

TSG RAN Meeting #18
New Orleans, Louisiana, USA, 3 - 6 December, 2002

RP-020767

Title CRs (Rel-5 only) to 25.423 and 25.433 on Addition of the second TDD
Channelisation Code of HS-SCCH for the 1.28Mcps TDD option
Source TSG RAN WG3
Agenda Item 7.3.5

| RAN3 Tdoc | Spec | curr. Vers. | new Vers. | REL | CR | Rev | Cat | Title | Work item |
|-----------|--------|-------------|-----------|-------|-----|-----|-----|--|--------------|
| R3-022562 | 25.423 | 5.3.0 | 5.4.0 | REL-5 | 742 | 1 | F | Addition of the second TDD Channelisation Code of HS-SCCH for the 1.28Mcps TDD option. | HSDPA-lublur |
| R3-022561 | 25.433 | 5.2.0 | 5.3.0 | REL-5 | 770 | 1 | F | Addition of the second TDD Channelisation Code of HS-SCCH for the 1.28Mcps TDD option. | HSDPA-lublur |

CR-Form-v7

CHANGE REQUEST

25.423 CR 742 # rev **1** # Current version: **5.3.0**

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the # symbols.

Proposed change affects: UICC apps ME Radio Access Network Core Network

| | | | |
|------------------------|---|--|---|
| Title: | # | Addition of the second TDD Channelisation Code of HS-SCCH for the 1.28Mcps TDD option. | |
| Source: | # | RAN WG3 | |
| Work item code: | # | HSDPA-lublur | Date: # 11/11/2002 |
| Category: | # | F | Release: # Rel-5 |
| | | Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900. | Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) |

| | | |
|--------------------------------------|---|--|
| Reason for change: | # | In the description of the physical channels for the 1.28Mcps TDD option in 25.221 v.5.2.0 there is stated that the information on the HS-SCCH is carried by two separate physical channels (HS-SCCH1 and HS-SCCH2). This fact is not considered in the current RAN-WG3 specifications. |
| Summary of change: | # | A new IE, the <i>Second TDD Channelisation Code LCR</i> IE, is introduced in the HS-DSCH TDD Information Response. Impact Analysis: Impact Assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification (same release) because HSDPA only is affected. This CR has an impact under functional point of view. The impact can be considered isolated because the change affects one function namely HSDPA. |
| Consequences if not approved: | # | If this CR is not approved, the concerned RAN-WG3 specification is not aligned with the RAN-WG1 specification TS 25.221v5.2.0 which describes two TDD Channelisation Codes for HS-SCCH. |

| | | |
|--------------------------|---|---|
| Clauses affected: | # | 9.2.3.3ab, 9.3.4 |
| | | <input type="checkbox"/> Y <input type="checkbox"/> N |

| | | | | | | |
|------------------------|---|-------------------------------------|-------------------------------------|---------------------------|---|-----------------------|
| Other specs | ⌘ | <input checked="" type="checkbox"/> | | Other core specifications | ⌘ | TS25.433 v5.2.0 CR770 |
| affected: | | | <input checked="" type="checkbox"/> | Test specifications | | |
| | | | <input checked="" type="checkbox"/> | O&M Specifications | | |
| Other comments: | ⌘ | | | | | |

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <http://www.3gpp.org/specs/CR.htm>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request

/* partly omitted */

9.2.3.3ab HS-DSCH TDD Information Response

The *HS-DSCH TDD Information Response* IE provides information for HS-DSCH that have been established or modified.

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|---|----------|--|--|---------------------------------|-------------|----------------------|
| HS-DSCH MAC-d Flow Specific Information Response | | <i>1..<maxno ofMACdFlows></i> | | | – | |
| >HS-DSCH MAC-d Flow ID | M | | 9.2.1.300 | | – | |
| >Binding ID | O | | 9.2.1.3 | | – | |
| >Transport Layer Address | O | | 9.2.1.62 | | – | |
| >HS-DSCH Initial Capacity Allocation | O | | 9.2.1.30Na | | – | |
| HS-SCCH Specific Information Response | | <i>0..<maxno ofHSSCC Hcodes></i> | | Mandatory for 3.84Mcps TDD | GLOBAL | reject |
| >Time Slot | M | | 9.2.3.23 | | | |
| >Midamble Shift And Burst Type | M | | 9.2.3.7 | | | |
| >TDD Channelisation Code | M | | 9.2.3.19 | | | |
| >HS-SICH Information | | <i>1</i> | | | | |
| >>Time Slot | M | | 9.2.3.23 | | | |
| >>Midamble Shift And Burst Type | M | | 9.2.3.7 | | | |
| >>TDD Channelisation Code | M | | 9.2.3.19 | | | |
| HS-SCCH Specific Information Response LCR | | <i>0..<maxno ofHSSCC Hcodes></i> | | Mandatory for 1.28Mcps TDD only | GLOBAL | reject |
| >Time Slot LCR | M | | 9.2.3.24a | | | |
| >Midamble shift LCR | M | | 9.2.3.7A | | | |
| >First TDD Channelisation Code LCR | M | | TDD Channelisation Code LCR 9.2.3.19a | | | |
| >Second TDD Channelisation Code LCR | M | | TDD Channelisation Code LCR 9.2.3.19a | | | |
| >HS-SICH Information LCR | | <i>1</i> | | | | |
| >>Time Slot LCR | M | | 9.2.3.24a | | | |
| >>Midamble shift LCR | M | | 9.2.3.7A | | | |
| >>TDD Channelisation Code LCR | M | | 9.2.3.19a | | | |

| Range bound | Explanation |
|---------------------------|----------------------------------|
| <i>maxnoofMACdFlows</i> | Maximum number of MAC-d flows. |
| <i>maxnoofHSSCCHcodes</i> | Maximum number of HS-SCCH codes. |

/* partly omitted */

9.3.4 Information Element Definitions

/* partly omitted */

-- H

HARQ-FDD-InfoList ::= SEQUENCE (SIZE (1..maxNrOfHARQProc)) OF HARQ-FDD-InfoItem

```
HARQ-FDD-InfoItem ::= SEQUENCE {
    process-Memory-Size          INTEGER (1..172800,...),
    iE-Extensions                ProtocolExtensionContainer { { HARQ-FDD-InfoItem-ExtIEs } } OPTIONAL,
    ...
}
```

```
HARQ-FDD-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

HARQ-TDD-InfoList ::= SEQUENCE (SIZE (1..maxNrOfHARQProc)) OF HARQ-TDD-InfoItem

```
HARQ-TDD-InfoItem ::= SEQUENCE {
    process-Memory-Size          INTEGER (1..168960,...),
    iE-Extensions                ProtocolExtensionContainer { { HARQ-TDD-InfoItem-ExtIEs } } OPTIONAL,
    ...
}
```

```
HARQ-TDD-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

HCS-Prio ::= INTEGER (0..7)

-- 0 = lowest priority, ...7 = highest priority

```
HSDSCH-FDD-Information ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-Info          HSDSCH-MACdFlow-Specific-InfoList,
    uE-Capabilities-InfoFDD                UE-Capabilities-InfoFDD,
    hARQ-FDD-Info                          HARQ-FDD-InfoList,
    cqiFeedback-CycleK                     CQI-Feedback-Cycle,
    cqiRepetitionFactor                    CQI-RepetitionFactor OPTIONAL,
    -- This IE shall be present if the CQI Feedback Cycle k is greater than 0
    cqiPowerOffset                         CQI-Power-Offset,
    ackNackRepetitionFactor                 AckNack-RepetitionFactor,
    ackPowerOffset                         Ack-Power-Offset,
    nackPowerOffset                        Nack-Power-Offset,
    hssch-PowerOffset                      HSSCCH-PowerOffset OPTIONAL,
    iE-Extensions                          ProtocolExtensionContainer { { HSDSCH-FDD-Information-ExtIEs } } OPTIONAL,
}
```

```

}
...
}
HSDSCH-FDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
HSDSCH-FDD-Information-Response ::= SEQUENCE {
  hSDSCH-MACdFlow-Specific-InfoList-Response      HSDSCH-MACdFlow-Specific-InfoList-Response,
  hSSCCH-Specific-InfoList-Response              HSSCCH-FDD-Specific-InfoList-Response,
  iE-Extensions                                  ProtocolExtensionContainer { { HSDSCH-FDD-Information-Response-ExtIEs } } OPTIONAL,
  ...
}
HSDSCH-FDD-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
HSDSCH-Information-to-Modify ::= SEQUENCE {
  hSDSCH-MACdFlow-Specific-InfoList-to-Modify      HSDSCH-MACdFlow-Specific-InfoList-to-Modify OPTIONAL,
  cqiFeedback-CycleK                               CQI-Feedback-Cycle OPTIONAL, -- For FDD only
  cqiRepetitionFactor                              CQI-RepetitionFactor OPTIONAL, -- For FDD only
  ackNackRepetitionFactor                          AckNack-RepetitionFactor OPTIONAL, -- For FDD only
  cqiPowerOffset                                  CQI-Power-Offset OPTIONAL, -- For FDD only
  ackPowerOffset                                  Ack-Power-Offset OPTIONAL, -- For FDD only
  nackPowerOffset                                  Nack-Power-Offset OPTIONAL, -- For FDD only
  hsscch-PowerOffset                              HSSCCH-PowerOffset OPTIONAL, -- Only for FDD
  iE-Extensions                                  ProtocolExtensionContainer { { HSDSCH-Information-to-Modify-ExtIEs } } OPTIONAL,
  ...
}
HSDSCH-Information-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
HSDSCH-MACdFlow-ID ::= INTEGER (0..maxNrOfMACdFlows-1)
HSDSCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem
HSDSCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
  hSDSCH-MACdFlow-ID                             HSDSCH-MACdFlow-ID,
  allocationRetentionPriority                      AllocationRetentionPriority,
  trafficClass                                    TrafficClass,
  bindingID                                       BindingID OPTIONAL,
  transportLayerAddress                          TransportLayerAddress OPTIONAL,
  priorityQueue-Info                             PriorityQueue-InfoList,
  iE-Extensions                                  ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs } } OPTIONAL,
  ...
}
HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

