```
                    tdd128                              SEQUENCE {
                        beaconPLEst                         BEACON-PL-Est       OPTIONAL,
                        tpc-StepSize                        TPC-StepSizeTDD
                    }
                },
                primaryCCPCH-TX-Power               PrimaryCCPCH-TX-Power
            }
        }
    }
}

UL-DPCH-PowerControlInfo-r7 ::=     CHOICE {
    fdd                                 SEQUENCE {
        dpcch-PowerOffset                   DPCCH-PowerOffset,
        pc-Preamble                         PC-Preamble,
        sRB-delay                           SRB-delay,
        -- TABULAR: TPC step size nested inside PowerControlAlgorithm
        powerControlAlgorithm               PowerControlAlgorithm,
        deltaACK                            DeltaACK    OPTIONAL,
        deltaNACK                           DeltaNACK   OPTIONAL,
        ack-NACK-repetition-factor          ACK-NACK-repetitionFactor   OPTIONAL,
        harq-Preamble-Mode                  HARQ-Preamble-Mode
    },
    tdd                                 SEQUENCE {
        -- The IE ul-TargetSIR corresponds to PRX-DPCHdes for 1.28Mcps TDD
        -- Actual value PRX-DPCHdes = (value of IE "ul-TargetSIR" - 120)
        ul-TargetSIR                        UL-TargetSIR                OPTIONAL,
        ul-OL-PC-Signalling                 CHOICE {
            broadcast-UL-OL-PC-info             NULL,
            individuallySignalled               SEQUENCE {
                tddOption                           CHOICE {
                    tdd384                              SEQUENCE {
                        individualTS-InterferenceList       IndividualTS-InterferenceList,
                        dpch-ConstantValue                  ConstantValue
                    },
                    tdd768                              SEQUENCE {
                        individualTS-InterferenceList       IndividualTS-InterferenceList,
                        dpch-ConstantValue                  ConstantValue
                    },
                    tdd128                              SEQUENCE {
                        beaconPLEst                         BEACON-PL-Est       OPTIONAL,
                        tpc-StepSize                        TPC-StepSizeTDD
                    }
                },
                primaryCCPCH-TX-Power               PrimaryCCPCH-TX-Power
            }
        }
    }
}

UL-DPCH-PowerControlInfoPostFDD ::= SEQUENCE {
    -- DPCCH-PowerOffset2 has a smaller range to save bits
    dpcch-PowerOffset                   DPCCH-PowerOffset2,
    pc-Preamble                         PC-Preamble,
    sRB-delay                           SRB-delay
}

UL-DPCH-PowerControlInfoPostTDD ::= SEQUENCE {
    ul-TargetSIR                        UL-TargetSIR,
    ul-TimeslotInterference             TDD-UL-Interference
}

UL-DPCH-PowerControlInfoPostTDD-LCR-r4 ::=  SEQUENCE {
    -- The IE ul-TargetSIR corresponds to PRX-DPCHdes for 1.28Mcps TDD
    -- Actual value PRX-DPCHdes = (value of IE "ul-TargetSIR" - 120)
    ul-TargetSIR                        UL-TargetSIR
}

UL-DPCH-PowerControlInfoPredef ::=      CHOICE {
    fdd                                 SEQUENCE {
        -- TABULAR: TPC step size nested inside PowerControlAlgorithm
        powerControlAlgorithm               PowerControlAlgorithm
    },
    tdd                                 SEQUENCE {
        -- dpch-ConstantValue shall be ignored if in 1.28Mcps TDD mode.
        dpch-ConstantValue                  ConstantValueTdd
    }
}
```


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```
UL-EDCH-Information-r6 ::=          SEQUENCE {
    mac-es-e-resetIndicator             ENUMERATED { true }                     OPTIONAL,
    e-DPCCH-Info                        E-DPCCH-Info                            OPTIONAL,
    e-DPDCH-Info                        E-DPDCH-Info                            OPTIONAL,
    schedulingTransmConfiguration       E-DPDCH-SchedulingTransmConfiguration   OPTIONAL
}

UL-EDCH-Information-r7 ::=          SEQUENCE {
    mac-es-e-resetIndicator             ENUMERATED { true }                     OPTIONAL,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            e-DPCCH-Info                        E-DPCCH-Info-r7                 OPTIONAL,
            e-DPDCH-Info                        E-DPDCH-Info-r7                 OPTIONAL,
            schedulingTransmConfiguration       E-DPDCH-SchedulingTransmConfiguration   OPTIONAL,
            ul-16QAM-Settings                   UL-16QAM-Settings               OPTIONAL
        },
        tdd                                 SEQUENCE {
            e-RUCCH-Info                        E-RUCCH-Info                    OPTIONAL,
            e-PUCH-Info                         E-PUCH-Info                     OPTIONAL
        }
    }
}

UL-Interference ::=                 INTEGER (-110..-70)

UL-ScramblingCode ::=               INTEGER (0..16777215)


UL-SynchronisationParameters-r4 ::= SEQUENCE {
    stepSize                            INTEGER (1..8),
    frequency                           INTEGER (1..8)
}

-- Actual value UL-TargetSIR = (IE value * 0.5) - 11
UL-TargetSIR ::=                    INTEGER (0..62)

UL-TimingAdvance ::=                INTEGER (0..63)

UL-TimingAdvanceControl ::=         CHOICE {
    disabled                            NULL,
    enabled                             SEQUENCE {
        ul-TimingAdvance                    UL-TimingAdvance                OPTIONAL,
        activationTime                      ActivationTime                  OPTIONAL
    }
}

UL-TimingAdvanceControl-r4 ::=      CHOICE {
    disabled                            NULL,
    enabled                             SEQUENCE {
        tddOption                           CHOICE {
            tdd384                              SEQUENCE {
                ul-TimingAdvance                    UL-TimingAdvance                OPTIONAL,
                activationTime                      ActivationTime                  OPTIONAL
            },
            tdd128                              SEQUENCE {
                ul-SynchronisationParameters        UL-SynchronisationParameters-r4 OPTIONAL,
                synchronisationParameters           SynchronisationParameters-r4    OPTIONAL
            }
        }
    }
}

UL-TimingAdvanceControl-r7 ::=      CHOICE {
    disabled                            NULL,
    enabled                             SEQUENCE {
        tddOption                           CHOICE {
            tdd384                              SEQUENCE {
                ul-TimingAdvance                    UL-TimingAdvance                OPTIONAL,
                ext-ul-TimingAdvance                EXT-UL-TimingAdvance            OPTIONAL,
                activationTime                      ActivationTime                  OPTIONAL
            },
            tdd768                              SEQUENCE {
                ext-ul-TimingAdvance                EXT-UL-TimingAdvance            OPTIONAL,
                activationTime                      ActivationTime                  OPTIONAL
            },
            tdd128                              SEQUENCE {
                ul-SynchronisationParameters        UL-SynchronisationParameters-r4 OPTIONAL,
```


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```
                synchronisationParameters           SynchronisationParameters-r4    OPTIONAL
            }
        }
    }
}

UL-TimingAdvanceControl-LCR-r4 ::=  CHOICE {
    disabled                            NULL,
    enabled                             SEQUENCE {
        ul-SynchronisationParameters        UL-SynchronisationParameters-r4 OPTIONAL,
        synchronisationParameters           SynchronisationParameters-r4    OPTIONAL
    }
}

UL-TS-ChannelisationCode ::=        ENUMERATED {
                                        cc1-1, cc2-1, cc2-2,
                                        cc4-1, cc4-2, cc4-3, cc4-4,
                                        cc8-1, cc8-2, cc8-3, cc8-4,
                                        cc8-5, cc8-6, cc8-7, cc8-8,
                                        cc16-1, cc16-2, cc16-3, cc16-4,
                                        cc16-5, cc16-6, cc16-7, cc16-8,
                                        cc16-9, cc16-10, cc16-11, cc16-12,
                                        cc16-13, cc16-14, cc16-15, cc16-16 }

UL-TS-ChannelisationCodeList ::=    SEQUENCE (SIZE (1..2)) OF
                                        UL-TS-ChannelisationCode

UL-TS-ChannelisationCodeList-r7 ::=     SEQUENCE (SIZE (1..2)) OF
                                            SEQUENCE {
        ul-TS-Channelisation-Code               UL-TS-ChannelisationCode,
        plcch-info                              PLCCH-Info      OPTIONAL
}

UL-TS-ChannelisationCode-VHCR ::=       ENUMERATED {
                                        cc1-1, cc2-1, cc2-2,
                                        cc4-1, cc4-2, cc4-3, cc4-4,
                                        cc8-1, cc8-2, cc8-3, cc8-4,
                                        cc8-5, cc8-6, cc8-7, cc8-8,
                                        cc16-1, cc16-2, cc16-3, cc16-4,
                                        cc16-5, cc16-6, cc16-7, cc16-8,
                                        cc16-9, cc16-10, cc16-11, cc16-12,
                                        cc16-13, cc16-14, cc16-15, cc16-16,
                                        cc32-1, cc32-2, cc32-3, cc32-4,
                                        cc32-5, cc32-6, cc32-7, cc32-8,
                                        cc32-9, cc32-10, cc32-11, cc32-12,
                                        cc32-13, cc32-14, cc32-15, cc32-16,
                                        cc32-17, cc32-18, cc32-19, cc32-20,
                                        cc32-21, cc32-22, cc32-23, cc32-24,
                                        cc32-25, cc32-26, cc32-27, cc32-28,
                                        cc32-29, cc32-30, cc32-31, cc32-32 }

UL-TS-ChannelisationCodeList-VHCR ::=   SEQUENCE (SIZE (1..2)) OF
                                            UL-TS-ChannelisationCode-VHCR

Uplink-DPCCH-Slot-Format-Information ::=    ENUMERATED {
                                                slot-format-1,
                                                slot-format-3,
                                                slot-format-4,
                                                spare1 }

UplinkAdditionalTimeslots ::=       SEQUENCE {
    parameters                          CHOICE {
        sameAsLast                          SEQUENCE {
            timeslotNumber                      TimeslotNumber
        },
        newParameters                       SEQUENCE {
            individualTimeslotInfo                      IndividualTimeslotInfo,
            ul-TS-ChannelisationCodeList                UL-TS-ChannelisationCodeList
        }
    }
}

UplinkAdditionalTimeslots-LCR-r4 ::=    SEQUENCE {
    parameters                          CHOICE {
        sameAsLast                          SEQUENCE {
            timeslotNumber                      TimeslotNumber
        },
        newParameters                       SEQUENCE {
```

```
            individualTimeslotInfo                      IndividualTimeslotInfo-LCR-r4,
            ul-TS-ChannelisationCodeList                UL-TS-ChannelisationCodeList
        }
    }
}

UplinkAdditionalTimeslots-LCR-r7 ::=    SEQUENCE {
    parameters                          CHOICE {
        sameAsLast                          SEQUENCE {
            timeslotNumber                      TimeslotNumber
            -- plcch-info assigned as previously defined slot
        },
        newParameters                       SEQUENCE {
            individualTimeslotInfo              IndividualTimeslotInfo-LCR-r4,
            ul-TS-ChannelisationCodeList        UL-TS-ChannelisationCodeList-r7
        }
    }
}

UplinkTimeslotsCodes ::=            SEQUENCE {
    dynamicSFusage                      BOOLEAN,
    firstIndividualTimeslotInfo         IndividualTimeslotInfo,
    ul-TS-ChannelisationCodeList        UL-TS-ChannelisationCodeList,
    moreTimeslots                       CHOICE {
        noMore                              NULL,
        additionalTimeslots                 CHOICE {
            consecutive                         SEQUENCE {
                numAdditionalTimeslots              INTEGER (1..maxTS-1)
            },
            timeslotList                        SEQUENCE (SIZE (1..maxTS-1)) OF
                                                    UplinkAdditionalTimeslots
        }
    }
}

UplinkTimeslotsCodes-VHCR ::=       SEQUENCE {
    dynamicSFusage                      BOOLEAN,
    firstIndividualTimeslotInfo         IndividualTimeslotInfo-VHCR,
    ul-TS-ChannelisationCodeList        UL-TS-ChannelisationCodeList-VHCR,
    moreTimeslots                       CHOICE {
        noMore                              NULL,
        additionalTimeslots                 CHOICE {
            consecutive                         SEQUENCE {
                numAdditionalTimeslots              INTEGER (1..maxTS-1)
            },
            timeslotList                        SEQUENCE (SIZE (1..maxTS-1)) OF
                                                    UplinkAdditionalTimeslots
        }
    }
}

UplinkTimeslotsCodes-LCR-r4 ::=     SEQUENCE {
    dynamicSFusage                      BOOLEAN,
    firstIndividualTimeslotInfo         IndividualTimeslotInfo-LCR-r4,
    ul-TS-ChannelisationCodeList        UL-TS-ChannelisationCodeList,
    moreTimeslots                       CHOICE {
        noMore                              NULL,
        additionalTimeslots                 CHOICE {
            consecutive                         SEQUENCE {
                numAdditionalTimeslots              INTEGER (1..maxTS-LCR-1)
            },
            timeslotList                        SEQUENCE (SIZE (1..maxTS-LCR-1)) OF
                                                    UplinkAdditionalTimeslots-LCR-r4
        }
    }
}

UplinkTimeslotsCodes-LCR-r7 ::=     SEQUENCE {
    dynamicSFusage                      BOOLEAN,
    firstIndividualTimeslotInfo         IndividualTimeslotInfo-LCR-r4,
    ul-TS-ChannelisationCodeList        UL-TS-ChannelisationCodeList-r7,
    moreTimeslots                       CHOICE {
        noMore                              NULL,
        additionalTimeslots                 CHOICE {
            consecutive                         SEQUENCE {
            -- the choice of 'consecutive' is not needed because there is only 1 option.
                numAdditionalTimeslots              INTEGER (1..maxTS-LCR-1)
            },
```


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```
            timeslotList                        SEQUENCE (SIZE (1..maxTS-LCR-1)) OF
                                                    UplinkAdditionalTimeslots-LCR-r7
        }
    }
}

Wi-LCR ::=                                                          INTEGER(1..4)

-- **************************************************
--
--     MEASUREMENT INFORMATION ELEMENTS (10.3.7)
--
-- **************************************************

AcquisitionSatInfo ::=              SEQUENCE {
    satID                               SatID,
    -- Actual value dopplerOthOrder = IE value * 2.5
    doppler0thOrder                     INTEGER (-2048..2047),
    extraDopplerInfo                    ExtraDopplerInfo                    OPTIONAL,
    codePhase                           INTEGER (0..1022),
    integerCodePhase                    INTEGER (0..19),
    gps-BitNumber                       INTEGER (0..3),
    codePhaseSearchWindow               CodePhaseSearchWindow,
    azimuthAndElevation                 AzimuthAndElevation                 OPTIONAL
}

AcquisitionSatInfoList ::=          SEQUENCE (SIZE (1..maxSat)) OF
                                        AcquisitionSatInfo


AdditionalMeasurementID-List ::=    SEQUENCE (SIZE (1..maxAdditionalMeas)) OF
                                        MeasurementIdentity

AlmanacSatInfo ::=                  SEQUENCE {
    dataID                              INTEGER (0..3),
    satID                               SatID,
    e                                   BIT STRING (SIZE (16)),
    t-oa                                BIT STRING (SIZE (8)),
    deltaI                              BIT STRING (SIZE (16)),
    omegaDot                            BIT STRING (SIZE (16)),
    satHealth                           BIT STRING (SIZE (8)),
    a-Sqrt                              BIT STRING (SIZE (24)),
    omega0                              BIT STRING (SIZE (24)),
    m0                                  BIT STRING (SIZE (24)),
    omega                               BIT STRING (SIZE (24)),
    af0                                 BIT STRING (SIZE (11)),
    af1                                 BIT STRING (SIZE (11))
}

AlmanacSatInfoList ::=              SEQUENCE (SIZE (1..maxSat)) OF
                                        AlmanacSatInfo

ALM-keplerianParameters ::=         SEQUENCE {
    t-oa                                INTEGER (0..255),
    iod-a                               INTEGER (0..3),
    sat-info-kpList                     GANSS-SAT-Info-Almanac-KpList
}

AverageRLC-BufferPayload ::=        ENUMERATED {
                                        pla0, pla4, pla8, pla16, pla32,
                                        pla64, pla128, pla256, pla512,
                                        pla1024, pla2k, pla4k, pla8k, pla16k,
                                        pla32k, pla64k, pla128k, pla256k,
                                        pla512k, pla1024k, spare12, spare11,
                                        spare10, spare9, spare8, spare7, spare6,
                                        spare5, spare4, spare3, spare2, spare1 }

AzimuthAndElevation ::=             SEQUENCE {
    -- Actual value azimuth = IE value * 11.25
    azimuth                             INTEGER (0..31),
    -- Actual value elevation = IE value * 11.25
    elevation                           INTEGER (0..7)
}

BadSatList ::=                      SEQUENCE (SIZE (1..maxSat)) OF
                                        INTEGER (0..63)

Frequency-Band ::=                  ENUMERATED {
```

```
                                    dcs1800BandUsed, pcs1900BandUsed }

BCCH-ARFCN ::=                      INTEGER (0..1023)

BLER-MeasurementResults ::=         SEQUENCE {
    transportChannelIdentity            TransportChannelIdentity,
    dl-TransportChannelBLER             DL-TransportChannelBLER             OPTIONAL
}

BLER-MeasurementResultsList ::=     SEQUENCE (SIZE (1..maxTrCH)) OF
                                        BLER-MeasurementResults

BLER-TransChIdList ::=              SEQUENCE (SIZE (1..maxTrCH)) OF
                                        TransportChannelIdentity

BSIC-VerificationRequired ::=       ENUMERATED {
                                        required, notRequired }

BSICReported ::=                    CHOICE {
    -- Value maxCellMeas is not allowed for verifiedBSIC
    verifiedBSIC                        INTEGER (0..maxCellMeas),
    nonVerifiedBSIC                     BCCH-ARFCN
}

BurstModeParameters ::=             SEQUENCE {
    burstStart                          INTEGER (0..15),
    burstLength                         INTEGER (10..25),
    burstFreq                           INTEGER (1..16)
}

CellDCH-ReportCriteria ::=          CHOICE {
    intraFreqReportingCriteria          IntraFreqReportingCriteria,
    periodicalReportingCriteria         PeriodicalReportingCriteria
}

CellDCH-ReportCriteria-LCR-r4 ::=   CHOICE {
    intraFreqReportingCriteria          IntraFreqReportingCriteria-LCR-r4,
    periodicalReportingCriteria         PeriodicalReportingCriteria
}

-- Actual value CellIndividualOffset = IE value * 0.5
CellIndividualOffset ::=            INTEGER (-20..20)


CellInfo ::=                        SEQUENCE {
    cellIndividualOffset                CellIndividualOffset                DEFAULT 0,
    referenceTimeDifferenceToCell       ReferenceTimeDifferenceToCell       OPTIONAL,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            primaryCPICH-Info                   PrimaryCPICH-Info           OPTIONAL,
            primaryCPICH-TX-Power               PrimaryCPICH-TX-Power       OPTIONAL,
            readSFN-Indicator                   BOOLEAN,
            tx-DiversityIndicator               BOOLEAN
        },
        tdd                                 SEQUENCE {
            primaryCCPCH-Info                   PrimaryCCPCH-Info,
            primaryCCPCH-TX-Power               PrimaryCCPCH-TX-Power       OPTIONAL,
            timeslotInfoList                    TimeslotInfoList            OPTIONAL,
            readSFN-Indicator                   BOOLEAN
        }
    }
}

CellInfo-r4 ::=                     SEQUENCE {
    cellIndividualOffset                CellIndividualOffset                DEFAULT 0,
    referenceTimeDifferenceToCell       ReferenceTimeDifferenceToCell       OPTIONAL,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            primaryCPICH-Info                   PrimaryCPICH-Info           OPTIONAL,
            primaryCPICH-TX-Power               PrimaryCPICH-TX-Power       OPTIONAL,
            readSFN-Indicator                   BOOLEAN,
            tx-DiversityIndicator               BOOLEAN
        },
        tdd                                 SEQUENCE {
            primaryCCPCH-Info                   PrimaryCCPCH-Info-r4,
            primaryCCPCH-TX-Power               PrimaryCCPCH-TX-Power       OPTIONAL,
            timeslotInfoList                    TimeslotInfoList-r4         OPTIONAL,
            readSFN-Indicator                   BOOLEAN
```

```
        }
    }
}

CellInfoSI-RSCP ::=                 SEQUENCE {
    cellIndividualOffset                CellIndividualOffset                DEFAULT 0,
    referenceTimeDifferenceToCell       ReferenceTimeDifferenceToCell       OPTIONAL,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            primaryCPICH-Info                   PrimaryCPICH-Info           OPTIONAL,
            primaryCPICH-TX-Power               PrimaryCPICH-TX-Power       OPTIONAL,
            readSFN-Indicator                   BOOLEAN,
            tx-DiversityIndicator               BOOLEAN
        },
        tdd                                 SEQUENCE {
            primaryCCPCH-Info                   PrimaryCCPCH-Info,
            primaryCCPCH-TX-Power               PrimaryCCPCH-TX-Power       OPTIONAL,
            timeslotInfoList                    TimeslotInfoList            OPTIONAL,
            readSFN-Indicator                   BOOLEAN
        }
    },
    cellSelectionReselectionInfo        CellSelectReselectInfoSIB-11-12-RSCP        OPTIONAL
}

CellInfoSI-RSCP-LCR-r4 ::=          SEQUENCE {
    cellIndividualOffset                CellIndividualOffset                DEFAULT 0,
    referenceTimeDifferenceToCell       ReferenceTimeDifferenceToCell       OPTIONAL,
    primaryCCPCH-Info                   PrimaryCCPCH-Info-LCR-r4,
    primaryCCPCH-TX-Power               PrimaryCCPCH-TX-Power               OPTIONAL,
    timeslotInfoList                    TimeslotInfoList-LCR-r4             OPTIONAL,
    readSFN-Indicator                   BOOLEAN,
    cellSelectionReselectionInfo        CellSelectReselectInfoSIB-11-12-RSCP        OPTIONAL
}

CellInfoSI-ECN0 ::=                 SEQUENCE {
    cellIndividualOffset                CellIndividualOffset                DEFAULT 0,
    referenceTimeDifferenceToCell       ReferenceTimeDifferenceToCell       OPTIONAL,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            primaryCPICH-Info                   PrimaryCPICH-Info           OPTIONAL,
            primaryCPICH-TX-Power               PrimaryCPICH-TX-Power       OPTIONAL,
            readSFN-Indicator                   BOOLEAN,
            tx-DiversityIndicator               BOOLEAN
        },
        tdd                                 SEQUENCE {
            primaryCCPCH-Info                   PrimaryCCPCH-Info,
            primaryCCPCH-TX-Power               PrimaryCCPCH-TX-Power       OPTIONAL,
            timeslotInfoList                    TimeslotInfoList            OPTIONAL,
            readSFN-Indicator                   BOOLEAN
        }
    },
    cellSelectionReselectionInfo        CellSelectReselectInfoSIB-11-12-ECN0    OPTIONAL
}

CellInfoSI-ECN0-LCR-r4 ::=          SEQUENCE {
    cellIndividualOffset                CellIndividualOffset                DEFAULT 0,
    referenceTimeDifferenceToCell       ReferenceTimeDifferenceToCell       OPTIONAL,
    primaryCCPCH-Info                   PrimaryCCPCH-Info-LCR-r4,
    primaryCCPCH-TX-Power               PrimaryCCPCH-TX-Power               OPTIONAL,
    timeslotInfoList                    TimeslotInfoList-LCR-r4             OPTIONAL,
    readSFN-Indicator                   BOOLEAN,
    cellSelectionReselectionInfo        CellSelectReselectInfoSIB-11-12-ECN0    OPTIONAL
}

CellInfoSI-HCS-RSCP ::=             SEQUENCE {
    cellIndividualOffset                CellIndividualOffset                DEFAULT 0,
    referenceTimeDifferenceToCell       ReferenceTimeDifferenceToCell       OPTIONAL,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            primaryCPICH-Info                   PrimaryCPICH-Info           OPTIONAL,
            primaryCPICH-TX-Power               PrimaryCPICH-TX-Power       OPTIONAL,
            readSFN-Indicator                   BOOLEAN,
            tx-DiversityIndicator               BOOLEAN
        },
        tdd                                 SEQUENCE {
            primaryCCPCH-Info                   PrimaryCCPCH-Info,
            primaryCCPCH-TX-Power               PrimaryCCPCH-TX-Power       OPTIONAL,
```


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```
            timeslotInfoList                    TimeslotInfoList            OPTIONAL,
            readSFN-Indicator                   BOOLEAN
        }
    },
    cellSelectionReselectionInfo        CellSelectReselectInfoSIB-11-12-HCS-RSCP    OPTIONAL
}

CellInfoSI-HCS-RSCP-LCR-r4 ::=      SEQUENCE {
    cellIndividualOffset                CellIndividualOffset                DEFAULT 0,
    referenceTimeDifferenceToCell       ReferenceTimeDifferenceToCell       OPTIONAL,
    primaryCCPCH-Info                   PrimaryCCPCH-Info-LCR-r4,
    primaryCCPCH-TX-Power               PrimaryCCPCH-TX-Power               OPTIONAL,
    timeslotInfoList                    TimeslotInfoList-LCR-r4             OPTIONAL,
    readSFN-Indicator                   BOOLEAN,
    cellSelectionReselectionInfo        CellSelectReselectInfoSIB-11-12-HCS-RSCP    OPTIONAL
}

CellInfoSI-HCS-ECN0 ::=             SEQUENCE {
    cellIndividualOffset                CellIndividualOffset                DEFAULT 0,
    referenceTimeDifferenceToCell       ReferenceTimeDifferenceToCell       OPTIONAL,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            primaryCPICH-Info                   PrimaryCPICH-Info           OPTIONAL,
            primaryCPICH-TX-Power               PrimaryCPICH-TX-Power       OPTIONAL,
            readSFN-Indicator                   BOOLEAN,
            tx-DiversityIndicator               BOOLEAN
        },
        tdd                                 SEQUENCE {
            primaryCCPCH-Info                   PrimaryCCPCH-Info,
            primaryCCPCH-TX-Power               PrimaryCCPCH-TX-Power       OPTIONAL,
            timeslotInfoList                    TimeslotInfoList            OPTIONAL,
            readSFN-Indicator                   BOOLEAN
        }
    },
    cellSelectionReselectionInfo        CellSelectReselectInfoSIB-11-12-HCS-ECN0    OPTIONAL
}

CellInfoSI-HCS-ECN0-LCR-r4 ::=      SEQUENCE {
    cellIndividualOffset                CellIndividualOffset                DEFAULT 0,
    referenceTimeDifferenceToCell       ReferenceTimeDifferenceToCell       OPTIONAL,
    primaryCCPCH-Info                   PrimaryCCPCH-Info-LCR-r4,
    primaryCCPCH-TX-Power               PrimaryCCPCH-TX-Power               OPTIONAL,
    timeslotInfoList                    TimeslotInfoList-LCR-r4             OPTIONAL,
    readSFN-Indicator                   BOOLEAN,
    cellSelectionReselectionInfo        CellSelectReselectInfoSIB-11-12-HCS-ECN0    OPTIONAL
}

CellMeasuredResults ::=             SEQUENCE {
    cellIdentity                        CellIdentity                        OPTIONAL,
    -- dummy is not used in this version of the specification, it should
    -- not be sent and if received it should be ignored.
    dummy           SFN-SFN-ObsTimeDifference           OPTIONAL,
    cellSynchronisationInfo         CellSynchronisationInfo         OPTIONAL,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            primaryCPICH-Info                   PrimaryCPICH-Info,
            cpich-Ec-N0                         CPICH-Ec-N0                 OPTIONAL,
            cpich-RSCP                          CPICH-RSCP                  OPTIONAL,
            pathloss                            Pathloss                    OPTIONAL
        },
        tdd                                 SEQUENCE {
            cellParametersID                    CellParametersID,
            proposedTGSN                        TGSN                        OPTIONAL,
            primaryCCPCH-RSCP                   PrimaryCCPCH-RSCP           OPTIONAL,
            pathloss                            Pathloss                    OPTIONAL,
            timeslotISCP-List                   TimeslotISCP-List           OPTIONAL
        }
    }
}

CellMeasurementEventResults ::=     CHOICE {
    fdd                                 SEQUENCE (SIZE (1..maxCellMeas)) OF
                                            PrimaryCPICH-Info,
    tdd                                 SEQUENCE (SIZE (1..maxCellMeas)) OF
                                            PrimaryCCPCH-Info
}

CellMeasurementEventResults-LCR-r4 ::=  SEQUENCE (SIZE (1..maxCellMeas)) OF
```


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```
                                        PrimaryCCPCH-Info-LCR-r4

CellReportingQuantities ::=         SEQUENCE {
    -- dummy is not used in this version of the specification
    -- and if received it should be ignored.
    dummy                   SFN-SFN-OTD-Type,
    cellIdentity-reportingIndicator                     BOOLEAN,
    cellSynchronisationInfoReportingIndicator           BOOLEAN,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            cpich-Ec-N0-reportingIndicator                          BOOLEAN,
            cpich-RSCP-reportingIndicator                           BOOLEAN,
            pathloss-reportingIndicator                         BOOLEAN
        },
        tdd                                 SEQUENCE {
            timeslotISCP-reportingIndicator                     BOOLEAN,
            proposedTGSN-ReportingRequired                      BOOLEAN,
            primaryCCPCH-RSCP-reportingIndicator                    BOOLEAN,
            pathloss-reportingIndicator                         BOOLEAN
        }
    }
}

CellSelectReselectInfoSIB-11-12 ::= SEQUENCE {
    q-Offset1S-N                        Q-OffsetS-N                         DEFAULT 0,
    q-Offset2S-N                        Q-OffsetS-N                         OPTIONAL,
    maxAllowedUL-TX-Power               MaxAllowedUL-TX-Power               OPTIONAL,
    hcs-NeighbouringCellInformation-RSCP        HCS-NeighbouringCellInformation-RSCP
    OPTIONAL,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            q-QualMin                           Q-QualMin                   OPTIONAL,
            q-RxlevMin                          Q-RxlevMin                  OPTIONAL
        },
        tdd                                 SEQUENCE {
            q-RxlevMin                          Q-RxlevMin                  OPTIONAL
        },
        gsm                                 SEQUENCE {
            q-RxlevMin                          Q-RxlevMin                  OPTIONAL
        }
    }
}

CellSelectReselectInfoSIB-11-12-RSCP ::=    SEQUENCE {
    q-OffsetS-N                     Q-OffsetS-N                     DEFAULT 0,
    maxAllowedUL-TX-Power               MaxAllowedUL-TX-Power               OPTIONAL,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            q-QualMin                           Q-QualMin                   OPTIONAL,
            q-RxlevMin                          Q-RxlevMin                  OPTIONAL
        },
        tdd                                 SEQUENCE {
            q-RxlevMin                          Q-RxlevMin                  OPTIONAL
        },
        gsm                                 SEQUENCE {
            q-RxlevMin                          Q-RxlevMin                  OPTIONAL
        }
    }
}

CellSelectReselectInfoSIB-11-12-ECN0 ::=    SEQUENCE {
    q-Offset1S-N                        Q-OffsetS-N                     DEFAULT 0,
    q-Offset2S-N                        Q-OffsetS-N                     DEFAULT 0,
    maxAllowedUL-TX-Power               MaxAllowedUL-TX-Power               OPTIONAL,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            q-QualMin                           Q-QualMin                   OPTIONAL,
            q-RxlevMin                          Q-RxlevMin                  OPTIONAL
        },
        tdd                                 SEQUENCE {
            q-RxlevMin                          Q-RxlevMin                  OPTIONAL
        },
        gsm                                 SEQUENCE {
            q-RxlevMin                          Q-RxlevMin                  OPTIONAL
        }
    }
}
```


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```
CellSelectReselectInfoSIB-11-12-HCS-RSCP ::=    SEQUENCE {
    q-OffsetS-N                     Q-OffsetS-N                     DEFAULT 0,
    maxAllowedUL-TX-Power               MaxAllowedUL-TX-Power               OPTIONAL,
    hcs-NeighbouringCellInformation-RSCP        HCS-NeighbouringCellInformation-RSCP
    OPTIONAL,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            q-QualMin                           Q-QualMin                   OPTIONAL,
            q-RxlevMin                          Q-RxlevMin                  OPTIONAL
        },
        tdd                                 SEQUENCE {
            q-RxlevMin                          Q-RxlevMin                  OPTIONAL
        },
        gsm                                 SEQUENCE {
            q-RxlevMin                          Q-RxlevMin                  OPTIONAL
        }
    }
}

CellSelectReselectInfoSIB-11-12-HCS-ECN0 ::=    SEQUENCE {
    q-Offset1S-N                        Q-OffsetS-N                     DEFAULT 0,
    q-Offset2S-N                        Q-OffsetS-N                     DEFAULT 0,
    maxAllowedUL-TX-Power               MaxAllowedUL-TX-Power               OPTIONAL,
    hcs-NeighbouringCellInformation-ECN0        HCS-NeighbouringCellInformation-ECN0
    OPTIONAL,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            q-QualMin                           Q-QualMin                   OPTIONAL,
            q-RxlevMin                          Q-RxlevMin                  OPTIONAL
        },
        tdd                                 SEQUENCE {
            q-RxlevMin                          Q-RxlevMin                  OPTIONAL
        },
        gsm                                 SEQUENCE {
            q-RxlevMin                          Q-RxlevMin                  OPTIONAL
        }
    }
}

CellSelectReselectInfo-v590ext ::= SEQUENCE {
    deltaQrxlevmin                  DeltaQrxlevmin                  OPTIONAL,
    deltaQhcs                       DeltaRSCP                       OPTIONAL
}

CellSelectReselectInfoPCHFACH-v5b0ext ::= SEQUENCE {
    q-Hyst-l-S-PCH              Q-Hyst-S-Fine                       OPTIONAL,
    q-Hyst-l-S-FACH             Q-Hyst-S-Fine                       OPTIONAL,
    q-Hyst-2-S-PCH              Q-Hyst-S-Fine                       OPTIONAL,
    q-Hyst-2-S-FACH             Q-Hyst-S-Fine                       OPTIONAL,
    t-Reselection-S-PCH         T-Reselection-S                     OPTIONAL,
    t-Reselection-S-FACH        T-Reselection-S-Fine                OPTIONAL
}

CellSelectReselectInfoTreselectionScaling-v5c0ext ::= SEQUENCE {
    -- For speed detection, the same HCS parameters are utilised
    non-HCS-t-CR-Max                    T-CRMax                                 OPTIONAL,
    speedDependentScalingFactor         SpeedDependentScalingFactor             OPTIONAL,
    interFrequencyTreselectionScalingFactor     TreselectionScalingFactor       OPTIONAL,
    interRATTreselectionScalingFactor           TreselectionScalingFactor       OPTIONAL
}

CellsForInterFreqMeasList ::=       SEQUENCE (SIZE  (1..maxCellMeas)) OF
                                        InterFreqCellID
CellsForInterRATMeasList ::=            SEQUENCE (SIZE  (1..maxCellMeas)) OF
                                        InterRATCellID
CellsForIntraFreqMeasList ::=       SEQUENCE (SIZE  (1..maxCellMeas)) OF
                                        IntraFreqCellID

CellSynchronisationInfo ::=         SEQUENCE {
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            countC-SFN-Frame-difference         CountC-SFN-Frame-difference     OPTIONAL,
            tm                                  INTEGER(0..38399)
        },
        tdd                                 SEQUENCE {
            countC-SFN-Frame-difference         CountC-SFN-Frame-difference     OPTIONAL
        }
    }
```


