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GSM PROTOCOL STACK

TEST SPECIFICATION

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

1.1 References

- [1] GSM 2.81, Line Identification Supplementary Services - Stage 1
ETS 300 514, ETSI, September 1994
- [2] GSM 2.82, Call Forwarding Supplementary Services - Stage 1
ETS 300 515, ETSI, September 1994
- [3] GSM 2.83, Call Waiting and Call Hold Supplementary Services - Stage 1
ETS 300 516, ETSI, September 1994
- [4] GSM 2.84, Multi Party Supplementary Services - Stage 1
ETS 300 517, ETSI, September 1994
- [5] GSM 2.85, Closed User Group Supplementary Services - Stage 1
ETS 300 518, ETSI, September 1994
- [6] GSM 2.86, Advice of Charge Supplementary Services - Stage 1
ETS 300 519, ETSI, September 1994
- [7] GSM 2.88, Call Barring Supplementary Services - Stage 1
ETS 300 520, ETSI, September 1994
- [8] GSM 3.14, Support of Dual Tone Multi Frequency Signalling via the GSM System
ETS 300 532, ETSI, April 1994
- [9] GSM 3.40, Technical Realization of the Short Message Service Point-to-Point
ETS 300 536, ETSI, January 1996
- [10] GSM 3.41, Technical Realization of Short Message Service Cell Broadcast
ETS 300 537, ETSI, June 1995
- [11] GSM 3.81, Line Identification Supplementary Services - Stage 2
ETS 300 542, ETSI, February 1995
- [12] GSM 3.82, Call Forwarding Supplementary Services - Stage 2
ETS 300 543, ETSI, February 1995
- [13] GSM 3.83, Call Waiting and Call Hold Supplementary Services - Stage 2
ETS 300 544, ETSI, November 1994
- [14] GSM 3.84, Multi Party Supplementary Services - Stage 2
ETS 300 545, ETSI, November 1994
- [15] GSM 3.85, Closed User Group Supplementary Services - Stage 2
ETS 300 546, ETSI, January 1996
- [16] GSM 3.86, Advice of Charge Supplementary Services - Stage 2
ETS 300 547, ETSI, March 1995
- [17] GSM 3.88, Call Barring Supplementary Services - Stage 2
ETS 300 548, ETSI, November 1994
- [18] GSM 4.01, MS-BSS Interface General Aspects and Principles
ETS 300 550, ETSI, September 1994
- [18a] GSM 4.03, MS-BSS Interface Channel Structures and Access Capabilities
ETS 300 552, ETSI, September 1994
- [19] GSM 4.05, Data Link Layer General Aspects
ETS 300 554, ETSI, September 1994
- [20] GSM 4.06, MS-BSS Interface Data Link Layer Specification
ETS 300 555, ETSI, September 1994
- [21] GSM 4.07, Mobile Radio Interface Signalling Layer 3 General Aspects
ETS 300 556, ETSI, February 1995
- [22] GSM 4.08, Mobile Radio Interface Layer 3 Specification
ETS 300 557, ETSI, January 1996
- [23] GSM 4.10, Mobile Radio Interface Layer 3 Supplementary Services Specification
General Aspects
ETS 300 558, ETSI, February 1995
- [24] GSM 4.11, Point-to-Point Short Message Service Support on Mobile Radio Interface
ETS 300 559, ETSI, October 1995
- [25] GSM 4.12, Short Message Service Cell Broadcast Support on Mobile Radio Interface
ETS 300 560, ETSI, January 1996
- [26] GSM 4.80, Mobile Radio Interface Supplementary Services Specification Formats and Coding
ETS 300 564, ETSI, February 1995

- [27] GSM 4.81, Line Identification Supplementary Services - Stage 3
ETS 300 565, ETSI, February 1995
- [28] GSM 4.82, Call Forwarding Supplementary Services - Stage 3
ETS 300 566, ETSI, February 1995
- [29] GSM 4.83, Call Waiting and Call Hold Supplementary Services - Stage 3
ETS 300 567, ETSI, February 1995
- [30] GSM 4.84, Multi Party Supplementary Services - Stage 3
ETS 300 568, ETSI, February 1995
- [31] GSM 4.85, Closed User Group Supplementary Services - Stage 3
ETS 300 569, ETSI, February 1995
- [32] GSM 4.86, Advice of Charge Supplementary Services - Stage 3
ETS 300 570, ETSI, February 1995
- [33] GSM 4.88, Call Barring Supplementary Services - Stage 3
ETS 300 571, ETSI, February 1995
- [34] GSM 5.01, Physical Layer on the Radio Path General Description
ETS 300 573, ETSI, October 1995
- [35] GSM 5.02, Multiplexing and Multiple Access on the Radio Path
ETS 300 574, ETSI, January 1996
- [36] GSM 5.08, Radio Sub-system Link Control
ETS 300 578, ETSI, January 1996
- [37] GSM 5.10, Radio Sub-system Synchronisation
ETS 300 579, ETSI, October 1995
- [38] Service Access Point MMREG
6147.100.96.100; Condat GmbH
- [39] Service Access Point MNCC
6147.101.96.100; Condat GmbH
- [40] Service Access Point MNSS
6147.102.96.100; Condat GmbH
- [41] Service Access Point MNSMS
6147.103.96.100; Condat GmbH
- [42] Service Access Point MMCC
6147.104.97.100; Condat GmbH
- [43] Service Access Point MMSS
6147.105.97.100; Condat GmbH
- [44] Service Access Point MMSMS
6147.106.97.100; Condat GmbH
- [45] Service Access Point RR
6147.107.97.100; Condat GmbH
- [46] Service Access Point SIM
6147.108.97.100; Condat GmbH
- [47] Service Access Point MPH
6147.109.96.100; Condat GmbH
- [48] Service Access Point DL
6147.110.96.100; Condat GmbH
- [49] Service Access Point MDL
6147.111.96.100; Condat GmbH
- [50] Service Access Point PH
6147.112.97.100; Condat GmbH
- [51] Service Access Point MMI
6147.113.96.100; Condat GmbH
- [52] Message Sequence Charts CC
6147.200.97.100; Condat GmbH
- [53] Message Sequence Charts SS
6147.201.97.100; Condat GmbH
- [54] Message Sequence Charts SMS
6147.202.97.100; Condat GmbH
- [55] Message Sequence Charts MM
6147.203.97.100; Condat GmbH

[56]	Message Sequence Charts RR 6147.204.96.100; Condat GmbH
[57]	Message Sequence Charts DL 6147.205.96.100; Condat GmbH
[58]	Users Guide 6147.300.96.100; Condat GmbH
[59]	Test Specification CC 6147.400.97.100; Condat GmbH
[60]	Test Specification SS 6147.401.97.100; Condat GmbH
[61]	Test Specification SMS 6147.402.97.100; Condat GmbH
[62]	Test Specification MM 6147.403.97.100; Condat GmbH
[63]	Test Specification RR 6147.404.97.100; Condat GmbH
[64]	Test Specification DL 6147.405.97.100; Condat GmbH
[65]	Test Specification CCD 6147.406.97.100; Condat GmbH
[66]	SDL Specification CC 6147.500.97.100; Condat GmbH
[67]	SDL Specification SS 6147.501.97.100; Condat GmbH
[68]	SDL Specification SMS 6147.502.97.100; Condat GmbH
[69]	SDL Specification MM 6147.503.97.100; Condat GmbH
[70]	SDL Specification RR 6147.504.97.100; Condat GmbH
[71]	SDL Specification DL 6147.505.97.100; Condat GmbH
[72]	Message Specification CC 6147.600.97.100; Condat GmbH
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[74]	Message Specification SMS 6147.602.97.100; Condat GmbH
[75]	Message Specification MM 6147.603.97.100; Condat GmbH
[76]	Message Specification RR 6147.604.97.100; Condat GmbH
[77]	Message Specification DL 6147.605.97.100; Condat GmbH
[78]	Technical Documentation CC 6147.700.97.100; Condat GmbH
[79]	Technical Documentation SS 6147.701.97.100; Condat GmbH
[80]	Technical Documentation SMS 6147.702.97.100; Condat GmbH
[81]	Technical Documentation MM 6147.703.97.100; Condat GmbH
[82]	Technical Documentation RR 6147.704.97.100; Condat GmbH
[83]	Technical Documentation DL 6147.705.97.100; Condat GmbH
[84]	Technical Documentation CCD 6147.706.97.100; Condat GmbH

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
NECI	New Establishment Causes included
N(R)	Receive Number
N(S)	Send Number
OTD	Observed Time Difference
P	Poll Bit
PCH	Paging Channel
PDU	Protocol Description Unit
P/F	Poll / Final Bit
PL	Physical Layer
PLMN	Public Land Mobile Network
RACH	Random Access Channel
REJ	Reject Frame
RNR	Receive Not Ready Frame
RR	Radio Resource Management
RR	Receive Ready Frame
RTD	Real Time Difference

SABM Set Asynchronous Balanced Mode
SACCH Slow Associated Control Channel
SAP Service Access Point
SAPI Service Access Point Identifier
SDCCH Slow Dedicated Control Channel
SIM Subscriber Identity Module
SMS Short Message Service
SMSCB Short Message Service Cell Broadcast
SS Supplementary Services
TCH Traffic Channel
TCH/F Traffic Channel Full Rate
TCH/H Traffic Channel Half Rate
TDMA Time Division Multiple Access
TMSI Temporary Mobile Subscriber Identity
UA Unnumbered Acknowledgement Frame
UI Unnumbered Information Frame
VPLMN Visiting Public Land Mobile Network
V(A) Acknowledgement State Variable
V(R) Receive State Variable
V(S) Send State Variable

1.3 Terms

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

2 Overview

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

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

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

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

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

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

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

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

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

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

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

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 (NCELLS_14_BSIC_PBCCH)
DECLARATION (NCELLS_124_BSIC_PBCCH)
DECLARATION (NCELLS_10_BSIC_PBCCH)
DECLARATION (CHLIST_14_124_10_PBCCH)
DECLARATION (CHLIST_14_PBCCH)
DECLARATION (CHLIST_124_PBCCH)
DECLARATION (CHLIST_10_PBCCH)
DECLARATION (NCELLS_14_PBCCH)
DECLARATION (NCELLS_10_PBCCH)
DECLARATION (NCELLS_124_PBCCH)
DECLARATION (ARFCN_14a)
DECLARATION (ARFCN_14b)
DECLARATION (ARFCN_1a)
DECLARATION (ARFCN_1b)
DECLARATION (ARFCN_23_14_124_1)
DECLARATION (ARFCN_23a)
DECLARATION (ARFCN_25a)
DECLARATION (ARFCN_25b)
DECLARATION (ARFCN_512a)
DECLARATION (ARFCN_512b)
DECLARATION (ARFCN_580a)
DECLARATION (ARFCN_637_580_810_512)
DECLARATION (ARFCN_637_580_885_512)
DECLARATION (ARFCN_637a)
DECLARATION (ARFCN_87b)
DECLARATION (ARFCN_885a)
DECLARATION (ARFCN_885b)
DECLARATION (ARFCN_DUAL)
DECLARATION (ARFCN_EGSM)
DECLARATION (ASYNC_HO_CMD)
DECLARATION (ASYNC_HO_CMD_2)
DECLARATION (ASYNC_HO_CMD_3)
DECLARATION (BURST_DELTA)
DECLARATION (BURST_RACH)
DECLARATION (CBCH_1_11)
DECLARATION (CBCH_1_11_CONTENT)
DECLARATION (CBCH_1_12)
DECLARATION (CBCH_1_12_CONTENT)
DECLARATION (CBCH_1_13)
DECLARATION (CBCH_1_13_CONTENT)
```

DECLARATION (CBCH_1_14)
DECLARATION (CHLIST_124)
DECLARATION (CBCH_1_14_CONTENT)
DECLARATION (CBCH_1_2)
DECLARATION (CBCH_1_2_CONTENT)
DECLARATION (CBCH_1_3)
DECLARATION (CBCH_1_3_CONTENT)
DECLARATION (CBCH_1_7)
DECLARATION (CBCH_1_7_B)
DECLARATION (CBCH_1_7_B_CONTENT)
DECLARATION (CBCH_1_7_CONTENT)
DECLARATION (CBCH_1_8)
DECLARATION (CBCH_1_8_CONTENT)
DECLARATION (CBCH_2)
DECLARATION (CBCH_2_CONTENT)
DECLARATION (CBCH_3)
DECLARATION (CBCH_3_CONTENT)
DECLARATION (CBCH_4)
DECLARATION (CBCH_4_CONTENT)
DECLARATION (CBCH_DESCRIPTION_4)
DECLARATION (CBCH_DESCRIPTION_4_MA)
DECLARATION (CBCH_DESCRIPTION_8)
DECLARATION (CBCH_DESCRIPTION_8_MA)
DECLARATION (CBCH_MSG_11)
DECLARATION (CBCH_MSG_12)
DECLARATION (CBCH_MSG_13)
DECLARATION (CBCH_MSG_3)
DECLARATION (CBCH_MSG_7)
DECLARATION (CBCH_MSG_7_B)
DECLARATION (CELL_CHAN_DESC_1)
DECLARATION (CELL_CHAN_DESC_1_NEW)
DECLARATION (CELL_DESCRIPTION_2)
DECLARATION (CELL_DESCRIPTION_3)
DECLARATION (CELL_OPT_BCCH_1)
DECLARATION (CELL_OPT_SACCH_1)
DECLARATION (CELL_SELECT_1)
DECLARATION (CELL_SELECT_2)
DECLARATION (CH_TYPE_ASS_AFTER)
DECLARATION (CH_TYPE_ASS_BEFORE)
DECLARATION (CH_TYPE_FREQ_REDEF)
DECLARATION (CH_TYPE_HOP)
DECLARATION (CH_TYPE_IMM_ASS)
DECLARATION (CH_TYPE_SDCCH2)
DECLARATION (CH_TYPE_SDCCH3)
DECLARATION (CH_TYPE_SDCCH4)
DECLARATION (CH_TYPE_TCH2)
DECLARATION (CH_TYPE_TCH2_MA)
DECLARATION (CH_TYPE_TCH3)
DECLARATION (CH_TYPE_TCH3_MA)
DECLARATION (CH_TYPE2)
DECLARATION (CHAN_DESC_1)
DECLARATION (CHAN_DESC_2)
DECLARATION (CHAN_SEL_1)
DECLARATION (CHAN_SEL_10)

DECLARATION (CHAN_SEL_11)
DECLARATION (CHAN_SEL_12)
DECLARATION (CHAN_SEL_2)
DECLARATION (CHAN_SEL_3)
DECLARATION (CHAN_SEL_4)
DECLARATION (CHAN_SEL_5)
DECLARATION (CHAN_SEL_6)
DECLARATION (CHAN_SEL_7)
DECLARATION (CHAN_SEL_8)
DECLARATION (CHAN_SEL_9)
DECLARATION (CHANGED_SYS_INFO_6)
DECLARATION (CHANNEL_DESC_1)
DECLARATION (CHANNEL_DESC_2)
DECLARATION (CHANNEL_DESC_2_TCH)
DECLARATION (CHANNEL_DESC_3)
DECLARATION (CHANNEL_DESC_3_TCH)
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)
DECLARATION (CHLIST_0)
DECLARATION (CHLIST_1_11_14_25_87_124_512_885_FFFF)
DECLARATION (CHLIST_1_11_14_25_87_512)
DECLARATION (CHLIST_1_124)
DECLARATION (CHLIST_1_14)
DECLARATION (CHLIST_1)
DECLARATION (CHLIST_1_14_0_124_512_580_1023_975)
DECLARATION (CHLIST_1_14_0_124_512_580_1023_FFFF)
DECLARATION (CHLIST_1_14_124)
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)
DECLARATION (CHLIST_10_20_40_80_90_100_110_120)
DECLARATION (CHLIST_10_20_40_80_90_100_110_120_FFFF)
DECLARATION (CHLIST_10_52_59_73_108_114)
DECLARATION (CHLIST_10_52_59_73_108_114_FFFF)
DECLARATION (CHLIST_10_FFFF)
DECLARATION (CHLIST_14)
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)
DECLARATION (CHLIST_14_25_512_580_637_885)
DECLARATION (CHLIST_14_512_637_885_FFFF)
DECLARATION (CHLIST_14_513_600_700_810_885)
DECLARATION (CHLIST_2_8_FFFF)
DECLARATION (CHLIST_23)
DECLARATION (CHLIST_23_1_11_14_25_87_124_512_885)
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)
DECLARATION (CHLIST_23_1_14_25_124_512_580_637_885)
DECLARATION (CHLIST_23_1_14_512_885)
DECLARATION (CHLIST_23_1_15)
DECLARATION (CHLIST_42_2_30)
DECLARATION (CHLIST_23_10)
DECLARATION (CHLIST_26_34_42_52_59_FFFF)
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_578_1_14_25_124_512_580_637_885)
DECLARATION (CHLIST_580)
DECLARATION (CHLIST_580_512_637_810)
DECLARATION (CHLIST_580_512_637_885)
DECLARATION (CHLIST_637)
DECLARATION (CHLIST_637_1_14_23_124_512_580_885)
DECLARATION (CHLIST_637_1_14_512_513_600_700_810_885)
DECLARATION (CHLIST_637_1_14_512_885)
DECLARATION (CHLIST_637_512_580_885)
DECLARATION (CHLIST_73_74_75_76)
DECLARATION (CHLIST_73_74_75_76_FFFF)
DECLARATION (CHLIST_975)
DECLARATION (CIPH_PARAM)
DECLARATION (CIPH_PARAM_KC)
DECLARATION (CLASS_DCS_1800)
DECLARATION (CLASS_DUAL)
DECLARATION (CLASS_GSM_1800)
DECLARATION (CLASS_GSM_1900)
DECLARATION (CLASS_GSM_900)
DECLARATION (CTRL_CHAN_DESC_1)
DECLARATION (DCS_ID_EMPTY)
DECLARATION (EMPTY_FRAME)
DECLARATION (EMPTY_NCELL_LIST)
DECLARATION (EMPTY_SCELL_NBCCH)
DECLARATION (FREQ_LIST)
DECLARATION (FREQ_LIST_ASS_AFTER)

DECLARATION (FREQ_LIST_ASS_AFTER_NO)
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)
DECLARATION (FULL_READ)
DECLARATION (FULL_READ_ARRAY)
DECLARATION (HO_PARAM)
DECLARATION (HO_PARAM_1)
DECLARATION (I_SMS)
DECLARATION (IMM_ASS)
DECLARATION (IMM_ASS_HOP)
DECLARATION (IMM_ASS_REJ)
DECLARATION (IMS1)
DECLARATION (IMS2)
DECLARATION (L2_CHANGED_SYS_INFO_6)
DECLARATION (L2_CHANGED_SYS_INFO_6_ARRAY)
DECLARATION (L2_I_SMS)
DECLARATION (L2_I_SMS_ARRAY)
DECLARATION (L2_IMM_ASS)
DECLARATION (L2_IMM_ASS_ARRAY)
DECLARATION (L2_IMM_ASS_EXT_REO)
DECLARATION (L2_IMM_ASS_EXT_REO_ARRAY)
DECLARATION (L2_IMM_ASS_HOP)
DECLARATION (L2_IMM_ASS_HOP_ARRAY)
DECLARATION (L2_IMM_ASS_REJ)
DECLARATION (L2_IMM_ASS_REJ_ARRAY)
DECLARATION (L2_NO_CONTENT)
DECLARATION (L2_PAG_1_EMPTY)
DECLARATION (L2_PAG_1_EMPTY_ARRAY)
DECLARATION (L2_PAG_1_I1_A)
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)
DECLARATION (L2_PAG_1_ST1_A1)
DECLARATION (L2_PAG_1_ST1_A1_ARRAY)
DECLARATION (L2_PAG_1_ST1_A2)
DECLARATION (L2_PAG_1_ST1_A2_ARRAY)
DECLARATION (L2_PAG_1_ST2_T3)
DECLARATION (L2_PAG_1_ST2_T3_ARRAY)

DECLARATION (L2_PAG_1_ST2_T4)
DECLARATION (L2_PAG_1_ST2_T4_ARRAY)
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)
DECLARATION (L2_PAG_1_WI1)
DECLARATION (L2_PAG_1_WI1_ARRAY)
DECLARATION (L2_PAG_1_WI2)
DECLARATION (L2_PAG_1_WI2_ARRAY)
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DECLARATION (L2_PAG_1_WT1_ARRAY)
DECLARATION (L2_PAG_1_WT2)
DECLARATION (L2_PAG_1_WT2_ARRAY)
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DECLARATION (L2_PAG_1_WTYPE_ARRAY)
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DECLARATION (L2_PAG_2_EMPTY_ARRAY)
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DECLARATION (L2_PAG_2_I3_A_ARRAY)
DECLARATION (L2_PAG_2_I3_D)
DECLARATION (L2_PAG_2_I3_D_ARRAY)
DECLARATION (L2_PAG_2_I3_N)
DECLARATION (L2_PAG_2_I3_N_ARRAY)
DECLARATION (L2_PAG_2_I3_S)
DECLARATION (L2_PAG_2_I3_S_ARRAY)
DECLARATION (L2_PAG_2_I3_T)
DECLARATION (L2_PAG_2_I3_T_ARRAY)
DECLARATION (L2_PAG_2_SI3_A)
DECLARATION (L2_PAG_2_SI3_A_ARRAY)
DECLARATION (L2_PAG_2_ST3_D)
DECLARATION (L2_PAG_2_ST3_D_ARRAY)
DECLARATION (L2_PAG_2_ST3_N)
DECLARATION (L2_PAG_2_ST3_N_ARRAY)
DECLARATION (L2_PAG_2_ST3_S)
DECLARATION (L2_PAG_2_ST3_S_ARRAY)
DECLARATION (L2_PAG_2_ST3_T)
DECLARATION (L2_PAG_2_ST3_T_ARRAY)
DECLARATION (L2_PAG_2_T1_A)
DECLARATION (L2_PAG_2_T1_A_ARRAY)
DECLARATION (L2_PAG_2_T1_D)
DECLARATION (L2_PAG_2_T1_D_ARRAY)
DECLARATION (L2_PAG_2_T1_S)
DECLARATION (L2_PAG_2_T1_S_ARRAY)
DECLARATION (L2_PAG_2_T1_T)
DECLARATION (L2_PAG_2_T1_T_ARRAY)
DECLARATION (L2_PAG_2_T2_A)
DECLARATION (L2_PAG_2_T2_A_ARRAY)
DECLARATION (L2_PAG_2_T2_D)
DECLARATION (L2_PAG_2_T2_D_ARRAY)

DECLARATION (L2_PAG_2_T2_S)
DECLARATION (L2_PAG_2_T2_S_ARRAY)
DECLARATION (L2_PAG_2_T2_T)
DECLARATION (L2_PAG_2_T2_T_ARRAY)
DECLARATION (L2_PAG_2_T3_A)
DECLARATION (L2_PAG_2_T3_A_ARRAY)
DECLARATION (L2_PAG_2_T3_D)
DECLARATION (L2_PAG_2_T3_D_ARRAY)
DECLARATION (L2_PAG_2_T3_N)
DECLARATION (L2_PAG_2_T3_N_ARRAY)
DECLARATION (L2_PAG_2_T3_S)
DECLARATION (L2_PAG_2_T3_S_ARRAY)
DECLARATION (L2_PAG_2_T3_T)
DECLARATION (L2_PAG_2_T3_T_ARRAY)
DECLARATION (L2_PAG_2_WRONG)
DECLARATION (L2_PAG_2_WRONG_ARRAY)
DECLARATION (L2_PAG_3_EMPTY)
DECLARATION (L2_PAG_3_EMPTY_ARRAY)
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DECLARATION (L2_PAG_3_T1_A_ARRAY)
DECLARATION (L2_PAG_3_T1_D)
DECLARATION (L2_PAG_3_T1_D_ARRAY)
DECLARATION (L2_PAG_3_T1_S)
DECLARATION (L2_PAG_3_T1_S_ARRAY)
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DECLARATION (L2_PAG_3_T1_T_ARRAY)
DECLARATION (L2_PAG_3_T2_A)
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)
DECLARATION (L2_PAG_3_T2_T)
DECLARATION (L2_PAG_3_T2_T_ARRAY)
DECLARATION (L2_PAG_3_T3_A)
DECLARATION (L2_PAG_3_T3_A_ARRAY)
DECLARATION (L2_PAG_3_T3_D)
DECLARATION (L2_PAG_3_T3_D_ARRAY)
DECLARATION (L2_PAG_3_T3_N)
DECLARATION (L2_PAG_3_T3_N_ARRAY)
DECLARATION (L2_PAG_3_T3_S)
DECLARATION (L2_PAG_3_T3_S_ARRAY)
DECLARATION (L2_PAG_3_T3_T)
DECLARATION (L2_PAG_3_T3_T_ARRAY)
DECLARATION (L2_PAG_3_T4_A)
DECLARATION (L2_PAG_3_T4_A_ARRAY)
DECLARATION (L2_PAG_3_T4_D)
DECLARATION (L2_PAG_3_T4_D_ARRAY)
DECLARATION (L2_PAG_3_T4_N)
DECLARATION (L2_PAG_3_T4_N_ARRAY)
DECLARATION (L2_PAG_3_T4_S)
DECLARATION (L2_PAG_3_T4_S_ARRAY)
DECLARATION (L2_PAG_3_T4_T)
DECLARATION (L2_PAG_3_T4_T_ARRAY)

DECLARATION (L2_PAG_3_WRONG)
DECLARATION (L2_PAG_3_WRONG_ARRAY)
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DECLARATION (L2_PAGING_REO_1_ARRAY)
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DECLARATION (L2_PAGING_REQ_1_REO_ARRAY)
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DECLARATION (L2_PAGING_REQ_1_SAB_ARRAY)
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DECLARATION (L2_SYS_INFO_1_NEW_ARRAY)
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DECLARATION (L2_SYS_INFO_2_ARRAY)
DECLARATION (L2_SYS_INFO_3)
DECLARATION (L2_SYS_INFO_3_ARRAY)
DECLARATION (L2_SYS_INFO_4)
DECLARATION (L2_SYS_INFO_4_ACS)
DECLARATION (L2_SYS_INFO_4_ACS_ARRAY)
DECLARATION (L2_SYS_INFO_4_ARRAY)
DECLARATION (L2_SYS_INFO_5)
DECLARATION (L2_SYS_INFO_5_ARRAY)
DECLARATION (L2_SYS_INFO_5BIS)
DECLARATION (L2_SYS_INFO_5BIS_ARRAY)
DECLARATION (L2_SYS_INFO_6)
DECLARATION (L2_SYS_INFO_6_ARRAY)
DECLARATION (L2_SYS_INFO_7)
DECLARATION (L2_SYS_INFO_7_ARRAY)
DECLARATION (L2_SYS_INFO_8)
DECLARATION (L2_SYS_INFO_8_ARRAY)
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DECLARATION (LOC_AREA_IDENT_2)
DECLARATION (MAC_1)
DECLARATION (MCC_1)
DECLARATION (MCC_2)
DECLARATION (MNC_1)
DECLARATION (MNC_2)
DECLARATION (MOB_ALLOC_1)
DECLARATION (MS_ID_IMSI_TMSI)
DECLARATION (MS_ID_SHORT_IMSI_TMSI)
DECLARATION (MSG_ID_1_TO_20)
DECLARATION (MSG_ID_3_7_11_TO_13)
DECLARATION (NCELL_1_L1_23_CONTENT)
DECLARATION (NCELL_1_L1_N23_CONTENT)
DECLARATION (NCELL_BCCH_BITMAP)
DECLARATION (NCELL_RES_124)
DECLARATION (NCELL_RES_124a)
DECLARATION (NCELL_RES_124y)
DECLARATION (NCELL_RES_14)
DECLARATION (NCELL_RES_14a)

DECLARATION (NCELL_RES_14c)
DECLARATION (NCELL_RES_14d)
DECLARATION (NCELL_RES_14y)
DECLARATION (NCELL_RES_14z)
DECLARATION (NCELL_RES_1c)
DECLARATION (NCELL_RES_1d)
DECLARATION (NCELL_RES_1z)
DECLARATION (NCELL_RES_23)
DECLARATION (NCELL_RES_23a)
DECLARATION (NCELL_RES_25)
DECLARATION (NCELL_RES_25a)
DECLARATION (NCELL_RES_25y)
DECLARATION (NCELL_RES_512)
DECLARATION (NCELL_RES_512a)
DECLARATION (NCELL_RES_512c)
DECLARATION (NCELL_RES_512d)
DECLARATION (NCELL_RES_512y)
DECLARATION (NCELL_RES_512z)
DECLARATION (NCELL_RES_513d)
DECLARATION (NCELL_RES_578y)
DECLARATION (NCELL_RES_580)
DECLARATION (NCELL_RES_580a)
DECLARATION (NCELL_RES_580y)
DECLARATION (NCELL_RES_600d)
DECLARATION (NCELL_RES_637)
DECLARATION (NCELL_RES_637_4_1)
DECLARATION (NCELL_RES_637a)
DECLARATION (NCELL_RES_637y)
DECLARATION (NCELL_RES_700d)
DECLARATION (NCELL_RES_810d)
DECLARATION (NCELL_RES_885)
DECLARATION (NCELL_RES_885a)
DECLARATION (NCELL_RES_885c)
DECLARATION (NCELL_RES_885d)
DECLARATION (NCELL_RES_885y)
DECLARATION (NCELL_RES_885z)
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DECLARATION (NCELL_RES_SC_23_8)
DECLARATION (NCELL_RES_SC_23_8_1)
DECLARATION (NCELL_RES_SC_23_8_1_CONTENT)
DECLARATION (NCELL_RES_SC_578_8)
DECLARATION (NCELL_RES_SC_637_4_1)
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_BSICS)
DECLARATION (NCELLS_1_BSIC)
DECLARATION (NCELLS_124_BSIC)

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)
DECLARATION (NCELLS_NO_CONTENT)
DECLARATION (NCELLS_RES_SC_23_16_2A)
DECLARATION (NCELLS_RES_SC_23_16_2B)
DECLARATION (NCELLS_SC_1800_4_1)
DECLARATION (NCELLS_SC_1800_4_1_BSICS)
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)
DECLARATION (NCELLS_SC_23_16_2)
DECLARATION (NCELLS_SC_900_16_2)
DECLARATION (NCELLS_SC_900_4_1)
DECLARATION (NCELLS_SC_900_4_1_BSICS)
DECLARATION (NCELLS_SC_900_4_1_FO)
DECLARATION (NCELLS_SC_900_4_1_RXLEVS)
DECLARATION (NCELLS_SC_900_4_1_TA)
DECLARATION (NCELLS_SC_900_8)
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)
DECLARATION (NEIGH_CELL_DESC_1)
DECLARATION (NEIGH_CELL_DESC_2)
DECLARATION (NO_CBCH)
DECLARATION (NO_NCELLS)
DECLARATION (NO_STARTING_TIME)
DECLARATION (NULL_MESSAGE)
DECLARATION (NULL_MESSAGE_CONTENT)
DECLARATION (PAGE_MODE_1)
DECLARATION (PAGING_REQ_1)
DECLARATION (PAGING_REQ_1_EXT)
DECLARATION (PAGING_REQ_1_REO)

DECLARATION (PAGING_REQ_1_SAB)
DECLARATION (PCH_NCH_INFO_1)
DECLARATION (PCK_CHAN_DESC_1)
DECLARATION (PERIODIC_SCELL_BCCH_ARRAY)
DECLARATION (RACH_CTRL_1)
DECLARATION (REQ_REF_1)
DECLARATION (RF_1_14_0_124_512_580_1023_975)
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_23_1_11_14_25_87_124_512_885)
DECLARATION (RF_23_1_14_124)
DECLARATION (RF_23_1_14_124_512_580_637_885)
DECLARATION (RF_23_1_14_25_124_512_580_637_885)
DECLARATION (RF_23_1_14_512_885)
DECLARATION (RF_23_1_15)
DECLARATION (RF_42_2_30)
DECLARATION (RF_23_10)
DECLARATION (RF_512_580_810_637)
DECLARATION (RF_512_580_810_FFFF)
DECLARATION (RF_512_637_810_FFFF)
DECLARATION (RF_578_1_14_25_124_512_580_637_885)
DECLARATION (RF_580)
DECLARATION (RF_580_512_637_810)
DECLARATION (RF_580_512_637_885)
DECLARATION (RF_637)
DECLARATION (RF_637_1_14_23_124_512_580_885)
DECLARATION (RF_637_1_14_512_513_600_700_810_885)
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 (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)
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)

/*

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	NO_OF_CELLS_1	1	
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	BAND_00	
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 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_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_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_X817	0x817
SHORTARFCN_24	24
SHORTARFCN_25	25
SHORTARFCN_26	26
SHORTARFCN_27	27
SHORTARFCN_28	28
SHORTARFCN_29	29
SHORTARFCN_30	30
SHORTARFCN_34	34
SHORTARFCN_40	40
SHORTARFCN_42	42
SHORTARFCN_46	46
SHORTARFCN_52	52
SHORTARFCN_59	59
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_512	512
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_588	588	
SHORTARFCN_600	600	
SHORTARFCN_637	637	
SHORTARFCN_687	687	
SHORTARFCN_700	700	
SHORTARFCN_810	810	
SHORTARFCN_853	853	
SHORTARFCN_885	885	
SHORTARFCN_883	883	
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_BLKES_RES_2	2	
BYTE BS_AG_BLKES_RES_3	3	
BYTE BS_AG_BLKES_RES_5	5	
BYTE BS_AG_BLKES_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	DLT_10	10
BYTE	DLT_24	24
SHORT	FN_BURST_1	61434
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_10	10
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
SHORT	FN_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_4 4
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_513513
SHORT      TIME_ALIGNMT_540540
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_3 3
BYTE STOP_SIZE_0 0
LONG FIRST_BLOCKS_0_B 0x032042
BYTE SCHED_LEN_5 5
LONG FIRST_BLOCKS_1_B 0

