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# **GSM PROTOCOL STACK**

## **TEST SPECIFICATION**

### **ALR**

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3. Adaptation to SAP MPH (MPH\_IDLE\_REQ, MPH\_BSIC\_REQ, MPH\_NEIGHBOURCELL-REQ, MPH\_MEASUREMENT\_IND); Changing the most calls of “ periodic sc bcch reads ” to “ full sc bcch reads “ (MPHC\_SELL\_NBCCH\_REQ); This are necessary for all cases of paging mode are set to PGM\_REORG or PGM\_REORG\_CS
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6. New Testcases added for AMR implementation

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## 1.2 Abbreviations

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

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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)  
DECLARATION (NCELL\_RES\_SC\_23\_4\_1)  
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)  
DECLARATION (NCELL\_RESULT\_1)  
DECLARATION (NCELL\_RESULT\_124a)  
DECLARATION (NCELL\_RESULT\_14a)  
DECLARATION (NCELL\_RESULT\_1a)  
DECLARATION (NCELL\_RESULT\_23a)  
DECLARATION (NCELL\_RESULT\_NO\_CONTENT)  
DECLARATION (NCELL\_RESULT\_NO\_CONTENT\_1)  
DECLARATION (NCELLS\_1\_124)  
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 Tl\_0 0  
 BYTE BAND\_00  
 BYTE Tl\_1 1  
 BYTE Tl\_2 2  
 BYTE Tl\_3 3  
 BYTE Tl\_4 4  
 BYTE Tl\_5 5  
 BYTE Tl\_6 6  
 BYTE Tl\_7 7  
 BYTE Tl\_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_BLKS_RES_2	2	
BYTE BS_AG_BLKS_RES_3	3	
BYTE BS_AG_BLKS_RES_5	5	
BYTE BS_AG_BLKS_RES_7	7	
BYTE BS_PA_MFRMS_0	0	
BYTE BS_PA_MFRMS_1	1	
BYTE BS_PA_MFRMS_2	2	
BYTE BS_PA_MFRMS_3	3	
BYTE BS_PA_MFRMS_4	4	
BYTE BS_PA_MFRMS_5	5	
BYTE BS_PA_MFRMS_6	6	
BYTE BS_PA_MFRMS_7	7	
BYTE BS_PA_MFRMS_8	8	
BYTE BS_PA_MFRMS_9	9	
BYTE BSIC_0		
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\_512512

```

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 TXPWRO 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
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(IMS12,15)
    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

ENDARRAY

BEGINARRAY (MSG\_ID\_1\_TO\_20, 40)

1, 0, 20, 0,  
 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

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

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  
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  
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("I2\_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	I2 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("I2\_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("I2_frame", L2_SYS_INFO_4_ACS)  
    SET_COMP("content", L2_SYS_INFO_4_ACS_ARRAY)  
ENDSTRUCT
```

```
BEGINARRAY (L2_SYS_INFO_4_ACS_ARRAY, 23)  
    0x59,  
    0x06,  
    0x1C,  
    0x21, 0xF3, 0x33, 0x21, 0x47,  
    0x42, 0xD6,  
    0x00, 0x00, 0x40,  
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,  
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B  
ENDARRAY
```

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

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

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

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

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

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

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

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

```
BEGIN_PSTRUCT("I2_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("I2_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 (L_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
0	
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
0	
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_resele_hyst", CELL_HYST_4_DB)
    SET_COMP ("ms_txpwr_max_cch", 2)
    SET_COMP ("acs", ACS_USE_SI4)
    SET_COMP ("neci", NECI_YES)
    SET_COMP ("rxlev_access_min", 22)
ENDSTRUCT

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

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

```

        SKIP_COMP ("lsa_id_info")
    ENDSTRUCT
    
```

```

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

/\*

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

\*/

```

BEGIN_PSTRUCT("l2_frame", L2_PAGING_REQ_1)
    SET_COMP("content", L2_PAGING_REQ_1_ARRAY)
ENDSTRUCT
    
```

```

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

/\*

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

\*/

```

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

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

/\*

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

\*/

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

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

/\*

0x19	l2 pseudo length (= 6 Byte)
0x06	protocol discriminator, transaction identifier
0x21	message type
PAGING_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	I2 pseudo length (= 6 Byte)
0x06	protocol discriminator, transaction identifier
0x21	message type
0x00	page mode normal
0x00	not empty mobile identity

\*/

```
BEGINARRAY (PAGING_REQ_1, 9)
    0xB0, 0x00,
    0x08, 0x00,
    0x19,
    0x06,
    0x21,
    0x00,
    0x00
ENDARRAY
```

/\*

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

\*/

```
BEGINARRAY (PAGING_REQ_1_EXT, 9)
    0xB0, 0x00,
    0x08, 0x00,
    0x19,
```

```

    0x06,
    0x21,
    0x01,
    0x00
ENDARRAY

```

/\*

0xB0,0x00	length in bits
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)  
 ENDSSTRUCT

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)  
 ENDSSTRUCT

BEGINARRAY (L2\_PAG\_2\_T1\_D\_ARRAY, 23)

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

ENDARRAY

/\*

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

\*/

BEGIN\_PSTRUCT ("l2\_frame", L2\_PAG\_2\_T2\_A)

```
    SET_COMP ("content", L2_PAG_2_T2_A_ARRAY)  
ENDSTRUCT
```

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

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

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

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

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

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

BEGINARRAY (L2\_PAG\_2\_T2\_D\_ARRAY, 23)

0x2D,  
0x06,  
0x22,  
0xC0,  
0x05, 0x22, 0x33, 0x65,  
0x05, 0x22, 0x33, 0x66,  
0x2B, 0x2B, 0x2B, 0x2B, 0x2B,  
0x2B, 0x2B, 0x2B, 0x2B, 0x2B,  
0x2B

ENDARRAY

BEGIN\_PSTRUCT ("l2\_frame", L2\_PAG\_2\_WRONG)  
SET\_COMP ("content", L2\_PAG\_2\_WRONG\_ARRAY)  
ENDSTRUCT

BEGINARRAY (L2\_PAG\_2\_WRONG\_ARRAY, 23)

0x2D,  
0x06,  
0x22,  
0x30,  
0x01, 0x22, 0x33, 0x66,  
0x04, 0x22, 0x33, 0x65,  
0x2B, 0x2B, 0x2B, 0x2B, 0x2B,  
0x2B, 0x2B, 0x2B, 0x2B, 0x2B,  
0x2B

ENDARRAY

/\*

0x55	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\_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	l2 pseudo length (= 18 Byte)
0x06	Protocol discriminator, transaction identifier
0x22	Message type
0x00	Page mode normal
0x00	Mobile identity

\*/

BEGIN\_PSTRUCT ("l2\_frame", L2\_PAG\_2\_T3\_A)  
 SET\_COMP ("content", L2\_PAG\_2\_T3\_A\_ARRAY)  
 ENDSTRUCT

BEGINARRAY (L2\_PAG\_2\_T3\_A\_ARRAY, 23)

0x49,  
 0x06,  
 0x22,  
 0x00,  
 0x01, 0x22, 0x33, 0x66,  
 0x04, 0x22, 0x33, 0x65,  
 0x17, 0x05, 0xF4, 0x05, 0x22,  
 0x33, 0x66, 0x8B, 0x2B, 0x2B,  
 0x2B

ENDARRAY

BEGIN\_PSTRUCT ("l2\_frame", L2\_PAG\_2\_T3\_S)  
 SET\_COMP ("content", L2\_PAG\_2\_T3\_S\_ARRAY)  
 ENDSTRUCT

BEGINARRAY (L2\_PAG\_2\_T3\_S\_ARRAY, 23)

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

ENDARRAY

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

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

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

```
BEGINARRAY (L2_PAG_2_T3_D_ARRAY, 23)  
    0x49,  
    0x06,  
    0x22,  
    0x00,  
    0x01, 0x22, 0x33, 0x66,  
    0x04, 0x22, 0x33, 0x65,  
    0x17, 0x05, 0xF4, 0x05, 0x22,  
    0x33, 0x66, 0xEB, 0x2B, 0x2B,  
    0x2B  
ENDARRAY
```

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_T3_N)  
    SET_COMP ("content", L2_PAG_2_T3_N_ARRAY)  
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_2_T3_N_ARRAY, 23)  
    0x49,  
    0x06,  
    0x22,  
    0x00,  
    0x01, 0x22, 0x33, 0x66,  
    0x04, 0x22, 0x33, 0x65,  
    0x17, 0x05, 0xF4, 0x05, 0x22,  
    0x33, 0x66, 0x2B, 0x2B, 0x2B,  
    0x2B  
ENDARRAY
```

/\*

---

0x4D	l2 pseudo length (= 19 Byte)
0x06	Protocol discriminator, transaction

---

	identifier
0x22	Message type
0x00	page mode normal
0x00	Mobile identity

---

```
*/  
BEGIN_PSTRUCT ("l2_frame", L2_PAG_2_SI3_A)  
    SET_COMP ("content", L2_PAG_2_SI3_A_ARRAY)  
ENDSTRUCT
```

```
BEGINARRAY (L2_PAG_2_SI3_A_ARRAY, 23)  
    0x4D,  
    0x06,  
    0x22,  
    0x00,  
    0x01, 0x22, 0x33, 0x66,  
    0x04, 0x22, 0x33, 0x65,  
    0x17, 0x06, 0x01, 0x10, 0x10,  
    0x83, 0x32, 0xF3, 0x8B, 0x2B,  
    0x2B  
ENDARRAY
```

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

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

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

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

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

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

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

```
BEGINARRAY (L2_PAG_2_ST3_N_ARRAY, 23)
    0x49,
    0x06,
    0x22,
    0x00,
    0x01, 0x22, 0x33, 0x66,
    0x04, 0x22, 0x33, 0x65,
    0x17, 0x05, 0xF4, 0, 0,0,142, 0x2B,
    0x2B, 0x2B, 0x2B
ENDARRAY
```

/\*

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

\*/

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

```
BEGINARRAY (L2_PAG_3_EMPTY_ARRAY, 23)
    0x11,
    0x06,
    0x24,
    0x00,
    0x00,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
    0x2B, 0x2B, 0x2B, 0x2B, 0x2B,
```

0x2B, 0x2B, 0x2B  
ENDARRAY

/\*

---

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

---

\*/

BEGIN\_PSTRUCT ("l2\_frame", L2\_PAG\_3\_T1\_A)  
    SET\_COMP ("content", L2\_PAG\_3\_T1\_A\_ARRAY)  
ENDSTRUCT

BEGINARRAY (L2\_PAG\_3\_T1\_A\_ARRAY, 23)

0x4D,  
0x06,  
0x24,  
0x00,  
0x05, 0x22, 0x33, 0x66,  
0x04, 0x22, 0x33, 0x65,  
0x03, 0x22, 0x33, 0x65,  
0x02, 0x22, 0x33, 0x65,  
0x2B, 0x2B, 0x2B

ENDARRAY

BEGIN\_PSTRUCT ("l2\_frame", L2\_PAG\_3\_T1\_S)  
    SET\_COMP ("content", L2\_PAG\_3\_T1\_S\_ARRAY)  
ENDSTRUCT

BEGINARRAY (L2\_PAG\_3\_T1\_S\_ARRAY, 23)

0x4D,  
0x06,  
0x24,  
0x10,  
0x05, 0x22, 0x33, 0x66,  
0x04, 0x22, 0x33, 0x65,  
0x03, 0x22, 0x33, 0x65,  
0x02, 0x22, 0x33, 0x65,  
0x2B, 0x2B, 0x2B

ENDARRAY

BEGIN\_PSTRUCT ("l2\_frame", L2\_PAG\_3\_T1\_T)  
    SET\_COMP ("content", L2\_PAG\_3\_T1\_T\_ARRAY)  
ENDSTRUCT

BEGINARRAY (L2\_PAG\_3\_T1\_T\_ARRAY, 23)

0x4D,  
0x06,  
0x24,  
0x20,

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

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

```
BEGINARRAY (L2_PAG_3_T1_D_ARRAY, 23)  
    0x4D,  
    0x06,  
    0x24,  
    0x30,  
    0x05, 0x22, 0x33, 0x66,  
    0x04, 0x22, 0x33, 0x65,  
    0x03, 0x22, 0x33, 0x65,  
    0x02, 0x22, 0x33, 0x65,  
    0x2B, 0x2B, 0x2B  
ENDARRAY
```

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

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

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

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

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

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

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

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

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

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

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

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

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

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T3_T)  
    SET_COMP ("content", L2_PAG_3_T3_T_ARRAY)  
ENDSTRUCT
```

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

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

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

```
BEGIN_PSTRUCT ("l2_frame", L2_PAG_3_T3_N)
```

```
    SET_COMP ("content", L2_PAG_3_T3_N_ARRAY)
ENDSTRUCT
```

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

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

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

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

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

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

BEGINARRAY (L2\_PAG\_3\_T4\_T\_ARRAY, 23)

0x4D,  
0x06,  
0x24,  
0x00,  
0x04, 0x22, 0x33, 0x66,  
0x04, 0x22, 0x33, 0x65,  
0x04, 0x22, 0x33, 0x67,  
0x05, 0x22, 0x33, 0x66,  
0x93, 0x2B, 0x2B

ENDARRAY

BEGIN\_PSTRUCT ("l2\_frame", L2\_PAG\_3\_T4\_D)

SET\_COMP ("content", L2\_PAG\_3\_T4\_D\_ARRAY)

ENDSTRUCT

BEGINARRAY (L2\_PAG\_3\_T4\_D\_ARRAY, 23)

0x4D,  
0x06,  
0x24,  
0x00,  
0x04, 0x22, 0x33, 0x66,  
0x04, 0x22, 0x33, 0x65,  
0x04, 0x22, 0x33, 0x67,  
0x05, 0x22, 0x33, 0x66,  
0x9B, 0x2B, 0x2B

ENDARRAY

BEGIN\_PSTRUCT ("l2\_frame", L2\_PAG\_3\_T4\_N)

SET\_COMP ("content", L2\_PAG\_3\_T4\_N\_ARRAY)

ENDSTRUCT

BEGINARRAY (L2\_PAG\_3\_T4\_N\_ARRAY, 23)

0x4D,  
0x06,  
0x24,  
0x50,  
0x04, 0x22, 0x33, 0x66,  
0x04, 0x22, 0x33, 0x65,  
0x04, 0x22, 0x33, 0x67,  
0x05, 0x22, 0x33, 0x66,  
0x2B, 0x2B, 0x2B

ENDARRAY

BEGIN\_PSTRUCT ("l2\_frame", L2\_PAG\_3\_WRONG)

SET\_COMP ("content", L2\_PAG\_3\_WRONG\_ARRAY)

ENDSTRUCT

BEGINARRAY (L2\_PAG\_3\_WRONG\_ARRAY, 23)

0x4D,  
0x06,

0x24,  
 0x50,  
 0x04, 0x22, 0x33, 0x66,  
 0x04, 0x22, 0x33, 0x65,  
 0x04, 0x22, 0x33, 0x67,  
 0x02, 0x22, 0x33, 0x65,  
 0x2B, 0x2B, 0x2B

ENDARRAY

/\*

0x31	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, 0x0	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	I2 pseudo length (= 12 Byte)
0x06	protocol discriminator, transaction identifier
0x3F	message type
0x00	page mode
0x2B, ..	any content

\*/

```
BEGIN_PSTRUCT ("I2_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
0	
0x08, 0x00	offset in bits
0x31	I2 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	servicing 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,
    
```



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	pwrctrl
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 ("pwrctrl", 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**

<u>Primitive</u>	<u>Parameter</u>	<u>Value</u>
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
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History:	22.09.99	MPA	Initial
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**4.1.4 ALR600: Filter and Routings (Dualband GSM 900 / DCS 1800)**

**Description:** The ALR is configured for Dualband GSM 900 / DCS 1800.

**Preamble:** None

RR/DL	ALR	PL
COMMAND (TAP RESET)		

COMMAND (MMI RESET)  
COMMAND (CC RESET)  
COMMAND (SS RESET)  
COMMAND (SMS RESET)  
COMMAND (MM RESET)  
COMMAND (RR RESET)  
COMMAND (DL RESET)  
COMMAND (SIM RESET)  
COMMAND (PL RESET)  
| |  
COMMAND (TAP REDIRECT CLEAR)  
COMMAND (MMI REDIRECT CLEAR)  
COMMAND (CC REDIRECT CLEAR)  
COMMAND (SS REDIRECT CLEAR)  
COMMAND (SMS REDIRECT CLEAR)  
COMMAND (MM REDIRECT CLEAR)  
COMMAND (RR REDIRECT CLEAR)  
COMMAND (DL REDIRECT CLEAR)  
COMMAND (SIM REDIRECT CLEAR)  
COMMAND (PL REDIRECT CLEAR)  
| |  
COMMAND (MMI REDIRECT MM NULL)  
COMMAND (MMI REDIRECT CC NULL)  
COMMAND (MMI REDIRECT SS NULL)  
COMMAND (MMI REDIRECT SMS NULL)  
COMMAND (MMI REDIRECT PL NULL)  
| |  
COMMAND (CC REDIRECT MMI NULL)  
COMMAND (CC REDIRECT MM NULL)  
| |  
COMMAND (SS REDIRECT MMI NULL)  
COMMAND (SS REDIRECT MM NULL)  
| |  
COMMAND (SMS REDIRECT MMI NULL)  
COMMAND (SMS REDIRECT MM NULL)  
| |  
COMMAND (MM REDIRECT MMI NULL)  
COMMAND (MM REDIRECT CC NULL)  
COMMAND (MM REDIRECT SS NULL)  
COMMAND (MM REDIRECT SMS NULL)  
COMMAND (MM REDIRECT SIM NULL)  
COMMAND (MM REDIRECT RR NULL)  
COMMAND (MM REDIRECT DL NULL)  
| |  
COMMAND (RR REDIRECT PL NULL)  
COMMAND (RR REDIRECT DL NULL)  
COMMAND (RR REDIRECT MM NULL)  
| |  
COMMAND (DL REDIRECT RR NULL)  
COMMAND (DL REDIRECT MM NULL)  
COMMAND (DL REDIRECT PL NULL)  
| |  
COMMAND (PL REDIRECT RR TAP)  
COMMAND (PL REDIRECT DL TAP)  
COMMAND (PL REDIRECT MMI TAP)  
COMMAND (PL REDIRECT L1 TAP)  
| |  
COMMAND (SIM REDIRECT MM NULL)  
| |  
COMMAND (TAP REDIRECT TAP PL)

COMMAND (PL CONFIG STD=5)		
---------------------------	--	--

**Parameterization**

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

History:	22.09.99	MPA	Initial
----------	----------	-----	---------

**4.1.5 ALR849: Filter and Routings (Dualband GSM 900 / E-GSM / DCS 1800)**

**Description:** The ALR is configured for Dualband GSM 900 / E-GSM / DCS 1800.

**Preamble:** None

RR/DL	ALR	PL
COMMAND (TAP RESET)		
COMMAND (MMI RESET)		
COMMAND (CC RESET)		
COMMAND (SS RESET)		
COMMAND (SMS RESET)		
COMMAND (MM RESET)		
COMMAND (RR RESET)		
COMMAND (DL RESET)		
COMMAND (SIM RESET)		
COMMAND (PL RESET)		
COMMAND (TAP REDIRECT CLEAR)		
COMMAND (MMI REDIRECT CLEAR)		
COMMAND (CC REDIRECT CLEAR)		
COMMAND (SS REDIRECT CLEAR)		
COMMAND (SMS REDIRECT CLEAR)		
COMMAND (MM REDIRECT CLEAR)		
COMMAND (RR REDIRECT CLEAR)		
COMMAND (DL REDIRECT CLEAR)		
COMMAND (SIM REDIRECT CLEAR)		
COMMAND (PL REDIRECT CLEAR)		
COMMAND (MMI REDIRECT MM NULL)		
COMMAND (MMI REDIRECT CC NULL)		
COMMAND (MMI REDIRECT SS NULL)		
COMMAND (MMI REDIRECT SMS NULL)		
COMMAND (MMI REDIRECT PL NULL)		
COMMAND (CC REDIRECT MMI NULL)		
COMMAND (CC REDIRECT MM NULL)		
COMMAND (SS REDIRECT MMI NULL)		
COMMAND (SS REDIRECT MM NULL)		
COMMAND (SMS REDIRECT MMI NULL)		
COMMAND (SMS REDIRECT MM NULL)		
COMMAND (MM REDIRECT MMI NULL)		
COMMAND (MM REDIRECT CC NULL)		
COMMAND (MM REDIRECT SS NULL)		
COMMAND (MM REDIRECT SMS NULL)		
COMMAND (MM REDIRECT SIM NULL)		
COMMAND (MM REDIRECT RR NULL)		
COMMAND (MM REDIRECT DL NULL)		

```

COMMAND (RR REDIRECT PL NULL)
COMMAND (RR REDIRECT DL NULL)
COMMAND (RR REDIRECT MM NULL)
|
|
COMMAND (DL REDIRECT RR NULL)
COMMAND (DL REDIRECT MM NULL)
COMMAND (DL REDIRECT PL NULL)
|
|
COMMAND (PL REDIRECT RR TAP)
COMMAND (PL REDIRECT DL TAP)
COMMAND (PL REDIRECT MMI TAP)
COMMAND (PL REDIRECT L1 TAP)
|
|
COMMAND (SIM REDIRECT MM NULL)
|
|
COMMAND (TAP REDIRECT TAP PL)
|
|
COMMAND (PL CONFIG STD=6)
|
|
    
```

**Parametrization**

Primitive	Parameter	Value
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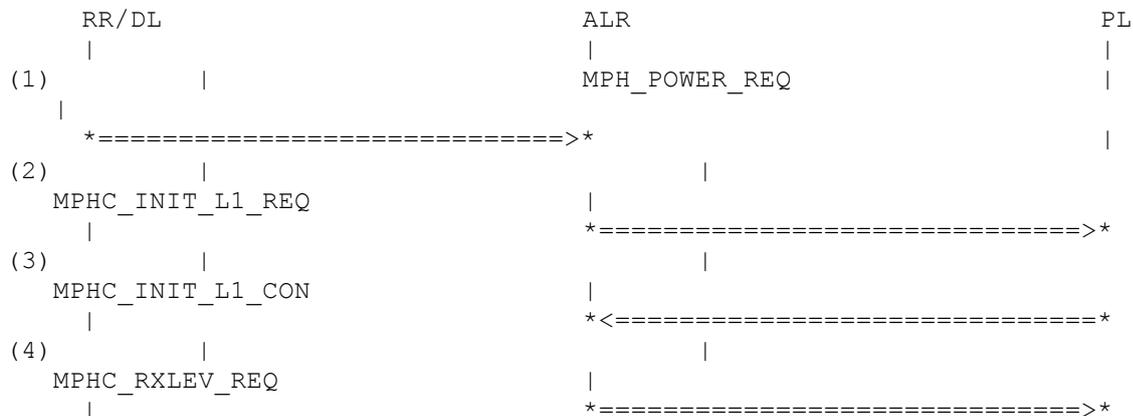
History:	22.09.99	MPA	Initial
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## 4.2 Cell Selection (GSM 900)

### 4.2.1 ALR001: Initiation by RR, 4 channels available

**Description:** RR starts a cell selection with power measurements with interruption. Four channels in the order 23, 14, 124, 1 have acceptable fieldstrength values.