```

HSDSCH-MACdFlow-Specific-InfoList-Response ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem-Response

```
HSDSCH-MACdFlow-Specific-InfoItem-Response ::= SEQUENCE {
  hSDSCH-MACdFlow-ID          HSDSCH-MACdFlow-ID,
  bindingID                   BindingID                               OPTIONAL,
  transportLayerAddress       TransportLayerAddress                 OPTIONAL,
  hSDSCH-Initial-Capacity-Allocation HSDSCH-Initial-Capacity-Allocation OPTIONAL,
  iE-Extensions               ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-Response-ExtIEs } } OPTIONAL,
  ...
}
```

```
HSDSCH-MACdFlow-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

HSDSCH-MACdFlow-Specific-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem-to-Modify

```
HSDSCH-MACdFlow-Specific-InfoItem-to-Modify ::= SEQUENCE {
  hSDSCH-MACdFlow-ID          HSDSCH-MACdFlow-ID,
  allocationRetentionPriority  AllocationRetentionPriority           OPTIONAL,
  transportBearerRequestIndicator TransportBearerRequestIndicator,
  trafficClass                TrafficClass                               OPTIONAL,
  bindingID                   BindingID                               OPTIONAL,
  transportLayerAddress       TransportLayerAddress                 OPTIONAL,
  priorityQueue-Info-to-Modify PriorityQueue-InfoList-to-Modify     OPTIONAL,
  iE-Extensions               ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs } } OPTIONAL,
  ...
}
```

```
HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

HSDSCH-Initial-Capacity-Allocation ::= SEQUENCE (SIZE (1..16)) OF HSDSCH-Initial-Capacity-AllocationItem

```
HSDSCH-Initial-Capacity-AllocationItem ::= SEQUENCE {
  schedulingPriorityIndicator  SchedulingPriorityIndicator,
  maximum-MACdPDU-Size       MACdPDU-Size,
  hSDSCH-InitialWindowSize   HSDSCH-InitialWindowSize,
  iE-Extensions               ProtocolExtensionContainer { {HSDSCH-Initial-Capacity-AllocationItem-ExtIEs} } OPTIONAL,
  ...
}
```

```
HSDSCH-Initial-Capacity-AllocationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

HSDSCH-InitialWindowSize ::= INTEGER (1..2047)

-- Number of MAC-d PDUs.

-- 2047 = Unlimited number of MAC-d PDUs

HSDSCH-RNTI ::= INTEGER (0..65535)

```

HSDSCH-TDD-Information ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-Info          HSDSCH-MACdFlow-Specific-InfoList,
    uE-Capabilities-InfoTDD                UE-Capabilities-InfoTDD,
    hARQ-TDD-InfoList                      HARQ-TDD-InfoList,
    iE-Extensions                           ProtocolExtensionContainer { { HSDSCH-TDD-Information-ExtIEs } }    OPTIONAL,
    ...
}

HSDSCH-TDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-TDD-Information-Response ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-InfoList-Response          HSDSCH-MACdFlow-Specific-InfoList-Response,
    hSSCCH-TDD-Specific-InfoList-Response              HSSCCH-TDD-Specific-InfoList-Response          OPTIONAL,
    hSSCCH-TDD-Specific-InfoList-Response-LCR          HSSCCH-TDD-Specific-InfoList-Response-LCR          OPTIONAL,
    iE-Extensions                                       ProtocolExtensionContainer { { HSDSCH-TDD-Information-Response-ExtIEs } }    OPTIONAL,
    ...
}

HSDSCH-TDD-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSCCH-FDD-Specific-InfoList-Response ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-FDD-Specific-InfoItem-Response

HSSCCH-FDD-Specific-InfoItem-Response ::= SEQUENCE {
    code-Number          INTEGER (0..127),
    iE-Extensions        ProtocolExtensionContainer { { HSSCCH-FDD-Specific-InfoItem-Response-ExtIEs } }    OPTIONAL,
    ...
}

HSSCCH-FDD-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSCCH-PowerOffset ::= INTEGER (0..255)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB

HSSCCH-TDD-Specific-InfoList-Response ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-TDD-Specific-InfoItem-Response

HSSCCH-TDD-Specific-InfoItem-Response ::= SEQUENCE {
    timeslot          TimeSlot,
    midambleShiftAndBurstType          MidambleShiftAndBurstType,
    tDD-ChannelisationCode          TDD-ChannelisationCode,
    hSSICH-Info          HSSICH-Info,
    iE-Extensions        ProtocolExtensionContainer { { HSSCCH-TDD-Specific-InfoItem-Response-ExtIEs } }    OPTIONAL,
    ...
}

HSSCCH-TDD-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

```



```

}
...
}
HSSCCH-TDD-Specific-InfoList-Response-PCR ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-TDD-Specific-InfoItem-Response-PCR

HSSCCH-TDD-Specific-InfoItem-Response-PCR ::= SEQUENCE {
    timeslotPCR                    TimeSlotPCR,
    midambleShiftPCR              MidambleShiftPCR,
    first-TDD-ChannelisationCodePCR  TDD-ChannelisationCodePCR,
    second-TDD-ChannelisationCodePCR TDD-ChannelisationCodePCR,
    hSSICH-InfoPCR                HSSICH-InfoPCR,
    iE-Extensions                  ProtocolExtensionContainer { { HSSCCH-TDD-Specific-InfoItem-Response-PCR-ExtIEs } } OPTIONAL,
    ...
}

HSSCCH-TDD-Specific-InfoItem-Response-PCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSICH-Info ::= SEQUENCE {
    timeslot                    TimeSlot,
    midambleShiftAndBurstType  MidambleShiftAndBurstType,
    tDD-ChannelisationCode     TDD-ChannelisationCode,
    iE-Extensions              ProtocolExtensionContainer { { HSSICH-Info-ExtIEs } } OPTIONAL,
    ...
}

HSSICH-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSICH-InfoPCR ::= SEQUENCE {
    timeslotPCR                    TimeSlotPCR,
    midambleShiftPCR              MidambleShiftPCR,
    tDD-ChannelisationCodePCR     TDD-ChannelisationCodePCR,
    iE-Extensions                  ProtocolExtensionContainer { { HSSICH-Info-PCR-ExtIEs } } OPTIONAL,
    ...
}

HSSICH-Info-PCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSCCH-CodeChangeIndicator ::= ENUMERATED {
    hsSCCHCodeChangeNeeded
}

HSDSCH-FDD-Update-Information ::= SEQUENCE {
    hsSCCHCodeChangeIndicator  HSSCCH-CodeChangeIndicator OPTIONAL,
    cqiFeedbackCycleK          CQI-Feedback-Cycle OPTIONAL,
    cqiRepetitionFactor        CQI-RepetitionFactor OPTIONAL,
    ackNackRepetitionFactor    AckNack-RepetitionFactor OPTIONAL,
    cqiPowerOffset             CQI-Power-Offset OPTIONAL,
}

```

```

    ackPowerOffset          Ack-Power-Offset          OPTIONAL,
    nackPowerOffset         Nack-Power-Offset         OPTIONAL,
    iE-Extensions           ProtocolExtensionContainer { { HSDSCH-FDD-Update-Information-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-FDD-Update-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-TDD-Update-Information ::= SEQUENCE {
    hsSCCHCodeChangeIndicator          HSSCCH-CodeChangeIndicator          OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { HSDSCH-TDD-Update-Information-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-TDD-Update-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

/* partly omitted */

CHANGE REQUEST

25.433 CR 770 # rev **1** # Current version: **5.2.0**

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the # symbols.