```

/* used for stopping NCELL BCCH and SYNC requests */

```

BEGIN_SHORT_ARRAY(STOP_ARRAY_EMPTY, 6) 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    ICMI_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_SCELL_NBCCH,
    EMPTY_SCELL_NBCCH,
    EMPTY_SCELL_NBCCH,
    EMPTY_SCELL_NBCCH,
    EMPTY_SCELL_NBCCH,
    EMPTY_SCELL_NBCCH
ENDARRAY

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

BEGIN_PSTRUCT("schedule_array", EMPTY_SCELL_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_SCELL_NBCCH,
    EMPTY_SCELL_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(IMS1,15)
    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(IMS2,15)
    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,
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,
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 ("l2_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 ("l2_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 ("l2_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

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

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

BEGIN_SHORT_ARRAY_PART (ARFCN_637_580_810_512, 4)
ARFCN_637,
ARFCN_580,
ARFCN_810,
ARFCN_512
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
```

```
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("l2_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("l2_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("l2_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("l2_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
0	
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_mfrms", 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 ("rtt", 15)
ENDSTRUCT

BEGIN_MSTRUCT ("cell_select", CELL_SELECT_1)
    SET_COMP ("cell_resel_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_resel_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_RE	page mode reorganization
ORG	
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	l2 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	l2 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
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
0x08,0x00	offset in bits
0x19	I2 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	I2 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	l2 pseudo length (= 12 Bytes)
0x06	protocol discriminator, transaction identifier
0x21	message type
0x00	page mode normal
0x09	mobile identity 1

*/

```
BEGIN_PSTRUCT("l2_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	l2 pseudo length (= 22 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0x00	Page mode normal

0x09 Mobile identity 1

```
*/
BEGIN_PSTRUCT("l2_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	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_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	l2 pseudo length (= 7 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0x30	page mode normal, Dual
0x09	Mobile identity 1

*/

```

BEGIN_PSTRUCT ("l2_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	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_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	l2 pseudo length (= 12 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0x01	page mode normal, SDCCH
0x09	Mobile identity 1

*/

BEGIN_PSTRUCT ("l2_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	l2 pseudo length (= 22 Bytes)
0x06	Protocol discriminator, transaction identifier
0x21	Message type
0x04	Page mode normal, SDCCH
0x09	Mobile identity 1

*/

BEGIN_PSTRUCT ("l2_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	l2 pseudo length (= 7 Bytes)
------	------------------------------

0x06	Protocol discriminator, transaction identifier
0x21	Message type
0x30	page mode normal, Dual
0x09	Mobile identity 1

```

/*
BEGIN_PSTRUCT ("l2_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	l2 pseudo length (= 13 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_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	l2 pseudo length (= 4 Byte)
0x06	protocol discriminator, transaction identifier
0x22	message type
0x00	page mode normal
0x00	empty mobile identity

*/

BEGIN_PSTRUCT ("l2_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	l2 pseudo length (= 7 Byte)
0x06	Protocol discriminator, transaction identifier
0x22	Message type
0x00	page mode normal
0x00	Mobile identity

*/

BEGIN_PSTRUCT ("l2_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 ("l2_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 ("l2_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 ("I2_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 ("l2_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 ("l2_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 ("l2_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 ("l2_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 ("I2_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 ("I2_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	I2 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, 0x16	mobile allocation

*/

```

BEGIN_PSTRUCT ("I2_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	I2 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 ("I2_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, 0x00	length in bits (184/8 = 23 bytes)
0	
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", 0)
    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	l2 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_SHORT_ARRAY_PART (CHLIST_14_124_10_PBCCH, 4)
    ARFCN_14,
    ARFCN_124,
    ARFCN_10,
    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,	end of neighbour cell list

0xFF	
------	--

*/

```
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,	end of neighbour cell list

0xFF	
------	--

*/

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_23_1_14_25_124_512_580_637_885)

SET_COMP ("radio_freq", RF_23_1_14_25_124_512_580_637_885)

ENDSTRUCT

BEGIN_SHORT_ARRAY_PART (RF_23_1_14_25_124_512_580_637_885, 9)

ARFCN_23,
ARFCN_1,
ARFCN_14,
ARFCN_25,
ARFCN_124,
ARFCN_512,
ARFCN_580,
ARFCN_637,
ARFCN_885

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_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_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_23_1_11_14_25_87_124_512_885)
    SET_COMP ("radio_freq", RF_23_1_11_14_25_87_124_512_885)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_23_1_11_14_25_87_124_512_885, 9)
    ARFCN_23,
    ARFCN_1,
```

```
        ARFCN_11,  
        ARFCN_14,  
        ARFCN_25,  
        ARFCN_87,  
        ARFCN_124,  
        ARFCN_512,  
        ARFCN_885  
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,
```


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_637_1_14_512_513_600_700_810_885)
    SET_COMP ("radio_freq", RF_637_1_14_512_513_600_700_810_885)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_637_1_14_512_513_600_700_810_885, 9)
    ARFCN_637,
    ARFCN_1,
    ARFCN_14,
    ARFCN_512,
    ARFCN_513,
    ARFCN_600,
    ARFCN_700,
    ARFCN_810,
    ARFCN_885
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_578_1_14_25_124_512_580_637_885)
    SET_COMP("radio_freq", RF_578_1_14_25_124_512_580_637_885)
ENDSTRUCT
```

```
BEGIN_SHORT_ARRAY_PART (RF_578_1_14_25_124_512_580_637_885, 9)
    ARFCN_578,
    ARFCN_1,
    ARFCN_14,
    ARFCN_25,
    ARFCN_124,
    ARFCN_512,
    ARFCN_580,
    ARFCN_637,
    ARFCN_885
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
```

```
BEGINARRAY_PART(NCELLS_14_BSIC_PBCCH, 1)
    BSIC_1
ENDARRAY
BEGINARRAY_PART(NCELLS_124_BSIC_PBCCH, 1)
    NOT_PRESENT_8BIT
ENDARRAY
BEGINARRAY_PART(NCELLS_10_BSIC_PBCCH, 1)
    BSIC_2
ENDARRAY
BEGIN_SHORT_ARRAY_PART(CHLIST_14_PBCCH, 1)
    ARFCN_14
ENDARRAY
BEGIN_SHORT_ARRAY_PART(CHLIST_124_PBCCH, 1)
    ARFCN_124
ENDARRAY
BEGIN_SHORT_ARRAY_PART(CHLIST_10_PBCCH, 1)
    ARFCN_10
ENDARRAY
```

```
BEGIN_PSTRUCT("ncells", NCELLS_14_PBCCH)
    SET_COMP("no_of_ncells", 1)
    SET_COMP("arfcn", CHLIST_14_PBCCH)
    SKIP_COMP("rx_lev")
    SET_COMP("bsic", NCELLS_14_BSIC_PBCCH)
    SKIP_COMP("time_alignmt")
    SKIP_COMP("frame_offset")
ENDSTRUCT
```

```
BEGIN_PSTRUCT("ncells", NCELLS_124_PBCCH)
    SET_COMP("no_of_ncells", 1)
    SET_COMP("arfcn", CHLIST_124_PBCCH)
```

```

        SKIP_COMP("rx_lev")
        SET_COMP("bsic", NCELLS_124_BSIC_PBCCH)
        SKIP_COMP("time_alignmt")
        SKIP_COMP("frame_offset")
    ENDSTRUCT

```

```

BEGIN_PSTRUCT("ncells", NCELLS_10_PBCCH)
    SET_COMP("no_of_ncells", 1)
    SET_COMP("arfcn", CHLIST_10_PBCCH)
    SKIP_COMP("rx_lev")
    SET_COMP("bsic", NCELLS_10_BSIC_PBCCH)
    SKIP_COMP("time_alignmt")
    SKIP_COMP("frame_offset")
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 sending)
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,
```

/*

* /

/*

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
```

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)		

Parametrization

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)		

Parametrization

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

History: 22.09.99 MPA Initial

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)		

Parameterization

<u>Primitive</u>	<u>Parameter</u>	<u>Value</u>
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History:	22.09.99	MPA	Initial
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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)		

Parameterization

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 freq_bands	PCH_INTERRUPT BAND_GSM_900
(2) MPHC_INIT_L1_REQ	radio_band_config	BAND_GSM_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

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_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	PCH_INTERRUPT BAND_GSM_1800
(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

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

RR/DL	ALR	PL
(1) MPH_BSIC_REQ		
=====>		
(2)	MPHC_NETWORK_SYNC_REQ	
	=====>	
(3)	MPHC_NETWORK_SYNC_IND	
	<=====	
(4) MPH_BSIC_CNF		
<=====		
(5)	MPHC_NEW_SCELL_REQ	
	=====>	
(6)	MPHC_NEW_SCELL_CON	
	<=====	
(7)	MPHC_SCELL_NBCCH_REQ	
	=====>	

Parametrization

Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_23
(2) MPHC_NETWORK_SYNC_REQ	radio_freq fn_offset	ARFCN_23 NOT_USED

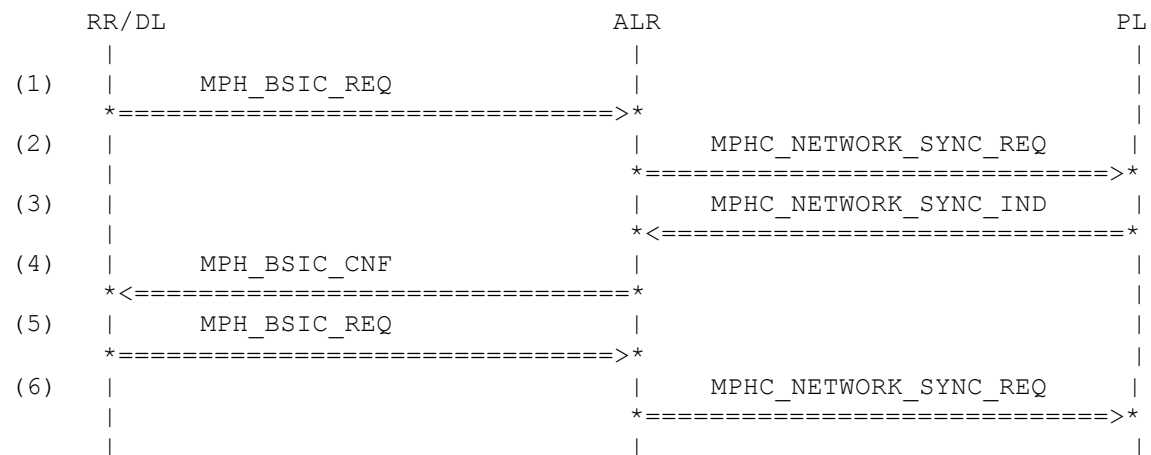
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(3) MPHC_NETWORK_SYNC_IND		
	radio_freq	ARFCN_23
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_1
(4) MPH_BSIC_CNF		
	arfcn	ARFCN_X817
	bsic	BSIC_1
	cs	CS_NO_ERROR
(5) MPHC_NEW_SCELL_REQ		
	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

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

(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
bsic	BSIC_1
cs	CS_NO_BCCH_AVAIL

(5) MPH_BSIC_REQ

arfcn	ARFCN_14
-------	----------

(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

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

	RR/DL	ALR	PL
(1)			
		MPHC_NETWORK_SYNC_IND	
		<=====	
(2)	MPH_BSIC_CNF		
	<=====		
(3)	MPH_BSIC_REQ		
	=====>		
(4)		MPHC_NETWORK_SYNC_REQ	
		=====>	
(5)		MPHC_NETWORK_SYNC_IND	
		<=====	
(6)	MPH_BSIC_CNF		
	<=====		
(7)	MPH_BSIC_REQ		
	=====>		
(8)		MPHC_NETWORK_SYNC_REQ	
		=====>	
(9)		MPHC_NETWORK_SYNC_IND	
		<=====	
(10)	MPH_BSIC_CNF		
	<=====		

Parametrization

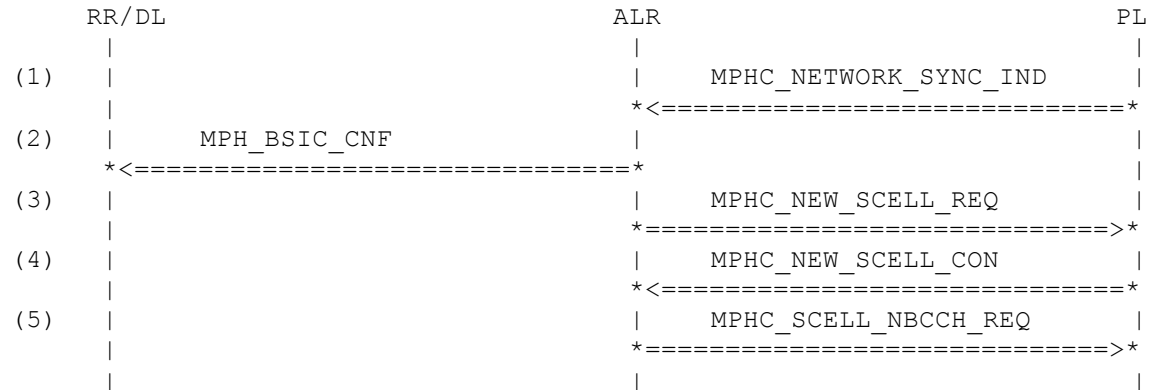
Primitive	Parameter	Value
(1) MPHC_NETWORK_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_14 NO_SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(2) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_14 NOT_USED CS_NO_BCCH_AVAIL
(3) MPH_BSIC_REQ	arfcn	ARFCN_124
(4) MPHC_NETWORK_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity search_mode	ARFCN_124 NOT_USED NOT_USED TV_INVALID_TIMING_INFO SM_WIDE_MODE
(5) 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
(6) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_124 NOT_USED CS_NO_BCCH_AVAIL
(7) MPH_BSIC_REQ	arfcn	ARFCN_1
(8) 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
(9) MPHC_NETWORK_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_1 NO_SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(10) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_1 NOT_USED CS_NO_BCCH_AVAIL

History: 22.09.99 MPA Initial

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



Parametrization

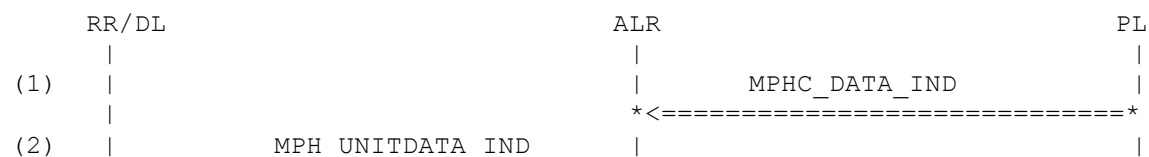
Primitive	Parameter	Value
(1) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_14
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(2) MPH_BSIC_CNF	arfcn	ARFCN_14
	bsic	BSIC_0
	cs	CS_NO_ERROR
(3) MPHC_NEW_SCELL_REQ	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	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

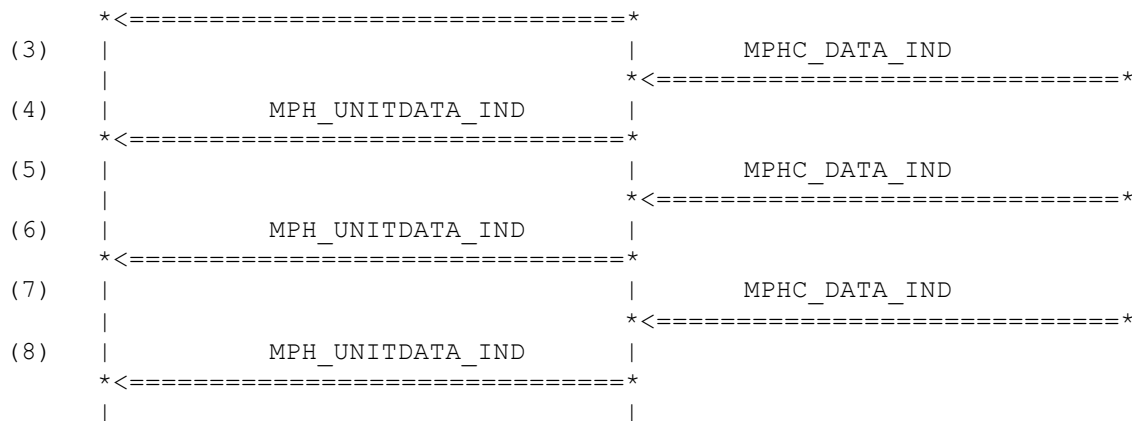
History: 23.09.99 MPA Initial

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	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: 23.09.99 MPA Initial

4.2.8 ALR008: Read failed BCCH data

Description: A failed BCCH data block is read.