**Preamble:** ALR000



```

(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) MPH_C_RXLEV_REQ	shared_ptr	NOT_USED
(13) MPH_C_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)	MPH_C_RXLEV_REQ	
	*----->*	
(3)	MPH_C_RXLEV_IND	
	*<-----*	
(4)	MPH_C_RXLEV_REQ	
	*----->*	
(5)	MPH_C_RXLEV_IND	
	*<-----*	
(6)	MPH_C_RXLEV_REQ	
	*----->*	
(7)	MPH_C_RXLEV_IND	
	*<-----*	
(8)	MPH_C_RXLEV_REQ	
	*----->*	
(9)	MPH_C_RXLEV_IND	
	*<-----*	
(10)	MPH_C_RXLEV_REQ	
	*----->*	
(11)	MPH_C_RXLEV_IND	
	*<-----*	
(12) MPH_POWER_CNF		
*<-----*		

#### Parametrization

Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT BAND_GSM_1800
(2) MPH_C_RXLEV_REQ	shared_ptr	NOT_USED
(3) MPH_C_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(4) MPH_C_RXLEV_REQ	shared_ptr	NOT_USED

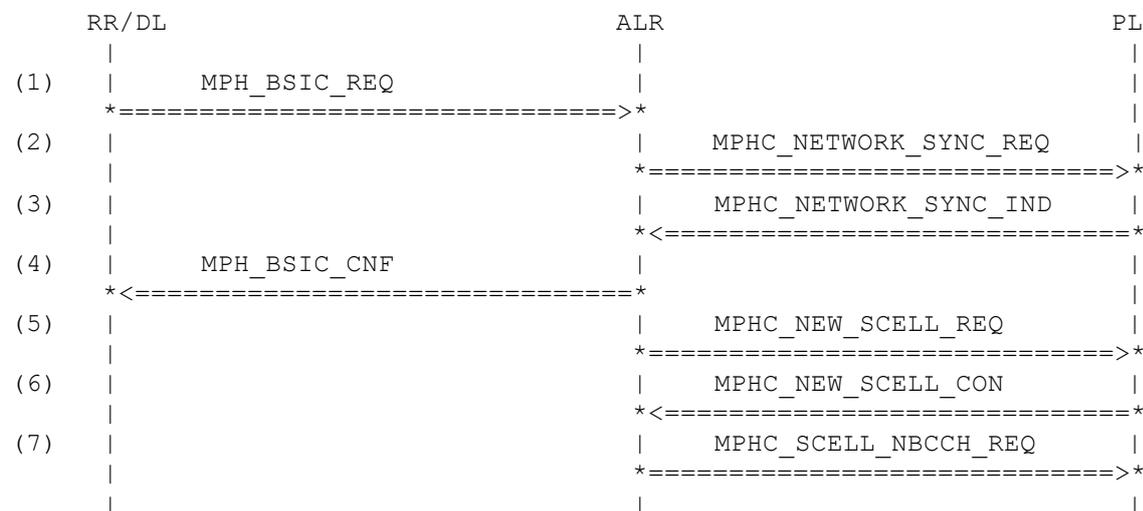
(5) MPH_C_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(6) MPH_C_RXLEV_REQ	shared_ptr	NOT_USED
(7) MPH_C_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(8) MPH_C_RXLEV_REQ	shared_ptr	NOT_USED
(9) MPH_C_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(10) MPH_C_RXLEV_REQ	shared_ptr	NOT_USED
(11) MPH_C_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(12) MPH_POWER_CNF	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



**Parametrization**

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

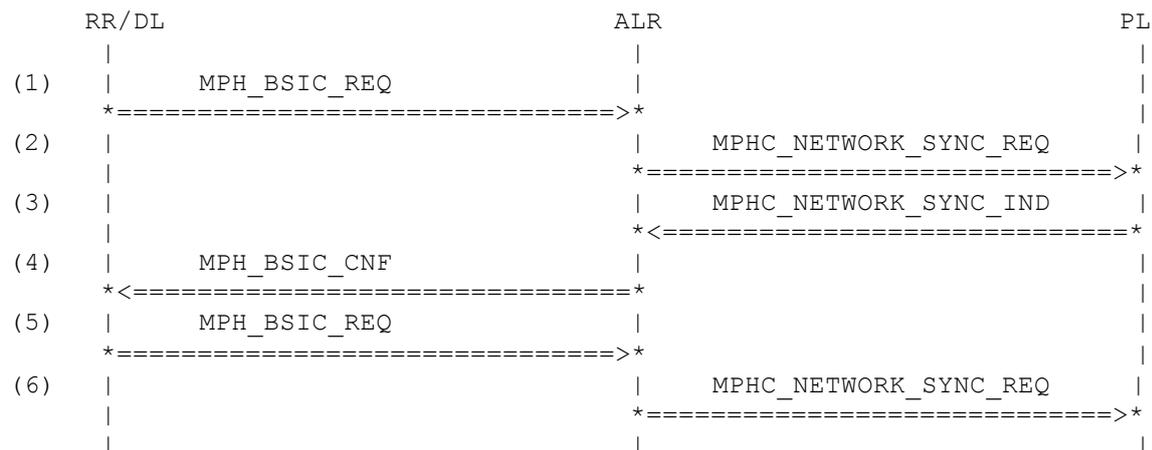
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
 (3) MPH_NETWORK_SYNC_IND		
	radio_freq	ARFCN_23
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_1
 (4) MPH_BSIC_CNF		
	arfcn	ARFCN_X817
	bsic	BSIC_1
	cs	CS_NO_ERROR
 (5) MPH_NEW_SCELL_REQ		
	radio_freq	ARFCN_23
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	tsc	BSIC_1
 (6) MPH_NEW_SCELL_CON		
	param	NOT_USED
 (7) MPH_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 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 BSIC_1 CS_NO_BCCH_AVAIL
(5) MPH_BSIC_REQ	arfcn	ARFCN_14
(6) 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

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**

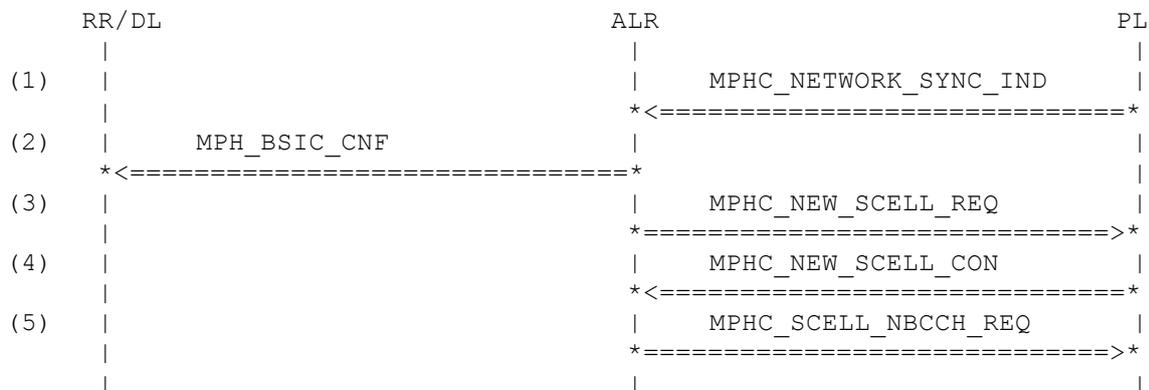
Primitive	Parameter	Value
(1) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_14
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(2) MPH_BSIC_CNF	arfcn	ARFCN_14
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(3) MPH_BSIC_REQ	arfcn	ARFCN_124
(4) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_124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

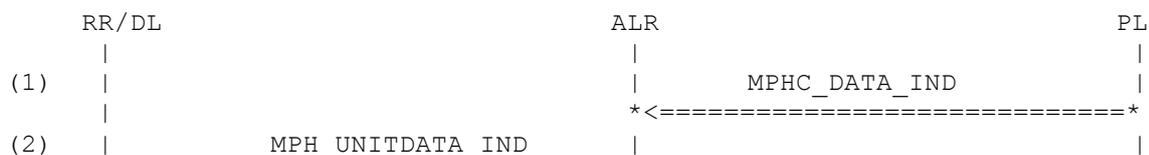
Primitive	Parameter	Value
(1) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_14
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(2) MPH_BSIC_CNF	arfcn	ARFCN_14
	bsic	BSIC_0
	cs	CS_NO_ERROR
(3) MPHC_NEW_SCELL_REQ	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0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



```

* <=====
(3) | | MPHC_DATA_IND |
| | * <=====
(4) | MPH_UNITDATA_IND |
| | * <=====
(5) | | MPHC_DATA_IND |
| | * <=====
(6) | MPH_UNITDATA_IND |
| | * <=====
(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:                    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	



(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 } 23.09.9	ARFCN_124 NOT_USED  RR DOWNLINK D_SYS_INFO_1 TI_0 CELL_CHAN_DESC_1 RACH_CTRL_1  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)	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_1
(2) MPH_STOP_SCELL_BCCH_REQ	param	NOT_USED
(3) MPH_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) MPH_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) MPH_NEW_SCELL_REQ	radio_freq fn_offset time_alignment tsc	ARFCN_1 FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(7) MPH_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\_C\_UNITDATA\_IND

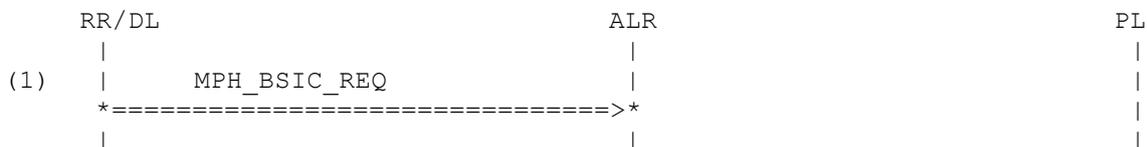
arfcn ARFCN\_1  
 fn NOT\_USED  
 sdu  
 {  
 component RR  
 direction DOWNLINK  
 pd D\_SYS\_INFO\_1  
 ti TI\_0  
 cell\_chan\_desc CELL\_CHAN\_DESC\_1  
 rach\_ctrl RACH\_CTRL\_1  
 }

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



**Parametrization**

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

(1) MPH\_BSIC\_REQ

arfcn NOT\_PRESENT\_16BIT

History: 23.09.99 MPA Initial

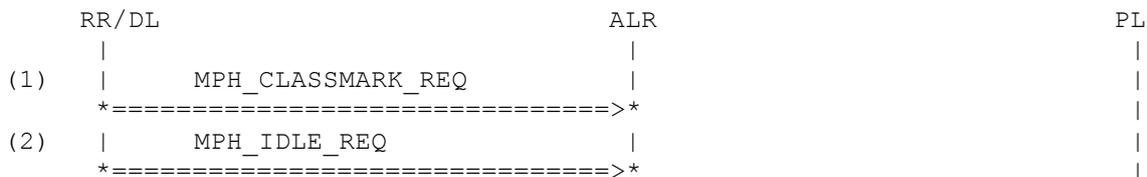
### 4.2.12 ALR012: RR select second channel

**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>



```

(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
<B>	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
<B>	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
<B>	page_block_index	PBI_0
<C>	page_block_index	PBI_2
	page_mode	PGM_REORG

(6) MPH_C_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	multi_band	MULTI_BAND_0
<A>	arfcn	CHLIST_23_1_124_FFFF
<B>	arfcn	EMPTY_NCELL_LIST
<C>	arfcn	CHLIST_23_1_124_FFFF
	sync_only	NOT_USED
(10) MPH_C_RXLEV_PERIODIC_REQ		
<A>	chan_list	CHLIST_14_23_1_124
<B>	chan_list	CHLIST_14
<C>	chan_list	CHLIST_14_23_1_124
<A>	num_of_chans	CHANNELS_4
<B>	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)		MPH_STOP_SCELL_BCCH_REQ	
		*----->*	
(5)		MPH_START_CCCH_REQ	
		*----->*	
(6)		MPH_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

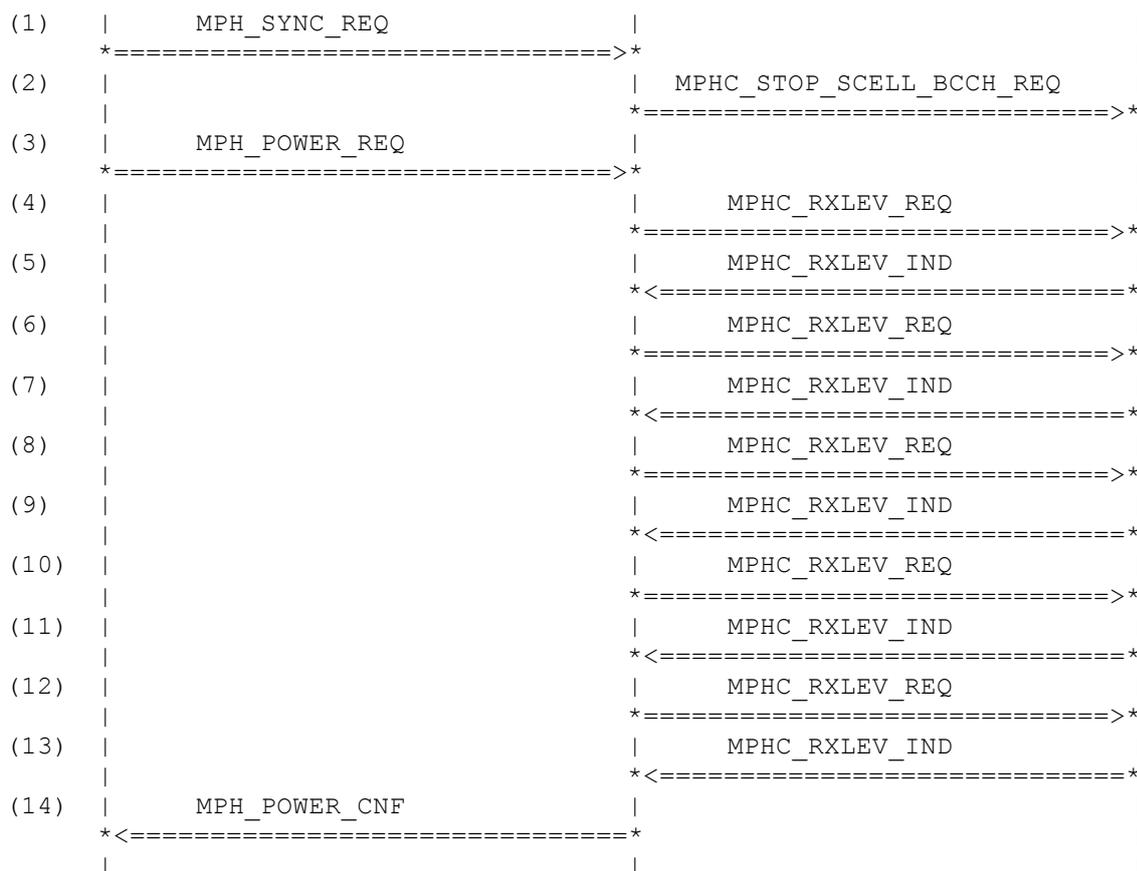
**Description:** During BCCH reading RR restarts a cell selection. This leads to a new full power measurement cycle.

**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



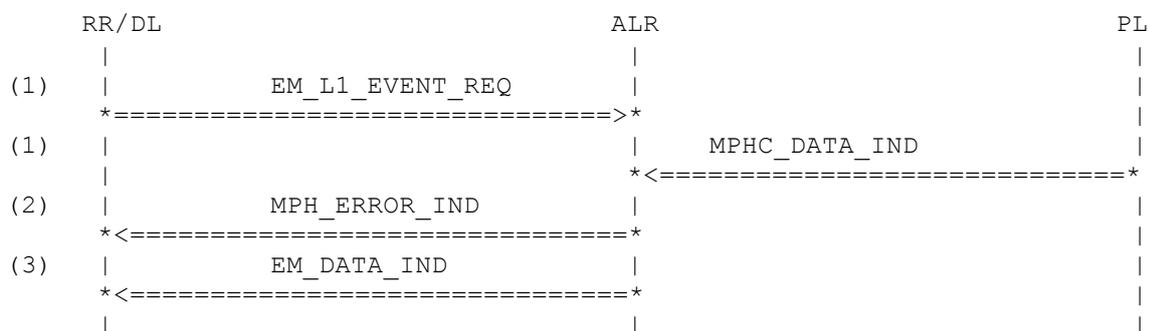
- (6) MPHC\_STOP\_NCELL\_BCCH\_REQ
  - radio\_freq\_array\_size STOP\_SIZE\_0
  - radio\_freq\_array NOT\_USED
- (7) MPHC\_STOP\_SCELL\_BCCH\_REQ
  - param NOT\_USED
- (8) MPHC\_RXLEV\_REQ
  - shared\_ptr NOT\_USED

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) MPH_C_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(3) MPH_C_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(4) MPH_C_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_1 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(5) MPH_C_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) MPH_C_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(8) MPH_C_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) MPH_C_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) MPH_C_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**

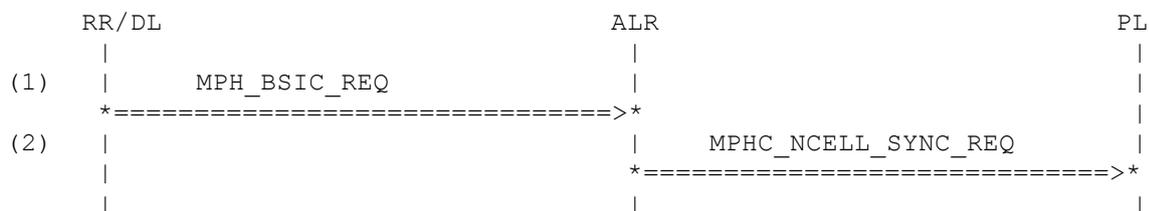
Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt	NO_PCH_INTERRUPT
	freq_bands	NOT_USED
(2) MPHC_STOP_NCELL_SYNC_REQ	radio_freq_array_size	STOP_SIZE_0
	radio_freq_array	NOT_USED
(3) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_0
	radio_freq_array	NOT_USED
(4) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
	shared_ptr	RXLEV_IDX_2
(6) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
	shared_ptr	RXLEV_IDX_2
(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
	shared_ptr	RXLEV_IDX_2
(10) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
	shared_ptr	RXLEV_IDX_2
(12) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
	shared_ptr	RXLEV_IDX_2
(14) MPH_POWER_CNF	num_of_chan	CHANNELS_0
	arfcn	NOT_USED
	rx_lev	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**

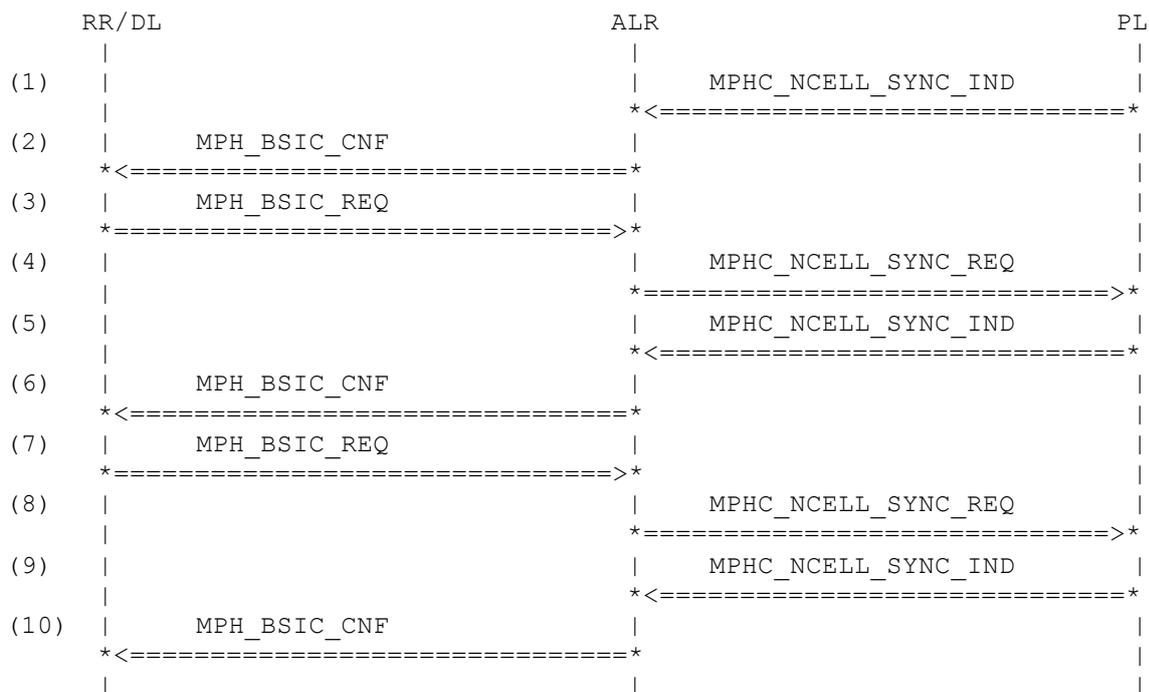
Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_14
(2) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO

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**

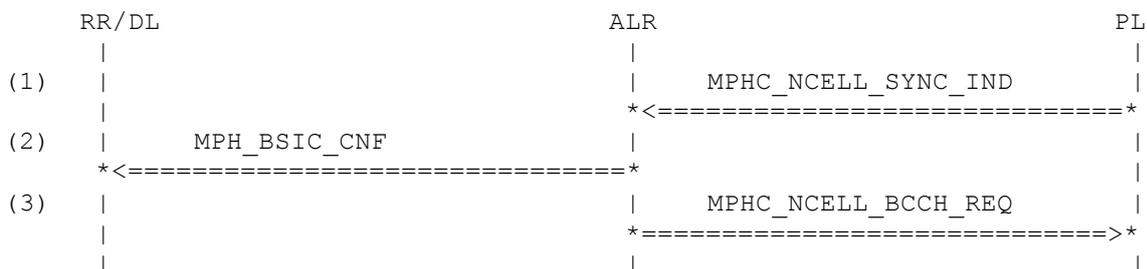
Primitive	Parameter	Value
(1) MPH_C_NCELL_SYNC_IND	radio_freq	ARFCN_14
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(2) MPH_BSIC_CNF	arfcn	ARFCN_14
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(3) MPH_BSIC_REQ	arfcn	ARFCN_124
(4) MPH_C_NCELL_SYNC_REQ	radio_freq	ARFCN_124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

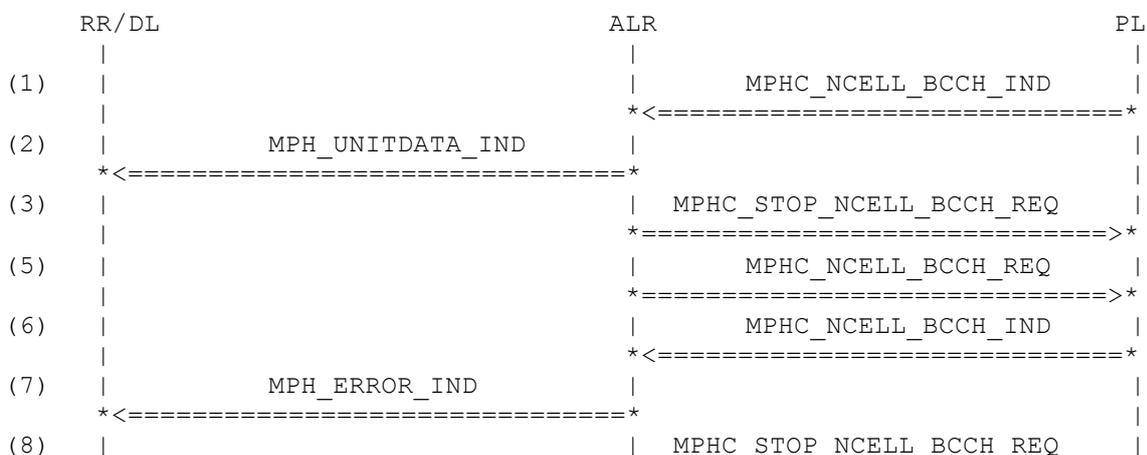
Primitive	Parameter	Value
(1) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_14
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	bsic	BSIC_1
(2) MPH_BSIC_CNF	arfcn	ARFCN_14
	bsic	BSIC_1
	cs	CS_NO_ERROR
(3) MPHC_NCELL_BCCH_REQ	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14
	time_alignment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





(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)		MPH_NCELL_SYNC_REQ	
		*=====>*	
(3)		MPH_NCELL_SYNC_IND	
		*<=====*	
(4)	MPH_BSIC_CNF		
	*<=====*		
(5)		MPH_NCELL_BCCH_REQ	
		*=====>*	
(6)		MPH_NCELL_BCCH_IND	
		*<=====*	
(7)	MPH_UNITDATA_IND		

```

      * <=====
(8)  |                                     | 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 fn_offset time_alignment timing_validity	ARFCN_124 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(3) MPHC_NCELL_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_124 SB_FOUND FN_OFFSET_124 TIME_ALIGNMT_124 BSIC_1
(4) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_124 BSIC_1 CS_NO_ERROR
(5) MPHC_NCELL_BCCH_REQ	radio_freq fn_offset time_alignment tsc bcch_blocks_required gprs_prio	ARFCN_124 FN_OFFSET_124 TIME_ALIGNMT_124 BSIC_1 NCELL_BCCH_SI_2_3_4 NOT_USED
(6) MPHC_NCELL_BCCH_IND	radio_freq l2_channel error_flag l2_frame tc fn	ARFCN_124 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_3 TC_0 FN_OFFSET_124
(13) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select	ARFCN_124 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      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

RR/DL	ALR	PL
(1) MPH_BSIC_REQ		
*=====>*		
(2)	MPH_C_STOP_NCELL_BCCH_REQ	
*=====>*		
(4)	MPH_C_NCELL_SYNC_REQ	
*=====>*		
(5)	MPH_C_NCELL_SYNC_IND	
*<=====*		
(6) MPH_BSIC_CNF		
*<=====*		
(7)	MPH_C_NCELL_BCCH_REQ	
*=====>*		
(8)	MPH_C_NCELL_BCCH_IND	
*<=====*		
(9) MPH_UNITDATA_IND		
*<=====*		
(10)	MPH_C_STOP_NCELL_BCCH_REQ	
*=====>*		
(11)	MPH_C_NCELL_BCCH_REQ	
*=====>*		

