH_REQ (ARFCN 14)	

```

(37) | | | *=====>*
| | | | MPHC_NCELL_BCCH_IND |
| | | | (ARFCN 512) |
| | | | *<=====*
(38) | | | | MPHC_STOP_NCELL_BCCH_REQ |
| | | | (ARFCN 512) |
| | | | *=====>*
(39) | | | | MPHC_NCELL_BCCH_IND |
| | | | (ARFCN 580) |
| | | | *<=====*
(40) | | | | MPHC_STOP_NCELL_BCCH_REQ |
| | | | (ARFCN 580) |
| | | | *=====>*
(41) | | | | MPHC_NCELL_BCCH_IND |
| | | | (ARFCN 885) |
| | | | *<=====*
(42) | | | | MPHC_STOP_NCELL_BCCH_REQ |
| | | | (ARFCN 885) |
| | | | *=====>*
(43) | | | | MPHC_RXLEV_PERIODIC_IND |
| | | | *<=====*
(44) | | | | MPHC_RXLEV_PERIODIC_IND |
| | | | *<=====*
(45) | | MPH_MEASUREMENT_IND |
| | (ARFCN 23 - SC) |
| | *<=====*
(46) | | MPH_UNITDATA_IND |
| | (ARFCN 14) |
| | *<=====*
(47) | | MPH_UNITDATA_IND |
| | (ARFCN 25) |
| | *<=====*
(48) | | MPH_UNITDATA_IND |
| | (ARFCN 512) |
| | *<=====*
(49) | | MPH_UNITDATA_IND |
| | (ARFCN 580) |
| | *<=====*
(50) | | MPH_UNITDATA_IND |
| | (ARFCN 637) |
| | *<=====*
(51) | | MPH_UNITDATA_IND |
| | (ARFCN 885) |
| | *<=====*
(52) | | | MPHC_RXLEV_PERIODIC_IND |
| | | *<=====*
(53) | | | MPHC_RXLEV_PERIODIC_IND |
| | | *<=====*
(54) | | | MPHC_RXLEV_PERIODIC_IND |
| | | *<=====*
(55) | | MPH_MEASUREMENT_IND |
| | (ARFCN 23 - SC) |
| | *<=====*
WAIT_TIMEOUT
(56) | | | MPHC_STOP_NCELL_SYNC_REQ |
| | | *=====>*
(57) | | | MPHC_STOP_NCELL_SYNC_CON |
| | | *<=====*

```

START_TIMEOUT (30000)

```
(58) |                                     | MPHC_NCELL_LIST_SYNC_REQ |
      |                                     | *=====*>
      |                                     |
```

Parametrization

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_DUAL
(2) MPH_IDLE_REQ	mod	MODE_CELL_RESELECTION
	arfcn	ARFCN_23
	ext_bcch	NORMAL_PGM
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLK_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_4
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_NOT_PRES
	gprs_support	NOT_USED
(3) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_6
	bs_ag_blk_res	BS_AG_BLK_RES_3
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_2
	page_mode	PGM_REORG
(5) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(6) MPH_NEIGHBOURCELL_REQ	multi_band	MULTI_BAND_0
	arfcn	NCELL_LIST_EOTD
	sync_only	NORMAL_BA
(7) MPHC_RXLEV_PERIODIC_REQ	chan_list	CHAN_LIST_EOTD
	num_of_chans	CHANNELS_9
	ba_id	BA_ID_1
	next_radio_freq_measured	CHAN_LIST_IDX_0
(8) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_23_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(9) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_637
	fn_offset	FN_OFFSET_0

	time_alignment timing_validity	TIME_ALIGN_0 TV_INVALID_TIMING_INFO
(10) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_25 FN_OFFSET_0 TIME_ALIGN_0 TV_INVALID_TIMING_INFO
(11) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 FN_OFFSET_0 TIME_ALIGN_0 TV_INVALID_TIMING_INFO
(12) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_512 FN_OFFSET_0 TIME_ALIGN_0 TV_INVALID_TIMING_INFO
(13) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_580 FN_OFFSET_0 TIME_ALIGN_0 TV_INVALID_TIMING_INFO
(14) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_885 FN_OFFSET_0 TIME_ALIGN_0 TV_INVALID_TIMING_INFO
(15) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 FN_OFFSET_0 TIME_ALIGN_0 TV_INVALID_TIMING_INFO
(16) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_23_8 CHANNELS_8 RXLEV_56 BA_ID_1
(17) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 RX_0 RX_0 RX_0 RX_0 OTD_0 VALID_REPORT FN_OFFSET_918 NOT_USED NORMAL_MEAS_REP
(18) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset	ARFCN_637 SB_FOUND FN_OFFSET_14

time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_NOT_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrj	EOTD_0L
a_eotd_crosscor	NOT_USED
time_tag	EOTD_0L
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(19) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_637
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	GPRS_PRIO_NORM

(20) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_25
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_102
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_NOT_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrj	EOTD_0L
a_eotd_crosscor	NOT_USED
time_tag	EOTD_0L
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(21) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_25
fn_offset	FN_OFFSET_102
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	GPRS_PRIO_NORM

(22) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_14
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_124
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_NOT_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrj	EOTD_0L
a_eotd_crosscor	NOT_USED
time_tag	EOTD_0L
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(23) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_14
fn_offset	FN_OFFSET_124
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	GPRS_PRIO_NORM

(24) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_512
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_153
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_NOT_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrj	EOTD_0L
a_eotd_crosscor	NOT_USED
time_tag	EOTD_0L
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(25) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_512
fn_offset	FN_OFFSET_153
time_alignment	TIME_ALIGNMT_14

(26) MPHC_NCELL_SYNC_IND

tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	GPRS_PRIO_NORM

radio_freq	ARFCN_580
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_204
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_NOT_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrij	EOTD_0L
a_eotd_crosscor	NOT_USED
time_tag	EOTD_0L
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(27) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_580
fn_offset	FN_OFFSET_204
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	GPRS_PRIO_NORM

(28) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_885
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_255
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_NOT_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrij	EOTD_0L
a_eotd_crosscor	NOT_USED
time_tag	EOTD_0L
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(29) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_885
fn_offset	FN_OFFSET_255
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	GPRS_PRIO_NORM

(30) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RES_SC_23_8
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(31) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_637
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(32) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_637

(33) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_25
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(34) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_25

(35) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_14
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(36) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_14

(37) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_512
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(38) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_512

(39) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_580
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(40) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_580

(41) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_885
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(42) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_885

(43) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RES_SC_23_8
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(44) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RES_SC_23_8
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(45) MPH_MEASUREMENT_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	RX_0
rx_qual_full	RX_0
rx_qual_sub	RX_0
dtx	RX_0
otd	OTD_0
valid	VALID_REPORT
fn_offset	FN_OFFSET_306
ncells	NCELLS_SC_900_EOTD
gprs_sync	NORMAL_MEAS_REP