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```
}

CellToReport ::=                    SEQUENCE {
    bsicReported                        BSICReported
}

CellToReportList ::=                SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        CellToReport

CodePhaseSearchWindow ::=           ENUMERATED {
                                        w1023, w1, w2, w3, w4, w6, w8,
                                        w12, w16, w24, w32, w48, w64,
                                        w96, w128, w192 }

CountC-SFN-Frame-difference ::= SEQUENCE {
    -- Actual value countC-SFN-High = IE value * 256
    countC-SFN-High                 INTEGER(0..15),
    off                             INTEGER(0..255)
}

-- SPARE: CPICH-Ec-No, Max = 49
-- Values above Max are spare
CPICH-Ec-N0 ::=                     INTEGER (0..63)

-- SPARE: CPICH- RSCP, Max = 91
-- Values above Max are spare
CPICH-RSCP ::=                      INTEGER (0..127)

DataBitAssistance ::=               SEQUENCE {
    ganss-data-type-id                  INTEGER (0..3),
    n-bits                              INTEGER (1..1024),
    data-bits                           BIT STRING (SIZE (1024))
}

DataBitAssistanceList ::=           SEQUENCE (SIZE (1..maxSgnType)) OF
                                        DataBitAssistance

DeltaPRC ::=                        INTEGER (-127..127)

--Actual value DeltaQrxlevmin = IE value * 2
DeltaQrxlevmin ::= INTEGER (-2..-1)

DeltaRSCP ::= INTEGER (-5..-1)

DeltaRSCPPerCell ::= SEQUENCE {
    deltaRSCP                       DeltaRSCP   OPTIONAL
}

-- Actual value DeltaRRC = IE value * 0.032
DeltaRRC ::=                        INTEGER (-7..7)

DGANSSInfo ::=                      SEQUENCE {
    ganssSignalId                       GANSS-Signal-Id                     OPTIONAL,
    ganssStatusHealth                   GANSS-Status-Health,
    dgansssignalInformationList         DGANSSSignalInformationList         OPTIONAL
}

DGANSSInfoList ::=                  SEQUENCE (SIZE (1..maxSgnType)) OF
                                        DGANSSInfo

DGANSSSignalInformation ::=         SEQUENCE {
    satId                               INTEGER (0..63),
    iode-dganss                         BIT STRING (SIZE (8)),
    udre                                UDRE,
    ganss-prc                           INTEGER (-2047..2047),
    ganss-rrc                           INTEGER (-127..127)
}

DGANSSSignalInformationList ::=     SEQUENCE (SIZE (1..maxGANSSSat)) OF
                                        DGANSSSignalInformation

DGANSS-Sig-Id-Req ::=               BIT STRING (SIZE (8))

DGPS-CorrectionSatInfo ::=          SEQUENCE {
    satID                               SatID,
    iode                                IODE,
    udre                                UDRE,
    prc                                 PRC,
```

```
    rrc                                 RRC,
-- dummy1 and dummy2 are not used in this version of the specification and should be ignored.
    dummy1                          DeltaPRC,
    dummy2                          DeltaRRC,
    -- dummy3 and dummy4 are not used in this version of the specification. They should not
    -- be sent and if received they should be ignored.
    dummy3                          DeltaPRC            OPTIONAL,
    dummy4                          DeltaRRC            OPTIONAL
}

DGPS-CorrectionSatInfoList ::=      SEQUENCE (SIZE (1..maxSat)) OF
                                        DGPS-CorrectionSatInfo

DiffCorrectionStatus ::=            ENUMERATED {
                                        udre-1-0, udre-0-75, udre-0-5, udre-0-3,
                                        udre-0-2, udre-0-1, noData, invalidData }

DL-TransportChannelBLER ::=         INTEGER (0..63)

DopplerUncertainty ::=              ENUMERATED {
                                        hz12-5, hz25, hz50, hz100, hz200,
                                        spare3, spare2, spare1 }

EllipsoidPoint ::=                  SEQUENCE {
    latitudeSign        ENUMERATED { north, south },
    latitude            INTEGER (0..8388607),
    longitude           INTEGER (-8388608..8388607)
}


EllipsoidPointAltitude ::=          SEQUENCE {
    latitudeSign        ENUMERATED { north, south },
    latitude            INTEGER (0..8388607),
    longitude           INTEGER (-8388608..8388607),
    altitudeDirection   ENUMERATED {height, depth},
    altitude            INTEGER (0..32767)
}


EllipsoidPointAltitudeEllipsoide ::=    SEQUENCE {
    latitudeSign            ENUMERATED { north, south },
    latitude                INTEGER (0..8388607),
    longitude               INTEGER (-8388608..8388607),
    altitudeDirection       ENUMERATED {height, depth},
    altitude                INTEGER (0..32767),
    uncertaintySemiMajor    INTEGER (0..127),
    uncertaintySemiMinor    INTEGER (0..127),
    -- Actual value orientationMajorAxis = IE value * 2
    orientationMajorAxis    INTEGER (0..89),
    uncertaintyAltitude     INTEGER (0..127),
    confidence              INTEGER (0..100)
}


EllipsoidPointUncertCircle ::=      SEQUENCE {
    latitudeSign            ENUMERATED { north, south },
    latitude                INTEGER (0..8388607),
    longitude               INTEGER (-8388608..8388607),
    uncertaintyCode         INTEGER (0..127)
}


EllipsoidPointUncertEllipse ::=     SEQUENCE {
    latitudeSign            ENUMERATED { north, south },
    latitude                INTEGER (0..8388607),
    longitude               INTEGER (-8388608..8388607),
    uncertaintySemiMajor    INTEGER (0..127),
    uncertaintySemiMinor    INTEGER (0..127),
    -- Actual value orientationMajorAxis = IE value * 2
    orientationMajorAxis    INTEGER (0..89),
    confidence              INTEGER (0..100)
}


EnvironmentCharacterisation ::=     ENUMERATED {
                                        possibleHeavyMultipathNLOS,
                                        lightMultipathLOS,
                                        notDefined,
```

```
                                    spare }

Event1a ::=                         SEQUENCE {
    triggeringCondition                 TriggeringCondition2,
    reportingRange                      ReportingRange,
    forbiddenAffectCellList             ForbiddenAffectCellList             OPTIONAL,
    w                                   W,
    reportDeactivationThreshold         ReportDeactivationThreshold,
    reportingAmount                     ReportingAmount,
    reportingInterval                   ReportingInterval
}

Event1a-r4 ::=                      SEQUENCE {
    triggeringCondition                 TriggeringCondition2,
    reportingRange                      ReportingRange,
    forbiddenAffectCellList             ForbiddenAffectCellList-r4          OPTIONAL,
    w                                   W,
    reportDeactivationThreshold         ReportDeactivationThreshold,
    reportingAmount                     ReportingAmount,
    reportingInterval                   ReportingInterval
}

Event1a-LCR-r4 ::=                  SEQUENCE {
    triggeringCondition                 TriggeringCondition2,
    reportingRange                      ReportingRange,
    forbiddenAffectCellList             ForbiddenAffectCellList-LCR-r4          OPTIONAL,
    w                                   W,
    reportDeactivationThreshold         ReportDeactivationThreshold,
    reportingAmount                     ReportingAmount,
    reportingInterval                   ReportingInterval
}

Event1b ::=                         SEQUENCE {
    triggeringCondition                 TriggeringCondition1,
    reportingRange                      ReportingRange,
    forbiddenAffectCellList             ForbiddenAffectCellList             OPTIONAL,
    w                                   W
}

Event1b-r4 ::=                      SEQUENCE {
    triggeringCondition                 TriggeringCondition1,
    reportingRange                      ReportingRange,
    forbiddenAffectCellList             ForbiddenAffectCellList-r4          OPTIONAL,
    w                                   W
}

Event1b-LCR-r4 ::=                  SEQUENCE {
    triggeringCondition                 TriggeringCondition1,
    reportingRange                      ReportingRange,
    forbiddenAffectCellList             ForbiddenAffectCellList-LCR-r4          OPTIONAL,
    w                                   W
}

Event1c ::=                         SEQUENCE {
    replacementActivationThreshold      ReplacementActivationThreshold,
    reportingAmount                     ReportingAmount,
    reportingInterval                   ReportingInterval
}

Event1d ::=                         SEQUENCE {
    triggeringCondition                 TriggeringCondition2    OPTIONAL,
    useCIO                              BOOLEAN                 OPTIONAL
}

Event1e ::=                     SEQUENCE {
    triggeringCondition             TriggeringCondition2,
    thresholdUsedFrequency          ThresholdUsedFrequency
}

Event1e-r6 ::=                  SEQUENCE {
    triggeringCondition             TriggeringCondition2,
    thresholdUsedFrequency          ThresholdUsedFrequency-r6
}

Event1f ::=                     SEQUENCE {
    triggeringCondition             TriggeringCondition1,
    thresholdUsedFrequency          ThresholdUsedFrequency
}
```


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```
Event1f-r6 ::=                  SEQUENCE {
    triggeringCondition                 TriggeringCondition1,
    thresholdUsedFrequency              ThresholdUsedFrequency-r6
}

Event1j-r6 ::=                  SEQUENCE {
    replacementActivationThreshold      ReplacementActivationThreshold,
    reportingAmount                     ReportingAmount,
    reportingInterval                   ReportingInterval
}

Event2a ::=                         SEQUENCE {
    -- dummy is not used in this version of the specification and should be ignored
    dummy                               Threshold,
    usedFreqW                           W,
    hysteresis                          HysteresisInterFreq,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL,
    nonUsedFreqParameterList            NonUsedFreqParameterList            OPTIONAL
}

Event2a-r6 ::=                      SEQUENCE {
    usedFreqW                           W,
    hysteresis                          HysteresisInterFreq,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL,
    nonUsedFreqParameterList            NonUsedFreqWList-r6                 OPTIONAL
}

Event2b ::=                         SEQUENCE {
    usedFreqThreshold                   Threshold,
    usedFreqW                           W,
    hysteresis                          HysteresisInterFreq,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL,
    nonUsedFreqParameterList            NonUsedFreqParameterList            OPTIONAL
}

Event2b-r6 ::=                      SEQUENCE {
    usedFreqThreshold                   Threshold-r6,
    usedFreqW                           W,
    hysteresis                          HysteresisInterFreq,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL,
    nonUsedFreqParameterList            NonUsedFreqParameterList-r6         OPTIONAL
}

Event2c ::=                         SEQUENCE {
    hysteresis                          HysteresisInterFreq,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL,
    nonUsedFreqParameterList            NonUsedFreqParameterList            OPTIONAL
}

Event2c-r6 ::=                      SEQUENCE {
    hysteresis                          HysteresisInterFreq,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL,
    nonUsedFreqParameterList            NonUsedFreqParameterList-r6         OPTIONAL
}

Event2d ::=                         SEQUENCE {
    usedFreqThreshold                   Threshold,
    usedFreqW                           W,
    hysteresis                          HysteresisInterFreq,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL
}

Event2d-r6 ::=                      SEQUENCE {
    usedFreqThreshold                   Threshold-r6,
    usedFreqW                           W,
    hysteresis                          HysteresisInterFreq,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL
}
```


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```
Event2e ::=                         SEQUENCE {
    hysteresis                          HysteresisInterFreq,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL,
    nonUsedFreqParameterList            NonUsedFreqParameterList            OPTIONAL
}

Event2e-r6 ::=                      SEQUENCE {
    hysteresis                          HysteresisInterFreq,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL,
    nonUsedFreqParameterList            NonUsedFreqParameterList-r6         OPTIONAL
}

Event2f ::=                         SEQUENCE {
    usedFreqThreshold                   Threshold,
    usedFreqW                           W,
    hysteresis                          HysteresisInterFreq,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL
}

Event2f-r6 ::=                      SEQUENCE {
    usedFreqThreshold                   Threshold-r6,
    usedFreqW                           W,
    hysteresis                          HysteresisInterFreq,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL
}

Event3a ::=                         SEQUENCE {
    thresholdOwnSystem                  Threshold,
    w                                   W,
    thresholdOtherSystem                Threshold,
    hysteresis                          Hysteresis,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL
}

Event3b ::=                         SEQUENCE {
    thresholdOtherSystem                Threshold,
    hysteresis                          Hysteresis,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL

}

Event3c ::=                         SEQUENCE {
    thresholdOtherSystem                Threshold,
    hysteresis                          Hysteresis,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL
}

Event3d ::=                         SEQUENCE {
    hysteresis                          Hysteresis,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL
}

EventIDInterFreq ::=                ENUMERATED {
                                        e2a, e2b, e2c, e2d, e2e, e2f, spare2, spare1 }

EventIDInterRAT ::=                 ENUMERATED {
                                        e3a, e3b, e3c, e3d }

EventIDIntraFreq ::=                ENUMERATED {
                                        e1a, e1b, e1c, e1d, e1e,
                                        e1f, e1g, e1h, e1i, e1j,
                                        spare6, spare5, spare4, spare3, spare2,
                                        spare1 }

EventResults ::=                    CHOICE {
    intraFreqEventResults               IntraFreqEventResults,
    interFreqEventResults               InterFreqEventResults,
    interRATEventResults                InterRATEventResults,
    trafficVolumeEventResults           TrafficVolumeEventResults,
    qualityEventResults                 QualityEventResults,
```


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```
    ue-InternalEventResults             UE-InternalEventResults,
    ue-positioning-MeasurementEventResults          UE-Positioning-MeasurementEventResults,
    spare                               NULL
}

ExtraDoppler ::=                    SEQUENCE {
    dopplerFirstOrder                   INTEGER (-42.. 21),
    dopplerUncertainty                  ENUMERATED { dopU40, dopU20, dopU10, dopU5, dopU2-5, spare }
}

ExtraDopplerInfo ::=                SEQUENCE {
    -- Actual value doppler1stOrder = IE value * 0.023
    doppler1stOrder                     INTEGER (-42..21),
    dopplerUncertainty                  DopplerUncertainty
}

FACH-MeasurementOccasionInfo ::=    SEQUENCE {
    fACH-meas-occasion-coeff            INTEGER (1..12)                     OPTIONAL,
    inter-freq-FDD-meas-ind             BOOLEAN,
    -- inter-freq-TDD-meas-ind is for 3.84Mcps TDD and 7.68 Mcps TDD. For 1.28Mcps TDD, the IE in
    -- FACH-MeasurementOccasionInfo-LCR-r4-ext is used.
    inter-freq-TDD-meas-ind             BOOLEAN,
    inter-RAT-meas-ind                  SEQUENCE (SIZE (1..maxOtherRAT)) OF
                                            RAT-Type                        OPTIONAL
}

FACH-MeasurementOccasionInfo-LCR-r4-ext ::= SEQUENCE {
    inter-freq-TDD128-meas-ind                  BOOLEAN
}

FilterCoefficient ::=               ENUMERATED {
                                        fc0, fc1, fc2, fc3, fc4, fc5,
                                        fc6, fc7, fc8, fc9, fc11, fc13,
                                        fc15, fc17, fc19, spare1 }

-- Actual value FineSFN-SFN = IE value * 0.0625
FineSFN-SFN ::=                     INTEGER (0..15)

ForbiddenAffectCell ::=             CHOICE {
    fdd                                 PrimaryCPICH-Info,
    tdd                                 PrimaryCCPCH-Info
}

ForbiddenAffectCell-r4 ::=          CHOICE {
    fdd                                 PrimaryCPICH-Info,
    tdd                                 PrimaryCCPCH-Info-r4
}

ForbiddenAffectCell-LCR-r4 ::=      SEQUENCE {
    tdd                                 PrimaryCCPCH-Info-LCR-r4
}

ForbiddenAffectCellList ::=         SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        ForbiddenAffectCell

ForbiddenAffectCellList-r4 ::=          SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        ForbiddenAffectCell-r4

ForbiddenAffectCellList-LCR-r4 ::=  SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        ForbiddenAffectCell-LCR-r4

FreqQualityEstimateQuantity-FDD ::= ENUMERATED {
                                        cpich-Ec-N0,
                                        cpich-RSCP }

FreqQualityEstimateQuantity-TDD ::= ENUMERATED {
                                        primaryCCPCH-RSCP }

GanssDataBits ::=                   SEQUENCE {
    ganssTod                            INTEGER (0..86399),
    dataBitAssistancelist               ReqDataBitAssistanceList
}

GANSSDecipheringKeys ::=            SEQUENCE {
    currentDecipheringKey               BIT STRING (SIZE (56)),
    nextDecipheringKey                  BIT STRING (SIZE (56))
}
```


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```
GANSSGenericData ::=                SEQUENCE {
    ganssId                             INTEGER (0..7)                                  OPTIONAL,
    ganssTimeModelsList                 GANSSTimeModelsList                             OPTIONAL,
    uePositioningDGANSSCorrections      UE-Positioning-DGANSSCorrections                OPTIONAL,
    uePositioningGANSSNavigationModel   UE-Positioning-GANSS-NavigationModel            OPTIONAL,
    uePositioningGANSSRealTimeIntegrity     UE-Positioning-GANSS-RealTimeIntegrity      OPTIONAL,
    uePositioningGANSSDataBitAssistance     UE-Positioning-GANSS-Data-Bit-Assistance    OPTIONAL,
    uePositioningGANSSReferenceMeasurementInfo
                                        UE-Positioning-GANSS-ReferenceMeasurementInfo   OPTIONAL,
    uePositioningGANSSAlmanac           UE-Positioning-GANSS-Almanac                    OPTIONAL,
    uePositioningGANSSUTCModel          UE-Positioning-GANSS-UTCModel                   OPTIONAL
}

GANSSGenericDataList ::=            SEQUENCE (SIZE (1..maxGANSS)) OF
                                        GANSSGenericData

GANSSGenericMeasurementInfo ::=     SEQUENCE (SIZE (1..maxGANSS)) OF SEQUENCE {
    ganssId                             INTEGER (0..7)                      OPTIONAL,
    ganssSignalId                       INTEGER (0..3)                      OPTIONAL,
    ganssMeasurementParameters          GANSSMeasurementParameters
}

GANSSMeasurementParameters ::=      SEQUENCE (SIZE (1..maxGANSSSat)) OF SEQUENCE {
    satId                               INTEGER (0..63),
    cSurNzero                           INTEGER (0..63),
    multipathIndicator                  ENUMERATED { nm, low, medium, high },
    carrierQualityIndication            BIT STRING (SIZE (2))               OPTIONAL,
    codePhase                           INTEGER (0..2097151),
    integerCodePhase                    INTEGER (0..63)                     OPTIONAL,
    codePhaseRmsError                   INTEGER (0..63),
    doppler                             INTEGER (-32768..32767),
    adr                                 INTEGER (0..33554431)               OPTIONAL
}

GanssNavigationModelAdditionalData ::= SEQUENCE {
    ganssWeek                           INTEGER (0..4095),
    ganssToe                            INTEGER (0..167),
    t-toeLimit                          INTEGER (0..10),
    satellitesListRelatedDataList       SatellitesListRelatedDataList
}

GANSSReferenceTimeOnly ::=          SEQUENCE {
    gANSS-tod                           INTEGER (0..3599999),
    gANSS-timeId                        INTEGER (0..7)                      OPTIONAL
}

GanssReqGenericData ::=             SEQUENCE {
    ganssId                             INTEGER (0..7)                      OPTIONAL,
    ganssRealTimeIntegrity              BOOLEAN                             OPTIONAL,
    ganssDifferentialCorrection         DGANSS-Sig-Id-Req                   OPTIONAL,
    ganssAlmanac                        BOOLEAN                             OPTIONAL,
    ganssNavigationModel                BOOLEAN                             OPTIONAL,
    ganssTimeModels                     BIT STRING (SIZE (8))               OPTIONAL,
    ganssReferenceMeasurementInfo       BOOLEAN                             OPTIONAL,
    ganssDataBits                       GanssDataBits                       OPTIONAL,
    ganssUTCModel                       BOOLEAN                             OPTIONAL,
    ganssNavigationModelAdditionalData  GanssNavigationModelAdditionalData  OPTIONAL
}

GanssRequestedGenericAssistanceDataList ::= SEQUENCE (SIZE (1..maxGANSSSat)) OF
                                        GanssReqGenericData

GANSSSatelliteInformation ::=       SEQUENCE {
    ganssSatId                          INTEGER (0..63),
    dopplerZeroOrder                    INTEGER (-2048..2047),
    extraDoppler                        ExtraDoppler                        OPTIONAL,
    codePhase                           INTEGER (0..1023),
    integerCodePhase                    INTEGER (0..127),
    codePhaseSearchWindow               INTEGER (0..31),
    azimuthandElevation                 AzimuthAndElevation                 OPTIONAL
}

GANSSSatelliteInformationList ::=   SEQUENCE (SIZE (1..maxGANSSSat)) OF
                                        GANSSSatelliteInformation

GANSSTimeModelsList ::=             SEQUENCE (SIZE (1..maxGANSS-1)) OF
                                        UE-Positioning-GANSS-TimeModel
```


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```
GANSS-SAT-Info-Almanac-Kp ::=       SEQUENCE {
    ganss-alm-e                         BIT STRING (SIZE (11)),
    ganss-delta-I-alm                   BIT STRING (SIZE (11)),
    ganss-omegadot-alm                  BIT STRING (SIZE (11)),
    ganss-svhealth-alm                  BIT STRING (SIZE (4)),
    ganss-delta-a-sqrt-alm              BIT STRING (SIZE (17)),
    ganss-omegazero-alm                 BIT STRING (SIZE (16)),
    ganss-m-zero-alm                    BIT STRING (SIZE (16)),
    ganss-omega-alm                     BIT STRING (SIZE (16)),
    ganss-af-zero-alm                   BIT STRING (SIZE (14)),
    ganss-af-one-alm                    BIT STRING (SIZE (11))
}

GANSS-SAT-Info-Almanac-KpList ::=   SEQUENCE (SIZE (1..maxGANSSSat)) OF
                                        GANSS-SAT-Info-Almanac-Kp

Ganss-Sat-Info-Nav ::=              SEQUENCE {
    satId                               INTEGER (0..63),
    svHealth                            BIT STRING (SIZE (5)),
    iod                                 BIT STRING (SIZE (10)),
    ganssClockModel                     UE-Positioning-GANSS-ClockModel,
    ganssOrbitModel                     UE-Positioning-GANSS-OrbitModel
}

Ganss-Sat-Info-NavList ::=          SEQUENCE (SIZE (1..maxGANSSSat)) OF
                                        Ganss-Sat-Info-Nav

GANSS-Signal-Id ::=                 INTEGER (0..3)

GANSS-Status-Health ::=             ENUMERATED {
                                        udre-scale-1dot0,
                                        udre-scale-0dot75,
                                        udre-scale-0dot5,
                                        udre-scale-0dot3,
                                        udre-scale-0dot1,
                                        no-data,
                                        invalid-data }

GANSS-Storm-Flag ::=                SEQUENCE {
    storm-flag-one                      BOOLEAN,
    storm-flag-two                      BOOLEAN,
    storm-flag-three                    BOOLEAN,
    storm-flag-four                     BOOLEAN,
    storm-flag-five                     BOOLEAN
}

GPS-MeasurementParam ::=            SEQUENCE {
    satelliteID                         INTEGER (0..63),
    c-N0                                INTEGER (0..63),
    doppler                             INTEGER (-32768..32768),
    wholeGPS-Chips                      INTEGER (0..1022),
    fractionalGPS-Chips                 INTEGER (0..1023),
    multipathIndicator                  MultipathIndicator,
    pseudorangeRMS-Error                INTEGER (0..63)
}

GPS-MeasurementParamList ::=        SEQUENCE (SIZE (1..maxSat)) OF
                                        GPS-MeasurementParam

GSM-CarrierRSSI ::=                 BIT STRING (SIZE (6))


GSM-MeasuredResults ::=             SEQUENCE {
    gsm-CarrierRSSI                     GSM-CarrierRSSI                     OPTIONAL,
    -- dummy is not used in this version of the specification, it should
    -- not be sent and if received it should be ignored.
    dummy                               INTEGER (46..173)                   OPTIONAL,
    bsicReported                        BSICReported,
    -- dummy2 is not used in this version of the specification, it should
    -- not be sent and if received it should be ignored.
    dummy2                              ObservedTimeDifferenceToGSM         OPTIONAL
}

GSM-MeasuredResultsList ::=         SEQUENCE (SIZE (1..maxReportedGSMCells)) OF
                                        GSM-MeasuredResults

GPS-TOW-1msec ::=                   INTEGER (0..604799999)
```

```
GPS-TOW-Assist ::=                  SEQUENCE {
    satID                               SatID,
    tlm-Message                         BIT STRING (SIZE (14)),
    tlm-Reserved                        BIT STRING (SIZE (2)),
    alert                               BOOLEAN,
    antiSpoof                           BOOLEAN
}

GPS-TOW-AssistList ::=              SEQUENCE (SIZE (1..maxSat)) OF
                                        GPS-TOW-Assist

HCS-CellReselectInformation-RSCP ::=        SEQUENCE {
    -- TABULAR: The default value for penaltyTime is "notUsed"
    -- Temporary offset is nested inside PenaltyTime-RSCP
    penaltyTime                                 PenaltyTime-RSCP
}

HCS-CellReselectInformation-ECN0 ::=        SEQUENCE {
    -- TABULAR: The default value for penaltyTime is "notUsed"
    -- Temporary offset is nested inside PenaltyTime-ECN0
    penaltyTime                         PenaltyTime-ECN0
}

HCS-NeighbouringCellInformation-RSCP ::= SEQUENCE {
    hcs-PRIO                            HCS-PRIO                            DEFAULT 0,
    q-HCS                               Q-HCS                               DEFAULT 0,
    hcs-CellReselectInformation         HCS-CellReselectInformation-RSCP
}

HCS-NeighbouringCellInformation-ECN0 ::= SEQUENCE {
    hcs-PRIO                            HCS-PRIO                            DEFAULT 0,
    q-HCS                               Q-HCS                               DEFAULT 0,
    hcs-CellReselectInformation         HCS-CellReselectInformation-ECN0
}

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

HCS-ServingCellInformation ::=      SEQUENCE {
    hcs-PRIO                            HCS-PRIO                            DEFAULT 0,
    q-HCS                               Q-HCS                               DEFAULT 0,
    t-CR-Max                            T-CRMax                             OPTIONAL
}

HorizontalVelocity ::=              SEQUENCE {
    bearing                             INTEGER (0..359),
    horizontalSpeed                     INTEGER (0..2047)
    }

HorizontalWithVerticalVelocity ::=  SEQUENCE {
    verticalSpeedDirection              ENUMERATED { upward, downward },
    bearing                             INTEGER (0..359),
    horizontalSpeed                     INTEGER (0..2047),
    verticalSpeed                       INTEGER (0..255)
}

HorizontalVelocityWithUncertainty ::=   SEQUENCE {
    bearing                             INTEGER (0..359),
    horizontalSpeed                     INTEGER (0..2047),
    horizontalSpeedUncertainty          INTEGER (0..255)
}

HorizontalWithVerticalVelocityAndUncertainty ::=    SEQUENCE {
    verticalSpeedDirection              ENUMERATED { upward, downward },
    bearing                             INTEGER (0..359),
    horizontalSpeed                     INTEGER (0..2047),
    verticalSpeed                       INTEGER (0..255),
    horizontalSpeedUncertainty          INTEGER (0..255)
}

-- Actual value Hysteresis = IE value * 0.5
Hysteresis ::=                      INTEGER (0..15)

-- Actual value HysteresisInterFreq = IE value * 0.5
HysteresisInterFreq ::=             INTEGER (0..29)

InterFreqCell ::=                   SEQUENCE {
    frequencyInfo                       FrequencyInfo,
    nonFreqRelatedEventResults          CellMeasurementEventResults
```


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```
}

InterFreqCell-LCR-r4 ::=            SEQUENCE {
    frequencyInfo                       FrequencyInfo,
    nonFreqRelatedEventResults          CellMeasurementEventResults-LCR-r4
}

InterFreqCellID ::=                 INTEGER (0..maxCellMeas-1)

InterFreqCellInfoList ::=           SEQUENCE {
    removedInterFreqCellList            RemovedInterFreqCellList            OPTIONAL,
    newInterFreqCellList                NewInterFreqCellList                OPTIONAL,
    cellsForInterFreqMeasList           CellsForInterFreqMeasList           OPTIONAL
}

InterFreqCellInfoList-r4 ::=        SEQUENCE {
    removedInterFreqCellList            RemovedInterFreqCellList            OPTIONAL,
    newInterFreqCellList                NewInterFreqCellList-r4             OPTIONAL,
    cellsForInterFreqMeasList           CellsForInterFreqMeasList           OPTIONAL
}

InterFreqCellInfoSI-List-RSCP ::=       SEQUENCE {
    removedInterFreqCellList            RemovedInterFreqCellList            OPTIONAL,
    newInterFreqCellList                NewInterFreqCellSI-List-RSCP        OPTIONAL
}

InterFreqCellInfoSI-List-ECN0 ::=       SEQUENCE {
    removedInterFreqCellList            RemovedInterFreqCellList            OPTIONAL,
    newInterFreqCellList                NewInterFreqCellSI-List-ECN0        OPTIONAL
}

InterFreqCellInfoSI-List-HCS-RSCP ::=       SEQUENCE {
    removedInterFreqCellList            RemovedInterFreqCellList            OPTIONAL,
    newInterFreqCellList                NewInterFreqCellSI-List-HCS-RSCP    OPTIONAL
}
InterFreqCellInfoSI-List-HCS-ECN0 ::=       SEQUENCE {
    removedInterFreqCellList            RemovedInterFreqCellList            OPTIONAL,
    newInterFreqCellList                NewInterFreqCellSI-List-HCS-ECN0    OPTIONAL
}

InterFreqCellInfoSI-List-RSCP-LCR ::=       SEQUENCE {
    removedInterFreqCellList            RemovedInterFreqCellList            OPTIONAL,
    newInterFreqCellList                NewInterFreqCellSI-List-RSCP-LCR-r4     OPTIONAL
}

InterFreqCellInfoSI-List-ECN0-LCR ::=       SEQUENCE {
    removedInterFreqCellList            RemovedInterFreqCellList            OPTIONAL,
    newInterFreqCellList                NewInterFreqCellSI-List-ECN0-LCR-r4     OPTIONAL
}

InterFreqCellInfoSI-List-HCS-RSCP-LCR ::=       SEQUENCE {
    removedInterFreqCellList            RemovedInterFreqCellList            OPTIONAL,
    newInterFreqCellList                NewInterFreqCellSI-List-HCS-RSCP-LCR-r4 OPTIONAL
}
InterFreqCellInfoSI-List-HCS-ECN0-LCR ::=       SEQUENCE {
    removedInterFreqCellList            RemovedInterFreqCellList            OPTIONAL,
    newInterFreqCellList                NewInterFreqCellSI-List-HCS-ECN0-LCR-r4 OPTIONAL
}

InterFreqCellList ::=               SEQUENCE (SIZE (1..maxFreq)) OF
                                        InterFreqCell

InterFreqCellList-LCR-r4-ext ::=    SEQUENCE (SIZE (1..maxFreq)) OF
                                        InterFreqCell-LCR-r4

InterFreqCellMeasuredResultsList ::= SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        CellMeasuredResults

InterFreqEvent ::=                  CHOICE {
    event2a                             Event2a,
    event2b                             Event2b,
    event2c                             Event2c,
    event2d                             Event2d,
    event2e                             Event2e,
    event2f                             Event2f
}

InterFreqEvent-r6 ::=               CHOICE {
```

```
    event2a                             Event2a-r6,
    event2b                             Event2b-r6,
    event2c                             Event2c-r6,
    event2d                             Event2d-r6,
    event2e                             Event2e-r6,
    event2f                             Event2f-r6
}

InterFreqEventList ::=              SEQUENCE (SIZE (1..maxMeasEvent)) OF
                                        InterFreqEvent

InterFreqEventList-r6 ::=           SEQUENCE (SIZE (1..maxMeasEvent)) OF
                                        InterFreqEvent-r6

--Following IE shall be used regardless of CPICH RSCP(FDD) or Primary CCPCH RSCP(TDD)
--The order of the list corresponds to the order of the cells in InterFrequencyMeasuredResultsList
--The IE is only used for measured results and not for additional measured results.
InterFrequencyMeasuredResultsList-v590ext ::= SEQUENCE (SIZE (1..maxCellMeas)) OF
                                            DeltaRSCPPerCell

Inter-FreqEventCriteria-v590ext ::= SEQUENCE {
    threholdUsedFrequency-delta             DeltaRSCP,
    threholdNonUsedFrequency-deltaList      ThreholdNonUsedFrequency-deltaList      OPTIONAL
}