Preamble: ALR007

	RR/DL		ALR		PL
(1)					
				MPHC_DATA_IND	



History: 23.09.99 MPA Initial

Description: RR rejects the BCCH carrier. The next best channel (channel 124) is selected for synchronizing to frequency correction burst and synchron burst.

	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
(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_124 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_124 SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(5) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_124 BSIC_0 CS_NO_ERROR
(6) MPHC_NEW_SCELL_REQ	radio_freq fn_offset time_alignment tsc	ARFCN_124 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_124 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_1 TC_0 NOT_USED FN_OFFSET_0
(9) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_chan_desc rach_ctrl }	ARFCN_124 NOT_USED RR DOWNLINK D_SYS_INFO_1 TI_0 CELL_CHAN_DESC_1 RACH_CTRL_1
History:	23.09.9	MPA Initial

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
(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 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) MPH_C_SCELL_NBCCH_REQ

schedule_array_size	SCHED_SIZE_1
schedule_array	NOT_USED

(9) MPH_C_DATA_IND

radio_freq	ARFCN_1
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_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

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

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) | | 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_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
(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

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) | | MPH_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_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	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_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_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**

mark	12.07.00	DG	MPH_CLASSMARK_REQ: class changed into class-
	21.06.01	MSB	(Forum G23M / No 0057) sequence and parameter changed for MPHC_SCELL_NBCCH_REQ: after pagemode set to REORG, full read is neces- sary
	19.07.01	MSB	CHLIST_23_1_14_124 changed
	07.02.02	LG	changed value for ba_id

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_RXLEV_REQ	
	=====>	
(3)	MPHC_RXLEV_IND	
	<=====	
(4)	MPHC_RXLEV_REQ	
	=====>	
(5) MPH_POWER_REQ		
=====>		
(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_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT NOT_USED
(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) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT 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 rx_lev	CHANNELS_4 ARFCN_23_14_124_1 RXLEV_23_14_124_1

History: 23.09.99 MPA Initial

4.2.15 ALR017: Re-Initiation of Cell Selection during BCCH reading

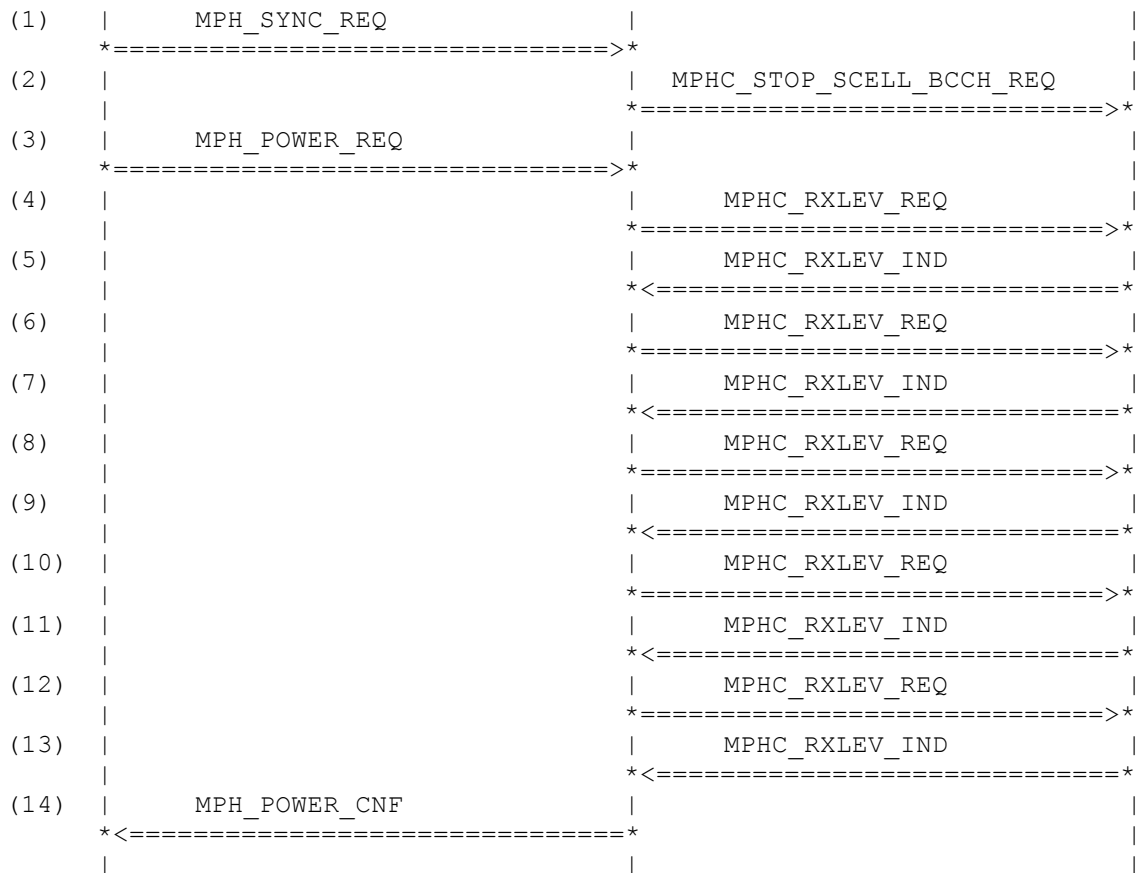
Description: During BCCH reading RR restarts a cell selection. This leads to a new full power measurement cycle.

Preamble: ALR007

RR/DL
|

ALR
|

PL
|



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 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 ARFCN_23_14_124_1 RXLEV_23_14_124_1

History: 23.09.99 MPA Initial

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_NCELL_SYNC_REQ	
	=====>	
(6)	MPHC_STOP_NCELL_BCCH_REQ	
	=====>	
(7)	MPHC_STOP_SCELL_BCCH_REQ	
	=====>	
(8)	MPHC_RXLEV_REQ	
	=====>	

Parametrization

Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT NOT_USED
(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_NCELL_SYNC_REQ	radio_freq_array_size radio_freq_array	STOP_SIZE_0 NOT_USED

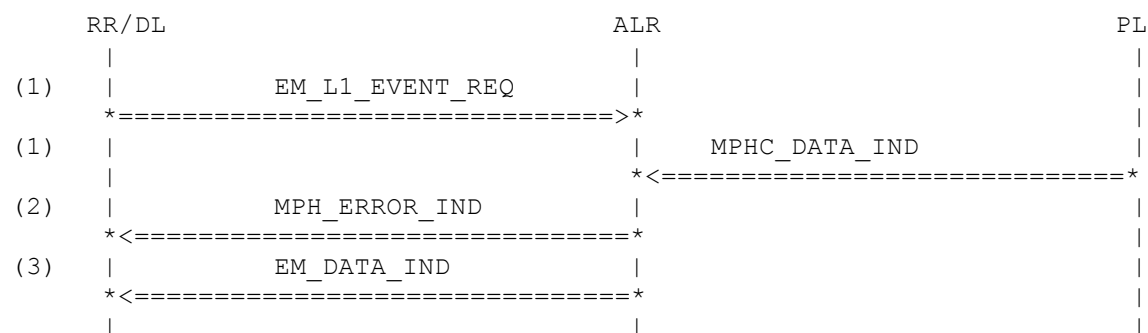
(6) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_0
	radio_freq_array	NOT_USED
(7) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED

History: 23.09.99 MPA Initial

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	Bitm_H
	bitmask_l1_l	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

4.3 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 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_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	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1
(9) 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
(10) MPHC_NCELL_BCCH_IND	radio_freq l2_channel error_flag	ARFCN_14 L2_CHANNEL_NBCCH 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
(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
(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

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

	RR/DL	ALR	PL
(1)	MPH_POWER_REQ		
	*=====>		
(2)		MPHC_STOP_NCELL_SYNC_REQ	
		*=====>	
(3)		MPHC_STOP_NCELL_BCCH_REQ	
		*=====>	
(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	NO_PCH_INTERRUPT
	freq_bands	NOT_USED
(2) MPHC_STOP_NCELL_SYNC_REQ	radio_freq_array_size	STOP_SIZE_0
	radio_freq_array	NOT_USED

(3) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_0
	radio_freq_array	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	CHANNELS_4
	arfcn	ARFCN_23_14_124_1
	rx_lev	RXLEV_23_14_124_1

History: 24.09.99 MPA Initial

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_STOP_NCELL_SYNC_REQ	
	=====>	
(3)	MPHC_STOP_NCELL_BCCH_REQ	
	=====>	
(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

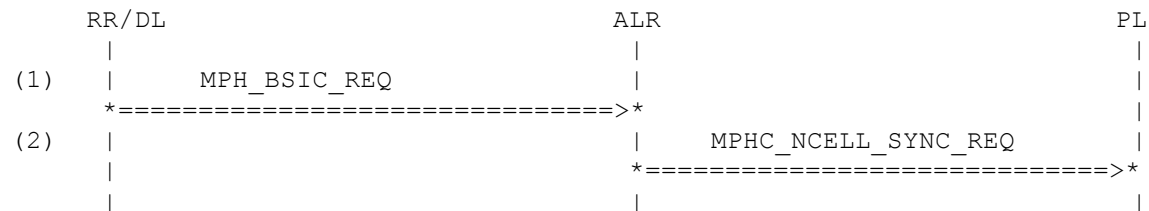
Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	NO_PCH_INTERRUPT NOT_USED
(2) MPHC_STOP_NCELL_SYNC_REQ	radio_freq_array_size radio_freq_array	STOP_SIZE_0 NOT_USED
(3) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	STOP_SIZE_0 NOT_USED
(4) MPHC_RXLEV_REQ	shared_ptr	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

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

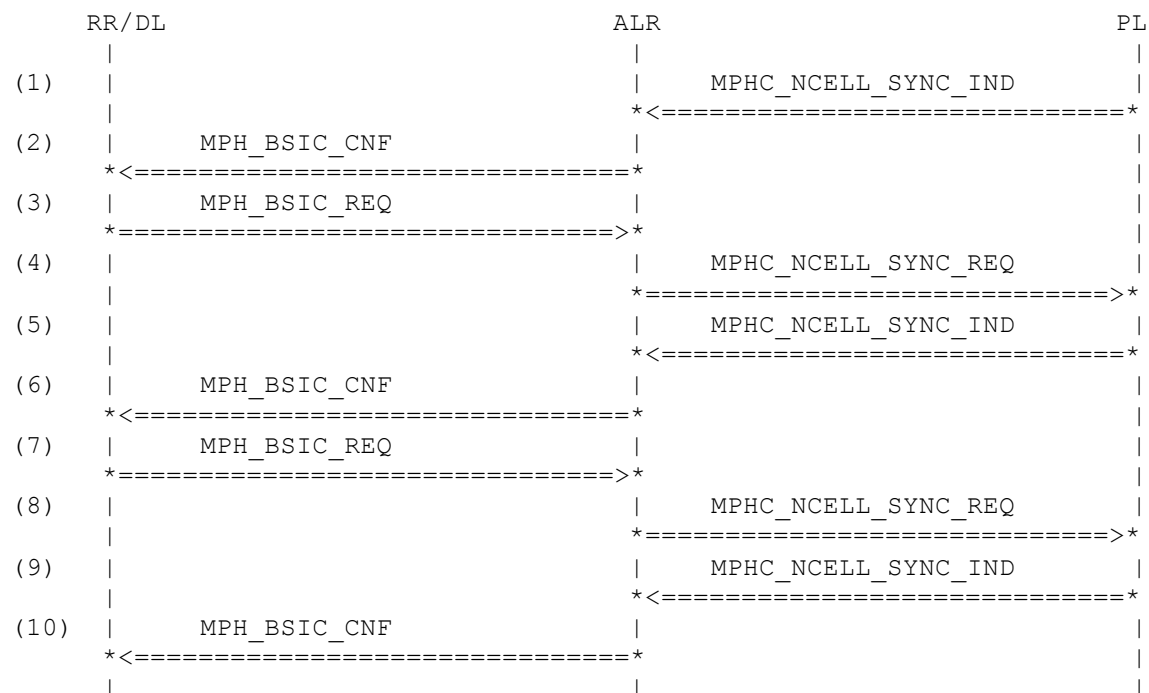
Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_14
(2) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO

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



Parametrization

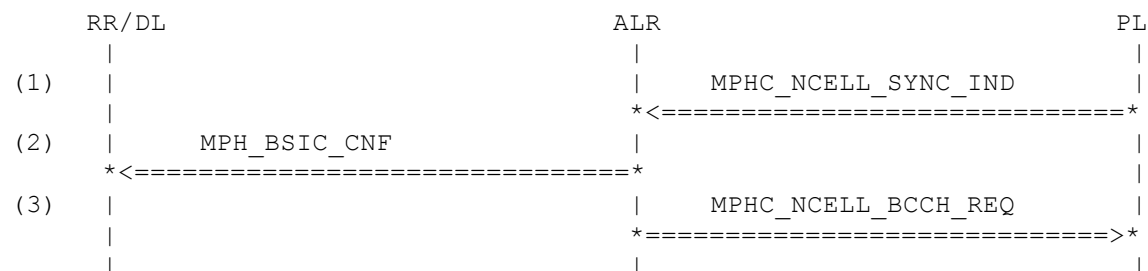
Primitive	Parameter	Value
(1) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_14 NO_SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(2) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_14 NOT_USED CS_NO_BCCH_AVAIL
(3) MPH_BSIC_REQ	arfcn	ARFCN_124
(4) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(5) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_124 NO_SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(6) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_124 NOT_USED CS_NO_BCCH_AVAIL
(7) MPH_BSIC_REQ	arfcn	ARFCN_1
(8) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_1 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(9) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_1 NO_SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(10) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_1 NOT_USED CS_NO_BCCH_AVAIL

History: 24.09.99 MPA Initial

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



Parametrization

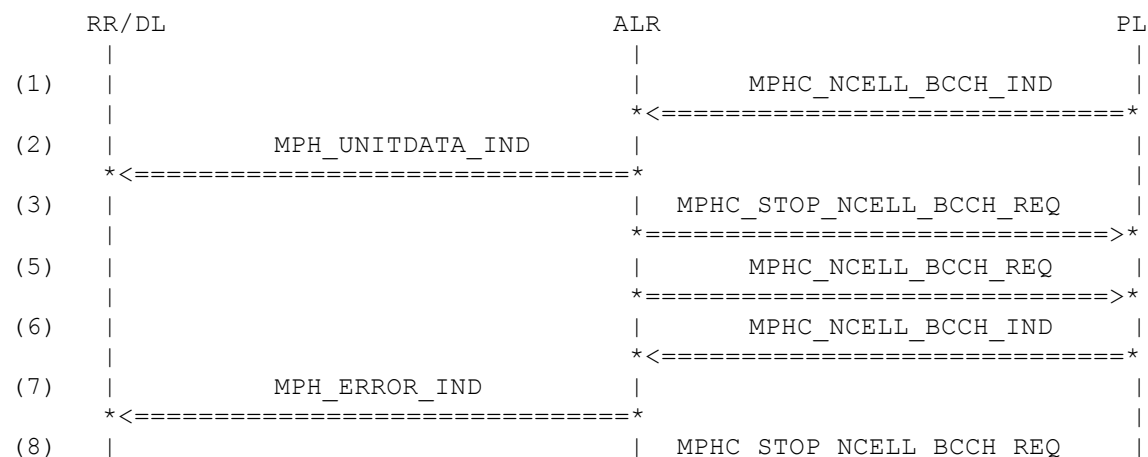
Primitive	Parameter	Value
(1) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_14
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
(2) MPH_BSIC_CNF	arfcn	ARFCN_14
	bsic	BSIC_1
	cs	CS_NO_ERROR
(3) MPHC_NCELL_BCCH_REQ	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
	bcch_blocks_required	NCELL_BCCH_SI_2_3_4
	gprs_prio	NOT_USED

History: 24.09.99 MPA Initial

4.3.7 ALR091: Read BCCH data

Description: The BCCH data blocks are read for the channel 14.

Preamble: ALR090



```

(10) | | *=====>*
      | | | MPHC_NCELL_BCCH_REQ |
      | | *=====>*
(11) | | | MPHC_NCELL_BCCH_IND |
      | | *<=====*
(12) | | MPH_UNITDATA_IND |
      | *<=====*
(13) | | | MPHC_STOP_NCELL_BCCH_REQ |
      | | *=====>*
      | |

```

Parametrization

Primitive	Parameter	Value
(1) 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_1
	fn	FN_OFFSET_14
(11) 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
	}	
(2) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_14
(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_3_4
	gprs_prio	NOT_USED
(4) 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
(5) MPH_ERROR_IND	cs	CS_BCCH_READ_ERROR
	arfcn	ARFCN_14
(6) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_14