(46) MPH_UNITDATA_IND

arfcn	ARFCN_14
fn	FN_OFFSET_14
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_3
ti	TI_0
cell_ident	CELL_IDENT_1
loc_area_ident	LOC_AREA_IDENT_1
ctrl_chan_desc	CTRL_CHAN_DESC_1

	cell_opt_bcch cell_select rach_ctrl }	CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(47) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl }	ARFCN_25 FN_OFFSET_14 RR DOWNLINK D_SYS_INFO_3 TI_0 CELL_IDENT_1 LOC_AREA_IDENT_1 CTRL_CHAN_DESC_1 CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(48) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl }	ARFCN_512 FN_OFFSET_14 RR DOWNLINK D_SYS_INFO_3 TI_0 CELL_IDENT_1 LOC_AREA_IDENT_1 CTRL_CHAN_DESC_1 CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(49) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl }	ARFCN_580 FN_OFFSET_14 RR DOWNLINK D_SYS_INFO_3 TI_0 CELL_IDENT_1 LOC_AREA_IDENT_1 CTRL_CHAN_DESC_1 CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(50) MPH_UNITDATA_IND	arfcn fn sdu {	ARFCN_637 FN_OFFSET_14

	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(51) MPH_UNITDATA_IND		
	arfcn	ARFCN_885
	fn	FN_OFFSET_14
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(52) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_23_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(53) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_23_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(54) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_23_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(55) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	RX_0
	rx_qual_full	RX_0
	rx_qual_sub	RX_0
	dtx	RX_0
	otd	OTD_0
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_SC_900_EOTD
	gprs_sync	NORMAL_MEAS_REP

(56) MPHC_STOP_NCELL_SYNC_REQ

radio_freq_array_size STOP_SIZE_12
radio_freq_array STOP_ARRAY_EMPTY_12

(57) MPHC_STOP_NCELL_SYNC_CON

param NOT_USED

(58) MPHC_NCELL_LIST_SYNC_REQ

eotd NC_MON
list_size NO_NCELLS_6
ncell_list NCELL_LIST_6_EOTD_IDLE

History: 14 October 2002 DL Initial

4.18.4 ALR960: Power measurement – E-OTD on (IDLE Mode)

Description: RR selects Channel 23 as serving cell after reading the BCCH carrier.
On receipt of a list of neighbour cells (MPH-NEIGHBOURCELL request primitive) followed by the power measurements of these cells (MPHC-RXLEV-PERIODIC indication primitive), ALR starts a 10-second timer and requests Layer 1 to commence synchronization of these cells.
On expiry of this timer, ALR requests Layer 1 to stop synchronization of these cells and forwards a list of all synchronized neighbour cells to be measured to Layer 1 (MPHC-NCELL-LIST-SYNC request primitive).

Preamble: ALR607

	RR	ALR	PL
(1)	MPH_CLASSMARK_REQ		
	=====>		
(2)	MPH_IDLE_REQ		
	=====>		
(3)		MPHC_STOP_SCELL_BCCH_REQ	
		=====>	
(4)		MPHC_START_CCCH_REQ	
		=====>	
(5)		MPHC_SCELL_NBCCH_REQ	
		=====>	
(6)	MPH_NEIGHBOURCELL_REQ		
	=====>		
(7)		MPHC_RXLEV_PERIODIC_REQ	
		=====>	
(8)		MPHC_RXLEV_PERIODIC_IND	
		<=====	
START_TIMEOUT (9500)			
(9)		MPHC_NCELL_SYNC_REQ	
		(ARFCN 637)	
		=====>	
(10)		MPHC_NCELL_SYNC_REQ	
		(ARFCN 25)	
		=====>	
(11)		MPHC_NCELL_SYNC_REQ	
		(ARFCN 14)	
		=====>	
(12)		MPHC_NCELL_SYNC_REQ	
		(ARFCN 512)	
		=====>	
(13)		MPHC_NCELL_SYNC_REQ	

			(ARFCN 580)	
			*=====	
(14)			MPHC_NCELL_SYNC_REQ	
			(ARFCN 885)	
			*=====	
(15)			MPHC_NCELL_SYNC_REQ	
			(ARFCN 124)	
			*=====	
(16)			MPHC_NCELL_SYNC_IND	
			(ARFCN 23 - SC)	
			*<=====	
(17)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(18)		MPH_MEASUREMENT_IND		
		(ARFCN 23 - SC)		
		*<=====		
(19)			MPHC_NCELL_SYNC_IND	
			(ARFCN 637)	
			*<=====	
(20)			MPHC_NCELL_BCCH_REQ	
			(ARFCN 637)	
			*=====	
(21)			MPHC_NCELL_SYNC_IND	
			(ARFCN 25)	
			*<=====	
(22)			MPHC_NCELL_BCCH_REQ	
			(ARFCN 25)	
			*=====	
(23)			MPHC_NCELL_SYNC_IND	
			(ARFCN 14)	
			*<=====	
(24)			MPHC_NCELL_BCCH_REQ	
			(ARFCN 14)	
			*=====	
(25)			MPHC_NCELL_SYNC_IND	
			(ARFCN 512)	
			*<=====	
(26)			MPHC_NCELL_BCCH_REQ	
			(ARFCN 512)	
			*=====	
(27)			MPHC_NCELL_SYNC_IND	
			(ARFCN 580)	
			*<=====	
(28)			MPHC_NCELL_BCCH_REQ	
			(ARFCN 580)	
			*=====	
(29)			MPHC_NCELL_SYNC_IND	
			(ARFCN 885)	
			*<=====	
(30)			MPHC_NCELL_BCCH_REQ	
			(ARFCN 885)	
			*=====	
(31)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(32)			MPHC_NCELL_BCCH_IND	
			(ARFCN 637)	
			*<=====	
(33)			MPHC_STOP_NCELL_BCCH_REQ	