--The order of the list corresponds to the order of the events in Inter-FreqEventList
Inter-FreqEventCriteriaList-v590ext ::= SEQUENCE (SIZE (1..maxMeasEvent)) OF
                                            Inter-FreqEventCriteria-v590ext

--The order of the list corresponds to the order of relevant events in Intra-FreqEventCriteriaList
--i.e. the first element of the list corresponds to the first occurance of event 1e, 1f, 1h, 1i,
--the second element of the list corresponds to the second occurance of event 1e, 1f, 1h, 1i
Intra-FreqEventCriteriaList-v590ext ::= SEQUENCE (SIZE (1..maxMeasEvent)) OF
                                            DeltaRSCP

--Following IE shall be used regardless of CPICH RSCP(FDD) or Primary CCPCH RSCP(TDD)
--The order of the list corresponds to the order of the cells in IntraFrequencyMeasuredResultsList
--The IE is only used for measured results and not for additional measured results.
IntraFrequencyMeasuredResultsList-v590ext ::= SEQUENCE (SIZE (1..maxCellMeas)) OF
                                            DeltaRSCPPerCell

IntraFreqReportingCriteria-1b-r5 ::= SEQUENCE {
    periodicReportingInfo-1b            PeriodicReportingInfo-1b
}

PeriodicReportingInfo-1b ::= SEQUENCE {
    reportingAmount                     ReportingAmount,
    reportingInterval                   ReportingInterval
}

InterFreqEventResults ::=           SEQUENCE {
    eventID                             EventIDInterFreq,
    interFreqCellList                   InterFreqCellList                   OPTIONAL
}

InterFreqEventResults-LCR-r4-ext ::=    SEQUENCE {
    eventID                             EventIDInterFreq,
    interFreqCellList                   InterFreqCellList-LCR-r4-ext        OPTIONAL
}

InterFreqMeasQuantity ::=           SEQUENCE {
    reportingCriteria                   CHOICE {
        intraFreqReportingCriteria          SEQUENCE {
            intraFreqMeasQuantity               IntraFreqMeasQuantity
        },
        interFreqReportingCriteria          SEQUENCE {
            filterCoefficient                   FilterCoefficient           DEFAULT fc0,
            modeSpecificInfo                    CHOICE {
                fdd                                 SEQUENCE {
                    freqQualityEstimateQuantity-FDD     FreqQualityEstimateQuantity-FDD
                },
                tdd                                 SEQUENCE {
                    freqQualityEstimateQuantity-TDD     FreqQualityEstimateQuantity-TDD
                }
            }
        }
    }
}
```


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```
InterFreqMeasuredResults ::=        SEQUENCE {
    frequencyInfo                       FrequencyInfo                       OPTIONAL,
    utra-CarrierRSSI                    UTRA-CarrierRSSI                    OPTIONAL,
    interFreqCellMeasuredResultsList    InterFreqCellMeasuredResultsList    OPTIONAL
}

InterFreqMeasuredResultsList ::=    SEQUENCE (SIZE (1..maxFreq)) OF
                                        InterFreqMeasuredResults


InterFreqMeasurementSysInfo-RSCP ::=    SEQUENCE {
    interFreqCellInfoSI-List                InterFreqCellInfoSI-List-RSCP       OPTIONAL
}

InterFreqMeasurementSysInfo-ECN0 ::=        SEQUENCE {
    interFreqCellInfoSI-List            InterFreqCellInfoSI-List-ECN0       OPTIONAL
}

InterFreqMeasurementSysInfo-HCS-RSCP ::=        SEQUENCE {
    interFreqCellInfoSI-List            InterFreqCellInfoSI-List-HCS-RSCP   OPTIONAL
}

InterFreqMeasurementSysInfo-HCS-ECN0 ::=        SEQUENCE {
    interFreqCellInfoSI-List            InterFreqCellInfoSI-List-HCS-ECN0   OPTIONAL
}

InterFreqMeasurementSysInfo-RSCP-LCR-r4 ::= SEQUENCE {
    interFreqCellInfoSI-List                InterFreqCellInfoSI-List-RSCP-LCR       OPTIONAL
}

InterFreqMeasurementSysInfo-ECN0-LCR-r4 ::=     SEQUENCE {
    interFreqCellInfoSI-List            InterFreqCellInfoSI-List-ECN0-LCR       OPTIONAL
}

InterFreqMeasurementSysInfo-HCS-RSCP-LCR-r4 ::=     SEQUENCE {
    interFreqCellInfoSI-List            InterFreqCellInfoSI-List-HCS-RSCP-LCR   OPTIONAL
}

InterFreqMeasurementSysInfo-HCS-ECN0-LCR-r4 ::=     SEQUENCE {
    interFreqCellInfoSI-List            InterFreqCellInfoSI-List-HCS-ECN0-LCR   OPTIONAL
}

InterFreqRACHRepCellsList ::=           SEQUENCE (SIZE (1..maxFreq)) OF
InterFreqCellID

Dummy-InterFreqRACHReportingInfo ::= SEQUENCE {
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            interFreqRepQuantityRACH-FDD        InterFreqRepQuantityRACH-FDD
        },
        tdd                                 SEQUENCE {
            interFreqRepQuantityRACH-TDDList    InterFreqRepQuantityRACH-TDDList
        },
    interFreqRACHReportingThreshold     Threshold,
    maxReportedCellsOnRACHinterFreq     MaxReportedCellsOnRACHinterFreq
    }
}

InterFreqRACHReportingInfo ::= SEQUENCE {
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            interFreqRepQuantityRACH-FDD        InterFreqRepQuantityRACH-FDD
        },
        tdd                                 SEQUENCE {
            interFreqRepQuantityRACH-TDDList    InterFreqRepQuantityRACH-TDDList
        }
    },
    interFreqRACHReportingThreshold     Threshold,
    maxReportedCellsOnRACHinterFreq     MaxReportedCellsOnRACHinterFreq
}

InterFreqReportCriteria ::=         CHOICE {
    intraFreqReportingCriteria          IntraFreqReportingCriteria,
    interFreqReportingCriteria          InterFreqReportingCriteria,
    periodicalReportingCriteria         PeriodicalWithReportingCellStatus,
    noReporting                         ReportingCellStatusOpt
}
```


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```
InterFreqReportCriteria-r4 ::=      CHOICE {
    intraFreqReportingCriteria          IntraFreqReportingCriteria-r4,
    interFreqReportingCriteria          InterFreqReportingCriteria,
    periodicalReportingCriteria         PeriodicalWithReportingCellStatus,
    noReporting                         ReportingCellStatusOpt
}

InterFreqReportCriteria-r6 ::=      CHOICE {
    intraFreqReportingCriteria          IntraFreqReportingCriteria-r6,
    interFreqReportingCriteria          InterFreqReportingCriteria-r6,
    periodicalReportingCriteria         PeriodicalWithReportingCellStatus,
    noReporting                         ReportingCellStatusOpt
}

InterFreqReportingCriteria ::=      SEQUENCE {
    interFreqEventList                  InterFreqEventList                  OPTIONAL
}

InterFreqReportingCriteria-r6 ::=   SEQUENCE {
    interFreqEventList                  InterFreqEventList-r6               OPTIONAL
}

InterFreqReportingQuantity ::=      SEQUENCE {
    utra-Carrier-RSSI                   BOOLEAN,
    frequencyQualityEstimate            BOOLEAN,
    nonFreqRelatedQuantities            CellReportingQuantities
}

InterFreqRepQuantityRACH-FDD ::=    ENUMERATED {
                                        cpich-EcN0, cpich-RSCP }

InterFreqRepQuantityRACH-TDD ::=    ENUMERATED {
                                        timeslotISCP,
                                        primaryCCPCH-RSCP }

InterFreqRepQuantityRACH-TDDList ::= SEQUENCE (SIZE (1..2)) OF
                                        InterFreqRepQuantityRACH-TDD

InterFrequencyMeasurement ::=       SEQUENCE {
    interFreqCellInfoList               InterFreqCellInfoList,
    interFreqMeasQuantity               InterFreqMeasQuantity               OPTIONAL,
    interFreqReportingQuantity          InterFreqReportingQuantity          OPTIONAL,
    measurementValidity                 MeasurementValidity                 OPTIONAL,
    interFreqSetUpdate                  UE-AutonomousUpdateMode             OPTIONAL,
    reportCriteria                      InterFreqReportCriteria
}

InterFrequencyMeasurement-r4 ::=    SEQUENCE {
    interFreqCellInfoList               InterFreqCellInfoList-r4,
    interFreqMeasQuantity               InterFreqMeasQuantity               OPTIONAL,
    interFreqReportingQuantity          InterFreqReportingQuantity          OPTIONAL,
    measurementValidity                 MeasurementValidity                 OPTIONAL,
    interFreqSetUpdate                  UE-AutonomousUpdateMode             OPTIONAL,
    reportCriteria                      InterFreqReportCriteria-r4
}

InterFrequencyMeasurement-r6 ::=    SEQUENCE {
    interFreqCellInfoList               InterFreqCellInfoList-r4,
    interFreqMeasQuantity               InterFreqMeasQuantity               OPTIONAL,
    interFreqReportingQuantity          InterFreqReportingQuantity          OPTIONAL,
    measurementValidity                 MeasurementValidity                 OPTIONAL,
    interFreqSetUpdate                  UE-AutonomousUpdateMode             OPTIONAL,
    reportCriteria                      InterFreqReportCriteria-r6
}

InterRAT-TargetCellDescription ::=  SEQUENCE {
    technologySpecificInfo              CHOICE {
        gsm                                 SEQUENCE {
            bsic                                BSIC,
            frequency-band                      Frequency-Band,
            bcch-ARFCN                          BCCH-ARFCN,
            ncMode                              NC-Mode             OPTIONAL
        },
        is-2000                             NULL,
        spare2                              NULL,
        spare1                              NULL
    }
```


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```
}

InterRATCellID ::=              INTEGER (0..maxCellMeas-1)

InterRATCellInfoIndication ::=      INTEGER (0..3)

InterRATCellInfoList ::=            SEQUENCE {
    removedInterRATCellList         RemovedInterRATCellList,
    -- NOTE: Future revisions of dedicated messages including IE newInterRATCellList
    -- should use a corrected version of this IE
    newInterRATCellList             NewInterRATCellList,
    cellsForInterRATMeasList            CellsForInterRATMeasList            OPTIONAL
}

InterRATCellInfoList-B ::=          SEQUENCE {
    removedInterRATCellList         RemovedInterRATCellList,
    -- NOTE: IE newInterRATCellList should be optional.  However, system information
    -- does not support message versions.  Hence, this can not be corrected
    newInterRATCellList             NewInterRATCellList-B
}

InterRATCellInfoList-r4 ::=         SEQUENCE {
    removedInterRATCellList                 RemovedInterRATCellList,
    newInterRATCellList                     NewInterRATCellList                 OPTIONAL,
    cellsForInterRATMeasList                CellsForInterRATMeasList            OPTIONAL
}

InterRATCellInfoList-r6 ::=         SEQUENCE {
    removedInterRATCellList                 RemovedInterRATCellList,
    newInterRATCellList                     NewInterRATCellList                 OPTIONAL,
    cellsForInterRATMeasList                CellsForInterRATMeasList            OPTIONAL,
    interRATCellInfoIndication-r6           InterRATCellInfoIndication          OPTIONAL
}

InterRATCellIndividualOffset ::=            INTEGER (-50..50)

InterRATEvent ::=               CHOICE {
    event3a                             Event3a,
    event3b                             Event3b,
    event3c                             Event3c,
    event3d                             Event3d
}

InterRATEventList ::=           SEQUENCE (SIZE (1..maxMeasEvent)) OF
                                        InterRATEvent

InterRATEventResults ::=            SEQUENCE {
    eventID                             EventIDInterRAT,
    cellToReportList                    CellToReportList
}

InterRATInfo ::=                    ENUMERATED {
                                        gsm }

InterRATInfo-r6 ::=                 SEQUENCE {
    rat                                 InterRATInfo,
    gsm-TargetCellInfoList              GSM-TargetCellInfoList          OPTIONAL
}

InterRATMeasQuantity ::=                SEQUENCE {
    measQuantityUTRAN-QualityEstimate       IntraFreqMeasQuantity           OPTIONAL,
    ratSpecificInfo                     CHOICE {
        gsm                                     SEQUENCE {
            measurementQuantity                     MeasurementQuantityGSM,
            filterCoefficient                       FilterCoefficient       DEFAULT fc0,
            bsic-VerificationRequired               BSIC-VerificationRequired
        },
        is-2000                                 SEQUENCE {
            tadd-EcIo                               INTEGER (0..63),
            tcomp-EcIo                              INTEGER (0..15),
            softSlope                               INTEGER (0..63)         OPTIONAL,
            addIntercept                            INTEGER (0..63)         OPTIONAL
        }
    }
}

InterRATMeasuredResults ::=     CHOICE {
    gsm                                 GSM-MeasuredResultsList,
```


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```
    spare                               NULL
}

InterRATMeasuredResultsList ::= SEQUENCE (SIZE (1..maxOtherRAT-16)) OF
                                InterRATMeasuredResults

InterRATMeasurement ::=         SEQUENCE {
    interRATCellInfoList                InterRATCellInfoList                OPTIONAL,
    interRATMeasQuantity                InterRATMeasQuantity                OPTIONAL,
    interRATReportingQuantity           InterRATReportingQuantity       OPTIONAL,
    reportCriteria                      InterRATReportCriteria
}

InterRATMeasurement-r4 ::=          SEQUENCE {
    interRATCellInfoList                InterRATCellInfoList-r4             OPTIONAL,
    interRATMeasQuantity                InterRATMeasQuantity                OPTIONAL,
    interRATReportingQuantity           InterRATReportingQuantity       OPTIONAL,
    reportCriteria                      InterRATReportCriteria
}

InterRATMeasurement-r6 ::=          SEQUENCE {
    interRATCellInfoList                InterRATCellInfoList-r6             OPTIONAL,
    interRATMeasQuantity                InterRATMeasQuantity                OPTIONAL,
    interRATReportingQuantity           InterRATReportingQuantity       OPTIONAL,
    reportCriteria                      InterRATReportCriteria
}

InterRATMeasurementSysInfo ::=  SEQUENCE {
    interRATCellInfoList                InterRATCellInfoList                OPTIONAL
}

InterRATMeasurementSysInfo-B ::=    SEQUENCE {
    interRATCellInfoList                InterRATCellInfoList-B          OPTIONAL
}

InterRATReportCriteria ::=      CHOICE {
    interRATReportingCriteria           InterRATReportingCriteria,
    periodicalReportingCriteria         PeriodicalWithReportingCellStatus,
    noReporting                         ReportingCellStatusOpt
}

InterRATReportingCriteria ::=   SEQUENCE {
    interRATEventList               InterRATEventList               OPTIONAL
}

InterRATReportingQuantity ::=   SEQUENCE {
    utran-EstimatedQuality              BOOLEAN,
    ratSpecificInfo                 CHOICE {
        gsm                                 SEQUENCE {
            -- dummy and dummy2 are not used in this version of the specification
            -- and when received they should be ignored.
            dummy                               BOOLEAN,
            dummy2                              BOOLEAN,
            gsm-Carrier-RSSI                    BOOLEAN
        }
    }
}

IntraFreqCellID ::=                 INTEGER (0..maxCellMeas-1)

IntraFreqCellInfoList ::=           SEQUENCE {
    removedIntraFreqCellList            RemovedIntraFreqCellList            OPTIONAL,
    newIntraFreqCellList                NewIntraFreqCellList                OPTIONAL,
    cellsForIntraFreqMeasList           CellsForIntraFreqMeasList           OPTIONAL
}

IntraFreqCellInfoList-r4 ::=        SEQUENCE {
    removedIntraFreqCellList            RemovedIntraFreqCellList            OPTIONAL,
    newIntraFreqCellList                NewIntraFreqCellList-r4             OPTIONAL,
    cellsForIntraFreqMeasList           CellsForIntraFreqMeasList           OPTIONAL
}

IntraFreqCellInfoSI-List-RSCP ::=   SEQUENCE {
    removedIntraFreqCellList            RemovedIntraFreqCellList            OPTIONAL,
    newIntraFreqCellList                NewIntraFreqCellSI-List-RSCP
}

IntraFreqCellInfoSI-List-ECN0 ::=       SEQUENCE {
```

```
    removedIntraFreqCellList            RemovedIntraFreqCellList            OPTIONAL,
    newIntraFreqCellList                NewIntraFreqCellSI-List-ECN0
}

IntraFreqCellInfoSI-List-HCS-RSCP ::=       SEQUENCE {
    removedIntraFreqCellList            RemovedIntraFreqCellList            OPTIONAL,
    newIntraFreqCellList                NewIntraFreqCellSI-List-HCS-RSCP
}

IntraFreqCellInfoSI-List-HCS-ECN0 ::=       SEQUENCE {
    removedIntraFreqCellList            RemovedIntraFreqCellList            OPTIONAL,
    newIntraFreqCellList                NewIntraFreqCellSI-List-HCS-ECN0
}

IntraFreqCellInfoSI-List-RSCP-LCR-r4 ::=    SEQUENCE {
    removedIntraFreqCellList            RemovedIntraFreqCellList            OPTIONAL,
    newIntraFreqCellList                NewIntraFreqCellSI-List-RSCP-LCR-r4
}

IntraFreqCellInfoSI-List-ECN0-LCR-r4 ::=        SEQUENCE {
    removedIntraFreqCellList            RemovedIntraFreqCellList            OPTIONAL,
    newIntraFreqCellList                NewIntraFreqCellSI-List-ECN0-LCR-r4
}

IntraFreqCellInfoSI-List-HCS-RSCP-LCR-r4 ::=        SEQUENCE {
    removedIntraFreqCellList            RemovedIntraFreqCellList            OPTIONAL,
    newIntraFreqCellList                NewIntraFreqCellSI-List-HCS-RSCP-LCR-r4
}

IntraFreqCellInfoSI-List-HCS-ECN0-LCR-r4 ::=        SEQUENCE {
    removedIntraFreqCellList            RemovedIntraFreqCellList            OPTIONAL,
    newIntraFreqCellList                NewIntraFreqCellSI-List-HCS-ECN0-LCR-r4
}

IntraFreqEvent ::=                  CHOICE {
    e1a                                 Event1a,
    e1b                                 Event1b,
    e1c                                 Event1c,
    e1d                                 NULL,
    e1e                                 Event1e,
    e1f                                 Event1f,
    e1g                                 NULL,
    e1h                                 ThresholdUsedFrequency,
    e1i                                 ThresholdUsedFrequency
}

IntraFreqEvent-r4 ::=               CHOICE {
    e1a                                 Event1a-r4,
    e1b                                 Event1b-r4,
    e1c                                 Event1c,
    e1d                                 NULL,
    e1e                                 Event1e,
    e1f                                 Event1f,
    e1g                                 NULL,
    e1h                                 ThresholdUsedFrequency,
    e1i                                 ThresholdUsedFrequency
}

IntraFreqEvent-LCR-r4 ::=           CHOICE {
    e1a                                 Event1a-LCR-r4,
    e1b                                 Event1b-LCR-r4,
    e1c                                 Event1c,
    e1d                                 NULL,
    e1e                                 Event1e,
    e1f                                 Event1f,
    e1g                                 NULL,
    e1h                                 ThresholdUsedFrequency,
    e1i                                 ThresholdUsedFrequency
}

IntraFreqEvent-r6 ::=               CHOICE {
    e1a                                 Event1a-r4,
    e1b                                 Event1b-r4,
    e1c                                 Event1c,
    e1d                                 Event1d,
    e1e                                 Event1e-r6,
    e1f                                 Event1f-r6,
    e1g                                 NULL,
```


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```
    e1h                                 ThresholdUsedFrequency-r6,
    e1i                                 ThresholdUsedFrequency-r6,
    e1j                                 Event1j-r6
}

IntraFreqEvent-1d-r5 ::=        SEQUENCE {
    triggeringCondition                 TriggeringCondition2    OPTIONAL,
    useCIO                              BOOLEAN                 OPTIONAL
}

IntraFreqEventCriteria ::=          SEQUENCE {
    event                               IntraFreqEvent,
    hysteresis                          Hysteresis,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL
}

IntraFreqEventCriteria-r4 ::=       SEQUENCE {
    event                               IntraFreqEvent-r4,
    hysteresis                          Hysteresis,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL
}

IntraFreqEventCriteria-LCR-r4 ::=   SEQUENCE {
    event                               IntraFreqEvent-LCR-r4,
    hysteresis                          Hysteresis,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL
}

IntraFreqEventCriteria-r6 ::=   SEQUENCE {
    event                               IntraFreqEvent-r6,
    hysteresis                          Hysteresis,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL
}

IntraFreqEventCriteriaList ::=      SEQUENCE (SIZE (1..maxMeasEvent)) OF
                                        IntraFreqEventCriteria

IntraFreqEventCriteriaList-r4 ::=   SEQUENCE (SIZE (1..maxMeasEvent)) OF
                                        IntraFreqEventCriteria-r4

IntraFreqEventCriteriaList-LCR-r4 ::=   SEQUENCE (SIZE (1..maxMeasEvent)) OF
                                        IntraFreqEventCriteria-LCR-r4

IntraFreqEventCriteriaList-r6 ::=       SEQUENCE (SIZE (1..maxMeasEvent)) OF
                                        IntraFreqEventCriteria-r6

IntraFreqEventResults ::=           SEQUENCE {
    eventID                             EventIDIntraFreq,
    cellMeasurementEventResults         CellMeasurementEventResults
}

IntraFreqMeasQuantity ::=           SEQUENCE {
    filterCoefficient                   FilterCoefficient                   DEFAULT fc0,
    modeSpecificInfo                    CHOICE {
        fdd                             SEQUENCE {
            intraFreqMeasQuantity-FDD       IntraFreqMeasQuantity-FDD
        },
        tdd                             SEQUENCE {
            intraFreqMeasQuantity-TDDList   IntraFreqMeasQuantity-TDDList
        }
    }
}

-- If IntraFreqMeasQuantity-FDD is used in InterRATMeasQuantity, then only
-- cpich-Ec-N0 and cpich-RSCP are allowed.
-- dummy is not used in this version of the specification, it should
-- not be sent and if received the UE behaviour is not specified.
IntraFreqMeasQuantity-FDD ::=       ENUMERATED {
                                        cpich-Ec-N0,
                                        cpich-RSCP,
                                        pathloss,
                                        dummy }

IntraFreqMeasQuantity-FDD-sib3-r7 ::=   ENUMERATED {
```

```
                                        cpich-Ec-N0 }

-- dummy is not used in this version of the specification, it should
-- not be sent and if received the UE behaviour is not specified.
IntraFreqMeasQuantity-TDD ::=       ENUMERATED {
                                        primaryCCPCH-RSCP,
                                        pathloss,
                                        timeslotISCP,
                                        dummy }

IntraFreqMeasQuantity-TDDList ::=   SEQUENCE (SIZE (1..4)) OF
                                        IntraFreqMeasQuantity-TDD

IntraFreqMeasuredResultsList ::=    SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        CellMeasuredResults

IntraFreqMeasurementSysInfo-RSCP ::=    SEQUENCE {
    intraFreqMeasurementID              MeasurementIdentity         DEFAULT 1,
    intraFreqCellInfoSI-List            IntraFreqCellInfoSI-List-RSCP       OPTIONAL,
    intraFreqMeasQuantity               IntraFreqMeasQuantity               OPTIONAL,
    intraFreqReportingQuantityForRACH   IntraFreqReportingQuantityForRACH   OPTIONAL,
    maxReportedCellsOnRACH              MaxReportedCellsOnRACH              OPTIONAL,
    reportingInfoForCellDCH             ReportingInfoForCellDCH             OPTIONAL
}

IntraFreqMeasurementSysInfo-ECN0 ::=        SEQUENCE {
    intraFreqMeasurementID              MeasurementIdentity         DEFAULT 1,
    intraFreqCellInfoSI-List            IntraFreqCellInfoSI-List-ECN0       OPTIONAL,
    intraFreqMeasQuantity               IntraFreqMeasQuantity               OPTIONAL,
    intraFreqReportingQuantityForRACH   IntraFreqReportingQuantityForRACH   OPTIONAL,
    maxReportedCellsOnRACH              MaxReportedCellsOnRACH              OPTIONAL,
    reportingInfoForCellDCH             ReportingInfoForCellDCH             OPTIONAL
}

IntraFreqMeasurementSysInfo-HCS-RSCP ::=    SEQUENCE {
    intraFreqMeasurementID              MeasurementIdentity         DEFAULT 1,
    intraFreqCellInfoSI-List            IntraFreqCellInfoSI-List-HCS-RSCP   OPTIONAL,
    intraFreqMeasQuantity               IntraFreqMeasQuantity               OPTIONAL,
    intraFreqReportingQuantityForRACH   IntraFreqReportingQuantityForRACH   OPTIONAL,
    maxReportedCellsOnRACH              MaxReportedCellsOnRACH              OPTIONAL,
    reportingInfoForCellDCH             ReportingInfoForCellDCH             OPTIONAL
}

IntraFreqMeasurementSysInfo-HCS-ECN0 ::=    SEQUENCE {
    intraFreqMeasurementID              MeasurementIdentity         DEFAULT 1,
    intraFreqCellInfoSI-List            IntraFreqCellInfoSI-List-HCS-ECN0   OPTIONAL,
    intraFreqMeasQuantity               IntraFreqMeasQuantity               OPTIONAL,
    intraFreqReportingQuantityForRACH   IntraFreqReportingQuantityForRACH   OPTIONAL,
    maxReportedCellsOnRACH              MaxReportedCellsOnRACH              OPTIONAL,
    reportingInfoForCellDCH             ReportingInfoForCellDCH             OPTIONAL
}

IntraFreqMeasurementSysInfo-RSCP-LCR-r4 ::= SEQUENCE {
    intraFreqMeasurementID              MeasurementIdentity         DEFAULT 1,
    intraFreqCellInfoSI-List            IntraFreqCellInfoSI-List-RSCP-LCR-r4    OPTIONAL,
    intraFreqMeasQuantity               IntraFreqMeasQuantity               OPTIONAL,
    intraFreqReportingQuantityForRACH   IntraFreqReportingQuantityForRACH   OPTIONAL,
    maxReportedCellsOnRACH              MaxReportedCellsOnRACH              OPTIONAL,
    reportingInfoForCellDCH             ReportingInfoForCellDCH-LCR-r4      OPTIONAL
}

IntraFreqMeasurementSysInfo-ECN0-LCR-r4 ::=     SEQUENCE {
    intraFreqMeasurementID              MeasurementIdentity         DEFAULT 1,
    intraFreqCellInfoSI-List            IntraFreqCellInfoSI-List-ECN0-LCR-r4    OPTIONAL,
    intraFreqMeasQuantity               IntraFreqMeasQuantity               OPTIONAL,
    intraFreqReportingQuantityForRACH   IntraFreqReportingQuantityForRACH   OPTIONAL,
    maxReportedCellsOnRACH              MaxReportedCellsOnRACH              OPTIONAL,
    reportingInfoForCellDCH             ReportingInfoForCellDCH-LCR-r4      OPTIONAL
}

IntraFreqMeasurementSysInfo-HCS-RSCP-LCR-r4 ::= SEQUENCE {
    intraFreqMeasurementID              MeasurementIdentity         DEFAULT 1,
    intraFreqCellInfoSI-List            IntraFreqCellInfoSI-List-HCS-RSCP-LCR-r4    OPTIONAL,
    intraFreqMeasQuantity               IntraFreqMeasQuantity               OPTIONAL,
    intraFreqReportingQuantityForRACH   IntraFreqReportingQuantityForRACH   OPTIONAL,
    maxReportedCellsOnRACH              MaxReportedCellsOnRACH              OPTIONAL,
    reportingInfoForCellDCH             ReportingInfoForCellDCH-LCR-r4      OPTIONAL
}
```

```
IntraFreqMeasurementSysInfo-HCS-ECN0-LCR-r4 ::= SEQUENCE {
    intraFreqMeasurementID              MeasurementIdentity         DEFAULT 1,
    intraFreqCellInfoSI-List            IntraFreqCellInfoSI-List-HCS-ECN0-LCR-r4    OPTIONAL,
    intraFreqMeasQuantity               IntraFreqMeasQuantity               OPTIONAL,
    intraFreqReportingQuantityForRACH   IntraFreqReportingQuantityForRACH   OPTIONAL,
    maxReportedCellsOnRACH              MaxReportedCellsOnRACH              OPTIONAL,
    reportingInfoForCellDCH             ReportingInfoForCellDCH-LCR-r4      OPTIONAL
}

IntraFreqReportCriteria ::=         CHOICE {
    intraFreqReportingCriteria          IntraFreqReportingCriteria,
    periodicalReportingCriteria         PeriodicalWithReportingCellStatus,
    noReporting                         ReportingCellStatusOpt
}

IntraFreqReportCriteria-r4 ::=      CHOICE {
    intraFreqReportingCriteria          IntraFreqReportingCriteria-r4,
    periodicalReportingCriteria         PeriodicalWithReportingCellStatus,
    noReporting                         ReportingCellStatusOpt
}

IntraFreqReportCriteria-r6 ::=      CHOICE {
    intraFreqReportingCriteria          IntraFreqReportingCriteria-r6,
    periodicalReportingCriteria         PeriodicalWithReportingCellStatus,
    noReporting                         ReportingCellStatusOpt
}

IntraFreqReportingCriteria ::=      SEQUENCE {
    eventCriteriaList                   IntraFreqEventCriteriaList      OPTIONAL
}

IntraFreqReportingCriteria-r4 ::=   SEQUENCE {
    eventCriteriaList                   IntraFreqEventCriteriaList-r4   OPTIONAL
}

IntraFreqReportingCriteria-LCR-r4 ::=   SEQUENCE {
    eventCriteriaList                   IntraFreqEventCriteriaList-LCR-r4   OPTIONAL
}

IntraFreqReportingCriteria-r6 ::= SEQUENCE {
    eventCriteriaList                   IntraFreqEventCriteriaList-r6   OPTIONAL
}

IntraFreqReportingQuantity ::=      SEQUENCE {
    activeSetReportingQuantities        CellReportingQuantities,
    monitoredSetReportingQuantities     CellReportingQuantities,
    detectedSetReportingQuantities      CellReportingQuantities             OPTIONAL
}

IntraFreqReportingQuantityForRACH ::= SEQUENCE {
    sfn-SFN-OTD-Type                    SFN-SFN-OTD-Type,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            intraFreqRepQuantityRACH-FDD        IntraFreqRepQuantityRACH-FDD
        },
        tdd                                 SEQUENCE {
            intraFreqRepQuantityRACH-TDDList    IntraFreqRepQuantityRACH-TDDList
        }
    }
}

IntraFreqRepQuantityRACH-FDD ::=    ENUMERATED {
                                        cpich-EcN0, cpich-RSCP,
                                        pathloss, noReport }

IntraFreqRepQuantityRACH-TDD ::=    ENUMERATED {
                                        timeslotISCP,
                                        primaryCCPCH-RSCP,
                                        noReport }

IntraFreqRepQuantityRACH-TDDList ::= SEQUENCE (SIZE (1..2)) OF
                                        IntraFreqRepQuantityRACH-TDD

IntraFrequencyMeasurement ::=       SEQUENCE {
    intraFreqCellInfoList               IntraFreqCellInfoList               OPTIONAL,
    intraFreqMeasQuantity               IntraFreqMeasQuantity               OPTIONAL,
    intraFreqReportingQuantity          IntraFreqReportingQuantity          OPTIONAL,
```


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```
    measurementValidity                 MeasurementValidity                 OPTIONAL,
    reportCriteria                      IntraFreqReportCriteria             OPTIONAL
}

IntraFrequencyMeasurement-r4 ::=    SEQUENCE {
    intraFreqCellInfoList               IntraFreqCellInfoList-r4            OPTIONAL,
    intraFreqMeasQuantity               IntraFreqMeasQuantity               OPTIONAL,
    intraFreqReportingQuantity          IntraFreqReportingQuantity          OPTIONAL,
    measurementValidity                 MeasurementValidity                 OPTIONAL,
    reportCriteria                      IntraFreqReportCriteria-r4          OPTIONAL
}

IntraFrequencyMeasurement-r6 ::=        SEQUENCE {
    intraFreqCellInfoList               IntraFreqCellInfoList-r4            OPTIONAL,
    intraFreqMeasQuantity               IntraFreqMeasQuantity               OPTIONAL,
    intraFreqReportingQuantity          IntraFreqReportingQuantity          OPTIONAL,
    measurementValidity                 MeasurementValidity                 OPTIONAL,
    reportCriteria                      IntraFreqReportCriteria-r6
}

IODE ::=                            INTEGER (0..255)

IP-Length ::=                       ENUMERATED {
                                        ipl5, ipl10 }

IP-PCCPCH-r4 ::=                    BOOLEAN

IP-Spacing ::=                      ENUMERATED {
                                        e5, e7, e10, e15, e20,
                                        e30, e40, e50 }

IP-Spacing-TDD ::=                      ENUMERATED {
                                        e30, e40, e50, e70, e100}

IS-2000SpecificMeasInfo ::=         ENUMERATED {
                                        frequency, timeslot, colourcode,
                                        outputpower, pn-Offset }

KeplerianParameters ::=             SEQUENCE {
    toe-lsb-nav                         INTEGER (0..511),
    ganss-omega-nav                     BIT STRING (SIZE (32)),
    delta-n-nav                         BIT STRING (SIZE (16)),
    m-zero-nav                          BIT STRING (SIZE (32)),
    omegadot-nav                        BIT STRING (SIZE (24)),
    gnass-e-lsb-nav                     INTEGER (0..33554431),
    idot-nav                            BIT STRING (SIZE (14)),
    a-sqrt-lsb-nav                      INTEGER (0..67108863),
    i-zero-nav                          BIT STRING (SIZE (32)),
    omega-zero-nav                      BIT STRING (SIZE (32)),
    c-rs-nav                            BIT STRING (SIZE (16)),
    c-is-nav                            BIT STRING (SIZE (16)),
    c-us-nav                            BIT STRING (SIZE (16)),
    c-rc-nav                            BIT STRING (SIZE (16)),
    c-ic-nav                            BIT STRING (SIZE (16)),
    c-uc-nav                            BIT STRING (SIZE (16))
}