Proposed change affects: UICC apps# ME Radio Access Network Core Network

| | | | |
|------------------------|---|--|---|
| Title: | # | Addition of the second TDD Channelisation Code of HS-SCCH for the 1.28Mcps TDD option. | |
| Source: | # | RAN WG3 | |
| Work item code: | # | HSDPA-lublur | Date: # 11/11/2002 |
| Category: | # | F | Release: # Rel-5 |
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| | | |
|--------------------------------------|---|---|
| Reason for change: | # | In the description of the physical channels for the 1.28Mcps TDD option in 25.221 v.5.2.0 there is stated that the information on the HS-SCCH is carried by two separate physical channels (HS-SCCH1 and HS-SCCH2). This fact is not considered in the current RAN-WG3 specifications. |
| Summary of change: | # | A new IE, the <i>Second TDD Channelisation Code LCR</i> IE, is introduced in the RADIO LINK SETUP RESPONSE, the RADIO LINK RECONFIGURATION READY and the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message. Impact Analysis: Impact Assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification (same release) because HSDPA only is affected. This CR has an impact under functional point of view. The impact can be considered isolated because the change affects one function namely HSDPA. |
| Consequences if not approved: | # | If this CR is not approved, the concerned RAN-WG3 specification is not aligned with the RAN-WG1 specification TS 25.221v5.2.0 which describes two TDD Channelisation Codes for HS-SCCH. |

Clauses affected: # 8.2.18, 9.1.62.2, 9.2.3.5G, 9.3.3, 9.3.4

| | | | | | |
|------------------------------|---|----------|----------|---------------------------|-------------------------|
| Other specs affected: | | Y | N | Other core specifications | ⌘ TS25.423 v5.3.0 CR742 |
| | ⌘ | X | | | |
| | | | X | | |
| | | | X | O&M Specifications | |
| Other comments: | ⌘ | | | | |

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/* partly omitted */

8.2.18 Physical Shared Channel Reconfiguration

8.2.18.1 General

This procedure is used to assign HS-DSCH related resources to the Node B.

[TDD - This procedure is also used for handling PDSCH Sets and PUSCH Sets in the Node B, i.e.

- Adding new PDSCH Sets and/or PUSCH Sets,
- Modifying these, and
- Deleting them.]

8.2.18.2 Successful Operation

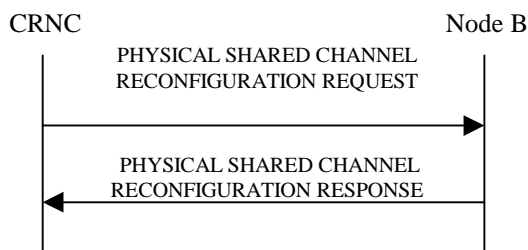


Figure 26: Physical Shared Channel Reconfiguration: Successful Operation

The procedure is initiated with a PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes an *SFN* IE, the Node B shall activate the new configuration on that specified SFN.

HS-DSCH Resources

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH and HS-SCCH Total Power* IE, the Node B shall not exceed this maximum transmission power on all HS-PDSCH and HS-SCCH codes in the cell. If a value has never been set or if the value of the *HS-PDSCH Total Power* IE is equal to or greater than the maximum transmission power of the cell the Node B may use all unused power for HS-PDSCH and HS-SCCH codes.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH and HS-SCCH Scrambling Code* IE, the Node B shall use this as the scrambling code for all HS-PDSCHs and HS-SCCHs. If a value has never been set, the Node B shall use the primary scrambling code for all HS-PDSCH and HS-SCCH codes.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH FDD Code Information* IE, the Node B shall:

- If the *HS-PDSCH FDD Code Information* IE contains no code, delete any existing HS-PDSCH resources from the cell.
- If the *HS-PDSCH FDD Code Information* IE contains one or more codes and HS-PDSCH resources are not currently configured in the cell, use this list as the range of codes for HS-PDSCH channels.

- If the *HS-PDSCH FDD Code Information* IE contains one or more codes and HS-PDSCH resources are currently configured in the cell, replace the current range of codes with this new range of codes for HS-PDSCH channels.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-SCCH FDD Code Information* IE, the Node B shall:

- If the *HS-SCCH FDD Code Information* IE contains no code, delete any existing HS-SCCH resources from the cell.
- If the *HS-SCCH FDD Code Information* IE contains one or more codes and HS-SCCH resources are not currently configured in the cell, use this list of codes as the list of codes for HS-SCCH channels.
- If the *HS-SCCH FDD Code Information* IE contains one or more codes and HS-SCCH resources are currently configured in the cell, replace the current list of codes with this new list of codes for HS-SCCH channels.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-SCCH Maximum Power* IE, the Node B shall not exceed this power for each HS-SCCH code.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH TDD Information* IE, the Node B shall:

- If the *HS-PDSCH TDD Code Information* IE contains no code, delete any existing HS-PDSCH resources from the cell.
- If the *HS-PDSCH TDD Code Information* IE contains one or more codes and HS-PDSCH resources are not currently configured in the cell, use this list as the list of codes for HS-PDSCH channels.
- If the *HS-PDSCH TDD Code Information* IE contains one or more codes and HS-PDSCH resources are currently configured in the cell, replace the current list of codes with this new list of codes for HS-PDSCH channels.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *Add to HS-SCCH Resource Pool* IE, the Node B shall add this resource to the HS-SCCH resource pool to be used to assign HS-SCCH sets.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Modify HS-SCCH Resource Pool* IEs and includes any of [3.84Mcps TDD - *TDD Channelisation Code* IE, *Midamble shift and burst type* IE, *Time Slot* IE], [1.28Mcps TDD - *First TDD Channelisation Code LCR* IE, *Second TDD Channelisation Code LCR* IE, *Midamble shift LCR* IE, *Time Slot LCR* IE], for either HS-SCCH or HS-SICH channels, the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Delete from HS-SCCH Resource Pool* IEs, the Node B shall delete these resources from the HS-SCCH resource pool.]

[TDD - PDSCH/PUSCH Addition]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be added, the Node B shall add these new sets to its PDSCH/PUSCH configuration.]

[TDD - PDSCH/PUSCH Modification]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be modified, and includes any of [3.84Mcps TDD - *DL/UL Code Information* IE, *Midamble Shift And Burst Type* IE, *Time Slot* IE], [1.28Mcps TDD - *DL/UL Code Information LCR* IE, *Midamble Shift LCR* IE, *Time Slot LCR* IE], *TDD Physical Channel Offset* IE, *Repetition Period* IE, *Repetition Length* IE, or *TFCI Presence* IE, the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.]

[TDD - PDSCH/PUSCH Deletion]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be deleted the Node B shall delete these sets from its PDSCH/PUSCH configuration.]

[1.28Mcps TDD – Uplink Synchronisation Parameters LCR]:

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the *Uplink Synchronisation Parameters LCR* IE, the Node B shall use the indicated values of *Uplink Synchronisation Stepsize* IE and *Uplink Synchronisation Frequency* IE when evaluating the timing of the UL synchronisation.]

Response Message

HS-DSCH/HS-SCCH Resources

In the successful case involving HS-PDSCH or HS-SCCH resources, the Node B shall make these resources available to all the current and future HS-DSCH transport channels; and shall respond with PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE:

[TDD – PDSCH/PUSCH Addition/Modification/Deletion]

[TDD - In the successful case involving PDSCH/PUSCH addition, modification or deletion, the Node B shall add, modify and delete the PDSCH Sets and PUSCH Sets in the Common Transport Channel data base, as requested in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, and shall make these available to all the current and future DSCH and USCH transport channels. The Node B shall respond with the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.]

/* partly omitted */

/* partly omitted */

9.1.62 PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST

/* partly omitted */

9.1.62.2 TDD Message

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|--|----------|---------------------------------------|-----------------------|---|-------------|----------------------|
| Message Discriminator | M | | 9.2.1.45 | | – | |
| Message Type | M | | 9.2.1.46 | | YES | reject |
| Transaction ID | M | | 9.2.1.62 | | – | |
| C-ID | M | | 9.2.1.9 | | YES | reject |
| SFN | O | | 9.2.1.53A | | YES | reject |
| PDSCH Sets To Add | | <i>0..<maxno of PDSCH Sets></i> | | | GLOBAL | reject |
| >PDSCH Set ID | M | | 9.2.3.11 | | – | |
| >PDSCH To Add Information | | <i>0..1</i> | | Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD. | YES | reject |
| >>Repetition Period | M | | 9.2.3.16 | | – | |
| >>Repetition Length | M | | 9.2.3.15 | | – | |
| >>TDD Physical Channel Offset | M | | 9.2.3.20 | | – | |
| >>DL Timeslot Information | | <i>1..<maxno of DLts></i> | | | – | |
| >>>Time Slot | M | | 9.2.3.23 | | – | |
| >>>Midamble Shift And Burst Type | M | | 9.2.3.7 | | – | |
| >>>TFCI Presence | M | | 9.2.1.57 | | – | |
| >>>DL Code Information | | <i>1..<maxno of PDSCHs ></i> | | | – | |
| >>>>PDSCH ID | M | | 9.2.3.10 | | – | |
| >>>>TDD Channelisation Code | M | | 9.2.3.19 | | – | |
| >PDSCH To Add Information LCR | | <i>0..1</i> | | Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD. | YES | reject |
| >>Repetition Period | M | | 9.2.3.16 | | – | |
| >>Repetition Length | M | | 9.2.3.15 | | – | |
| >>TDD Physical Channel Offset | M | | 9.2.3.20 | | – | |
| >>DL Timeslot Information LCR | | <i>1..<maxno of DLtsLCR ></i> | | | – | |
| >>>Time Slot LCR | M | | 9.2.3.24A | | – | |
| >>>Midamble Shift LCR | M | | 9.2.3.7A | | – | |
| >>>TFCI Presence | M | | 9.2.1.57 | | – | |
| >>>DL Code Information LCR | | <i>1..<maxno of PDSCHs ></i> | | | – | |