			(ARFCN 637)	
			*=====	
(34)			MPHC_NCELL_BCCH_IND	
			(ARFCN 25)	
			*<=====	
(35)			MPHC_STOP_NCELL_BCCH_REQ	
			(ARFCN 25)	
			*=====	
(36)			MPHC_NCELL_BCCH_IND	
			(ARFCN 14)	
			*<=====	
(37)			MPHC_STOP_NCELL_BCCH_REQ	
			(ARFCN 14)	
			*=====	
(38)			MPHC_NCELL_BCCH_IND	
			(ARFCN 512)	
			*<=====	
(39)			MPHC_STOP_NCELL_BCCH_REQ	
			(ARFCN 512)	
			*=====	
(40)			MPHC_NCELL_BCCH_IND	
			(ARFCN 580)	
			*<=====	
(41)			MPHC_STOP_NCELL_BCCH_REQ	
			(ARFCN 580)	
			*=====	
(42)			MPHC_NCELL_BCCH_IND	
			(ARFCN 885)	
			*<=====	
(43)			MPHC_STOP_NCELL_BCCH_REQ	
			(ARFCN 885)	
			*=====	
(44)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(45)			MPHC_RXLEV_PERIODIC_IND	
			*<=====	
(46)			MPH_MEASUREMENT_IND	
			(ARFCN 23 - SC)	
			*<=====	
(47)			MPH_UNITDATA_IND	
			(ARFCN 14)	
			*<=====	
(48)			MPH_UNITDATA_IND	
			(ARFCN 25)	
			*<=====	
(49)			MPH_UNITDATA_IND	
			(ARFCN 512)	
			*<=====	
(50)			MPH_UNITDATA_IND	
			(ARFCN 580)	
			*<=====	
(51)			MPH_UNITDATA_IND	
			(ARFCN 637)	
			*<=====	
(52)			MPH_UNITDATA_IND	
			(ARFCN 885)	
			*<=====	
(53)			MPHC_RXLEV_PERIODIC_IND	


```

(54) | | *<=====
      | | | MPHC_RXLEV_PERIODIC_IND |
      | | *<=====
(55) | | | MPHC_RXLEV_PERIODIC_IND |
      | | *<=====
(56) | | MPH_MEASUREMENT_IND |
      | | (ARFCN 23 - SC) |
      | | *<=====
WAIT_TIMEOUT
(57) | | | MPHC_STOP_NCELL_SYNC_REQ |
      | | *=====>
(58) | | | MPHC_STOP_NCELL_SYNC_CON |
      | | *<=====
START_TIMEOUT (9500)
(59) | | | MPHC_NCELL_LIST_SYNC_REQ |
      | | *=====>
      | |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_DUAL
(2) MPH_IDLE_REQ	mod	MODE_CELL_SELECTION
	arfcn	ARFCN_23
	ext_bcch	NORMAL_PGM
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLK_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_4
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_PRES
	gprs_support	NOT_USED
(3) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_6
	bs_ag_blk_res	BS_AG_BLK_RES_3
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_2
	page_mode	PGM_REORG
(5) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(6) MPH_NEIGHBOURCELL_REQ	multi_band	MULTI_BAND_0
	arfcn	NCELL_LIST_EOTD
	sync_only	NORMAL_BA
(7) MPHC_RXLEV_PERIODIC_REQ	chan_list	CHAN_LIST_EOTD

	num_of_chans	CHANNELS_9
	ba_id	BA_ID_1
	next_radio_freq_measured	CHAN_LIST_IDX_0
(8) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_23_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(9) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_637
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGN_0
	timing_validity	TV_INVALID_TIMING_INFO
(10) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_25
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGN_0
	timing_validity	TV_INVALID_TIMING_INFO
(11) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGN_0
	timing_validity	TV_INVALID_TIMING_INFO
(12) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_512
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGN_0
	timing_validity	TV_INVALID_TIMING_INFO
(13) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_580
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGN_0
	timing_validity	TV_INVALID_TIMING_INFO
(14) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_885
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGN_0
	timing_validity	TV_INVALID_TIMING_INFO
(15) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGN_0
	timing_validity	TV_INVALID_TIMING_INFO
(16) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_23
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_918
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	EOTD_00
	attempt	EOTD_00
	pm	EOTD_0L
	toa	EOTD_0L

	angle	EOTD_0L
	snr	EOTD_0L
	eotd_data_valid	EOTD_PRES
	mode	EOTD_00
	d_eotd_first	EOTD_0000
	d_eotd_max	EOTD_0000
	d_eotd_nrij	EOTD_0L
	a_eotd_crosscor	NOT_USED
	time_tag	EOTD_0L
	fn_sb_neigh	EOTD_0L
	fn_in_sb	EOTD_0L
	delta_fn	EOTD_0L
	delta_qbit	EOTD_0L
(17) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_23_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(18) MPH_MEASUREMENT_IND		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	RX_0
	rx_qual_full	RX_0
	rx_qual_sub	RX_0
	dtx	RX_0
	otd	OTD_0
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_918
	ncells	NOT_USED
	gprs_sync	NORMAL_MEAS_REP
(19) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_637
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	EOTD_00
	attempt	EOTD_00
	pm	EOTD_0L
	toa	EOTD_0L
	angle	EOTD_0L
	snr	EOTD_0L
	eotd_data_valid	EOTD_PRES
	mode	EOTD_00
	d_eotd_first	EOTD_0000
	d_eotd_max	EOTD_0000
	d_eotd_nrij	EOTD_0L
	a_eotd_crosscor	NOT_USED
	time_tag	EOTD_0L
	fn_sb_neigh	EOTD_0L
	fn_in_sb	EOTD_0L
	delta_fn	EOTD_0L
	delta_qbit	EOTD_0L
(20) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_637
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14

(21) MPHC_NCELL_SYNC_IND

tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	GPRS_PRIO_NORM

radio_freq	ARFCN_25
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_102
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrij	EOTD_0L
a_eotd_crosscor	NOT_USED
time_tag	EOTD_0L
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(22) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_25
fn_offset	FN_OFFSET_102
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	GPRS_PRIO_NORM