**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

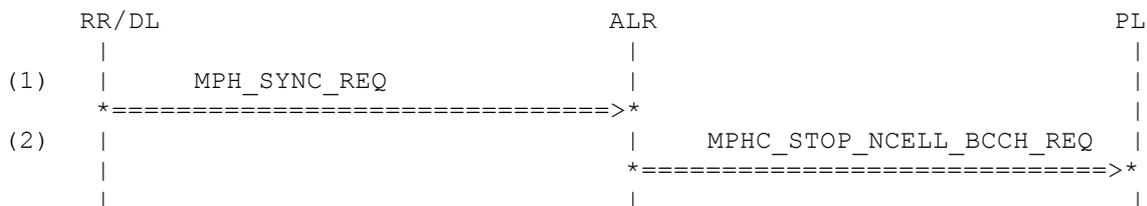
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(4) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_1
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_1
	time_alignment	TIME_ALIGNMT_1
	bsic	BSIC_1
(5) MPH_BSIC_CNF	arfcn	ARFCN_1
	bsic	BSIC_1
	cs	CS_NO_ERROR
(6) MPHC_NCELL_BCCH_REQ	radio_freq	ARFCN_1
	fn_offset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

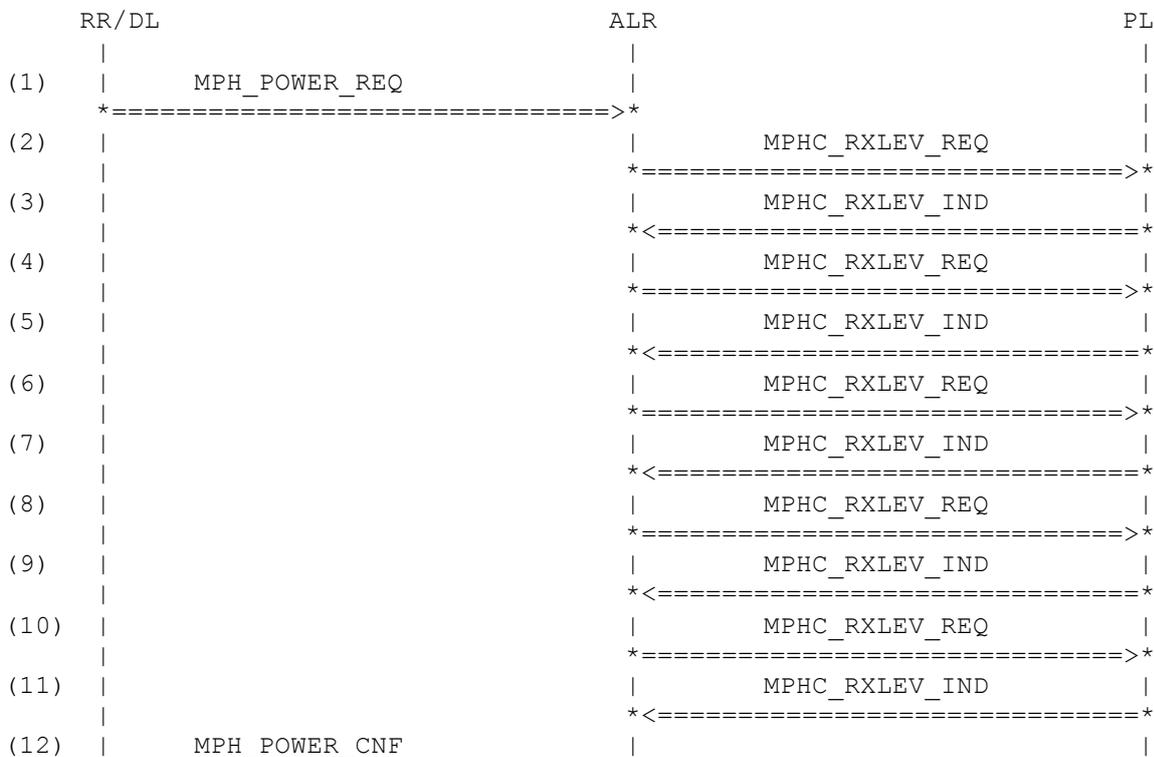
History: 24.09.99 MPA Initial

## 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



* <=====*		
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_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**

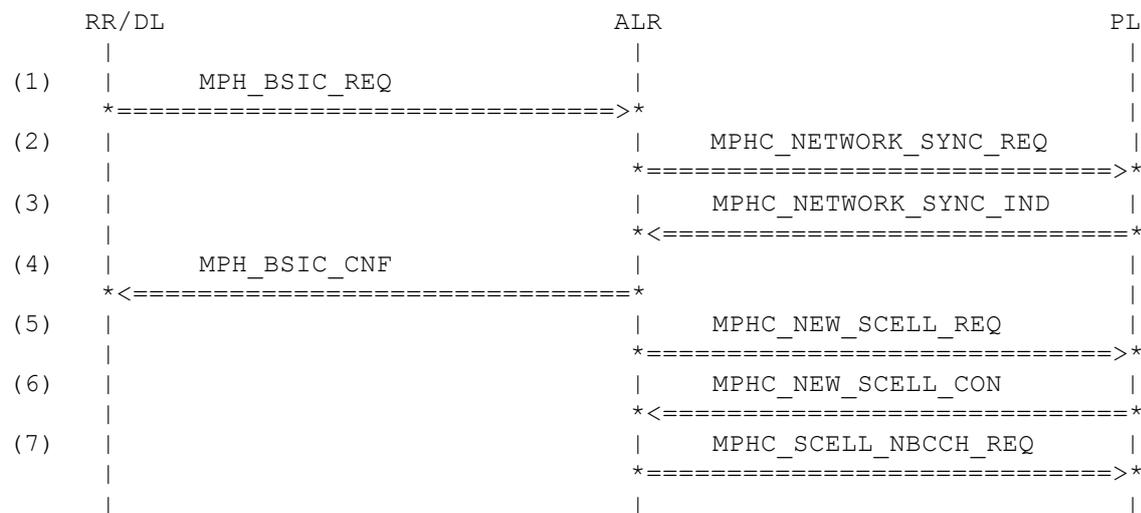
Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT NOT_USED
(2) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(3) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(4) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(5) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_2
(6) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(7) MPHC_RXLEV_IND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

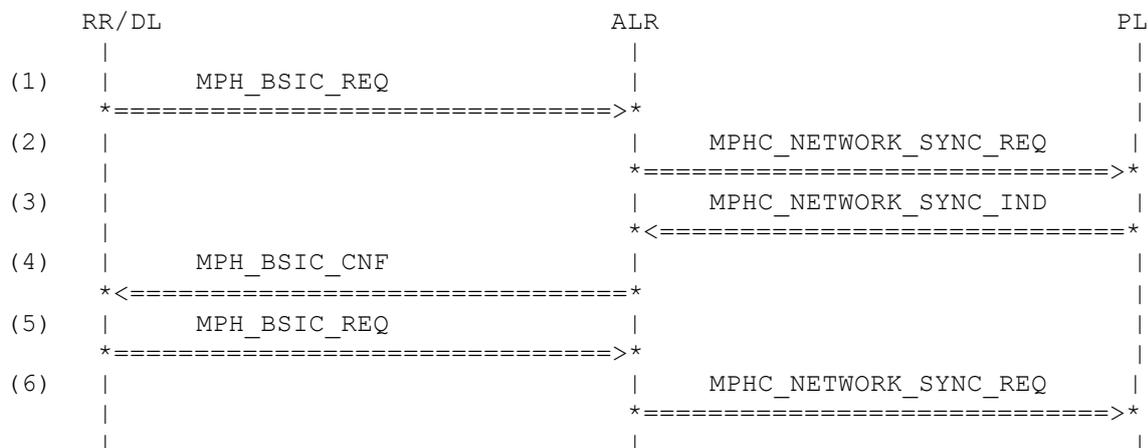
Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_637
(2) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_637
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(3) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_637
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_0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

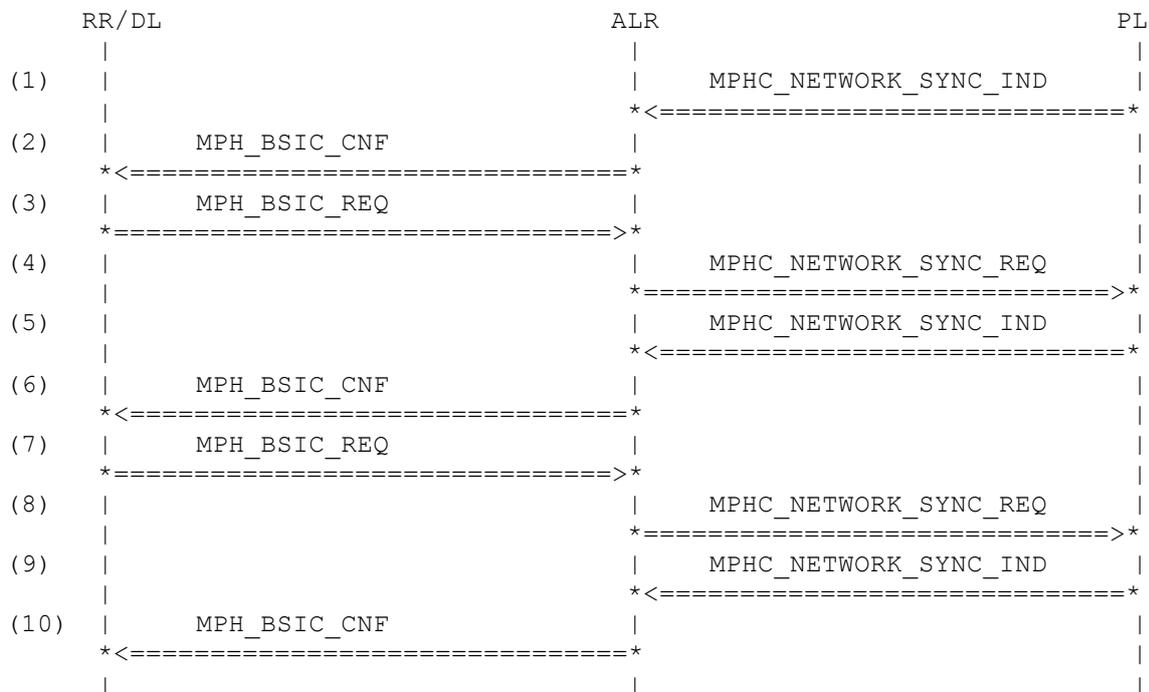
Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_637
(2) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_637
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(3) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_637
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	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) MPH\_NEW\_SCELL\_REQ

radio_freq	ARFCN_580
fn_offset	FN_OFFSET_0
time_alignment	TIME_ALIGNMT_0
tsc	BSIC_0

(4) MPH\_NEW\_SCELL\_CON

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

(5) MPH\_SCELL\_NBCCH\_REQ

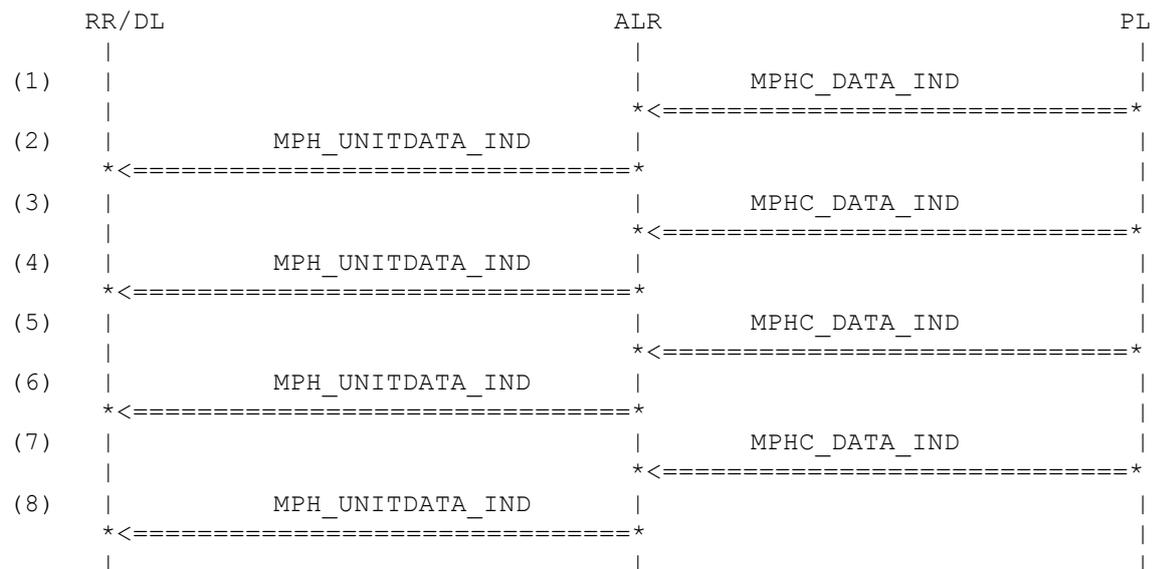
schedule_array_size	SCHED_SIZE_1
schedule_array	FULL_READ

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**

<u>Primitive</u>	<u>Parameter</u>	<u>Value</u>
------------------	------------------	--------------

(1) MPH\_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) MPH_C_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) MPH_C_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) MPH_C_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

```

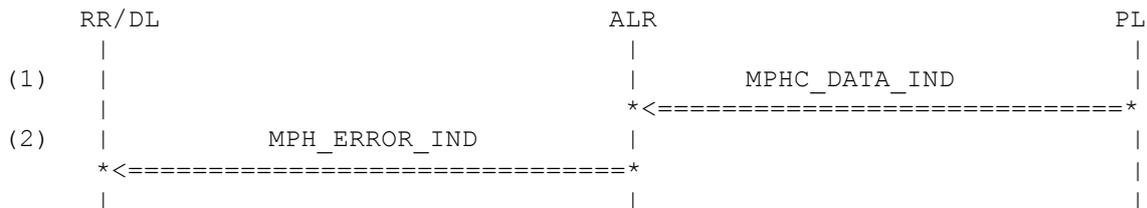
arfcn        ARFCN_637
fn           NOT_USED
sdu          {
component    RR
direction    DOWNLINK
pd           D_SYS_INFO_4
ti           TI_0
loc_area_ident LOC_AREA_IDENT_1
cell_select  CELL_SELECT_1
rach_ctrl    RACH_CTRL_1
}
    
```

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

```

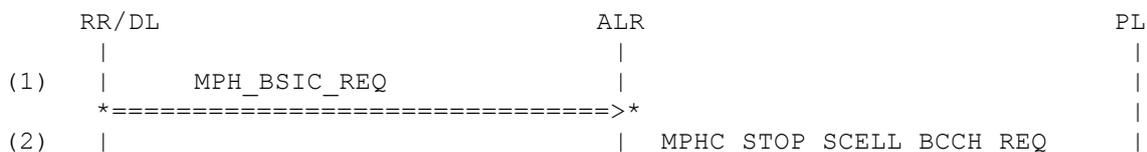
cs            CS_BCCH_READ_ERROR
arfcn        ARFCN_637
    
```

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





```

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

```

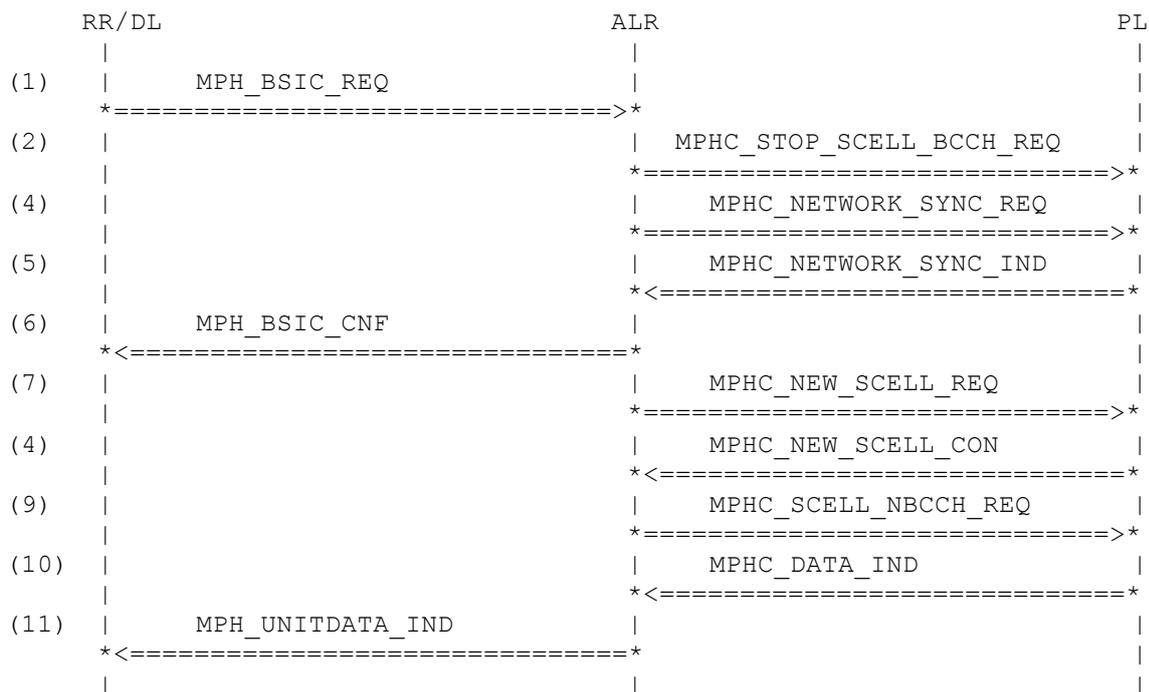
arfcn           ARFCN_885
fn              NOT_USED
sdu              {
component       RR
direction       DOWNLINK
pd              D_SYS_INFO_1
ti              TI_0
cell_chan_desc  CELL_CHAN_DESC_1
rach_ctrl       RACH_CTRL_1
}
    
```

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 fn_offset time_alignment timing_validity search_mode	ARFCN_512 NOT_USED NOT_USED TV_INVALID_TIMING_INFO SM_WIDE_MODE
(4) MPHC_NETWORK_SYNC_IND	radio_freq sb_flag fn_offset time_alignment bsic	ARFCN_512 SB_FOUND FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(5) MPH_BSIC_CNF	arfcn bsic cs	ARFCN_512 BSIC_0 CS_NO_ERROR
(6) MPHC_NEW_SCELL_REQ	radio_freq fn_offset time_alignment tsc	ARFCN_512 FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_0
(7) MPHC_NEW_SCELL_CON	param	NOT_USED
(8) MPHC_SCELL_NBCCH_REQ	schedule_array_size schedule_array	SCHED_SIZE_1 NOT_USED
(9) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_512 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_1 TC_0 NOT_USED FN_OFFSET_0
(10) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_chan_desc rach_ctrl }	ARFCN_512 NOT_USED  RR DOWNLINK D_SYS_INFO_1 TI_0 CELL_CHAN_DESC_1 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) | | | MPH_C_STOP_SCELL_BCCH_REQ |
    | | | *=====>* |
(4) | | | MPH_C_START_CCCH_REQ |
    | | | *=====>* |
(5) | | | MPH_C_SCELL_NBCCH_REQ |
    | | | *=====>* |
(6) | MPH_IDENTITY_REQ | |
    | *=====>* | |
(7) | MPH_CBCH_REQ | |
    | *=====>* | |
(8) | MPH_NEIGHBOURCELL_REQ | |
    | *=====>* | |
(9) | | | MPH_C_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
<B>	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 reorg_only	NOT_PRESENT_8BIT NOT_USED
(3)	MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4)	MPHC_START_CCCH_REQ	bs_pa_mfrms bs_ag_blks_res <A> <B> <C>  <A> <B> <C>	BS_PA_MFRMS_8 BS_AG_BLK_RES_3 COMB_CCCH_COMB COMB_CCCH_COMB COMB_CCCH_NOT_COMB CCCH_GROUP_0 PG_20 PBI_0 PBI_0 PBI_2 PGM_REORG
(5)	MPHC_SCELL_NBCCH_REQ	schedule_array_size schedule_array	SCHED_SIZE_1 NOT_USED
(6)	MPH_IDENTITY_REQ	mid	MS_ID_IMSI_TMSI
(7)	MPH_CBCH_REQ	cbch	NO_CBCH
(8)	MPH_NEIGHBOURCELL_REQ	multi_band <A> <B> <C>  sync_only	MULTI_BAND_0 CHLIST_512_637_885_FFFF EMPTY_NCELL_LIST CHLIST_512_637_885_FFFF NOT_USED
(9)	MPHC_RXLEV_PERIODIC_REQ	<A> <B> <C> <A> <B> <C>	chan_list chan_list chan_list num_of_chans num_of_chans num_of_chans ba_id next_radio_freq_measured
History:	23.09.99 12.07.00  20.07.01 07.02.02	MPA DG  MSB LG	Initial MPH_CLASSMARK_REQ: class changed into classmark (Forum G23M / No 0057) channel list adapted 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)		MPH_CXLEV_REQ	
		*=====	
(3)		MPH_CXLEV_IND	
		*<=====	
(4)		MPH_CXLEV_REQ	
		*=====	
(5)	MPH_POWER_REQ		
	*=====		
(6)		MPH_CXLEV_REQ	
		*=====	
(7)		MPH_CXLEV_IND	
		*<=====	
(8)		MPH_CXLEV_REQ	
		*=====	
(9)		MPH_CXLEV_IND	
		*<=====	
(10)		MPH_CXLEV_REQ	
		*=====	
(11)		MPH_CXLEV_IND	
		*<=====	
(12)		MPH_CXLEV_REQ	
		*=====	
(13)		MPH_CXLEV_IND	
		*<=====	
(14)		MPH_CXLEV_REQ	
		*=====	
(15)		MPH_CXLEV_IND	
		*<=====	
(16)	MPH_POWER_CNF		

\* <=====\*

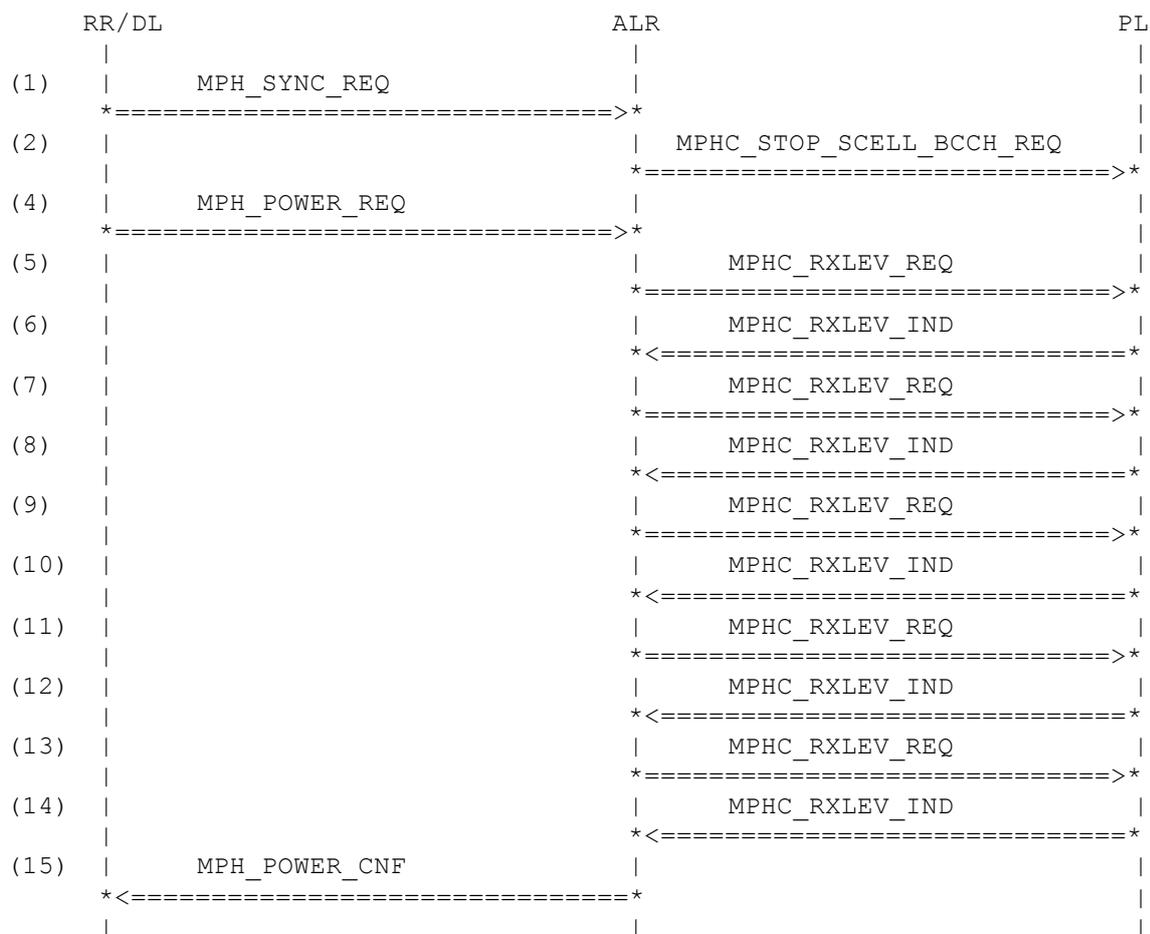
<b>Parametrization</b>			
	<u>Primitive</u>	<u>Parameter</u>	<u>Value</u>
(1)	MPH_POWER_REQ	pch_interrupt freq_bands	PCH_INTERRUPT NOT_USED
(2)	MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(3)	MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_3_1800
(4)	MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(5)	MPH_POWER_REQ	pch_interrupt freq_bands	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



**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

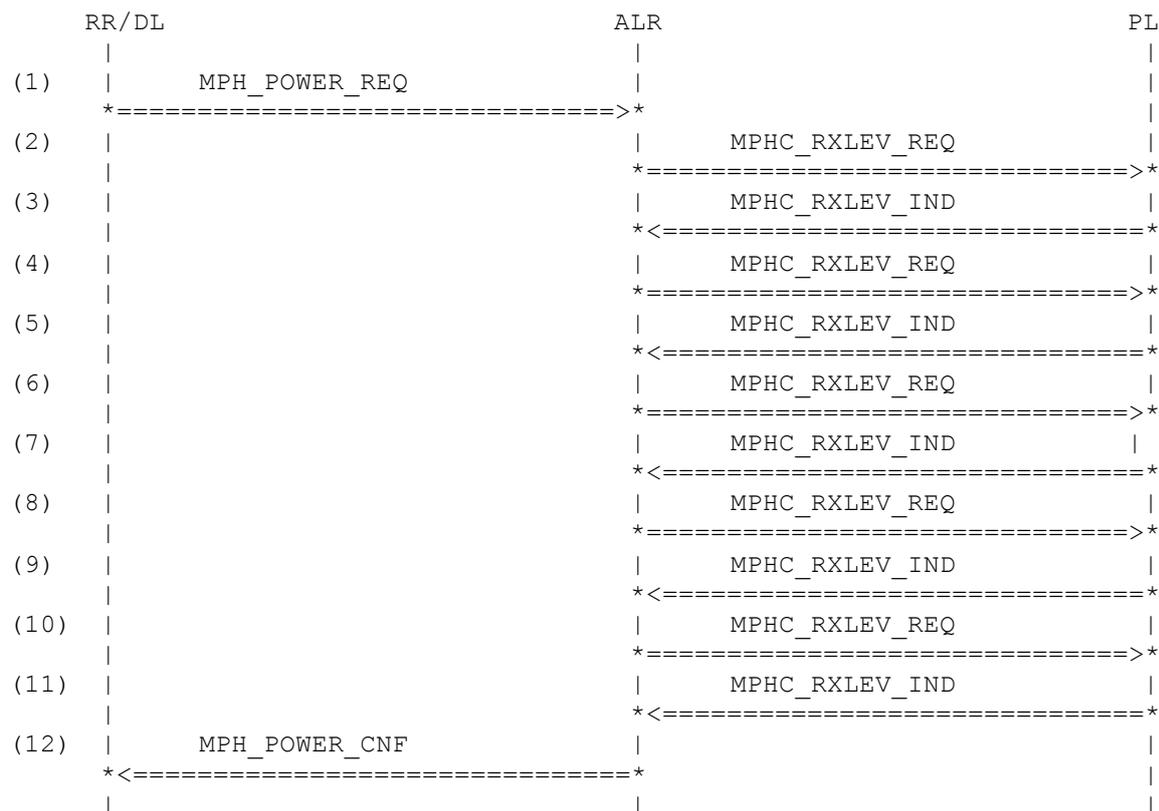
History:                    23.09.99                    MPA                    Initial

## 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



**Parametrization**

Primitive	Parameter	Value
(1) MPH_POWER_REQ	pch_interrupt	PCH_INTERRUPT
	freq_bands	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) 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) MPH_POWER_CNF	num_of_chan arfcn rx_lev	CHANNELS_8 ARFCN_DUAL RXLEV_DUAL

**History:            24.01.00            MPA            Initial**

#### 4.5.2 ALR602: Initiation by RR, no channels available

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

**Preamble:** ALR600

	RR/DL	ALR	PL
(1)	MPH_POWER_REQ		
	*=====>*		
(2)		MPHC_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	