(7) 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

(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)		MPHC_NCELL_SYNC_REQ	
		=====>	
(3)		MPHC_NCELL_SYNC_IND	
		<=====	
(4)	MPH_BSIC_CNF		
	<=====		
(5)		MPHC_NCELL_BCCH_REQ	
		=====>	
(6)		MPHC_NCELL_BCCH_IND	
		<=====	
(7)	MPH_UNITDATA_IND		

```

      * <=====
(8)  |                                     | MPHC_STOP_NCELL_BCCH_REQ |
      |                                     | *=====>*
(9)  |                                     | MPHC_NCELL_BCCH_REQ   |
      |                                     | *=====>*
      |                                     |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_124
(2) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(3) 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
(4) MPH_BSIC_CNF	arfcn	ARFCN_124
	bsic	BSIC_1
	cs	CS_NO_ERROR
(5) 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_3_4
	gprs_prio	NOT_USED
(6) 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_0
	fn	FN_OFFSET_124
(13) 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
}

(7) MPH_C_STOP_NCELL_BCCH_REQ

radio_freq_array_size STOP_SIZE_1
radio_freq_array STOP_ARRAY_124

(8) MPH_C_NCELL_BCCH_REQ

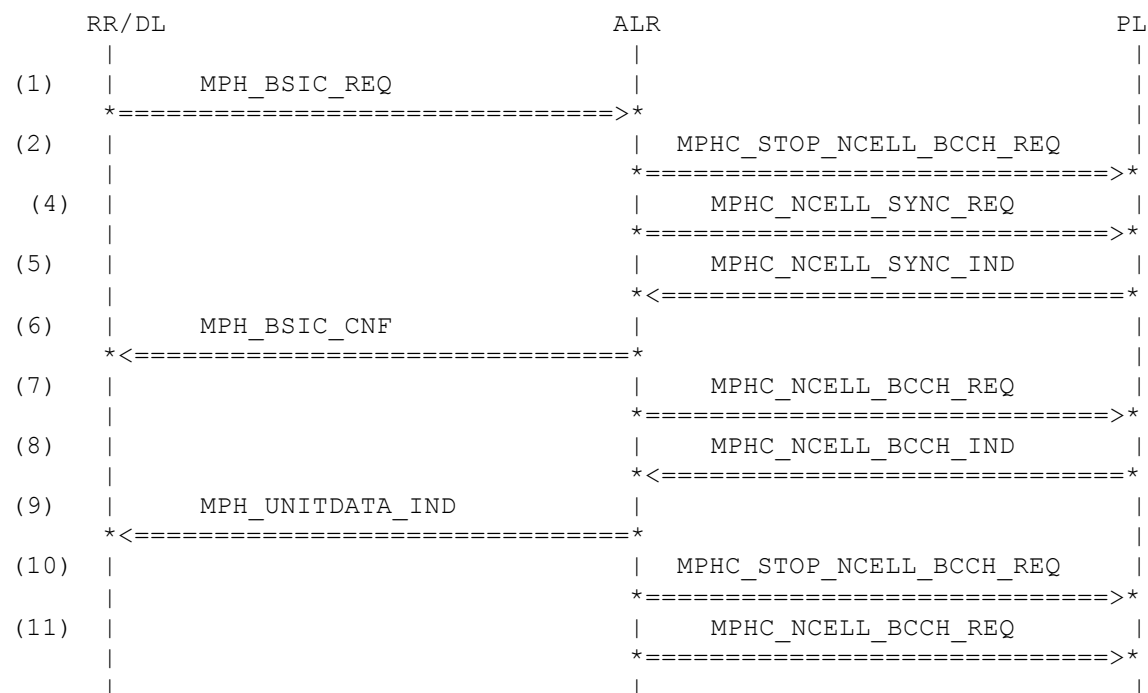
radio_freq ARFCN_124
fn_offset FN_OFFSET_124
time_alignment TIME_ALIGNMT_124
tsc BSIC_1
bcch_blocks_required NCELL_BCCH_SI_2
gprs_prio NOT_USED

History: 24.09.99 MPA Initial

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



Parameterization

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

(1) MPH_BSIC_REQ

arfcn ARFCN_1

(2) MPH_C_STOP_NCELL_BCCH_REQ

radio_freq_array_size STOP_SIZE_1
radio_freq_array STOP_ARRAY_124

(3) MPH_C_NCELL_SYNC_REQ

radio_freq ARFCN_1
fn_offset NOT_USED

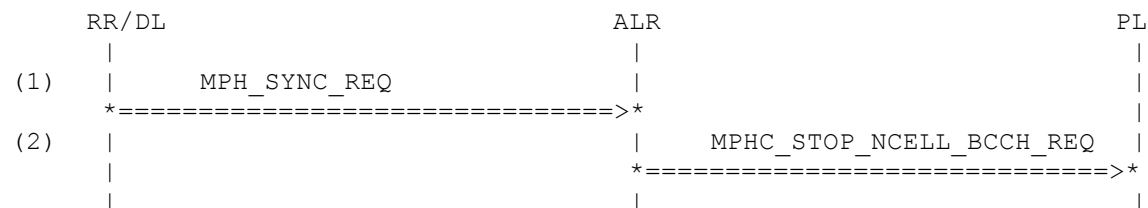
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(4) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_1
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	bsic	BSIC_1
(5) MPH_BSIC_CNF		
	arfcn	ARFCN_1
	bsic	BSIC_1
	cs	CS_NO_ERROR
(6) MPHC_NCELL_BCCH_REQ		
	radio_freq	ARFCN_1
	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

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
(15) MPH_SYNC_REQ	cs	CS_STOP_PLMN_SEARCH
(16) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	STOP_ARRAY_1

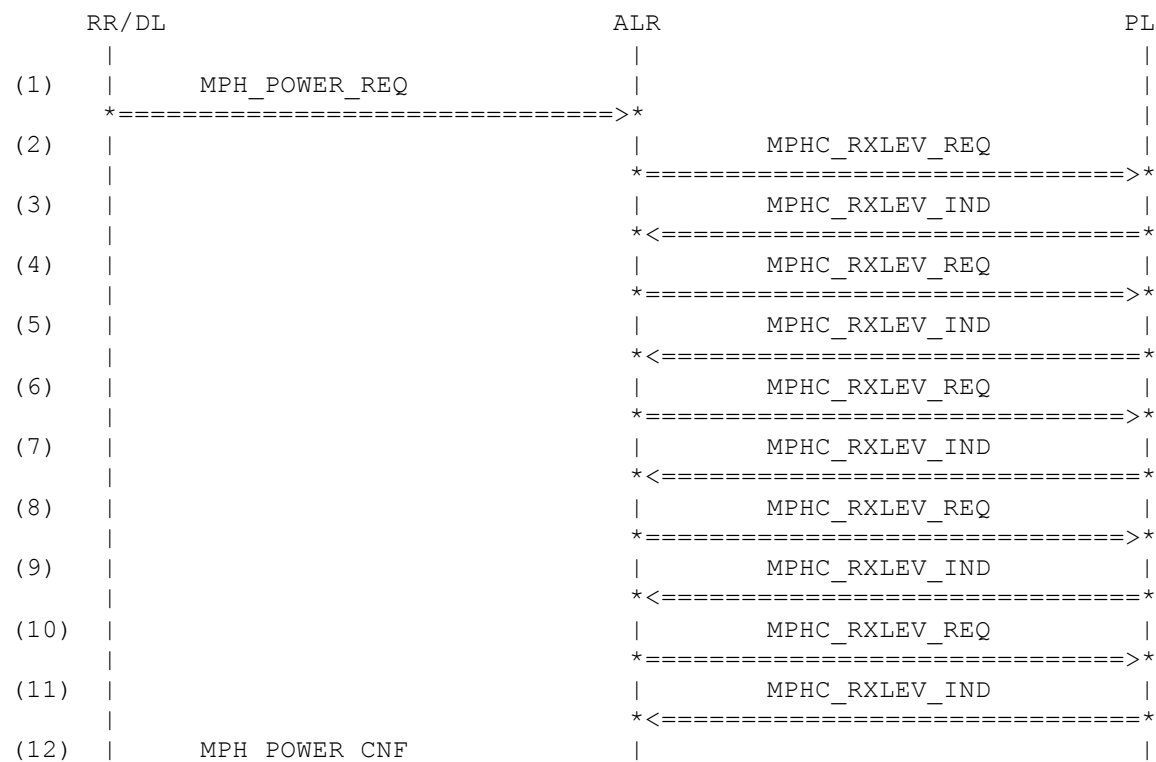
History: 24.09.99 MPA Initial

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			
<u>Primitive</u>	<u>Parameter</u>	<u>Value</u>	
(1) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT NOT_USED	
(2) MPHC_RXLEV_REQ	shared_ptr	NOT_USED	
(3) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800	
(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) MPH_POWER_CNF	num_of_chan arfcn rx_lev	CHANNELS_4 ARFCN_637_580_885_512 RXLEV_637_580_885_512	

History: 22.09.99 MPA Initial

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_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

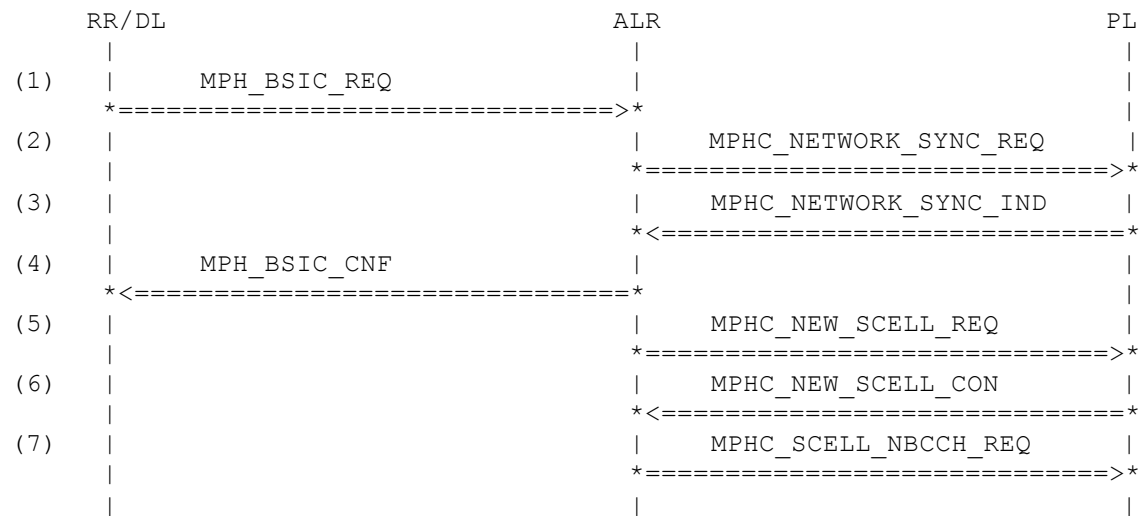
Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT NOT_USED
(2) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(3) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(4) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(5) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(6) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(7) MPHC_RXLEV_IND	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

4.4.3 ALR203: Find BCCH carrier, first channel

Description: The carrier with the highest fieldstrength (channel 637) is selected for synchronizing to frequency correction burst and synchron burst.

Preamble: ALR201



Parametrization

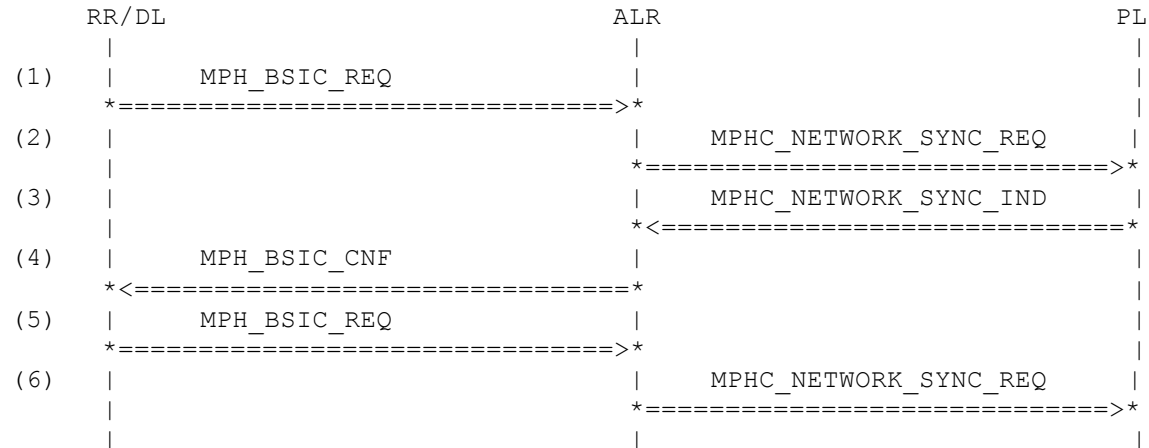
Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_637
(2) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_637
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(3) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_637
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_1
(4) MPH_BSIC_CNF	arfcn	ARFCN_637
	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

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

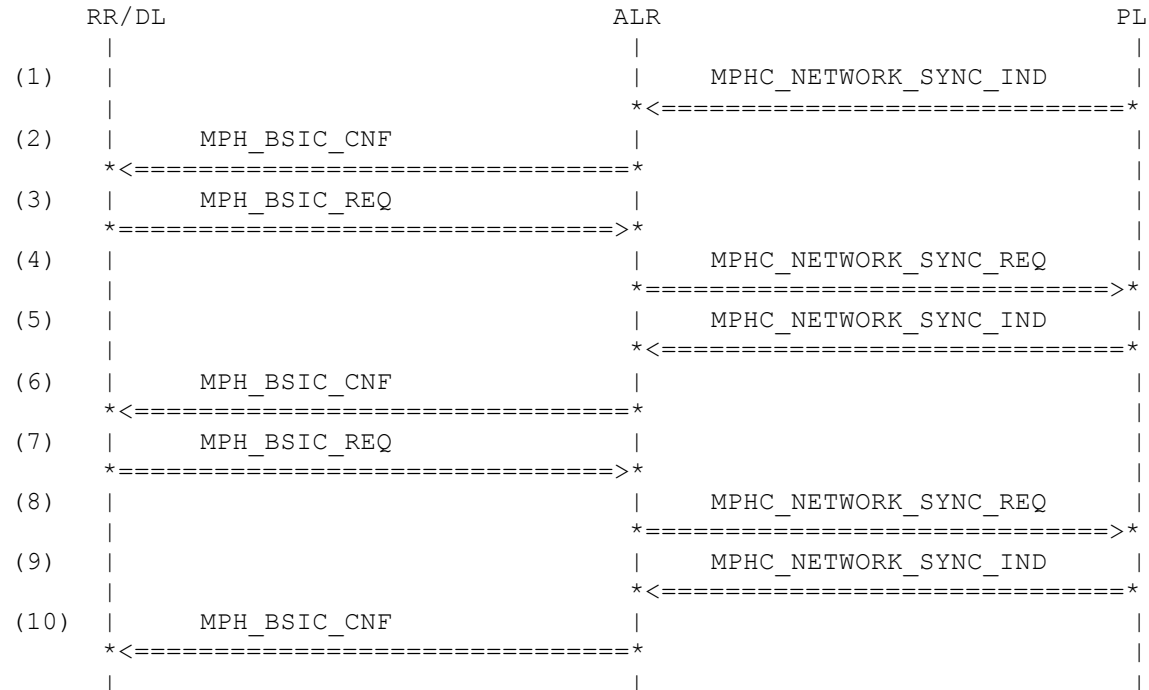
Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_637
(2) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_637
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(3) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_637
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(4) MPH_BSIC_CNF	arfcn	ARFCN_637
	bsic	BSIC_0
	cs	CS_NO_BCCH_AVAIL
(5) MPH_BSIC_REQ	arfcn	ARFCN_580
(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

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



Parametrization

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
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(3) MPH_BSIC_REQ	arfcn	ARFCN_885
(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	TIME_ALIGNMT_0
	bsic	BSIC_0
(6) MPH_BSIC_CNF		
	arfcn	ARFCN_885
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(7) MPH_BSIC_REQ		
	arfcn	ARFCN_512
(8) MPH_NETWORK_SYNC_REQ		
	radio_freq	ARFCN_512
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(9) MPH_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
(10) MPH_BSIC_CNF		
	arfcn	ARFCN_512
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL

History: 22.09.99 MPA Initial

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) MPH_NETWORK_SYNC_IND		
	radio_freq	ARFCN_580
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0

(2) MPH_BSIC_CNF

arfcn	ARFCN_580
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

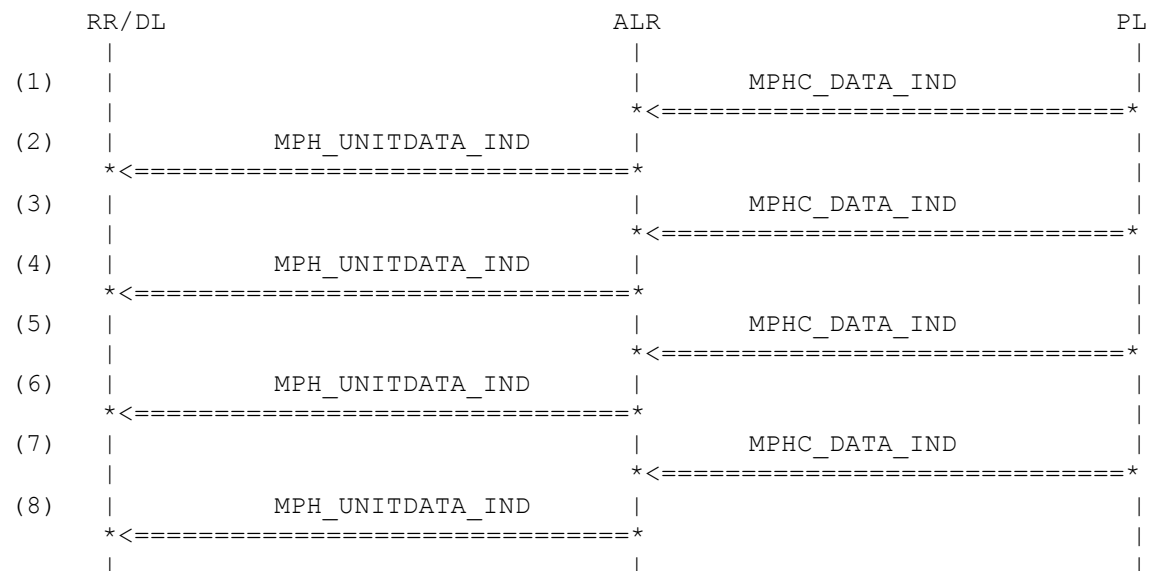
schedule_array_size	SCHED_SIZE_1
schedule_array	FULL_READ

History: 23.09.99 MPA Initial

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 direction pd ti cell_chan_desc rach_ctrl }	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_637 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_637 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_637 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_3 TC_2 NOT_USED FN_OFFSET_0
(6) 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
(7) MPHC_DATA_IND	radio_freq l2_channel error_flag	ARFCN_637 L2_CHANNEL_NBCCH VALID_BLOCK

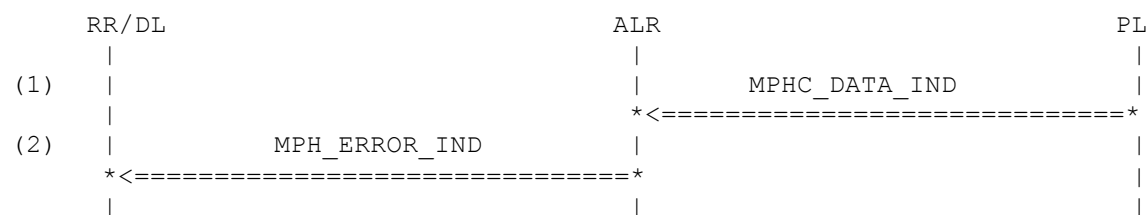
	l2_frame	L2_SYS_INFO_4
	tc	TC_3
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(8) MPH_UNITDATA_IND		
	arfcn	ARFCN_637
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_4
	ti	TI_0
	loc_area_ident	LOC_AREA_IDENT_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	

History: 23.09.99 MPA Initial

4.4.8 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	ARFCN_637
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

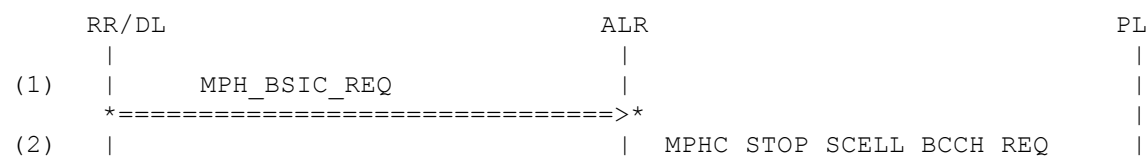
cs	CS_BCCH_READ_ERROR
arfcn	ARFCN_637

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



```

(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_885
(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_885 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_885 SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(5) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_885 BSIC_0 CS_NO_ERROR
(6) MPHC_NEW_SCELL_REQ	radio_freq fn_offset time_alignment tsc	ARFCN_885 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	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

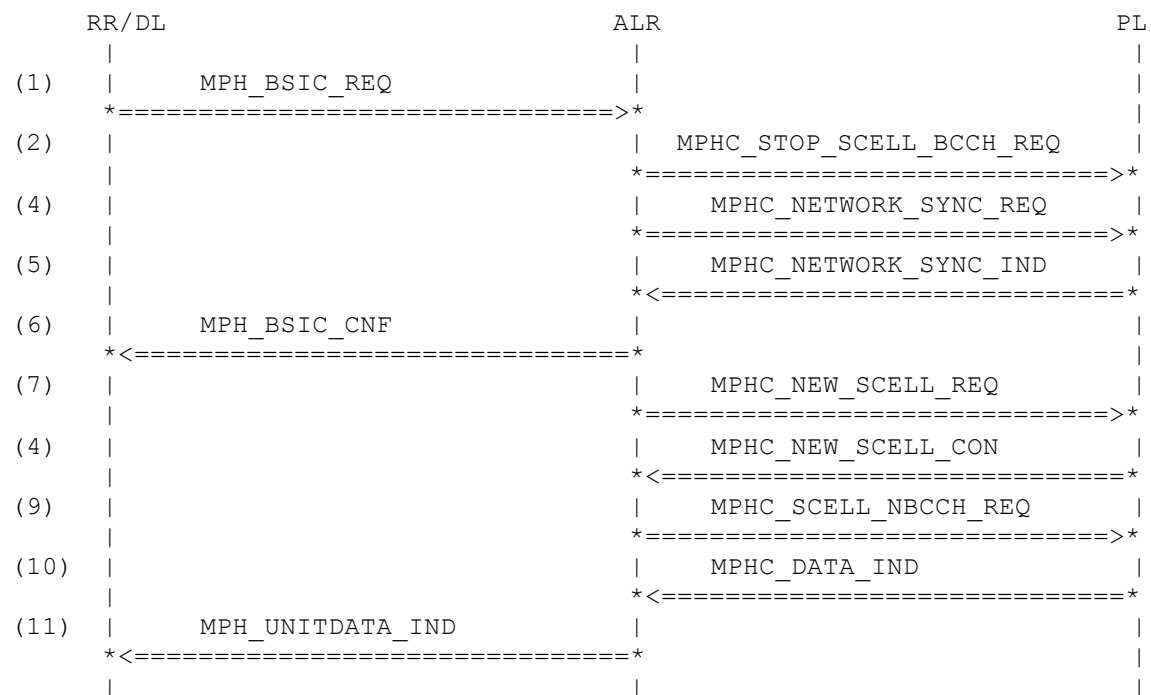
arfcn	ARFCN_885
fn	NOT_USED
sdu	
{	
component	RR
direction	DOWNLINK
pd	D_SYS_INFO_1
ti	TI_0
cell_chan_desc	CELL_CHAN_DESC_1
rach_ctrl	RACH_CTRL_1
}	

History: 23.09.9 MPA Initial

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



Parametrization

Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_512
(2) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED

(3) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_512
	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_512
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(5) MPH_BSIC_CNF	arfcn	ARFCN_512
	bsic	BSIC_0
	cs	CS_NO_ERROR
(6) MPHC_NEW_SCELL_REQ	radio_freq	ARFCN_512
	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_512
	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_512
	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

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
(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_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12

	ncc_permitted	NOT_PRESENT_8BIT	
	reorg_only	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	
<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) 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_512_637_885_FFFF	
	arfcn	EMPTY_NCELL_LIST	
<C>	arfcn	CHLIST_512_637_885_FFFF	
	sync_only	NOT_USED	
(9) MPHC_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

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
(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
	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

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)		MPHC_RXLEV_REQ	
		=====>	
(3)		MPHC_RXLEV_IND	
		<=====	
(4)		MPHC_RXLEV_REQ	
		=====>	
(5)	MPH_POWER_REQ		
	=====>		
(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			
	<u>Primitive</u>	<u>Parameter</u>	<u>Value</u>
(1)	MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT NOT_USED
(2)	MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(3)	MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800
(4)	MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(5)	MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT 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 rx_lev	CHANNELS_4 ARFCN_637_580_885_512 RXLEV_637_580_885_512

History: 23.09.99 MPA Initial

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_RXLEV_REQ	
		=====>	
(6)		MPHC_RXLEV_IND	
		<=====	
(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)	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 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 rx_lev	CHANNELS_4 ARFCN_637_580_885_512 RXLEV_637_580_885_512

History: 23.09.99 MPA Initial

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_NCELL_SYNC_REQ	
	=====>	
(6)	MPHC_STOP_NCELL_BCCH_REQ	
	=====>	
(7)	MPHC_STOP_SCELL_BCCH_REQ	
	=====>	
(8)	MPHC_RXLEV_REQ	
	=====>	

Parametrization

Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT NOT_USED
(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_NCELL_SYNC_REQ	radio_freq_array_size	STOP_SIZE_0
	radio_freq_array	NOT_USED
(6) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_0
	radio_freq_array	NOT_USED
(7) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED

History: 23.09.99 MPA Initial

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_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	PCH_INTERRUPT
	freq_bands	NOT_USED

History:	24.01.00	MPA	Initial
-----------------	-----------------	------------	----------------

Description: RR starts a cell selection. No channel is available.
Preamble: ALR600

	RR/DL	ALR	PLR
(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	PCH_INTERRUPT NOT_USED
(2) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(3) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2_DUAL
(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) 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

```

RR/DL | | | ALR | | | PL
(1) | | | | | | |
      * =====> *
(2) | | | | MPHC_NETWORK_SYNC_REQ |

```

```

(3) | | *=====>*
    | | | MPHC_NETWORK_SYNC_IND |
    | | *<=====*
(4) | MPH_BSIC_CNF | |
    | *<=====* |
(5) | | | MPHC_NEW_SCELL_REQ |
    | | *=====>* |
(6) | | | MPHC_NEW_SCELL_CON |
    | | *<=====* |
(7) | | | MPHC_SCELL_NBCCH_REQ |
    | | *=====>* |
    | | | |

```

Parametrization

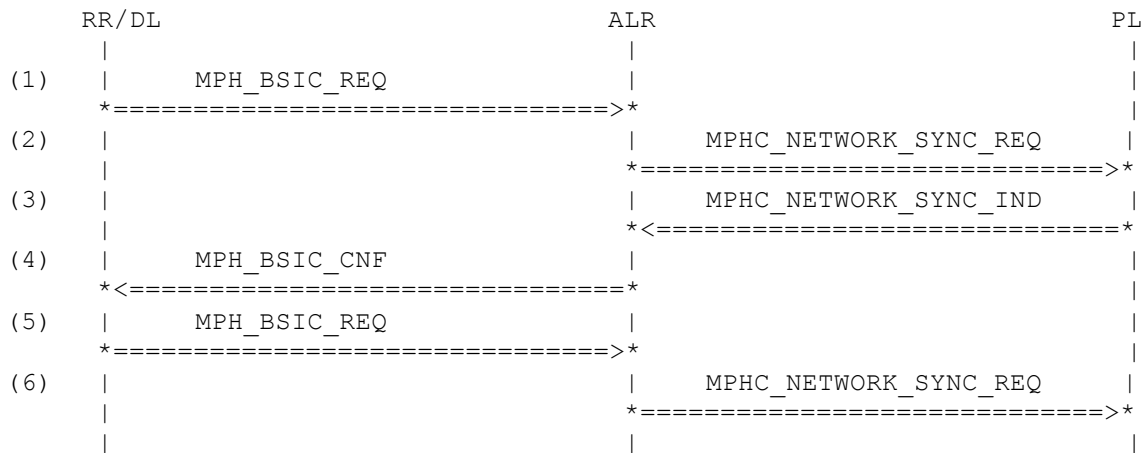
Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_23
(2) MPHC_NETWORK_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity search_mode	ARFCN_23 NOT_USED NOT_USED TV_INVALID_TIMING_INFO SM_WIDE_MODE
(3) MPHC_NETWORK_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_23 SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_1
(4) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_23 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 schedule_array	SCHED_SIZE_1 FULL_READ

History: 24.01.00 MPA Initial

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
(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 NO_SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_1
(4) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_23 NOT_USED CS_NO_BCCH_AVAIL
(5) MPH_BSIC_REQ	arfcn	ARFCN_637
(6) MPHC_NETWORK_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity search_mode	ARFCN_637 NOT_USED NOT_USED TV_INVALID_TIMING_INFO SM_WIDE_MODE

History: 24.01.00 MPA Initial

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

	RR/DL	ALR	PL
(1)		MPHC_NETWORK_SYNC_IND	
		<=====	
(2)	MPH_BSIC_CNF		
	<=====		
(3)	MPH_BSIC_REQ		
	=====>		
(4)		MPHC_NETWORK_SYNC_REQ	
		=====>	
(5)		MPHC_NETWORK_SYNC_IND	
		<=====	
(6)	MPH_BSIC_CNF		
	<=====		
(7)	MPH_BSIC_REQ		
	=====>		
(8)		MPHC_NETWORK_SYNC_REQ	
		=====>	
(9)		MPHC_NETWORK_SYNC_IND	
		<=====	
(10)	MPH_BSIC_CNF		
	<=====		
(11)	MPH_BSIC_REQ		
	=====>		
(12)		MPHC_NETWORK_SYNC_REQ	
		=====>	
(13)		MPHC_NETWORK_SYNC_IND	
		<=====	
(14)	MPH_BSIC_CNF		
	<=====		
(15)	MPH_BSIC_REQ		
	=====>		
(16)		MPHC_NETWORK_SYNC_REQ	
		=====>	
(17)		MPHC_NETWORK_SYNC_IND	
		<=====	
(18)	MPH_BSIC_CNF		
	<=====		
(19)	MPH_BSIC_REQ		
	=====>		
(20)		MPHC_NETWORK_SYNC_REQ	
		=====>	
(21)		MPHC_NETWORK_SYNC_IND	
		<=====	
(21)	MPH_BSIC_CNF		
	<=====		

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

	bsic cs	NOT_USED CS_NO_BCCH_AVAIL
(3) MPH_BSIC_REQ	arfcn	ARFCN_14
(4) 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
(5) MPHC_NETWORK_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_14 NO_SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(6) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_14 NOT_USED CS_NO_BCCH_AVAIL
(7) MPH_BSIC_REQ	arfcn	ARFCN_580
(8) MPHC_NETWORK_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity search_mode	ARFCN_580 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_580 NO_SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(10) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_580 NOT_USED CS_NO_BCCH_AVAIL
(11) MPH_BSIC_REQ	arfcn	ARFCN_124
(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	ARFCN_124 NO_SB_FOUND

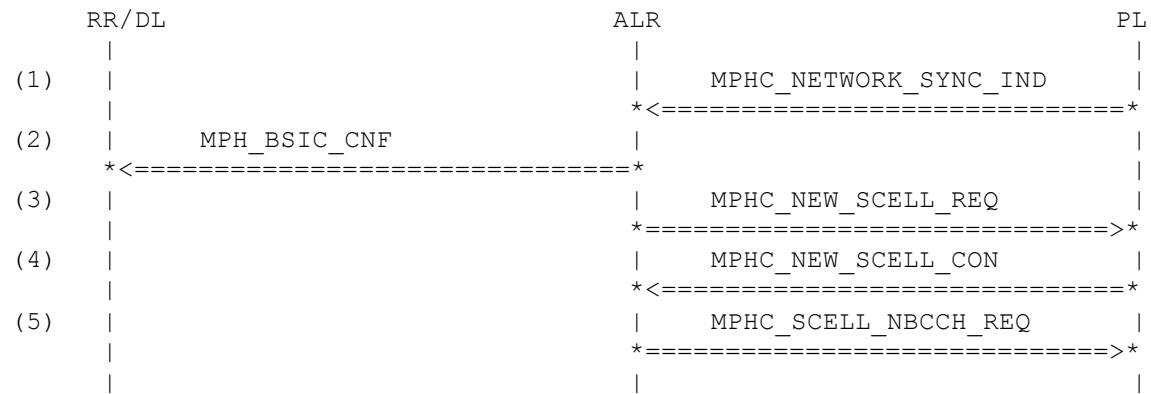
	fn_offset time_alignment bsic	FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(14) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_124 NOT_USED CS_NO_BCCH_AVAIL
(15) MPH_BSIC_REQ	arfcn	ARFCN_885
(16) MPHC_NETWORK_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity search_mode	ARFCN_885 NOT_USED NOT_USED TV_INVALID_TIMING_INFO 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 NOT_USED CS_NO_BCCH_AVAIL
(19) MPH_BSIC_REQ	arfcn	ARFCN_512
(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 sb_flag fn_offset time_alignment bsic	ARFCN_512 NO_SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(22) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_512 NOT_USED CS_NO_BCCH_AVAIL

History: 24.01.00 MPA Initial

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

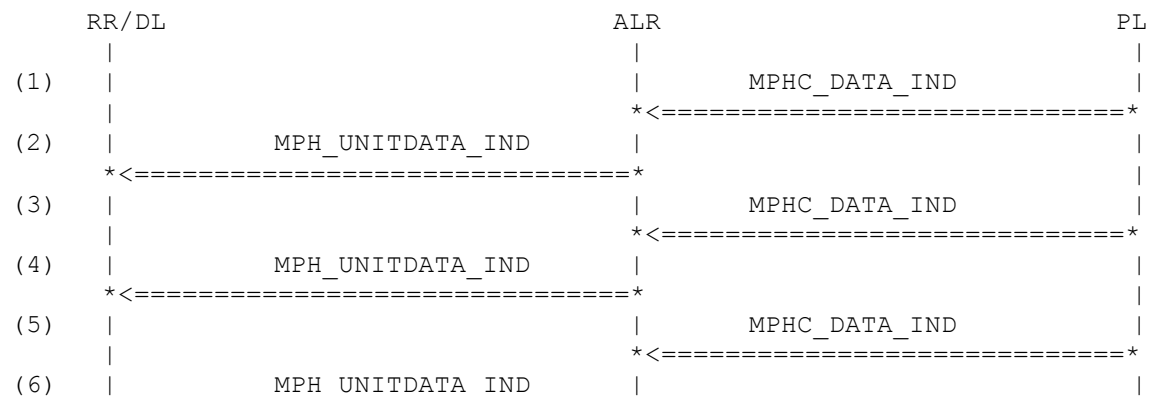
Primitive	Parameter	Value
(1) MPHC_NETWORK_SYNC_IND		
	radio_freq	ARFCN_637
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(2) MPH_BSIC_CNF		
	arfcn	ARFCN_637
	bsic	BSIC_0
	cs	CS_NO_ERROR
(3) MPHC_NEW_SCELL_REQ		
	radio_freq	ARFCN_637
	fn_offset	FN_OFFSET_0
	time_alignment	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

4.5.7 ALR607: Read BCCH data

Description: The BCCH data blocks are read for the channel 23.