MaxNumberOfReportingCellsType1 ::=  ENUMERATED {
                                        e1, e2, e3, e4, e5, e6}

MaxNumberOfReportingCellsType2 ::=  ENUMERATED {
                                        e1, e2, e3, e4, e5, e6, e7, e8, e9, e10, e11, e12}

MaxNumberOfReportingCellsType3 ::=  ENUMERATED {
                                        viactCellsPlus1,
                                        viactCellsPlus2,
                                        viactCellsPlus3,
                                        viactCellsPlus4,
                                        viactCellsPlus5,
                                        viactCellsPlus6 }

MaxReportedCellsOnRACH ::=          ENUMERATED {
                                        noReport,
                                        currentCell,
                                        currentAnd-1-BestNeighbour,
                                        currentAnd-2-BestNeighbour,
                                        currentAnd-3-BestNeighbour,
                                        currentAnd-4-BestNeighbour,
```


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```
                                    currentAnd-5-BestNeighbour,
                                    currentAnd-6-BestNeighbour }

MaxReportedCellsOnRACHinterFreq ::=     INTEGER (1..8)

MeasuredResults ::=                 CHOICE {
    intraFreqMeasuredResultsList        IntraFreqMeasuredResultsList,
    interFreqMeasuredResultsList        InterFreqMeasuredResultsList,
    interRATMeasuredResultsList     InterRATMeasuredResultsList,
    trafficVolumeMeasuredResultsList    TrafficVolumeMeasuredResultsList,
    qualityMeasuredResults              QualityMeasuredResults,
    ue-InternalMeasuredResults          UE-InternalMeasuredResults,
    ue-positioning-MeasuredResults      UE-Positioning-MeasuredResults,
    spare                               NULL
}

MeasuredResults-v390ext ::=                 SEQUENCE {
    ue-positioning-MeasuredResults-v390ext                  UE-Positioning-MeasuredResults-v390ext
}


MeasuredResults-v590ext ::= CHOICE {
    intraFrequencyMeasuredResultsList       IntraFrequencyMeasuredResultsList-v590ext,
    interFrequencyMeasuredResultsList       InterFrequencyMeasuredResultsList-v590ext
}

MeasuredResults-v7xyext ::= CHOICE {
    ueInternalMeasuredResults               UE-InternalMeasuredResults-r7,
    ue-positioning-MeasuredResults-v7xyext  UE-Positioning-MeasuredResults-v7xyext
}

MeasuredResults-LCR-r4 ::=          CHOICE {
    intraFreqMeasuredResultsList        IntraFreqMeasuredResultsList,
    interFreqMeasuredResultsList        InterFreqMeasuredResultsList,
    interRATMeasuredResultsList     InterRATMeasuredResultsList,
    trafficVolumeMeasuredResultsList    TrafficVolumeMeasuredResultsList,
    qualityMeasuredResults              QualityMeasuredResults,
    ue-InternalMeasuredResults          UE-InternalMeasuredResults-LCR-r4,
    ue-positioniing-MeasuredResults     UE-Positioning-MeasuredResults,
    spare                               NULL
}

MeasuredResultsList ::=             SEQUENCE (SIZE (1..maxAdditionalMeas)) OF
                                        MeasuredResults

MeasuredResultsList-LCR-r4-ext ::=  SEQUENCE (SIZE (1..maxAdditionalMeas)) OF
                                        MeasuredResults-LCR-r4

MeasuredResultsOnRACH ::=           SEQUENCE {
    currentCell                         SEQUENCE {
        modeSpecificInfo                    CHOICE {
            fdd                                 SEQUENCE {
                measurementQuantity                 CHOICE {
                    cpich-Ec-N0                         CPICH-Ec-N0,
                    cpich-RSCP                          CPICH-RSCP,
                    pathloss                            Pathloss,
                    spare                               NULL
                }
            },
            tdd                                 SEQUENCE {
                -- For 3.84 Mcps and 7.68 Mcps TDD   --
                timeslotISCP                        TimeslotISCP-List       OPTIONAL,
                primaryCCPCH-RSCP                   PrimaryCCPCH-RSCP       OPTIONAL
            }
        }
    },
    monitoredCells                      MonitoredCellRACH-List              OPTIONAL
}

MeasuredResultsOnRACHinterFreq ::=      SEQUENCE {
    interFreqCellIndication-SIB11           INTEGER (0..1),
    interFreqCellIndication-SIB12           INTEGER (0..1),
    interFreqRACHRepCellsList               InterFreqRACHRepCellsList
}

MeasurementCommand ::=              CHOICE {
    setup                               MeasurementType,
    modify                              SEQUENCE {
```

```
        measurementType                     MeasurementType                 OPTIONAL
    },
    release                             NULL
}

MeasurementCommand-r4 ::=           CHOICE {
    setup                               MeasurementType-r4,
    modify                              SEQUENCE {
        measurementType                     MeasurementType-r4              OPTIONAL
    },
    release                             NULL
}

MeasurementCommand-r6 ::=           CHOICE {
    setup                               MeasurementType-r6,
    modify                              SEQUENCE {
        measurementType                     MeasurementType-r6              OPTIONAL
    },
    release                             NULL
}

MeasurementControlSysInfo ::=       SEQUENCE {
    -- CHOICE cellSelectQualityMeasure represents PCCPCH-RSCP in TDD mode.
    use-of-HCS                          CHOICE  {
        hcs-not-used                    SEQUENCE    {
            cellSelectQualityMeasure    CHOICE  {
                cpich-RSCP              SEQUENCE    {
                    intraFreqMeasurementSysInfo         IntraFreqMeasurementSysInfo-RSCP
    OPTIONAL,
                    interFreqMeasurementSysInfo         InterFreqMeasurementSysInfo-RSCP    OPTIONAL
                },
                cpich-Ec-N0             SEQUENCE    {
                    intraFreqMeasurementSysInfo         IntraFreqMeasurementSysInfo-ECN0
    OPTIONAL,
                    interFreqMeasurementSysInfo         InterFreqMeasurementSysInfo-ECN0    OPTIONAL
                }
            },
            interRATMeasurementSysInfo      InterRATMeasurementSysInfo-B        OPTIONAL
        },
        hcs-used                        SEQUENCE    {
            cellSelectQualityMeasure    CHOICE  {
                cpich-RSCP              SEQUENCE    {
                    intraFreqMeasurementSysInfo         IntraFreqMeasurementSysInfo-HCS-RSCP
    OPTIONAL,
                    interFreqMeasurementSysInfo         InterFreqMeasurementSysInfo-HCS-RSCP
    OPTIONAL
                },
                cpich-Ec-N0             SEQUENCE    {
                    intraFreqMeasurementSysInfo         IntraFreqMeasurementSysInfo-HCS-ECN0
    OPTIONAL,
                    interFreqMeasurementSysInfo         InterFreqMeasurementSysInfo-HCS-ECN0
    OPTIONAL                }
            },
            interRATMeasurementSysInfo      InterRATMeasurementSysInfo      OPTIONAL
        }
    },

    trafficVolumeMeasSysInfo            TrafficVolumeMeasSysInfo            OPTIONAL,
    -- dummy is not used in this version of specification and it shall be ignored by the UE.
    dummy       UE-InternalMeasurementSysInfo       OPTIONAL
}

MeasurementControlSysInfoExtension ::= SEQUENCE {
    -- CHOICE cellSelectQualityMeasure represents PCCPCH-RSCP in TDD mode.
    use-of-HCS                      CHOICE {
        hcs-not-used                    SEQUENCE {
            cellSelectQualityMeasure        CHOICE {
                cpich-RSCP                      SEQUENCE {
                    newIntraFreqCellList            NewIntraFreqCellSI-List-RSCP    OPTIONAL,
                    newInterFreqCellList            NewInterFreqCellSI-List-RSCP    OPTIONAL
                },
                cpich-Ec-N0                     SEQUENCE {
                    newIntraFreqCellList            NewIntraFreqCellSI-List-ECN0    OPTIONAL,
                    newInterFreqCellList            NewInterFreqCellSI-List-ECN0    OPTIONAL
                }
            },
            newInterRATCellList             NewInterRATCellList             OPTIONAL
        },
```


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```
        hcs-used                        SEQUENCE {
            cellSelectQualityMeasure        CHOICE {
                cpich-RSCP                      SEQUENCE {
                    newIntraFreqCellList            NewIntraFreqCellSI-List-HCS-RSCP    OPTIONAL,
                    newInterFreqCellList            NewInterFreqCellSI-List-HCS-RSCP    OPTIONAL
                },
                cpich-Ec-N0                     SEQUENCE {
                    newIntraFreqCellList            NewIntraFreqCellSI-List-HCS-ECN0    OPTIONAL,
                    newInterFreqCellList            NewInterFreqCellSI-List-HCS-ECN0    OPTIONAL
                }
            },
            newInterRATCellList             NewInterRATCellList             OPTIONAL
        }
    }
}

MeasurementControlSysInfoExtensionAddon-r5 ::= SEQUENCE {
    --The order of the list corresponds to the order of cell in newIntraFrequencyCellInfoList
    newIntraFrequencyCellInfoListAddon-r5   SEQUENCE (SIZE (1..maxCellMeas)) OF
                                                CellSelectReselectInfo-v590ext  OPTIONAL,
    --The order of the list corresponds to the order of cell in newInterFrequencyCellInfoList
    newInterFrequencyCellInfoListAddon-r5   SEQUENCE (SIZE (1..maxCellMeas)) OF
                                                CellSelectReselectInfo-v590ext  OPTIONAL,
    --The order of the list corresponds to the order of cell in newInterRATCellInfoList
    newInterRATCellInfoListAddon-r5         SEQUENCE (SIZE (1..maxCellMeas)) OF
                                                CellSelectReselectInfo-v590ext  OPTIONAL
}

MeasurementControlSysInfoExtension-LCR-r4 ::= SEQUENCE {
    -- CHOICE cellSelectQualityMeasure represents PCCPCH-RSCP in TDD mode.
    use-of-HCS                  CHOICE {
        hcs-not-used                SEQUENCE {
            cellSelectQualityMeasure    CHOICE {
                cpich-RSCP                  SEQUENCE {
                    newIntraFreqCellList        NewIntraFreqCellSI-List-RSCP-LCR-r4 OPTIONAL,
                    newInterFreqCellList        NewInterFreqCellSI-List-RSCP-LCR-r4 OPTIONAL
                },
                cpich-Ec-N0                 SEQUENCE {
                    newIntraFreqCellList        NewIntraFreqCellSI-List-ECN0-LCR-r4 OPTIONAL,
                    newInterFreqCellList        NewInterFreqCellSI-List-ECN0-LCR-r4 OPTIONAL
                }
            },
            newInterRATCellList         NewInterRATCellList                 OPTIONAL
        },
        hcs-used                    SEQUENCE {
            cellSelectQualityMeasure    CHOICE {
                cpich-RSCP                  SEQUENCE {
                    newIntraFreqCellList        NewIntraFreqCellSI-List-HCS-RSCP-LCR-r4 OPTIONAL,
                    newInterFreqCellList        NewInterFreqCellSI-List-HCS-RSCP-LCR-r4 OPTIONAL
                },
                cpich-Ec-N0                 SEQUENCE {
                    newIntraFreqCellList        NewIntraFreqCellSI-List-HCS-ECN0-LCR-r4 OPTIONAL,
                    newInterFreqCellList        NewInterFreqCellSI-List-HCS-ECN0-LCR-r4 OPTIONAL
                }
            },
            newInterRATCellList         NewInterRATCellList                 OPTIONAL
        }
    }
}

MeasurementControlSysInfo-LCR-r4-ext ::=    SEQUENCE {
    -- CHOICE use-of-HCS shall have the same value as the use-of-HCS
    -- in MeasurementControlSysInfo
    -- CHOICE cellSelectQualityMeasure represents PCCPCH-RSCP in TDD mode.
    use-of-HCS                      CHOICE  {
        hcs-not-used                SEQUENCE    {
            -- CHOICE cellSelectQualityMeasure shall have the same value as the
            -- cellSelectQualityMeasure in MeasurementControlSysInfo
            cellSelectQualityMeasure    CHOICE  {
                cpich-RSCP              SEQUENCE    {
                    intraFreqMeasurementSysInfo IntraFreqMeasurementSysInfo-RSCP-LCR-r4 OPTIONAL,
                    interFreqMeasurementSysInfo InterFreqMeasurementSysInfo-RSCP-LCR-r4 OPTIONAL
                },
                cpich-Ec-N0             SEQUENCE    {
                    intraFreqMeasurementSysInfo IntraFreqMeasurementSysInfo-ECN0-LCR-r4 OPTIONAL,
                    interFreqMeasurementSysInfo InterFreqMeasurementSysInfo-ECN0-LCR-r4 OPTIONAL
                }
            }
```

```
        },
        hcs-used                        SEQUENCE    {
            -- CHOICE cellSelectQualityMeasure shall have the same value as the
            -- cellSelectQualityMeasure in MeasurementControlSysInfo
            cellSelectQualityMeasure    CHOICE  {
                cpich-RSCP              SEQUENCE    {
                    intraFreqMeasurementSysInfo IntraFreqMeasurementSysInfo-HCS-RSCP-LCR-r4
    OPTIONAL,
                    interFreqMeasurementSysInfo InterFreqMeasurementSysInfo-HCS-RSCP-LCR-r4 OPTIONAL
                },
                cpich-Ec-N0             SEQUENCE    {
                    intraFreqMeasurementSysInfo IntraFreqMeasurementSysInfo-HCS-ECN0-LCR-r4
    OPTIONAL,
                    interFreqMeasurementSysInfo InterFreqMeasurementSysInfo-HCS-ECN0-LCR-r4 OPTIONAL
                }
            }
        }
    }
}

MeasurementIdentity ::=     INTEGER (1..16)

MeasurementQuantityGSM ::=          ENUMERATED {
                                        gsm-CarrierRSSI,
                                        dummy }

MeasurementReportingMode ::=        SEQUENCE {
    measurementReportTransferMode       TransferMode,
    periodicalOrEventTrigger            PeriodicalOrEventTrigger
}

MeasurementType ::=                 CHOICE {
    intraFrequencyMeasurement           IntraFrequencyMeasurement,
    interFrequencyMeasurement           InterFrequencyMeasurement,
    interRATMeasurement                 InterRATMeasurement,
    ue-positioning-Measurement          UE-Positioning-Measurement,
    trafficVolumeMeasurement            TrafficVolumeMeasurement,
    qualityMeasurement                  QualityMeasurement,
    ue-InternalMeasurement              UE-InternalMeasurement
}

MeasurementType-r4 ::=              CHOICE {
    intraFrequencyMeasurement           IntraFrequencyMeasurement-r4,
    interFrequencyMeasurement           InterFrequencyMeasurement-r4,
    interRATMeasurement                 InterRATMeasurement-r4,
    up-Measurement                      UE-Positioning-Measurement-r4,
    trafficVolumeMeasurement            TrafficVolumeMeasurement,
    qualityMeasurement                  QualityMeasurement,
    ue-InternalMeasurement              UE-InternalMeasurement-r4
}

MeasurementType-r6 ::=              CHOICE {
    intraFrequencyMeasurement           IntraFrequencyMeasurement-r6,
    interFrequencyMeasurement           InterFrequencyMeasurement-r6,
    interRATMeasurement                 InterRATMeasurement-r6,
    up-Measurement                      UE-Positioning-Measurement-r4,
    trafficVolumeMeasurement            TrafficVolumeMeasurement,
    qualityMeasurement                  QualityMeasurement,
    ue-InternalMeasurement              UE-InternalMeasurement-r4
}

MeasurementValidity ::=             SEQUENCE {
    ue-State                            ENUMERATED {
                                            cell-DCH, all-But-Cell-DCH, all-States }
}

MonitoredCellRACH-List ::=          SEQUENCE (SIZE (1..8)) OF
                                        MonitoredCellRACH-Result

MonitoredCellRACH-Result ::=        SEQUENCE {
    sfn-SFN-ObsTimeDifference           SFN-SFN-ObsTimeDifference           OPTIONAL,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            primaryCPICH-Info                   PrimaryCPICH-Info,
            measurementQuantity                 CHOICE {
                cpich-Ec-N0                         CPICH-Ec-N0,
                cpich-RSCP                          CPICH-RSCP,
                pathloss                            Pathloss,
```


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```
                spare                                   NULL
            }                                                                   OPTIONAL
        },
        tdd                                 SEQUENCE {
            cellParametersID                    CellParametersID,
            primaryCCPCH-RSCP                   PrimaryCCPCH-RSCP
        }
    }
}

MultipathIndicator ::=              ENUMERATED {
                                        nm,
                                        low,
                                        medium,
                                        high }

N-CR-T-CRMaxHyst ::=                SEQUENCE {
    n-CR                                INTEGER (1..16)                     DEFAULT 8,
    t-CRMaxHyst                         T-CRMaxHyst
}

NavigationModelSatInfo ::=          SEQUENCE {
    satID                               SatID,
    satelliteStatus                     SatelliteStatus,
    ephemerisParameter                  EphemerisParameter      OPTIONAL
}

NavigationModelSatInfoList ::=      SEQUENCE (SIZE (1..maxSat)) OF
                                        NavigationModelSatInfo

EphemerisParameter ::=                      SEQUENCE {
    codeOnL2                            BIT STRING (SIZE (2)),
    uraIndex                            BIT STRING (SIZE (4)),
    satHealth                           BIT STRING (SIZE (6)),
    iodc                                BIT STRING (SIZE (10)),
    l2Pflag                             BIT STRING (SIZE (1)),
    sf1Revd                             SubFrame1Reserved,
    t-GD                                BIT STRING (SIZE (8)),
    t-oc                                BIT STRING (SIZE (16)),
    af2                                 BIT STRING (SIZE (8)),
    af1                                 BIT STRING (SIZE (16)),
    af0                                 BIT STRING (SIZE (22)),
    c-rs                                BIT STRING (SIZE (16)),
    delta-n                             BIT STRING (SIZE (16)),
    m0                                  BIT STRING (SIZE (32)),
    c-uc                                BIT STRING (SIZE (16)),
    e                                   BIT STRING (SIZE (32)),
    c-us                                BIT STRING (SIZE (16)),
    a-Sqrt                              BIT STRING (SIZE (32)),
    t-oe                                BIT STRING (SIZE (16)),
    fitInterval                         BIT STRING (SIZE (1)),
    aodo                                BIT STRING (SIZE (5)),
    c-ic                                BIT STRING (SIZE (16)),
    omega0                              BIT STRING (SIZE (32)),
    c-is                                BIT STRING (SIZE (16)),
    i0                                  BIT STRING (SIZE (32)),
    c-rc                                BIT STRING (SIZE (16)),
    omega                               BIT STRING (SIZE (32)),
    omegaDot                            BIT STRING (SIZE (24)),
    iDot                                BIT STRING (SIZE (14))
}
NC-Mode ::=                         BIT STRING (SIZE (3))

Neighbour ::=                       SEQUENCE {
    modeSpecificInfo                CHOICE {
        fdd                             SEQUENCE {
            neighbourIdentity                   PrimaryCPICH-Info                   OPTIONAL,
            uE-RX-TX-TimeDifferenceType2Info    UE-RX-TX-TimeDifferenceType2Info    OPTIONAL
        },
        tdd                             SEQUENCE {
            neighbourAndChannelIdentity     CellAndChannelIdentity                  OPTIONAL
        }
    },
    neighbourQuality                    NeighbourQuality,
    sfn-SFN-ObsTimeDifference2          SFN-SFN-ObsTimeDifference2}

Neighbour-v390ext ::=                       SEQUENCE {
    modeSpecificInfo                CHOICE {
```


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```
        fdd                             SEQUENCE {
            frequencyInfo                       FrequencyInfo
        },
        tdd                             NULL
    }
}

NeighbourList ::=                   SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        Neighbour

-- The order of the cells in IE NeighbourList-v390ext shall be the
-- same as the order in IE NeighbourList
NeighbourList-v390ext ::=                   SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        Neighbour-v390ext

NeighbourQuality ::=                SEQUENCE {
    ue-Positioning-OTDOA-Quality        UE-Positioning-OTDOA-Quality
}

NewInterFreqCell ::=                SEQUENCE {
    interFreqCellID                     InterFreqCellID                     OPTIONAL,
    frequencyInfo                       FrequencyInfo                       OPTIONAL,
    cellInfo                            CellInfo
}

NewInterFreqCell-r4 ::=             SEQUENCE {
    interFreqCellID                     InterFreqCellID                     OPTIONAL,
    frequencyInfo                       FrequencyInfo                       OPTIONAL,
    cellInfo                            CellInfo-r4
}

NewInterFreqCellList ::=            SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        NewInterFreqCell

NewInterFreqCellList-r4 ::=         SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        NewInterFreqCell-r4

NewInterFreqCellSI-RSCP ::=             SEQUENCE {
    interFreqCellID                     InterFreqCellID                     OPTIONAL,
    frequencyInfo                       FrequencyInfo                       OPTIONAL,
    cellInfo                            CellInfoSI-RSCP
}

NewInterFreqCellSI-ECN0 ::=             SEQUENCE {
    interFreqCellID                     InterFreqCellID                     OPTIONAL,
    frequencyInfo                       FrequencyInfo                       OPTIONAL,
    cellInfo                            CellInfoSI-ECN0
}

NewInterFreqCellSI-HCS-RSCP ::=             SEQUENCE {
    interFreqCellID                     InterFreqCellID                     OPTIONAL,
    frequencyInfo                       FrequencyInfo                       OPTIONAL,
    cellInfo                            CellInfoSI-HCS-RSCP
}

NewInterFreqCellSI-HCS-ECN0 ::=             SEQUENCE {
    interFreqCellID                     InterFreqCellID                     OPTIONAL,
    frequencyInfo                       FrequencyInfo                       OPTIONAL,
    cellInfo                            CellInfoSI-HCS-ECN0
}

NewInterFreqCellSI-RSCP-LCR-r4 ::=          SEQUENCE {
    interFreqCellID                     InterFreqCellID                     OPTIONAL,
    frequencyInfo                       FrequencyInfo                       OPTIONAL,
    cellInfo                            CellInfoSI-RSCP-LCR-r4
}

NewInterFreqCellSI-ECN0-LCR-r4 ::=          SEQUENCE {
    interFreqCellID                     InterFreqCellID                     OPTIONAL,
    frequencyInfo                       FrequencyInfo                       OPTIONAL,
    cellInfo                            CellInfoSI-ECN0-LCR-r4
}

NewInterFreqCellSI-HCS-RSCP-LCR-r4 ::=      SEQUENCE {
    interFreqCellID                     InterFreqCellID                     OPTIONAL,
    frequencyInfo                       FrequencyInfo                       OPTIONAL,
    cellInfo                            CellInfoSI-HCS-RSCP-LCR-r4
}
```


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```
NewInterFreqCellSI-HCS-ECN0-LCR-r4 ::=      SEQUENCE {
    interFreqCellID                     InterFreqCellID                     OPTIONAL,
    frequencyInfo                       FrequencyInfo                       OPTIONAL,
    cellInfo                            CellInfoSI-HCS-ECN0-LCR-r4
}

NewInterFreqCellSI-List-ECN0 ::=            SEQUENCE (SIZE (1..maxCellMeas)) OF
                                    NewInterFreqCellSI-ECN0

NewInterFreqCellSI-List-HCS-RSCP ::=            SEQUENCE (SIZE (1..maxCellMeas)) OF
                                    NewInterFreqCellSI-HCS-RSCP

NewInterFreqCellSI-List-HCS-ECN0 ::=            SEQUENCE (SIZE (1..maxCellMeas)) OF
                                    NewInterFreqCellSI-HCS-ECN0

NewInterFreqCellSI-List-RSCP ::=        SEQUENCE (SIZE (1..maxCellMeas)) OF
                                    NewInterFreqCellSI-RSCP

NewInterFreqCellSI-List-ECN0-LCR-r4 ::=     SEQUENCE (SIZE (1..maxCellMeas)) OF
                                    NewInterFreqCellSI-ECN0-LCR-r4

NewInterFreqCellSI-List-HCS-RSCP-LCR-r4 ::= SEQUENCE (SIZE (1..maxCellMeas)) OF
                                    NewInterFreqCellSI-HCS-RSCP-LCR-r4

NewInterFreqCellSI-List-HCS-ECN0-LCR-r4 ::= SEQUENCE (SIZE (1..maxCellMeas)) OF
                                    NewInterFreqCellSI-HCS-ECN0-LCR-r4

NewInterFreqCellSI-List-RSCP-LCR-r4 ::=     SEQUENCE (SIZE (1..maxCellMeas)) OF
                                    NewInterFreqCellSI-RSCP-LCR-r4

NewInterRATCell ::=             SEQUENCE {
    interRATCellID                      InterRATCellID          OPTIONAL,
    technologySpecificInfo              CHOICE {
        gsm                                 SEQUENCE {
            cellSelectionReselectionInfo        CellSelectReselectInfoSIB-11-12     OPTIONAL,
            interRATCellIndividualOffset        InterRATCellIndividualOffset,
            bsic                                BSIC,
            frequency-band                      Frequency-Band,
            bcch-ARFCN                          BCCH-ARFCN,
            -- dummy is not used in this version of the specification, it should
            -- not be sent and if received it should be ignored.
            dummy                               NULL                OPTIONAL
        },
        is-2000                             SEQUENCE {
            is-2000SpecificMeasInfo             IS-2000SpecificMeasInfo
        },
        -- ASN.1 inconsistency: NewInterRATCellList should be optional within
        -- InterRATCellInfoList. The UE shall consider IE NewInterRATCell with
        -- technologySpecificInfo set to "absent" as valid and handle the
        -- message as if the IE NewInterRATCell was absent
        absent                              NULL,
        spare1                              NULL
    }
}

NewInterRATCell-B ::=               SEQUENCE {
    interRATCellID                      InterRATCellID              OPTIONAL,
    technologySpecificInfo              CHOICE {
        gsm                                 SEQUENCE {
            cellSelectionReselectionInfo        CellSelectReselectInfoSIB-11-12     OPTIONAL,
            interRATCellIndividualOffset        InterRATCellIndividualOffset,
            bsic                                BSIC,
            frequency-band                      Frequency-Band,
            bcch-ARFCN                          BCCH-ARFCN,
            -- dummy is not used in this version of the specification, it should
            -- not be sent and if received it should be ignored.
            dummy                               NULL                OPTIONAL
        },
        is-2000                             SEQUENCE {
            is-2000SpecificMeasInfo             IS-2000SpecificMeasInfo
        },
        -- ASN.1 inconsistency: NewInterRATCellList-B should be optional within
        -- InterRATCellInfoList-B. The UE shall consider IE NewInterRATCell-B with
        -- technologySpecificInfo set to "absent" as valid and handle the
        -- message as if the IE NewInterRATCell-B was absent
        absent                              NULL,
        spare1                              NULL
```


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```
    }
}

NewInterRATCellList ::=         SEQUENCE (SIZE (1..maxCellMeas)) OF
                                    NewInterRATCell

NewInterRATCellList-B ::=           SEQUENCE (SIZE (1..maxCellMeas)) OF
                                    NewInterRATCell-B

NewIntraFreqCell ::=                SEQUENCE {
    intraFreqCellID                     IntraFreqCellID                     OPTIONAL,
    cellInfo                            CellInfo
}

NewIntraFreqCell-r4 ::=             SEQUENCE {
    intraFreqCellID                     IntraFreqCellID                     OPTIONAL,
    cellInfo                            CellInfo-r4
}

NewIntraFreqCellList ::=            SEQUENCE (SIZE (1..maxCellMeas)) OF
                                    NewIntraFreqCell

NewIntraFreqCellList-r4 ::=         SEQUENCE (SIZE (1..maxCellMeas)) OF
                                    NewIntraFreqCell-r4

NewIntraFreqCellSI-RSCP ::=             SEQUENCE {
    intraFreqCellID                     IntraFreqCellID                     OPTIONAL,
    cellInfo                            CellInfoSI-RSCP
}

NewIntraFreqCellSI-ECN0 ::=         SEQUENCE {
    intraFreqCellID                     IntraFreqCellID                     OPTIONAL,
    cellInfo                            CellInfoSI-ECN0
}
NewIntraFreqCellSI-HCS-RSCP ::=     SEQUENCE {
    intraFreqCellID                     IntraFreqCellID                     OPTIONAL,
    cellInfo                            CellInfoSI-HCS-RSCP
}

NewIntraFreqCellSI-HCS-ECN0 ::=     SEQUENCE {
    intraFreqCellID                     IntraFreqCellID                     OPTIONAL,
    cellInfo                            CellInfoSI-HCS-ECN0
}

NewIntraFreqCellSI-RSCP-LCR-r4 ::=      SEQUENCE {
    intraFreqCellID                     IntraFreqCellID                     OPTIONAL,
    cellInfo                            CellInfoSI-RSCP-LCR-r4
}

NewIntraFreqCellSI-ECN0-LCR-r4 ::=      SEQUENCE {
    intraFreqCellID                     IntraFreqCellID                     OPTIONAL,
    cellInfo                            CellInfoSI-ECN0-LCR-r4
}
NewIntraFreqCellSI-HCS-RSCP-LCR-r4 ::=  SEQUENCE {
    intraFreqCellID                     IntraFreqCellID                     OPTIONAL,
    cellInfo                            CellInfoSI-HCS-RSCP-LCR-r4
}

NewIntraFreqCellSI-HCS-ECN0-LCR-r4 ::=  SEQUENCE {
    intraFreqCellID                     IntraFreqCellID                     OPTIONAL,
    cellInfo                            CellInfoSI-HCS-ECN0-LCR-r4
}

NewIntraFreqCellSI-List-RSCP ::=        SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        NewIntraFreqCellSI-RSCP

NewIntraFreqCellSI-List-ECN0 ::=        SEQUENCE (SIZE (1..maxCellMeas)) OF
                                    NewIntraFreqCellSI-ECN0

NewIntraFreqCellSI-List-HCS-RSCP ::=    SEQUENCE (SIZE (1..maxCellMeas)) OF
                                    NewIntraFreqCellSI-HCS-RSCP

NewIntraFreqCellSI-List-HCS-ECN0 ::=    SEQUENCE (SIZE (1..maxCellMeas)) OF
                                    NewIntraFreqCellSI-HCS-ECN0

NewIntraFreqCellSI-List-RSCP-LCR-r4 ::=     SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        NewIntraFreqCellSI-RSCP-LCR-r4
```


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```
NewIntraFreqCellSI-List-ECN0-LCR-r4 ::=     SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        NewIntraFreqCellSI-ECN0-LCR-r4

NewIntraFreqCellSI-List-HCS-RSCP-LCR-r4 ::= SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        NewIntraFreqCellSI-HCS-RSCP-LCR-r4

NewIntraFreqCellSI-List-HCS-ECN0-LCR-r4 ::= SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        NewIntraFreqCellSI-HCS-ECN0-LCR-r4

    -- IE "nonUsedFreqThreshold" is not needed in case of event 2a
    -- In case of event 2a UTRAN should include value 0 within IE "nonUsedFreqThreshold"
    -- In case of event 2a, the UE shall be ignore IE "nonUsedFreqThreshold"
    -- In later versions of the message including this IE, a special version of
    -- IE "NonUsedFreqParameterList" may be defined for event 2a, namely a
    -- version not including IE "nonUsedFreqThreshold"
NonUsedFreqParameter ::=            SEQUENCE {
    nonUsedFreqThreshold                Threshold,
    nonUsedFreqW                        W
}

NonUsedFreqParameter-r6 ::=         SEQUENCE {
    nonUsedFreqThreshold                Threshold-r6,
    nonUsedFreqW                        W
}

NonUsedFreqParameterList ::=        SEQUENCE (SIZE (1..maxFreq)) OF
                                        NonUsedFreqParameter

NonUsedFreqParameterList-r6 ::=     SEQUENCE (SIZE (1..maxFreq)) OF
                                        NonUsedFreqParameter-r6

NonUsedFreqWList-r6 ::=     SEQUENCE (SIZE (1..maxFreq)) OF W

ObservedTimeDifferenceToGSM ::=     INTEGER (0..4095)

OTDOA-SearchWindowSize ::=          ENUMERATED {
                                        c20, c40, c80, c160, c320,
                                        c640, c1280, moreThan1280 }

-- SPARE: Pathloss, Max = 158
-- Values above Max are spare
Pathloss ::=                        INTEGER (46..173)

PenaltyTime-RSCP ::=                CHOICE {
    notUsed                             NULL,
    pt10                                TemporaryOffset1,
    pt20                                TemporaryOffset1,
    pt30                                TemporaryOffset1,
    pt40                                TemporaryOffset1,
    pt50                                TemporaryOffset1,
    pt60                                TemporaryOffset1
}

PenaltyTime-ECN0 ::=                CHOICE {
    notUsed                             NULL,
    pt10                                TemporaryOffsetList,
    pt20                                TemporaryOffsetList,
    pt30                                TemporaryOffsetList,
    pt40                                TemporaryOffsetList,
    pt50                                TemporaryOffsetList,
    pt60                                TemporaryOffsetList
}

PendingTimeAfterTrigger ::=         ENUMERATED {
                                        ptat0-25, ptat0-5, ptat1,
                                        ptat2, ptat4, ptat8, ptat16 }

PeriodicalOrEventTrigger ::=        ENUMERATED {
                                        periodical,
                                        eventTrigger }

PeriodicalReportingCriteria ::=     SEQUENCE {
    reportingAmount                     ReportingAmount                 DEFAULT ra-Infinity,
    reportingInterval                   ReportingIntervalLong
}

PeriodicalWithReportingCellStatus ::= SEQUENCE {
    periodicalReportingCriteria         PeriodicalReportingCriteria,
```

```
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL
}

PLMNIdentitiesOfNeighbourCells ::=  SEQUENCE {
        plmnsOfIntraFreqCellsList       PLMNsOfIntraFreqCellsList           OPTIONAL,
        plmnsOfInterFreqCellsList       PLMNsOfInterFreqCellsList           OPTIONAL,
        plmnsOfInterRATCellsList        PLMNsOfInterRATCellsList            OPTIONAL
}

PLMNsOfInterFreqCellsList ::=           SEQUENCE (SIZE (1..maxCellMeas)) OF
                                            SEQUENCE {
    plmn-Identity                               PLMN-Identity               OPTIONAL
}

PLMNsOfIntraFreqCellsList ::=           SEQUENCE (SIZE (1..maxCellMeas)) OF
                                            SEQUENCE {
    plmn-Identity                               PLMN-Identity               OPTIONAL
}

PLMNsOfInterRATCellsList ::=            SEQUENCE (SIZE (1..maxCellMeas)) OF
                                            SEQUENCE {
    plmn-Identity                               PLMN-Identity               OPTIONAL
}

PositionEstimate ::=                CHOICE {
    ellipsoidPoint                      EllipsoidPoint,
    ellipsoidPointUncertCircle          EllipsoidPointUncertCircle,
    ellipsoidPointUncertEllipse         EllipsoidPointUncertEllipse,
    ellipsoidPointAltitude              EllipsoidPointAltitude,
    ellipsoidPointAltitudeEllipse       EllipsoidPointAltitudeEllipsoide
}

PositionEstimateGANSS ::=           CHOICE {
    ellipsoidPoint                      EllipsoidPoint,
    ellipsoidPointUncertCircle          EllipsoidPointUncertCircle,
    ellipsoidPointUncertEllipse         EllipsoidPointUncertEllipse,
    ellipsoidPointAltitude              EllipsoidPointAltitude,
    ellipsoidPointAltitudeEllipse       EllipsoidPointAltitudeEllipsoide
}

PositioningMethod ::=               ENUMERATED {
                                        otdoa,
                                        gps,
                                        otdoaOrGPS, cellID }

-- Actual value PRC = IE value * 0.32
PRC ::=                             INTEGER (-2047..2047)

-- SPARE: PrimaryCCPCH-RSCP, Max = 91
-- Values above Max are spare
PrimaryCCPCH-RSCP ::=               INTEGER (0..127)

Q-HCS ::=                           INTEGER (0..99)

Q-OffsetS-N ::=                     INTEGER (-50..50)

Q-QualMin ::=                       INTEGER (-24..0)

Q-QualMin-Offset ::=                INTEGER (1..16)

-- Actual value Q-RxlevMin = (IE value * 2) + 1
Q-RxlevMin ::=                      INTEGER (-58..-13)

-- Actual value Q-RxlevMin-Offset = (IE value * 2)
Q-RxlevMin-Offset ::=               INTEGER (1..8)

QualityEventResults ::=             SEQUENCE (SIZE (1..maxTrCH)) OF
                                        TransportChannelIdentity

QualityMeasuredResults ::=          SEQUENCE {
    blerMeasurementResultsList          BLER-MeasurementResultsList         OPTIONAL,
    modeSpecificInfo                    CHOICE {
        fdd                                 NULL,
        tdd                                 SEQUENCE {
            sir-MeasurementResults              SIR-MeasurementList         OPTIONAL
        }
    }
}
```