(23) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_14
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_124
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrij	EOTD_0L
a_eotd_crosscor	NOT_USED
time_tag	EOTD_0L
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(24) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_14
fn_offset	FN_OFFSET_124
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	GPRS_PRIO_NORM

(25) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_512
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_153
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrx	EOTD_0L
a_eotd_crosscor	NOT_USED
time_tag	EOTD_0L
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(26) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_512
fn_offset	FN_OFFSET_153
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	GPRS_PRIO_NORM

(27) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_580
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_204
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrx	EOTD_0L
a_eotd_crosscor	NOT_USED
time_tag	EOTD_0L
fn_sb_neigh	EOTD_0L

	fn_in_sb	EOTD_0L
	delta_fn	EOTD_0L
	delta_qbit	EOTD_0L
(28) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_580
	fn_offset	FN_OFFSET_204
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	GPRS_PRIO_NORM
(29) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_885
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_255
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	EOTD_00
	attempt	EOTD_00
	pm	EOTD_0L
	toa	EOTD_0L
	angle	EOTD_0L
	snr	EOTD_0L
	eotd_data_valid	EOTD_PRES
	mode	EOTD_00
	d_eotd_first	EOTD_0000
	d_eotd_max	EOTD_0000
	d_eotd_nrij	EOTD_0L
	a_eotd_crosscor	NOT_USED
	time_tag	EOTD_0L
	fn_sb_neigh	EOTD_0L
	fn_in_sb	EOTD_0L
	delta_fn	EOTD_0L
	delta_qbit	EOTD_0L
(30) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_885
	fn_offset	FN_OFFSET_255
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_3_4
	gprs_prio	GPRS_PRIO_NORM
(31) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_23_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(32) MPHC_NCELL_BCCH_IND		
	radio_freq	ARFCN_637
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(33) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_637

(34) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_25
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(35) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_25

(36) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_14
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(37) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_14

(38) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_512
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(39) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_512

(40) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_580
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(41) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_580

(42) MPHC_NCELL_BCCH_IND

radio_freq	ARFCN_885
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(43) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_885

(44) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RES_SC_23_8
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	nbr_of_carriers s_rxlev ba_id	CHANNELS_8 RXLEV_56 BA_ID_1
(45) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_23_8 CHANNELS_8 RXLEV_56 BA_ID_1
(46) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 RX_0 RX_0 RX_0 RX_0 OTD_0 VALID_REPORT FN_OFFSET_306 NCELLS_SC_900_EOTD NORMAL_MEAS_REP
(47) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl }	ARFCN_14 NOT_USED RR DOWNLINK D_SYS_INFO_3 TI_0 CELL_IDENT_1 LOC_AREA_IDENT_1 CTRL_CHAN_DESC_1 CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(48) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl }	ARFCN_25 NOT_USED RR DOWNLINK D_SYS_INFO_3 TI_0 CELL_IDENT_1 LOC_AREA_IDENT_1 CTRL_CHAN_DESC_1 CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(49) MPH_UNITDATA_IND	arfcn fn sdu	ARFCN_512 NOT_USED

	<pre> { component RR direction DOWNLINK pd D_SYS_INFO_3 ti TI_0 cell_ident CELL_IDENT_1 loc_area_ident LOC_AREA_IDENT_1 ctrl_chan_desc CTRL_CHAN_DESC_1 cell_opt_bcch CELL_OPT_BCCH_1 cell_select CELL_SELECT_1 rach_ctrl RACH_CTRL_1 } </pre>	
(50) MPH_UNITDATA_IND	<pre> arfcn ARFCN_580 fn NOT_USED sdu { component RR direction DOWNLINK pd D_SYS_INFO_3 ti TI_0 cell_ident CELL_IDENT_1 loc_area_ident LOC_AREA_IDENT_1 ctrl_chan_desc CTRL_CHAN_DESC_1 cell_opt_bcch CELL_OPT_BCCH_1 cell_select CELL_SELECT_1 rach_ctrl RACH_CTRL_1 } </pre>	
(51) MPH_UNITDATA_IND	<pre> arfcn ARFCN_637 fn NOT_USED sdu { component RR direction DOWNLINK pd D_SYS_INFO_3 ti TI_0 cell_ident CELL_IDENT_1 loc_area_ident LOC_AREA_IDENT_1 ctrl_chan_desc CTRL_CHAN_DESC_1 cell_opt_bcch CELL_OPT_BCCH_1 cell_select CELL_SELECT_1 rach_ctrl RACH_CTRL_1 } </pre>	
(52) MPH_UNITDATA_IND	<pre> arfcn ARFCN_885 fn NOT_USED sdu { component RR direction DOWNLINK pd D_SYS_INFO_3 ti TI_0 cell_ident CELL_IDENT_1 loc_area_ident LOC_AREA_IDENT_1 ctrl_chan_desc CTRL_CHAN_DESC_1 cell_opt_bcch CELL_OPT_BCCH_1 } </pre>	

	cell_select rach_ctrl }	CELL_SELECT_1 RACH_CTRL_1
(53) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_23_8 CHANNELS_8 RXLEV_56 BA_ID_1