Preamble: ALR603



```

(7)  * <=====
      |                                     | MPHC_DATA_IND
      |                                     * <=====
(8)  |                                     |
      | MPH_UNITDATA_IND                 |
      * <=====
      |                                     |

```

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

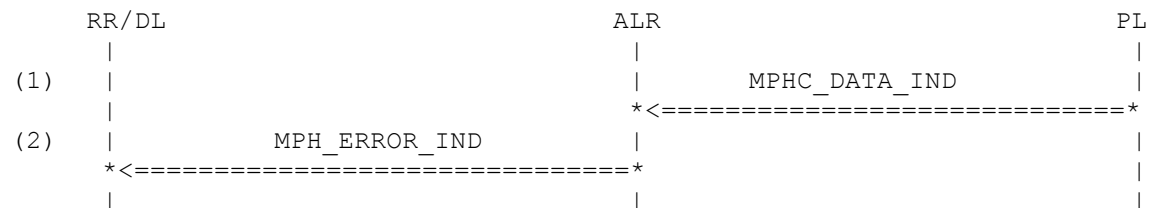
	tc	TC_2
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(6) MPH_UNITDATA_IND		
	arfcn	ARFCN_23
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	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

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	
	=====>	
(8)	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_14
(2) MPH_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPH_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
(4) 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
(5) MPH_BSIC_CNF		
	arfcn	ARFCN_14
	bsic	BSIC_0
	cs	CS_NO_ERROR
(6) MPHC_NEW_SCELL_REQ		
	radio_freq	ARFCN_14
	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_14
	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_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

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)		MPH_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
(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_580 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_580 SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(5) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_580 BSIC_0 CS_NO_ERROR
(6) MPHC_NEW_SCELL_REQ	radio_freq fn_offset time_alignment tsc	ARFCN_580 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	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

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

	RR/DL	ALR	PL
(1)	MPH_BSIC_REQ		
	=====>		

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> ..

	RR/DL	ALR	PL
(1)	MPH_CLASSMARK_REQ		
	=====>		
(2)	MPH_IDLE_REQ		
	=====>		
(3)		MPH_STOP_SCELL_BCCH_REQ	
		=====>	
(4)		MPH_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_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_BLKES_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	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_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_1
<A>	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

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_BLKES_RES_3

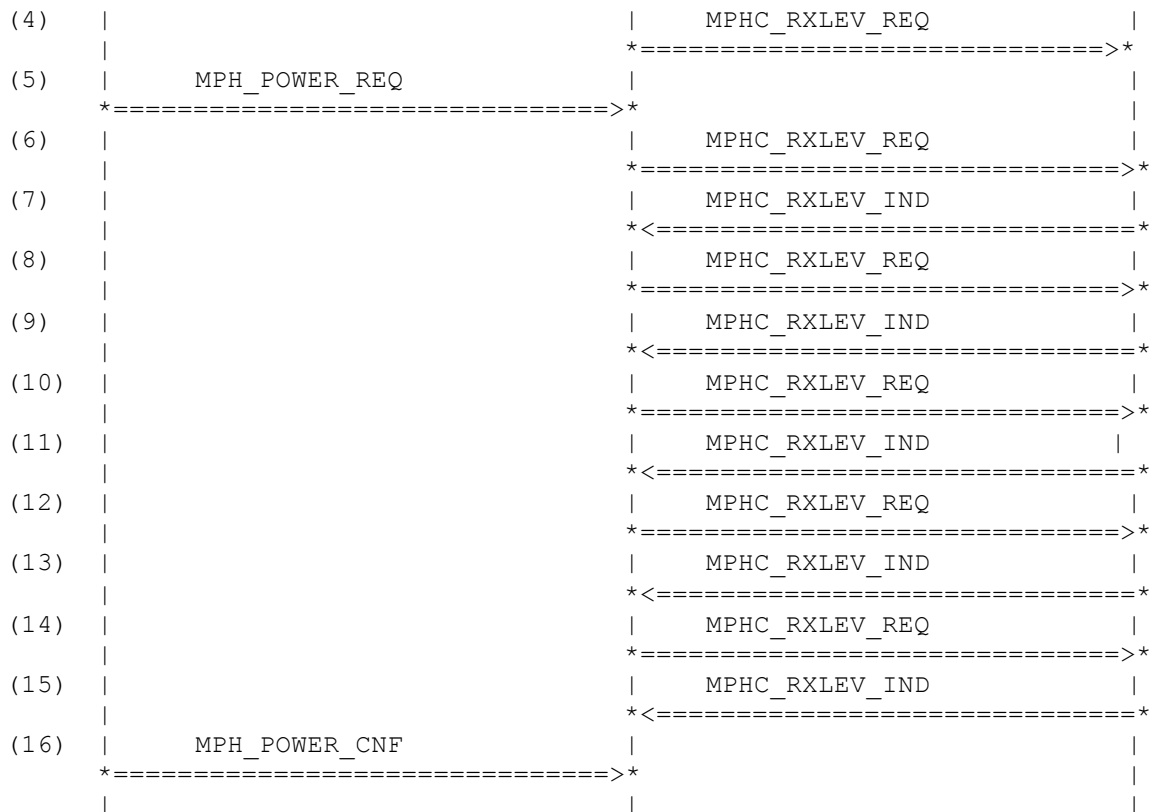
		bs_pa_mfrms	BS_PA_MFRMS_6
		power	POWER_12
		ncc_permitted	NOT_PRESENT_8BIT
		reorg_only	NOT_USED
(3) MPHC_STOP_SCELL_BCCH_REQ			
		param	NOT_USED
(4) MPHC_START_CCCH_REQ			
		bs_pa_mfrms	BS_PA_MFRMS_8
		bs_ag_blks_res	BS_AG_BLKS_RES_3
		bcch_combined	COMB_CCCH_NOT_COMB
		ccch_group	CCCH_GROUP_0
		page_group	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_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

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_RXLEV_REQ	
	*=====>	
(3)	MPHC_RXLEV_IND	
	*<=====	



Parametrization

Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT NOT_USED
(2) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(3) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(4) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(5) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT 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 RXLEV_DUAL

History: 24.01.00 MPA Initial

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_RXLEV_REQ	
=====>		
(6)	MPHC_RXLEV_IND	
<=====		
(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) 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 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 RXLEV_DUAL

History: 24.01.00 MPA Initial

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

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_NCELL_SYNC_REQ	
	=====>	

Parametrization

History: 24.01.00 MPA Initial

4.6.1 ALR020: Initiation with Paging Reorganisation

Preamble: ALR007
Variants: <A>..****



**TEXAS
INSTRUMENTS**

Parametrization

Primitive	Parameter	Value
(1) MPH_IDLE_REQ		
<A> 	mod	MODE_CELL_SELECTION
	arfcn	ARFCN_23
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_COMB
	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
(2) MPHC_STOP_SCELL_BCCH_REQ		
	param	NOT_USED
(3) MPHC_START_CCCH_REQ		
<A> 	bs_pa_mfrms	BS_PA_MFRMS_7
	bs_ag_blk_res	BS_AG_BLKS_RES_2
	bcch_combined	COMB_CCCH_COMB
	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
	19.07.01	MSB
		Initial
		use full sc bcch read
		MPHC_SCELL_NBCCH_REQ in-
		stead of periodical

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>

RR/DL	ALR	PL
(1)	MPHC_DATA_IND	
	*<=====	*
MUTE (3000)		

Parametrization

Primitive	Parameter	Value
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(1) MPHC_DATA_IND

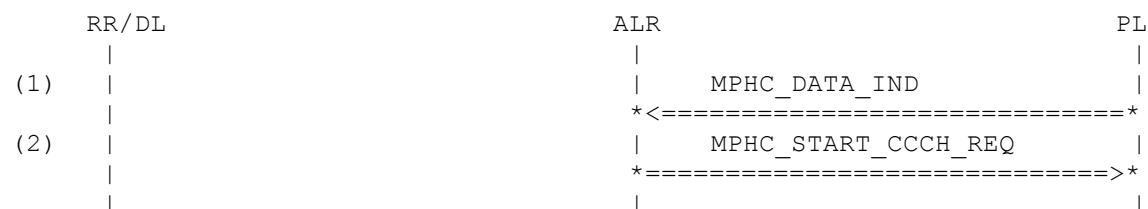
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
<A>	l2_frame	L2_PAGING_REQ_1_EXT
	l2_frame	L2_PAGING_REQ_1_REO
<C>	l2_frame	L2_PAGING_REQ_1_SAB
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

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
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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_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

History: 07.10.99 MPA Initial

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





Parametrization

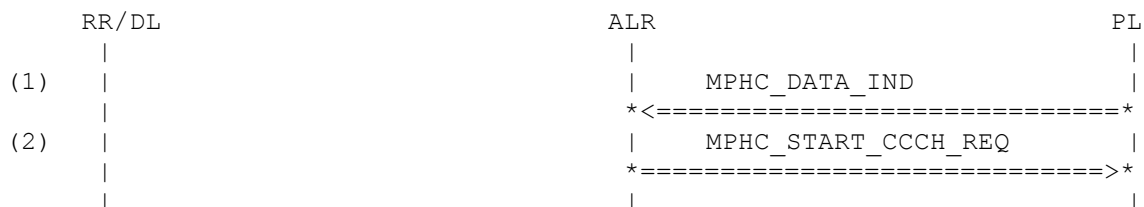
Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAGING_REQ_1_REO
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(2) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_2
	bs_ag_blks_res	BS_AG_BLKS_RES_7
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_0
	page_block_index	PBI_0
	page_mode	PGM_REORG

History: 07.10.99 MPA Initial

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



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_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_NORMAL

History: 07.10.99 MPA Initial

4.6.6 ALR026: Page Mode Change, Normal Paging

Description: The idle mode is configured with Normal Paging. The messages contain the following page mode:
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 be configured the second time, because it's a continuous process in ALR(MPHC).

Preamble: ALR025
Variants: <A>...

RR/DL	ALR	PL
(1)		
	MPHC_DATA_IND	
	<=====	
(2)		
	MPHC_START_CCCH_REQ	
	=====>	
(3)		
	MPHC_DATA_IND	
	<=====	
MUTE (3000)		

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_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_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

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_DATA_IND	
(4)	MPHC_START_CCCH_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_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

(4) MPHC_START_CCCH_REQ

bs_pa_mfrms	BS_PA_MFRMS_2
bs_ag_blks_res	BS_AG_BLK_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

History:	07.10.99	MPA	Initial
	20.06.01	MSB	Normal paging will be configure with
025			

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_DATA_IND	
	<=====	
(4)	MPHC_START_CCCH_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

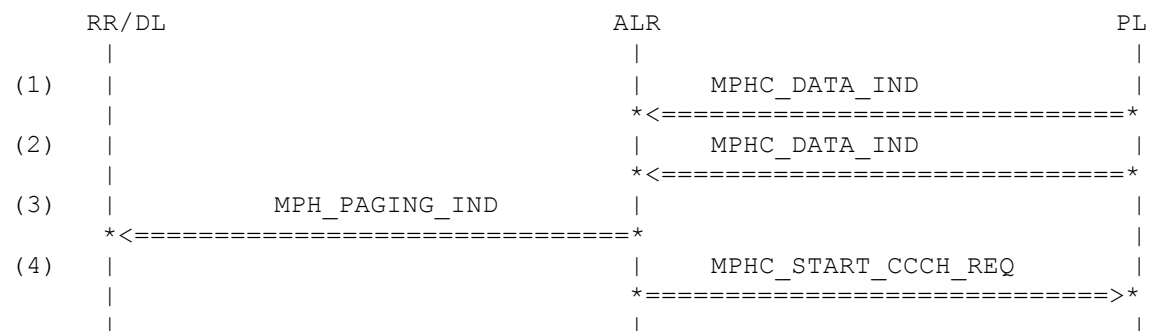
	ccch_lev fn	NOT_USED FN_OFFSET_0
(2) MPHC_START_CCCH_REQ	bs_pa_mfrms bs_ag_blks_res bcch_combined ccch_group page_group page_block_index page_mode	BS_PA_MFRMS_7 BS_AG_BLKES_RES_2 COMB_CCCH_COMB CCCH_GROUP_2 PG_23 PBI_0 PGM_EXTENDED
(3) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_PCH VALID_BLOCK L2_PAGING_REQ_1 TC_0 NOT_USED FN_OFFSET_0
(4) 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_7 BS_AG_BLKES_RES_2 COMB_CCCH_COMB CCCH_GROUP_2 PG_23 PBI_0 PGM_NORMAL

History:	07.10.99	MPA	Initial
	20.06.01	MSB	reconfiguration to normal paging

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 l2_channel	ARFCN_23 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

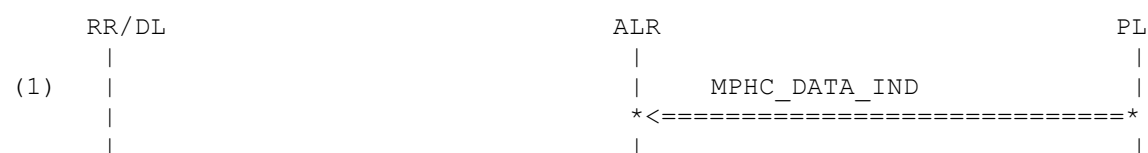
History: 07.10.99 MPA Initial

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

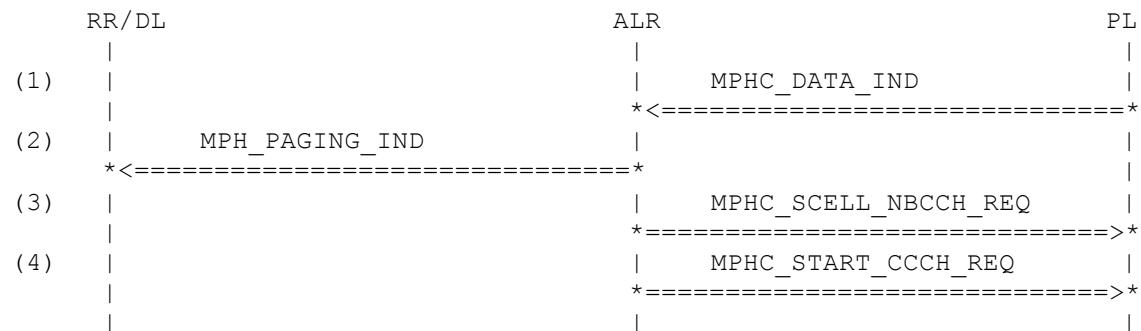
Variant F: IMSI mobile identity 2, SDCCH channel needed

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
(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
(1) MPHC_SCELL_NBCCH_REQ		
	schedule_array_size	
PERIODIC_SCELL_BCCH_ARRAY_SIZE	schedule_array	
PERIODIC_SCELL_BCCH_ARRAY		
(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

History: 08.10.99 MPA Initial

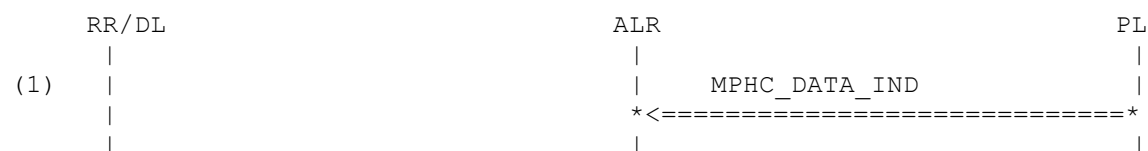
4.7.3 ALR072: Paging Req 1, Not for MS

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

Variant F: Short TMSI mobile identity 2, TCH/F needed, 4 bytes length from the network

(4) MPHC_SELL_NBCCH_REQ

PERIODIC_SELL_BCCH_ARRAY_SIZE schedule_array_size
PERIODIC_SELL_BCCH_ARRAY schedule_array

(5) MPHC_START_CCCH_REQ

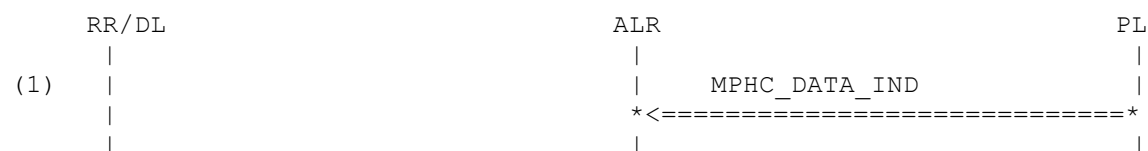
bs_pa_mfrms BS_PA_MFRMS_8
bs_ag_blks_res BS_AG_BLKES_RES_3
bcch_combined COMB_CCCH_COMB
ccch_group CCCH_GROUP_0
page_group PG_20
page_block_index PBI_0
page_mode PGM_NORMAL

History: 08.10.99 MPA Initial

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)

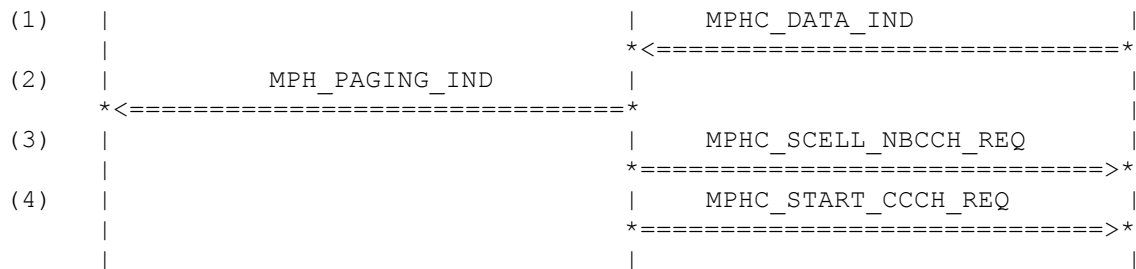
Description: The MS is in idle mode. It receives a paging message corresponding to the actual TMSI in the information elements mobile identity 1 or 2. A paging indication is forwarded to RR.

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

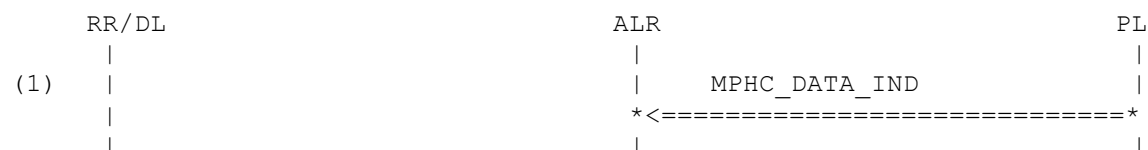
Primitive	Parameter	Value
(1) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
<A>	l2_frame	L2_PAG_2_T1_A
	l2_frame	L2_PAG_2_T1_S
<C>	l2_frame	L2_PAG_2_T1_T
<D>	l2_frame	L2_PAG_2_T1_D
<E>	l2_frame	L2_PAG_2_T2_A
<F>	l2_frame	L2_PAG_2_T2_S
<G>	l2_frame	L2_PAG_2_T2_T
<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_SCELL_NBCCH_REQ		
	schedule_array_size	
PERIODIC_SCELL_BCCH_ARRAY_SIZE		
	schedule_array	
PERIODIC_SCELL_BCCH_ARRAY		
(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

History: 08.10.99 MPA Initial

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,

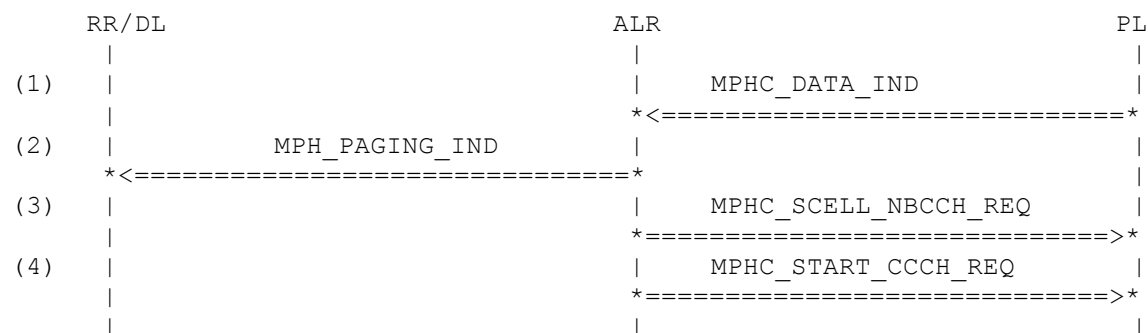
Variant H: TMSI mobile identity 3, TCH/F needed

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

<A>	error_flag	VALID_BLOCK
	l2_frame	L2_PAG_2_I3_A
<C>	l2_frame	L2_PAG_2_I3_S
<D>	l2_frame	L2_PAG_2_I3_T
<E>	l2_frame	L2_PAG_2_I3_D
<F>	l2_frame	L2_PAG_2_I3_N
<G>	l2_frame	L2_PAG_2_T3_A
<H>	l2_frame	L2_PAG_2_T3_S
<I>	l2_frame	L2_PAG_2_T3_T
<J>	l2_frame	L2_PAG_2_T3_D
	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_SCELL_NBCCH_REQ

	schedule_array_size
PERIODIC_SCELL_BCCH_ARRAY_SIZE	
	schedule_array
PERIODIC_SCELL_BCCH_ARRAY	

(4) MPHC_START_CCCH_REQ

bs_pa_mfrms	BS_PA_MFRMS_8
bs_ag_blks_res	BS_AG_BLKRES_3
bcch_combined	COMB_CCCH_COMB
ccch_group	CCCH_GROUP_0
page_group	PG_20
page_block_index	PBI_0
page_mode	PGM_NORMAL

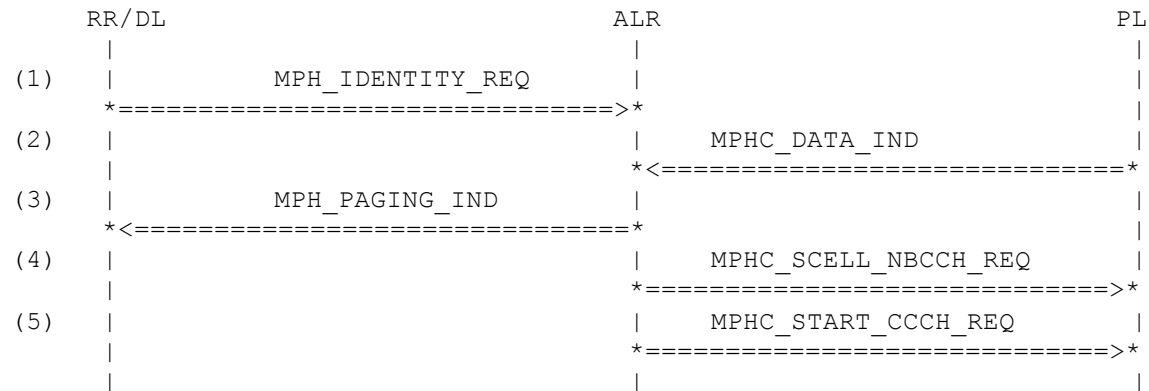
History: 08.10.99 MPA Initial

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>**



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_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_SCELL_NBCCH_REQ	schedule_array_size	PERIODIC_SCELL_BCCH_ARRAY_SIZE
	schedule_array	PERIODIC_SCELL_BCCH_ARRAY
(5) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_8