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```
QualityMeasurement ::=              SEQUENCE {
    qualityReportingQuantity            QualityReportingQuantity            OPTIONAL,
    reportCriteria                      QualityReportCriteria
}

QualityReportCriteria ::=           CHOICE {
    qualityReportingCriteria            QualityReportingCriteria,
    periodicalReportingCriteria         PeriodicalReportingCriteria,
    noReporting                         NULL
}

QualityReportingCriteria ::=        SEQUENCE (SIZE (1..maxTrCH)) OF
                                        QualityReportingCriteriaSingle

QualityReportingCriteriaSingle ::=  SEQUENCE {
    transportChannelIdentity            TransportChannelIdentity,
    totalCRC                            INTEGER (1..512),
    badCRC                              INTEGER (1..512),
    pendingAfterTrigger                 INTEGER (1..512)
}

QualityReportingQuantity ::=        SEQUENCE {
    dl-TransChBLER                      BOOLEAN,
    bler-dl-TransChIdList               BLER-TransChIdList                  OPTIONAL,
    modeSpecificInfo                    CHOICE {
        fdd                                 NULL,
        tdd                                 SEQUENCE {
            sir-TFCS-List                       SIR-TFCS-List               OPTIONAL
        }
    }
}

RAT-Type ::=                        ENUMERATED {
                                        gsm, is2000 }

ReferenceCellPosition ::=           CHOICE {
    ellipsoidPoint                      EllipsoidPoint,
    ellipsoidPointWithAltitude          EllipsoidPointAltitude
}

-- ReferenceLocation, as defined in 23.032
ReferenceLocation ::=           SEQUENCE {
    ellipsoidPointAltitudeEllipsoide        EllipsoidPointAltitudeEllipsoide
}

ReferenceLocationGANSS ::=          SEQUENCE {
    ellipsoidPointAltitudeEllipsoide    EllipsoidPointAltitudeEllipsoide
}

ReferenceTimeDifferenceToCell ::=   CHOICE {
    -- Actual value accuracy40 = IE value * 40
    accuracy40                          INTEGER (0..960),
    -- Actual value accuracy256 = IE value * 256
    accuracy256                         INTEGER (0..150),
    -- Actual value accuracy2560 = IE value * 2560
    accuracy2560                        INTEGER (0..15)
}

ReferenceTimeGANSS ::=              CHOICE {
    utranReferenceTime                  UTRAN-GANSSReferenceTime,
    ganssReferenceTimeOnly              GANSSReferenceTimeOnly
}

RemovedInterFreqCellList ::=        CHOICE {
    removeAllInterFreqCells             NULL,
    removeSomeInterFreqCells            SEQUENCE (SIZE (1..maxCellMeas)) OF
                                            InterFreqCellID,
    removeNoInterFreqCells              NULL
}

RemovedInterRATCellList ::=     CHOICE {
    removeAllInterRATCells          NULL,
    removeSomeInterRATCells         SEQUENCE (SIZE (1..maxCellMeas)) OF
                                            InterRATCellID,
    removeNoInterRATCells           NULL
}
```


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```
RemovedIntraFreqCellList ::=        CHOICE {
    removeAllIntraFreqCells             NULL,
    removeSomeIntraFreqCells            SEQUENCE (SIZE (1..maxCellMeas)) OF
                                            IntraFreqCellID,
    removeNoIntraFreqCells              NULL
}

ReplacementActivationThreshold ::=  ENUMERATED {
                                        notApplicable, t1, t2,
                                        t3, t4, t5, t6, t7 }

ReportDeactivationThreshold ::=     ENUMERATED {
                                        notApplicable, t1, t2,
                                        t3, t4, t5, t6, t7 }

ReportingAmount ::=                 ENUMERATED {
                                        ra1, ra2, ra4, ra8, ra16, ra32,
                                        ra64, ra-Infinity }

ReportingCellStatus ::=             CHOICE{
    withinActiveSet                     MaxNumberOfReportingCellsType1,
    withinMonitoredSetUsedFreq          MaxNumberOfReportingCellsType1,
    withinActiveAndOrMonitoredUsedFreq  MaxNumberOfReportingCellsType1,
    withinDetectedSetUsedFreq           MaxNumberOfReportingCellsType1,
    withinMonitoredAndOrDetectedUsedFreq
                                        MaxNumberOfReportingCellsType1,
    allActiveplusMonitoredSet           MaxNumberOfReportingCellsType3,
    allActivePlusDetectedSet            MaxNumberOfReportingCellsType3,
    allActivePlusMonitoredAndOrDetectedSet
                                        MaxNumberOfReportingCellsType3,
    withinVirtualActSet             MaxNumberOfReportingCellsType1,
    withinMonitoredSetNonUsedFreq       MaxNumberOfReportingCellsType1,
    withinMonitoredAndOrVirtualActiveSetNonUsedFreq
                                        MaxNumberOfReportingCellsType1,
    allVirtualActSetplusMonitoredSetNonUsedFreq
                                        MaxNumberOfReportingCellsType3,
    withinActSetOrVirtualActSet-InterRATcells
                                        MaxNumberOfReportingCellsType2,
    withinActSetAndOrMonitoredUsedFreqOrVirtualActSetAndOrMonitoredNonUsedFreq
                                        MaxNumberOfReportingCellsType2
}

ReportingCellStatusOpt ::=          SEQUENCE {
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL
}


ReportingInfoForCellDCH ::=         SEQUENCE {
    intraFreqReportingQuantity          IntraFreqReportingQuantity,
    measurementReportingMode            MeasurementReportingMode,
    reportCriteria                      CellDCH-ReportCriteria
}

ReportingInfoForCellDCH-LCR-r4 ::=  SEQUENCE {
    intraFreqReportingQuantity          IntraFreqReportingQuantity,
    measurementReportingMode            MeasurementReportingMode,
    reportCriteria                      CellDCH-ReportCriteria-LCR-r4
}

ReportingInterval ::=               ENUMERATED {
                                        noPeriodicalreporting, ri0-25,
                                        ri0-5, ri1, ri2, ri4, ri8, ri16 }

ReportingIntervalLong ::=           ENUMERATED {
                                        ril0, ril0-25, ril0-5, ril1,
                                        ril2, ril3, ril4, ril6, ril8,
                                        ril12, ril16, ril20, ril24,
                                        ril28, ril32, ril64 }
                                    -- When the value 'ril0' is used, the UE behaviour is not
                                    -- defined.

-- Actual value ReportingRange = IE value * 0.5
ReportingRange ::=                  INTEGER (0..29)

ReqDataBitAssistanceList ::=        SEQUENCE (SIZE (1..maxSgnType)) OF SEQUENCE {
    ganssDataBitAssistance              BOOLEAN
}
```

```
RL-AdditionInfoList ::=             SEQUENCE (SIZE (1..maxRL)) OF
                                        PrimaryCPICH-Info

RL-InformationLists ::=             SEQUENCE {
    rl-AdditionInfoList                 RL-AdditionInfoList                 OPTIONAL,
    rL-RemovalInformationList           RL-RemovalInformationList           OPTIONAL
}

RLC-BuffersPayload ::=              ENUMERATED {
                                        pl0, pl4, pl8, pl16, pl32,
                                        pl64, pl128, pl256, pl512, pl1024,
                                        pl2k, pl4k, pl8k, pl16k, pl32k,
                                        pl64k, pl128k, pl256k, pl512k, pl1024k,
                                        spare12, spare11, spare10, spare9, spare8,
                                        spare7, spare6, spare5, spare4, spare3,
                                        spare2, spare1 }

-- Actual value RRC = IE value * 0.032
RRC ::=                             INTEGER (-127..127)

SatData ::=                         SEQUENCE{
    satID                               SatID,
    iode                                IODE
}

SatDataList ::=                     SEQUENCE (SIZE (0..maxSat)) OF
                                        SatData

SatellitesListRelatedData ::=       SEQUENCE {
    satId                               INTEGER (0..63),
    iod                                 INTEGER (0..1023)
}

SatellitesListRelatedDataList ::=   SEQUENCE (SIZE (0..maxGANSSSat)) OF
                                        SatellitesListRelatedData

SatelliteStatus ::=                 ENUMERATED {
                                        ns-NN-U,
                                        es-SN,
                                        es-NN-U,
                                        rev2,
                                        rev }


Satellite-clock-model ::=           SEQUENCE {
    t-oc-lsb                            INTEGER (0..511),
    af2                                 BIT STRING (SIZE (12)),
    af1                                 BIT STRING (SIZE (18)),
    af0                                 BIT STRING (SIZE (28)),
    tgd                                 INTEGER (0..255),
    model-id                            INTEGER (0..1)
}

Satellite-clock-modelList ::=       SEQUENCE (SIZE (1..4)) OF Satellite-clock-model

-- Identifies the satellite and is equal to (SV ID No - 1) where SV ID No is defined in [12].
SatID ::=                           INTEGER (0..63)

SFN-Offset-Validity ::=         ENUMERATED { false }

SFN-SFN-Drift ::=                   ENUMERATED {
                                        sfnsfndrift0, sfnsfndrift1, sfnsfndrift2,
                                        sfnsfndrift3, sfnsfndrift4, sfnsfndrift5,
                                        sfnsfndrift8, sfnsfndrift10, sfnsfndrift15,
                                        sfnsfndrift25, sfnsfndrift35, sfnsfndrift50,
                                        sfnsfndrift65, sfnsfndrift80, sfnsfndrift100,
                                        sfnsfndrift-1, sfnsfndrift-2, sfnsfndrift-3,
                                        sfnsfndrift-4, sfnsfndrift-5, sfnsfndrift-8,
                                        sfnsfndrift-10, sfnsfndrift-15, sfnsfndrift-25,
                                        sfnsfndrift-35, sfnsfndrift-50, sfnsfndrift-65,
                                        sfnsfndrift-80, sfnsfndrift-100}

SFN-SFN-ObsTimeDifference ::=       CHOICE {
    type1                               SFN-SFN-ObsTimeDifference1,
    type2                               SFN-SFN-ObsTimeDifference2
}

-- SPARE: SFN-SFN-ObsTimeDifference1, Max = 9830399
```


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```
-- For 1.28Mcps TDD, Max value of SFN-SFN-ObsTimeDifference1 is 3276799.
-- Values above Max are spare
SFN-SFN-ObsTimeDifference1 ::=      INTEGER (0..16777215)

-- SPARE: SFN-SFN-ObsTimeDifference2, Max = 40961
-- For 1.28Mcps TDD, Max value of SFN-SFN-ObsTimeDifference2 is 27649.
-- Values above Max are spare
SFN-SFN-ObsTimeDifference2 ::=      INTEGER (0..65535)

SFN-SFN-OTD-Type ::=                ENUMERATED {
                                        noReport,
                                        type1,
                                        type2 }

SFN-SFN-RelTimeDifference1 ::=      SEQUENCE {
    sfn-Offset                          INTEGER (0 .. 4095),
    sfn-sfn-Reltimedifference           INTEGER (0.. 38399)
}

SFN-TOW-Uncertainty ::=             ENUMERATED {
                                        lessThan10,
                                        moreThan10 }


SIR ::=                             INTEGER (0..63)


SIR-MeasurementList ::=             SEQUENCE (SIZE (1..maxCCTrCH)) OF
                                        SIR-MeasurementResults


SIR-MeasurementResults ::=          SEQUENCE {
    tfcs-ID                             TFCS-IdentityPlain,
    sir-TimeslotList                    SIR-TimeslotList
}

SIR-TFCS ::=                        TFCS-IdentityPlain


SIR-TFCS-List ::=                   SEQUENCE (SIZE (1..maxCCTrCH)) OF
                                        SIR-TFCS

SIR-TimeslotList ::=                SEQUENCE (SIZE (1..maxTS)) OF
                                        SIR

-- SubFrame1Reserved, reserved bits in subframe 1 of the GPS navigation message
SubFrame1Reserved ::=               SEQUENCE {
    reserved1                           BIT STRING (SIZE (23)),
    reserved2                           BIT STRING (SIZE (24)),
    reserved3                           BIT STRING (SIZE (24)),
    reserved4                           BIT STRING (SIZE (16))
}

T-ADVinfo ::=                       SEQUENCE {
                t-ADV                   INTEGER(0..2047),
                sfn                     INTEGER(0..4095)
}

T-CRMax ::=                         CHOICE {
    notUsed                             NULL,
    t30                                 N-CR-T-CRMaxHyst,
    t60                                 N-CR-T-CRMaxHyst,
    t120                                N-CR-T-CRMaxHyst,
    t180                                N-CR-T-CRMaxHyst,
    t240                                N-CR-T-CRMaxHyst
}

T-CRMaxHyst ::=                     ENUMERATED {
                                        notUsed, t10, t20, t30,
                                        t40, t50, t60, t70 }

TemporaryOffset1 ::=                ENUMERATED {
                                        to3, to6, to9, to12, to15,
                                        to18, to21, infinite }

TemporaryOffset2 ::=                ENUMERATED {
                                        to2, to3, to4, to6, to8,
                                        to10, to12, infinite }
```


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```
TemporaryOffsetList ::=             SEQUENCE    {
        temporaryOffset1                TemporaryOffset1,
        temporaryOffset2                TemporaryOffset2
}

Threshold ::=                       INTEGER (-115..0)

Threshold-r6 ::=                            INTEGER (-120..0)

-- The order of the list corresponds to the order of frequency defined in Inter-FreqEventCriteria
ThreholdNonUsedFrequency-deltaList ::= SEQUENCE (SIZE (1..maxFreq)) OF
                                            DeltaRSCPPerCell

ThresholdPositionChange ::=         ENUMERATED {
                                        pc10, pc20, pc30, pc40, pc50,
                                        pc100, pc200, pc300, pc500,
                                        pc1000, pc2000, pc5000, pc10000,
                                        pc20000, pc50000, pc100000 }

ThresholdSFN-GANSS-TOW ::=          ENUMERATED {
                                        ms1, ms2, ms3, ms5, ms10,
                                        ms20, ms50, ms100 }

ThresholdSFN-GPS-TOW ::=            ENUMERATED {
                                        ms1, ms2, ms3, ms5, ms10,
                                        ms20, ms50, ms100 }

ThresholdSFN-GPS-TOW-us ::=         ENUMERATED {
                                        us1, us2, us3, us5, us10,
                                        us20, us50, us100 }

ThresholdSFN-SFN-Change ::=         ENUMERATED {
                                        c0-25, c0-5, c1, c2, c3, c4, c5,
                                        c10, c20, c50, c100, c200, c500,
                                        c1000, c2000, c5000 }

ThresholdUsedFrequency ::=          INTEGER (-115..165)

ThresholdUsedFrequency-r6 ::=       INTEGER (-120..165)

-- Actual value TimeInterval = IE value * 20.
TimeInterval ::=                    INTEGER (1..13)


TimeslotInfo ::=                    SEQUENCE {
    timeslotNumber                      TimeslotNumber,
    burstType                           BurstType
}

TimeslotInfo-LCR-r4 ::=             SEQUENCE {
    timeslotNumber                      TimeslotNumber-LCR-r4
}

TimeslotInfoList ::=                SEQUENCE (SIZE (1..maxTS)) OF
                                        TimeslotInfo

TimeslotInfoList-LCR-r4 ::=         SEQUENCE (SIZE (1..maxTS-LCR)) OF
                                        TimeslotInfo-LCR-r4

TimeslotInfoList-r4 ::=             CHOICE {
    -- the choice for 7.68 Mcps TDD is the same as for 3.84 Mcps TDD --
    tdd384                              SEQUENCE (SIZE (1..maxTS)) OF
                                            TimeslotInfo,
    tdd128                              SEQUENCE (SIZE (1..maxTS-LCR)) OF
                                            TimeslotInfo-LCR-r4
}

-- SPARE: TimeslotISCP, Max = 91
-- Values above Max are spare
TimeslotISCP ::=                    INTEGER (0..127)


-- TimeslotISCP-List shall not include more than 6 elements in 1.28Mcps TDD mode.
TimeslotISCP-List ::=               SEQUENCE (SIZE (1..maxTS)) OF
                                        TimeslotISCP

TimeslotListWithISCP ::=            SEQUENCE (SIZE (1..maxTS)) OF
```


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```
                                    TimeslotWithISCP

TimeslotWithISCP ::=                SEQUENCE {
    timeslot                            TimeslotNumber,
    timeslotISCP                        TimeslotISCP
}

TimeToTrigger ::=                   ENUMERATED {
                                        ttt0, ttt10, ttt20, ttt40, ttt60,
                                        ttt80, ttt100, ttt120, ttt160,
                                        ttt200, ttt240, tt320, ttt640,
                                        ttt1280, ttt2560, ttt5000 }

TrafficVolumeEventParam ::=         SEQUENCE {
    eventID                             TrafficVolumeEventType,
    reportingThreshold                  TrafficVolumeThreshold,
    timeToTrigger                       TimeToTrigger                       OPTIONAL,
    pendingTimeAfterTrigger             PendingTimeAfterTrigger             OPTIONAL,
    tx-InterruptionAfterTrigger         TX-InterruptionAfterTrigger         OPTIONAL
}

TrafficVolumeEventResults ::=       SEQUENCE {
    ul-transportChannelCausingEvent     UL-TrCH-Identity,
    trafficVolumeEventIdentity          TrafficVolumeEventType
}

TrafficVolumeEventType ::=          ENUMERATED {
                                        e4a,
                                        e4b }

TrafficVolumeMeasQuantity ::=       CHOICE {
    rlc-BufferPayload                   NULL,
    averageRLC-BufferPayload            TimeInterval,
    varianceOfRLC-BufferPayload         TimeInterval
}

TrafficVolumeMeasSysInfo ::=        SEQUENCE {
    trafficVolumeMeasurementID          MeasurementIdentity         DEFAULT 4,
    trafficVolumeMeasurementObjectList  TrafficVolumeMeasurementObjectList  OPTIONAL,
    trafficVolumeMeasQuantity           TrafficVolumeMeasQuantity           OPTIONAL,
    trafficVolumeReportingQuantity      TrafficVolumeReportingQuantity      OPTIONAL,
    -- dummy is not used in this version of specification, it should
    -- not be sent and if received it should be ignored.
    dummy                               TrafficVolumeReportingCriteria      OPTIONAL,
    measurementValidity                 MeasurementValidity                 OPTIONAL,
    measurementReportingMode            MeasurementReportingMode,
    reportCriteriaSysInf                TrafficVolumeReportCriteriaSysInfo

}

TrafficVolumeMeasuredResults ::=    SEQUENCE {
    rb-Identity                         RB-Identity,
    rlc-BuffersPayload                  RLC-BuffersPayload                  OPTIONAL,
    averageRLC-BufferPayload            AverageRLC-BufferPayload            OPTIONAL,
    varianceOfRLC-BufferPayload         VarianceOfRLC-BufferPayload         OPTIONAL
}

TrafficVolumeMeasuredResultsList ::= SEQUENCE (SIZE (1..maxRB)) OF
                                    TrafficVolumeMeasuredResults

TrafficVolumeMeasurement ::=        SEQUENCE {
    trafficVolumeMeasurementObjectList  TrafficVolumeMeasurementObjectList  OPTIONAL,
    trafficVolumeMeasQuantity           TrafficVolumeMeasQuantity           OPTIONAL,
    trafficVolumeReportingQuantity      TrafficVolumeReportingQuantity      OPTIONAL,
    measurementValidity                 MeasurementValidity                 OPTIONAL,
    reportCriteria                      TrafficVolumeReportCriteria
}

TrafficVolumeMeasurementObjectList ::= SEQUENCE (SIZE (1..maxTrCH)) OF
                                        UL-TrCH-Identity

TrafficVolumeReportCriteria ::=     CHOICE {
    trafficVolumeReportingCriteria      TrafficVolumeReportingCriteria,
    periodicalReportingCriteria         PeriodicalReportingCriteria,
    noReporting                         NULL
}

TrafficVolumeReportCriteriaSysInfo ::=  CHOICE {
```

```
    trafficVolumeReportingCriteria      TrafficVolumeReportingCriteria,
    periodicalReportingCriteria         PeriodicalReportingCriteria
}

TrafficVolumeReportingCriteria ::= SEQUENCE {
    -- NOTE: transChCriteriaList should be mandatory in later versions of this message
    transChCriteriaList                 TransChCriteriaList                 OPTIONAL
}

TrafficVolumeReportingQuantity ::= SEQUENCE {
    rlc-RB-BufferPayload                BOOLEAN,
    rlc-RB-BufferPayloadAverage         BOOLEAN,
    rlc-RB-BufferPayloadVariance        BOOLEAN
}

TrafficVolumeThreshold ::=          ENUMERATED {
                                        th8, th16, th32, th64, th128,
                                        th256, th512, th1024, th2k, th3k,
                                        th4k, th6k, th8k, th12k, th16k,
                                        th24k, th32k, th48k, th64k, th96k,
                                        th128k, th192k, th256k, th384k,
                                        th512k, th768k }

TransChCriteria ::=                 SEQUENCE {
    ul-transportChannelID               UL-TrCH-Identity                    OPTIONAL,
    eventSpecificParameters             SEQUENCE (SIZE (1..maxMeasParEvent)) OF
                                            TrafficVolumeEventParam         OPTIONAL
}

TransChCriteriaList ::=         SEQUENCE (SIZE (1..maxTrCH)) OF
                                        TransChCriteria

TransferMode ::=                    ENUMERATED {
                                        acknowledgedModeRLC,
                                        unacknowledgedModeRLC }

TransmittedPowerThreshold ::=       INTEGER (-50..33)

TriggeringCondition1 ::=            ENUMERATED {
                                        activeSetCellsOnly,
                                        monitoredSetCellsOnly,
                                        activeSetAndMonitoredSetCells }

TriggeringCondition2 ::=            ENUMERATED {
                                        activeSetCellsOnly,
                                        monitoredSetCellsOnly,
                                        activeSetAndMonitoredSetCells,
                                        detectedSetCellsOnly,
                                        detectedSetAndMonitoredSetCells }

Tutran-Ganss-DriftRate ::=          ENUMERATED {
                                        ugdr0, ugdr1, ugdr2, ugdr5, ugdr10, ugdr15 , ugdr25,
                                        ugdr50, ugdr-1, ugdr-2, ugdr-5, ugdr-10, ugdr-15,
                                        ugdr-25, ugdr-50, spare }

TX-InterruptionAfterTrigger ::=     ENUMERATED {
                                        txiat0-25, txiat0-5, txiat1,
                                        txiat2, txiat4, txiat8, txiat16 }

UDRE ::=                            ENUMERATED {
                                        lessThan1,
                                        between1-and-4,
                                        between4-and-8,
                                        over8 }

UE-6AB-Event ::=                    SEQUENCE {
    timeToTrigger                       TimeToTrigger,
    transmittedPowerThreshold           TransmittedPowerThreshold
}

UE-6FG-Event ::=                    SEQUENCE {
    timeToTrigger                       TimeToTrigger,
    -- in 1.28 Mcps TDD ue-RX-TX-TimeDifferenceThreshold corresponds to T_ADV Threshold
    ue-RX-TX-TimeDifferenceThreshold    UE-RX-TX-TimeDifferenceThreshold
}

-- dummy and dummy2 are not used in this version of the specification, they should
-- not be sent and if received the UE behaviour is not specified.
```

```
UE-AutonomousUpdateMode ::=         CHOICE {
    dummy                               NULL,
    onWithNoReporting                   NULL,
    dummy2                              RL-InformationLists
}

UE-InternalEventParam ::=           CHOICE {
    event6a                             UE-6AB-Event,
    event6b                             UE-6AB-Event,
    event6c                             TimeToTrigger,
    event6d                             TimeToTrigger,
    event6e                             TimeToTrigger,
    event6f                             UE-6FG-Event,
    event6g                             UE-6FG-Event
}

UE-InternalEventParamList ::=       SEQUENCE (SIZE (1..maxMeasEvent)) OF
                                        UE-InternalEventParam

UE-InternalEventResults ::=         CHOICE {
    event6a                             NULL,
    event6b                             NULL,
    event6c                             NULL,
    event6d                             NULL,
    event6e                             NULL,
    event6f                             PrimaryCPICH-Info,
    event6g                             PrimaryCPICH-Info,
    spare                               NULL
}

UE-InternalMeasQuantity ::=         SEQUENCE {
    measurementQuantity                 UE-MeasurementQuantity,
    filterCoefficient                   FilterCoefficient                   DEFAULT fc0
}

UE-InternalMeasuredResults ::=      SEQUENCE {
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            ue-TransmittedPowerFDD              UE-TransmittedPower         OPTIONAL,
            ue-RX-TX-ReportEntryList            UE-RX-TX-ReportEntryList    OPTIONAL
        },
        tdd                                 SEQUENCE {
            ue-TransmittedPowerTDD-List         UE-TransmittedPowerTDD-List OPTIONAL,
            appliedTA                           UL-TimingAdvance            OPTIONAL
        }
    }
}

UE-InternalMeasuredResults-r7 ::=   SEQUENCE {
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            ue-TransmittedPowerFDD              UE-TransmittedPower         OPTIONAL,
            ue-RX-TX-ReportEntryList            UE-RX-TX-ReportEntryList    OPTIONAL
        },
        tdd                                 SEQUENCE {
            ue-TransmittedPowerTDD-List         UE-TransmittedPowerTDD-List OPTIONAL,
            appliedTA                           EXT-UL-TimingAdvance        OPTIONAL
        }
    }
}

UE-InternalMeasuredResults-LCR-r4 ::=   SEQUENCE {
        ue-TransmittedPowerTDD-List         UE-TransmittedPowerTDD-List     OPTIONAL,
        t-ADVinfo                           T-ADVinfo                       OPTIONAL
}

UE-InternalMeasurement ::=          SEQUENCE {
    ue-InternalMeasQuantity             UE-InternalMeasQuantity             OPTIONAL,
    ue-InternalReportingQuantity        UE-InternalReportingQuantity        OPTIONAL,
    reportCriteria                      UE-InternalReportCriteria
}

UE-InternalMeasurement-r4 ::=       SEQUENCE {
    ue-InternalMeasQuantity             UE-InternalMeasQuantity             OPTIONAL,
    ue-InternalReportingQuantity        UE-InternalReportingQuantity-r4     OPTIONAL,
    reportCriteria                      UE-InternalReportCriteria
}
```


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```
UE-InternalMeasurementSysInfo ::=   SEQUENCE {
    ue-InternalMeasurementID            MeasurementIdentity         DEFAULT 5,
    ue-InternalMeasQuantity             UE-InternalMeasQuantity
}

UE-InternalReportCriteria ::=       CHOICE {
    ue-InternalReportingCriteria        UE-InternalReportingCriteria,
    periodicalReportingCriteria         PeriodicalReportingCriteria,
    noReporting                         NULL
}

UE-InternalReportingCriteria ::=    SEQUENCE {
    ue-InternalEventParamList           UE-InternalEventParamList           OPTIONAL
}

UE-InternalReportingQuantity ::=    SEQUENCE {
    ue-TransmittedPower                 BOOLEAN,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            ue-RX-TX-TimeDifference             BOOLEAN
        },
        tdd                                 SEQUENCE {
            appliedTA                           BOOLEAN
        }
    }
}

UE-InternalReportingQuantity-r4 ::= SEQUENCE {
    ue-TransmittedPower                 BOOLEAN,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            ue-RX-TX-TimeDifference             BOOLEAN
        },
        tdd                                 SEQUENCE {
            tddOption                           CHOICE {
            -- appliedTA applies to both 3.84 Mcps TDD and to 7.68 Mcps TDD.
            -- Therefore, no additional choice of TDD mode is necessary
                tdd384                              SEQUENCE {
                    appliedTA                           BOOLEAN
                },
                tdd128                              SEQUENCE {
                    t-ADVinfo                           BOOLEAN
                }
            }
        }
    }
}

-- TABULAR: UE-MeasurementQuantity, for 3.84 Mcps TDD only the first two values
-- ue-TransmittedPower and utra-Carrier-RSSI are used.
-- For 1.28 Mcps TDD ue-RX-TX-TimeDifference corresponds to T-ADV in the tabular
UE-MeasurementQuantity ::=          ENUMERATED {
                                        ue-TransmittedPower,
                                        utra-Carrier-RSSI,
                                        ue-RX-TX-TimeDifference }

UE-RX-TX-ReportEntry ::=            SEQUENCE {
    primaryCPICH-Info                   PrimaryCPICH-Info,
    ue-RX-TX-TimeDifferenceType1        UE-RX-TX-TimeDifferenceType1
}

UE-RX-TX-ReportEntryList ::=        SEQUENCE (SIZE (1..maxRL)) OF
                                        UE-RX-TX-ReportEntry

-- SPARE: UE-RX-TX-TimeDifferenceType1, Max = 1280
-- Values above Max are spare
UE-RX-TX-TimeDifferenceType1 ::=            INTEGER (768..1791)


UE-RX-TX-TimeDifferenceType2 ::=    INTEGER (0..8191)

UE-RX-TX-TimeDifferenceType2Info ::=    SEQUENCE {
    ue-RX-TX-TimeDifferenceType2            UE-RX-TX-TimeDifferenceType2,
    neighbourQuality                        NeighbourQuality
}

-- In 1.28 Mcps TDD, actual value for
-- T-ADV Threshold = (UE-RX-TX-TimeDifferenceThreshold - 768) * 0.125
```


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```
UE-RX-TX-TimeDifferenceThreshold ::= INTEGER (768..1280)

UE-TransmittedPower ::=             INTEGER (0..104)

UE-TransmittedPowerTDD-List ::=     SEQUENCE (SIZE (1..maxTS)) OF
                                        UE-TransmittedPower

UL-TrCH-Identity ::=                    CHOICE{
    dch                                 TransportChannelIdentity,
    -- Note: the reference to CPCH in the element name below is incorrect. The name is not changed
    -- to keep it aligned with R99.
    rachorcpch                          NULL,
    usch                                TransportChannelIdentity
}

UE-Positioning-Accuracy ::=                 BIT STRING (SIZE (7))


UE-Positioning-CipherParameters ::=         SEQUENCE {
    cipheringKeyFlag                    BIT STRING (SIZE (1)),
    cipheringSerialNumber               INTEGER (0..65535)
}

UE-Positioning-DGANSSCorrections ::= SEQUENCE {
    dganssreferencetime                 INTEGER (0..119),
    dganssInfoList                      DGANSSInfoList                      OPTIONAL
}

UE-Positioning-Error ::=                        SEQUENCE {
    errorReason                         UE-Positioning-ErrorCause,
    ue-positioning-GPS-additionalAssistanceDataRequest          UE-Positioning-GPS-
AdditionalAssistanceDataRequest OPTIONAL
}

UE-Positioning-ErrorCause ::=                   ENUMERATED {
                                        notEnoughOTDOA-Cells,
                                        notEnoughGPS-Satellites,
                                        assistanceDataMissing,
                                        notAccomplishedGPS-TimingOfCellFrames,
                                        undefinedError,
                                        requestDeniedByUser,
                                        notProcessedAndTimeout,
                                        referenceCellNotServingCell }

UE-Positioning-EventParam ::=                   SEQUENCE {
    reportingAmount                     ReportingAmount,
    reportFirstFix                      BOOLEAN,
    measurementInterval                 UE-Positioning-MeasurementInterval,
    eventSpecificInfo                   UE-Positioning-EventSpecificInfo
}

UE-Positioning-EventParamList ::=               SEQUENCE (SIZE (1..maxMeasEvent)) OF
                                        UE-Positioning-EventParam