```

(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**

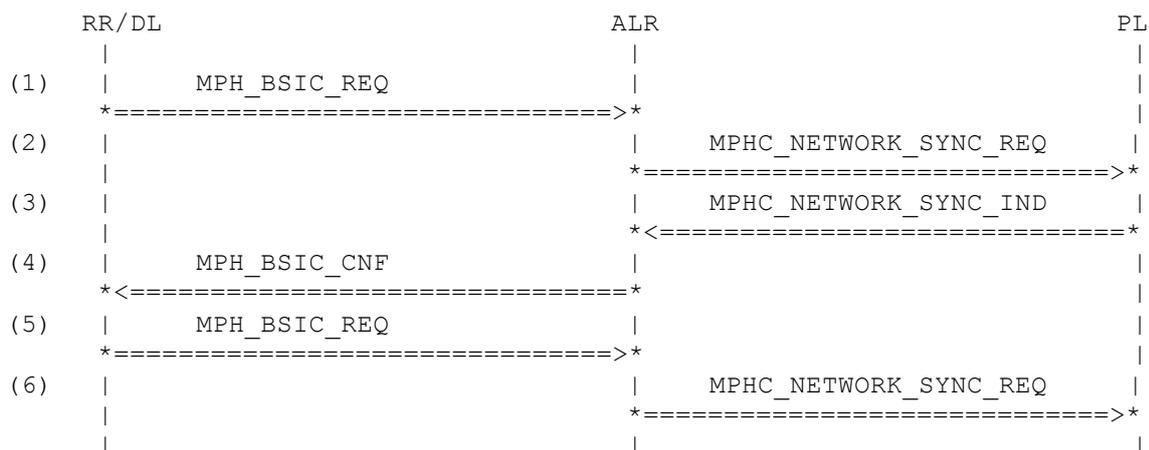
Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_23
(2) MPHC_NETWORK_SYNC_REQ	radio_freq	ARFCN_23
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(3) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_23
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_1
(4) MPH_BSIC_CNF	arfcn	ARFCN_23
	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: 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	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(3) MPH_BSIC_REQ		
	arfcn	ARFCN_14
(4) 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
(5) MPH_NETWORK_SYNC_IND		
	radio_freq	ARFCN_14
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(6) MPH_BSIC_CNF		
	arfcn	ARFCN_14
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(7) MPH_BSIC_REQ		
	arfcn	ARFCN_580
(8) MPH_NETWORK_SYNC_REQ		
	radio_freq	ARFCN_580
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(9) MPH_NETWORK_SYNC_IND		
	radio_freq	ARFCN_580
	sb_flag	NO_SB_FOUND
	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(10) MPH_BSIC_CNF		
	arfcn	ARFCN_580
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(11) MPH_BSIC_REQ		
	arfcn	ARFCN_124
(12) MPH_NETWORK_SYNC_REQ		
	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
	search_mode	SM_WIDE_MODE
(13) MPH_NETWORK_SYNC_IND		
	radio_freq	ARFCN_124
	sb_flag	NO_SB_FOUND

	fn_offset	FN_OFFSET_0
	time_alignment	TIME_ALIGNMT_0
	bsic	BSIC_0
(14) MPH_BSIC_CNF		
	arfcn	ARFCN_124
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(15) MPH_BSIC_REQ		
	arfcn	ARFCN_885
(16) MPH_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
(17) MPH_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
(18) MPH_BSIC_CNF		
	arfcn	ARFCN_885
	bsic	NOT_USED
	cs	CS_NO_BCCH_AVAIL
(19) MPH_BSIC_REQ		
	arfcn	ARFCN_512
(20) 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
(21) 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
(22) MPH_BSIC_CNF		
	arfcn	ARFCN_512
	bsic	NOT_USED
	cs	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

RR/DL	ALR	PL
(1)	MPHC_NETWORK_SYNC_IND	
(2)	MPH_BSIC_CNF	
(3)	MPHC_NEW_SCELL_REQ	
(4)	MPHC_NEW_SCELL_CON	
(5)	MPHC_SCELL_NBCCH_REQ	

**Parametrization**

Primitive	Parameter	Value
(1) MPHC_NETWORK_SYNC_IND	radio_freq	ARFCN_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
(5) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	FULL_READ

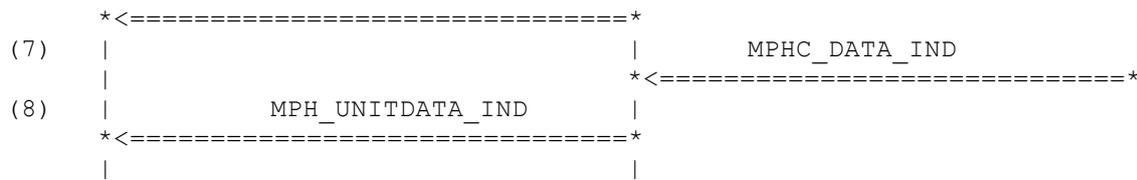
History: 24.01.00 MPA Initial

**4.5.7 ALR607: Read BCCH data**

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

**Preamble:** ALR603

RR/DL	ALR	PL
(1)	MPHC_DATA_IND	
(2)	MPH_UNITDATA_IND	
(3)	MPHC_DATA_IND	
(4)	MPH_UNITDATA_IND	
(5)	MPHC_DATA_IND	
(6)	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
	}	

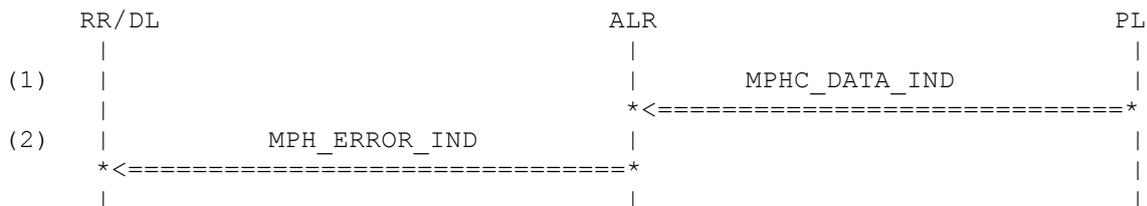
 (7) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_4
	tc	TC_3
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

 (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**

<u>Primitive</u>	<u>Parameter</u>	<u>Value</u>
(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	



(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
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(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> .. <B>

	RR/DL		ALR		PL
(1)		MPH_CLASSMARK_REQ			
		*=====>*			
(2)		MPH_IDLE_REQ			
		*=====>*			
(3)				MPHC_STOP_SCELL_BCCH_REQ	
				*=====>*	
(4)				MPHC_START_CCCH_REQ	



	sync_only	NOT_USED
(9) MPHC_RXLEV_PERIODIC_REQ		
<A>	chan_list	
	CHLIST_637_1_14_23_124_512_580_885	
<B>	chan_list	CHLIST_637
<A>	num_of_chans	CHANNELS_8
<B>	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)	MPH_STOP_SCELL_BCCH_REQ	
	*=====	>*
(4)	MPH_START_CCCH_REQ	
	*=====	>*
(5)	MPH_SCELL_NBCCH_REQ	
	*=====	>*
(6)   MPH_IDENTITY_REQ		
*=====	>*	
(7)   MPH_CBCH_REQ		
*=====	>*	
(8)   MPH_NEIGHBOURCELL_REQ		
*=====	>*	
(9)	MPH_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_BLKS_RES_3

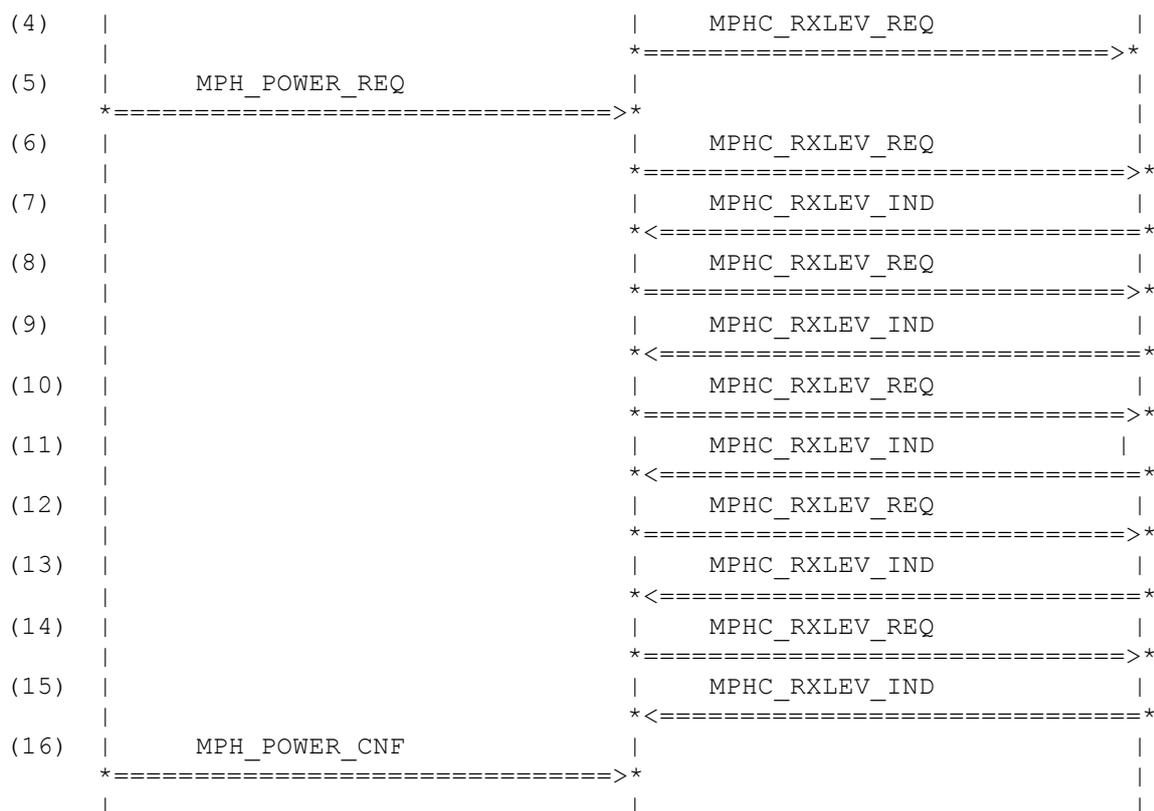
	bs_pa_mfrms	BS_PA_MFRMS_6	
	power	POWER_12	
	ncc_permitted	NOT_PRESENT_8BIT	
	reorg_only	NOT_USED	
(3) MPH_C_STOP_SCELL_BCCH_REQ	param	NOT_USED	
(4) MPH_C_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_8	
	bs_ag_blks_res	BS_AG_BLK_RES_3	
	bcch_combined	COMB_CCCH_NOT_COMB	
	ccch_group	CCCH_GROUP_0	
	page_group	PG_20	
	page_block_index	PBI_2	
	page_mode	PGM_REORG	
(5) MPH_C_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) MPH_C_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)		MPH_C_RXLEV_REQ	
		*=====>	
(3)		MPH_C_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

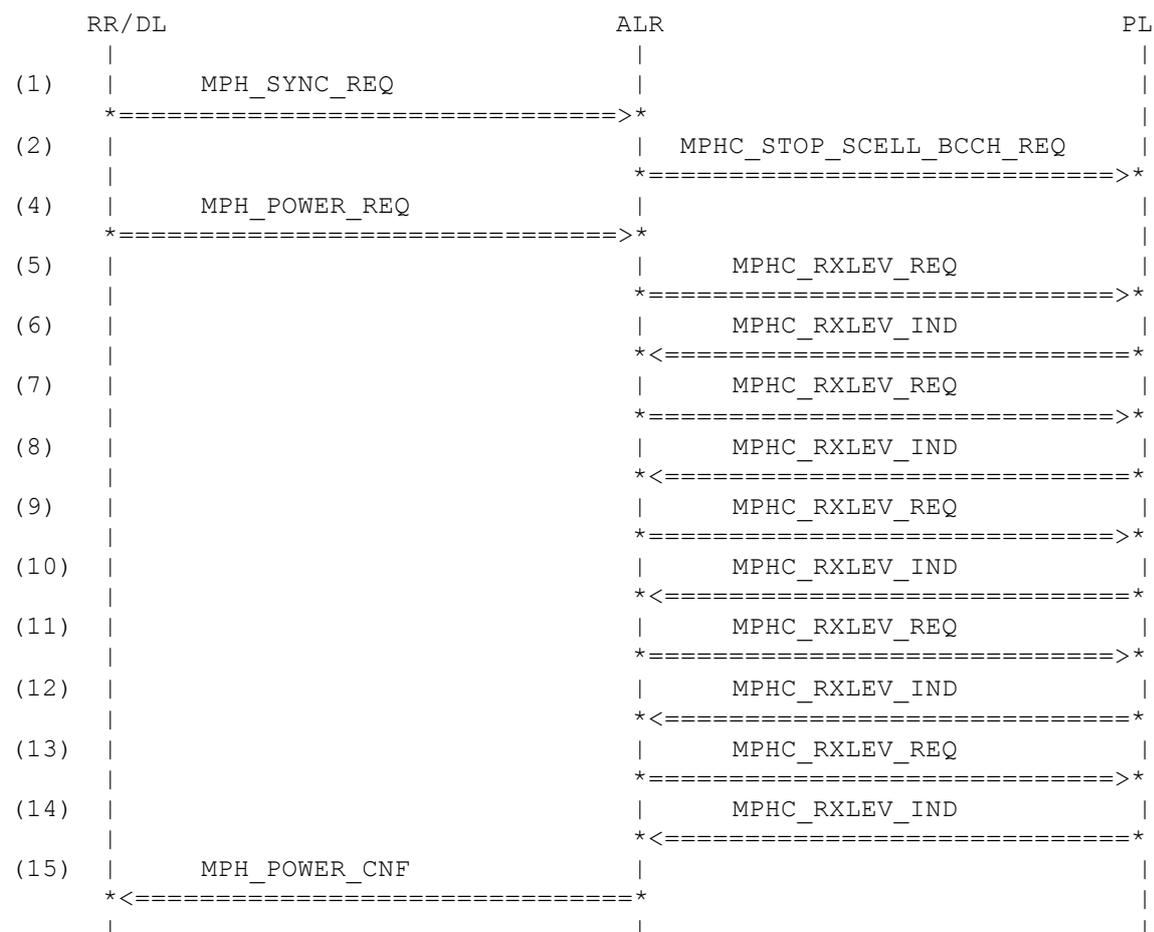
(11) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(12) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(13) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(14) MPHC_RXLEV_REQ	shared_ptr	NOT_USED
(15) MPHC_RXLEV_IND	shared_ptr	RXLEV_IDX_DUAL
(16) MPH_POWER_CNF	num_of_chan arfcn rx_lev	CHANNELS_8 ARFCN_DUAL RXLEV_DUAL

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



**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	
		*----->	

(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 radio_freq_array	STOP_SIZE_0 NOT_USED
(7) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(8) MPHC_RXLEV_REQ	shared_ptr	NOT_USED

History:            24.01.00            MPA            Initial

## 4.6 Page Mode Change

### 4.6.1 ALR020: Initiation with Paging Reorganisation

**Description:** The idle mode is configured by RR. Layer 1 is configured with MPHC\_START\_CCCH\_REQ.

**Preamble:** ALR007

**Variants:** <A>..<B>

	RR/DL	ALR	PL
(1)			
		MPH_IDLE_REQ	
		*=====>*	
(2)			
		MPHC_STOP_SCELL_BCCH_REQ	
		*=====>*	
(4)			
		MPHC_START_CCCH_REQ	
		*=====>*	
(5)			
		MPHC_SCELL_NBCCH_REQ	
		*=====>*	



(1) MPHC\_DATA\_IND

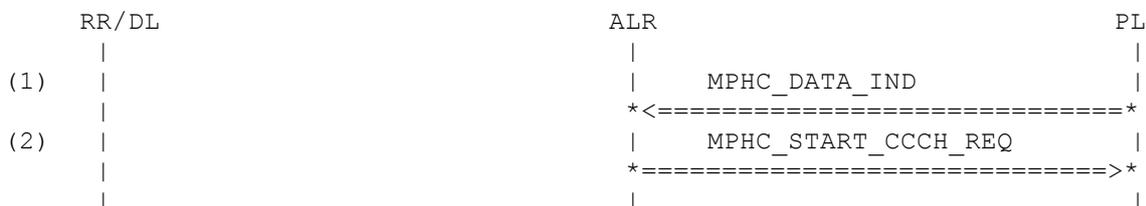
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
<A>	l2_frame	L2_PAGING_REQ_1_EXT
<B>	l2_frame	L2_PAGING_REQ_1_REO
<C>	l2_frame	L2_PAGING_REQ_1_SAB
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

History: 07.10.99 MPA Initial

**4.6.3 ALR023: Page Mode Change, Normal Paging to Extended Paging**

**Description:** The idle mode is configured with Normal Paging. After reception of the new paging mode Extended Paging this information is forwarded to the lower layer. The new paging mode is configured for layer 1.

**Preamble:** ALR025



**Parametrization**

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

(1) MPHC\_DATA\_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_PCH
error_flag	VALID_BLOCK
l2_frame	L2_PAGING_REQ_1_EXT
tc	TC_0
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(2) MPHC\_START\_CCCH\_REQ

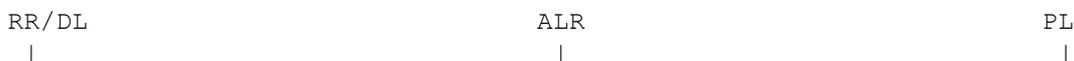
bs_pa_mfrms	BS_PA_MFRMS_7
bs_ag_blks_res	BS_AG_BLKS_RES_2
bcch_combined	COMB_CCCH_COMB
ccch_group	CCCH_GROUP_2
page_group	PG_23
page_block_index	PBI_0
page_mode	PGM_EXTENDED

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



```

(1) | | MPHC_DATA_IND |
    | | *<===== *
(2) | | 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_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

```

RR/DL | | ALR | | PL
(1) | | MPHC_DATA_IND |
    | | *<===== *
(2) | | 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
	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 modi:  
 Variant A: Normal Paging  
 Variant B: Same as before.  
 No reaction is expected.