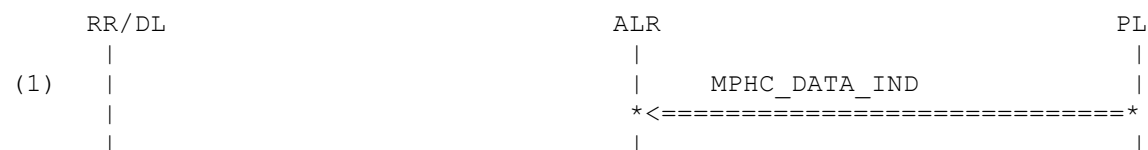
bs_ag_blks_res	BS_AG_BLKES_RES_3
bcch_combined	COMB_CCCH_COMB
ccch_group	CCCH_GROUP_0
page_group	PG_20
page_block_index	PBI_0
page_mode	PGM_NORMAL

History: 08.10.99 MPA Initial

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



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

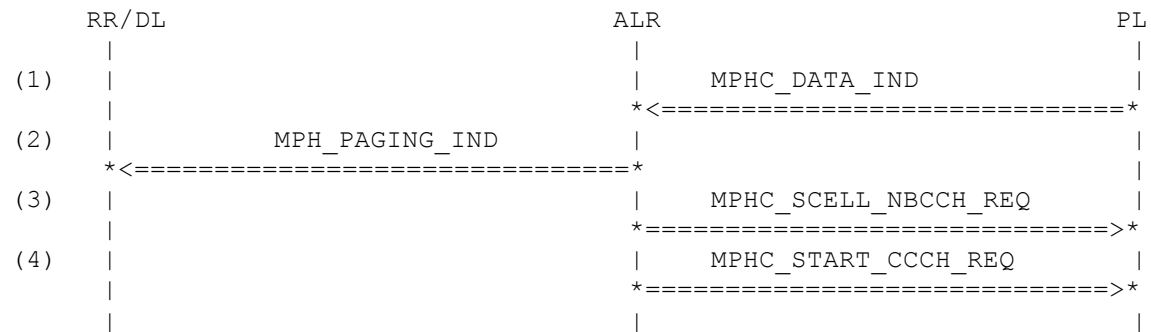
Variant P: TMSI mobile identity 4, TCH/F needed

Variant Q: TMSI mobile identity 4, Dual Rate needed

Variant R: TMSI mobile identity 4, no channel indication

Preamble: ALR013

Variants: <A>..**<R>**



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		
	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
<I>	channel_needed	channel_needed
CN_ANY_CHAN		
<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_SCELL_NBCCH_REQ

PERIODIC_SCELL_BCCH_ARRAY_SIZE	schedule_array_size
PERIODIC_SCELL_BCCH_ARRAY	schedule_array

(4) MPHC_START_CCCH_REQ

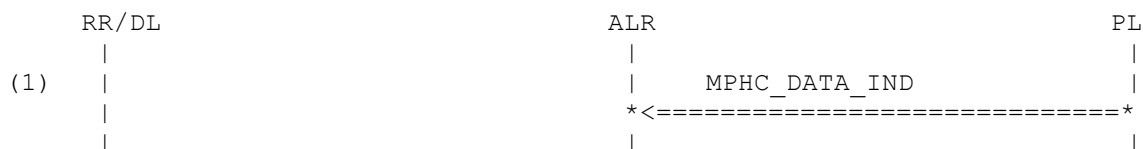
bs_pa_mfrms	BS_PA_MFRMS_8
bs_ag_blks_res	BS_AG_BLK_RES_3
bcch_combined	COMB_CCCH_COMB
ccch_group	CCCH_GROUP_0
page_group	PG_20
page_block_index	PBI_0
page_mode	PGM_NORMAL

History: 08.10.99 MPA Initial

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

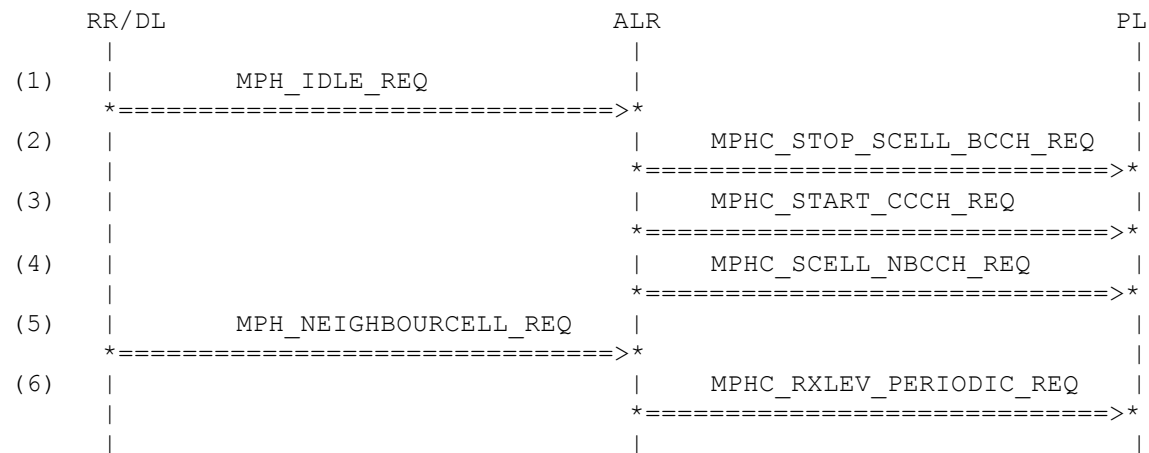
4.8 Measurement Reporting

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>



Parametrization

Primitive	Parameter	Value
(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_BLK_RES_2
	bs_pa_mfrms	BS_PA_MFRMS_0
	bs_pa_mfrms	BS_PA_MFRMS_1
	bs_pa_mfrms	BS_PA_MFRMS_2
	bs_pa_mfrms	BS_PA_MFRMS_3
	bs_pa_mfrms	BS_PA_MFRMS_4
	bs_pa_mfrms	BS_PA_MFRMS_5
	bs_pa_mfrms	BS_PA_MFRMS_6
	bs_pa_mfrms	BS_PA_MFRMS_7
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
(2) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_2
	bs_pa_mfrms	BS_PA_MFRMS_3
	bs_pa_mfrms	BS_PA_MFRMS_4
	bs_pa_mfrms	BS_PA_MFRMS_5
	bs_pa_mfrms	BS_PA_MFRMS_6
	bs_pa_mfrms	BS_PA_MFRMS_7
	bs_pa_mfrms	BS_PA_MFRMS_8
	bs_pa_mfrms	BS_PA_MFRMS_9
	bs_ag_blk_res	BS_AG_BLK_RES_2
	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

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	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) MPHC_RXLEV_PERIODIC_IND	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	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0

	s_rxlev ba_id	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	NCELL_RESULT_NO_CONTENT CHANNELS_0

	s_rxlev ba_id	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) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1	
(21) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1	
(22) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1	
(23) 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_102 NOT_USED NOT_USED	
History:	08.10.99 08.06.01 07.02.02	MPA MSB LG	Initial fn_offset in (12) corrected 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 multiframes.

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	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 ba_id	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	NCELL_RESULT_NO_CONTENT CHANNELS_0

	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(13) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(14) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	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	
		<=====	

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(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) | | MPHC_RXLEV_PERIODIC_IND |
    | | *<=====*
(12) | | MPHC_RXLEV_PERIODIC_IND |
    | | *<=====*
(13) | MPH_MEASUREMENT_IND |
    | *<=====*
    | |

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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) MPHC_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) 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) 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	NCELL_RESULT_NO_CONTENT CHANNELS_0

	s_rxlev ba_id	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 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_306 NOT_USED NOT_USED	
History:	08.10.99 08.06.01 07.02.02	MPA MSB LG	Initial fn_offset in (6) corrected 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	

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	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED

	dtx	NOT_USED	
	otd	NOT_USED	
	valid	VALID_REPORT	
	fn_offset	FN_OFFSET_1071	
	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) 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 | |
    | *<=====
    | |

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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_816
	ncells	NOT_USED
	gprs_sync	NOT_USED
(7) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0

		s_rxlev ba_id	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_408 NOT_USED NOT_USED
History:	08.10.99 08.06.01 07.02.02	MPA MSB LG	Initial fn_offset in (6) corrected 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 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 459 TDMA frames which is equal to nine multiframes.

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
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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_918 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_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

4.9 BCCH Reading

4.9.1 ALR039: BCCH Reading, BS_PA_MFRMS = 5

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.

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	
		<=====	


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(19) |                                     | MPH_C_RXLEV_PERIODIC_IND |
      |                                     | *<=====*              |
(20) | MPH_MEASUREMENT_IND               |                             |
      | *<=====*                      |                             |
(21) |                                     | MPH_C_DATA_IND           |
      |                                     | *<=====*              |
(22) |                                     | MPH_C_DATA_IND           |
      |                                     | *<=====*              |
(23) |                                     | MPH_C_DATA_IND           |
      |                                     | *<=====*              |
(24) |                                     | MPH_C_DATA_IND           |
      |                                     | *<=====*              |
(25) |                                     | MPH_C_DATA_IND           |
      |                                     | *<=====*              |
(26) |                                     | MPH_C_DATA_IND           |
      |                                     | *<=====*              |
(27) |                                     | MPH_C_DATA_IND           |
      |                                     | *<=====*              |
(28) |                                     | MPH_C_DATA_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_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

(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	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

(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) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(18) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	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) 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

(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
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	l2_channel error_flag l2_frame tc ccch_lev fn	L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_2 TC_1 NOT_USED FN_OFFSET_0
(23) 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_2 NOT_USED FN_OFFSET_0
(24) 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_4 TC_3 NOT_USED FN_OFFSET_0
(25) 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_4 NOT_USED FN_OFFSET_0
(26) 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_5 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	

Parametrization

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_NO_CONTENT CHANNELS_0

	s_rxlev ba_id	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) 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
(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) 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	NCELL_RESULT_NO_CONTENT CHANNELS_0

	s_rxlev ba_id	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 tc ccch_lev fn	ARFCN_23 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_1 TC_0 NOT_USED FN_OFFSET_0
(15) 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
(16) 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_2 NOT_USED 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 multiframes 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	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) 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

(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 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
(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_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
(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 |
      | | | *<=====
      | | |

```

Parameterization

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) 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

(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	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

(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) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(18) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_NO_CONTENT
nbr_of_carriers	CHANNELS_0
s_rxlev	RXLEV_56
ba_id	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) 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

(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 error_flag l2_frame tc ccch_lev fn	L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_2 TC_1 NOT_USED FN_OFFSET_0
(23) 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_NEW TC_0 NOT_USED FN_OFFSET_0
(24) 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_NEW RACH_CTRL_1
(25) 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_4 TC_3 NOT_USED FN_OFFSET_0
(26) 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_4 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 {	ARFCN_23 NOT_USED

component	RR
direction	DOWNLINK
pd	D_SYS_INFO_1
ti	TI_0
cell_chan_desc	CELL_CHAN_DESC_1
rach_ctrl	RACH_CTRL_1
}	

(29) 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

(30) 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

4.10 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_NCELL_SYNC_REQ	
	=====>	
(4)	MPHC_STOP_NCELL_BCCH_REQ	
	=====>	
(5)	MPHC_STOP_SCELL_BCCH_REQ	
	=====>	
(6)	MPHC_RA_REQ	
	=====>	
(7)	MPHC_RA_CON	
	<=====	
(8)		
MPH_RANDOM_ACCESS_CNF		
<=====		
(9)	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_NCELL_SYNC_REQ	radio_freq_array_size	STOP_SIZE_0	
	radio_freq_array	STOP_ARRAY_EMPTY	
(4) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_0	
	radio_freq_array	STOP_ARRAY_EMPTY	
(5) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED	
(6) MPHC_RA_REQ	txpwr	POWER_12	
	rand	RAND_BURST_1	
	channel_request	CHANNEL_REQUEST_1	
	powerclass_gsm	POWER_CLASS_5	
	powerclass_dcs	NOT_USED	
(7) MPHC_RA_CON	fn	FN_BURST_1	
	channel_request	CHANNEL_REQUEST_1	
(8) MPH_RANDOM_ACCESS_CNF	frame_no	T123_BURST_1	
(9) MPHC_RA_REQ	txpwr	POWER_12	
	rand	RAND_BURST_2	
	channel_request	CHANNEL_REQUEST_2	
	powerclass_gsm	POWER_CLASS_5	
	powerclass_dcs	NOT_USED	
History:	10.11.99	LE	Initial
	07.02.02	LG	removed MPHC_START_CCCH_REQ (ALR-FIX-4650)

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 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
(2) 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
(3) 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
(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	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
(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 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
(8) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(9) MPHC_STOP_CCCH_REQ	param	NOT_USED
(10) 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
(11) MPHC_IMMED_ASSIGN_CON	param	NOT_USED
(12) MPH_DEDICATED_CNF	dedi_res	DEDI_RES_OK
History:	10.11.99 26-Feb-02	LE Initial OT Adaptations for AMR integra- tion

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		
<u>Primitive</u>	<u>Parameter</u>	<u>Value</u>
(1) MPH_C_RA_CON	fn channel_request	FN_BURST_1 CHANNEL_REQUEST_1
(2) MPH_RANDOM_ACCESS_CNF	frame_no	T123_BURST_1
(3) MPH_IDLE_REQ	mod arfcn ext_bcch comb_ccch tn dlt pg bs_ag_blocks_res bs_pa_mfrms power ncc_permitted reorg_only	NOT_USED ARFCN_23 NOT_USED COMB_CCCH_NOT_COMB TN_0 DLT_10 PG_20 BS_AG_BLK_RES_3 BS_PA_MFRMS_6 POWER_12 NOT_PRESENT_8BIT NOT_USED
(4) MPH_STOP_RA_REQ	param	NOT_USED
(5) MPH_START_CCCH_REQ	bs_pa_mfrms bs_ag_blk_res bcch_combined ccch_group page_group page_block_index page_mode	BS_PA_MFRMS_8 BS_AG_BLK_RES_3 COMB_CCCH_NOT_COMB CCCH_GROUP_0 PG_20 PBI_2 PGM_REORG
(6) MPH_SCELL_NBCCH_REQ	schedule_array_size schedule_array	SCHED_SIZE_1 NOT_USED
History:	10.11.99	LE Initial

4.11 Handover & Assignment

4.11.1 ALR150: Non-synchronized Handover

Description: A non-synchronized handover for the mobile station is configured without starting time.
Preamble: ALR056

	RR/DL	ALR	PL
(1)	MPH_DEDICATED_REQ		
	=====>		
(2)		MPH_ASYNC_HO_REQ	
		=====>	

Parametrization

Primitive	Parameter	Value
(1) MPH_DEDICATED_REQ	mod	MODE_ASYNC_HANOVER
	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
(2) MPHC_ASYNC_HO_REQ	amr_conf	NOT_USED
	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 integra-
tion

4.11.2 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)	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_RA_REQ	
	=====>	
(7)	MPHC_RA_CON	
	<=====	
(8) MPH_RANDOM_ACCESS_CNF		
<=====		
(9)	MPHC_RA_REQ	
	=====>	
(10)	MPHC_DATA_IND	
	<=====	
(11) MPH_UNITDATA_IND		
<=====		
(12) MPH_DEDICATED_REQ		
=====>		
(13)	MPHC_STOP_SCELL_BCCH_REQ	
	=====>	
(14)	MPHC_STOP_CCCH_REQ	
	=====>	


```

(15) | | MPHC_STOP_RA_REQ |
| | *=====>*
(16) | | MPHC_IMMED_ASSIGN_REQ |
| | *=====>*
(17) | | MPHC_IMMED_ASSIGN_CON |
| | *<=====*
(18) | MPH_DEDICATED_CNF |
| *<=====*
(19) | MPH_FREQ_REDEF_REQ |
| *=====>*
(20) | | MPHC_CHANGE_FREQUENCY |
| | *=====>*
(21) | MPH_DEDICATED_REQ |
| *=====>*
(22) | | MPHC_CHANNEL_ASSIGN_REQ |
| | *=====>*
(23) | | MPHC_CHANNEL_ASSIGN_CON |
| | *<=====*
(24) | MPH_DEDICATED_CNF |
| *<=====*
(25) | MPH_DEDICATED_FAIL_REQ |
| *=====>*
(26) | | MPHC_CHANNEL_ASSIGN_REQ |
| | *=====>*
(27) | | MPHC_CHANNEL_ASSIGN_CON |
| | *<=====*
(28) | 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_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_RA_REQ	txpwr	POWER_12
	rand	RAND_BURST_1
	channel_request	CHANNEL_REQUEST_1
	powerclass_gsm	POWER_CLASS_5
	powerclass_dcs	NOT_USED
(7) MPHC_RA_CON	fn	FN_BURST_1
	channel_request	CHANNEL_REQUEST_1
(8) MPH_RANDOM_ACCESS_CNF	frame_no	T123_BURST_1

(9) MPHC_RA_REQ

txpwr	POWER_12
rand	RAND_BURST_2
channel_request	CHANNEL_REQUEST_2
powerclass_gsm	POWER_CLASS_5
powerclass_dcs	NOT_USED

(10) MPHC_DATA_IND

radio_freq	ARFCN_14
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

(11) MPH_UNITDATA_IND

arfcn	ARFCN_14
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
}	

(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_1_bef_sti	
CHANNEL_DESC_ASS_BEFORE	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

4.11.3 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)	MPH_CHANGE_FREQUENCY	
	=====>	
(3)		
MPH_DEDICATED_REQ		
=====>		
(4)	MPH_ASYNC_HO_REQ	
	=====>	
(5)	MPH_ASYNC_HO_CON	
	<=====	
(6)	MPH_HANDOVER_FINISHED	
	<=====	
(7)		
MPH_DEDICATED_CNF		
<=====		
(8)		
MPH_DEDICATED_FAIL_REQ		
=====>		
(9)	MPH_HANDOVER_FAIL_REQ	
	=====>	
(10)	MPH_HANDOVER_FAIL_CON	
	<=====	
(11)		
MPH_DEDICATED_FAIL_CNF		
<=====		
(12)	MPH_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 cipher_key amr_configuration	ASYNC_HO_CMD_2 NOT_USED NOT_USED NOT_USED 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 26-Feb-02	LE Initial OT Adaptations for AMR integra- tion

4.11.4 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 error_flag l2_frame tc ccch_lev fn	L2_CHANNEL_SACCH VALID_BLOCK L2_SYS_INFO_5BIS TC_0 NOT_USED FN_OFFSET_0
(4) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti neigh_cell_desc }	ARFCN_14 NOT_USED RR DOWNLINK D_SYS_INFO_5BIS TI_0 NEIGH_CELL_DESC_2
(5) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_14 L2_CHANNEL_SACCH VALID_BLOCK L2_SYS_INFO_6 TC_0 NOT_USED FN_OFFSET_0
(6) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_ident loc_area_ident cell_opt_sacch ncc_permit si6_rest_oct }	ARFCN_14 NOT_USED RR DOWNLINK D_SYS_INFO_6 TI_0 CELL_IDENT_2 LOC_AREA_IDENT_2 CELL_OPT_SACCH_1 NCC_PERMIT_2 NOT_USED
(7) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_14 L2_CHANNEL_SACCH VALID_BLOCK L2_I_SMS TC_0 NOT_USED FN_OFFSET_0
(8) PH_DATA_IND	ch_type dummy sdu	CH_TYPE_SACCH NOT_USED I_SMS
(9) MPHC_DATA_IND	radio_freq l2_channel	ARFCN_14 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

4.11.5 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

RR/DL	ALR	PL
(1) MPH_DEDICATED_REQ		
=====>		
(2)	MPHC_ASYNC_HO_REQ	
	=====>	
(3)	MPHC_ASYNC_HO_CON	
	<=====	
(4)	MPHC_HANDOVER_FINISHED	
	<=====	
(5) MPH_DEDICATED_CNF		
<=====		

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		

4.12 Channel mode modify

4.12.1 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

RR/DL	ALR	PL
(1) MPH_CHANNEL_MODE_REQ		
*=====		
(2)	MPH_CHANNEL_MODE_MODIFY_REQ	
	*=====	
(3)	MPH_CHANNEL_MODE_MODIFY_CON	
	*<=====	

Parametrization

Primitive	Parameter	Value
(1) MPH_CHANNEL_MODE_REQ	mode	CHANNEL_MODE_AMR
	amr_conf	S_AMR_CONF_4_ICMI
(2) MPHC_CHANNEL_MODE_MODIFY_REQ	sub_channel	NOT_USED

	channel_mode	CHM_AHS
	amr_configuration	S_AMR_CONFIGURATION
(3)	MPHC_CHANNEL_MODE_MODIFY_CON	
	param	NOT_USED

History: 30-Nov-01 OT Initial

4.13 Downlink Failure Detection

4.13.1 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

RR/DL	ALR	PL
(1)	MPHC_DATA_IND	
	<=====	
(2)	MPHC_DATA_IND	
	<=====	
(3)	MPHC_DATA_IND	
	<=====	
(4)	MPH_ERROR_IND	
	<=====	

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

4.13.2 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_DATA_IND	
	<=====	
(4)	MPHC_DATA_IND	
	<=====	
(5)	MPHC_DATA_IND	
	<=====	
(6)	MPHC_DATA_IND	
	<=====	
(7)	MPHC_DATA_IND	
	<=====	
(8)	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_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAGING_REQ_1

	tc ccch_lev fn	TC_0 NOT_USED FN_OFFSET_0
(4) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_PCH VALID_BLOCK L2_PAGING_REQ_1 TC_0 NOT_USED FN_OFFSET_0
(5) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_PCH INVALID_BLOCK L2_NO_CONTENT TC_0 NOT_USED FN_OFFSET_0
(6) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_PCH INVALID_BLOCK L2_NO_CONTENT TC_0 NOT_USED FN_OFFSET_0
(7) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_PCH INVALID_BLOCK L2_NO_CONTENT TC_0 NOT_USED FN_OFFSET_0
(8) MPH_ERROR_IND	cs arfcn	CS_DOWN_LINK_FAIL ARFCN_23
History:	10.11.99	LE Initial

4.14 Cell Reselection

4.14.1 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_DATA_IND |
    | | *<=====* |
(14) | MPH_UNITDATA_IND |
    | *<=====* |
(15) | | MPHC_DATA_IND |
    | | *<=====* |
(16) | | MPHC_START_CCCH_REQ |
    | | *=====>* |
(17) | | MPHC_DATA_IND |
    | | *<=====* |
(18) | 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_BLKES_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	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_blkes_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 cell_opt_bcch cell_select rach_ctrl }	CTRL_CHAN_DESC_1 CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(12) 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_4 BS_AG_BLK_RES_5 COMB_CCCH_NOT_COMB CCCH_GROUP_0 PG_1 PBI_1 PGM_REORG
(13) 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_1 NOT_USED FN_OFFSET_14
(14) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_chan_desc rach_ctrl }	ARFCN_14 NOT_USED RR DOWNLINK D_SYS_INFO_1 TI_0 CELL_CHAN_DESC_1 RACH_CTRL_1
(15) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_PCH VALID_BLOCK L2_PAGING_REQ_1 TC_0 NOT_USED FN_OFFSET_0
(16) 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_4 BS_AG_BLK_RES_5 COMB_CCCH_NOT_COMB CCCH_GROUP_0 PG_1 PBI_1 PGM_NORMAL
(17) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc	ARFCN_14 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_2 TC_1