| | | | | | | |
|--|---|---|-----------|--|--------|--------|
| >>>>PDSCH ID | M | | 9.2.3.10 | | – | |
| >>>>TDD Channelisation Code LCR | M | | 9.2.3.19a | | – | |
| PDSCH Sets To Modify | | <i>0..<maxno of PDSCHSe ts></i> | | | GLOBAL | reject |
| >PDSCH Set ID | M | | 9.2.3.11 | | – | |
| >PDSCH To Modify Information | | <i>0..1</i> | | Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD. | YES | reject |
| >>Repetition Period | O | | 9.2.3.16 | | – | |
| >>Repetition Length | O | | 9.2.3.15 | | – | |
| >>TDD Physical Channel Offset | O | | 9.2.3.20 | | – | |
| >>DL Timeslot Information | | <i>0..<maxno ofDLts></i> | | | – | |
| >>>Time Slot | M | | 9.2.3.23 | | – | |
| >>>Midamble Shift And Burst Type | O | | 9.2.3.7 | | – | |
| >>>TFCI Presence | O | | 9.2.1.57 | | – | |
| >>>DL Code Information | | <i>0..<maxno ofPDSCHs ></i> | | | – | |
| >>>>PDSCH ID | M | | 9.2.3.10 | | – | |
| >>>>TDD Channelisation Code | M | | 9.2.3.19 | | – | |
| >PDSCH To Modify Information LCR | | <i>0..1</i> | | Mandatory for 1.28 Mcps TDD. Not Applicable to 3.84Mcps TDD. | YES | reject |
| >>Repetition Period | O | | 9.2.3.16 | | – | |
| >>Repetition Length | O | | 9.2.3.15 | | – | |
| >>TDD Physical Channel Offset | O | | 9.2.3.20 | | – | |
| >>DL Timeslot Information LCR | | <i>0..<maxno ofDLtsLCR ></i> | | | – | |
| >>>Time Slot LCR | M | | 9.2.3.24A | | – | |
| >>>Midamble Shift LCR | O | | 9.2.3.7A | | – | |
| >>>TFCI Presence | O | | 9.2.1.57 | | – | |
| >>>DL Code Information LCR | | <i>0..<maxno ofPDSCHs ></i> | | | – | |
| >>>>PDSCH ID | M | | 9.2.3.10 | | – | |
| >>>>TDD Channelisation Code LCR | M | | 9.2.3.19a | | – | |
| PDSCH Sets To Delete | | <i>0..<maxno of PDSCHSe ts></i> | | | GLOBAL | reject |
| >PDSCH Set ID | M | | 9.2.3.11 | | – | |
| PUSCH Sets To Add | | <i>0..<maxno of PUSCHSe ts></i> | | | GLOBAL | reject |
| >PUSCH Set ID | M | | 9.2.3.13 | | – | |

| | | | | | | |
|--|---|-------------------------|-----------|---|--------|--------|
| >PUSCH To Add Information | | 0..1 | | Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD. | YES | reject |
| >>Repetition Period | M | | 9.2.3.16 | | – | |
| >>Repetition Length | M | | 9.2.3.15 | | – | |
| >>TDD Physical Channel Offset | M | | 9.2.3.20 | | – | |
| >>UL Timeslot Information | | 1..<maxno ofULts> | | | – | |
| >>>Time Slot | M | | 9.2.3.23 | | – | |
| >>>Midamble Shift And Burst Type | M | | 9.2.3.7 | | – | |
| >>>TFCI Presence | M | | 9.2.1.57 | | – | |
| >>>UL Code Information | | 1..<maxno ofPUSCHs > | | | – | |
| >>>>PUSCH ID | M | | 9.2.3.12 | | – | |
| >>>>TDD Channelisation Code | M | | 9.2.3.19 | | – | |
| >PUSCH To Add Information LCR | | 0..1 | | Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD. | YES | reject |
| >>Repetition Period | M | | 9.2.3.16 | | – | |
| >>Repetition Length | M | | 9.2.3.15 | | – | |
| >>TDD Physical Channel Offset | M | | 9.2.3.20 | | – | |
| >>UL Timeslot Information LCR | | 1..<maxno ofULtsLCR > | | | – | |
| >>>Time Slot LCR | M | | 9.2.3.24A | | – | |
| >>>Midamble Shift LCR | M | | 9.2.3.7A | | – | |
| >>>TFCI Presence | M | | 9.2.1.57 | | – | |
| >>>UL Code Information LCR | | 1..<maxno ofPUSCHs LCR> | | | – | |
| >>>>PUSCH ID | M | | 9.2.3.12 | | – | |
| >>>>TDD Channelisation Code LCR | M | | 9.2.3.19a | | – | |
| PUSCH Sets To Modify | | 0..<maxno of PUSCHSets> | | | GLOBAL | reject |
| >PUSCH Set ID | M | | 9.2.3.13 | | – | |
| >PUSCH To Modify Information | | 0..1 | | Applicable to 3.84Mcps TDD only | YES | reject |
| >>Repetition Period | O | | 9.2.3.16 | | – | |
| >>Repetition Length | O | | 9.2.3.15 | | – | |
| >>TDD Physical Channel Offset | O | | 9.2.3.20 | | – | |
| >>UL Timeslot Information | | 0..<maxno ofULts> | | | – | |
| >>>Time Slot | M | | 9.2.3.23 | | – | |
| >>>Midamble Shift And Burst Type | O | | 9.2.3.7 | | – | |
| >>>TFCI Presence | O | | 9.2.1.57 | | – | |

| | | | | | | |
|--|---|--------------------------------------|-----------|---|--------|--------|
| >>>UL Code Information | | <i>0..<maxno ofPUSCHs ></i> | | | – | |
| >>>>PUSCH ID | M | | 9.2.3.12 | | – | |
| >>>>TDD Channelisation Code | M | | 9.2.3.19 | | – | |
| >PUSCH To Modify Information LCR | | <i>0..1</i> | | Applicable to 1.28Mcps TDD only | YES | reject |
| >>Repetition Period | O | | 9.2.3.16 | | – | |
| >>Repetition Length | O | | 9.2.3.15 | | – | |
| >>TDD Physical Channel Offset | O | | 9.2.3.20 | | – | |
| >>UL Timeslot Information LCR | | <i>0..<maxno ofULtsLCR ></i> | | Applicable to 1.28Mcps TDD only | – | |
| >>>Time Slot LCR | M | | 9.2.3.24A | | – | |
| >>>Midamble Shift LCR | O | | 9.2.3.7A | | – | |
| >>>TFCI Presence | O | | 9.2.1.57 | | – | |
| >>>UL Code Information LCR | | <i>0..<maxno ofPUSCHs LCR></i> | | | – | |
| >>>>PUSCH ID | M | | 9.2.3.12 | | – | |
| >>>>TDD Channelisation Code LCR | M | | 9.2.3.19a | | – | |
| PUSCH Sets To Delete | | <i>0..<maxno ofPUSCH Sets></i> | | | GLOBAL | reject |
| >PUSCH Set ID | M | | 9.2.3.13 | | – | |
| HS-PDSCH TDD Information | | <i>0..1</i> | | | GLOBAL | reject |
| >CHOICE <i>replaceremove</i> | | | | | – | |
| >> <i>replace</i> | | | | | – | |
| >>>DL Timeslot Information | | <i>0..<maxno ofDLts></i> | | Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD. | – | |
| >>>>Time Slot | M | | 9.2.3.23 | | – | |
| >>>>Midamble Shift And Burst Type | M | | 9.2.3.7 | | – | |
| >>>DL Timeslot Information LCR | | <i>0..<maxno ofDLtsLCR ></i> | | Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD. | GLOBAL | reject |
| >>>>Time Slot LCR | M | | 9.2.3.24a | | – | |
| >>>>Midamble Shift LCR | M | | 9.2.3.7A | | – | |
| >> <i>remove</i> | | | NULL | | – | |
| Add to HS-SCCH Resource Pool | | <i>0..1</i> | | | GLOBAL | reject |
| >HS-SCCH Information | | <i>0..<maxno ofHSSCC Hs></i> | | Applicable to 3.84Mcps TDD only | – | |
| >>HS-SCCH ID | M | | 9.2.3.5Ga | | – | |
| >>Time Slot | M | | 9.2.3.23 | | – | |
| >>Midamble Shift And Burst Type | M | | 9.2.3.7 | | – | |