(54) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_23_8 CHANNELS_8 RXLEV_56 BA_ID_1
(55) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_23_8 CHANNELS_8 RXLEV_56 BA_ID_1
(56) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 RX_0 RX_0 RX_0 RX_0 OTD_0 VALID_REPORT FN_OFFSET_306 NCELLS_SC_900_EOTD NORMAL_MEAS_REP
(57) MPHC_STOP_NCELL_SYNC_REQ	radio_freq_array_size radio_freq_array	STOP_SIZE_12 STOP_ARRAY_EMPTY_12
(58) MPHC_STOP_NCELL_SYNC_CON	param	NOT_USED
(59) MPHC_NCELL_LIST_SYNC_REQ	eotd list_size ncell_list	EOTD_MON NO_NCELLS_6 NCELL_LIST_6_EOTD_IDLE

History:	26 September 2002	DL	Initial
	16 October 2002	DL	Revised

4.18.5 ALR962: Power measurement – E-OTD on (IDLE Mode)

Description: Completion of the E-OTD cell monitoring procedure is signalled by the receipt of a second MPHC-NCELL-SYNC indication primitive for the serving cell, whereupon the measurement results are forwarded to RR (MPH-NCELL-POS indication primitive).

Preamble: ALR960

	RR	ALR	PL
(1)		MPHC_NCELL_SYNC_IND	

		(ARFCN 23 - SC)	
		<=====	
(2)		MPHC_NCELL_SYNC_IND	
		(ARFCN 637)	
		<=====	
(3)		MPHC_NCELL_SYNC_IND	
		(ARFCN 25)	
		<=====	
(4)		MPHC_NCELL_SYNC_IND	
		(ARFCN 14)	
		<=====	
(5)		MPHC_NCELL_SYNC_IND	
		(ARFCN 512)	
		<=====	
(6)		MPHC_NCELL_SYNC_IND	
		(ARFCN 580)	
		<=====	
(7)		MPHC_NCELL_SYNC_IND	
		(ARFCN 885)	
		<=====	
(8)		MPHC_NCELL_SYNC_IND	
		(ARFCN 23 - SC)	
		<=====	
(9)	MPH_NCELL_POS_IND		
	<=====		

Parametrization

Primitive	Parameter	Value
(1) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_23
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_918
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	EOTD_00
	attempt	EOTD_00
	pm	EOTD_0L
	toa	EOTD_0L
	angle	EOTD_0L
	snr	EOTD_0L
	eotd_data_valid	EOTD_PRES
	mode	EOTD_00
	d_eotd_first	EOTD_0000
	d_eotd_max	EOTD_0000
	d_eotd_nrx	RSSI_61440
	a_eotd_crosscor	EOTD_CROSSCOR_12
	time_tag	NOM_POS_1000
	fn_sb_neigh	EOTD_0L
	fn_in_sb	EOTD_0L
	delta_fn	EOTD_0L
	delta_qbit	EOTD_0L
(2) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_637
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	EOTD_00

attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrx	RSSI_61952
a_eotd_crosscor	EOTD_CROSSCOR_9
time_tag	NOM_POS_2000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(3) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_25
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrx	RSSI_61440
a_eotd_crosscor	EOTD_CROSSCOR_6
time_tag	NOM_POS_2000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(4) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_14
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrx	RSSI_61952
a_eotd_crosscor	EOTD_CROSSCOR_9
time_tag	NOM_POS_1000

	fn_sb_neigh	EOTD_0L
	fn_in_sb	EOTD_0L
	delta_fn	EOTD_0L
	delta_qbit	EOTD_0L
(5) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_512
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	EOTD_00
	attempt	EOTD_00
	pm	EOTD_0L
	toa	EOTD_0L
	angle	EOTD_0L
	snr	EOTD_0L
	eotd_data_valid	EOTD_PRES
	mode	EOTD_00
	d_eotd_first	EOTD_0000
	d_eotd_max	EOTD_0000
	d_eotd_nrij	RSSI_61440
	a_eotd_crosscor	EOTD_CROSSCOR_6
	time_tag	NOM_POS_2000
	fn_sb_neigh	EOTD_0L
	fn_in_sb	EOTD_0L
	delta_fn	EOTD_0L
	delta_qbit	EOTD_0L
(6) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_580
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	EOTD_00
	attempt	EOTD_00
	pm	EOTD_0L
	toa	EOTD_0L
	angle	EOTD_0L
	snr	EOTD_0L
	eotd_data_valid	EOTD_PRES
	mode	EOTD_00
	d_eotd_first	EOTD_0000
	d_eotd_max	EOTD_0000
	d_eotd_nrij	RSSI_61952
	a_eotd_crosscor	EOTD_CROSSCOR_9
	time_tag	NOM_POS_1000
	fn_sb_neigh	EOTD_0L
	fn_in_sb	EOTD_0L
	delta_fn	EOTD_0L
	delta_qbit	EOTD_0L
(7) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_885
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_2
	neigh_id	EOTD_00

attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrj	RSSI_61440
a_eotd_crosscor	EOTD_CROSSCOR_6
time_tag	NOM_POS_2000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(8) MPH_C_NCELL_SYNC_IND

radio_freq	ARFCN_23
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_918
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrj	RSSI_61440
a_eotd_crosscor	EOTD_CROSSCOR_12
time_tag	NOM_POS_2000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(9) MPH_NCELL_POS_IND

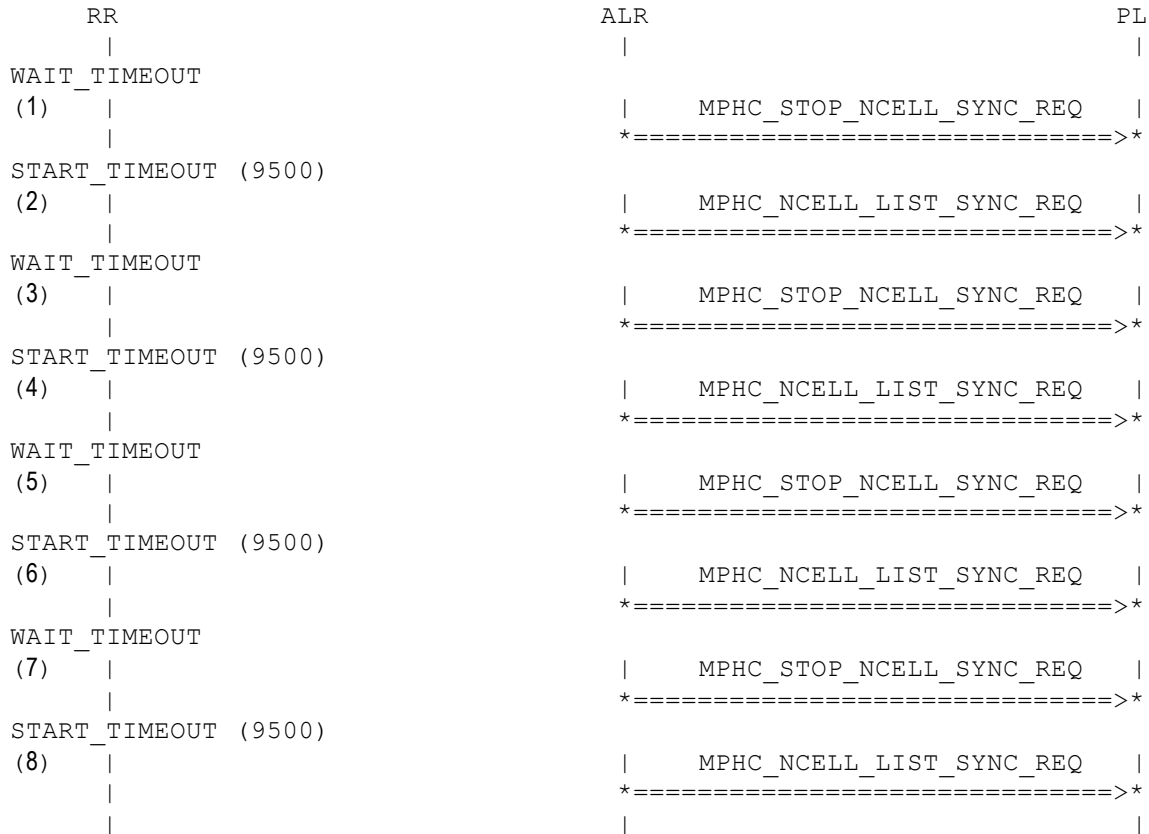
req_id	REQ_ID_FFFF
eotd_res	EOTD_SUCC
ta	TA_NOT_AVAIL
fn	FN_OFFSET_0
eotd_sc_res	EOTD_SC_RES_OK
eotd_sc_res1	EOTD_SC_RES1_OK
eotd_nc_res	EOTD_RESULT_6

History: 16 October 2002 DL Initial

4.18.6 ALR964: Power measurement – E-OTD on – no response from Layer 1 (IDLE Mode)

Description: ALR requests Layer 1 to stop synchronization of neighbour cells and starts a 10-second timer. As Layer 1 fails to respond the request is repeated on each expiry of the 10-second TIM_NCSYNC timer.

Preamble: ALR960



Parametrization

Primitive	Parameter	Value
(1) MPHC_STOP_NCELL_SYNC_REQ	radio_freq_array_size	STOP_SIZE_12
	radio_freq_array	STOP_ARRAY_EMPTY_12
(2) MPHC_NCELL_LIST_SYNC_REQ	eotd	EOTD_MON
	list_size	NO_NCELLS_6
	ncell_list	NCELL_LIST_6_EOTD_IDLE
(3) MPHC_STOP_NCELL_SYNC_REQ	radio_freq_array_size	STOP_SIZE_12
	radio_freq_array	STOP_ARRAY_EMPTY_12
(4) MPHC_NCELL_LIST_SYNC_REQ	eotd	EOTD_MON
	list_size	NO_NCELLS_6
	ncell_list	NCELL_LIST_6_EOTD_IDLE
(5) MPHC_STOP_NCELL_SYNC_REQ	radio_freq_array_size	STOP_SIZE_12