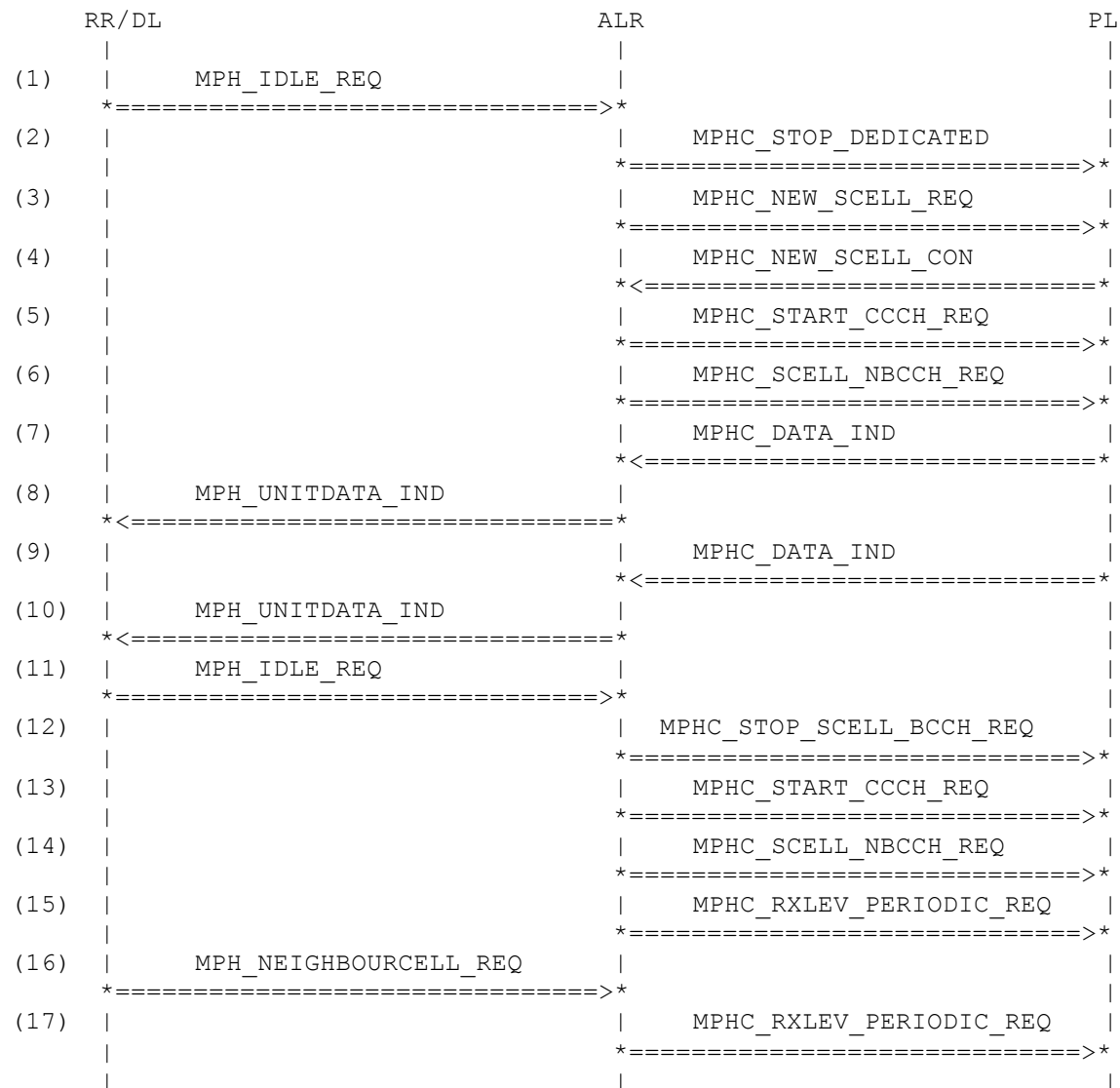
	ccch_lev fn	NOT_USED FN_OFFSET_14
(18) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti neigh_cell_desc ncc_permit rach_ctrl }	ARFCN_14 NOT_USED RR DOWNLINK D_SYS_INFO_2 TI_0 NEIGH_CELL_DESC_1 NCC_PERMIT_1 RACH_CTRL_1
(19) MPH_IDLE_REQ	mod arfcn ext_bcch comb_ccch tn dlt pg bs_ag_blocks_res bs_pa_mfrms power ncc_permitted reorg_only	MODE_CELL_SELECTION ARFCN_14 NOT_USED COMB_CCCH_NOT_COMB TN_0 DLT_10 PG_1 BS_AG_BLK_RES_5 BS_PA_MFRMS_2 POWER_12 NOT_PRESENT_8BIT NOT_USED
(20) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(21) MPHC_SCELL_NBCCH_REQ	schedule_array_size schedule_array	SCHED_SIZE_1 NOT_USED
(22) MPHC_RXLEV_PERIODIC_REQ	chan_list num_of_chans ba_id next_radio_freq_measured	CHLIST_23_1_14_124 CHANNELS_4 BA_ID_2 CHAN_LIST_IDX_0
(23) MPH_NEIGHBOURCELL_REQ	multi_band arfcn sync_only	MULTI_BAND_0 CHLIST_1_15_FFFF NOT_USED
(24) MPHC_RXLEV_PERIODIC_REQ	chan_list num_of_chans ba_id next_radio_freq_measured	CHLIST_1_14_15 CHANNELS_3 BA_ID_3 CHAN_LIST_IDX_0

History: 10.11.99 LE Initial
 08.02.02 LG handling of SI3 inserted (ALR-FIX-
4650)

4.14.2 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_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	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
(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

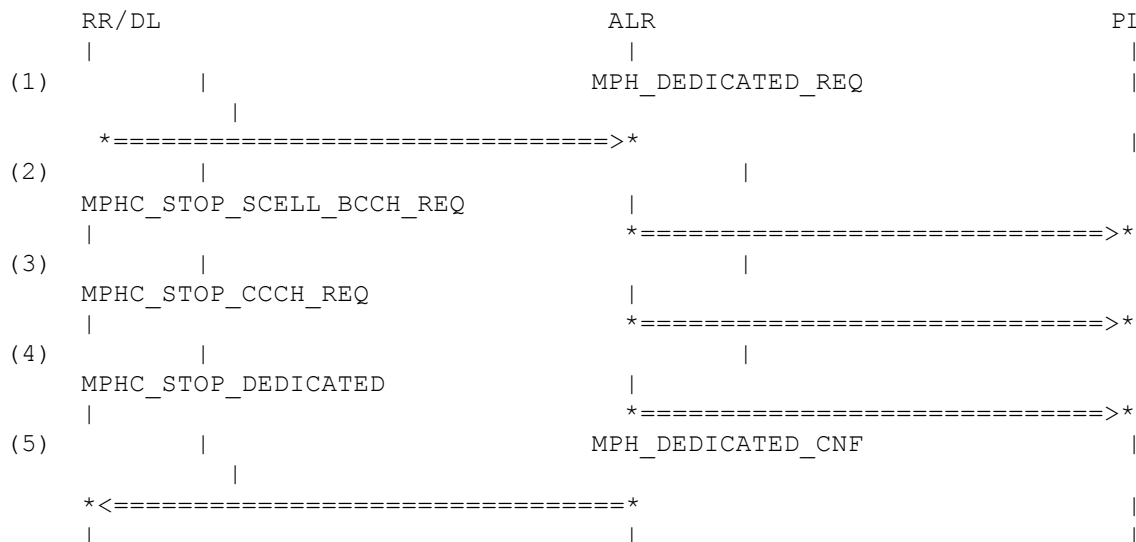
History:	10.11.99	LE	Initial
	21.06.02	MSB	sequence and parameter changed for MPHC_SCELL_NBCCH_REQ:

after pagemode set to REORG,
full read is necessary

4.14.3 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



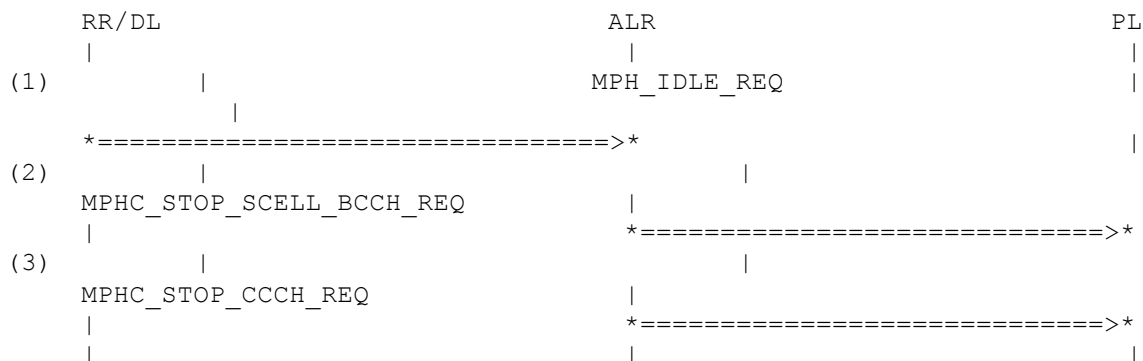
Parametrization

Parametrization		Parameter	Value
(27)	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
(1)	MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(2)	MPHC_STOP_CCCH_REQ	param	NOT_USED
(3)	MPHC_STOP_DEDICATED	param	NOT_USED
(4)	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

4.14.4 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



Parametrization

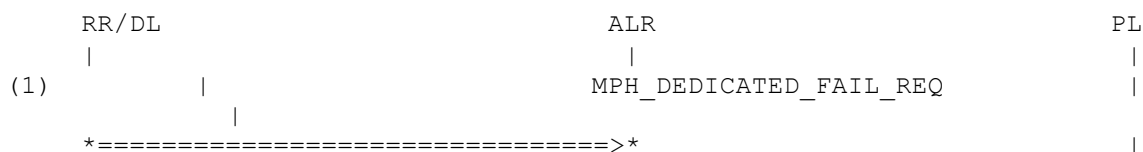
Primitive	Parameter	Value
(1) MPH_IDLE_REQ	mod	MODE_PACKET_TRANSFER
	arfcn	ARFCN_23
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLK_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
(2) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPHC_STOP_CCCH_REQ	param	NOT_USED

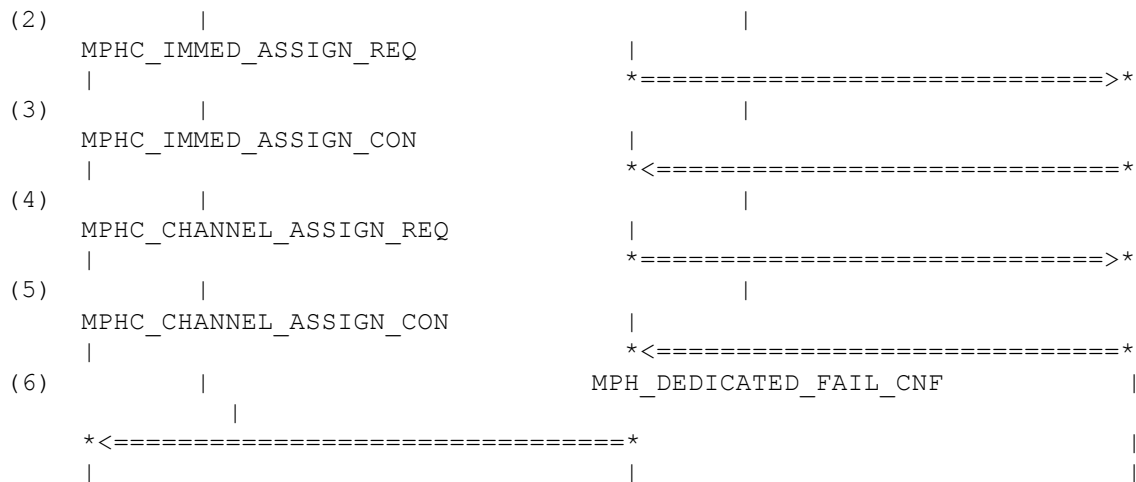
History: 13.08.01 VK Initial

4.14.5 ALR922: PDCH Assignment, Error during TBF establishment

Description: After an unsuccessful TBF establishment, ALR is requested to switch back to the 'old' channel.

Preamble: ALR921





Parametrization

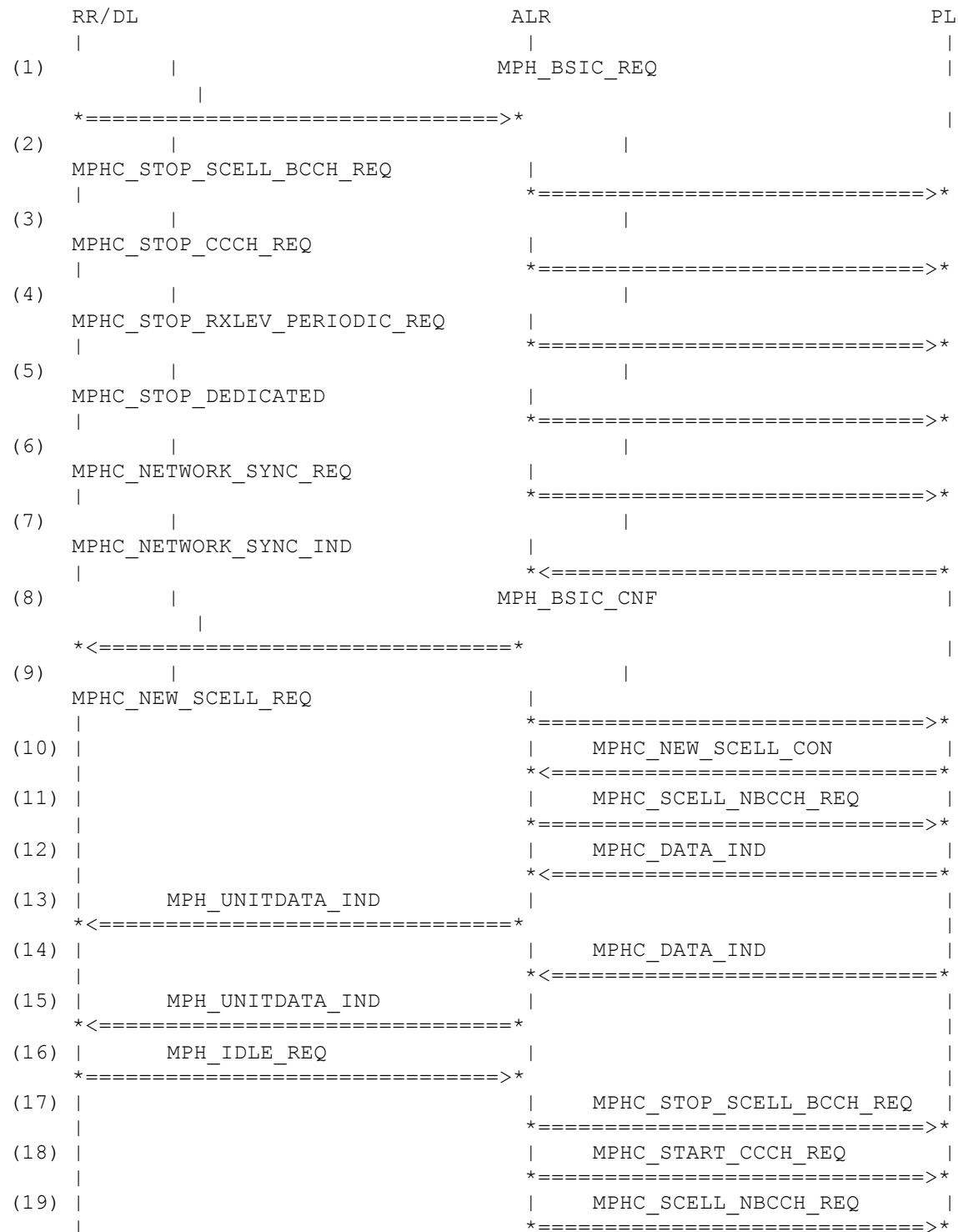
Primitive	Parameter	Value
(1) MPH_DEDICATED_FAIL_REQ	param	NOT_USED
(2) MPHC_IMMED_ASSIGN_REQ	channel_desc	CHANNEL_DESC_1
	timing_advance	TIMING_ADVANCE
	frequency_list	FREQ_LIST
	starting_time	NOT_USED
	frequency_list_bef_sti	NOT_USED
	maio_bef_sti	NOT_USED
	dtx_allowed	NOT_USED
	bcch_allocation	NOT_USED
	ba_id	NOT_USED
	pwrc	NOT_USED
(3) MPHC_IMMED_ASSIGN_CON	param	NOT_USED
(4) MPHC_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) MPHC_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

4.14.6 ALR930: Network Colttrolled 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



```

(20) | MPH_NEIGHBOURCELL_REQ |
      | *=====>* |
(21) | | MPH_C_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 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_lev fn	ARFCN_42 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_1 TC_0 NOT_USED FN_OFFSET_0

(13)MPH_UNITDATA_IND

arfcn	ARFCN_42
fn	FN_OFFSET_0
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
}	

(14)MPHC_DATA_IND

radio_freq	ARFCN_42
l2_channel	L2_CHANNEL_NBCCCH
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_BLKS_RES_3
bs_pa_mfrms	BS_PA_MFRMS_6
power	POWER_12
ncc_permitted	NOT_PRESENT_8BIT
reorg_only	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_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

(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_1
next_radio_freq_measured CHAN_LIST_IDX_0

History: 08.08.01 VK Initial (copied from ALR901)

4.15 Idle Mode Neighbourcells Procedures

4.15.1 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: ALR006

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_BLK_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

(3) MPH_STOP_SCELL_BCCH_REQ

param	NOT_USED
-------	----------

(4) MPH_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) MPH_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) MPH_RXLEV_PERIODIC_REQ

<A>	chan_list	CHLIST_23_1_14_124
	chan_list	CHLIST_23_1_14_124
<C>	chan_list	CHLIST_23
<D>	chan_list	CHLIST_23_1_14_124
<A>	num_of_chans	CHANNELS_4
	num_of_chans	CHANNELS_4
<C>	num_of_chans	CHANNELS_1
<D>	num_of_chans	CHANNELS_4
	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

4.15.2 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 ba_id	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	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1
(9) 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
(10) 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
(11) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	ONE_ELEM STOP_ARRAY_14
(12) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(13) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_124 SB_FOUND FN_OFFSET_124 TIME_ALIGNMT_124 BSIC_1

(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

(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 nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(28) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(29) 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
(30) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(31) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 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 s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 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 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 s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(53) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 FN_OFFSET_14 TIME_ALIGNMT_14 TV_VALID_TIMING_INFO
(54) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1
(55) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 FN_OFFSET_124 TIME_ALIGNMT_124 TV_VALID_TIMING_INFO
(56) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_1 FN_OFFSET_1 TIME_ALIGNMT_1 TV_VALID_TIMING_INFO
(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_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_124 SB_FOUND FN_OFFSET_124 TIME_ALIGNMT_124 BSIC_1
(59) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset	ARFCN_1 SB_FOUND FN_OFFSET_1

		time_alignment	TIME_ALIGNMT_1
		bsic	BSIC_1
(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

4.15.3 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) | | MPHC_RXLEV_PERIODIC_IND |
      | *<===== |
(69) | | MPHC_RXLEV_PERIODIC_IND |
      | *<===== |
(70) | | MPHC_RXLEV_PERIODIC_IND |
      | *<===== |
(71) | | MPHC_NCELL_SYNC_REQ |
      | *=====> |
(72) | MPH_MEASUREMENT_IND |
      | *<===== |
(73) | | MPHC_RXLEV_PERIODIC_IND |
      | *<===== |
(74) | | MPHC_NCELL_SYNC_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) 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
(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
(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
(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_rxlev	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 direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl }	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
(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	ARFCN_14
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1

(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	RXLEV_56
ba_id	BA_ID_1

(37) MPHC_RXLEV_PERIODIC_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8

	s_rxlev ba_id	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 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
(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) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(47) 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
(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) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(51) 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
(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) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(55) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 FN_OFFSET_124 TIME_ALIGNMT_124 TV_VALID_TIMING_INFO
(56) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_1 FN_OFFSET_1 TIME_ALIGNMT_1 TV_VALID_TIMING_INFO
(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_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_124 SB_FOUND FN_OFFSET_124 TIME_ALIGNMT_124 BSIC_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_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_1 SB_FOUND FN_OFFSET_1 TIME_ALIGNMT_1 BSIC_1
(62) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(63) 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
(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) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(67) 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
(68) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1

	nbr_of_carriers s_rxlev ba_id	CHANNELS_8 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_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(71) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 FN_OFFSET_14 TIME_ALIGNMT_14 TV_VALID_TIMING_INFO
(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
(73) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(74) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1
History:	24.09.99 20.06.01 20.06.01 07.02.02	MPA MSB MSB LG
		Initial fn_offset in (6) corrected, numbering of msc corrected changed value for ba_id

4.15.4 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	

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(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) 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

(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	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
(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
(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	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(33) 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
(34) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_124
(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_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
(37) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_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) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(40) 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
(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
	}	

	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

4.15.5 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
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(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 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	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_16
(9) MPHC_NCELL_BCCH_REQ	radio_freq fn_offset time_alignment tsc	ARFCN_14 FN_OFFSET_14 TIME_ALIGNMT_14 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
(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
(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

4.15.6 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
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(1) MPH_CLASSMARK_REQ	classmark	CLASS_DUAL
(2) MPH_IDLE_REQ	mod arfcn ext_bcch comb_ccch tn dlt pg bs_ag_blocks_res bs_pa_mfrms power ncc_permitted reorg_only	NOT_USED ARFCN_23 NOT_USED COMB_CCCH_NOT_COMB TN_0 DLT_10 PG_20 BS_AG_BLK_RES_3 BS_PA_MFRMS_4 POWER_12 NOT_PRESENT_8BIT NOT_USED
(3) MPH_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPH_START_CCCH_REQ	bs_pa_mfrms bs_ag_blk_res bcch_combined ccch_group page_group page_block_index page_mode	BS_PA_MFRMS_6 BS_AG_BLK_RES_3 COMB_CCCH_NOT_COMB CCCH_GROUP_0 PG_20 PBI_2 PGM_REORG
(5) MPH_SCELL_NBCCH_REQ	schedule_array_size schedule_array	SCHED_SIZE_1 NOT_USED
(6) MPH_NEIGHBOURCELL_REQ	multi_band arfcn CHLIST_1_14_25_124_512_580_637_885_FFFF sync_only	MULTI_BAND_0 NOT_USED
(7) MPH_RXLEV_PERIODIC_REQ	chan_list CHLIST_23_1_14_25_124_512_580_637_885 num_of_chans ba_id next_radio_freq_measured	CHANNELS_9 BA_ID_1 CHAN_LIST_IDX_0
(8) MPH_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_23_8 CHANNELS_8 RXLEV_56 BA_ID_1
(9) MPH_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_637 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(10) MPH_NCELL_SYNC_REQ	radio_freq fn_offset	ARFCN_25 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_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	ARFCN_637 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1
(18) MPHC_NCELL_BCCH_REQ	radio_freq fn_offset time_alignment tsc bcch_blocks_required gprs_prio	ARFCN_637 FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1 NCELL_BCCH_SI_3_4 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

(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

(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

(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

(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
(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_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_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 gprs_sync	NCELLS_SC_900_8 NOT_USED
History:	22.01.00 12.07.00	MPA DG	Initial MPH_CLASSMARK_REQ: class changed into classmark (Forum G23M / No 0057)
	20.06.01 20.07.01 07.02.02	MSB MSB LG	fn_offset in (6) corrected channel list adapted changed value of ba_id

4.15.7 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	
		=====>	
(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
(3) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_6
	bs_ag_blk_s_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_578_1_14_25_124_512_580_637_885
	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	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	ARFCN_512
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(13) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_580
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(14) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_885
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(15) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_578_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(16) 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_918

	ncells	NCELLS_NO_CONTENT
	gprs_sync	NOT_USED
(17) 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
(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
(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
(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
(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

(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

(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_578_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
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	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_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 classmar (Forum G23M / No 0057)
	20.06.01	MSB	fn_offset in (6) corrected
	07.02.02	LG	changed value of ba_id

4.15.8 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	



```

(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_BLK_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_4
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	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_11_14_25_87_124_512_885_FFFF	
	sync_only	NOT_USED
(7) MPHC_RXLEV_PERIODIC_REQ		
	chan_list	
	CHLIST_23_1_11_14_25_87_124_512_885	
	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_11
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(12) MPHC_NCELL_SYNC_REQ		
	radio_freq	ARFCN_87
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(13) MPHC_NCELL_SYNC_REQ		
	radio_freq	ARFCN_25
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(14) MPHC_NCELL_SYNC_REQ		
	radio_freq	ARFCN_1
	fn_offset	NOT_USED

	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(15) 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
(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_918
	ncells	NCELLS_NO_CONTENT
	gprs_sync	NOT_USED
(17) 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
(18) 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
(19) 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
(20) 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
(21) 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
(22) 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
(23) 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
(24) 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
(25) 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
(26) 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
(27) 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
(28) 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
(29) 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
(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	ONE_ELEM
	radio_freq_array	STOP_ARRAY_14
(32) 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
(33) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_87
(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_11
	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_11
(38) 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
(39) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_1
(40) 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

(41) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size ONE_ELEM
radio_freq_array STOP_ARRAY_512

(42) 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

(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) 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

(45) 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
}

(46) 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
}

	<pre> rach_ctrl } </pre>	<pre> RACH_CTRL_1 </pre>
(47) MPH_UNITDATA_IND	<pre> arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl } </pre>	<pre> 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 </pre>
(48) MPH_UNITDATA_IND	<pre> arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl } </pre>	<pre> 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 </pre>
(49) MPH_UNITDATA_IND	<pre> arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl } </pre>	<pre> ARFCN_87 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 </pre>
(50) MPH_UNITDATA_IND	<pre> arfcn fn sdu { component direction </pre>	<pre> ARFCN_512 NOT_USED RR DOWNLINK </pre>

		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_1
		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_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) 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