| | | | | | | |
|--|---|-----------------------|--|---------------------------------|--------|--------|
| >>TDD Channelisation Code | M | | 9.2.3.19 | | - | |
| >>Maximum HS-SCCH Power | M | | DL Power 9.2.1.21 | | - | |
| >>HS-SICH Information | | 1 | | | - | |
| >>>Time Slot | M | | 9.2.3.23 | | - | |
| >>>Midamble Shift And Burst Type | M | | 9.2.3.7 | | - | |
| >>>TDD Channelisation Code | M | | 9.2.3.19 | | - | |
| >HS-SCCH Information LCR | | 0..<maxno ofHSSCC Hs> | | Applicable to 1.28Mcps TDD only | GLOBAL | reject |
| >>HS-SCCH ID | M | | 9.2.3.5Ga | | - | |
| >>Time Slot LCR | M | | 9.2.3.24a | | - | |
| >>Midamble Shift LCR | M | | 9.2.3.7A | | - | |
| >>First TDD Channelisation Code LCR | M | | <u>TDD Channelisation Code LCR</u> 9.2.3.19a | | - | |
| >>Second TDD Channelisation Code LCR | M | | <u>TDD Channelisation Code LCR</u> 9.2.3.19a | | : | |
| >>Maximum HS-SCCH Power | M | | DL Power 9.2.1.21 | | - | |
| >>HS-SICH Information LCR | | 1 | | | - | |
| >>>Time Slot LCR | M | | 9.2.3.24a | | - | |
| >>>Midamble Shift LCR | M | | 9.2.3.7A | | - | |
| >>>TDD Channelisation Code LCR | M | | 9.2.3.19a | | - | |
| Modify HS-SCCH Resource Pool | | 0..1 | | | GLOBAL | reject |
| >HS-SCCH Information | | 0..<maxno ofHSSCC Hs> | | Applicable to 3.84Mcps TDD only | - | |
| >>HS-SCCH ID | M | | 9.2.3.5Ga | | - | |
| >>Time Slot | O | | 9.2.3.23 | | - | |
| >>Midamble Shift And Burst Type | O | | 9.2.3.7 | | - | |
| >>TDD Channelisation Code | O | | 9.2.3.19 | | - | |
| >>Maximum HS-SCCH Power | O | | DL Power 9.2.1.21 | | - | |
| >>HS-SICH Information | | 0..1 | | | - | |
| >>>Time Slot | O | | 9.2.3.23 | | - | |
| >>>Midamble Shift And Burst Type | O | | 9.2.3.7 | | - | |
| >>>TDD Channelisation Code | O | | 9.2.3.19 | | - | |
| >HS-SCCH Information LCR | | 0..<maxno ofHSSCC Hs> | | Applicable to 1.28Mcps TDD only | GLOBAL | reject |
| >>HS-SCCH ID | M | | 9.2.3.5Ga | | - | |
| >>Time Slot LCR | O | | 9.2.3.24a | | - | |
| >>Midamble Shift LCR | O | | 9.2.3.7A | | - | |

| | | | | | | |
|--------------------------------------|---|------------------------|--|--|--------|--------|
| >>First TDD Channelisation Code LCR | O | | TDD Channelisation Code LCR 9.2.3.19a | | - | |
| >>Second TDD Channelisation Code LCR | O | | TDD Channelisation Code LCR 9.2.3.19a | | | |
| >>Maximum HS-SCCH Power | O | | DL Power 9.2.1.21 | | - | |
| >>HS-SICH Information LCR | | 0..1 | | | - | |
| >>>Time Slot LCR | O | | 9.2.3.24a | | - | |
| >>Midamble Shift LCR | O | | 9.2.3.7A | | - | |
| >>>TDD Channelisation Code LCR | O | | 9.2.3.19a | | - | |
| Delete from HS-SCCH Resource Pool | | 0..<maxno of HSSCCHs > | | | GLOBAL | reject |
| >HS-SCCH ID | M | | 9.2.3.5Ga | | - | |

| Range Bound | Explanation |
|-------------------------|---|
| <i>maxnoofPDSCHSets</i> | Maximum number of PDSCH Sets in a cell. |
| <i>maxnoofPDSCHs</i> | Maximum number of PDSCH in a cell. |
| <i>maxnoofPUSCHSets</i> | Maximum number of PUSCH Sets in a cell. |
| <i>maxnoofPUSCHs</i> | Maximum number of PUSCH in a cell. |
| <i>maxnoofDLts</i> | Maximum number of Downlink time slots in a cell for 3.84Mcps TDD. |
| <i>maxnoofULts</i> | Maximum number of Uplink time slots in a cell for 3.84Mcps TDD. |
| <i>maxnoofULtsLCR</i> | Maximum number of Uplink time slots in a cell for 1.28Mcps TDD |
| <i>maxnoofHSSCCHs</i> | Maximum number of HS-SCCHs in a Cell |

/* partly omitted */

9.2.3.5G HS-DSCH TDD Information Response

The HS-DSCH TDD Information Response provides information for HS-DSCH MAC-d flows that have been established or modified.

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|---|----------|--------------------------------------|---|-----------------------|-------------|----------------------|
| HS-DSCH MAC-d Flow Specific Information Response | | <i>1..<maxnoofMACdFlows></i> | | | – | |
| >HS-DSCH MAC-d Flow ID | M | | 9.2.1.31I | | – | |
| >Binding ID | O | | 9.2.1.4 | | – | |
| >Transport Layer Address | O | | 9.2.1.63 | | – | |
| > HS-DSCH Initial Capacity Allocation | O | | 9.2.1.31Ha | | – | |
| HS-SCCH Specific Information Response | | <i>0..<maxNoOfHSSCCHcodes></i> | | | GLOBAL | reject |
| >Time Slot | M | | 9.2.3.23 | | – | |
| >Midamble Shift And Burst Type | M | | 9.2.3.7 | | – | |
| >TDD Channelisation Code | M | | 9.2.3.19 | | – | |
| >HS-SICH Information | | <i>1</i> | | | – | |
| >>Time Slot | M | | 9.2.3.23 | | – | |
| >>Midamble Shift And Burst Type | M | | 9.2.3.7 | | – | |
| >>TDD Channelisation Code | M | | 9.2.3.19 | | – | |
| HS-SCCH Specific Information Response LCR | | <i>0..<maxNoOfHSSCCHcodes></i> | | | GLOBAL | reject |
| >Time Slot LCR | M | | 9.2.3.24A | | – | |
| >Midamble Shift LCR | M | | 9.2.3.7a | | – | |
| > <u>First TDD Channelisation Code LCR</u> | M | | <u>TDD Channelisation Code LCR</u> 9.2.3.19a | | – | |
| > <u>Second TDD Channelisation Code LCR</u> | <u>M</u> | | <u>TDD Channelisation Code LCR</u> 9.2.3.19a | | : | |
| >HS-SICH Information LCR | | <i>1</i> | | | – | |
| >>Time Slot LCR | M | | 9.2.3.24A | | – | |
| >>Midamble Shift LCR | M | | 9.2.3.7a | | – | |
| >>TDD Channelisation Code LCR | M | | 9.2.3.19a | | – | |

| Range Bound | Explanation |
|------------------------------|---|
| <i>maxnoofMACdFlows</i> | Maximum number of HS-DSCH MAC-d flows. |
| <i>maxnoofPrioQueues</i> | Maximum number of Priority Queues |
| <i>maxnoofMACdPDUindexes</i> | Maximum number of different MAC-d Size Indexes (SIDs) |
| <i>maxnoofHSSCCHcodes</i> | Maximum number of HS-SCCH codes |

/* partly omitted */

9.3.3 PDU Definitions

```
-- *****
--
-- PDU definitions for NBAP.
--
-- *****
```

/* partly omitted */

```
-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST TDD
--
-- *****
```

```
PhysicalSharedChannelReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{PhysicalSharedChannelReconfigurationRequestTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationRequestTDD-Extensions}}  OPTIONAL,
    ...
}
```

```
PhysicalSharedChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID                CRITICALITY  reject          TYPE      C-ID
    PRESENCE  mandatory              } |
    { ID      id-SFN                 CRITICALITY  reject          TYPE      SFN
    PRESENCE  optional              } |
    { ID      id-PDSCHSets-AddList-PSCH-ReconfRqst  CRITICALITY  reject          TYPE      PDSCHSets-AddList-PSCH-ReconfRqst  PRESENCE
    optional  } |
    { ID      id-PDSCHSets-ModifyList-PSCH-ReconfRqst  CRITICALITY  reject          TYPE      PDSCHSets-ModifyList-PSCH-ReconfRqst  PRESENCE
    optional  } |
    { ID      id-PDSCHSets-DeleteList-PSCH-ReconfRqst  CRITICALITY  reject          TYPE      PDSCHSets-DeleteList-PSCH-ReconfRqst  PRESENCE
    optional  } |
    { ID      id-PUSCHSets-AddList-PSCH-ReconfRqst  CRITICALITY  reject          TYPE      PUSCHSets-AddList-PSCH-ReconfRqst  PRESENCE
    optional  } |
    { ID      id-PUSCHSets-ModifyList-PSCH-ReconfRqst  CRITICALITY  reject          TYPE      PUSCHSets-ModifyList-PSCH-ReconfRqst  PRESENCE
    optional  } |
    { ID      id-PUSCHSets-DeleteList-PSCH-ReconfRqst  CRITICALITY  reject          TYPE      PUSCHSets-DeleteList-PSCH-ReconfRqst  PRESENCE
    optional  },
    ...
}
```

```
PhysicalSharedChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```