	radio_freq_array	STOP_ARRAY_EMPTY_12
(6) MPHC_NCELL_LIST_SYNC_REQ	eotd	EOTD_MON

	list_size	NO_NCELLS_6
	ncell_list	NCELL_LIST_6_EOTD_IDLE
(7) MPH_C_STOP_NCELL_SYNC_REQ	radio_freq_array_size	STOP_SIZE_12
	radio_freq_array	STOP_ARRAY_EMPTY_12
(8) MPH_C_NCELL_LIST_SYNC_REQ	eotd	EOTD_MON
	list_size	NO_NCELLS_6
	ncell_list	NCELL_LIST_6_EOTD_IDLE

History: 26 September 2002 DL Initial

4.18.7 ALR966: E-OTD measurement requested by upper layers (IDLE Mode)

Description: RR requests E-OTD measurement of a list of cells forwarded in the MPH-NCELL-POS request primitive. However, as no dedicated channel is available, ALR rejects this request (MPH-NCELL-POS indication primitive with the eotd_res IE set to EOTD_REF).

Preamble: ALR960

	RR	ALR	PL
(1)	MPH_NCELL_POS_REQ		
	=====>		
(2)	MPH_NCELL_POS_IND		
	<=====		

Parametrization

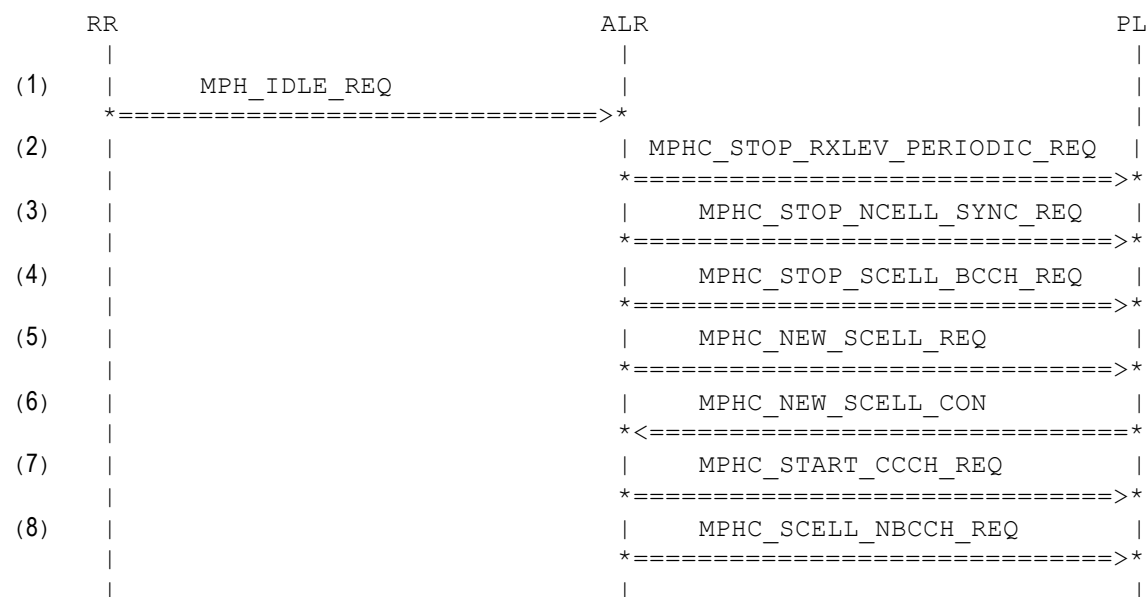
Primitive	Parameter	Value
(1) MPH_NCELL_POS_REQ	req_id	REQ_ID_8
	ncell_eotd	NCELL_EOTD_7
(2) MPH_NCELL_POS_IND	req_id	REQ_ID_8
	eotd_res	EOTD_REF
	ta	NOT_USED
	fn	NOT_USED
	eotd_sc_res	NOT_USED
	eotd_sc_res1	NOT_USED
	eotd_nc_res	NOT_USED

History: 18 October 2002 DL Initial

4.18.8 ALR968: Cell Reselection started during E-OTD measurement (IDLE Mode)

Description: RR request cell reselection (MPH-IDLE request primitive) following commencement of E-OTD measurement. E-OTD measurement is halted (MPHC-STOP-NCELL-SYNC request primitive), the current serving cell is deselected (MPHC-STOP-SCCELL-BCCH request primitive) and ALR requests the new serving cell (MPHC-NEW-SCCELL request primitive).

Preamble: ALR960

[illegible]

(1) MPH_IDLE_REQ	mod	MODE_CELL_RESELECTION
	arfcn	ARFCN_14
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	eotd_avail	EOTD_PRES
	gprs_support	NOT_USED
(2) MPH_STOP_RXLEV_PERIODIC_REQ	param	NOT_USED
(3) MPH_STOP_NCELL_SYNC_REQ	radio_freq_array_size	STOP_SIZE_12
	radio_freq_array	STOP_ARRAY_EMPTY_12
(4) MPH_STOP_SCELL_BCCH_REQ	param	NOT_USED
(5) MPH_NEW_SCELL_REQ	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGN_14
	tsc	BSIC_1
(6) MPH_NEW_SCELL_CON	param	NOT_USED
(7) MPH_START_CCCH_REQ	bs_pa_mfrms	NOT_USED
	bs_ag_blk_res	NOT_USED

bcch_combined	NOT_USED
ccch_group	NOT_USED
page_group	NOT_USED
page_block_index	NOT_USED
page_mode	NOT_USED

(8) MPHC_SCELL_NBCCH_REQ

schedule_array_size	SCHED_SIZE_1
schedule_array	NOT_USED

History:	26.09.02	DL	Initial
	07.04.03	MSB	MPHC_SCELL_NBCCH_REQ after MPHC_START_CCCH_REQ included

4.18.9 ALR970: Connection established (E-OTD -DEDICATED Mode)

Description: A dedicated channel is assigned in preparation for E-OTD measurement.
Preamble: ALR960

RR	ALR	PL
(1) MPH_RANDOM_ACCESS_REQ		
=====>		
	MPHC_STOP_RXLEV_PERIODIC_REQ	
	=====>	
	MPHC_STOP_RXLEV_PERIODIC_CON	
	<=====	
	MPHC_STOP_NCELL_SYNC_REQ	
	=====>	
	MPHC_STOP_NCELL_SYNC_CON	
	<=====	
	MPHC_STOP_SCELL_BCCH_REQ	
	=====>	
	MPHC_STOP_SCELL_BCCH_CON	
	<=====	
	MPHC_SCELL_NBCCH_REQ	
	=====>	
	MPHC_RA_REQ	
	=====>	
	MPHC_RA_CON	
	<=====	
MPH_RANDOM_ACCESS_CNF		
<=====		
	MPHC_RA_REQ	
	=====>	
	MPHC_DATA_IND	
	<=====	
MPH_UNITDATA_IND		
<=====		
MPH_DEDICATED_REQ		
=====>		
	MPHC_STOP_SCELL_BCCH_REQ	
	=====>	
	MPHC_STOP_CCCH_REQ	
	=====>	
	MPHC_STOP_RA_REQ	
	=====>	
	MPHC_IMMED_ASSIGN_REQ	
	=====>	
	MPHC_IMMED_ASSIGN_CON	
	<=====	
MPH_DEDICATED_CNF		
<=====		

Parametrization

Primitive	Parameter	Value
(1) MPH_RANDOM_ACCESS_REQ	send_mode	TWO_BURSTS
(2) MPHC_STOP_RXLEV_PERIODIC_REQ	param	NOT_USED
(3) MPHC_STOP_RXLEV_PERIODIC_CON	param	NOT_USED
(4) MPHC_STOP_NCELL_SYNC_REQ	radio_freq_array_size	STOP_SIZE_12
	radio_freq_array	STOP_ARRAY_EMPTY_12

(5) MPHC_STOP_NCELL_SYNC_CON	param	NOT_USED
(6) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(7) MPHC_STOP_SCELL_BCCH_CON	param	NOT_USED
(8) MPHC_SCELL_NBCCH_REQ	schedule_array_size schedule_array	SCHED_SIZE_1 NOT_USED
(9) MPHC_RA_REQ	txpwr rand channel_request powerclass_gsm powerclass_dcs	POWER_12 RAND_BURST_1 CHANNEL_REQUEST_1 POWER_CLASS_4 POW_CLASS_2
(10) MPHC_RA_CON	fn channel_request	FN_BURST_1 CHANNEL_REQUEST_1
(11) MPH_RANDOM_ACCESS_CNF	frame_no	T123_BURST_1
(12) MPHC_RA_REQ	txpwr rand channel_request powerclass_gsm powerclass_dcs	POWER_12 RAND_BURST_2 CHANNEL_REQUEST_2 POWER_CLASS_4 POW_CLASS_2
(13) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_CCCH VALID_BLOCK L2_IMM_ASS_HOP TC_0 NOT_USED FN_OFFSET_0
(14) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti tma dl d_t page_mode chan_desc pck_chan_desc req_ref time_advance mob_alloc }	ARFCN_23 NOT_USED RR DOWNLINK D_IMM_ASSIGN TI_0 TMA_0 DL_0 D_T_DED PAGE_MODE_1 CHAN_DESC_1 NOT_USED REQ_REF_1 TIME_ADVANCE_1 MOB_ALLOC_1

(15) MPH_DEDICATED_REQ

mod	MODE_IMM_ASSIGN
start	STARTING_TIME
ch_type	CH_TYPE_HOP
ch_type2	CH_TYPE2
arfcn	ARFCN_23
bsic	BSIC_1
ho_param	HO_PARAM
tr_para	TR_PARAM
ciph	CIPH_PARAM
amr_conf	NOT_USED

(16) MPHC_STOP_SCELL_BCCH_REQ

param	NOT_USED
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(17) MPHC_STOP_CCCH_REQ

param	NOT_USED
-------	----------

(18) MPHC_STOP_RA_REQ

param	NOT_USED
-------	----------

(19) MPHC_IMMED_ASSIGN_REQ

channel_desc	CHANNEL_DESC_1
timing_advance	TIMING_ADVANCE
frequency_list	FREQ_LIST
starting_time	S_TIME_MPHC
frequency_list_bef_sti	NOT_USED
maio_bef_sti	NOT_USED
dtx_allowed	NOT_USED
bcch_allocation	NOT_USED
ba_id	NOT_USED
pwrc	NOT_USED

(20) MPHC_IMMED_ASSIGN_CON