**Preamble:** ALR025  
**Variants:** <A>...<B>

```

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

```

#### 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
<B>	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>...<B>

```

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

```

#### Parametrization

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

(1) MPHC\_DATA\_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_PCH
error_flag	VALID_BLOCK
l2_frame	L2_PAGING_REQ_1_EXT
tc	TC_0
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(2) MPHC\_START\_CCCH\_REQ

bs_pa_mfrms	BS_PA_MFRMS_7
bs_ag_blks_res	BS_AG_BLKS_RES_2
bcch_combined	COMB_CCCH_COMB
ccch_group	CCCH_GROUP_2
page_group	PG_23
page_block_index	PBI_0
page_mode	PGM_EXTENDED

(3) MPHC\_DATA\_IND

<A>  
<B>

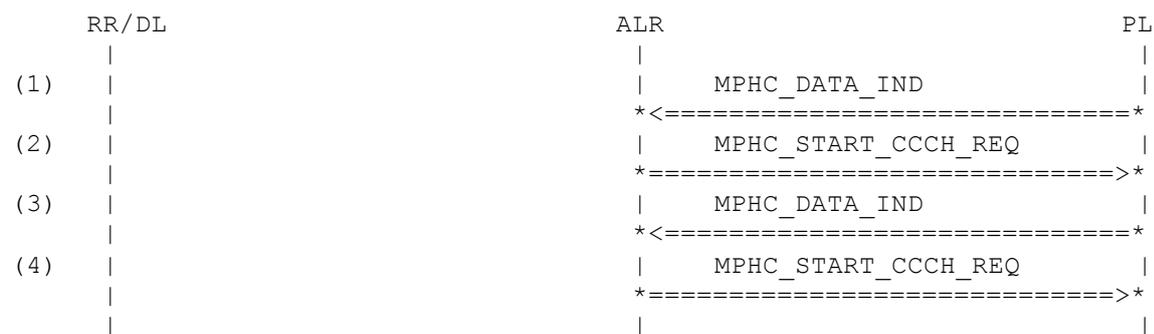
radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_PCH
error_flag	VALID_BLOCK
l2_frame	L2_PAGING_REQ_1_EXT
l2_frame	L2_PAGING_REQ_1_SAB
tc	TC_0
ccch_lev	NOT_USED
fn	FN_OFFSET_0

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



**Parametrization**

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

(1) MPHC\_DATA\_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_PCH
error_flag	VALID_BLOCK
l2_frame	L2_PAGING_REQ_1_EXT
tc	TC_0
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(2) MPHC\_START\_CCCH\_REQ

bs_pa_mfrms	BS_PA_MFRMS_7
bs_ag_blks_res	BS_AG_BLKS_RES_2
bcch_combined	COMB_CCCH_COMB
ccch_group	CCCH_GROUP_2
page_group	PG_23
page_block_index	PBI_0
page_mode	PGM_EXTENDED

(3) MPHC\_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

(4) 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

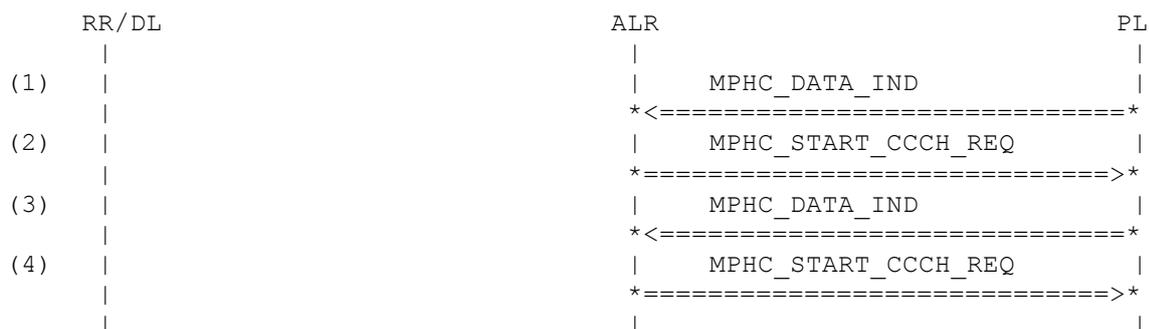
History:	07.10.99	MPA	Initial
	20.06.01	MSB	Normal paging will be configure with

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



**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

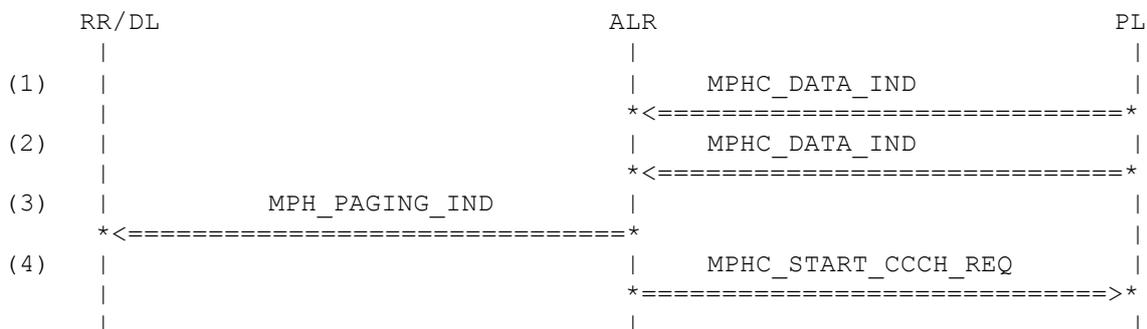
	ccch_lev fn	NOT_USED FN_OFFSET_0
(2) MPHC_START_CCCH_REQ	bs_pa_mfrms bs_ag_blks_res bcch_combined ccch_group page_group page_block_index page_mode	BS_PA_MFRMS_7 BS_AG_BLKS_RES_2 COMB_CCCH_COMB CCCH_GROUP_2 PG_23 PBI_0 PGM_EXTENDED
(3) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev 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_BLKS_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	ARFCN_23
	l2_channel	L2_CHANNEL_PCH

	error_flag	VALID_BLOCK
	l2_frame	L2_IMM_ASS_EXT_REO
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
 (2) MPH_C_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) MPH_C_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

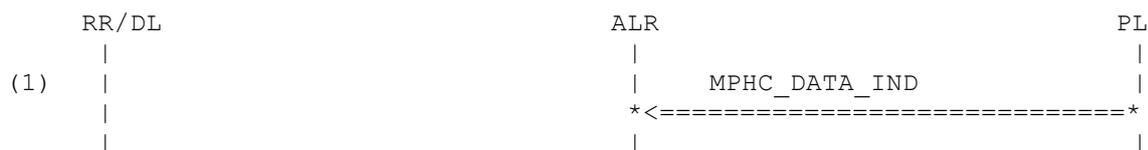
History:                    07.10.99                    MPA                    Initial

## 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) MPH_C_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

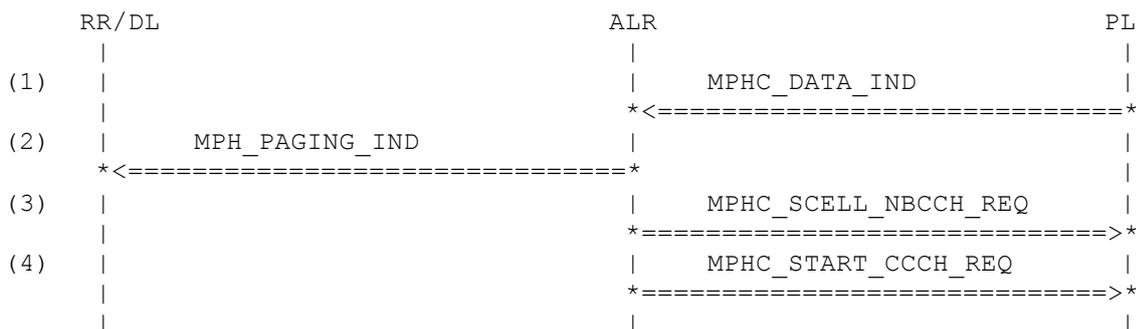
Variant F: IMSI mobile identity 2, SDCCH channel needed

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
<b>(1) MPHC_DATA_IND</b>		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
<A>	l2_frame	L2_PAG_1_I1_A
<B>	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
<b>(2) MPH_PAGING_IND</b>		
<A>	identity_type	ID_TYPE_IMSI
<B>	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
<B>	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

PERIODIC_SCELL_BCCH_ARRAY_SIZE	schedule_array_size
PERIODIC_SCELL_BCCH_ARRAY	schedule_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

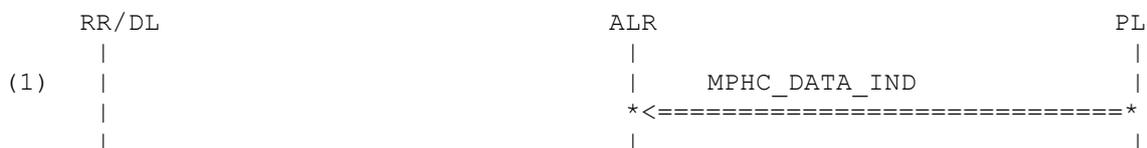
### 4.7.3 ALR072: Paging Req 1, Not for MS

**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

<A>	radio_freq	ARFCN_23
<B>	l2_channel	L2_CHANNEL_PCH
<C>	error_flag	VALID_BLOCK
<D>	l2_frame	L2_PAG_1_WI1
<E>	l2_frame	L2_PAG_1_WT1
	l2_frame	L2_PAG_1_WI2
	l2_frame	L2_PAG_1_WT2
	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



(4) MPHC\_SELL\_NBCCH\_REQ

PERIODIC\_SELL\_BCCH\_ARRAY\_SIZE schedule\_array\_size  
 PERIODIC\_SELL\_BCCH\_ARRAY schedule\_array

(5) MPHC\_START\_CCCH\_REQ

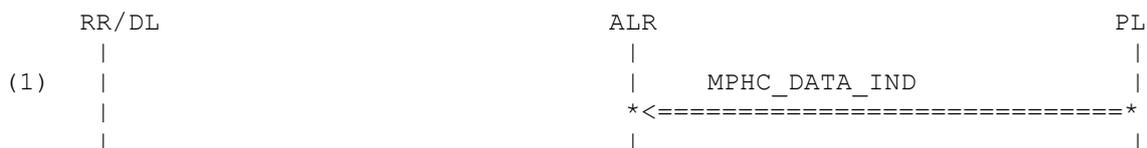
bs\_pa\_mfrms BS\_PA\_MFRMS\_8  
 bs\_ag\_blks\_res BS\_AG\_BLK\_RES\_3  
 bcch\_combined COMB\_CCCH\_COMB  
 ccch\_group CCCH\_GROUP\_0  
 page\_group PG\_20  
 page\_block\_index PBI\_0  
 page\_mode PGM\_NORMAL

History: 08.10.99 MPA Initial

**4.7.5 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)**

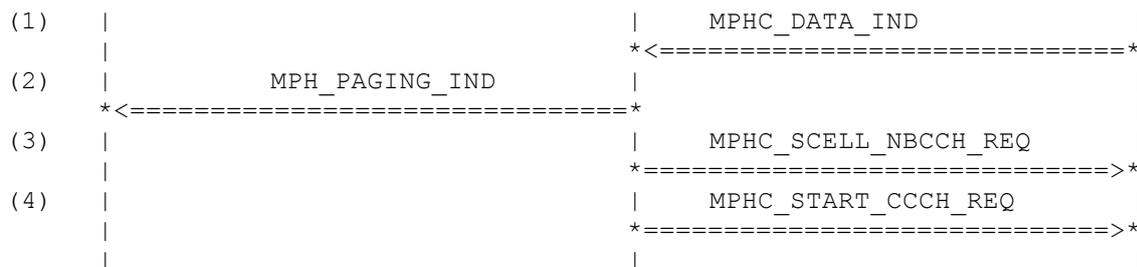
**Description:** The MS is in idle mode. It receives a paging message corresponding to the actual TMSI in the information elements mobile identity 1 or 2. A paging indication is forwarded to RR.

- 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**

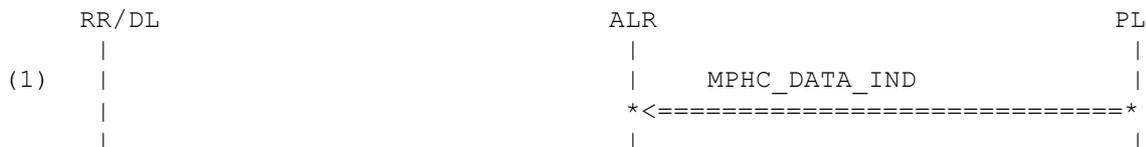
Primitive	Parameter	Value
<b>(1) MPHC_DATA_IND</b>		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
<A>	l2_frame	L2_PAG_2_T1_A
<B>	l2_frame	L2_PAG_2_T1_S
<C>	l2_frame	L2_PAG_2_T1_T
<D>	l2_frame	L2_PAG_2_T1_D
<E>	l2_frame	L2_PAG_2_T2_A
<F>	l2_frame	L2_PAG_2_T2_S
<G>	l2_frame	L2_PAG_2_T2_T
<H>	l2_frame	L2_PAG_2_T2_D
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
<b>(2) MPH_PAGING_IND</b>		
	identity_type	ID_TYPE_TMSI
<A>	channel_needed	CN_ANY_CHAN
<B>	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
<b>(3) MPHC_SCELL_NBCCH_REQ</b>		
	schedule_array_size	PERIODIC_SCELL_BCCH_ARRAY_SIZE
	schedule_array	PERIODIC_SCELL_BCCH_ARRAY
<b>(4) MPHC_START_CCCH_REQ</b>		
	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

### 4.7.7 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

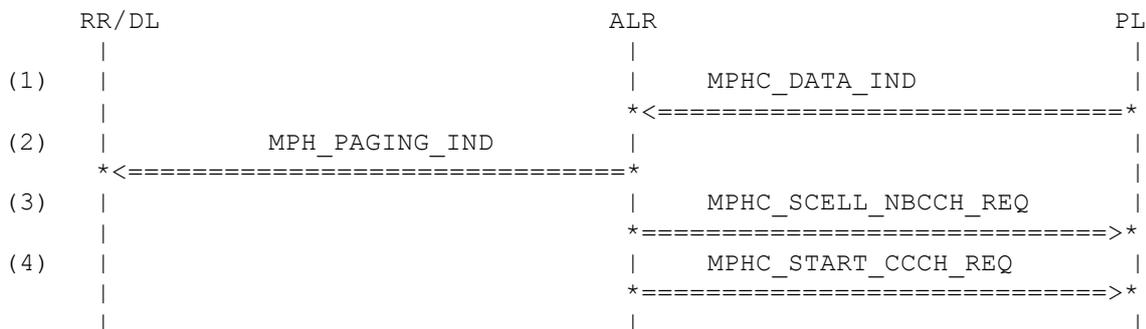
### 4.7.8 ALR077: Paging Req 2, IMSI / TMSI for MS (Mobile Identity 3)

**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
<B>	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_frame L2_PAG_2_T3_D
	tc	L2_PAG_2_T3_N
	ccch_lev	TC_0
	fn	NOT_USED
		FN_OFFSET_0

(2) MPH\_PAGING\_IND

<A>	identity_type	ID_TYPE_IMSI
<B>	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
<B>	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_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

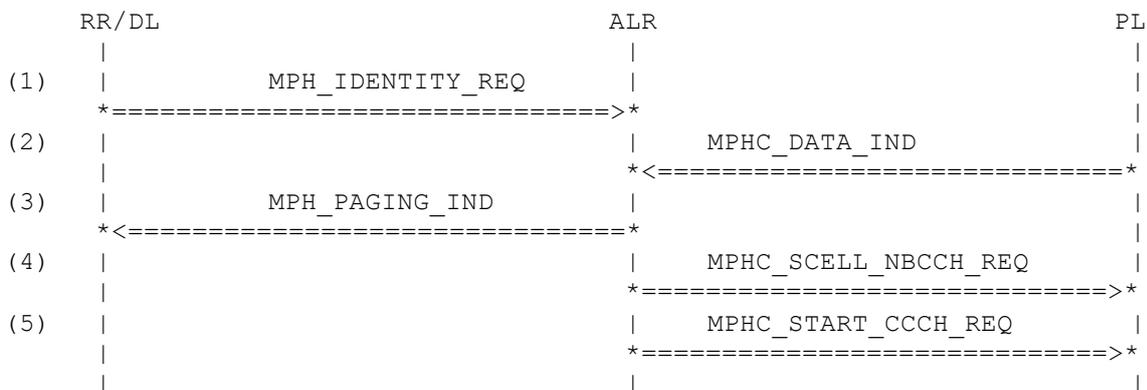
History: 08.10.99 MPA Initial

**4.7.9 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
<B>	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
<B>	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
<B>	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

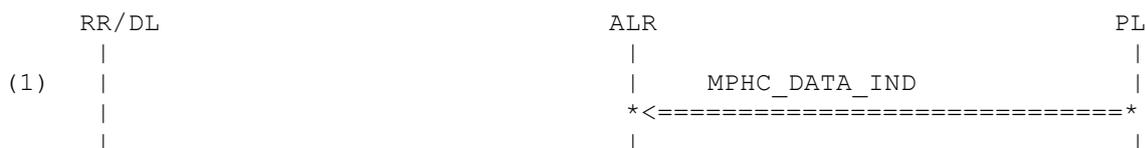
bs_ag_blks_res	BS_AG_BLKS_RES_3
bcch_combined	COMB_CCCH_COMB
ccch_group	CCCH_GROUP_0
page_group	PG_20
page_block_index	PBI_0
page_mode	PGM_NORMAL

History: 08.10.99 MPA Initial

#### 4.7.10 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

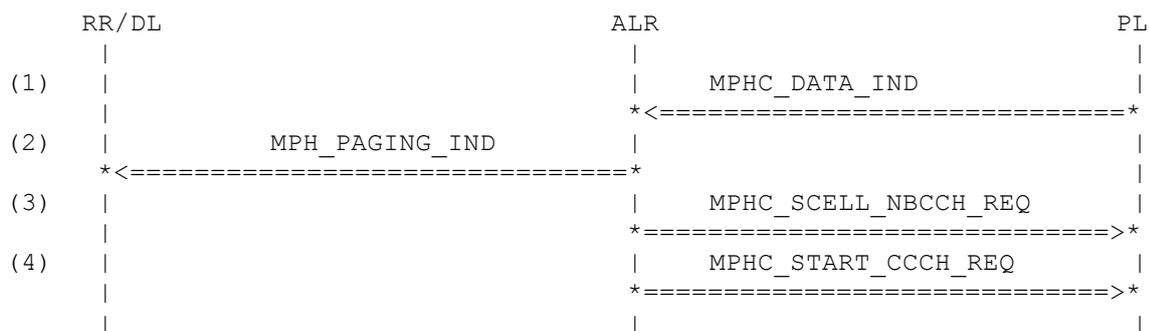
History: 08.10.99 MPA Initial

#### 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
<b>(1) MPHC_DATA_IND</b>		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
<A>	l2_frame	L2_PAG_3_T1_A
<B>	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
<b>(2) MPH_PAGING_IND</b>		
	identity_type	ID_TYPE_TMSI
<A>	channel_needed	CN_ANY_CHAN
<B>	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

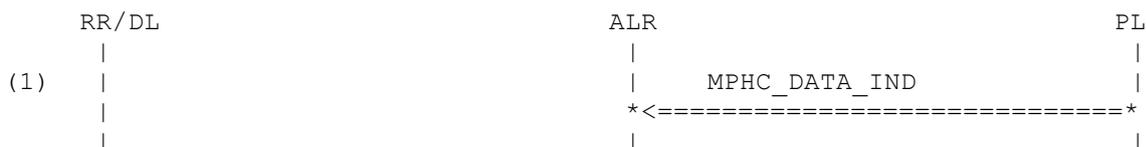
bs_pa_mfrms	BS_PA_MFRMS_8
bs_ag_blks_res	BS_AG_BLK_RES_3
bcch_combined	COMB_CCCH_COMB
ccch_group	CCCH_GROUP_0
page_group	PG_20
page_block_index	PBI_0
page_mode	PGM_NORMAL

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>

RR/DL	ALR	PL
(1) MPH_IDLE_REQ		
*-----*		
(2)	MPHC_STOP_SCELL_BCCH_REQ	
*-----*		
(3)	MPHC_START_CCCH_REQ	
*-----*		
(4)	MPHC_SCELL_NBCCH_REQ	
*-----*		
(5) MPH_NEIGHBOURCELL_REQ		
*-----*		
(6)	MPHC_RXLEV_PERIODIC_REQ	
*-----*		

**Parametrization**

Primitive	Parameter	Value
<b>(1) MPH_IDLE_REQ</b>		
	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
<A>	bs_pa_mfrms	BS_PA_MFRMS_0
<B>	bs_pa_mfrms	BS_PA_MFRMS_1
<C>	bs_pa_mfrms	BS_PA_MFRMS_2
<D>	bs_pa_mfrms	BS_PA_MFRMS_3
<E>	bs_pa_mfrms	BS_PA_MFRMS_4
<F>	bs_pa_mfrms	BS_PA_MFRMS_5
<G>	bs_pa_mfrms	BS_PA_MFRMS_6
<H>	bs_pa_mfrms	BS_PA_MFRMS_7
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
<b>(2) MPHC_STOP_SCELL_BCCH_REQ</b>		
	param	NOT_USED
<b>(3) MPHC_START_CCCH_REQ</b>		
<A>	bs_pa_mfrms	BS_PA_MFRMS_2
<B>	bs_pa_mfrms	BS_PA_MFRMS_3
<C>	bs_pa_mfrms	BS_PA_MFRMS_4
<D>	bs_pa_mfrms	BS_PA_MFRMS_5
<E>	bs_pa_mfrms	BS_PA_MFRMS_6
<F>	bs_pa_mfrms	BS_PA_MFRMS_7
<G>	bs_pa_mfrms	BS_PA_MFRMS_8
<H>	bs_pa_mfrms	BS_PA_MFRMS_9
	bs_ag_blocks_res	BS_AG_BLK_RES_2
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_11

	page_block_index	PBI_4	
	page_mode	PGM_REORG	
(4) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1	
	schedule_array	NOT_USED	
(5) MPH_NEIGHBOURCELL_REQ	multi_band	MULTI_BAND_0	
	arfcn	EMPTY_NCELL_LIST	
	sync_only	NOT_USED	
(6) MPHC_RXLEV_PERIODIC_REQ	chan_list	CHLIST_23	
	num_of_chans	CHANNELS_1	
	ba_id	BA_ID_1	
	next_radio_freq_measured	CHAN_LIST_IDX_0	
History:	08.10.99	MPA	Initial
	07.02.02	LG	changed value for ba_id

#### 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	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) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(12) 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
(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) 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) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(21) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(22) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(23) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_102
	ncells	NOT_USED
	gprs_sync	NOT_USED

History:	08.10.99	MPA	Initial
	08.06.01	MSB	fn_offset in (12) corrected
	07.02.02	LG	changed value for ba_id

### 4.8.3 ALR032: Measurement Reporting, BS\_PA\_MFRMS = 3

**Description:** Measurement reporting for the serving cell is tested. The multiframe period is set to three multiframes. 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	
		*<=====*	

(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		
	*<=====*			

**Parametrization**

	<u>Primitive</u>	<u>Parameter</u>	<u>Value</u>
(1)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(2)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(3)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(4)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(5)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(6)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(7)	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 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_1020 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) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(11) 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

History:	08.10.99 08.06.01 07.02.02	MPA MSB LG	Initial fn_offset in (6) corrected changed value for ba_id
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### 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	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
<b>(6) MPH_MEASUREMENT_IND</b>		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_918
	ncells	NOT_USED
	gprs_sync	NOT_USED
<b>(7) MPHC_RXLEV_PERIODIC_IND</b>		
	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
<b>(8) MPHC_RXLEV_PERIODIC_IND</b>		
	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
<b>(9) MPHC_RXLEV_PERIODIC_IND</b>		
	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
<b>(10) MPH_MEASUREMENT_IND</b>		
	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NOT_USED
	gprs_sync	NOT_USED

History:	08.10.99	MPA	Initial
	08.06.01	MSB	fn_offset in (6) corrected
	07.02.02	LG	changed value for ba_id

#### 4.8.7 ALR036: Measurement Reporting, BS\_PA\_MFRMS = 7

**Description:** Measurement reporting for the serving cell is tested. The multiframe period is set to seven multiframes. It is expected that the initial report to RR is send after five reports of layer 1 and successive reports are send to RR after three reports. The number of TDMA frames between measurement reports to RR is 357 TDMA frames which is equal to seven multiframes.

**Preamble:** ALR030F

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
(2)	MPHC_RXLEV_PERIODIC_IND	
(3)	MPHC_RXLEV_PERIODIC_IND	
(4)	MPHC_RXLEV_PERIODIC_IND	
(5)	MPHC_RXLEV_PERIODIC_IND	
(6)	MPH_MEASUREMENT_IND	
(7)	MPHC_RXLEV_PERIODIC_IND	
(8)	MPHC_RXLEV_PERIODIC_IND	
(9)	MPHC_RXLEV_PERIODIC_IND	
(10)	MPH_MEASUREMENT_IND	

**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_1071
	ncells	NOT_USED
	gprs_sync	NOT_USED
 (7) MPHCRXLEVPERIODICIND		
	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
 (8) MPHCRXLEVPERIODICIND		
	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
 (9) MPHCRXLEVPERIODICIND		
	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
 (10) MPHMEASUREMENTIND		
	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)			
		MPHCRXLEVPERIODICIND	
		*<=====*	
(2)		MPHCRXLEVPERIODICIND	
		*<=====*	
(3)		MPHCRXLEVPERIODICIND	
		*<=====*	
(4)		MPHCRXLEVPERIODICIND	

```

    |
    | *<=====
    (5) | | MPHC_RXLEV_PERIODIC_IND |
    | | *<=====
    (6) | MPH_MEASUREMENT_IND |
    | | *<=====
    (7) | | MPHC_RXLEV_PERIODIC_IND |
    | | *<=====
    (8) | | MPHC_RXLEV_PERIODIC_IND |
    | | *<=====
    (9) | MPH_MEASUREMENT_IND |
    | | *<=====
    | |
    
```

**Parametrization**

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(3) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(4) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(5) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(6) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_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	RXLEV_56
	ba_id	BA_ID_1
<b>(8) MPHC_RXLEV_PERIODIC_IND</b>		
	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
<b>(9) MPH_MEASUREMENT_IND</b>		
	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	NOT_USED
	gprs_sync	NOT_USED

History:	08.10.99	MPA	Initial
	08.06.01	MSB	fn_offset in (6) corrected
	07.02.02	LG	changed value for ba_id

#### 4.8.9 ALR038: Measurement Reporting, BS\_PA\_MFRMS = 9

**Description:** Measurement reporting for the serving cell is tested. The multiframe period is set to nine 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) MPH_C_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(2) MPH_C_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(3) MPH_C_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(4) MPH_C_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(5) MPH_C_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) MPH_C_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(8) MPH_C_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 multiframe it is expected that all 25 reports from layer 1 reading of BCCH information is started. Nine reports are received in the preamble. All four reports a measurement report is send to RR.