```

{ ID id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst CRITICALITY reject EXTENSION HS-PDSCH-TDD-Information-PSCH-ReconfRqst
  PRESENCE optional } |
{ ID id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst CRITICALITY reject EXTENSION Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst
  PRESENCE optional } |
{ ID id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst CRITICALITY reject EXTENSION Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst
  PRESENCE optional } |
{ ID id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst CRITICALITY reject EXTENSION Delete-From-HS-SCCH-Resource-Pool-PSCH-
ReconfRqst PRESENCE optional },
...
}

PDSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-AddItem-PSCH-ReconfRqst

PDSCHSets-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
  pDSCHSet-ID PDSCHSet-ID,
  pDSCH-InformationList PDSCH-Information-AddList-PSCH-ReconfRqst OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  {ID id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
  PRESENCE optional}, -- Mandatory for 1.28Mcps TDD
  ...
}

PDSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-AddListIEs-PSCH-ReconfRqst }}
-- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD

PDSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
  {ID id-PDSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-Information-AddItem-PSCH-ReconfRqst PRESENCE
  mandatory}
}

PDSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
  dL-Timeslot-InformationAddList-PSCH-ReconfRqst DL-Timeslot-InformationAddList-PSCH-ReconfRqst,
  iE-Extensions ProtocolExtensionContainer { {PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationAddItem-PSCH-ReconfRqst

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
  timeSlot TimeSlot,
  midambleShiftAndBurstType MidambleShiftAndBurstType,
  tFCI-Presence TFCI-Presence,

```

```

    DL-Code-InformationAddList-PSCH-ReconfRqst          DL-Code-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions                                     ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationAddItem-PSCH-ReconfRqst

DL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                PDSCH-ID,
    tdd-ChannelisationCode  TDD-ChannelisationCode,
    iE-Extensions          ProtocolExtensionContainer { { DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength         RepetitionLength,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
    DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst          DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions          ProtocolExtensionContainer { {PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst

DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR          MidambleShiftLCR,
    tFCI-Presence              TFCI-Presence,
    DL-Code-InformationAddList-LCR-PSCH-ReconfRqst          DL-Code-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions          ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst

DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {

```

```

    pDSCH-ID                PDSCH-ID,
    tdd-ChannelisationCodeLCR  TDD-ChannelisationCodeLCR,
    iE-Extensions            ProtocolExtensionContainer { { DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-ModifyItem-PSCH-ReconfRqst

PDSCHSets-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID                PDSCHSet-ID,
    pDSCH-InformationList      PDSCH-Information-ModifyList-PSCH-ReconfRqst,
    iE-Extensions            ProtocolExtensionContainer { {PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PDSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst
    PRESENCE optional}, -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    ...
}

PDSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst }}

PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-Information-ModifyItem-PSCH-ReconfRqst
    PRESENCE optional} -- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD
}

PDSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod                OPTIONAL,
    repetitionLength          RepetitionLength                OPTIONAL,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset     OPTIONAL,
    dL-Timeslot-InformationModifyList-PSCH-ReconfRqst DL-Timeslot-InformationModifyList-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                  TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType    OPTIONAL,
    tFCI-Presence            TFCI-Presence    OPTIONAL,
    dL-Code-InformationModifyList-PSCH-ReconfRqst DL-Code-InformationModifyList-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
}

```

```

}
...
}
DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
DL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst
DL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
pDSCH-ID PDSCH-ID,
tdd-ChannelisationCode TDD-ChannelisationCode,
iE-Extensions ProtocolExtensionContainer { { DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
...
}
DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
PDSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
repetitionPeriod RepetitionPeriod OPTIONAL,
repetitionLength RepetitionLength OPTIONAL,
tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset OPTIONAL,
dL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
iE-Extensions ProtocolExtensionContainer { {PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs} }
OPTIONAL,
...
}
PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst
DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
timeSlotLCR TimeSlotLCR,
midambleShiftLCR MidambleShiftLCR OPTIONAL,
tFCI-Presence TFCI-Presence OPTIONAL,
dL-Code-LCR-InformationModifyList-PSCH-ReconfRqst DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
iE-Extensions ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } }
OPTIONAL,
...
}
DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst
DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {

```

```

    pDSCH-ID                PDSCH-ID,
    tdd-ChannelisationCodeLCR  TDD-ChannelisationCodeLCR,
    iE-Extensions           ProtocolExtensionContainer { { DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-DeleteItem-PSCH-ReconfRqst

PDSCHSets-DeleteItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID                PDSCHSet-ID,
    iE-Extensions           ProtocolExtensionContainer { {PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-AddItem-PSCH-ReconfRqst

PUSCHSets-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID                PUSCHSet-ID,
    pUSCH-InformationList      PUSCH-Information-AddList-PSCH-ReconfRqst OPTIONAL,
    -- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD
    iE-Extensions           ProtocolExtensionContainer { {PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
    PRESENCE optional}, -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    ...
}

PUSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-AddListIEs-PSCH-ReconfRqst }}

PUSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCH-Information-AddItem-PSCH-ReconfRqst PRESENCE
    mandatory}
}

PUSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tdd-PhysicalChannelOffset  TDD-PhysicalChannelOffset,
    uL-Timeslot-InformationAddList-PSCH-ReconfRqst  UL-Timeslot-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions           ProtocolExtensionContainer { {PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

```

```

PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationAddItem-PSCH-ReconfRqst

UL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
  timeSlot                TimeSlot,
  midambleShiftAndBurstType MidambleShiftAndBurstType,
  tFCI-Presence           TFCI-Presence,
  uL-Code-InformationAddList-PSCH-ReconfRqst UL-Code-InformationAddList-PSCH-ReconfRqst,
  iE-Extensions           ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
  ...
}

UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationAddItem-PSCH-ReconfRqst

UL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
  pUSCH-ID                PUSCH-ID,
  tdd-ChannelisationCode  TDD-ChannelisationCode,
  iE-Extensions           ProtocolExtensionContainer { { UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
  ...
}

UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
  repetitionPeriod        RepetitionPeriod,
  repetitionLength        RepetitionLength,
  tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
  uL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst,
  iE-Extensions           ProtocolExtensionContainer { {PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfULTSLCRs)) OF UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst

UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
  timeSlotLCR            TimeSlotLCR,
  midambleShiftLCR      MidambleShiftLCR,
  tFCI-Presence          TFCI-Presence,
  uL-Code-InformationAddList-LCR-PSCH-ReconfRqst UL-Code-InformationAddList-LCR-PSCH-ReconfRqst,
}

```

```

    iE-Extensions                ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst

UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                      PUSCH-ID,
    tdd-ChannelisationCodeLCR      TDD-ChannelisationCodeLCR,
    iE-Extensions                  ProtocolExtensionContainer { { UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-ModifyItem-PSCH-ReconfRqst

PUSCHSets-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID                    PUSCHSet-ID,
    pUSCH-InformationList          PUSCH-Information-ModifyList-PSCH-ReconfRqst    OPTIONAL,
    -- Applicable to 3.84Mcps TDD only
    iE-Extensions                  ProtocolExtensionContainer { { PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst    CRITICALITY reject    EXTENSION    PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst
    PRESENCE    optional}, -- Applicable to 1.28Mcps TDD only
    ...
}

PUSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst }}

PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst    CRITICALITY reject    TYPE    PUSCH-Information-ModifyItem-PSCH-ReconfRqst
    PRESENCE    mandatory}
}

PUSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod                RepetitionPeriod                OPTIONAL,
    repetitionLength                 RepetitionLength                OPTIONAL,
    tdd-PhysicalChannelOffset         TDD-PhysicalChannelOffset        OPTIONAL,
    uL-Timeslot-InformationModifyList-PSCH-ReconfRqst    UL-Timeslot-InformationModifyList-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

```

```

PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
    tFCI-Presence            TFCI-Presence OPTIONAL,
    uL-Code-InformationModifyList-PSCH-ReconfRqst UL-Code-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst

UL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                PUSCH-ID,
    tdd-ChannelisationCode  TDD-ChannelisationCode,
    iE-Extensions            ProtocolExtensionContainer { { UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod        RepetitionPeriod OPTIONAL,
    repetitionLength        RepetitionLength OPTIONAL,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset OPTIONAL,
    uL-Timeslot-InformationModifyList-LCR-PSCH-ReconfRqst UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR            TimeSlotLCR,
    midambleShiftLCR      MidambleShiftLCR OPTIONAL,
    tFCI-Presence          TFCI-Presence OPTIONAL,
    uL-Code-InformationModifyList-PSCH-ReconfRqst UL-Code-InformationModifyList-PSCH-ReconfRqst OPTIONAL,

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    iE-Extensions
    OPTIONAL,
    ...
}

UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst

UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                PUSCH-ID,
    tdd-ChannelisationCodeLCR    TDD-ChannelisationCodeLCR,
    iE-Extensions            ProtocolExtensionContainer { { UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-DeleteItem-PSCH-ReconfRqst

PUSCHSets-DeleteItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID            PUSCHSet-ID,
    iE-Extensions            ProtocolExtensionContainer { { PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-PDSCH-TDD-Information-PSCH-ReconfRqst ::= CHOICE {
    replace                HS-PDSCH-TDD-TSInfo-PSCH-ReconfRqst,
    remove                NULL,
    ...
}

HS-PDSCH-TDD-TSInfo-PSCH-ReconfRqst ::= SEQUENCE {
    dL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst                DL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst    OPTIONAL,
    dL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst            DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { HS-PDSCH-TDD-TSInfo-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

HS-PDSCH-TDD-TSInfo-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst

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DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    iE-Extensions           ProtocolExtensionContainer { { DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst-ExtIEs } }
    OPTIONAL,
    ...
}

DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-
ReconfRqst

DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlotLCR,
    midambleShiftAndBurstType MidambleShiftLCR,
    iE-Extensions           ProtocolExtensionContainer { { DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs } }
    OPTIONAL,
    ...
}

DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-Information-PSCH-ReconfRqst    HS-SCCH-Information-PSCH-ReconfRqst    OPTIONAL,
    hS-SCCH-Information-LCR-PSCH-ReconfRqst HS-SCCH-Information-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { { Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SCCH-Information-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationItem-PSCH-ReconfRqst

HS-SCCH-InformationItem-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-ID                HS-SCCH-ID,
    timeSlot                  TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tdd-ChannelisationCode    TDD-ChannelisationCode,
    hS-SCCH-MaxPower          DL-Power,
    hS-SICH-Information        HS-SICH-Information-PSCH-ReconfRqst,
    iE-Extensions             ProtocolExtensionContainer { { HS-SCCH-InformationItem-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

HS-SCCH-InformationItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

}

HS-SICH-Information-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tdd-ChannelisationCode  TDD-ChannelisationCode,
    iE-Extensions           ProtocolExtensionContainer { { HS-SICH-Information-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

HS-SICH-Information-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SCCH-Information-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst

HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-ID                HS-SCCH-ID,
    timeSlotLCR               TimeSlotLCR,
    midambleShiftLCR          MidambleShiftLCR,
    first-TDD-ChannelisationCode TDD-ChannelisationCodeLCR,
    second-TDD-ChannelisationCode TDD-ChannelisationCodeLCR,
    hS-SCCH-MaxPower          DL-Power,
    HS-SICH-Information-LCR    HS-SICH-Information-LCR-PSCH-ReconfRqst,
    iE-Extensions             ProtocolExtensionContainer { { HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SICH-Information-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR          MidambleShiftLCR,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
    iE-Extensions             ProtocolExtensionContainer { { HS-SICH-Information-LCR-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

HS-SICH-Information-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-InformationModify-PSCH-ReconfRqst HS-SCCH-InformationModify-PSCH-ReconfRqst OPTIONAL,
    hS-SCCH-InformationModify-LCR-PSCH-ReconfRqst HS-SCCH-InformationModify-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions                               ProtocolExtensionContainer { { Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
HS-SCCH-InformationModify-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationModifyItem-PSCH-ReconfRqst
HS-SCCH-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-ID                HS-SCCH-ID,
    timeSlot                  TimeSlot OPTIONAL,
    midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
    tdd-ChannelisationCode    TDD-ChannelisationCode OPTIONAL,
    hS-SCCH-MaxPower          DL-Power OPTIONAL,
    hS-SICH-Information        HS-SICH-Information-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { { HS-SCCH-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}
HS-SCCH-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
HS-SICH-InformationModify-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                  TimeSlot OPTIONAL,
    midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
    tdd-ChannelisationCode    TDD-ChannelisationCode OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { { HS-SICH-InformationModify-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}
HS-SICH-InformationModify-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
HS-SCCH-InformationModify-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst
HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-ID                HS-SCCH-ID,
    timeSlotLCR               TimeSlotLCR OPTIONAL,
    midambleShiftLCR          MidambleShiftLCR OPTIONAL,
    first-TDD-ChannelisationCode TDD-ChannelisationCodeLCR OPTIONAL,
    second-TDD-ChannelisationCode TDD-ChannelisationCodeLCR OPTIONAL,
    hS-SCCH-MaxPower          DL-Power OPTIONAL,
    hS-SICH-Information-LCR    HS-SICH-Information-LCR-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { { HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}
HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
HS-SICH-InformationModify-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR               TimeSlotLCR OPTIONAL,
    midambleShiftLCR          MidambleShiftLCR OPTIONAL,

```

```

    tdd-ChannelisationCodeLCR          TDD-ChannelisationCodeLCR  OPTIONAL,
    iE-Extensions                      ProtocolExtensionContainer { { HS-SICH-InformationModify-LCR-PSCH-ReconfRqst-ExtIEs} }  OPTIONAL,
    ...
}

HS-SICH-InformationModify-LCR-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst

Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-ID                      HS-SCCH-ID,
    iE-Extensions                  ProtocolExtensionContainer { { Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
    ...
}

Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

9.3.4 Information Element Definitions

/* partly omitted */

```

-- =====
-- H
-- =====

HARQMemoryPartitioningFDD ::= SEQUENCE (SIZE (1..maxNrOfHARQProcesses)) OF HARQMemoryPartitioning-ItemFDD

HARQMemoryPartitioning-ItemFDD ::= SEQUENCE {
    process-Memory-Size          INTEGER (0..172800,...),
    iE-Extensions                ProtocolExtensionContainer { { HARQMemoryPartitioning-ItemFDD-ExtIEs} }  OPTIONAL,
    ...
}

HARQMemoryPartitioning-ItemFDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HARQMemoryPartitioningTDD ::= SEQUENCE (SIZE (1..maxNrOfHARQProcesses)) OF HARQMemoryPartitioning-ItemTDD

HARQMemoryPartitioning-ItemTDD ::= SEQUENCE {
    process-Memory-Size          INTEGER (0..168960,...),
    iE-Extensions                ProtocolExtensionContainer { { HARQMemoryPartitioning-ItemTDD-ExtIEs} }  OPTIONAL,