UE-Positioning-EventSpecificInfo ::=            CHOICE {
    e7a                                 ThresholdPositionChange,
    e7b                                 ThresholdSFN-SFN-Change,
    -- IE 'ThresholdSFN-GPS-TOW' shall be ignored if IE 'ThresholdSFN-GPS-TOW-us' is present in
    -- MeasurementControl-v7xyext-IEs, and the value of that IE shall be used instead.
    e7c                                 ThresholdSFN-GPS-TOW
}

UE-Positioning-GANSS-Almanac ::=    SEQUENCE{
    ganss-wk-number                     INTEGER (0..255),
    ganss-sat-id                        BIT STRING (SIZE (36)),
    alm-model                           CHOICE {
        alm-keplerianParameters             ALM-keplerianParameters,
        spare5                              NULL,
        spare4                              NULL,
        spare3                              NULL,
        spare2                              NULL,
        spare1                              NULL
    }
}

UE-Positioning-GANSS-AdditionalAssistanceDataRequest ::= SEQUENCE {
    ganssReferenceTime                  BOOLEAN,
    ganssreferenceLocation              BOOLEAN,
```

```
    ganssIonosphericModel               BOOLEAN,
    ganssRequestedGenericAssistanceDataList GanssRequestedGenericAssistanceDataList
}

UE-Positioning-GANSS-AssistanceData ::= SEQUENCE {
    ue-positioning-GANSS-ReferenceTime  UE-Positioning-GANSS-ReferenceTime      OPTIONAL,
    uePositioningGanssReferencePosition ReferenceLocationGANSS                  OPTIONAL,
    uePositioningGanssIonosphericModel  UE-Positioning-GANSS-IonosphericModel   OPTIONAL,
    ganssGenericDataList                GANSSGenericDataList                    OPTIONAL
}


UE-Positioning-GANSS-ClockModel ::= SEQUENCE {
    satellite-clock-modelList           Satellite-clock-modelList               OPTIONAL
}

UE-Positioning-GANSS-Data ::=       SEQUENCE {
    ganssDataCipheringInfo              UE-Positioning-CipherParameters         OPTIONAL,
    ganssDecipheringKeys                GANSSDecipheringKeys                    OPTIONAL,
    uePositioningGanssReferenceTime     UE-Positioning-GANSS-ReferenceTime      OPTIONAL,
    uePositioningGanssReferencePosition ReferenceLocationGANSS                  OPTIONAL,
    uePositioningGanssIonosphericModel  UE-Positioning-GANSS-IonosphericModel   OPTIONAL,
    ganssGenericDataList                GANSSGenericDataList                    OPTIONAL
}

UE-Positioning-GANSS-Data-Bit-Assistance ::= SEQUENCE {
    ganss-tod                           INTEGER (0..59),
    dataBitAssistanceList               DataBitAssistanceList
}

UE-Positioning-GANSS-Error ::=      SEQUENCE {
    errorReason                         UE-Positioning-GANSS-ErrorCause,
    ue-positioningGanss-AdditionalAssistanceDataRequest
                                UE-Positioning-GANSS-AdditionalAssistanceDataRequest    OPTIONAL
}

UE-Positioning-GANSS-ErrorCause ::= ENUMERATED {
                                    notEnoughOTDOA-Cells,
                                    notEnoughGPS-Satellites,
                                    assistanceDataMissing,
                                    notAccomplishedGPS-TimingOfCellFrames,
                                    undefinedError,
                                    requestDeniedByUser,
                                    notProcessedAndTimeout,
                                    referenceCellNotServingCell,
                                    notEnoughGANSS-Satellites,
                                    notAccomplishedGANSS-TimingOfCellFrames }

UE-Positioning-GANSS-IonosphericModel ::= SEQUENCE {
    alpha-zero-ionos                    BIT STRING (SIZE (12)),
    alpha-one-ionos                     BIT STRING (SIZE (12)),
    alpha-two-ionos                     BIT STRING (SIZE (12)),
    gANSS-storm-flags                   GANSS-Storm-Flag                    OPTIONAL
}

UE-Positioning-GANSS-MeasuredResults ::= SEQUENCE {
    referenceTime                       ReferenceTimeGANSS,
    ganssGenericMeasurementInfo         GANSSGenericMeasurementInfo
}

UE-Positioning-GANSS-NavigationModel ::= SEQUENCE {
    non-broadcstIndication              ENUMERATED { true }                 OPTIONAL,
    toe-c-msb                           INTEGER (0..31)                     OPTIONAL,
    e-msb                               INTEGER (0..127)                    OPTIONAL,
    sqrtA-msb                           INTEGER (0..63)                     OPTIONAL,
    ganssSatInfoNavList                 Ganss-Sat-Info-NavList

}

UE-Positioning-GANSS-OrbitModel ::= SEQUENCE {
    orbit-model                         CHOICE {
        keplerianParameters                 KeplerianParameters,
        spare5                              NULL,
        spare4                              NULL,
        spare3                              NULL,
        spare2                              NULL,
        spare1                              NULL
    }
```


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```
}

UE-Positioning-GANSS-PositionEstimateInfo ::= SEQUENCE {
    referenceTime                       ReferenceTimeGANSS,
    positionEstimateGanss               PositionEstimateGANSS,
    positionData                        BIT STRING (SIZE (16)),
    velocityEstimateGanss               VelocityEstimate
}

UE-Positioning-GANSS-RealTimeIntegrity ::= SEQUENCE (SIZE (1..maxGANSSSat)) OF SEQUENCE {
    bad-ganss-satId                     INTEGER (0..63),
    bad-ganss-signalId                  GANSS-Signal-Id                     OPTIONAL
}

UE-Positioning-GANSS-ReferenceMeasurementInfo ::= SEQUENCE {
    ganssSignalId                       INTEGER (0..3)                      OPTIONAL,
    satelliteInformationList            GANSSSatelliteInformationList
}

UE-Positioning-GANSS-ReferenceTime ::= SEQUENCE {
    ganssDay                            INTEGER (0..8191)                   OPTIONAL,
    ganssTod                            INTEGER (0..86399),
    ganssTodUncertainty                 INTEGER (0..127)                    OPTIONAL,
    ganssTimeId                         INTEGER (0..7)                      OPTIONAL,
    utran-ganssreferenceTime            UTRAN-GANSSReferenceTime            OPTIONAL,
    tutran-ganss-driftRate              Tutran-Ganss-DriftRate              OPTIONAL
}


UE-Positioning-GANSS-TimeModel ::=  SEQUENCE {
    ganss-time-model                    INTEGER (0..37799),
    ganss-t-a0                          INTEGER (-2147483648..2147483647),
    ganss-t-a1                          INTEGER (-8388608..8388607)         OPTIONAL,
    ganss-t-a2                          INTEGER (-64..63)                   OPTIONAL,
    ganss-to-id                         INTEGER (0..7),
    ganss-wk-number                     INTEGER (0..8191)                   OPTIONAL
}

UE-Positioning-GANSS-Time-Models ::= SEQUENCE (SIZE (1..maxGANSS-1)) OF BOOLEAN

UE-Positioning-GANSS-UTCModel ::=   SEQUENCE {
    a-one-utc                           BIT STRING (SIZE (24)),
    a-zero-utc                          BIT STRING (SIZE (32)),
    t-ot-utc                            BIT STRING (SIZE (8)),
    delta-t-ls-utc                      BIT STRING (SIZE (8)),
    w-n-t-utc                           BIT STRING (SIZE (8)),
    w-n-lsf-utc                         BIT STRING (SIZE (8)),
    dn-utc                              BIT STRING (SIZE (8)),
    delta-t-lsf-utc                     BIT STRING (SIZE (8))
}

UE-Positioning-GPS-AcquisitionAssistance ::=    SEQUENCE {
    gps-ReferenceTime                   INTEGER (0..604799999),
    utran-GPSReferenceTime              UTRAN-GPSReferenceTime          OPTIONAL,
    satelliteInformationList            AcquisitionSatInfoList
}

UE-Positioning-GPS-AdditionalAssistanceDataRequest ::=      SEQUENCE {
    almanacRequest                      BOOLEAN,
    utcModelRequest                     BOOLEAN,
    ionosphericModelRequest             BOOLEAN,
    navigationModelRequest              BOOLEAN,
    dgpsCorrectionsRequest              BOOLEAN,
    referenceLocationRequest            BOOLEAN,
    referenceTimeRequest                BOOLEAN,
    aquisitionAssistanceRequest         BOOLEAN,
    realTimeIntegrityRequest            BOOLEAN,
    navModelAddDataRequest              UE-Positioning-GPS-NavModelAddDataReq       OPTIONAL
}

UE-Positioning-GPS-Almanac ::=                  SEQUENCE {
    wn-a                                BIT STRING (SIZE (8)),
    almanacSatInfoList                  AlmanacSatInfoList,
    sv-GlobalHealth                     BIT STRING (SIZE (364))             OPTIONAL
}

UE-Positioning-GPS-AssistanceData ::=           SEQUENCE {
```

```
    ue-positioning-GPS-ReferenceTime                UE-Positioning-GPS-ReferenceTime
    OPTIONAL,
    ue-positioning-GPS-ReferenceLocation            ReferenceLocation               OPTIONAL,
    ue-positioning-GPS-DGPS-Corrections             UE-Positioning-GPS-DGPS-Corrections
    OPTIONAL,
    ue-positioning-GPS-NavigationModel              UE-Positioning-GPS-NavigationModel
    OPTIONAL,
    ue-positioning-GPS-IonosphericModel             UE-Positioning-GPS-IonosphericModel
    OPTIONAL,
    ue-positioning-GPS-UTC-Model                    UE-Positioning-GPS-UTC-Model
    OPTIONAL,
    ue-positioning-GPS-Almanac                      UE-Positioning-GPS-Almanac
    OPTIONAL,
    ue-positioning-GPS-AcquisitionAssistance        UE-Positioning-GPS-AcquisitionAssistance
    OPTIONAL,
    ue-positioning-GPS-Real-timeIntegrity           BadSatList                              OPTIONAL,
    -- dummy is not used in this version of the specification, it should
    -- not be sent and if received it should be ignored.
    dummy           UE-Positioning-GPS-ReferenceCellInfo        OPTIONAL
}

UE-Positioning-GPS-DGPS-Corrections ::=     SEQUENCE {
    gps-TOW                             INTEGER (0..604799),
    statusHealth                        DiffCorrectionStatus,
    dgps-CorrectionSatInfoList          DGPS-CorrectionSatInfoList
}

UE-Positioning-GPS-IonosphericModel ::=     SEQUENCE {
    alfa0                               BIT STRING (SIZE (8)),
    alfa1                               BIT STRING (SIZE (8)),
    alfa2                               BIT STRING (SIZE (8)),
    alfa3                               BIT STRING (SIZE (8)),
    beta0                               BIT STRING (SIZE (8)),
    beta1                               BIT STRING (SIZE (8)),
    beta2                               BIT STRING (SIZE (8)),
    beta3                               BIT STRING (SIZE (8))
}

UE-Positioning-GPS-MeasurementResults ::=       SEQUENCE {
    referenceTime                       CHOICE {
        utran-GPSReferenceTimeResult        UTRAN-GPSReferenceTimeResult,
        gps-ReferenceTimeOnly               INTEGER (0..604799999)
    },
    gps-MeasurementParamList            GPS-MeasurementParamList
}

UE-Positioning-GPS-NavigationModel ::=          SEQUENCE {
    navigationModelSatInfoList          NavigationModelSatInfoList
}

UE-Positioning-GPS-NavModelAddDataReq ::=       SEQUENCE {
    gps-Week                            INTEGER (0..1023),
    -- SPARE: gps-Toe, Max = 167
    -- Values above Max are spare
    gps-Toe                             INTEGER (0..255),
    -- SPARE: tToeLimit, Max = 10
    -- Values above Max are spare
    tToeLimit                           INTEGER (0..15),
    satDataList                         SatDataList
}

UE-Positioning-GPS-ReferenceCellInfo ::=        SEQUENCE{
    modeSpecificInfo                CHOICE {
        fdd                             SEQUENCE {
            referenceIdentity               PrimaryCPICH-Info
        },
        tdd                             SEQUENCE {
            referenceIdentity               CellParametersID
        }
    }
}

UE-Positioning-GPS-ReferenceTime ::=            SEQUENCE {
    gps-Week                            INTEGER (0..1023),
    gps-tow-1msec                       GPS-TOW-1msec,
    utran-GPSReferenceTime              UTRAN-GPSReferenceTime              OPTIONAL,
    sfn-tow-Uncertainty                 SFN-TOW-Uncertainty                 OPTIONAL,
    utran-GPS-DriftRate                 UTRAN-GPS-DriftRate                 OPTIONAL,
```


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```
    gps-TOW-AssistList                  GPS-TOW-AssistList                  OPTIONAL
}

UE-Positioning-GPS-ReferenceTimeUncertainty ::= INTEGER (0..127)

UE-Positioning-GPS-UTC-Model ::=                SEQUENCE {
    a1                                  BIT STRING (SIZE (24)),
    a0                                  BIT STRING (SIZE (32)),
    t-ot                                BIT STRING (SIZE (8)),
    wn-t                                BIT STRING (SIZE (8)),
    delta-t-LS                          BIT STRING (SIZE (8)),
    wn-lsf                              BIT STRING (SIZE (8)),
    dn                                  BIT STRING (SIZE (8)),
    delta-t-LSF                         BIT STRING (SIZE (8))
}

UE-Positioning-IPDL-Parameters ::=              SEQUENCE {
    ip-Spacing                          IP-Spacing,
    ip-Length                           IP-Length,
    ip-Offset                           INTEGER (0..9),
    seed                                INTEGER (0..63),
    burstModeParameters                 BurstModeParameters         OPTIONAL
}

UE-Positioning-IPDL-Parameters-r4 ::=           SEQUENCE {
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            ip-Spacing                          IP-Spacing,
            ip-Length                           IP-Length,
            ip-Offset                           INTEGER (0..9),
            seed                                INTEGER (0..63)
        },
        tdd                                 SEQUENCE {
            ip-Spacing-TDD                      IP-Spacing-TDD,
            ip-slot                             INTEGER (0..14),
            ip-Start                            INTEGER (0..4095),
            ip-PCCPCG                           IP-PCCPCH-r4            OPTIONAL
        }
    },
    burstModeParameters                 BurstModeParameters             OPTIONAL
}

UE-Positioning-IPDL-Parameters-TDD-r4-ext ::=   SEQUENCE {
    ip-Spacing                          IP-Spacing-TDD,
    ip-slot                             INTEGER (0..14),
    ip-Start                            INTEGER (0..4095),
    ip-PCCPCG                           IP-PCCPCH-r4                    OPTIONAL,
    burstModeParameters                 BurstModeParameters
}

UE-Positioning-MeasuredResults ::=              SEQUENCE {
    ue-positioning-OTDOA-Measurement            UE-Positioning-OTDOA-Measurement
    OPTIONAL,
    ue-positioning-PositionEstimateInfo         UE-Positioning-PositionEstimateInfo
        OPTIONAL,
    ue-positioning-GPS-Measurement              UE-Positioning-GPS-MeasurementResults
        OPTIONAL,
    ue-positioning-Error                        UE-Positioning-Error
    OPTIONAL
}

UE-Positioning-MeasuredResults-v7xyext ::= SEQUENCE {
    ue-positioning-Ganss-PositionEstimateInfo
                                        UE-Positioning-GANSS-PositionEstimateInfo   OPTIONAL,
    ue-positioning-Ganss-MeasurementResults UE-Positioning-GANSS-MeasuredResults    OPTIONAL,
    ue-positioning-Ganss-Error          UE-Positioning-GANSS-Error                  OPTIONAL
}

UE-Positioning-MeasuredResults-v390ext ::=      SEQUENCE {
    ue-Positioning-OTDOA-Measurement-v390ext        UE-Positioning-OTDOA-Measurement-v390ext
}

UE-Positioning-Measurement ::=                  SEQUENCE {
    ue-positioning-ReportingQuantity            UE-Positioning-ReportingQuantity,
    reportCriteria                      UE-Positioning-ReportCriteria,
    ue-positioning-OTDOA-AssistanceData         UE-Positioning-OTDOA-AssistanceData
    OPTIONAL,
```

```
    ue-positioning-GPS-AssistanceData               UE-Positioning-GPS-AssistanceData
    OPTIONAL
}

UE-Positioning-Measurement-v390ext ::=          SEQUENCE {
    ue-positioning-ReportingQuantity-v390ext        UE-Positioning-ReportingQuantity-v390ext
    OPTIONAL,
    measurementValidity                 MeasurementValidity                 OPTIONAL,
    ue-positioning-OTDOA-AssistanceData-UEB         UE-Positioning-OTDOA-AssistanceData-UEB
    OPTIONAL
}

UE-Positioning-Measurement-r4 ::=               SEQUENCE {
    ue-positioning-ReportingQuantity                UE-Positioning-ReportingQuantity-r4,
    measurementValidity                             MeasurementValidity
    OPTIONAL,
    reportCriteria                                  UE-Positioning-ReportCriteria,
    ue-positioning-OTDOA-AssistanceData             UE-Positioning-OTDOA-AssistanceData-r4
    OPTIONAL,
    ue-positioning-GPS-AssistanceData               UE-Positioning-GPS-AssistanceData
    OPTIONAL
}

UE-Positioning-Measurement-v7xyext ::= SEQUENCE {
    ue-positioning-ReportingQuantity    UE-Positioning-ReportingQuantity-v7xyext,
    ue-positioning-GANSS-AssistanceData UE-Positioning-GANSS-AssistanceData     OPTIONAL
}

UE-Positioning-MeasurementEventResults ::= CHOICE {
    event7a                             UE-Positioning-PositionEstimateInfo,
    event7b                             UE-Positioning-OTDOA-Measurement,
    event7c                             UE-Positioning-GPS-MeasurementResults,
    additionalPosMeasEvent              NULL
}

UE-Positioning-MeasurementEventResults-v7xyext ::= SEQUENCE{
    additionalPosMeasEvent              CHOICE {
        event7d                             UE-Positioning-GANSS-MeasuredResults,
        spare                               NULL
    }
}

UE-Positioning-MeasurementInterval ::=          ENUMERATED {
                                        e5, e15, e60, e300,
                                        e900, e1800, e3600, e7200 }

UE-Positioning-MethodType ::=                   ENUMERATED {
                                        ue-Assisted,
                                        ue-Based,
                                        ue-BasedPreferred,
                                        ue-AssistedPreferred }

UE-Positioning-OTDOA-AssistanceData ::=     SEQUENCE {
    ue-positioning-OTDOA-ReferenceCellInfo          UE-Positioning-OTDOA-ReferenceCellInfo
    OPTIONAL,
    ue-positioning-OTDOA-NeighbourCellList              UE-Positioning-OTDOA-NeighbourCellList
        OPTIONAL
}

UE-Positioning-OTDOA-AssistanceData-r4 ::=  SEQUENCE {
    ue-positioning-OTDOA-ReferenceCellInfo          UE-Positioning-OTDOA-ReferenceCellInfo-r4
        OPTIONAL,
    ue-positioning-OTDOA-NeighbourCellList          UE-Positioning-OTDOA-NeighbourCellList-r4
        OPTIONAL
}

UE-Positioning-OTDOA-AssistanceData-r4ext ::= SEQUENCE {
    -- In case of TDD these IPDL parameters shall be used for the reference cell instead of
    -- IPDL Parameters in IE UE-Positioning-OTDOA-ReferenceCellInfo
    ue-Positioning-IPDL-Parameters-TDD-r4-ext       UE-Positioning-IPDL-Parameters-TDD-r4-ext
    OPTIONAL,
    -- These IPDL parameters shall be used for the neighbour cells in case of TDD instead of
    -- IPDL Parameters in IE UE-Positioning-OTDOA-NeighbourCellInfoList. The cells shall be
    -- listed in the same order as in IE UE-Positioning-OTDOA-NeighbourCellInfoList
    ue-Positioning-IPDL-Parameters-TDDList-r4-ext   UE-Positioning-IPDL-Parameters-TDDList-r4-ext
    OPTIONAL
}
```


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```
UE-Positioning-OTDOA-AssistanceData-UEB ::=     SEQUENCE {
    ue-positioning-OTDOA-ReferenceCellInfo-UEB
                                        UE-Positioning-OTDOA-ReferenceCellInfo-UEB      OPTIONAL,
    ue-positioning-OTDOA-NeighbourCellList-UEB
                                        UE-Positioning-OTDOA-NeighbourCellList-UEB      OPTIONAL
}

UE-Positioning-OTDOA-AssistanceData-UEB-ext ::= SEQUENCE {
    ue-positioning-OTDOA-ReferenceCellInfo-UEB-ext
                                        UE-Positioning-OTDOA-ReferenceCellInfo-UEB-ext  OPTIONAL,
    ue-positioning-OTDOA-NeighbourCellList-UEB-ext
                                        UE-Positioning-OTDOA-NeighbourCellList-UEB-ext  OPTIONAL
}

UE-Positioning-IPDL-Parameters-TDDList-r4-ext ::=   SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        UE-Positioning-IPDL-Parameters-TDD-r4-ext

UE-Positioning-OTDOA-Measurement ::=            SEQUENCE {
    sfn                                 INTEGER (0..4095),
    modeSpecificInfo                CHOICE {
        fdd                             SEQUENCE {
            referenceCellIDentity               PrimaryCPICH-Info,
            ue-RX-TX-TimeDifferenceType2Info    UE-RX-TX-TimeDifferenceType2Info
        },
        tdd                                 SEQUENCE {
            referenceCellIdentity           CellParametersID
        }
    },
    neighbourList                       NeighbourList                       OPTIONAL
}

UE-Positioning-OTDOA-Measurement-v390ext ::=            SEQUENCE {
    neighbourList-v390ext                       NeighbourList-v390ext
}

UE-Positioning-OTDOA-NeighbourCellInfo ::= SEQUENCE {
    modeSpecificInfo    CHOICE  {
        fdd                             SEQUENCE {
            primaryCPICH-Info                   PrimaryCPICH-Info
        },
        tdd                             SEQUENCE{
            cellAndChannelIdentity              CellAndChannelIdentity
        }
    },
    frequencyInfo                       FrequencyInfo                       OPTIONAL,
    ue-positioning-IPDL-Paremeters                  UE-Positioning-IPDL-Parameters
    OPTIONAL,
    sfn-SFN-RelTimeDifference           SFN-SFN-RelTimeDifference1,
    sfn-SFN-Drift                       SFN-SFN-Drift                       OPTIONAL,
    searchWindowSize                    OTDOA-SearchWindowSize,
    positioningMode     CHOICE{
        ueBased                                 SEQUENCE {},
        ueAssisted                              SEQUENCE {}
    }
}

UE-Positioning-OTDOA-NeighbourCellInfo-r4 ::= SEQUENCE {
    modeSpecificInfo    CHOICE  {
        fdd                             SEQUENCE {
            primaryCPICH-Info                   PrimaryCPICH-Info
        },
        tdd                             SEQUENCE{
            cellAndChannelIdentity              CellAndChannelIdentity
        }
    },
    frequencyInfo                       FrequencyInfo                       OPTIONAL,
    ue-positioning-IPDL-Paremeters      UE-Positioning-IPDL-Parameters-r4   OPTIONAL,
    sfn-SFN-RelTimeDifference           SFN-SFN-RelTimeDifference1,
    sfn-Offset-Validity                 SFN-Offset-Validity                 OPTIONAL,
    sfn-SFN-Drift                       SFN-SFN-Drift                       OPTIONAL,
    searchWindowSize                    OTDOA-SearchWindowSize,
    positioningMode     CHOICE {
        ueBased                                 SEQUENCE {
            relativeNorth                       INTEGER (-20000..20000)             OPTIONAL,
            relativeEast                        INTEGER (-20000..20000)             OPTIONAL,
            relativeAltitude                    INTEGER (-4000..4000)               OPTIONAL,
            fineSFN-SFN                         FineSFN-SFN                         OPTIONAL,
            -- actual value roundTripTime = (IE value * 0.0625) + 876
```


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```
            roundTripTime                       INTEGER (0.. 32766)                 OPTIONAL
        },
        ueAssisted                              SEQUENCE {}
    }
}

UE-Positioning-OTDOA-NeighbourCellInfo-UEB ::= SEQUENCE {
    modeSpecificInfo    CHOICE  {
        fdd                                 SEQUENCE {
            primaryCPICH-Info                       PrimaryCPICH-Info
        },
        tdd                                 SEQUENCE{
            cellAndChannelIdentity                  CellAndChannelIdentity
        }
    },
    frequencyInfo                           FrequencyInfo                       OPTIONAL,
    ue-positioning-IPDL-Paremeters          UE-Positioning-IPDL-Parameters      OPTIONAL,
    sfn-SFN-RelTimeDifference               SFN-SFN-RelTimeDifference1,
    sfn-SFN-Drift                           SFN-SFN-Drift                       OPTIONAL,
    searchWindowSize                        OTDOA-SearchWindowSize,
    relativeNorth                           INTEGER (-20000..20000)             OPTIONAL,
    relativeEast                            INTEGER (-20000..20000)             OPTIONAL,
    relativeAltitude                        INTEGER (-4000..4000)               OPTIONAL,
    fineSFN-SFN                             FineSFN-SFN,
    -- actual value roundTripTime = (IE value * 0.0625) + 876
    roundTripTime                           INTEGER (0..32766)                  OPTIONAL
}

UE-Positioning-OTDOA-NeighbourCellInfo-UEB-ext ::= SEQUENCE {
    -- actual value roundTripTimeExtension = (IE value * 0.0625)
    roundTripTimeExtension              INTEGER (0..70274)                  OPTIONAL
}

UE-Positioning-OTDOA-NeighbourCellList ::= SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        UE-Positioning-OTDOA-NeighbourCellInfo

UE-Positioning-OTDOA-NeighbourCellList-r4 ::= SEQUENCE (SIZE (1..maxCellMeas)) OF
                                            UE-Positioning-OTDOA-NeighbourCellInfo-r4

UE-Positioning-OTDOA-NeighbourCellList-UEB ::= SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        UE-Positioning-OTDOA-NeighbourCellInfo-UEB

-- The order of the list corresponds to the order of UE-Positioning-OTDOA-NeighbourCellInfo-UEB
-- in UE-Positioning-OTDOA-NeighbourCellList-UEB
UE-Positioning-OTDOA-NeighbourCellList-UEB-ext ::= SEQUENCE (SIZE (1..maxCellMeas)) OF
                                        UE-Positioning-OTDOA-NeighbourCellInfo-UEB-ext


UE-Positioning-OTDOA-Quality ::=            SEQUENCE {
    stdResolution                       BIT STRING (SIZE (2)),
    numberOfOTDOA-Measurements          BIT STRING (SIZE (3)),
    stdOfOTDOA-Measurements             BIT STRING (SIZE (5))
}

UE-Positioning-OTDOA-ReferenceCellInfo ::=          SEQUENCE {
    sfn                                 INTEGER (0..4095)
    OPTIONAL,
    modeSpecificInfo CHOICE {
        fdd                                     SEQUENCE {
            primaryCPICH-Info                       PrimaryCPICH-Info
        },
        tdd                                     SEQUENCE{
            cellAndChannelIdentity                  CellAndChannelIdentity
        }
    },
    frequencyInfo                       FrequencyInfo                       OPTIONAL,
    positioningMode CHOICE {
        ueBased                                 SEQUENCE {},
        ueAssisted                              SEQUENCE {}
    },
    ue-positioning-IPDL-Paremeters              UE-Positioning-IPDL-Parameters  OPTIONAL
}

UE-Positioning-OTDOA-ReferenceCellInfo-r4 ::=   SEQUENCE {
    sfn                                 INTEGER (0..4095)
    OPTIONAL,
    modeSpecificInfo CHOICE {
        fdd                                     SEQUENCE {
```

```
            primaryCPICH-Info                   PrimaryCPICH-Info
        },
        tdd                                     SEQUENCE{
            cellAndChannelIdentity              CellAndChannelIdentity
        }
    },
    frequencyInfo                       FrequencyInfo                       OPTIONAL,
    positioningMode CHOICE {
        ueBased                                 SEQUENCE {
            cellPosition                                ReferenceCellPosition   OPTIONAL,
            -- actual value roundTripTime = (IE value * 0.0625) + 876
            roundTripTime                       INTEGER (0..32766)              OPTIONAL
        },
        ueAssisted                              SEQUENCE {}
    },
    ue-positioning-IPDL-Paremeters              UE-Positioning-IPDL-Parameters-r4   OPTIONAL
}

UE-Positioning-OTDOA-ReferenceCellInfo-UEB ::=          SEQUENCE {
    sfn                                 INTEGER (0..4095)                   OPTIONAL,
    modeSpecificInfo CHOICE {
        fdd                                     SEQUENCE {
            primaryCPICH-Info                   PrimaryCPICH-Info
        },
        tdd                                     SEQUENCE{
            cellAndChannelIdentity              CellAndChannelIdentity
        }
    },
    frequencyInfo                       FrequencyInfo                       OPTIONAL,
    cellPosition                        ReferenceCellPosition               OPTIONAL,
    -- actual value roundTripTime = (IE value * 0.0625) + 876
    roundTripTime                       INTEGER (0..32766)                  OPTIONAL,
    ue-positioning-IPDL-Paremeters      UE-Positioning-IPDL-Parameters      OPTIONAL
}

UE-Positioning-OTDOA-ReferenceCellInfo-UEB-ext ::= SEQUENCE {
    -- actual value roundTripTimeExtension = (IE value * 0.0625)
    roundTripTimeExtension              INTEGER (0..70274)                  OPTIONAL
}

UE-Positioning-PositionEstimateInfo ::=                 SEQUENCE {
    referenceTime                   CHOICE {
        utran-GPSReferenceTimeResult        UTRAN-GPSReferenceTimeResult,
        gps-ReferenceTimeOnly               INTEGER (0..604799999),
        cell-Timing                         SEQUENCE {
            sfn                                     INTEGER (0..4095),
            modeSpecificInfo                CHOICE {
                fdd                                 SEQUENCE {
                    primaryCPICH-Info                   PrimaryCPICH-Info
                },
                tdd                                 SEQUENCE{
                    cellAndChannelIdentity              CellAndChannelIdentity
                }
            }
        }
    },
    positionEstimate                    PositionEstimate
}

UE-Positioning-ReportCriteria ::=               CHOICE {
    ue-positioning-ReportingCriteria                UE-Positioning-EventParamList,
    periodicalReportingCriteria         PeriodicalReportingCriteria,
    noReporting                         NULL
}

UE-Positioning-ReportingQuantity ::=            SEQUENCE {
    methodType                          UE-Positioning-MethodType,
    positioningMethod                   PositioningMethod,
    -- dummy1 is not used in this version of specification and it should
    -- be ignored.
    dummy1                              UE-Positioning-ResponseTime,
    horizontal-Accuracy                 UE-Positioning-Accuracy             OPTIONAL,
    gps-TimingOfCellWanted              BOOLEAN,
    -- dummy2 is not used in this version of specification and it should
    -- be ignored.
    dummy2                              BOOLEAN,
    additionalAssistanceDataRequest     BOOLEAN,
    environmentCharacterisation         EnvironmentCharacterisation         OPTIONAL
```

```
}

UE-Positioning-ReportingQuantity-v390ext ::=        SEQUENCE {
    vertical-Accuracy                           UE-Positioning-Accuracy
}

UE-Positioning-ReportingQuantity-r4 ::=         SEQUENCE {
    methodType                              UE-Positioning-MethodType,
    positioningMethod                       PositioningMethod,
    horizontalAccuracy                      UE-Positioning-Accuracy             OPTIONAL,
    verticalAccuracy                        UE-Positioning-Accuracy             OPTIONAL,
    gps-TimingOfCellWanted                  BOOLEAN,
    additionalAssistanceDataReq             BOOLEAN,
    environmentCharacterisation             EnvironmentCharacterisation         OPTIONAL
}

UE-Positioning-ReportingQuantity-v7xyext ::=    SEQUENCE {
    velocityRequested                       ENUMERATED { true }                 OPTIONAL,
    gANSSPositioningMethod                  BIT STRING (SIZE (16))              OPTIONAL,
    gANSSTimingOfCellWanted                 BIT STRING (SIZE (8))               OPTIONAL,
    gANSSCarrierPhaseMeasurementRequested
                                            BIT STRING (SIZE (8))               OPTIONAL
}

UE-Positioning-ResponseTime ::=             ENUMERATED {
                                        s1, s2, s4, s8, s16,
                                        s32, s64, s128 }

-- SPARE: UTRA-CarrierRSSI, Max = 76
-- Values above Max are spare
UTRA-CarrierRSSI ::=                INTEGER (0..127)

UTRAN-GANSSReferenceTime ::=        SEQUENCE {
    ue-GANSSTimingOfCellFrames          INTEGER (0..345599999999),
    gANSS-TimeId                        INTEGER (0..7)                      OPTIONAL,
    gANSS-TimeUncertainty               INTEGER (0..127)                    OPTIONAL,
    mode                                CHOICE {
        fdd                                 SEQUENCE {
            primary-CPICH-Info                  PrimaryCPICH-Info
        },
        tdd                                 SEQUENCE {
            cellParameters                      CellParametersID
        },
        referenceSfn                        INTEGER (0..4095)
    }
}

UTRAN-GPS-DriftRate ::=             ENUMERATED {
                                    utran-GPSDrift0, utran-GPSDrift1, utran-GPSDrift2,
                                    utran-GPSDrift5, utran-GPSDrift10, utran-GPSDrift15,
                                    utran-GPSDrift25, utran-GPSDrift50, utran-GPSDrift-1,
                                    utran-GPSDrift-2, utran-GPSDrift-5, utran-GPSDrift-10,
                                    utran-GPSDrift-15, utran-GPSDrift-25, utran-GPSDrift-50}