**Preamble:** ALR034

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
(2)	MPHC_RXLEV_PERIODIC_IND	
(3)	MPHC_RXLEV_PERIODIC_IND	
(4)	MPHC_RXLEV_PERIODIC_IND	
(5)	MPH_MEASUREMENT_IND	
(6)	MPHC_RXLEV_PERIODIC_IND	
(7)	MPHC_RXLEV_PERIODIC_IND	
(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)			MPHC_DATA_IND	
			*<=====	
(25)			MPHC_DATA_IND	
			*<=====	
(26)			MPHC_DATA_IND	
			*<=====	
(27)			MPHC_DATA_IND	
			*<=====	
(28)			MPHC_DATA_IND	
			*<=====	

**Parametrization**

	<u>Primitive</u>	<u>Parameter</u>	<u>Value</u>
(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)	MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_255 NOT_USED NOT_USED

(6) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(7) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(8) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(9) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(10) MPH_MEASUREMENT_IND	arfcn rx_lev_full rx_lev_sub rx_qual_full rx_qual_sub dtx otd valid fn_offset ncells gprs_sync	ARFCN_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_255 NOT_USED NOT_USED
(11) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(12) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(13) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(14) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1

(15) MPH\_MEASUREMENT\_IND

arfcn	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 multiframes 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) MPH_C_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(3) MPH_C_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) MPH_C_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(6) MPH_C_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_NO_CONTENT CHANNELS_0 RXLEV_56 BA_ID_1
(7) MPH_C_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) MPH_C_RXLEV_PERIODIC_IND	result nbr_of_carriers	NCELL_RESULT_NO_CONTENT 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) 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
(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_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
(15) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_2
	tc	TC_1
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(16) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	INVALID_BLOCK
	l2_frame	L2_NO_CONTENT
	tc	TC_2
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

(17) MPHC\_DATA\_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_4
tc	TC_3
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(18) MPHC\_DATA\_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_NBCCH
error_flag	VALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_4
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(19) MPHC\_DATA\_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_NBCCH
error_flag	INVALID_BLOCK
l2_frame	L2_NO_CONTENT
tc	TC_5
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(20) MPHC\_DATA\_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_NBCCH
error_flag	INVALID_BLOCK
l2_frame	L2_NO_CONTENT
tc	TC_6
ccch_lev	NOT_USED
fn	FN_OFFSET_0

(21) MPHC\_DATA\_IND

radio_freq	ARFCN_23
l2_channel	L2_CHANNEL_NBCCH
error_flag	INVALID_BLOCK
l2_frame	L2_NO_CONTENT
tc	TC_7
ccch_lev	NOT_USED
fn	FN_OFFSET_0

History:	14.10.99	MPA	Initial
	07.02.02	LG	changed value for ba_id

**4.9.3 ALR041: BCCH Reading, BS\_PA\_MFRMS = 9**

**Description:** For a multiframe period of nine multiframe it is expected that all 14 reports from layer 1 reading of BCCH information is started. Seven reports are received in the preamble. All two reports a measurement report is send to RR.

**Preamble:** ALR038

	RR/DL	ALR	PL
(1)		MPHC_RXLEV_PERIODIC_IND	
		*<=====*	
(2)		MPHC_RXLEV_PERIODIC_IND	
		*<=====*	

(3)	MPH_MEASUREMENT_IND	
	*<=====*	
(4)		MPHC_RXLEV_PERIODIC_IND
	*<=====*	
(5)		MPHC_RXLEV_PERIODIC_IND
	*<=====*	
(6)	MPH_MEASUREMENT_IND	
	*<=====*	
(7)		MPHC_RXLEV_PERIODIC_IND
	*<=====*	
(8)		MPHC_RXLEV_PERIODIC_IND
	*<=====*	
(9)	MPH_MEASUREMENT_IND	
	*<=====*	
(10)		MPHC_RXLEV_PERIODIC_IND
	*<=====*	
(11)		MPHC_DATA_IND
	*<=====*	
(12)		MPHC_DATA_IND
	*<=====*	
(13)		MPHC_DATA_IND
	*<=====*	
(14)		MPHC_DATA_IND
	*<=====*	
(15)		MPHC_DATA_IND
	*<=====*	
(16)		MPHC_DATA_IND
	*<=====*	
(17)		MPHC_DATA_IND
	*<=====*	
(18)		MPHC_DATA_IND
	*<=====*	

**Parametrization**

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	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_NBCCCH 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 multiframe it is expected that all 25 reports from layer 1 reading of BCCH information is started. Nine reports are received in the preamble. All four reports a measurement report is send to RR. Changed System Information Messages are forwarded to RR.

**Preamble:** ALR034

RR/DL	ALR	PL
(1)	MPHC_RXLEV_PERIODIC_IND	
	*<=====*	
(2)	MPHC_RXLEV_PERIODIC_IND	
	*<=====*	
(3)	MPHC_RXLEV_PERIODIC_IND	
	*<=====*	
(4)	MPHC_RXLEV_PERIODIC_IND	
	*<=====*	
(5)	MPH_MEASUREMENT_IND	
	*<=====*	
(6)	MPHC_RXLEV_PERIODIC_IND	
	*<=====*	
(7)	MPHC_RXLEV_PERIODIC_IND	
	*<=====*	
(8)	MPHC_RXLEV_PERIODIC_IND	
	*<=====*	
(9)	MPHC_RXLEV_PERIODIC_IND	
	*<=====*	
(10)	MPH_MEASUREMENT_IND	
	*<=====*	
(11)	MPHC_RXLEV_PERIODIC_IND	
	*<=====*	
(12)	MPHC_RXLEV_PERIODIC_IND	
	*<=====*	
(13)	MPHC_RXLEV_PERIODIC_IND	
	*<=====*	
(14)	MPHC_RXLEV_PERIODIC_IND	
	*<=====*	
(15)	MPH_MEASUREMENT_IND	
	*<=====*	
(16)	MPHC_RXLEV_PERIODIC_IND	
	*<=====*	
(17)	MPHC_RXLEV_PERIODIC_IND	
	*<=====*	
(18)	MPHC_RXLEV_PERIODIC_IND	
	*<=====*	
(19)	MPHC_RXLEV_PERIODIC_IND	
	*<=====*	
(20)	MPH_MEASUREMENT_IND	
	*<=====*	
(21)	MPHC_DATA_IND	

```

(22) | | | *<=====
      | | | | MPHC_DATA_IND |
      | | | *<=====
(23) | | | | MPHC_DATA_IND |
      | | | *<=====
(24) | MPH_UNITDATA_IND | |
      *<=====
(25) | | | | MPHC_DATA_IND |
      | | | *<=====
(26) | | | | MPHC_DATA_IND |
      | | | *<=====
(27) | | | | MPHC_DATA_IND |
      | | | *<=====
(28) | MPH_UNITDATA_IND | |
      *<=====
(29) | | | | MPHC_DATA_IND |
      | | | *<=====
(30) | | | | MPHC_DATA_IND |
      | | | *<=====
    
```

**Parametrization**

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(3) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_NO_CONTENT
	nbr_of_carriers	CHANNELS_0
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(4) MPHC_RXLEV_PERIODIC_IND	result	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 |
    | | | *<=====*
```

**Parametrization**

Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_CCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_IMM_ASS_HOP
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(2) MPH_UNITDATA_IND	arfcn	ARFCN_23
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_IMM_ASSIGN
	ti	TI_0
	tma	TMA_0
	dl	DL_0
	d_t	D_T_DED
	page_mode	PAGE_MODE_1
	chan_desc	CHAN_DESC_1
	pck_chan_desc	NOT_USED
	req_ref	REQ_REF_1
	time_advance	TIME_ADVANCE_1
mob_alloc	MOB_ALLOC_1	
}		
(3) MPH_DEDICATED_REQ	mod	MODE_IMM_ASSIGN
	start	STARTING_TIME
	ch_type	CH_TYPE_HOP
	ch_type2	CH_TYPE2
	arfcn	ARFCN_23
	bsic	BSIC_1
	ho_param	HO_PARAM
	tr_para	TR_PARAM
	ciph	CIPH_PARAM
	amr_conf	NOT_USED
(4) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(5) MPHC_STOP_CCCH_REQ	param	NOT_USED

( 6 )	MPHC_STOP_RA_REQ	param	NOT_USED
( 7 )	MPHC_IMMED_ASSIGN_REQ	channel_desc	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) MPH_C_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_CCCH VALID_BLOCK L2_IMM_ASS_REJ 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_2 NOT_USED REQ_REF_1 TIME_ADVANCE_2 MOB_ALLOC_1
(3) MPH_RANDOM_ACCESS_REQ	send_mode	STOP_BURSTS
(4) MPH_C_STOP_RA_REQ	param	NOT_USED
(5) MPH_C_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_23 L2_CHANNEL_CCCH VALID_BLOCK L2_IMM_ASS TC_0 NOT_USED FN_OFFSET_0
(6) 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	ARFCN_23 NOT_USED  RR DOWNLINK D_IMM_ASSIGN TI_0 TMA_0 DL_0 D_T_DED PAGE_MODE_1 CHAN_DESC_2 NOT_USED REQ_REF_1 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	

Primitive	Parameter	Value
(1) MPH_C_RA_CON	fn	FN_BURST_1
	channel_request	CHANNEL_REQUEST_1
(2) MPH_RANDOM_ACCESS_CNF	frame_no	T123_BURST_1
(3) MPH_IDLE_REQ	mod	NOT_USED
	arfcn	ARFCN_23
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
(4) MPH_STOP_RA_REQ	param	NOT_USED
(5) MPH_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) MPH_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	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_C_ASYNC_HO_REQ		

**Parametrization**

Primitive	Parameter	Value
(1) MPH_DEDICATED_REQ	mod	MODE_ASYNC_HANDOVER
	start	NOT_USED
	ch_type	CH_TYPE_TCH2
	ch_type2	NOT_USED
	arfcn	ARFCN_14
	bsic	BSIC_1
	ho_param	HO_PARAM_1
	tr_para	TR_PARAM
(2) MPHC_ASYNC_HO_REQ	ciph	CIPH_PARAM
	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 integration

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

**Parametrization**

Primitive	Parameter	Value
(1) MPH_RANDOM_ACCESS_REQ	send_mode	TWO_BURSTS
	param	NOT_USED
(2) MPHC_STOP_RXLEV_PERIODIC_REQ	radio_freq_array_size	STOP_SIZE_0
	radio_freq_array	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	param	NOT_USED
	txpwr	POWER_12
(5) MPHC_STOP_SCELL_BCCH_REQ	rand	RAND_BURST_1
	channel_request	CHANNEL_REQUEST_1
	powerclass_gsm	POWER_CLASS_5
	powerclass_dcs	NOT_USED
	fn	FN_BURST_1
(6) MPHC_RA_REQ	channel_request	CHANNEL_REQUEST_1
	frame_no	T123_BURST_1

(9) MPHC_RA_REQ	txpwr rand channel_request powerclass_gsm powerclass_dcs	POWER_12 RAND_BURST_2 CHANNEL_REQUEST_2 POWER_CLASS_5 NOT_USED
(10) MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_14 L2_CHANNEL_CCCH VALID_BLOCK L2_IMM_ASS_HOP TC_0 NOT_USED FN_OFFSET_0
(11) 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_14 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
(10) MPH_DEDICATED_REQ	mod start ch_type ch_type2 arfcn bsic ho_param tr_para ciph amr_conf	MODE_IMM_ASSIGN NO_STARTING_TIME CH_TYPE_IMM_ASS NOT_USED ARFCN_14 BSIC_1 HO_PARAM TR_PARAM CIPH_PARAM 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 timing_advance frequency_list starting_time	CHANNEL_DESC_IA TIMING_ADVANCE FREQ_LIST_IA 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_HANOVER 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_HANOVER_FINISHED	cause	HO_COMPLETE
(7) MPH_DEDICATED_CNF	dedi_res	DEDI_RES_OK
(8) MPH_DEDICATED_FAIL_REQ	param	NOT_USED
(9) MPHC_HANOVER_FAIL_REQ	param	NOT_USED
(10) MPHC_HANOVER_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	L2_CHANNEL_SACCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_5BIS
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(4) MPH_UNITDATA_IND		
	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_5BIS
	ti	TI_0
	neigh_cell_desc	NEIGH_CELL_DESC_2
	}	
(5) MPH_DATA_IND		
	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_SACCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_6
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(6) MPH_UNITDATA_IND		
	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_6
	ti	TI_0
	cell_ident	CELL_IDENT_2
	loc_area_ident	LOC_AREA_IDENT_2
	cell_opt_sacch	CELL_OPT_SACCH_1
	ncc_permit	NCC_PERMIT_2
	si6_rest_oct	NOT_USED
	}	
(7) MPH_DATA_IND		
	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_SACCH
	error_flag	VALID_BLOCK
	l2_frame	L2_I_SMS
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(8) PH_DATA_IND		
	ch_type	CH_TYPE_SACCH
	dummy	NOT_USED
	sdu	I_SMS
(9) MPH_DATA_IND		
	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_SACCH

	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_5
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
 (10) MPHC_DATA_IND		
	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_SACCH
	error_flag	VALID_BLOCK
	l2_frame	L2_CHANGED_SYS_INFO_6
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
 (11) MPH_UNITDATA_IND		
	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_6
	ti	TI_0
	cell_ident	CELL_IDENT_3
	loc_area_ident	LOC_AREA_IDENT_2
	cell_opt_sacch	CELL_OPT_SACCH_1
	ncc_permit	NCC_PERMIT_2
	si6_rest_oct	NOT_USED
	}	

History: 10.11.99 LE Initial

#### 4.11.5 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  
 <B>: AMR signalled

**Variants:** <A>....<B>

**Preamble:** ALR056

	RR/DL	ALR	PL
(1)	MPH_DEDICATED_REQ		
	*----->*		
(2)		MPH_ASYNC_HO_REQ	
		*----->*	
(3)		MPH_ASYNC_HO_CON	
		*----->*	
(4)		MPH_HANDOVER_FINISHED	
		*----->*	
(5)	MPH_DEDICATED_CNF		
	*----->*		

**Parametrization**

Primitive	Parameter	Value
(1) MPH_DEDICATED_REQ	mod	MODE_ASYNC_HANDOVER
	start	STARTING_TIME

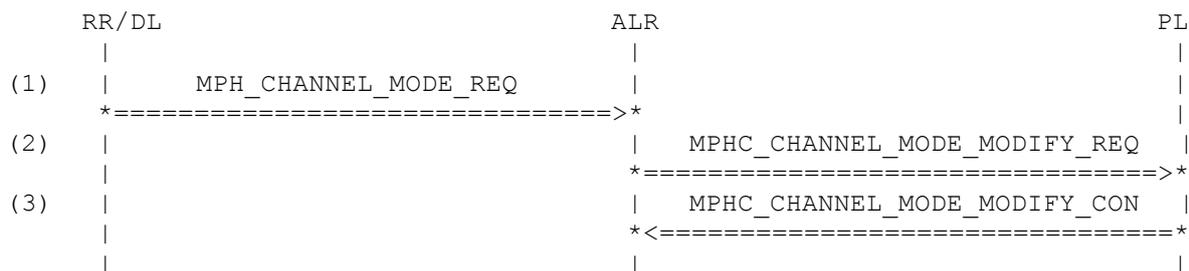
	ch_type	CH_TYPE_TCH2
	ch_type2	CH_TYPE_TCH3
	arfcn	ARFCN_30
	bsic	BSIC_1
	ho_param	HO_PARAM_1
	tr_para	TR_PARAM
	ciph	CIPH_PARAM
<A>	amr_conf	NOT_USED
<B>	amr_conf	S_AMR_CONF_4_ICMI
 (2) MPHC_ASYNC_HO_REQ		
	handover_command	ASYNC_HO_CMD_3
	fn_offset	NOT_USED
	time_alignmnt	NOT_USED
	cipher_key	NOT_USED
<A>	amr_configuration	NOT_USED
<B>	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>..<B> introduced,
<B> 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



#### Parametrization

	<u>Primitive</u>	<u>Parameter</u>	<u>Value</u>
(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	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(4) MPH_C_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAGING_REQ_1
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(5) MPH_C_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
(6) MPH_C_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	INVALID_BLOCK
	l2_frame	L2_NO_CONTENT
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(7) MPH_C_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	INVALID_BLOCK
	l2_frame	L2_NO_CONTENT
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(8) MPH_ERROR_IND		
	cs	CS_DOWN_LINK_FAIL
	arfcn	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_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_RXLEV_PERIODIC_REQ		
	param	NOT_USED
(3) MPHC_STOP_NCELL_SYNC_REQ		
	radio_freq_array_size	STOP_SIZE_0
	radio_freq_array	NOT_USED
(4) MPHC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	STOP_SIZE_0
	radio_freq_array	NOT_USED
(5) MPHC_STOP_SCELL_BCCH_REQ		
	param	NOT_USED
(6) MPHC_NEW_SCELL_REQ		
	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14
	time_alignment	TIME_ALIGNMT_14
	tsc	BSIC_1
(7) MPHC_NEW_SCELL_CON		
	param	NOT_USED
(8) MPHC_START_CCCH_REQ		
	bs_pa_mfrms	BS_PA_MFRMS_2
	bs_ag_blks_res	BS_AG_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
(9) MPHC_SCELL_NBCCH_REQ		
	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(10) MPHC_DATA_IND		
	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_1
	ccch_lev	NOT_USED
	fn	FN_OFFSET_14
(11) MPH_UNITDATA_IND		
	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1

	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(12) MPHC_START_CCCH_REQ		
	bs_pa_mfrms	BS_PA_MFRMS_4
	bs_ag_blks_res	BS_AG_BLKS_RES_5
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_1
	page_block_index	PBI_1
	page_mode	PGM_REORG
(13) MPHC_DATA_IND		
	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_1
	tc	TC_1
	ccch_lev	NOT_USED
	fn	FN_OFFSET_14
(14) MPH_UNITDATA_IND		
	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_1
	ti	TI_0
	cell_chan_desc	CELL_CHAN_DESC_1
	rach_ctrl	RACH_CTRL_1
	}	
(15) MPHC_DATA_IND		
	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_PCH
	error_flag	VALID_BLOCK
	l2_frame	L2_PAGING_REQ_1
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0
(16) MPHC_START_CCCH_REQ		
	bs_pa_mfrms	BS_PA_MFRMS_4
	bs_ag_blks_res	BS_AG_BLKS_RES_5
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_1
	page_block_index	PBI_1
	page_mode	PGM_NORMAL
(17) MPHC_DATA_IND		
	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_2
	tc	TC_1

	ccch_lev	NOT_USED
	fn	FN_OFFSET_14
(18) 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
	}	
(19) MPH_IDLE_REQ	mod	MODE_CELL_SELECTION
	arfcn	ARFCN_14
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_1
	bs_ag_blocks_res	BS_AG_BLK_RES_5
	bs_pa_mfrms	BS_PA_MFRMS_2
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
(20) MPH_STOP_SCELL_BCCH_REQ	param	NOT_USED
(21) MPH_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(22) MPH_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
(23) MPH_NEIGHBOURCELL_REQ	multi_band	MULTI_BAND_0
	arfcn	CHLIST_1_15_FFFF
	sync_only	NOT_USED
(24) MPH_RXLEV_PERIODIC_REQ	chan_list	CHLIST_1_14_15
	num_of_chans	CHANNELS_3
	ba_id	BA_ID_3
	next_radio_freq_measured	CHAN_LIST_IDX_0

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

### 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

RR/DL	ALR	PL
(1)   MPH_IDLE_REQ		
*=====>*		
(2)	MPHC_STOP_DEDICATED	
	*=====>*	
(3)	MPHC_NEW_SCELL_REQ	
	*=====>*	
(4)	MPHC_NEW_SCELL_CON	
	*<=====*	
(5)	MPHC_START_CCCH_REQ	
	*=====>*	
(6)	MPHC_SCELL_NBCCH_REQ	
	*=====>*	
(7)	MPHC_DATA_IND	
	*<=====*	
(8)   MPH_UNITDATA_IND		
*<=====*		
(9)	MPHC_DATA_IND	
	*<=====*	
(10)   MPH_UNITDATA_IND		
*<=====*		
(11)   MPH_IDLE_REQ		
*=====>*		
(12)	MPHC_STOP_SCELL_BCCH_REQ	
	*=====>*	
(13)	MPHC_START_CCCH_REQ	
	*=====>*	
(14)	MPHC_SCELL_NBCCH_REQ	
	*=====>*	
(15)	MPHC_RXLEV_PERIODIC_REQ	
	*=====>*	
(16)   MPH_NEIGHBOURCELL_REQ		
*=====>*		
(17)	MPHC_RXLEV_PERIODIC_REQ	
	*=====>*	

**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_BLK_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
(12) MPH_STOP_SCELL_BCCH_REQ	param	NOT_USED
(13) MPH_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_8
	bs_ag_blk_res	BS_AG_BLK_RES_3
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_2
	page_mode	PGM_REORG
(14) MPH_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	FULL_READ
(15) MPH_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) MPH_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

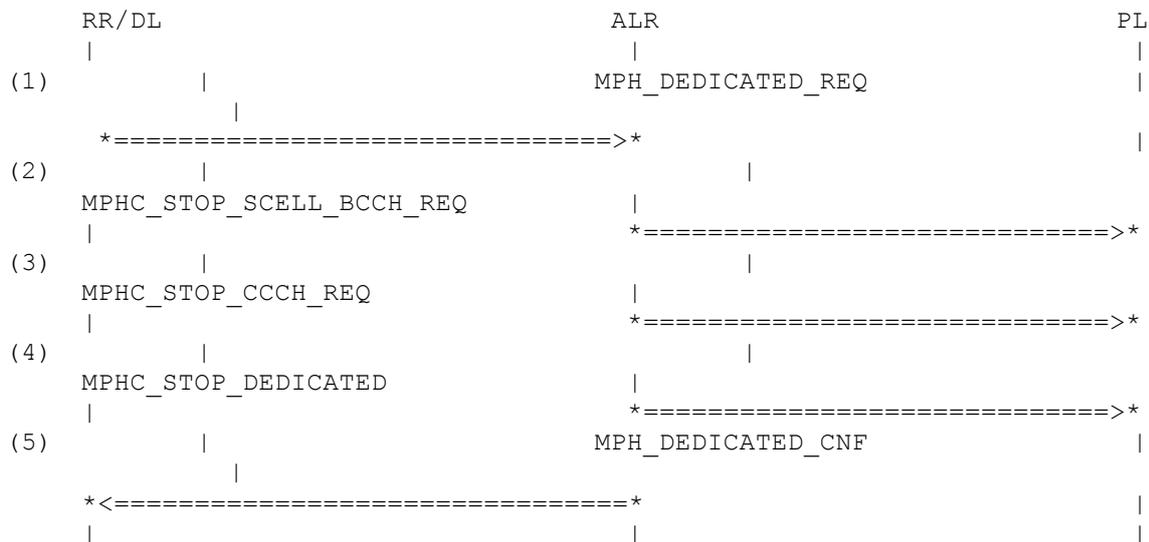
History:	10.11.99	LE	Initial
	21.06.02	MSB	sequence and parameter changed for MPH_SCELL_NBCCH_REQ:

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



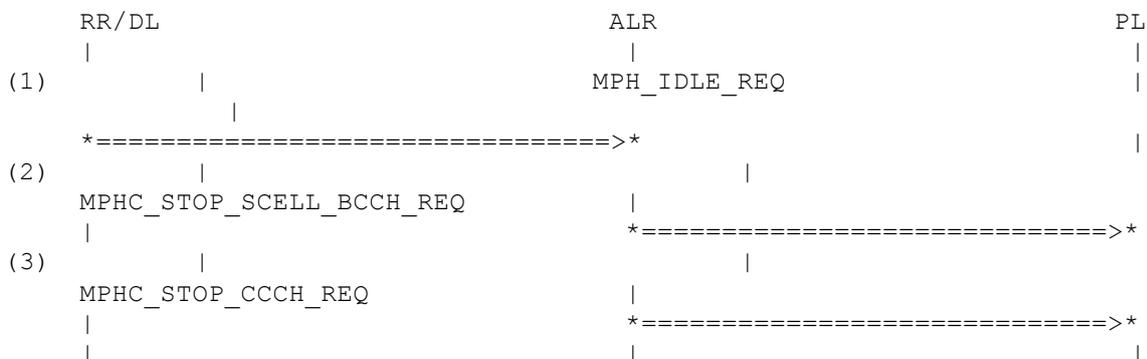
#### Parametrization

	<u>Primitive</u>	<u>Parameter</u>	<u>Value</u>
(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

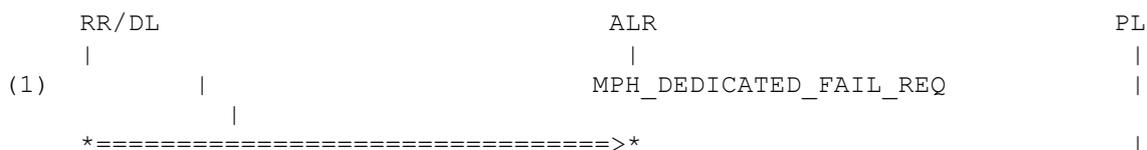
Primitive	Parameter	Value
(1) MPH_IDLE_REQ	mod	MODE_PACKET_TRANSFER
	arfcn	ARFCN_23
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_6
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
	(2) MPH_STOP_SCELL_BCCH_REQ	param
(3) MPH_STOP_CCCH_REQ	param	NOT_USED

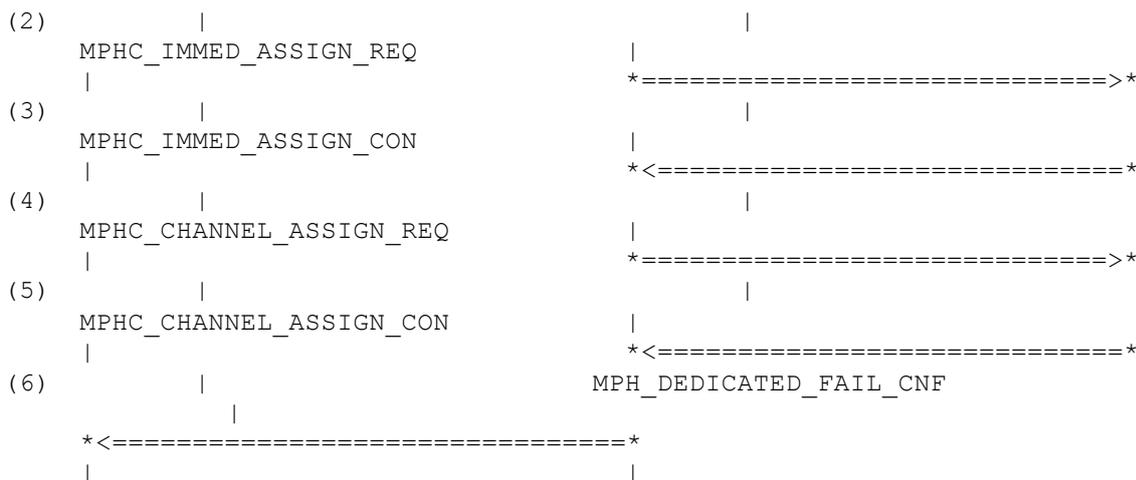
History: 13.08.01 VK Initial

#### 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**

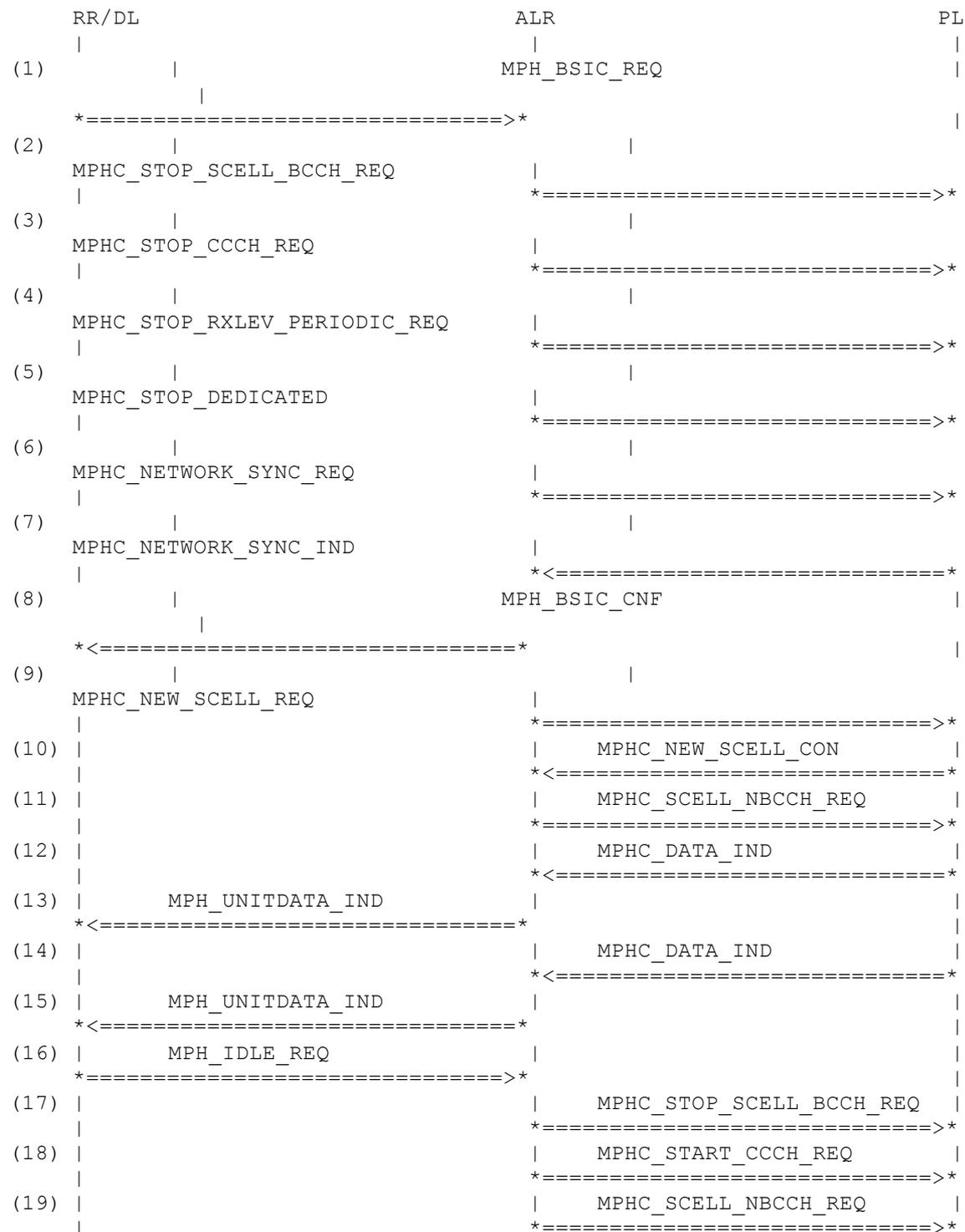
Primitive	Parameter	Value
(1) MPH_DEDICATED_FAIL_REQ	param	NOT_USED
(2) MPHC_IMMED_ASSIGN_REQ	channel_desc	CHANNEL_DESC_1
	timing_advance	TIMING_ADVANCE
	frequency_list	FREQ_LIST
	starting_time	NOT_USED
	frequency_list_bef_sti	NOT_USED
	maio_bef_sti	NOT_USED
	dtx_allowed	NOT_USED
	bcch_allocation	NOT_USED
	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

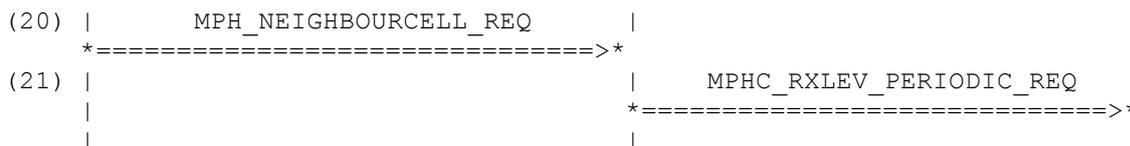
History: 14.08.01 VK Initial4650  
 26-Feb-02 OT Adaptations for AMR integration

### 4.14.6 ALR930: Network Coltroned 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





**Parametrization**

Primitive	Parameter	Value
(1) MPH_BSIC_REQ	arfcn	ARFCN_42
(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_DEDICATED	param	NOT_USED
(6) MPHC_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) MPHC_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) MPHC_NEW_SCELL_REQ	radio_freq fn_offset time_alignment tsc	ARFCN_42 FN_OFFSET_0 TIME_ALIGNMT_0 BSIC_1
(10)MPHC_NEW_SCELL_CON	param	NOT_USED
(11)MPHC_SCELL_NBCCH_REQ	schedule_array_size schedule_array	SCHED_SIZE_1 FULL_READ
(12)MPHC_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 fn sdu { component direction pd ti cell_chan_desc rach_ctrl }	ARFCN_42 FN_OFFSET_0  RR DOWNLINK D_SYS_INFO_1 TI_0 CELL_CHAN_DESC_1 RACH_CTRL_1
(14)MPHC_DATA_IND	radio_freq l2_channel error_flag l2_frame tc ccch_lev fn	ARFCN_42 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_2 TC_1 NOT_USED FN_OFFSET_0
(15)MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti neigh_cell_desc ncc_permit rach_ctrl }	ARFCN_42 FN_OFFSET_0  RR DOWNLINK D_SYS_INFO_2 TI_0 NEIGH_CELL_DESC_1 NCC_PERMIT_1 RACH_CTRL_1
(16)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_42 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
(17)MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(18)MPHC_START_CCCH_REQ	bs_pa_mfrms bs_ag_blk_res bcch_combined ccch_group page_group page_block_index page_mode	BS_PA_MFRMS_8 BS_AG_BLK_RES_3 COMB_CCCH_NOT_COMB CCCH_GROUP_0 PG_20 PBI_2 PGM_REORG

(19)MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHE_D_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)     MPH_STOP_SCELL_BCCH_REQ		
*=====		
(4)     MPH_START_CCCH_REQ		
*=====		
(5)     MPH_SCELL_NBCCH_REQ		
*=====		
(6)   MPH_IDENTITY_REQ		
*=====		
(7)   MPH_CBCH_REQ		
*=====		
(8)   MPH_NEIGHBOURCELL_REQ		
*=====		
(9)     MPH_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_BLKS_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_4
	power	POWER_12
<A>	ncc_permitted	NOT_PRESENT_8BIT
<B>	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_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) 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
<B>	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
<B>	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
<B>	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	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	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(11) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_14
(12) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(13) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_124
	sb_flag	SB_FOUND
	fn_offset	FN_OFFSET_124
	time_alignment	TIME_ALIGNMT_124
	bsic	BSIC_1

(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) MPH_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	



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(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 |
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| | | | |
(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	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(22) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(23) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(24) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(25) 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
(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_NCELL_SYNC_REQ		
	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	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	RXLEV_56
	ba_id	BA_ID_1
(38) 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
(39) 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
	}	
(40) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(41) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_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) 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
(44) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(45) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(46) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(47) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED
(48) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(49) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(50) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(51) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306

	ncells 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	RXLEV_56
	ba_id	BA_ID_1
(61) 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
(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
(64) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(65) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(66) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(67) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_1_14_124
	gprs_sync	NOT_USED
(68) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1

	nr_of_carriers	CHANNELS_8	
	s_rxlev	RXLEV_56	
	ba_id	BA_ID_1	
(69) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1	
	nr_of_carriers	CHANNELS_8	
	s_rxlev	RXLEV_56	
	ba_id	BA_ID_1	
(70) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1	
	nr_of_carriers	CHANNELS_8	
	s_rxlev	RXLEV_56	
	ba_id	BA_ID_1	
(71) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14	
	fn_offset	FN_OFFSET_14	
	time_alignment	TIME_ALIGNMT_14	
	timing_validity	TV_VALID_TIMING_INFO	
(72) MPH_MEASUREMENT_IND	arfcn	ARFCN_23	
	rx_lev_full	RXLEV_56	
	rx_lev_sub	NOT_USED	
	rx_qual_full	NOT_USED	
	rx_qual_sub	NOT_USED	
	dtx	NOT_USED	
	otd	NOT_USED	
	valid	VALID_REPORT	
	fn_offset	FN_OFFSET_306	
	ncells	NCELLS_1_14_124	
	gprs_sync	NOT_USED	
(73) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1	
	nr_of_carriers	CHANNELS_8	
	s_rxlev	RXLEV_56	
	ba_id	BA_ID_1	
(74) MPHC_NCELL_SYNC_IND	radio_freq	ARFCN_14	
	sb_flag	SB_FOUND	
	fn_offset	FN_OFFSET_14	
	time_alignment	TIME_ALIGNMT_14	
	bsic	BSIC_1	
History:	24.09.99	MPA	Initial
	20.06.01	MSB	fn_offset in (6) corrected,
	20.06.01	MSB	numbering of msc corrected
	07.02.02	LG	changed value for ba_id

#### 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	