```

```

}
...
}
HARQMemoryPartitioning-ItemTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
HSDSCH-FDD-Information ::= SEQUENCE {
  hsDSCH-MACdFlow-Specific-Info      HSDSCH-MACdFlow-Specific-InfoList,
  ueCapability-Info                   UE-Capability-InformationFDD,
  harqMemoryPartitioningFDD           HARQMemoryPartitioningFDD,
  cqiFeedback-CycleK                  CQI-Feedback-Cycle,
  cqiRepetitionFactor                 CQI-RepetitionFactor          OPTIONAL,
  -- This IE shall be present if the CQI Feedback Cycle k is greater than 0
  ackNackRepetitionFactor              AckNack-RepetitionFactor,
  cqiPowerOffset                      CQI-Power-Offset,
  ackPowerOffset                      Ack-Power-Offset,
  nackPowerOffset                     Nack-Power-Offset,
  hsscch-PowerOffset                  HSSCCH-PowerOffset          OPTIONAL,
  iE-Extensions                       ProtocolExtensionContainer { { HSDSCH-FDD-Information-ExtIEs } } OPTIONAL,
  ...
}
HSDSCH-FDD-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
HSDSCH-TDD-Information ::= SEQUENCE {
  hsDSCH-MACdFlow-Specific-Info      HSDSCH-MACdFlow-Specific-InfoList,
  ueCapability-Info                   UE-Capability-InformationTDD,
  harqMemoryPartitioningTDD           HARQMemoryPartitioningTDD,
  iE-Extensions                       ProtocolExtensionContainer { { HSDSCH-TDD-Information-ExtIEs } } OPTIONAL,
  ...
}
HSDSCH-TDD-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
HSDSCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem
HSDSCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
  hsDSCH-MACdFlow-ID                 HSDSCH-MACdFlow-ID,
  allocationRetentionPriority          AllocationRetentionPriority,
  bindingID                           BindingID          OPTIONAL,
  transportLayerAddress               TransportLayerAddress  OPTIONAL,
  priorityQueueInfo                   PriorityQueue-InfoList,
  iE-Extensions                       ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs } } OPTIONAL,
  ...
}
HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

}

HSDSCH-Information-to-Modify ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-Info-to-Modify      HSDSCH-MACdFlow-Specific-InfoList-to-Modify      OPTIONAL,
    cqiFeedback-CycleK                           CQI-Feedback-Cycle                               OPTIONAL, -- For FDD only
    cqiRepetitionFactor                          CQI-RepetitionFactor                             OPTIONAL, -- For FDD only
    ackNackRepetitionFactor                     AckNack-RepetitionFactor                         OPTIONAL, -- For FDD only
    cqiPowerOffset                              CQI-Power-Offset                               OPTIONAL, -- For FDD only
    ackPowerOffset                              Ack-Power-Offset                               OPTIONAL, -- For FDD only
    nackPowerOffset                             Nack-Power-Offset                              OPTIONAL, -- For FDD only
    hssch-PowerOffset                           HSSCCH-PowerOffset                             OPTIONAL, -- only for FDD
    iE-Extensions                               ProtocolExtensionContainer { { HSDSCH-Information-to-Modify-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-Information-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-MACdFlow-Specific-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem-to-Modify

HSDSCH-MACdFlow-Specific-InfoItem-to-Modify ::= SEQUENCE {
    hsDSCH-MACdFlow-ID                          HSDSCH-MACdFlow-ID,
    allocationRetentionPriority                  AllocationRetentionPriority                       OPTIONAL,
    transportBearerRequestIndicator             TransportBearerRequestIndicator,
    bindingID                                   BindingID                                         OPTIONAL,
    transportLayerAddress                       TransportLayerAddress                            OPTIONAL,
    priorityQueueInfoList-to-Modify             PriorityQueue-InfoList-to-Modify                 OPTIONAL,
    iE-Extensions                               ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-FDD-Information-Response ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-InformationResp    HSDSCH-MACdFlow-Specific-InformationResp,
    hsSCCH-Specific-Information-ResponseFDD     HSSCCH-Specific-InformationRespListFDD,
    iE-Extensions                               ProtocolExtensionContainer { { HSDSCH-FDD-Information-Response-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-FDD-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-TDD-Information-Response ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-InformationResp    HSDSCH-MACdFlow-Specific-InformationResp,
    hsSCCH-Specific-Information-ResponseTDD     HSSCCH-Specific-InformationRespListTDD          OPTIONAL,
    hsSCCH-Specific-Information-ResponseTDDLRCR HSSCCH-Specific-InformationRespListTDDLRCR     OPTIONAL,
    iE-Extensions                               ProtocolExtensionContainer { { HSDSCH-TDD-Information-Response-ExtIEs } } OPTIONAL,
    ...
}

```

```

}

HSDSCH-TDD-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-MACdFlow-Specific-InformationResp ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InformationResp-Item

HSDSCH-MACdFlow-Specific-InformationResp-Item ::= SEQUENCE {
    hsDSCHMacdFlow-Id          HSDSCH-MACdFlow-ID,
    bindingID                  BindingID OPTIONAL,
    transportLayerAddress      TransportLayerAddress OPTIONAL,
    hSDSCH-Initial-Capacity-Allocation HSDSCH-Initial-Capacity-Allocation OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InformationRespItem-ExtIEs } }
    OPTIONAL,
    ...
}

HSDSCH-MACdFlow-Specific-InformationRespItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSCCH-PowerOffset ::= INTEGER (0..255)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB

HSDSCH-Initial-Capacity-Allocation ::= SEQUENCE (SIZE (1..16)) OF HSDSCH-Initial-Capacity-AllocationItem

HSDSCH-Initial-Capacity-AllocationItem ::= SEQUENCE {
    schedulingPriorityIndicator SchedulingPriorityIndicator,
    maximum-MACdPDU-Size       MACdPDU-Size,
    hSDSCH-InitialWindowSize   HSDSCH-InitialWindowSize,
    iE-Extensions              ProtocolExtensionContainer { { HSDSCH-Initial-Capacity-AllocationItem-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-Initial-Capacity-AllocationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-InitialWindowSize ::= INTEGER (1..2047)
-- Number of MAC-d PDUs.
-- 2047 = Unlimited number of MAC-d PDUs

HSSCCH-Specific-InformationRespListFDD ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Codes

HSSCCH-Codes ::= SEQUENCE {
    codeNumber          INTEGER (1..127),
    iE-Extensions       ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemFDD-ExtIEs } } OPTIONAL,
    ...
}

HSSCCH-Specific-InformationRespItemFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```



```

}
...
}
HSSCCH-Specific-InformationRespListTDD ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Specific-InformationRespItemTDD

HSSCCH-Specific-InformationRespItemTDD ::= SEQUENCE {
    timeslot                TimeSlot,
    midambleShiftAndBurstType  MidambleShiftAndBurstType,
    tDD-ChannelisationCode    TDD-ChannelisationCode,
    hSSICH-Info              HSSICH-Info,
    iE-Extensions            ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemTDD-ExtIEs } }    OPTIONAL,
    ...
}

HSSCCH-Specific-InformationRespItemTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSCCH-Specific-InformationRespListTDDLRCR ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Specific-InformationRespItemTDDLRCR

HSSCCH-Specific-InformationRespItemTDDLRCR ::= SEQUENCE {
    timeslotLCR                TimeSlotLCR,
    midambleShiftLCR          MidambleShiftLCR,
    first-TDD-ChannelisationCodeLCR  TDD-ChannelisationCodeLCR,
    second-TDD-ChannelisationCodeLCR  TDD-ChannelisationCodeLCR,
    hSSICH-InfoLCR            HSSICH-InfoLCR,
    iE-Extensions            ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemTDDLRCR-ExtIEs } }    OPTIONAL,
    ...
}

HSSCCH-Specific-InformationRespItemTDDLRCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSICH-Info ::= SEQUENCE {
    timeslot                TimeSlot,
    midambleShiftAndBurstType  MidambleShiftAndBurstType,
    tDD-ChannelisationCode    TDD-ChannelisationCode,
    iE-Extensions            ProtocolExtensionContainer { { HSSICH-Info-ExtIEs } }    OPTIONAL,
    ...
}

HSSICH-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSICH-InfoLCR ::= SEQUENCE {
    timeslotLCR                TimeSlotLCR,
    midambleShiftLCR          MidambleShiftLCR,
    tDD-ChannelisationCodeLCR  TDD-ChannelisationCodeLCR,
    iE-Extensions            ProtocolExtensionContainer { { HSSICH-Info-LCR-ExtIEs } }    OPTIONAL,
    ...
}

```

```

HSSICH-Info-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-MACdFlow-ID ::= INTEGER (0..maxNrOfMACdFlows-1)

HSDSCH-RNTI ::= INTEGER (0..65535)

HS-PDSCH-FDD-Code-Information ::= SEQUENCE {
    number-of-HS-PDSCH-codes                INTEGER (0..maxCodeNrComp-1),
    hS-PDSCH-Start-code-number             HS-PDSCH-Start-code-number    OPTIONAL,
    -- Only included when number of HS-DSCH codes > 0
    ...
}

HS-PDSCH-Start-code-number ::= INTEGER (0..maxCodeNrComp-1)

HS-SCCH-ID ::= INTEGER (0..31)

HS-SCCH-FDD-Code-Information ::= CHOICE {
    replace                HS-SCCH-FDD-Code-List,
    remove                NULL,
    ...
}

HS-SCCH-FDD-Code-List ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-FDD-Code-Information-Item

HS-SCCH-FDD-Code-Information-Item ::= INTEGER (0..maxCodeNrComp-1)

HSSCCH-CodeChangeIndicator ::= ENUMERATED {
    hsSCCHCodeChangeNeeded
}

HSDSCH-FDD-Update-Information ::= SEQUENCE {
    hsSCCHCodeChangeIndicator                HSSCCH-CodeChangeIndicator                OPTIONAL,
    cqiFeedback-CycleK                       CQI-Feedback-Cycle                       OPTIONAL,
    cqiRepetitionFactor                      CQI-RepetitionFactor                     OPTIONAL,
    ackNackRepetitionFactor                  AckNack-RepetitionFactor                 OPTIONAL,
    cqiPowerOffset                          CQI-Power-Offset                         OPTIONAL,
    ackPowerOffset                          Ack-Power-Offset                         OPTIONAL,
    nackPowerOffset                          Nack-Power-Offset                        OPTIONAL,
    iE-Extensions                            ProtocolExtensionContainer { { HSDSCH-FDD-Update-Information-ExtIEs } }    OPTIONAL,
    ...
}

HSDSCH-FDD-Update-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-TDD-Update-Information ::= SEQUENCE {
    hsSCCHCodeChangeIndicator                HSSCCH-CodeChangeIndicator                OPTIONAL,
    iE-Extensions                            ProtocolExtensionContainer { { HSDSCH-TDD-Update-Information-ExtIEs } }    OPTIONAL,

```

```
    ...  
}  
HSDSCH-TDD-Update-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {  
    ...  
}
```

/* partly omitted */