UTRAN-GPSReferenceTime ::=              SEQUENCE {
    -- For utran-GPSTimingOfCell values above 2322431999999 are not
    -- used in this version of the specification
    -- Actual value utran-GPSTimingOfCell = (ms-part * 4294967296) + ls-part
    utran-GPSTimingOfCell           SEQUENCE {
        ms-part                         INTEGER (0..1023),
        ls-part                         INTEGER (0..4294967295)
    },
    modeSpecificInfo                CHOICE {
        fdd                             SEQUENCE {
            referenceIdentity               PrimaryCPICH-Info
        },
        tdd                             SEQUENCE {
            referenceIdentity               CellParametersID
        }
    }               OPTIONAL,
    sfn                                 INTEGER (0..4095)
}

UTRAN-GPSReferenceTimeResult ::=                SEQUENCE {
    -- For ue-GPSTimingOfCell values above 37158911999999 are not
    -- used in this version of the specification
    -- Actual value ue-GPSTimingOfCell = (ms-part * 4294967296) + ls-part
    ue-GPSTimingOfCell          SEQUENCE {
```

```
        ms-part                         INTEGER (0.. 16383),
        ls-part                         INTEGER (0..4294967295)
    },
    modeSpecificInfo                CHOICE {
        fdd                             SEQUENCE {
            referenceIdentity               PrimaryCPICH-Info
        },
        tdd                             SEQUENCE {
            referenceIdentity               CellParametersID
        }
    },
    sfn                                 INTEGER (0..4095)
}

VarianceOfRLC-BufferPayload ::=     ENUMERATED {
                                        plv0, plv4, plv8, plv16, plv32, plv64,
                                        plv128, plv256, plv512, plv1024,
                                        plv2k, plv4k, plv8k, plv16k, spare2, spare1 }

VelocityEstimate    ::=             CHOICE {
    horizontalVelocity                              HorizontalVelocity,
    horizontalWithVerticalVelocity                  HorizontalWithVerticalVelocity,
    horizontalVelocityWithUncertainty               HorizontalVelocityWithUncertainty,
    horizontalWithVerticalVelocityAndUncertainty    HorizontalWithVerticalVelocityAndUncertainty
}

-- Actual value W = IE value * 0.1
W ::=                               INTEGER (0..20)

-- **************************************************
--
--     OTHER INFORMATION ELEMENTS (10.3.8)
--
-- **************************************************

BCC ::=                             INTEGER (0..7)

BCCH-ModificationInfo ::=           SEQUENCE {
    mib-ValueTag                        MIB-ValueTag,
    bcch-ModificationTime               BCCH-ModificationTime               OPTIONAL
}

-- Actual value BCCH-ModificationTime = IE value * 8
BCCH-ModificationTime ::=           INTEGER (0..511)

BSIC ::=                            SEQUENCE {
    ncc                                 NCC,
    bcc                                 BCC
}

CBS-DRX-Level1Information ::=       SEQUENCE {
    ctch-AllocationPeriod               INTEGER (1..256),
    cbs-FrameOffset                     INTEGER (0..255)
}

CBS-DRX-Level1Information-extension-r6 ::=  ENUMERATED {p8, p16, p32, p64, p128, p256}

CDMA2000-Message ::=                SEQUENCE {
    msg-Type                            BIT STRING (SIZE (8)),
    payload                             BIT STRING (SIZE (1..512))
}

CDMA2000-MessageList ::=                SEQUENCE (SIZE (1..maxInterSysMessages)) OF
                                            CDMA2000-Message

CDMA2000-UMTS-Frequency-List ::=        SEQUENCE (SIZE (1..maxNumCDMA2000Freqs)) OF
                                            FrequencyInfoCDMA2000

CellValueTag ::=                        INTEGER (1..4)

-- If modeSpecificInfo is not included, then the presence of
-- DeferredMeasurementControlReadingSupport signals the support of deferred SIB11, SIB11bis and
-- SIB12 reading with default measurement quantities
DeferredMeasurementControlReadingSupport ::= SEQUENCE {
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            intraFreqMeasQuantity-FDD           IntraFreqMeasQuantity-FDD-sib3-r7
        },
```


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```
        tdd                                 SEQUENCE {
            intraFreqMeasQuantity-TDDList       IntraFreqMeasQuantity-TDDList
        }
    }   OPTIONAL
}

--Actual value = 2^(IE value)
ExpirationTimeFactor ::=                INTEGER (1..8)

-- For each extended SIB type the value tag information is added at the end
ExtSIBTypeInfoSchedulingInfo-List ::=   SEQUENCE (SIZE (1..maxSIB)) OF
                                            ExtSIBTypeInfoSchedulingInfo

ExtSIBTypeInfoSchedulingInfo ::=    SEQUENCE {
    extensionSIB-Type                   SIB-TypeExt,
    schedulingInfo                      SchedulingInformation,
    valueTagInfo                        ValueTagInfo
}

FDD-UMTS-Frequency-List ::=             SEQUENCE (SIZE (1..maxNumFDDFreqs)) OF
                                            FrequencyInfoFDD

FrequencyInfoCDMA2000 ::=               SEQUENCE {
                                            band-Class      BIT STRING (SIZE (5)),
                                            cdma-Freq       BIT STRING (SIZE(11))
}

GERAN-SystemInfoBlock ::=               OCTET STRING (SIZE (1..23))

GERAN-SystemInformation ::=             SEQUENCE (SIZE (1..maxGERAN-SI)) OF GERAN-SystemInfoBlock

GSM-BA-Range ::=                        SEQUENCE {
                                            gsmLowRangeUARFCN       UARFCN,
                                            gsmUpRangeUARFCN        UARFCN
}

GSM-BA-Range-List ::=                   SEQUENCE (SIZE (1..maxNumGSMFreqRanges)) OF
                                            GSM-BA-Range


-- This IE is formatted as 'TLV' and is coded in the same way as the Mobile Station Classmark 2
-- information element in [5]. The first octet is the Mobile station classmark 2 IEI and its value
-- shall be set to 33H. The second octet is the Length of mobile station classmark 2 and its value
-- shall be set to 3. The octet 3 contains the first octet of the value part of the Mobile Station
-- Classmark 2 information element, the octet 4 contains the second octet of the value part of the
-- Mobile Station Classmark 2 information element and so on. For each of these octets, the first/
-- leftmost/ most significant bit of the octet contains b8 of the corresponding octet of the Mobile
-- Station Classmark 2.
GSM-Classmark2 ::=                  OCTET STRING (SIZE (5))

-- This IE is formatted as 'V' and is coded in the same way as the value part in the Mobile station
-- classmark 3 information element in [5]
-- The value part is specified by means of CSN.1, which encoding results in a bit string, to which
-- final padding may be appended upto the next octet boundary [5]. The first/ leftmost bit of the
-- CSN.1 bit string is placed in the first/ leftmost/ most significant bit of the first
-- octet. This continues until the last bit of the CSN.1 bit string, which is placed in the last/
-- rightmost/ least significant bit of the last octet.
GSM-Classmark3 ::=                  OCTET STRING (SIZE (1..32))

GSM-MessageList ::=                 SEQUENCE (SIZE (1..maxInterSysMessages)) OF
                                        BIT STRING (SIZE (1..512))

GSM-MS-RadioAccessCapability ::=    OCTET STRING (SIZE (1..64))

GsmSecurityCapability ::=           BIT STRING {
                                        -- For each bit value '0' means false/ not supported
                                        a5-7(0),
                                        a5-6(1),
                                        a5-5(2),
                                        a5-4(3),
                                        a5-3(4),
                                        a5-2(5),
                                        a5-1(6)
                                        }   (SIZE (7))

GSM-TargetCellInfoList ::=      SEQUENCE (SIZE (1..maxGSMTargetCells)) OF
                                        GSM-TargetCellInfo
```


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```
GSM-TargetCellInfo ::=              SEQUENCE {
    bcch-ARFCN                          BCCH-ARFCN,
    frequency-band                      Frequency-Band,
    bsic                                BSIC            OPTIONAL
}

IdentificationOfReceivedMessage ::= SEQUENCE {
        rrc-TransactionIdentifier       RRC-TransactionIdentifier,
        receivedMessageType             ReceivedMessageType
}

InterRAT-ChangeFailureCause ::=     CHOICE {
    configurationUnacceptable           NULL,
    physicalChannelFailure              NULL,
    protocolError                       ProtocolErrorInformation,
    unspecified                         NULL,
    spare4                              NULL,
    spare3                              NULL,
    spare2                              NULL,
    spare1                              NULL
}

GERANIu-MessageList ::=             SEQUENCE (SIZE (1..maxInterSysMessages)) OF
                                        BIT STRING (SIZE (1..32768))

GERANIu-RadioAccessCapability ::=   BIT STRING (SIZE (1..170))

InterRAT-UE-RadioAccessCapability ::= CHOICE {
    gsm                                 SEQUENCE {
        gsm-Classmark2                      GSM-Classmark2,
        gsm-Classmark3                      GSM-Classmark3
    },
    cdma2000                            SEQUENCE {
        cdma2000-MessageList                CDMA2000-MessageList
    }
}

InterRAT-UE-RadioAccessCapabilityList ::=   SEQUENCE (SIZE(1..maxInterSysMessages)) OF
                                            InterRAT-UE-RadioAccessCapability

InterRAT-UE-RadioAccessCapability-v590ext ::= SEQUENCE {
    geranIu-RadioAccessCapability       GERANIu-RadioAccessCapability
}

InterRAT-UE-RadioAccessCapability-v690ext ::= SEQUENCE {
    supportOfInter-RAT-PS-Handover      ENUMERATED { doesSupporInter-RAT-PS-Handover }  OPTIONAL,
    gsm-MS-RadioAccessCapability        GSM-MS-RadioAccessCapability
}

InterRAT-UE-SecurityCapability ::= CHOICE {
    gsm                                 SEQUENCE {
        gsmSecurityCapability           GsmSecurityCapability
    }
}

InterRAT-UE-SecurityCapList ::=     SEQUENCE (SIZE(1..maxInterSysMessages)) OF
                                        InterRAT-UE-SecurityCapability

InterRAT-HO-FailureCause ::=        CHOICE {
    configurationUnacceptable           NULL,
    physicalChannelFailure              NULL,
    protocolError                       ProtocolErrorInformation,
    interRAT-ProtocolError              NULL,
    unspecified                         NULL,
    spare11                             NULL,
    spare10                             NULL,
    spare9                              NULL,
    spare8                              NULL,
    spare7                              NULL,
    spare6                              NULL,
    spare5                              NULL,
    spare4                              NULL,
    spare3                              NULL,
    spare2                              NULL,
    spare1                              NULL
}
```


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```
MasterInformationBlock ::=          SEQUENCE {
        mib-ValueTag                    MIB-ValueTag,
        -- TABULAR: The PLMN identity and ANSI-41 core network information
        -- are included in PLMN-Type.
        plmn-Type                       PLMN-Type,
        sibSb-ReferenceList             SIBSb-ReferenceList,
    -- Extension mechanism for non- release99 information
        v690NonCriticalExtensions           SEQUENCE {
            masterInformationBlock-v690ext      MasterInformationBlock-v690ext,
            v6b0NonCriticalExtensions           SEQUENCE {
                masterInformationBlock-v6b0ext      MasterInformationBlock-v6b0ext-IEs,
                nonCriticalExtensions               SEQUENCE {}                         OPTIONAL
            }   OPTIONAL
        }   OPTIONAL
}

MasterInformationBlock-v690ext ::=  SEQUENCE {
    multiplePLMN-List                   MultiplePLMN-List-r6            OPTIONAL
}

MasterInformationBlock-v6b0ext-IEs ::= SEQUENCE {
    extSIBTypeInfoSchedulingInfo-List   ExtSIBTypeInfoSchedulingInfo-List   OPTIONAL
}

MIB-ValueTag ::=                    INTEGER (1..8)

NCC ::=                             INTEGER (0..7)

PLMN-ValueTag ::=                   INTEGER (1..256)


PredefinedConfigIdentityAndValueTag ::= SEQUENCE {
    predefinedConfigIdentity                PredefinedConfigIdentity,
    predefinedConfigValueTag                PredefinedConfigValueTag
}

ProtocolErrorInformation ::=        SEQUENCE {
    diagnosticsType                     CHOICE {
        type1                               SEQUENCE {
            protocolErrorCause                  ProtocolErrorCause
        },
        spare                               NULL
    }
}

ReceivedMessageType ::=             ENUMERATED {
                                        activeSetUpdate,
                                        cellChangeOrderFromUTRAN,
                                        cellUpdateConfirm,
                                        counterCheck,
                                        downlinkDirectTransfer,
                                        interRATHandoverCommand,
                                        measurementControl,
                                        pagingType2,
                                        physicalChannelReconfiguration,
                                        physicalSharedChannelAllocation,
                                        radioBearerReconfiguration,
                                        radioBearerRelease,
                                        radioBearerSetup,
                                        rrcConnectionRelease,
                                        rrcConnectionReject,
                                        rrcConnectionSetup,
                                        securityModeCommand,
                                        signallingConnectionRelease,
                                        transportChannelReconfiguration,
                                        transportFormatCombinationControl,
                                        ueCapabilityEnquiry,
                                        ueCapabilityInformationConfirm,
                                        uplinkPhysicalChannelControl,
                                        uraUpdateConfirm,
                                        utranMobilityInformation,
                                        assistanceDataDelivery,
                                        spare6, spare5, spare4, spare3, spare2,
                                        spare1
}

Rplmn-Information ::=                   SEQUENCE {
                                            gsm-BA-Range-List       GSM-BA-Range-List   OPTIONAL,
```


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```
                                        fdd-UMTS-Frequency-List FDD-UMTS-Frequency-List
    OPTIONAL,
                                        tdd-UMTS-Frequency-List TDD-UMTS-Frequency-List
    OPTIONAL,
                                        cdma2000-UMTS-Frequency-List    CDMA2000-UMTS-Frequency-
List    OPTIONAL
}

Rplmn-Information-r4 ::=        SEQUENCE {
    gsm-BA-Range-List               GSM-BA-Range-List                       OPTIONAL,
    fdd-UMTS-Frequency-List         FDD-UMTS-Frequency-List                 OPTIONAL,
    -- the option is the same for 7.68 Mcps TDD as for 3.84 Mcps TDD
    -- i.e. TDD-UMTS-Frequency-List applies
    tdd384-UMTS-Frequency-List      TDD-UMTS-Frequency-List                 OPTIONAL,
    tdd128-UMTS-Frequency-List      TDD-UMTS-Frequency-List                 OPTIONAL,
    cdma2000-UMTS-Frequency-List    CDMA2000-UMTS-Frequency-List            OPTIONAL
}

SchedulingInformation ::=           SEQUENCE {
    scheduling                          SEQUENCE {
        segCount                            SegCount                         DEFAULT 1,
        sib-Pos                             CHOICE {
            -- The element name indicates the repetition period and the value
            -- (multiplied by two) indicates the position of the first segment.
            rep4                                INTEGER (0..1),
            rep8                                INTEGER (0..3),
            rep16                               INTEGER (0..7),
            rep32                               INTEGER (0..15),
            rep64                               INTEGER (0..31),
            rep128                              INTEGER (0..63),
            rep256                              INTEGER (0..127),
            rep512                              INTEGER (0..255),
            rep1024                             INTEGER (0..511),
            rep2048                             INTEGER (0..1023),
            rep4096                             INTEGER (0..2047)
        },
        sib-PosOffsetInfo                   SibOFF-List                     OPTIONAL
    }
}

SchedulingInformationSIB ::=            SEQUENCE {
    sib-Type                            SIB-TypeAndTag,
    scheduling                          SchedulingInformation
}

SchedulingInformationSIBSb ::=          SEQUENCE {
    sibSb-Type                          SIBSb-TypeAndTag,
    scheduling                          SchedulingInformation
}

SegCount ::=                        INTEGER (1..16)

SegmentIndex ::=                    INTEGER (1..15)

-- Actual value SFN-Prime = 2 * IE value
SFN-Prime ::=                       INTEGER (0..2047)


SIB-Data-fixed ::=                  BIT STRING (SIZE (222))


SIB-Data-variable ::=               BIT STRING (SIZE (1..214))

SIBOccurIdentity ::=            INTEGER (0..15)

SIBOccurrenceIdentityAndValueTag ::=    SEQUENCE {
    sibOccurIdentity                SIBOccurIdentity,
    sibOccurValueTag                SIBOccurValueTag
}

SIBOccurValueTag ::=            INTEGER (0..15)

SIB-ReferenceList ::=               SEQUENCE (SIZE (1..maxSIB)) OF
                                        SchedulingInformationSIB

SIBSb-ReferenceList ::=             SEQUENCE (SIZE (1..maxSIB)) OF
                                        SchedulingInformationSIBSb
```


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```
SIB-ReferenceListFACH ::=           SEQUENCE (SIZE (1..maxSIB-FACH)) OF
                                        SchedulingInformationSIB

SIB-Type ::=                        ENUMERATED {
                                        masterInformationBlock,
                                        systemInformationBlockType1,
                                        systemInformationBlockType2,
                                        systemInformationBlockType3,
                                        systemInformationBlockType4,
                                        systemInformationBlockType5,
                                        systemInformationBlockType6,
                                        systemInformationBlockType7,
        -- dummy, dummy2 and dummy3 are not used in this version of the specification,
        -- they should not be sent. If they are received they should be ignored
                                        dummy,
                                        dummy2,
                                        dummy3,
                                        systemInformationBlockType11,
                                        systemInformationBlockType12,
                                        systemInformationBlockType13,
                                        systemInformationBlockType13-1,
                                        systemInformationBlockType13-2,
                                        systemInformationBlockType13-3,
                                        systemInformationBlockType13-4,
                                        systemInformationBlockType14,
                                        systemInformationBlockType15,
                                        systemInformationBlockType15-1,
                                        systemInformationBlockType15-2,
                                        systemInformationBlockType15-3,
                                        systemInformationBlockType16,
                                        systemInformationBlockType17,
                                        systemInformationBlockType15-4,
                                        systemInformationBlockType18,
                                        schedulingBlock1,
                                        schedulingBlock2,
                                        systemInformationBlockType15-5,
                                        systemInformationBlockType5bis,
                                        extensionType }

SIB-TypeAndTag ::=                  CHOICE {
    sysInfoType1                        PLMN-ValueTag,
    sysInfoType2                        CellValueTag,
    sysInfoType3                        CellValueTag,
    sysInfoType4                        CellValueTag,
    sysInfoType5                        CellValueTag,
    sysInfoType6                        CellValueTag,
    sysInfoType7                        NULL,
    -- dummy, dummy2 and dummy3 are not used in this version of the specification,
    -- they should not be sent. If they are received the UE behaviour is not specified.
    dummy                               CellValueTag,
    dummy2                              NULL,
    dummy3                              NULL,
    sysInfoType11                       CellValueTag,
    sysInfoType12                       CellValueTag,
    sysInfoType13                       CellValueTag,
    sysInfoType13-1                     CellValueTag,
    sysInfoType13-2                     CellValueTag,
    sysInfoType13-3                     CellValueTag,
    sysInfoType13-4                     CellValueTag,
    sysInfoType14                       NULL,
    sysInfoType15                       CellValueTag,
    sysInfoType16                       PredefinedConfigIdentityAndValueTag,
    sysInfoType17                       NULL,
    sysInfoType15-1                     CellValueTag,
    sysInfoType15-2                     SIBOccurrenceIdentityAndValueTag,
    sysInfoType15-3                     SIBOccurrenceIdentityAndValueTag,
    sysInfoType15-4                     CellValueTag,
    sysInfoType18                       CellValueTag,
    sysInfoType15-5                     CellValueTag,
    sysInfoType5bis                     CellValueTag,
    spare4                              NULL,
    spare3                              NULL,
    spare2                              NULL,
    spare1                              NULL
}

SIBSb-TypeAndTag ::=                CHOICE {
    sysInfoType1                        PLMN-ValueTag,
```

```
    sysInfoType2                        CellValueTag,
    sysInfoType3                        CellValueTag,
    sysInfoType4                        CellValueTag,
    sysInfoType5                        CellValueTag,
    sysInfoType6                        CellValueTag,
    sysInfoType7                        NULL,
    -- dummy, dummy2 and dummy3 are not used in this version of the specification,
    -- they should not be sent. If they are received the UE behaviour is not specified.
    dummy                               CellValueTag,
    dummy2                              NULL,
    dummy3                              NULL,
    sysInfoType11                       CellValueTag,
    sysInfoType12                       CellValueTag,
    sysInfoType13                       CellValueTag,
    sysInfoType13-1                     CellValueTag,
    sysInfoType13-2                     CellValueTag,
    sysInfoType13-3                     CellValueTag,
    sysInfoType13-4                     CellValueTag,
    sysInfoType14                       NULL,
    sysInfoType15                       CellValueTag,
    sysInfoType16                       PredefinedConfigIdentityAndValueTag,
    sysInfoType17                       NULL,
    sysInfoTypeSB1                      CellValueTag,
    sysInfoTypeSB2                      CellValueTag,
    sysInfoType15-1                     CellValueTag,
    sysInfoType15-2                     SIBOccurrenceIdentityAndValueTag,
    sysInfoType15-3                     SIBOccurrenceIdentityAndValueTag,
    sysInfoType15-4                     CellValueTag,
    sysInfoType18                       CellValueTag,
    sysInfoType15-5                     CellValueTag,
    sysInfoType5bis                     CellValueTag,
    spare2                              NULL,
    spare1                              NULL
}

SIB-TypeExt ::=                     CHOICE {
    systemInformationBlockType11bis     NULL,
    systemInformationBlockType15bis     NULL,
    systemInformationBlockType15-1bis   NULL,
    systemInformationBlockType15-2bis   NULL,
    systemInformationBlockType15-3bis   NULL,
    systemInformationBlockType15-6      NULL,
    systemInformationBlockType15-8      NULL,
    spare1                              NULL
}

SibOFF ::=                          ENUMERATED {
                                        so2, so4, so6, so8, so10,
                                        so12, so14, so16, so18,
                                        so20, so22, so24, so26,
                                        so28, so30, so32 }

SibOFF-List ::=                     SEQUENCE (SIZE (1..15)) OF
                                        SibOFF

SysInfoType1 ::=                    SEQUENCE {
    -- Core network IEs
        cn-CommonGSM-MAP-NAS-SysInfo    NAS-SystemInformationGSM-MAP,
        cn-DomainSysInfoList            CN-DomainSysInfoList,
    -- User equipment IEs
        ue-ConnTimersAndConstants       UE-ConnTimersAndConstants           OPTIONAL,
        ue-IdleTimersAndConstants       UE-IdleTimersAndConstants           OPTIONAL,
    -- Extension mechanism for non- release99 information
        v3a0NonCriticalExtensions       SEQUENCE {
            sysInfoType1-v3a0ext        SysInfoType1-v3a0ext-IEs,
            nonCriticalExtensions       SEQUENCE {} OPTIONAL
        }                               OPTIONAL
}

SysInfoType1-v3a0ext-IEs ::= SEQUENCE {
    ue-ConnTimersAndConstants-v3a0ext       UE-ConnTimersAndConstants-v3a0ext,
    ue-IdleTimersAndConstants-v3a0ext       UE-IdleTimersAndConstants-v3a0ext
}

SysInfoType2 ::=                    SEQUENCE {
    -- UTRAN mobility IEs
        ura-IdentityList                URA-IdentityList,
    -- Extension mechanism for non- release99 information
```


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```
        nonCriticalExtensions           SEQUENCE {}                         OPTIONAL
}

SysInfoType3 ::=                    SEQUENCE {
        sib4indicator                   BOOLEAN,
    -- UTRAN mobility IEs
        cellIdentity                    CellIdentity,
        cellSelectReselectInfo          CellSelectReselectInfoSIB-3-4,
        cellAccessRestriction           CellAccessRestriction,
    -- Extension mechanism for non- release99 information
        v4b0NonCriticalExtensions       SEQUENCE {
            sysInfoType3-v4b0ext            SysInfoType3-v4b0ext-IEs,
            v590NonCriticalExtension        SEQUENCE {
                sysInfoType3-v590ext            SysInfoType3-v590ext,
                v5c0NoncriticalExtension        SEQUENCE {
                    sysInfoType3-v5c0ext            SysInfoType3-v5c0ext-IEs,
                    v670NonCriticalExtension            SEQUENCE {
                        sysInfoType3-v670ext                SysInfoType3-v670ext,
                        v750NonCriticalExtension            SEQUENCE {
                            sysInfoType3-v750ext                SysInfoType3-v750ext-IEs,
                            nonCriticalExtensions               SEQUENCE {}     OPTIONAL
                        }                           OPTIONAL
                    }                           OPTIONAL
                }                           OPTIONAL
            }                           OPTIONAL
        }                           OPTIONAL
}

SysInfoType3-v4b0ext-IEs ::= SEQUENCE {
    mapping-LCR                     Mapping-LCR-r4                          OPTIONAL
}

SysInfoType3-v590ext ::= SEQUENCE {
    cellSelectReselectInfo-v590ext      CellSelectReselectInfo-v590ext      OPTIONAL
}

SysInfoType3-v5c0ext-IEs ::= SEQUENCE {
    cellSelectReselectInfoTreselectionScaling-v5c0ext
                                        CellSelectReselectInfoTreselectionScaling-v5c0ext   OPTIONAL
}

SysInfoType3-v670ext ::= SEQUENCE {
        domainSpecificAccessRestrictionParametersForPLMNOfMIB
                                    DomainSpecificAccessRestrictionParam-v670ext    OPTIONAL,
        domainSpecificAccessRestictionForSharedNetwork
                                    DomainSpecificAccessRestrictionForSharedNetwork-v670ext OPTIONAL
}

SysInfoType3-v750ext-IEs ::=        SEQUENCE {
    deferredMeasurementControlReadingSupport
                                        DeferredMeasurementControlReadingSupport    OPTIONAL,
    q-QualMin-Offset                    Q-QualMin-Offset                OPTIONAL,
    q-RxlevMin-Offset                   Q-RxlevMin-Offset               OPTIONAL,
    mBSFNOnlyService                    MBSFNOnlyService                OPTIONAL
}

SysInfoType4 ::=                    SEQUENCE {
    -- UTRAN mobility IEs
        cellIdentity                    CellIdentity,
        cellSelectReselectInfo          CellSelectReselectInfoSIB-3-4,
        cellAccessRestriction           CellAccessRestriction,
    -- Extension mechanism for non- release99 information
        v4b0NonCriticalExtensions       SEQUENCE {
            sysInfoType4-v4b0ext            SysInfoType4-v4b0ext-IEs,
            v590NonCriticalExtension        SEQUENCE {
                sysInfoType4-v590ext            SysInfoType4-v590ext,
                v5b0NonCriticalExtension        SEQUENCE {
                    sysInfoType4-v5b0ext            SysInfoType4-v5b0ext-IEs,
                    v5c0NonCriticalExtension            SEQUENCE {
                        sysInfoType4-v5c0ext                SysInfoType4-v5c0ext-IEs,
                        nonCriticalExtensions               SEQUENCE {}                     OPTIONAL
                    }   OPTIONAL
                }   OPTIONAL
            }   OPTIONAL
        }   OPTIONAL
}

SysInfoType4-v4b0ext-IEs ::= SEQUENCE {
```


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```
    mapping-LCR                     Mapping-LCR-r4                          OPTIONAL
}


SysInfoType4-v590ext ::= SEQUENCE {
    cellSelectReselectInfo-v590ext      CellSelectReselectInfo-v590ext      OPTIONAL
}

SysInfoType4-v5b0ext-IEs ::= SEQUENCE {
    cellSelectReselectInfoPCHFACH-v5b0ext   CellSelectReselectInfoPCHFACH-v5b0ext       OPTIONAL
}

SysInfoType4-v5c0ext-IEs ::= SEQUENCE {
    cellSelectReselectInfoTreselectionScaling-v5c0ext
                                    CellSelectReselectInfoTreselectionScaling-v5c0ext   OPTIONAL
}

SysInfoType5 ::=                    SEQUENCE {
        sib6indicator                   BOOLEAN,
    -- Physical channel IEs
        pich-PowerOffset                PICH-PowerOffset,
        modeSpecificInfo                CHOICE {
            fdd                             SEQUENCE {
                aich-PowerOffset                AICH-PowerOffset
            },
            tdd                             SEQUENCE {
    -- If PDSCH/PUSCH is configured for 1.28Mcps TDD, the following IEs should be absent
    --   and the info included in the tdd128SpecificInfo instead.
    -- If PDSCH/PUSCH is configured for 3.84Mcps TDD in R5, HCR-r5-SpecificInfo should also be
    -- included.
                pusch-SysInfoList-SFN           PUSCH-SysInfoList-SFN       OPTIONAL,
                pdsch-SysInfoList-SFN           PDSCH-SysInfoList-SFN       OPTIONAL,
                openLoopPowerControl-TDD        OpenLoopPowerControl-TDD
            }
        },
        primaryCCPCH-Info               PrimaryCCPCH-Info                   OPTIONAL,
        prach-SystemInformationList     PRACH-SystemInformationList,
        sCCPCH-SystemInformationList    SCCPCH-SystemInformationList,
        -- cbs-DRX-Level1Information is conditional on any of the CTCH indicator IEs in
        -- sCCPCH-SystemInformationList
        cbs-DRX-Level1Information       CBS-DRX-Level1Information           OPTIONAL,
    -- Extension mechanism for non- release99 information
        v4b0NonCriticalExtensions       SEQUENCE {
            sysInfoType5-v4b0ext            SysInfoType5-v4b0ext-IEs        OPTIONAL,
        -- Extension mechanism for non- rel-4 information
            v590NonCriticalExtensions       SEQUENCE {
                sysInfoType5-v590ext            SysInfoType5-v590ext-IEs        OPTIONAL,
                v650NonCriticalExtensions       SEQUENCE {
                    sysInfoType5-v650ext            SysInfoType5-v650ext-IEs        OPTIONAL,
                    v680NonCriticalExtensions       SEQUENCE {
                        sysInfoType5-v680ext            SysInfoType5-v680ext-IEs        OPTIONAL,
                        v690NonCriticalExtensions       SEQUENCE {
                            sysInfoType5-v690ext            SysInfoType5-v690ext-IEs,
                            v7xyNonCriticalExtensions       SEQUENCE {
                                sysInfoType5-v7xyext            SysInfoType5-v7xyext-IEs,
                                nonCriticalExtensions           SEQUENCE {}             OPTIONAL
                            }       OPTIONAL
                        }       OPTIONAL
                    }       OPTIONAL
                }       OPTIONAL
            }       OPTIONAL
        }       OPTIONAL
}

SysInfoType5-v4b0ext-IEs ::= SEQUENCE {
    --The following IE PNBSCH-Allocation-r4 shall be used for 3.84Mcps TDD only.
    pNBSCH-Allocation-r4            PNBSCH-Allocation-r4            OPTIONAL,
    -- In case of TDD, the following IE is included instead of the
    -- IE up-IPDL-Parameter in up-OTDOA-AssistanceData.
    openLoopPowerControl-IPDL-TDD   OpenLoopPowerControl-IPDL-TDD-r4    OPTIONAL,
-- If SysInfoType5 is sent to describe a 1.28Mcps TDD cell, the IE PRACH-RACH-Info included in
-- PRACH-SystemInformationList shall be ignored, the IE PRACH-Partitioning and the
-- IE rach-TransportFormatSet shall be absent and the corresponding IE in the following
-- PRACH-SystemInformationList-LCR-r4 shall be used
    prach-SystemInformationList-LCR-r4  PRACH-SystemInformationList-LCR-r4  OPTIONAL,
    tdd128SpecificInfo              SEQUENCE {
        pusch-SysInfoList-SFN           PUSCH-SysInfoList-SFN-LCR-r4    OPTIONAL,
        pdsch-SysInfoList-SFN           PDSCH-SysInfoList-SFN-LCR-r4    OPTIONAL,
```


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```
        pCCPCH-LCR-Extensions           PrimaryCCPCH-Info-LCR-r4-ext    OPTIONAL,
        sCCPCH-LCR-ExtensionsList       SCCPCH-SystemInformationList-LCR-r4-ext
    }                                                                   OPTIONAL,
    frequencyBandIndicator          RadioFrequencyBandFDD           OPTIONAL
}

SysInfoType5-v590ext-IEs ::= SEQUENCE {
    hcr-r5-SpecificInfo             SEQUENCE {
        pusch-SysInfoList-SFN           PUSCH-SysInfoList-SFN-HCR-r5    OPTIONAL,
        pdsch-SysInfoList-SFN           PDSCH-SysInfoList-SFN-HCR-r5    OPTIONAL
    }                                                                   OPTIONAL
}

SysInfoType5-v650ext-IEs ::= SEQUENCE {
    frequencyBandIndicator2         RadioFrequencyBandFDD2
}

SysInfoType5-v680ext-IEs ::= SEQUENCE {
    -- TABULAR: HSDPA Cell Indicator is MD in tabular description
    -- Default value is "HSDPA Capability not indicated"
    hsdpa-CellIndicator     ENUMERATED { hsdpa-CapableCell }            OPTIONAL
}

SysInfoType5-v690ext-IEs ::=        SEQUENCE {
    -- TABULAR: E-DCH Cell Indicator is MD in tabular description
    -- Default value is "E-DCH Capability not indicated"
    edch-CellIndicator                  ENUMERATED { edch-CapableCell }     OPTIONAL,
    sccpch-SystemInformation-MBMS       CHOICE {
        mcchOnSCCPCHusedForNonMBMS          MBMS-MCCH-ConfigurationInfo-r6,
        mcchOnSCCPCHusedOnlyForMBMS         SCCPCH-SystemInformation-MBMS-r6
    }       OPTIONAL,
    additionalPRACH-TF-and-TFCS-CCCH-List   AdditionalPRACH-TF-and-TFCS-CCCH-List   OPTIONAL,
    cBS-DRX-Level1Information-extension     CBS-DRX-Level1Information-extension-r6  OPTIONAL
}