```

(30) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====
(31) | MPH_MEASUREMENT_IND |
| | *<=====
(32) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====
(33) | | MPHC_NCELL_BCCH_IND |
| | *<=====
(34) | | MPHC_STOP_NCELL_BCCH_REQ |
| | *=====>
(35) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====
(36) | | MPHC_NCELL_BCCH_IND |
| | *<=====
(37) | | MPHC_STOP_NCELL_BCCH_REQ |
| | *=====>
(38) | | MPHC_RXLEV_PERIODIC_IND |
| | *<=====
(39) | | MPHC_NCELL_SYNC_REQ |
| | *=====>
(40) | MPH_MEASUREMENT_IND |
| | *<=====
(41) | MPH_UNITDATA_IND |
| | *<=====
(42) | MPH_UNITDATA_IND |
| | *<=====
| |
    
```

**Parametrization**

Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(3) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(4) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(5) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1

(6) MPH\_MEASUREMENT\_IND

arfcn	ARFCN_23
rx_lev_full	RXLEV_56
rx_lev_sub	NOT_USED
rx_qual_full	NOT_USED
rx_qual_sub	NOT_USED
dtx	NOT_USED
otd	NOT_USED
valid	VALID_REPORT
fn_offset	FN_OFFSET_918
ncells	NCELLS_NO_CONTENT
gprs_sync	NOT_USED

(7) MPH\_C\_RXLEV\_PERIODIC\_IND

result	NCELL_RESULT_1
nbr_of_carriers	CHANNELS_8
s_rxlev	RXLEV_56
ba_id	BA_ID_1

(8) MPH\_C\_NCELL\_SYNC\_IND

radio_freq	ARFCN_14
sb_flag	SB_FOUND
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
bsic	BSIC_1

(9) MPH\_C\_NCELL\_BCCH\_REQ

radio_freq	ARFCN_14
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(10) MPH\_C\_NCELL\_BCCH\_IND

radio_freq	ARFCN_14
l2_channel	L2_CHANNEL_NBCCCH
error_flag	INVALID_BLOCK
l2_frame	L2_SYS_INFO_3
tc	TC_2
fn	FN_OFFSET_14

(11) MPH\_C\_STOP\_NCELL\_BCCH\_REQ

radio_freq_array_size	ONE_ELEM
radio_freq_array	STOP_ARRAY_14

(12) MPH\_C\_NCELL\_BCCH\_REQ

radio_freq	ARFCN_14
fn_offset	FN_OFFSET_14
time_alignment	TIME_ALIGNMT_14
tsc	BSIC_1
bcch_blocks_required	NCELL_BCCH_SI_3_4
gprs_prio	NOT_USED

(13) MPH\_C\_NCELL\_BCCH\_IND

radio_freq	ARFCN_14
l2_channel	L2_CHANNEL_NBCCCH
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) MPH_C_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(33) MPH_C_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) MPH_C_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_124
(35) MPH_C_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(36) MPH_C_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) MPH_C_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_1
(38) MPH_C_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(39) MPH_C_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
        }
    
```

```

(42) MPH_UNITDATA_IND

        arfcn                ARFCN_124
        fn                    NOT_USED
        sdu
        {
        component            RR
        direction            DOWNLINK
        pd                    D_SYS_INFO_3
        ti                    TI_0
        cell_ident            CELL_IDENT_1
        loc_area_ident        LOC_AREA_IDENT_1
        ctrl_chan_desc        CTRL_CHAN_DESC_1
        cell_opt_bcch         CELL_OPT_BCCH_1
        cell_select           CELL_SELECT_1
        rach_ctrl             RACH_CTRL_1
        }
    
```

History:	08.12.99	MPA	Initial
	20.06.01	MSB	fn_offset in (6) corrected
	07.02.02	LG	changed value for ba_id

#### 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
-----------	-----------	-------

(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
-----------	-----------	-------

(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) 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_NEIGHBOURCELL_REQ	multi_band	MULTI_BAND_0
	arfcn	
	CHLIST_1_14_25_124_512_580_637_885_FFFF	
	sync_only	NOT_USED
(7) MPH_RXLEV_PERIODIC_REQ	chan_list	
	CHLIST_23_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) MPH_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_23_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(9) MPH_NCELL_SYNC_REQ	radio_freq	ARFCN_637
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(10) MPH_NCELL_SYNC_REQ	radio_freq	ARFCN_25
	fn_offset	NOT_USED

	time_alignment timing_validity	NOT_USED TV_INVALID_TIMING_INFO
(11) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(12) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_512 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(13) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_580 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(14) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_885 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(15) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RES_SC_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) MPMC_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) MPMC_RXLEV_PERIODIC_IND		
	result	NCELL_RES_SC_23_8
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(30) MPMC_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) MPMC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_637
(32) MPMC_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) MPMC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_25
(34) MPMC_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) MPMC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_14
(36) MPMC_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	NCELLS_SC_900_8
		gprs_sync	NOT_USED
History:	22.01.00	MPA	Initial
	12.07.00	DG	MPH_CLASSMARK_REQ: class changed into classmark (Forum G23M / No 0057)
	20.06.01	MSB	fn_offset in (6) corrected
	20.07.01	MSB	channel list adapted
	07.02.02	LG	changed value of ba_id

#### 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)		MPH_STOP_SCELL_BCCH_REQ	
		*=====>	
(4)		MPH_START_CCCH_REQ	
		*=====>	
(5)		MPH_SCELL_NBCCH_REQ	
		*=====>	
(6)	MPH_NEIGHBOURCELL_REQ		
	*=====>		
(7)		MPH_RXLEV_PERIODIC_REQ	
		*=====>	
(8)		MPH_RXLEV_PERIODIC_IND	
		*<=====*	
(9)		MPH_NCELL_SYNC_REQ	
		*=====>	
(10)		MPH_NCELL_SYNC_REQ	
		*=====>	
(11)		MPH_NCELL_SYNC_REQ	
		*=====>	
(12)		MPH_NCELL_SYNC_REQ	
		*=====>	
(13)		MPH_NCELL_SYNC_REQ	
		*=====>	
(14)		MPH_NCELL_SYNC_REQ	
		*=====>	
(15)		MPH_RXLEV_PERIODIC_IND	
		*<=====*	
(16)	MPH_MEASUREMENT_IND		
	*<=====*		
(17)		MPH_NCELL_SYNC_IND	
		*<=====*	
(18)		MPH_NCELL_BCCH_REQ	
		*=====>	
(19)		MPH_NCELL_SYNC_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_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_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

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

#### 4.15.8 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_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) MPH_C_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) MPH_C_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) MPH_C_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) MPH_C_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(10) MPH_C_NCELL_SYNC_REQ	radio_freq	ARFCN_512
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(11) MPH_C_NCELL_SYNC_REQ	radio_freq	ARFCN_11
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(12) MPH_C_NCELL_SYNC_REQ	radio_freq	ARFCN_87
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(13) MPH_C_NCELL_SYNC_REQ	radio_freq	ARFCN_25
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(14) MPH_C_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

	rach_ctrl }	RACH_CTRL_1
(47) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl }	ARFCN_14 NOT_USED  RR DOWNLINK D_SYS_INFO_3 TI_0 CELL_IDENT_1 LOC_AREA_IDENT_1 CTRL_CHAN_DESC_1 CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(48) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl }	ARFCN_25 NOT_USED  RR DOWNLINK D_SYS_INFO_3 TI_0 CELL_IDENT_1 LOC_AREA_IDENT_1 CTRL_CHAN_DESC_1 CELL_OPT_BCCH_1 CELL_SELECT_1 RACH_CTRL_1
(49) MPH_UNITDATA_IND	arfcn fn sdu { component direction pd ti cell_ident loc_area_ident ctrl_chan_desc cell_opt_bcch cell_select rach_ctrl }	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
(50) MPH_UNITDATA_IND	arfcn fn sdu { component direction	ARFCN_512 NOT_USED  RR DOWNLINK

	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(51) MPH_C_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) MPH_C_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) MPH_C_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)		MPH_STOP_SCELL_BCCH_REQ	
		*=====>	
(4)		MPH_START_CCCH_REQ	
		*=====>	
(5)		MPH_SCELL_NBCCH_REQ	
		*=====>	
(6)	MPH_NEIGHBOURCELL_REQ		
	*=====>		
(7)		MPH_RXLEV_PERIODIC_REQ	
		*=====>	
(8)		MPH_RXLEV_PERIODIC_IND	
		*<=====	
(9)		MPH_NCELL_SYNC_REQ	
		*=====>	
(10)		MPH_NCELL_SYNC_REQ	
		*=====>	
(11)		MPH_NCELL_SYNC_REQ	
		*=====>	
(12)		MPH_NCELL_SYNC_REQ	
		*=====>	
(13)		MPH_RXLEV_PERIODIC_IND	
		*<=====	
(14)	MPH_MEASUREMENT_IND		
	*<=====		
(15)		MPH_NCELL_SYNC_IND	
		*<=====	
(16)		MPH_NCELL_BCCH_REQ	
		*=====>	
(17)		MPH_NCELL_SYNC_IND	
		*<=====	
(18)		MPH_NCELL_BCCH_REQ	
		*=====>	
(19)		MPH_NCELL_SYNC_IND	
		*<=====	
(20)		MPH_NCELL_BCCH_REQ	
		*=====>	
(21)		MPH_NCELL_SYNC_IND	
		*<=====	
(22)		MPH_NCELL_BCCH_REQ	
		*=====>	
(23)		MPH_RXLEV_PERIODIC_IND	
		*<=====	
(24)		MPH_NCELL_BCCH_IND	
		*<=====	
(25)		MPH_STOP_NCELL_BCCH_REQ	
		*=====>	
(26)		MPH_NCELL_BCCH_IND	
		*<=====	
(27)		MPH_STOP_NCELL_BCCH_REQ	
		*=====>	
(28)		MPH_NCELL_BCCH_IND	
		*<=====	
(29)		MPH_STOP_NCELL_BCCH_REQ	
		*=====>	
(30)		MPH_NCELL_BCCH_IND	

```

(31) | | | *<=====
      | | | | MPHC_STOP_NCELL_BCCH_REQ |
      | | | | *=====>*
(32) | | | | MPHC_RXLEV_PERIODIC_IND |
      | | | | *=====*
(33) | | | | MPHC_RXLEV_PERIODIC_IND |
      | | | | *=====*
(34) | MPH_MEASUREMENT_IND | |
      *<=====*
(35) | MPH_UNITDATA_IND | |
      *<=====*
(36) | MPH_UNITDATA_IND | |
      *<=====*
(37) | MPH_UNITDATA_IND | |
      *<=====*
(38) | MPH_UNITDATA_IND | |
      *<=====*
(39) | | | | MPHC_RXLEV_PERIODIC_IND |
      | | | | *=====*
(40) | | | | MPHC_RXLEV_PERIODIC_IND |
      | | | | *=====*
(41) | | | | MPHC_RXLEV_PERIODIC_IND |
      | | | | *=====*
(42) | MPH_MEASUREMENT_IND | |
      *<=====*
    
```