4.15.9 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_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_4
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	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 schedule_array	SCHED_SIZE_1 NOT_USED
(6) MPH_NEIGHBOURCELL_REQ	multi_band arfcn sync_only	MULTI_BAND_1 CHLIST_1_14_512_885_FFFF NOT_USED
(7) MPHC_RXLEV_PERIODIC_REQ	chan_list num_of_chans ba_id next_radio_freq_measured	CHLIST_23_1_14_512_885 CHANNELS_5 BA_ID_1 CHAN_LIST_IDX_0
(8) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_23_4_1 CHANNELS_4 RXLEV_56 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_23_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	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_918

	ncells gprs_sync	NCELLS_NO_CONTENT NOT_USED
(15) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1
(16) 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
(17) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_512 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1
(18) MPHC_NCELL_BCCH_REQ	radio_freq fn_offset time_alignment tsc bcch_blocks_required gprs_prio	ARFCN_512 FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1 NCELL_BCCH_SI_3_4 NOT_USED
(19) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_885 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1
(20) MPHC_NCELL_BCCH_REQ	radio_freq fn_offset time_alignment tsc bcch_blocks_required gprs_prio	ARFCN_885 FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1 NCELL_BCCH_SI_3_4 NOT_USED
(21) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_1 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1
(22) MPHC_NCELL_BCCH_REQ	radio_freq fn_offset time_alignment tsc bcch_blocks_required gprs_prio	ARFCN_1 FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1 NCELL_BCCH_SI_3_4 NOT_USED

(23) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_23_4_1 CHANNELS_4 RXLEV_56 BA_ID_1
(24) 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
(25) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	ONE_ELEM STOP_ARRAY_14
(26) 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
(27) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	ONE_ELEM STOP_ARRAY_512
(28) MPHC_NCELL_BCCH_IND	radio_freq l2_channel error_flag l2_frame tc fn	ARFCN_885 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_3 TC_2 FN_OFFSET_14
(29) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	ONE_ELEM STOP_ARRAY_885
(30) 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_14
(31) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	ONE_ELEM STOP_ARRAY_1
(32) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_23_4_1 CHANNELS_4 RXLEV_56 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 ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl }	LOC_AREA_IDENT_1 CTRL_CHAN_DESC_1 CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(38) 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
(39) MPHC_RXLEV_PERIODIC_IND		result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_23_4_1 CHANNELS_4 RXLEV_56 BA_ID_1
(40) MPHC_RXLEV_PERIODIC_IND		result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_23_4_1 CHANNELS_4 RXLEV_56 BA_ID_1
(41) MPHC_RXLEV_PERIODIC_IND		result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_23_4_1 CHANNELS_4 RXLEV_56 BA_ID_1
(42) 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_SC_900_4_1 NOT_USED
History:	24.01.00 12.07.00 20.06.01	MPA DG MSB	Initial MPH_CLASSMARK_REQ: class changed into classmark (Forum G23M / No 0057) fn_offset in (6) corrected

07.02.02

LG

changed value of ba_id

4.15.10 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)	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	

Parametrization



**TEXAS
INSTRUMENTS**

(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_700 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(11) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_600 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(12) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_513 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(13) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_810 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_637_8_1 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_637 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	ARFCN_700 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1

(18) 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

(19) 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

(20) 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

(21) 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

(22) 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

(23) 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

(24) 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

(25) 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

(26) MPHC_NCELL_BCCH_REQ

radio_freq	ARFCN_885
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	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_14
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
(28) 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
(29) 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
(30) 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
(31) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_700
(32) 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
(33) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_600
(34) 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
(35) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_513

(36) 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

(37) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_810

(38) 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

(39) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_885

(40) 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

(41) MPHC_STOP_NCELL_BCCH_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_14

(42) 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

(43) 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

(44) 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

(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_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
}	

(47) 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
}	

(48) 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
(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_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
(50) 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
(51) 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
(52) 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
(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) 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

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 (16)
	07.02.02	LG	changed value of ba_id

4.15.11 ALR655: Multiband = 1, Serving Cell is DCS 1800, 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 GSM 900 frequency band). The serving cell is 637 (that means in the DCS 1800 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_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
(3) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_6
	bs_ag_blk_s_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	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	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	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1
(16) 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
(17) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_512 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1
(18) MPHC_NCELL_BCCH_REQ	radio_freq fn_offset	ARFCN_512 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
(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
(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

4.15.12 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)		
	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) | | MPH_RXLEV_PERIODIC_IND |
      | *<=====
(42) | | MPH_RXLEV_PERIODIC_IND |
      | *<=====
(43) | | MPH_RXLEV_PERIODIC_IND |
      | *<=====
(44) | MPH_MEASUREMENT_IND |
      | *<=====
(45) | | MPH_RXLEV_PERIODIC_IND |
      | *<=====
(46) | | MPH_RXLEV_PERIODIC_IND |
      | *<=====
(47) | | MPH_RXLEV_PERIODIC_IND |
      | *<=====
(48) | MPH_MEASUREMENT_IND |
      | *<=====
(49) | | MPH_RXLEV_PERIODIC_IND |
      | *<=====
(50) | | MPH_RXLEV_PERIODIC_IND |
      | *<=====
(51) | | MPH_RXLEV_PERIODIC_IND |
      | *<=====
(52) | MPH_MEASUREMENT_IND |
      | *<=====
(53) | | MPH_RXLEV_PERIODIC_IND |
      | *<=====
(54) | | MPH_RXLEV_PERIODIC_IND |
      | *<=====
(55) | | MPH_RXLEV_PERIODIC_IND |
      | *<=====
(56) | MPH_MEASUREMENT_IND |
      | *<=====
(57) | | MPH_RXLEV_PERIODIC_IND |
      | *<=====
(58) | | MPH_RXLEV_PERIODIC_IND |
      | *<=====
(59) | | MPH_RXLEV_PERIODIC_IND |
      | *<=====
(60) | | MPH_NCELL_SYNC_REQ |
      | *=====>
(61) | | MPH_NCELL_SYNC_REQ |
      | *=====>
(62) | | MPH_NCELL_SYNC_REQ |
      | *=====>
(63) | MPH_MEASUREMENT_IND |
      | *<=====
      |

```

Parametrization

Primitive	Parameter	Value
(1) MPH_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 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 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	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1
(9) 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
(10) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 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

(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

(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 rach_ctrl }	CELL_SELECT_1 RACH_CTRL_1
(28) 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_1 RACH_CTRL_1
(29) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti loc_area_ident cell_select rach_ctrl }	ARFCN_124 NOT_USED RR DOWNLINK D_SYS_INFO_4 TI_0 LOC_AREA_IDENT_1 CELL_SELECT_1 RACH_CTRL_1
(30) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(31) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 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 s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 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

(4 2)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(4 3)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(4 4)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(4 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_306 NCELLS_1_14_124 NOT_USED
(4 6)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(4 7)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(4 8)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(4 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_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 s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(57) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_VALID_TIMING_INFO_SB
(58) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 NOT_USED NOT_USED 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

4.15.13 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 |
| | *<=====*

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(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 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	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1
(9)	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
(10)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(11)	MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_124 SB_FOUND FN_OFFSET_124 TIME_ALIGNMT_124 BSIC_1
(12)	MPHC_NCELL_BCCH_REQ	radio_freq fn_offset time_alignment	ARFCN_124 FN_OFFSET_124 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
(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

- (38)
- | | |
|------------------|------------------|
| si7_rest_oct | SI7_REST_OCT_1 |
| } | |
| 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 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 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 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 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	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_NCELL_SYNC_REQ	
	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_VALID_TIMING_INFO_SB
(70)	MPHC_NCELL_SYNC_REQ	
	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_VALID_TIMING_INFO_SB
(71)	MPHC_NCELL_SYNC_REQ	
	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_VALID_TIMING_INFO_SB
(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

History:	24.09.99	MPA	Initial
	20.06.01	MSB	fn_offset corrected in (6)
	07.02.02	LG	changed value of ba_id

4.15.14 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 |
| | *<=====
(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 |
| | *<=====
| |

```

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
(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
(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
(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_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	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_1
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_8
	ti	TI_0
	si8_rest_oct	SI8_REST_OCT_1
	}	
(42)	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
	}	
(43)	MPH_UNITDATA_IND	
	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_8
	ti	TI_0
	si8_rest_oct	SI8_REST_OCT_1
	}	
(44)	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
	}	
(45)	MPH_UNITDATA_IND	
	arfcn	ARFCN_124
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_8
	ti	TI_0
	si8_rest_oct	SI8_REST_OCT_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)	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)	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
(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_RXLEV_PERIODIC_IND	
	result	NCELL_RESULT_1
	nbr_of_carriers	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)	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_RXLEV_PERIODIC_IND	
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8

	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(60)	MPHC_RXLEV_PERIODIC_IND	
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(61)	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
(62)	MPHC_RXLEV_PERIODIC_IND	
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(63)	MPHC_RXLEV_PERIODIC_IND	
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(64)	MPHC_RXLEV_PERIODIC_IND	
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(65)	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
(66)	MPHC_RXLEV_PERIODIC_IND	
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(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)	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
(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_RXLEV_PERIODIC_IND	
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(72)	MPHC_RXLEV_PERIODIC_IND	
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(73)	MPHC_NCELL_SYNC_REQ	
	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_VALID_TIMING_INFO_SB
(74)	MPHC_NCELL_SYNC_REQ	
	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_VALID_TIMING_INFO_SB
(75)	MPHC_NCELL_SYNC_REQ	
	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_VALID_TIMING_INFO_SB
(76)	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

4.15.15 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_RXLEV_PERIODIC_IND |
    *<=====
(62) | MPH_RXLEV_PERIODIC_IND |
    *<=====
(63) | MPH_RXLEV_PERIODIC_IND |
    *<=====
(64) | MPH_MEASUREMENT_IND |
    *<=====
(65) | MPH_RXLEV_PERIODIC_IND |
    *<=====
(66) | MPH_RXLEV_PERIODIC_IND |
    *<=====
(67) | MPH_RXLEV_PERIODIC_IND |
    *<=====
(68) | MPH_MEASUREMENT_IND |
    *<=====
(69) | MPH_RXLEV_PERIODIC_IND |
    *<=====
(70) | MPH_RXLEV_PERIODIC_IND |
    *<=====
(71) | MPH_RXLEV_PERIODIC_IND |
    *<=====
(72) | MPH_MEASUREMENT_IND |
    *<=====
(73) | MPH_RXLEV_PERIODIC_IND |
    *<=====
(74) | MPH_RXLEV_PERIODIC_IND |
    *<=====
(75) | MPH_RXLEV_PERIODIC_IND |
    *<=====
(76) | MPH_NCELL_SYNC_REQ |
    *=====
(77) | MPH_NCELL_SYNC_REQ |
    *=====
(78) | MPH_NCELL_SYNC_REQ |
    *=====
(79) | MPH_MEASUREMENT_IND |
    *<=====

```

Parametrization

Primitive	Parameter	Value
(1) MPH_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPH_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(3) MPH_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_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	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1
(9) 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
(10)	MPHC_RXLEV_PERIODIC_IND result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(11)	MPHC_NCELL_SYNC_IND radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_124 SB_FOUND FN_OFFSET_124 TIME_ALIGNMT_124 BSIC_1

- (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
- (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 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)	MPHC_RXLEV_PERIODIC_IND
	result NCELL_RESULT_1
	nbr_of_carriers CHANNELS_8
	s_rxlev RXLEV_56
	ba_id BA_ID_1
(46)	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
(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)	MPHC_RXLEV_PERIODIC_IND
	result NCELL_RESULT_1
	nbr_of_carriers CHANNELS_8
	s_rxlev RXLEV_56
	ba_id BA_ID_1
(50)	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

(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_RXLEV_PERIODIC_IND result NCELL_RESULT_1 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_1_14_124 gprs_sync NOT_USED
(55)	MPHC_RXLEV_PERIODIC_IND result NCELL_RESULT_1 nbr_of_carriers 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_RXLEV_PERIODIC_IND result NCELL_RESULT_1 nbr_of_carriers CHANNELS_8 s_rxlev RXLEV_56 ba_id BA_ID_1
(58)	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

(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 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_rlev	RXLEV_56
	ba_id	BA_ID_1
(68)	MPHC_RXLEV_PERIODIC_IND	
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rlev	RXLEV_56
	ba_id	BA_ID_1
(69)	MPHC_RXLEV_PERIODIC_IND	
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rlev	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

4.15.16 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 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	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1
(9)	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
(10)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(11)	MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_124 SB_FOUND FN_OFFSET_124 TIME_ALIGNMT_124 BSIC_1
(12)	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_3_4 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
(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) MPH_RXLEV_PERIODIC_IND
result NCELL_RESULT_1
nbr_of_carriers CHANNELS_8
s_rxlev RXLEV_56
ba_id BA_ID_1
- (44) MPH_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)	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
(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)	MPHC_RXLEV_PERIODIC_IND	
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(50)	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
(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_RXLEV_PERIODIC_IND	
	result	NCELL_RESULT_1
	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_1_14_124
	gprs_sync	NOT_USED
(55)	MPHC_RXLEV_PERIODIC_IND	
	result	NCELL_RESULT_1
	nbr_of_carriers	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_RXLEV_PERIODIC_IND	
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(58)	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
(59)	MPHC_RXLEV_PERIODIC_IND	
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(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)	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
(63)	MPHC_RXLEV_PERIODIC_IND	
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(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)	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
(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

4.15.17 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 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 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	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1
(9) MPHC_NCELL_BCCH_REQ	radio_freq fn_offset time_alignment tsc	ARFCN_14 FN_OFFSET_14 TIME_ALIGNMT_14 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
(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
(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	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 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 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 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)	MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_VALID_TIMING_INFO_SB
(58)	MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 NOT_USED NOT_USED TV_VALID_TIMING_INFO_SB
(59)	MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_1 NOT_USED NOT_USED TV_VALID_TIMING_INFO_SB
(60)	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 20.06.01 07.02.02	MPA MSB LG	Initial fn_offset corrected in (16) changed value of ba_id

4.16 Short Message Cell Broadcast

4.16.1 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	

Parametrization



**TEXAS
INSTRUMENTS**

(8) MPHC_CONFIG_CBCH_REQ

<A>	cbch_desc	CHANNEL_DESC_CBCH_4
	cbch_desc	CHANNEL_DESC_CBCH_8
	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:	10.01.00	MPA	Initial
	12.07.00	DG	MPH_CLASSMARK_REQ: class changed into classmark (Forum G23M / No 0057)

4.16.2 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)	MPH_STOP_SCELL_BCCH_REQ	
	=====>	
(5)	MPH_START_CCCH_REQ	
	=====>	
(6)	MPH_SCELL_NBCCH_REQ	
	=====>	
(7)		
MMI_CBCH_REQ		
=====>		
(8)		
MPH_CBCH_REQ		
=====>		
(9)	MPH_CONFIG_CBCH_REQ	
	=====>	
(10)	MPH_CBCH_SCHEDULE_REQ	
	=====>	
(11)	MPH_CBCH_SCHEDULE_REQ	
	=====>	

Parametrization

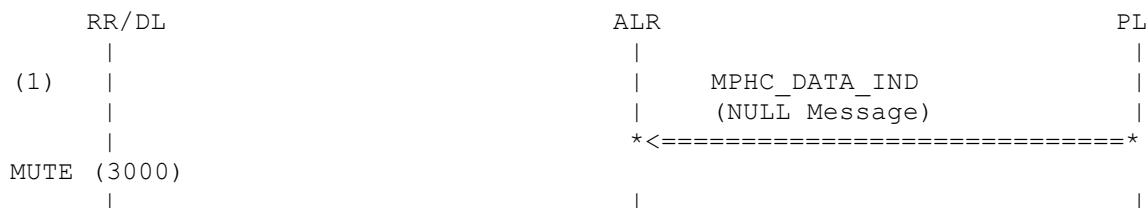
Primitive	Parameter	Value
(2) MPH_CLASSMARK_REQ	classmark	CLASS_GSM_900
(3) MPH_IDLE_REQ	mod	MODE_CELL_SELECTION
	arfcn	ARFCN_14

	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_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
(4) MPHC_STOP_SCELL_BCCH_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
(7) 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
(8) MPH_CBCH_REQ		
<A>	cbch	CBCH_DESCRIPTION_4
	cbch	CBCH_DESCRIPTION_8
<C>	cbch	CBCH_DESCRIPTION_4
(9) 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
(10) MPHC_CBCH_SCHEDULE_REQ		
	cbch_select	CBCH_READ_NORM
	schedule_length	SCHED_LEN_0
	first_blocks_0	NOT_USED
	first_blocks_1	NOT_USED
(11) 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
	12.07.00	DG
		Initial
		MPH_CLASSMARK_REQ:
		class changed into classmark
		(Forum G23M / No 0057)

4.16.3 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

4.16.4 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)

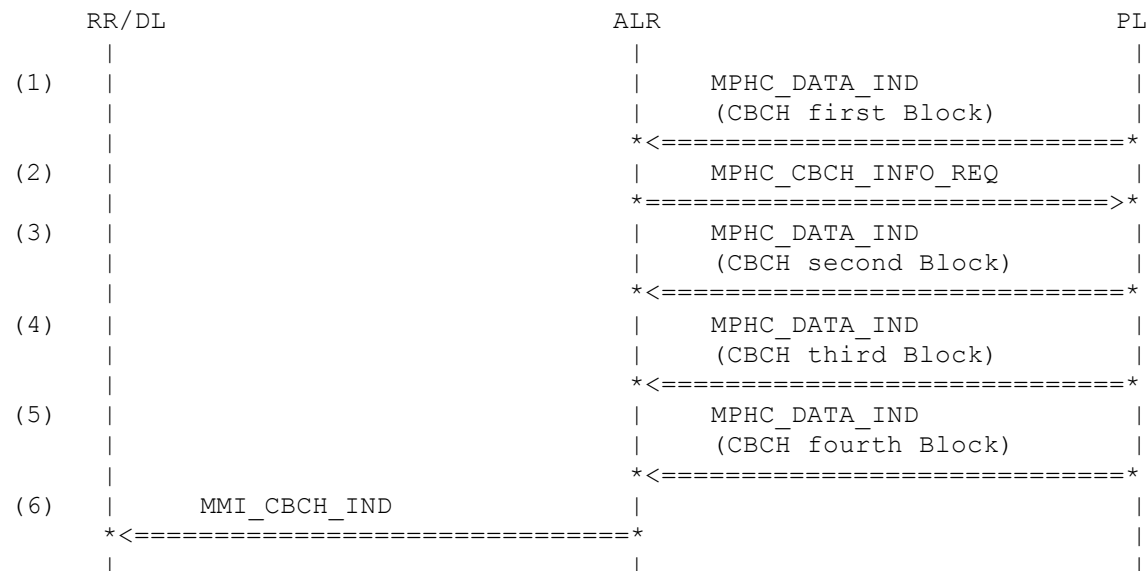
Variant B: message identifier specified by range (11), lower boundary

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

<A>	error_flag	VALID_BLOCK
	l2_frame	CBCH_1_7
<C>	l2_frame	CBCH_1_11
<D>	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		
<A>	cbch_msg	CBCH_MSG_7
	cbch_msg	CBCH_MSG_11
<C>	cbch_msg	CBCH_MSG_12
<D>	cbch_msg	CBCH_MSG_13
	cbch_len	CBCH_LEN_88

History: 13.1.00 MPA Initial

4.16.5 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

4.16.6 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 fn	NOT_USED FN_OFFSET_0
(4) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_CBCH VALID_BLOCK SCHEDULE_3 TC_0 NOT_USED FN_OFFSET_0
(5) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_CBCH VALID_BLOCK SCHEDULE_4 TC_0 NOT_USED FN_OFFSET_0
(6) MPHC_CBCH_SCHEDULE_REQ	cbch_select schedule_length first_blocks_0 first_blocks_1	CBCH_READ_NORM SCHD_LEN_5 FIRST_BLOCKS_0_B FIRST_BLOCKS_1_B

History: 13.1.00 MPA Initial

4.16.7 ALR806: 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	
	=====>	
(4) MPH_IDENTITY_REQ		
=====>		
(5) MPH_MON_CTRL_REQ		
=====>		
START_TIMEOUT (9500)		
(6) MPH_MON_CTRL_REQ		
=====>		
(7)	MPHC_START_CCCH_REQ	
	=====>	
(8) MPH_NEIGHBOURCELL_REQ		
=====>		
(9)	MPHC_NCELL_SYNC_REQ	
	=====>	
(10)	MPHC_NCELL_SYNC_REQ	
	=====>	
(11)	MPHC_NCELL_SYNC_REQ	

```

(12) | | *=====>*
      | | | MPHC_NCELL_SYNC_IND |
      | | *<=====*
(13) | MPH_MEASUREMENT_IND | |
      | *<=====*
(14) | | | MPHC_NCELL_SYNC_IND |
      | | *<=====*
(15) | MPH_MEASUREMENT_IND | |
      | *<=====*
(16) | MPH_NEIGHBOURCELL_REQ | |
      | *=====>*
(17) | | | MPHC_STOP_NCELL_SYNC_REQ |
      | | *=====>*
(18) | | | MPHC_NCELL_SYNC_REQ |
      | | *=====>*
(19) | | | MPHC_NCELL_SYNC_IND |
      | | *<=====*
(20) | MPH_MEASUREMENT_IND | |
      | *<=====*

WAIT_TIMEOUT
START_TIMEOUT (10000)
(21) | | | MPHC_NCELL_SYNC_REQ |
      | | *=====>*
(22) | | | MPHC_NCELL_SYNC_REQ |
      | | *=====>*
(23) | | | MPHC_NCELL_SYNC_REQ |
      | | *=====>*
(24) | MPH_MON_CTRL_REQ | |
      | *=====>*
(25) | | | MPHC_STOP_CCCH_REQ |
      | | *=====>*
(26) | | | MPHC_STOP_NCELL_SYNC_REQ |
      | | *=====>*
(27) | MPH_MON_CTRL_REQ | |
      | *=====>*
(28) | MPH_MON_CTRL_REQ | |
      | *=====>*
(29) | | | MPHC_NCELL_SB_READ |
      | | *=====>*

```

Parametrization

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_GSM_900
(2) MPH_IDLE_REQ	mod	MODE_CONFIG_PL
	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_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NORMAL_PGM
	gprs_support	MPH_GPRS_PROCS_USED

(3) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPH_IDENTITY_REQ	mid	MS_ID_IMSI_TMSI
(5) MPH_MON_CTRL_REQ	action si_to_read	ENTER_PIM_PBCCH NOT_USED
(6) MPH_MON_CTRL_REQ	action si_to_read	START_MON_CCCH NOT_USED
(7) 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_8 BS_AG_BLK_RES_3 COMB_CCCH_COMB CCCH_GROUP_0 PG_20 PBI_0 PGM_NORMAL
(8) MPH_NEIGHBOURCELL_REQ	multi_band arfcn sync_only	MULTI_BAND_0 CHLIST_1_14_124_FFFF SYNC_LIST
(9) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_1 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(10) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(11) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(12) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_14 SB_FOUND FN_OFFSET_14 TIME_ALIGNMT_14 BSIC_1
(13) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid	NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED

	fn_offset	NOT_USED
	ncells	NCELLS_14_PBCCH
	gprs_sync	SYNC_RESULTS
(14) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_124
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	bsic	BSIC_1
(15) MPH_MEASUREMENT_IND		
	arfcn	NOT_USED
	rx_lev_full	NOT_USED
	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	NCELLS_124_PBCCH
	gprs_sync	SYNC_RESULTS
(16) MPH_NEIGHBOURCELL_REQ		
	multi_band	MULTI_BAND_0
	arfcn	CHLIST_14_124_10_PBCCH
	sync_only	SYNC_LIST
(17) MPHC_STOP_NCELL_SYNC_REQ		
	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	NOT_USED
(18) MPHC_NCELL_SYNC_REQ		
	radio_freq	ARFCN_10
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(19) MPHC_NCELL_SYNC_IND		
	radio_freq	ARFCN_10
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_10
	time_alignment	TIME_ALIGNMT_10
	bsic	BSIC_2
(20) MPH_MEASUREMENT_IND		
	arfcn	NOT_USED
	rx_lev_full	NOT_USED
	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	NCELLS_10_PBCCH
	gprs_sync	SYNC_RESULTS
(21) MPHC_NCELL_SYNC_REQ		
	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14

	time_alignment timing_validity	TIME_ALIGNMT_14 TV_VALID_TIMING_INFO
(22) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(23) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_10 FN_OFFSET_10 TIME_ALIGNMT_10 TV_VALID_TIMING_INFO
(24) MPH_MON_CTRL_REQ	action si_to_read	LEAVING_PIM_PBCCH NOT_USED
(25) MPHC_STOP_CCCH_REQ	param	NOT_USED
(26) MPHC_STOP_NCELL_SYNC_REQ	radio_freq_array_size radio_freq_array	STOP_SIZE_3 NOT_USED
(27) MPH_MON_CTRL_REQ	action si_to_read	LEAVING_PAM_PBCCH NOT_USED
(28) MPH_MON_CTRL_REQ	action si_to_read	ENTER_PTM_PBCCH NOT_USED
(29) MPHC_NCELL_SB_READ	sb_flag radio_freq bsic fn_offset time_alignmnt	NOT_USED ARFCN_14 BSIC_1 FN_OFFSET_14 TIME_ALIGNMT_14

History: 06.11.02 MPA 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/>>