param	NOT_USED
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(21) MPH_DEDICATED_CNF

dedi_res	DEDI_RES_OK
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History: 26 September 2002 DL Initial

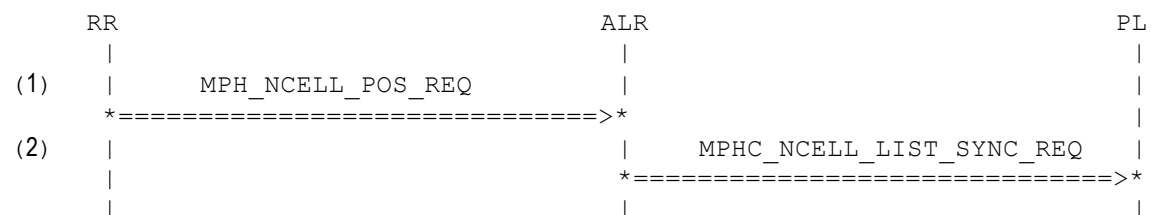
4.18.10 ALR972: E-OTD measurement started (DEDICATED Mode)

Description: RR requests E-OTD measurement of a list of cells forwarded in the MPH-NCELL-POS request primitive, whereupon ALR forwards this list to Layer 1 (MPHC-NCELL-LIST-SYNC request primitive).

Note: in Variant A all cells in the list are current neighbour cells and are thus known to ALR, whereas Variant B contains two cell (arfcn 516 and 525 respectively) which are unknown.

Variants: <A>....

Preamble: ALR970



Parametrization

Primitive	Parameter	Value
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(1) MPH_NCELL_POS_REQ

<A>	req_id	REQ_ID_1
	req_id	REQ_ID_8
<A>	ncell_eotd	NCELL_EOTD_7
	ncell_eotd	NCELL_EOTD_9

(2) MPHC_NCELL_LIST_SYNC_REQ

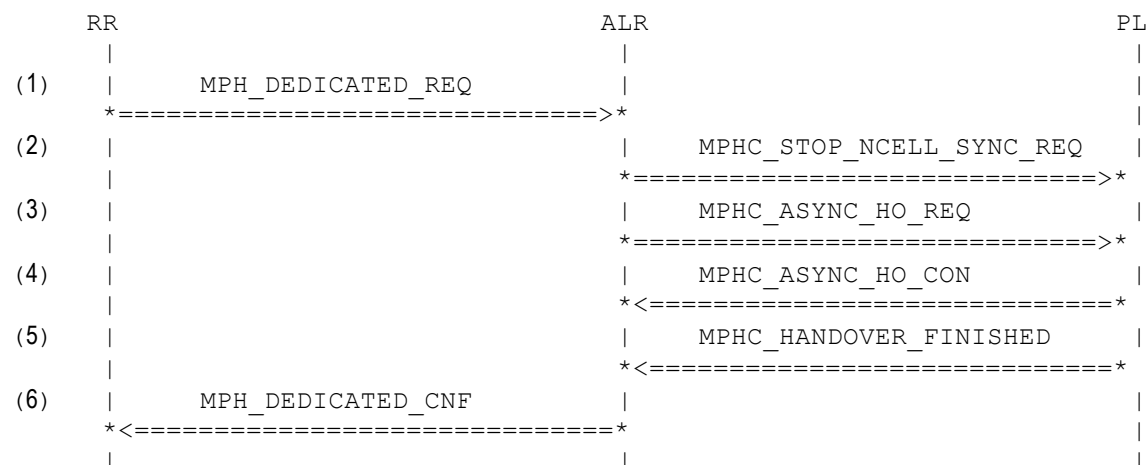
<A>	eotd	EOTD_MON
	list_size	NO_NCELLS_6
<A>	list_size	NO_NCELLS_8
<A>	ncell_list	NCELL_LIST_6_EOTD_DEDI
	ncell_list	NCELL_LIST_8_EOTD_DEDI

History: 26 September 2002 DL Initial

4.18.11 ALR974: E-OTD measurement halted due to commencement of Handover

Description: Following commencement of handover (receipt of MPH-DEDICATED request primitive), ALR immediately requests Layer 1 to cease E-OTD measurement (MPHC-STOP-NCELL-SYNC request primitive) and proceeds with the handover.

Preamble: ALR972A



Parametrization

Primitive	Parameter	Value
(1) MPH_DEDICATED_REQ	mod	MODE_ASYNC_HANDOVER
	start	NOT_USED
	ch_type	CH_TYPE_TCH2
	ch_type2	NOT_USED
	arfcn	ARFCN_14
	bsic	BSIC_1
	ho_param	HO_PARAM_1
	tr_para	TR_PARAM
	ciph	CIPH_PARAM
	amr_conf	NOT_USED
(2) MPHC_STOP_NCELL_SYNC_REQ	radio_freq_array_size	STOP_SIZE_12
	radio_freq_array	STOP_ARRAY_EMPTY_12
(3) MPHC_ASYNC_HO_REQ	handover_command	ASYNC_HO_CMD
	fn_offset	NOT_USED
	time_alignmnt	NOT_USED

	cipher_key	NOT_USED
	amr_configuration	NOT_USED
(4) MPHC_ASYNC_HO_CON	param	NOT_USED
(5) MPHC_HANDOVER_FINISHED	cause	HO_COMPLETE
(6) MPH_DEDICATED_CNF	dedi_res	DEDI_RES_OK
History:	26 September 2002	DL Initial

4.18.12 ALR976: E-OTD Measurement performed (DEDICATED Mode)

Description: On confirmation from Layer 1 that synchronization of neighbour cells has ceased (reception of MPHC-STOP-NCELL-SYNC confirmation primitive) ALR forwards a list of the neighbour cells selected for E-OTD measurement to Layer 1 (MPHC-NCELL-LIST-SYNC request primitive). Layer 1 subsequently forwards the measurements for the serving cell and the neighbour cells requested (MPHC-NCELL-SYNC indication primitive). The process is complete when a second measurement for the serving cell is received, whereupon ALR forwards the measurement results to RR (MPH-NCELL-POS indication primitive).

Preamble: ALR972A

RR	ALR	PL
(1)	MPHC_NCELL_SYNC_IND (ARFCN 23 - SC)	
(2)	MPHC_NCELL_SYNC_IND (ARFCN 637)	
(3)	MPHC_NCELL_SYNC_IND (ARFCN 25)	
(4)	MPHC_NCELL_SYNC_IND (ARFCN 14)	
(5)	MPHC_NCELL_SYNC_IND (ARFCN 512)	
(6)	MPHC_NCELL_SYNC_IND (ARFCN 580)	
(7)	MPHC_NCELL_SYNC_IND (ARFCN 885)	
(8)	MPHC_NCELL_SYNC_IND (ARFCN 23 - SC)	
(9)	MPH_NCELL_POS_IND	

Parametrization

Primitive	Parameter	Value
(1) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_23
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_918

time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrij	RSSI_61440
a_eotd_crosscor	EOTD_CROSSCOR_12
time_tag	NOM_POS_1000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(2) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_637
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrij	RSSI_61952
a_eotd_crosscor	EOTD_CROSSCOR_9
time_tag	NOM_POS_2000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(3) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_25
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000

d_eotd_nrij	RSSI_61440
a_eotd_crosscor	EOTD_CROSSCOR_6
time_tag	NOM_POS_2000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(4) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_14
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrij	RSSI_61952
a_eotd_crosscor	EOTD_CROSSCOR_9
time_tag	NOM_POS_1000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(5) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_512
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrij	RSSI_61440
a_eotd_crosscor	EOTD_CROSSCOR_6
time_tag	NOM_POS_2000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(6) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_580
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14

time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrij	RSSI_61952
a_eotd_crosscor	EOTD_CROSSCOR_9
time_tag	NOM_POS_1000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(7) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_885
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_2
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrij	RSSI_61440
a_eotd_crosscor	EOTD_CROSSCOR_6
time_tag	NOM_POS_2000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(8) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_23
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_918
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000

d_eotd_nrij	RSSI_61440