**Parametrization**

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_DUAL
(2) MPH_IDLE_REQ	mod	NOT_USED
	arfcn	ARFCN_23
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLK_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_4
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
(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) MPH_C_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) MPH_C_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) MPH_C_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) MPH_C_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(10) MPH_C_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_512 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(11) MPH_C_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_885 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(12) MPH_C_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_1 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(13) MPH_C_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	NCELL_RES_SC_23_4_1
	nbr_of_carriers	CHANNELS_4
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(24) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_14
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(25) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_14
(26) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_512
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(27) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_512
(28) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_885
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(29) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_885
(30) MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_1
	l2_channel	L2_CHANNEL_NBCCH
	error_flag	VALID_BLOCK
	l2_frame	L2_SYS_INFO_3
	tc	TC_2
	fn	FN_OFFSET_14
(31) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_1
(32) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_23_4_1
	nbr_of_carriers	CHANNELS_4
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(33) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RES_SC_23_4_1

	nbr_of_carriers	CHANNELS_4
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(34) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_306
	ncells	NCELLS_SC_900_4_1
	gprs_sync	NOT_USED
(35) MPH_UNITDATA_IND	arfcn	ARFCN_1
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(36) MPH_UNITDATA_IND	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1
	loc_area_ident	LOC_AREA_IDENT_1
	ctrl_chan_desc	CTRL_CHAN_DESC_1
	cell_opt_bcch	CELL_OPT_BCCH_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(37) MPH_UNITDATA_IND	arfcn	ARFCN_512
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_3
	ti	TI_0
	cell_ident	CELL_IDENT_1

		loc_area_ident	LOC_AREA_IDENT_1
		ctrl_chan_desc	CTRL_CHAN_DESC_1
		cell_opt_bcch	CELL_OPT_BCCH_1
		cell_select	CELL_SELECT_1
		rach_ctrl	RACH_CTRL_1
		}	
(38)	MPH_UNITDATA_IND		
		arfcn	ARFCN_885
		fn	NOT_USED
		sdu	
		{	
		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_23_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_23_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_23_4_1
		nbr_of_carriers	CHANNELS_4
		s_rxlev	RXLEV_56
		ba_id	BA_ID_1
(42)	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
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

#### 4.15.10 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 |
| | *<===== |
    
```

```

    |
(54) | MPH_MEASUREMENT_IND |
    | *<=====
    | *<=====
    |
    
```

**Parametrization**

Primitive	Parameter	Value
(1) MPH_CLASSMARK_REQ	classmark	CLASS_DUAL
(2) MPH_IDLE_REQ	mod	NOT_USED
	arfcn	ARFCN_637
	ext_bcch	NOT_USED
	comb_ccch	COMB_CCCH_NOT_COMB
	tn	TN_0
	dlt	DLT_10
	pg	PG_20
	bs_ag_blocks_res	BS_AG_BLK_RES_3
	bs_pa_mfrms	BS_PA_MFRMS_4
	power	POWER_12
	ncc_permitted	NOT_PRESENT_8BIT
	reorg_only	NOT_USED
(3) MPHC_STOP_SCELL_BCCH_REQ	param	NOT_USED
(4) MPHC_START_CCCH_REQ	bs_pa_mfrms	BS_PA_MFRMS_6
	bs_ag_blk_res	BS_AG_BLK_RES_3
	bcch_combined	COMB_CCCH_NOT_COMB
	ccch_group	CCCH_GROUP_0
	page_group	PG_20
	page_block_index	PBI_2
	page_mode	PGM_REORG
(5) MPHC_SCELL_NBCCH_REQ	schedule_array_size	SCHED_SIZE_1
	schedule_array	NOT_USED
(6) MPH_NEIGHBOURCELL_REQ	multi_band	MULTI_BAND_1
	arfcn	
	CHLIST_1_14_512_513_600_700_810_885_FFFF	
	sync_only	NOT_USED
(7) MPHC_RXLEV_PERIODIC_REQ	chan_list	
	CHLIST_637_1_14_512_513_600_700_810_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_637_8_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1

(9) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(10) MPHC_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_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) MPMC_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) MPMC_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) MPMC_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) MPMC_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) MPMC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_700
(32) MPMC_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) MPMC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_600
(34) MPMC_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) MPMC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_513

(36) MPHC_NCELL_BCCH_IND	radio_freq l2_channel error_flag l2_frame tc fn	ARFCN_810 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_3 TC_2 FN_OFFSET_14
(37) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	ONE_ELEM STOP_ARRAY_810
(38) 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
(39) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	ONE_ELEM STOP_ARRAY_885
(40) 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
(41) MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	ONE_ELEM STOP_ARRAY_14
(42) 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
(43) 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
(44) 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_306 NCELLS_SC_1800_8_1 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	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_810
	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_637_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_637_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_637_8_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	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) 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_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) MPH_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) MPH_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) MPH_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) MPH_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) MPMC_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) MPMC_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) MPMC_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) MPMC_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) MPMC_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) MPMC_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) MPMC_STOP_NCELL_BCCH_REQ		
	radio_freq_array_size	ONE_ELEM
	radio_freq_array	STOP_ARRAY_14
(26) MPMC_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_C_RXLEV_PERIODIC_IND | |
      | | | *<=====
(42) | | | | MPH_C_RXLEV_PERIODIC_IND | |
      | | | *<=====
(43) | | | | MPH_C_RXLEV_PERIODIC_IND | |
      | | | *<=====
(44) | | | MPH_MEASUREMENT_IND | |
      | | | *<=====
(45) | | | | MPH_C_RXLEV_PERIODIC_IND | |
      | | | *<=====
(46) | | | | MPH_C_RXLEV_PERIODIC_IND | |
      | | | *<=====
(47) | | | | MPH_C_RXLEV_PERIODIC_IND | |
      | | | *<=====
(48) | | | MPH_MEASUREMENT_IND | |
      | | | *<=====
(49) | | | | MPH_C_RXLEV_PERIODIC_IND | |
      | | | *<=====
(50) | | | | MPH_C_RXLEV_PERIODIC_IND | |
      | | | *<=====
(51) | | | | MPH_C_RXLEV_PERIODIC_IND | |
      | | | *<=====
(52) | | | MPH_MEASUREMENT_IND | |
      | | | *<=====
(53) | | | | MPH_C_RXLEV_PERIODIC_IND | |
      | | | *<=====
(54) | | | | MPH_C_RXLEV_PERIODIC_IND | |
      | | | *<=====
(55) | | | | MPH_C_RXLEV_PERIODIC_IND | |
      | | | *<=====
(56) | | | MPH_MEASUREMENT_IND | |
      | | | *<=====
(57) | | | | MPH_C_RXLEV_PERIODIC_IND | |
      | | | *<=====
(58) | | | | MPH_C_RXLEV_PERIODIC_IND | |
      | | | *<=====
(59) | | | | MPH_C_RXLEV_PERIODIC_IND | |
      | | | *<=====
(60) | | | | MPH_C_NCELL_SYNC_REQ | |
      | | | *=====
(61) | | | | MPH_C_NCELL_SYNC_REQ | |
      | | | *=====
(62) | | | | MPH_C_NCELL_SYNC_REQ | |
      | | | *=====
(63) | | | 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) 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 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 sb_flag fn_offset time_alignment bsic	ARFCN_1 SB_FOUND FN_OFFSET_1 TIME_ALIGNMT_1 BSIC_1
(14) MPHC_NCELL_BCCH_REQ	radio_freq fn_offset time_alignment tsc bcch_blocks_required gprs_prio	ARFCN_1 FN_OFFSET_1 TIME_ALIGNMT_1 BSIC_1 NCELL_BCCH_SI_3_4 NOT_USED
(15) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_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_23 RXLEV_56 NOT_USED NOT_USED NOT_USED NOT_USED NOT_USED VALID_REPORT FN_OFFSET_306 NO_NCELLS NOT_USED
(17) MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(18) MPHC_NCELL_BCCH_IND	radio_freq l2_channel error_flag l2_frame tc fn	ARFCN_14 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_4 TC_2 FN_OFFSET_14

(19)	MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
		radio_freq_array	STOP_ARRAY_14
(20)	MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_1
		l2_channel	L2_CHANNEL_NBCCH
		error_flag	VALID_BLOCK
		l2_frame	L2_SYS_INFO_4
		tc	TC_2
		fn	FN_OFFSET_1
(21)	MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
		radio_freq_array	STOP_ARRAY_1
(22)	MPHC_NCELL_BCCH_IND	radio_freq	ARFCN_124
		l2_channel	L2_CHANNEL_NBCCH
		error_flag	VALID_BLOCK
		l2_frame	L2_SYS_INFO_4
		tc	TC_2
		fn	FN_OFFSET_124
(23)	MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size	STOP_SIZE_1
		radio_freq_array	STOP_ARRAY_124
(24)	MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
		nbr_of_carriers	CHANNELS_8
		s_rxlev	RXLEV_56
		ba_id	BA_ID_1
(25)	MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
		nbr_of_carriers	CHANNELS_8
		s_rxlev	RXLEV_56
		ba_id	BA_ID_1
(26)	MPH_MEASUREMENT_IND	arfcn	ARFCN_23
		rx_lev_full	RXLEV_56
		rx_lev_sub	NOT_USED
		rx_qual_full	NOT_USED
		rx_qual_sub	NOT_USED
		dtx	NOT_USED
		otd	NOT_USED
		valid	VALID_REPORT
		fn_offset	FN_OFFSET_306
		ncells	NCELLS_1_14_124
		gprs_sync	NOT_USED
(27)	MPH_UNITDATA_IND	arfcn	ARFCN_1
		fn	NOT_USED
		sdu	
		{	
		component	RR
		direction	DOWNLINK
		pd	D_SYS_INFO_4
		ti	TI_0
		loc_area_ident	LOC_AREA_IDENT_1

	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(28) MPH_UNITDATA_IND		
	arfcn	ARFCN_14
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_4
	ti	TI_0
	loc_area_ident	LOC_AREA_IDENT_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(29) MPH_UNITDATA_IND		
	arfcn	ARFCN_124
	fn	NOT_USED
	sdu	
	{	
	component	RR
	direction	DOWNLINK
	pd	D_SYS_INFO_4
	ti	TI_0
	loc_area_ident	LOC_AREA_IDENT_1
	cell_select	CELL_SELECT_1
	rach_ctrl	RACH_CTRL_1
	}	
(30) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(31) MPHC_RXLEV_PERIODIC_IND		
	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	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 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) 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) MPMC\_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) MPMC\_STOP\_NCELL\_BCCH\_REQ  
 radio\_freq\_array\_size STOP\_SIZE\_1  
 radio\_freq\_array STOP\_ARRAY\_1
- (23) MPMC\_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) MPMC\_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) MPMC\_STOP\_NCELL\_BCCH\_REQ  
 radio\_freq\_array\_size STOP\_SIZE\_1  
 radio\_freq\_array STOP\_ARRAY\_124
- (26) MPMC\_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) MPMC\_RXLEV\_PERIODIC\_IND  
 result NCELL\_RESULT\_1  
 nbr\_of\_carriers CHANNELS\_8  
 s\_rxlev RXLEV\_56  
 ba\_id BA\_ID\_1
- (28) MPMC\_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) MPMC\_STOP\_NCELL\_BCCH\_REQ  
 radio\_freq\_array\_size STOP\_SIZE\_1  
 radio\_freq\_array STOP\_ARRAY\_14
- (30) MPMC\_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

- ( 4 3 )                   MPHC\_RXLEV\_PERIODIC\_IND  
                          result                    NCELL\_RESULT\_1  
                          nbr\_of\_carriers        CHANNELS\_8  
                          s\_rxlev                 RXLEV\_56  
                          ba\_id                  BA\_ID\_1
- ( 4 4 )                   MPHC\_RXLEV\_PERIODIC\_IND  
                          result                    NCELL\_RESULT\_1  
                          nbr\_of\_carriers        CHANNELS\_8  
                          s\_rxlev                 RXLEV\_56  
                          ba\_id                  BA\_ID\_1
- ( 4 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\_306  
                          ncells                NCELLS\_1\_14\_124  
                          gprs\_sync            NOT\_USED
- ( 4 6 )                   MPHC\_RXLEV\_PERIODIC\_IND  
                          result                    NCELL\_RESULT\_1  
                          nbr\_of\_carriers        CHANNELS\_8  
                          s\_rxlev                 RXLEV\_56  
                          ba\_id                  BA\_ID\_1
- ( 4 7 )                   MPHC\_RXLEV\_PERIODIC\_IND  
                          result                    NCELL\_RESULT\_1  
                          nbr\_of\_carriers        CHANNELS\_8  
                          s\_rxlev                 RXLEV\_56  
                          ba\_id                  BA\_ID\_1
- ( 4 8 )                   MPHC\_RXLEV\_PERIODIC\_IND  
                          result                    NCELL\_RESULT\_1  
                          nbr\_of\_carriers        CHANNELS\_8  
                          s\_rxlev                 RXLEV\_56  
                          ba\_id                  BA\_ID\_1
- ( 4 9 )                   MPH\_MEASUREMENT\_IND  
                          arfcn                    ARFCN\_23  
                          rx\_lev\_full            RXLEV\_56  
                          rx\_lev\_sub            NOT\_USED  
                          rx\_qual\_full         NOT\_USED  
                          rx\_qual\_sub         NOT\_USED  
                          dtx                     NOT\_USED  
                          otd                     NOT\_USED  
                          valid                    VALID\_REPORT  
                          fn\_offset            FN\_OFFSET\_306  
                          ncells                NCELLS\_1\_14\_124  
                          gprs\_sync            NOT\_USED
- ( 5 0 )                   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)	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 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	ARFCN_1 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) MPMC\_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) MPMC\_STOP\_NCELL\_BCCH\_REQ  
 radio\_freq\_array\_size STOP\_SIZE\_1  
 radio\_freq\_array STOP\_ARRAY\_14
- (32) MPMC\_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) MPMC\_STOP\_NCELL\_BCCH\_REQ  
 radio\_freq\_array\_size STOP\_SIZE\_1  
 radio\_freq\_array STOP\_ARRAY\_1
- (34) MPMC\_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) MPMC\_STOP\_NCELL\_BCCH\_REQ  
 radio\_freq\_array\_size STOP\_SIZE\_1  
 radio\_freq\_array STOP\_ARRAY\_124
- (36) MPMC\_RXLEV\_PERIODIC\_IND  
 result NCELL\_RESULT\_1  
 nbr\_of\_carriers CHANNELS\_8  
 s\_rxlev RXLEV\_56  
 ba\_id BA\_ID\_1
- (37) MPMC\_RXLEV\_PERIODIC\_IND  
 result NCELL\_RESULT\_1  
 nbr\_of\_carriers CHANNELS\_8  
 s\_rxlev RXLEV\_56  
 ba\_id BA\_ID\_1
- (38) MPMC\_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) | | MPHC_RXLEV_PERIODIC_IND |
      *<=====
(62) | | MPHC_RXLEV_PERIODIC_IND |
      *<=====
(63) | | MPHC_RXLEV_PERIODIC_IND |
      *<=====
(64) | MPH_MEASUREMENT_IND | |
      *<=====
(65) | | MPHC_RXLEV_PERIODIC_IND |
      *<=====
(66) | | MPHC_RXLEV_PERIODIC_IND |
      *<=====
(67) | | MPHC_RXLEV_PERIODIC_IND |
      *<=====
(68) | MPH_MEASUREMENT_IND | |
      *<=====
(69) | | MPHC_RXLEV_PERIODIC_IND |
      *<=====
(70) | | MPHC_RXLEV_PERIODIC_IND |
      *<=====
(71) | | MPHC_RXLEV_PERIODIC_IND |
      *<=====
(72) | MPH_MEASUREMENT_IND | |
      *<=====
(73) | | MPHC_RXLEV_PERIODIC_IND |
      *<=====
(74) | | MPHC_RXLEV_PERIODIC_IND |
      *<=====
(75) | | MPHC_RXLEV_PERIODIC_IND |
      *<=====
(76) | | MPHC_NCELL_SYNC_REQ |
      *=====
(77) | | MPHC_NCELL_SYNC_REQ |
      *=====
(78) | | MPHC_NCELL_SYNC_REQ |
      *=====
(79) | 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) MPMC\_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) MPMC\_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) MPMC\_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) MPMC\_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) MPMC\_RXLEV\_PERIODIC\_IND  
 result NCELL\_RESULT\_1  
 nbr\_of\_carriers CHANNELS\_8  
 s\_rxlev RXLEV\_56  
 ba\_id BA\_ID\_1
- (18) MPMC\_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) MPMC\_STOP\_NCELL\_BCCH\_REQ  
 radio\_freq\_array\_size STOP\_SIZE\_1  
 radio\_freq\_array STOP\_ARRAY\_14
- (20) MPMC\_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 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

#### 4.15.16 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 |
| |
    
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(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	



```

(36) | | | *<=====
      | MPH_MEASUREMENT_IND | |
      | *<=====
(37) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(38) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(39) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(40) | | | MPH_MEASUREMENT_IND |
      | | | *<=====
(41) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(42) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(43) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(44) | | | MPH_MEASUREMENT_IND |
      | | | *<=====
(45) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(46) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(47) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(48) | | | MPH_MEASUREMENT_IND |
      | | | *<=====
(49) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(50) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(51) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(52) | | | MPH_MEASUREMENT_IND |
      | | | *<=====
(53) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(54) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(55) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(56) | | | MPH_MEASUREMENT_IND |
      | | | *<=====
(57) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(58) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(59) | | | | MPH_C_RXLEV_PERIODIC_IND |
      | | | *<=====
(60) | | | | MPH_C_NCELL_SYNC_REQ |
      | | | *=====
(61) | | | | MPH_C_NCELL_SYNC_REQ |
      | | | *=====
(62) | | | | MPH_C_NCELL_SYNC_REQ |
      | | | *=====
(63) | | | MPH_MEASUREMENT_IND |
      | | | *<=====
    
```

**Parametrization**



Primitive	Parameter	Value
(1) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(2) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_14
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(3) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_124
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(4) MPHC_NCELL_SYNC_REQ	radio_freq	ARFCN_1
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(5) MPHC_RXLEV_PERIODIC_IND	result	NCELL_RESULT_1
	nbr_of_carriers	CHANNELS_8
	s_rxlev	RXLEV_56
	ba_id	BA_ID_1
(6) MPH_MEASUREMENT_IND	arfcn	ARFCN_23
	rx_lev_full	RXLEV_56
	rx_lev_sub	NOT_USED
	rx_qual_full	NOT_USED
	rx_qual_sub	NOT_USED
	dtx	NOT_USED
	otd	NOT_USED
	valid	VALID_REPORT
	fn_offset	FN_OFFSET_918
	ncells	NO_NCELLS
	gprs_sync	NOT_USED
	(7) MPHC_RXLEV_PERIODIC_IND	result
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 l2_channel error_flag l2_frame tc fn	ARFCN_14 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_3 TC_2 FN_OFFSET_14
(19)	MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	STOP_SIZE_1 STOP_ARRAY_14
(20)	MPHC_NCELL_BCCH_IND	radio_freq l2_channel error_flag l2_frame tc fn	ARFCN_1 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_3 TC_2 FN_OFFSET_1
(21)	MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	STOP_SIZE_1 STOP_ARRAY_1
(22)	MPHC_NCELL_BCCH_IND	radio_freq l2_channel error_flag l2_frame tc fn	ARFCN_124 L2_CHANNEL_NBCCH VALID_BLOCK L2_SYS_INFO_3 TC_2 FN_OFFSET_124
(23)	MPHC_STOP_NCELL_BCCH_REQ	radio_freq_array_size radio_freq_array	STOP_SIZE_1 STOP_ARRAY_124
(24)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(25)	MPHC_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(26)	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
(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 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) 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) MPH_C_RXLEV_PERIODIC_IND	result nbr_of_carriers s_rxlev ba_id	NCELL_RESULT_1 CHANNELS_8 RXLEV_56 BA_ID_1
(57) MPH_C_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_VALID_TIMING_INFO_SB
(58) MPH_C_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 NOT_USED NOT_USED TV_VALID_TIMING_INFO_SB
(59) MPH_C_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	MPA	Initial
	20.06.01	MSB	fn_offset corrected in (16)
	07.02.02	LG	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>..<B>

	RR/DL	ALR	PL
(1)	MPH_CLASSMARK_REQ		
	*----->*		
(2)	MPH_IDLE_REQ		
	*----->*		
(3)		MPH_C_STOP_SCELL_BCCH_REQ	





	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	
<B>	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	
<B>	cbch	CBCH_DESCRIPTION_8	
<C>	cbch	CBCH_DESCRIPTION_4	
(9) MPHC_CONFIG_CBCH_REQ			
<A>	cbch_desc	CHANNEL_DESC_CBCH_4	
<B>	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	Initial
	12.07.00	DG	MPH_CLASSMARK_REQ: class changed into classmark (Forum G23M / No 0057)



<A>	error_flag	VALID_BLOCK
<B>	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
<B>	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**

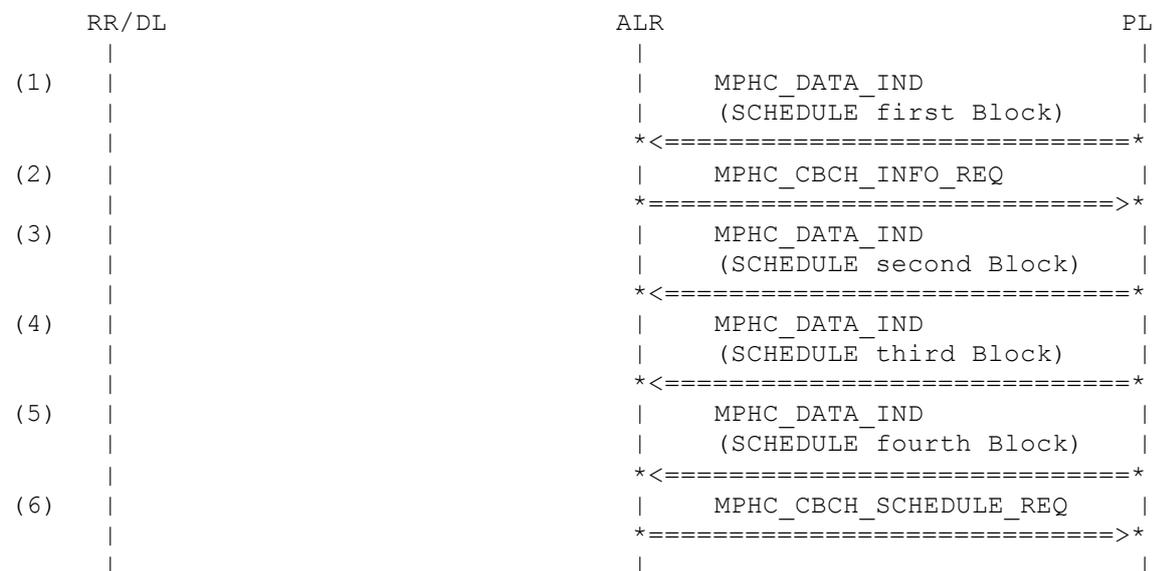
Primitive	Parameter	Value
(1) MPHC_DATA_IND	radio_freq	ARFCN_23
	l2_channel	L2_CHANNEL_CBCH
	error_flag	VALID_BLOCK
	l2_frame	CBCH_1_8
	tc	TC_0
	ccch_lev	NOT_USED
	fn	FN_OFFSET_0

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



**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) MPH_C_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) MPH_C_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) MPH_C_CBCH_SCHEDULE_REQ	cbch_select schedule_length first_blocks_0 first_blocks_1	CBCH_READ_NORM SCHED_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)		MPH_C_STOP_SCELL_BCCH_REQ	
		*=====>*	
(4)	MPH_IDENTITY_REQ		
	*=====>*		
(5)	MPH_MON_CTRL_REQ		
	*=====>*		
	START_TIMEOUT (9500)		
(6)	MPH_MON_CTRL_REQ		
	*=====>*		
(7)		MPH_C_START_CCCH_REQ	
		*=====>*	
(8)	MPH_NEIGHBOURCELL_REQ		
	*=====>*		
(9)		MPH_C_NCELL_SYNC_REQ	
		*=====>*	
(10)		MPH_C_NCELL_SYNC_REQ	
		*=====>*	
(11)		MPH_C_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) MPH_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) MPH_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_BLKS_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) MPH_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_1 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(10) MPH_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_14 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(11) MPH_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(12) MPH_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 NOT_USED

	fn_offset	NOT_USED
	ncells	NCELLS_14_PBCCH
	gprs_sync	SYNC_RESULTS
(14) MPH_C_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) MPH_C_STOP_NCELL_SYNC_REQ		
	radio_freq_array_size	STOP_SIZE_1
	radio_freq_array	NOT_USED
(18) MPH_C_NCELL_SYNC_REQ		
	radio_freq	ARFCN_10
	fn_offset	NOT_USED
	time_alignment	NOT_USED
	timing_validity	TV_INVALID_TIMING_INFO
(19) MPH_C_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) MPH_C_NCELL_SYNC_REQ		
	radio_freq	ARFCN_14
	fn_offset	FN_OFFSET_14

	time_alignment timing_validity	TIME_ALIGNMT_14 TV_VALID_TIMING_INFO
(22) MPH_C_NCELL_SYNC_REQ	radio_freq fn_offset time_alignment timing_validity	ARFCN_124 NOT_USED NOT_USED TV_INVALID_TIMING_INFO
(23) MPH_C_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) MPH_C_STOP_CCCH_REQ	param	NOT_USED
(26) MPH_C_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) MPH_C_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/>>