a_eotd_crosscor	EOTD_CROSSCOR_12
time_tag	NOM_POS_2000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(9) MPH_NCELL_POS_IND

req_id	REQ_ID_1
eotd_res	EOTD_SUCC
ta	NOT_USED
fn	FN_OFFSET_0
eotd_sc_res	EOTD_SC_RES_OK
eotd_sc_res1	EOTD_SC_RES1_OK
eotd_nc_res	EOTD_RESULT_6

History: 26 September 2002 DL Initial

4.18.13 ALR978: E-OTD Measurement performed – unknown ARFCNs (DEDICATED Mode)

Description: On confirmation from Layer 1 that synchronization of neighbour cells has ceased (reception of MPHC-STOP-NCELL-SYNC confirmation primitive) ALR forwards a list of the neighbour cells selected for E-OTD measurement to Layer 1 (MPHC-NCELL-LIST-SYNC request primitive). Layer 1 subsequently forwards the measurements for the serving cell and the neighbour cells requested (MPHC-NCELL-SYNC indication primitive). The process is complete when a second measurement for the serving cell is received, whereupon ALR forwards the measurement results to RR (MPH-NCELL-POS indication primitive).

Preamble: ALR972B

RR	ALR	PL
(1)	MPHC_NCELL_SYNC_IND (ARFCN 23 - SC)	
(2)	MPHC_NCELL_SYNC_IND (ARFCN 637)	
(3)	MPHC_NCELL_SYNC_IND (ARFCN 25)	
(4)	MPHC_NCELL_SYNC_IND (ARFCN 14)	
(5)	MPHC_NCELL_SYNC_IND (ARFCN 512)	
(6)	MPHC_NCELL_SYNC_IND (ARFCN 580)	
(7)	MPHC_NCELL_SYNC_IND (ARFCN 885)	
(8)	MPHC_NCELL_SYNC_IND (ARFCN 516)	
(9)	MPHC_NCELL_SYNC_IND	

			(ARFCN 525)	
			<=====	
(10)			MPHC_NCELL_SYNC_IND	
			(ARFCN 23 - SC)	
			<=====	
(11)		MPH_NCELL_POS_IND		
		<=====		

Parametrization

Primitive	Parameter	Value
(1) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_23
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_918
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	EOTD_00
	attempt	EOTD_00
	pm	EOTD_0L
	toa	EOTD_0L
	angle	EOTD_0L
	snr	EOTD_0L
	eotd_data_valid	EOTD_PRES
	mode	EOTD_00
	d_eotd_first	EOTD_0000
	d_eotd_max	EOTD_0000
	d_eotd_nrj	RSSI_61440
	a_eotd_crosscor	EOTD_CROSSCOR_12
	time_tag	NOM_POS_1000
	fn_sb_neigh	EOTD_0L
	fn_in_sb	EOTD_0L
	delta_fn	EOTD_0L
	delta_qbit	EOTD_0L
(2) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_637
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
	neigh_id	EOTD_00
	attempt	EOTD_00
	pm	EOTD_0L
	toa	EOTD_0L
	angle	EOTD_0L
	snr	EOTD_0L
	eotd_data_valid	EOTD_PRES
	mode	EOTD_00
	d_eotd_first	EOTD_0000
	d_eotd_max	EOTD_0000
	d_eotd_nrj	RSSI_61952
	a_eotd_crosscor	EOTD_CROSSCOR_9
	time_tag	NOM_POS_2000
	fn_sb_neigh	EOTD_0L
	fn_in_sb	EOTD_0L
	delta_fn	EOTD_0L
	delta_qbit	EOTD_0L

(3) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_25
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrij	RSSI_61440
a_eotd_crosscor	EOTD_CROSSCOR_6
time_tag	NOM_POS_2000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(4) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_14
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrij	RSSI_61952
a_eotd_crosscor	EOTD_CROSSCOR_9
time_tag	NOM_POS_1000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(5) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_512
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L

eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrj	RSSI_61440
a_eotd_crosscor	EOTD_CROSSCOR_6
time_tag	NOM_POS_2000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(6) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_580
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrj	RSSI_61952
a_eotd_crosscor	EOTD_CROSSCOR_9
time_tag	NOM_POS_1000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(7) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_885
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_2
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrj	RSSI_61440
a_eotd_crosscor	EOTD_CROSSCOR_6
time_tag	NOM_POS_2000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(8) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_516
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_102
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_10
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrij	RSSI_61440
a_eotd_crosscor	EOTD_CROSSCOR_6
time_tag	NOM_POS_1000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(9) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_525
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_114
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_10
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L
eotd_data_valid	EOTD_PRES
mode	EOTD_00
d_eotd_first	EOTD_0000
d_eotd_max	EOTD_0000
d_eotd_nrij	RSSI_61952
a_eotd_crosscor	EOTD_CROSSCOR_9
time_tag	NOM_POS_2000
fn_sb_neigh	EOTD_0L
fn_in_sb	EOTD_0L
delta_fn	EOTD_0L
delta_qbit	EOTD_0L

(10) MPHC_NCELL_SYNC_IND

radio_freq	ARFCN_23
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_918
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1
neigh_id	EOTD_00
attempt	EOTD_00
pm	EOTD_0L
toa	EOTD_0L
angle	EOTD_0L
snr	EOTD_0L

	eotd_data_valid	EOTD_PRES
	mode	EOTD_00
	d_eotd_first	EOTD_0000
	d_eotd_max	EOTD_0000
	d_eotd_nrj	RSSI_61440
	a_eotd_crosscor	EOTD_CROSSCOR_12
	time_tag	NOM_POS_2000
	fn_sb_neigh	EOTD_0L
	fn_in_sb	EOTD_0L
	delta_fn	EOTD_0L
	delta_qbit	EOTD_0L
(11) MPH_NCELL_POS_IND		
	req_id	REQ_ID_8
	eotd_res	EOTD_SUCC
	ta	NOT_USED
	fn	FN_OFFSET_0
	eotd_sc_res	EOTD_SC_RES_OK
	eotd_sc_res1	EOTD_SC_RES1_OK
	eotd_nc_res	EOTD_RESULT_8

History: 25 October 2002 DL 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/>>