SysInfoType5-v7xyext-IEs ::=        SEQUENCE {
    pusch-SysInfoList-SFN-VHCR          PUSCH-SysInfoList-SFN-VHCR      OPTIONAL,
    prach-SystemInformationList-r7      PRACH-SystemInformationList-r7  OPTIONAL,
    pdsch-SysInfoList-SFN-r7            PDSCH-SysInfoList-r7            OPTIONAL,
    sccpch-SystemInformation-MBMS       CHOICE {
        mcchOnSCCPCHusedForNonMBMS          MBMS-MCCH-ConfigurationInfo-r6,
        mcchOnSCCPCHusedOnlyForMBMS         SCCPCH-SystemInformation-MBMS-r7
    }       OPTIONAL,
    sCCPCH-SystemInformationList-r7     SCCPCH-SystemInformationList-r7 OPTIONAL,
    modeSpecificInfo                    CHOICE {
        fdd                                 SEQUENCE {
            hs-dsch-CommonSystemInformation     HS-DSCH-CommonSystemInformation,
            hs-dsch-PagingSystemInformation     HS-DSCH-PagingSystemInformation     OPTIONAL
        },
        tdd                                 NULL
    }       OPTIONAL,
    tDD-MBSFNInformation                TDD-MBSFNInformation            OPTIONAL
}


-- SysInfoType5bis uses the same structure as SysInfoType5
SysInfoType5bis ::= SysInfoType5

SysInfoType6 ::=                    SEQUENCE {
    -- Physical channel IEs
        pich-PowerOffset                PICH-PowerOffset,
        modeSpecificInfo                CHOICE {
            fdd                             SEQUENCE {
                aich-PowerOffset                AICH-PowerOffset,
                -- dummy is not used in this version of specification, it should
                -- not be sent and if received it should be ignored.
                dummy                           CSICH-PowerOffset           OPTIONAL
            },
            tdd                             SEQUENCE {
                -- If PDSCH/PUSCH is configured for 1.28Mcps TDD, pusch-SysInfoList-SFN,
                -- pdsch-SysInfoList-SFN and openLoopPowerControl-TDD should be absent
                -- and the info included in the tdd128SpecificInfo instead.
                -- If PDSCH/PUSCH is configured for 3.84Mcps TDD in R5, HCR-r5-SpecificInfo should
                -- also be included.
                pusch-SysInfoList-SFN           PUSCH-SysInfoList-SFN       OPTIONAL,
                pdsch-SysInfoList-SFN           PDSCH-SysInfoList-SFN       OPTIONAL,
                openLoopPowerControl-TDD        OpenLoopPowerControl-TDD
            }
```


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```
        },
        primaryCCPCH-Info               PrimaryCCPCH-Info                   OPTIONAL,
        prach-SystemInformationList     PRACH-SystemInformationList         OPTIONAL,
        sCCPCH-SystemInformationList    SCCPCH-SystemInformationList        OPTIONAL,
        cbs-DRX-Level1Information       CBS-DRX-Level1Information           OPTIONAL,
        -- Conditional on any of the CTCH indicator IEs in
        -- sCCPCH-SystemInformationList
    -- Extension mechanism for non- release99 information
        v4b0NonCriticalExtensions       SEQUENCE {
            sysInfoType6-v4b0ext            SysInfoType6-v4b0ext-IEs        OPTIONAL,
        -- Extension mechanism for non- rel-4 information
            v590NonCriticalExtensions   SEQUENCE {
                sysInfoType6-v590ext            SysInfoType6-v590ext-IEs        OPTIONAL,
                v650nonCriticalExtensions       SEQUENCE {
                    sysInfoType6-v650ext            SysInfoType6-v650ext-IEs        OPTIONAL,
                    v690nonCriticalExtensions       SEQUENCE {
                        sysInfoType6-v690ext            SysInfoType6-v690ext-IEs,
                        v7xyNonCriticalExtensions       SEQUENCE {
                            sysInfoType6-v7xyext            SysInfoType6-v7xyext-IEs,
                            nonCriticalExtensions           SEQUENCE {}                 OPTIONAL
                        }   OPTIONAL
                    }                           OPTIONAL
                }                           OPTIONAL
            }                           OPTIONAL
        }                           OPTIONAL
}

SysInfoType6-v4b0ext-IEs ::= SEQUENCE {
    -- openLoopPowerControl-IPDL-TDD is present only if IPDLs are applied for TDD
    openLoopPowerControl-IPDL-TDD   OpenLoopPowerControl-IPDL-TDD-r4    OPTIONAL,
    -- If SysInfoType6 is sent to describe a 1.28Mcps TDD cell, the IE PRACH-RACH-Info included
    -- in PRACH-SystemInformationList shall be ignored, the IE PRACH-Partitioning and the
    -- IE rach-TransportFormatSet shall be absent and the corresponding IEs in the following
    -- PRACH-SystemInformationList-LCR-r4 shall be used
    prach-SystemInformationList-LCR-r4  PRACH-SystemInformationList-LCR-r4  OPTIONAL,
    tdd128SpecificInfo              SEQUENCE {
        pusch-SysInfoList-SFN           PUSCH-SysInfoList-SFN-LCR-r4    OPTIONAL,
        pdsch-SysInfoList-SFN           PDSCH-SysInfoList-SFN-LCR-r4    OPTIONAL,
        pCCPCH-LCR-Extensions           PrimaryCCPCH-Info-LCR-r4-ext    OPTIONAL,
        sCCPCH-LCR-ExtensionsList       SCCPCH-SystemInformationList-LCR-r4-ext OPTIONAL
    }                                                           OPTIONAL,
    frequencyBandIndicator          RadioFrequencyBandFDD           OPTIONAL
}

SysInfoType6-v590ext-IEs ::= SEQUENCE {
    hcr-r5-SpecificInfo             SEQUENCE {
        pusch-SysInfoList-SFN           PUSCH-SysInfoList-SFN-HCR-r5    OPTIONAL,
        pdsch-SysInfoList-SFN           PDSCH-SysInfoList-SFN-HCR-r5    OPTIONAL
    }                                                                   OPTIONAL
}

SysInfoType6-v650ext-IEs ::= SEQUENCE {
    frequencyBandIndicator2         RadioFrequencyBandFDD2
}

SysInfoType6-v690ext-IEs ::= SEQUENCE {
    additionalPRACH-TF-and-TFCS-CCCH-List   AdditionalPRACH-TF-and-TFCS-CCCH-List   OPTIONAL
}

SysInfoType6-v7xyext-IEs ::=        SEQUENCE {
    pusch-SysInfoList-SFN-VHCR          PUSCH-SysInfoList-SFN-VHCR      OPTIONAL,
    pdsch-SysInfoList-SFN-r7            PDSCH-SysInfoList-r7            OPTIONAL,
    prach-SystemInformationList-r7      PRACH-SystemInformationList-r7  OPTIONAL,
    sCCPCH-SystemInformationList-r7     SCCPCH-SystemInformationList-r7 OPTIONAL
}

SysInfoType7 ::=                    SEQUENCE {
    -- Physical channel IEs
        modeSpecificInfo                CHOICE {
            fdd                             SEQUENCE {
                ul-Interference                 UL-Interference
            },
            tdd                             NULL
        },
        prach-Information-SIB5-List     DynamicPersistenceLevelList,
        prach-Information-SIB6-List     DynamicPersistenceLevelList         OPTIONAL,
        expirationTimeFactor            ExpirationTimeFactor                OPTIONAL,
    -- Extension mechanism for non- release99 information
```

```
        nonCriticalExtensions           SEQUENCE {}                         OPTIONAL
}

-- This IE is not used in this version of the specification.
-- It was kept only for backwards compatibility reasons
SysInfoType8 ::=                    SEQUENCE {
    -- User equipment IEs
        -- dummy1, dummy2, dummy3 are not used in this version of the specification and
        -- they should be ignored by the receiver.
        dummy1                          CPCH-Parameters,
    -- Physical channel IEs
        dummy2                          CPCH-SetInfoList,
        dummy3                          CSICH-PowerOffset,
    -- Extension mechanism for non- release99 information
        nonCriticalExtensions           SEQUENCE {}                         OPTIONAL
}

-- This IE is not used in this version of the specification.
-- It was kept only for backwards compatibility reasons
SysInfoType9 ::=                    SEQUENCE {
    -- Physical channel IEs
        -- dummy is not used in this version of the specification and
        -- it should be ignored by the receiver.
        dummy                           CPCH-PersistenceLevelsList,
    -- Extension mechanism for non- release99 information
        nonCriticalExtensions           SEQUENCE {}                         OPTIONAL
}

-- This IE is not used in this version of the specification.
-- It was kept only for backwards compatibility reasons
SysInfoType10 ::=                   SEQUENCE {
    -- User equipment IEs
        -- dummy is not used in this version of the specification, it should
        -- not be sent and if received it should be ignored.
        dummy                           DRAC-SysInfoList,
    -- Extension mechanism for non- release99 information
        nonCriticalExtensions           SEQUENCE {}                         OPTIONAL
}

SysInfoType11 ::=                   SEQUENCE {
        sib12indicator                  BOOLEAN,
    -- Measurement IEs
        fach-MeasurementOccasionInfo    FACH-MeasurementOccasionInfo        OPTIONAL,
        measurementControlSysInfo       MeasurementControlSysInfo,
    -- Extension mechanism for non- release99 information
        v4b0NonCriticalExtensions       SEQUENCE {
            sysInfoType11-v4b0ext           SysInfoType11-v4b0ext-IEs       OPTIONAL,
            v590NonCriticalExtension        SEQUENCE {
                sysInfoType11-v590ext           SysInfoType11-v590ext-IEs,
                v690NonCriticalExtensions       SEQUENCE {
                    sysInfoType11-v690ext           SysInfoType11-v690ext-IEs,
                    v6b0NonCriticalExtensions       SEQUENCE {
                        sysInfoType11-v6b0ext           SysInfoType11-v6b0ext-IEs,
                        v7xyNonCriticalExtensions       SEQUENCE {
                            sysInfoType11-v7xyext           SysInfoType11-v7xyext-IEs,
                            nonCriticalExtensions           SEQUENCE {}                     OPTIONAL
                        }                               OPTIONAL
                    }                               OPTIONAL
                }                               OPTIONAL
            }                               OPTIONAL
        }                               OPTIONAL
}

SysInfoType11-v4b0ext-IEs ::= SEQUENCE {
    fach-MeasurementOccasionInfo-LCR-Ext    FACH-MeasurementOccasionInfo-LCR-r4-ext OPTIONAL,
    measurementControlSysInfo-LCR           MeasurementControlSysInfo-LCR-r4-ext
}

SysInfoType11-v590ext-IEs ::= SEQUENCE {
    --The order of the list corresponds to the order of cell in newIntraFrequencyCellInfoList
    newIntraFrequencyCellInfoList-v590ext   SEQUENCE (SIZE (1..maxCellMeas)) OF
                                                CellSelectReselectInfo-v590ext  OPTIONAL,
    --The order of the list corresponds to the order of cell in newInterFrequencyCellInfoList
    newInterFrequencyCellInfoList-v590ext   SEQUENCE (SIZE (1..maxCellMeas)) OF
                                                CellSelectReselectInfo-v590ext  OPTIONAL,
    --The order of the list corresponds to the order of cell in newInterRATCellInfoList
    newInterRATCellInfoList-v590ext         SEQUENCE (SIZE (1..maxCellMeas)) OF
                                                CellSelectReselectInfo-v590ext  OPTIONAL,
```

```
    intraFreqEventCriteriaList-v590ext      Intra-FreqEventCriteriaList-v590ext     OPTIONAL,
    intraFreqReportingCriteria-1b-r5        IntraFreqReportingCriteria-1b-r5    OPTIONAL,
    intraFreqEvent-1d-r5                    IntraFreqEvent-1d-r5                OPTIONAL
}

SysInfoType11-v690ext-IEs ::= SEQUENCE {
    -- dummy is not used in this version of the specification. If received, the UE behaviour
    -- is not specified.
    dummy                               Dummy-InterFreqRACHReportingInfo    OPTIONAL
}

SysInfoType11-v6b0ext-IEs ::= SEQUENCE {
    -- Measurement IEs
    interFreqRACHReportingInfo          InterFreqRACHReportingInfo          OPTIONAL
}

SysInfoType11-v7xyext-IEs ::= SEQUENCE {
    -- Measurement IEs
        mBSFNFrequencyList              MBSFNFrequencyList                  OPTIONAL
}

SysInfoType11bis ::=                SEQUENCE {
    -- Measurement IEs
        measurementControlSysInfo       MeasurementControlSysInfoExtension          OPTIONAL,
        measurementControlSysInfo-LCR   MeasurementControlSysInfoExtension-LCR-r4   OPTIONAL,
        measurementControlSysInfoExtensionAddon-r5
                                        MeasurementControlSysInfoExtensionAddon-r5  OPTIONAL,
    -- Extension mechanism for non-release99 information
        nonCriticalExtensions           SEQUENCE {}     OPTIONAL
}

SysInfoType12 ::=                   SEQUENCE {
    -- Measurement IEs
        fach-MeasurementOccasionInfo    FACH-MeasurementOccasionInfo        OPTIONAL,
        measurementControlSysInfo       MeasurementControlSysInfo,
    -- Extension mechanism for non- release99 information
        v4b0NonCriticalExtensions       SEQUENCE {
            sysInfoType12-v4b0ext           SysInfoType12-v4b0ext-IEs       OPTIONAL,
            v590NonCriticalExtension        SEQUENCE {
                sysInfoType12-v590ext           SysInfoType12-v590ext-IEs,
                v690NonCriticalExtensions       SEQUENCE {
                    sysInfoType12-v690ext           SysInfoType12-v690ext-IEs,
                    v6b0NonCriticalExtensions       SEQUENCE {
                        sysInfoType12-v6b0ext           SysInfoType12-v6b0ext-IEs,
                        nonCriticalExtensions           SEQUENCE {}                     OPTIONAL
                    }                               OPTIONAL
                }                               OPTIONAL
            }                               OPTIONAL
        }                               OPTIONAL
}

SysInfoType12-v4b0ext-IEs ::= SEQUENCE {
    fach-MeasurementOccasionInfo-LCR-Ext    FACH-MeasurementOccasionInfo-LCR-r4-ext OPTIONAL,
    measurementControlSysInfo-LCR           MeasurementControlSysInfo-LCR-r4-ext
}

SysInfoType12-v590ext-IEs ::= SEQUENCE {
    --The order of the list corresponds to the order of cell in newIntraFrequencyCellInfoList
    newIntraFrequencyCellInfoList-v590ext   SEQUENCE (SIZE (1..maxCellMeas)) OF
                                                CellSelectReselectInfo-v590ext  OPTIONAL,
    --The order of the list corresponds to the order of cell in newInterFrequencyCellInfoList
    newInterFrequencyCellInfoList-v590ext   SEQUENCE (SIZE (1..maxCellMeas)) OF
                                                CellSelectReselectInfo-v590ext  OPTIONAL,
    --The order of the list corresponds to the order of cell in newInterRATCellInfoList
    newInterRATCellInfoList-v590ext         SEQUENCE (SIZE (1..maxCellMeas)) OF
                                                CellSelectReselectInfo-v590ext  OPTIONAL,
    intraFreqEventCriteriaList-v590ext      Intra-FreqEventCriteriaList-v590ext     OPTIONAL,
    intraFreqReportingCriteria-1b-r5        IntraFreqReportingCriteria-1b-r5    OPTIONAL,
    intraFreqEvent-1d-r5                    IntraFreqEvent-1d-r5                OPTIONAL
}

SysInfoType12-v690ext-IEs ::= SEQUENCE {
    -- dummy is not used in this version of the specification. If received, the UE behaviour
    -- is not specified.
    dummy                               Dummy-InterFreqRACHReportingInfo    OPTIONAL
}

SysInfoType12-v6b0ext-IEs ::= SEQUENCE {
```

```
    -- Measurement IEs
    interFreqRACHReportingInfo          InterFreqRACHReportingInfo          OPTIONAL
}

SysInfoType13 ::=                   SEQUENCE {
    -- Core network IEs
        cn-DomainSysInfoList            CN-DomainSysInfoList,
    -- User equipment IEs
        ue-IdleTimersAndConstants       UE-IdleTimersAndConstants           OPTIONAL,
        capabilityUpdateRequirement     CapabilityUpdateRequirement         OPTIONAL,
    -- Extension mechanism for non- release99 information
        v3a0NonCriticalExtensions           SEQUENCE {
            sysInfoType13-v3a0ext           SysInfoType13-v3a0ext-IEs,
            v4b0NonCriticalExtensions       SEQUENCE {
                sysInfoType13-v4b0ext           SysInfoType13-v4b0ext-IEs,
            -- Extension mechanism for non- release99 information
                v7xyNonCriticalExtensions       SEQUENCE {
                    sysInfoType13-v7xyext           SysInfoType13-v7xyext-IEs,
                    nonCriticalExtensions           SEQUENCE {}                     OPTIONAL
                }                               OPTIONAL
            }                               OPTIONAL
        }                               OPTIONAL
}

SysInfoType13-v3a0ext-IEs ::= SEQUENCE {
    ue-IdleTimersAndConstants-v3a0ext       UE-IdleTimersAndConstants-v3a0ext
}

SysInfoType13-v4b0ext-IEs ::= SEQUENCE {
    capabilityUpdateRequirement-r4Ext   CapabilityUpdateRequirement-r4-ext  OPTIONAL
}

SysInfoType13-v7xyext-IEs ::= SEQUENCE {
    capabilityUpdateRequirement-r7Ext   CapabilityUpdateRequirement-r7-ext  OPTIONAL
}

SysInfoType13-1 ::=                 SEQUENCE {
    -- ANSI-41 IEs
        ansi-41-RAND-Information        ANSI-41-RAND-Information,
    -- Extension mechanism for non- release99 information
        nonCriticalExtensions           SEQUENCE {}                         OPTIONAL
}

SysInfoType13-2 ::=                 SEQUENCE {
    -- ANSI-41 IEs
        ansi-41-UserZoneID-Information  ANSI-41-UserZoneID-Information,
    -- Extension mechanism for non- release99 information
        nonCriticalExtensions           SEQUENCE {}                         OPTIONAL
}

SysInfoType13-3 ::=                 SEQUENCE {
    -- ANSI-41 IEs
        ansi-41-PrivateNeighbourListInfo ANSI-41-PrivateNeighbourListInfo,
    -- Extension mechanism for non- release99 information
        nonCriticalExtensions           SEQUENCE {}                         OPTIONAL
}

SysInfoType13-4 ::=                 SEQUENCE {
    -- ANSI-41 IEs
        ansi-41-GlobalServiceRedirectInfo
                                        ANSI-41-GlobalServiceRedirectInfo,
    -- Extension mechanism for non- release99 information
        nonCriticalExtensions           SEQUENCE {}                         OPTIONAL
}

SysInfoType14 ::=                   SEQUENCE {
    -- Physical channel IEs
        individualTS-InterferenceList   IndividualTS-InterferenceList,
        expirationTimeFactor            ExpirationTimeFactor                OPTIONAL,
    -- Extension mechanism for non- release99 information
        nonCriticalExtensions           SEQUENCE {}                         OPTIONAL
}

SysInfoType15 ::=                   SEQUENCE {
    -- Measurement IEs
        ue-positioning-GPS-CipherParameters     UE-Positioning-CipherParameters     OPTIONAL,
        ue-positioning-GPS-ReferenceLocation    ReferenceLocation,
        ue-positioning-GPS-ReferenceTime        UE-Positioning-GPS-ReferenceTime,
```


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```
        ue-positioning-GPS-Real-timeIntegrity       BadSatList                          OPTIONAL,
    -- Extension mechanism for non- release99 information
        v4b0NonCriticalExtensions           SEQUENCE {
            sysInfoType15-v4b0ext               SysInfoType15-v4b0ext-IEs,
        -- Extension mechanism for non- release4 information
            v7xyNonCriticalExtensions           SEQUENCE {
                sysInfoType15-v7xyext               SysInfoType15-v7xyext-IEs,
                nonCriticalExtensions               SEQUENCE {}             OPTIONAL
            }   OPTIONAL
        }   OPTIONAL
}

SysInfoType15-v4b0ext-IEs ::= SEQUENCE {
    up-Ipdl-Parameters-TDD          UE-Positioning-IPDL-Parameters-TDD-r4-ext   OPTIONAL
}

SysInfoType15-v7xyext-IEs ::=   SEQUENCE {
    -- Measurement IEs
        ue-Positioning-GPS-ReferenceTimeUncertainty
                                    UE-Positioning-GPS-ReferenceTimeUncertainty     OPTIONAL
}

SysInfoType15bis ::=                SEQUENCE {
    -- Measurement IEs
        ue-positioning-GANSS-ReferencePosition  ReferenceLocationGANSS,
        ue-positioning-GANSS-ReferenceTime      UE-Positioning-GANSS-ReferenceTime,
        ue-positioning-GANSS-IonosphericModel   UE-Positioning-GANSS-IonosphericModel   OPTIONAL,
    -- Extension mechanism for non-release99 information
        nonCriticalExtensions           SEQUENCE {}             OPTIONAL
}

SysInfoType15-1 ::=                 SEQUENCE {
    -- DGPS corrections
        ue-positioning-GPS-DGPS-Corrections         UE-Positioning-GPS-DGPS-Corrections,
    -- Extension mechanism for non- release99 information
        nonCriticalExtensions           SEQUENCE {}             OPTIONAL
}

SysInfoType15-1bis ::=              SEQUENCE {
    -- Measurement IEs
        ue-positioning-GANSS-DGANSS-Corrections UE-Positioning-DGANSSCorrections,
    -- Extension mechanism for non-release99 information
        nonCriticalExtensions           SEQUENCE {}             OPTIONAL
}

SysInfoType15-2 ::=                 SEQUENCE {
    -- Ephemeris and clock corrections
        transmissionTOW                 INTEGER (0..604799),
        satID                           SatID,
        ephemerisParameter              EphemerisParameter,
    -- Extension mechanism for non- release99 information
        nonCriticalExtensions           SEQUENCE {}         OPTIONAL
}

SysInfoType15-2bis ::=              SEQUENCE {
    -- Measurement IEs
        ue-positioning-GANSS-navigationModel    UE-Positioning-GANSS-NavigationModel,
    -- Extension mechanism for non-release99 information
        nonCriticalExtensions           SEQUENCE {}             OPTIONAL
}

SysInfoType15-3 ::=                 SEQUENCE {
    -- Almanac and other data
        transmissionTOW                 INTEGER (0.. 604799),
        ue-positioning-GPS-Almanac                  UE-Positioning-GPS-Almanac
    OPTIONAL,
        ue-positioning-GPS-IonosphericModel         UE-Positioning-GPS-IonosphericModel
    OPTIONAL,
        ue-positioning-GPS-UTC-Model                UE-Positioning-GPS-UTC-Model
    OPTIONAL,
        satMask                         BIT STRING (SIZE (1..32))   OPTIONAL,
        lsbTOW                          BIT STRING (SIZE (8))       OPTIONAL,
    -- Extension mechanism for non- release99 information
        nonCriticalExtensions           SEQUENCE {}                 OPTIONAL
}

SysInfoType15-3bis ::=              SEQUENCE {
    -- Measurement IEs
```


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```
        ue-positioning-GANSS-Almanac    UE-Positioning-GANSS-Almanac        OPTIONAL,
        ue-positioning-GANSS-TimeModels UE-Positioning-GANSS-Time-Models    OPTIONAL,
        ue-positioning-GANSS-UTC-Model  UE-Positioning-GANSS-UTCModel       OPTIONAL,
        satMask                         BIT STRING (SIZE (1..32))           OPTIONAL,
    -- Extension mechanism for non-release99 information
        nonCriticalExtensions           SEQUENCE {}             OPTIONAL
}

SysInfoType15-4 ::=                 SEQUENCE {
    -- Measurement IEs
        ue-positioning-OTDOA-CipherParameters   UE-Positioning-CipherParameters         OPTIONAL,
        ue-positioning-OTDOA-AssistanceData     UE-Positioning-OTDOA-AssistanceData,
        v3a0NonCriticalExtensions           SEQUENCE {
            sysInfoType15-4-v3a0ext             SysInfoType15-4-v3a0ext,
        -- Extension mechanism for non- release99 information
            v4b0NonCriticalExtensions           SEQUENCE {
                sysInfoType15-4-v4b0ext             SysInfoType15-4-v4b0ext,
                nonCriticalExtensions               SEQUENCE {}     OPTIONAL
            }   OPTIONAL
        }   OPTIONAL
}

SysInfoType15-4-v3a0ext ::= SEQUENCE {
    sfn-Offset-Validity             SFN-Offset-Validity     OPTIONAL
}

SysInfoType15-4-v4b0ext ::= SEQUENCE {
    ue-Positioning-OTDOA-AssistanceData-r4ext   UE-Positioning-OTDOA-AssistanceData-r4ext   OPTIONAL
}

SysInfoType15-5 ::=                 SEQUENCE {
    -- Measurement IEs
        ue-positioning-OTDOA-AssistanceData-UEB     UE-Positioning-OTDOA-AssistanceData-UEB,
        v3a0NonCriticalExtensions           SEQUENCE {
            sysInfoType15-5-v3a0ext             SysInfoType15-5-v3a0ext,
            -- Extension mechanism for non- release99 information
            v7xyNonCriticalExtensions           SEQUENCE {
                sysInfoType15-5-v7xyext             SysInfoType15-5-v7xyext-IEs,
                nonCriticalExtensions               SEQUENCE {}     OPTIONAL
            }   OPTIONAL
        }   OPTIONAL
}

SysInfoType15-5-v3a0ext ::= SEQUENCE {
    sfn-Offset-Validity         SFN-Offset-Validity     OPTIONAL
}

SysInfoType15-5-v7xyext-IEs ::=     SEQUENCE {
    ue-Positioning-OTDOA-AssistanceData-UEB-ext
                                        UE-Positioning-OTDOA-AssistanceData-UEB-ext     OPTIONAL
}

SysInfoType15-6 ::=                 SEQUENCE {
    -- Measurement IEs
        ue-positioning-GANSS-TOD        INTEGER (0..86399),
        ue-positioning-GANSS-ReferenceMeasurementInformation
                                        UE-Positioning-GANSS-ReferenceMeasurementInfo,
    -- Extension mechanism for non-release99 information
        nonCriticalExtensions           SEQUENCE {}             OPTIONAL
}

SysInfoType15-7 ::=                 SEQUENCE {
    -- Measurement IEs
        ue-positioning-GANSS-DataBitAssistance  UE-Positioning-GANSS-Data-Bit-Assistance,
    -- Extension mechanism for non-release99 information
        nonCriticalExtensions           SEQUENCE {}             OPTIONAL
}

SysInfoType15-8 ::=                 SEQUENCE {
    -- Measurement IEs
        ue-positioning-GANSS-DataCipheringInfo  UE-Positioning-CipherParameters OPTIONAL,
        ue-positioning-GANSS-realTimeIntegrity  UE-Positioning-GANSS-RealTimeIntegrity  OPTIONAL,
    -- Extension mechanism for non-release99 information
        nonCriticalExtensions           SEQUENCE {}             OPTIONAL
}

SysInfoType16 ::=                   SEQUENCE {
    -- Radio bearer IEs
```

```
        preDefinedRadioConfiguration    PreDefRadioConfiguration,
    -- Extension mechanism for non- release99 information
        nonCriticalExtensions           SEQUENCE {}                         OPTIONAL
}

SysInfoType17 ::=                   SEQUENCE {
    -- Physical channel IEs
        -- If PDSCH/PUSCH is configured for 1.28Mcps TDD, pusch-SysInfoList and
        -- pdsch-SysInfoList should be absent and the info included in the
        -- tdd128SpecificInfo instead.
        -- If PDSCH/PUSCH is configured for 3.84Mcps TDD in R5, HCR-r5-SpecificInfo should also be
        -- included.
        pusch-SysInfoList               PUSCH-SysInfoList               OPTIONAL,
        pdsch-SysInfoList               PDSCH-SysInfoList               OPTIONAL,
    -- Extension mechanism for non- release99 information
        v4b0NonCriticalExtensions       SEQUENCE {
            sysInfoType17-v4b0ext           SysInfoType17-v4b0ext-IEs,
            v590NonCriticalExtensions   SEQUENCE {
                sysInfoType17-v590ext           SysInfoType17-v590ext-IEs       OPTIONAL,
                v7xyNonCriticalExtensions       SEQUENCE {
                    sysInfoType17-v7xyext           SysInfoType17-v7xyext-IEs,
                    nonCriticalExtensions           SEQUENCE {}             OPTIONAL
                }                               OPTIONAL
            }                               OPTIONAL
        }                               OPTIONAL
}

SysInfoType17-v4b0ext-IEs ::= SEQUENCE {
    tdd128SpecificInfo              SEQUENCE {
        pusch-SysInfoList               PUSCH-SysInfoList-LCR-r4        OPTIONAL,
        pdsch-SysInfoList               PDSCH-SysInfoList-LCR-r4        OPTIONAL
    }                                                                   OPTIONAL
}

SysInfoType17-v590ext-IEs ::= SEQUENCE {
    hcr-r5-SpecificInfo             SEQUENCE {
        pusch-SysInfoList           PUSCH-SysInfoList-HCR-r5    OPTIONAL,
        pdsch-SysInfoList           PDSCH-SysInfoList-HCR-r5    OPTIONAL
    }                                                           OPTIONAL
}

SysInfoType17-v7xyext-IEs ::=       SEQUENCE {
    pusch-SysInfoList-SFN-VHCR          PUSCH-SysInfoList-SFN-VHCR      OPTIONAL,
    pdsch-SysInfoList-r7                PDSCH-SysInfoList-r7            OPTIONAL
}

SysInfoType18 ::=                       SEQUENCE {
        idleModePLMNIdentities          PLMNIdentitiesOfNeighbourCells      OPTIONAL,
        connectedModePLMNIdentities PLMNIdentitiesOfNeighbourCells      OPTIONAL,
    -- Extension mechanism for non- release99 information
        v6b0NonCriticalExtensions       SEQUENCE {
            sysInfoType18-v6b0ext           SysInfoType18-v6b0ext,
            nonCriticalExtensions           SEQUENCE {}     OPTIONAL
        }   OPTIONAL
}

SysInfoType18-v6b0ext ::=               SEQUENCE {
        idleModePLMNIdentitiesSIB11bis      PLMNIdentitiesOfNeighbourCells      OPTIONAL,
        connectedModePLMNIdentitiesSIB11bis PLMNIdentitiesOfNeighbourCells      OPTIONAL
}

SysInfoTypeSB1 ::=                  SEQUENCE {
    -- Other IEs
        sib-ReferenceList               SIB-ReferenceList,
    -- Extension mechanism for non- release99 information
        v6b0NonCriticalExtensions       SEQUENCE {
            sysInfoTypeSB1-v6b0ext          SysInfoTypeSB1-v6b0ext,
            nonCriticalExtensions           SEQUENCE {}                     OPTIONAL
        }   OPTIONAL
}

SysInfoTypeSB1-v6b0ext ::=          SEQUENCE {
    extSIBTypeInfoSchedulingInfo-List   ExtSIBTypeInfoSchedulingInfo-List       OPTIONAL
}

SysInfoTypeSB2 ::=                  SEQUENCE {
    -- Other IEs
        sib-ReferenceList               SIB-ReferenceList,
```


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```
    -- Extension mechanism for non- release99 information
        v6b0NonCriticalExtensions       SEQUENCE {
            sysInfoTypeSB2-v6b0ext          SysInfoTypeSB2-v6b0ext,
            nonCriticalExtensions           SEQUENCE {}                         OPTIONAL
        }   OPTIONAL
}

SysInfoTypeSB2-v6b0ext ::=          SEQUENCE {
    extSIBTypeInfoSchedulingInfo-List   ExtSIBTypeInfoSchedulingInfo-List       OPTIONAL
}

TDD-UMTS-Frequency-List ::=             SEQUENCE (SIZE (1..maxNumTDDFreqs)) OF
                                            FrequencyInfoTDD

-- For systemInformationBlockType11bis the Value Tag Info "CellValueTag" is used
ValueTagInfo ::= CHOICE {
    none                                NULL,
    cellValueTag                        CellValueTag,
    plmn-ValueTag                       PLMN-ValueTag,
    sIBOccurrenceIdentityAndValueTag    SIBOccurrenceIdentityAndValueTag
}

-- ************************************************
--
--     ANSI-41 INFORMATION ELEMENTS (10.3.9)
--
-- ************************************************

ANSI-41-GlobalServiceRedirectInfo ::=   ANSI-41-NAS-Parameter
ANSI-41-PrivateNeighbourListInfo ::=    ANSI-41-NAS-Parameter
ANSI-41-RAND-Information ::=            ANSI-41-NAS-Parameter
ANSI-41-UserZoneID-Information ::=      ANSI-41-NAS-Parameter
ANSI-41-NAS-Parameter ::=               BIT STRING (SIZE (1..2048))

Min-P-REV ::=                           BIT STRING (SIZE (8))

NAS-SystemInformationANSI-41 ::=        ANSI-41-NAS-Parameter
NID ::=                                 BIT STRING (SIZE (16))

P-REV ::=                               BIT STRING (SIZE (8))

SID ::=                                 BIT STRING (SIZE (15))

-- ************************************************
--
--     MBMS INFORMATION ELEMENTS (10.3.9a)
--
-- ************************************************

MBMS-AccessProbabilityFactor ::=    ENUMERATED {
                                        apf0, apf32, apf64, apf96, apf128, apf160, apf192,
                                        apf224, apf256, apf288, apf320, apf352, apf384, apf416,
                                        apf448, apf480, apf512, apf544, apf576, apf608, apf640,
                                        apf672, apf704, apf736, apf768, apf800, apf832, apf864,
                                        apf896, apf928, apf960, apf1000 }

MBMS-CellGroupIdentity-r6 ::=       BIT STRING (SIZE (12))

MBMS-CommonCCTrChIdentity ::=       INTEGER (1..32)

MBMS-CommonPhyChIdentity ::=        INTEGER (1..32)

MBMS-CommonRBIdentity ::=           INTEGER (1..32)

MBMS-CommonRBInformation-r6 ::=     SEQUENCE {
    commonRBIdentity                    MBMS-CommonRBIdentity,
    pdcp-Info                           PDCP-Info-r4,
    rlc-Info                            RLC-Info-MTCH-r6
}

MBMS-CommonRBInformationList-r6 ::= SEQUENCE (SIZE (1..maxMBMS-CommonRB)) OF
                                        MBMS-CommonRBInformation-r6

MBMS-CommonTrChIdentity ::=         INTEGER (1..32)

MBMS-ConnectedModeCountingScope ::= SEQUENCE {
    countingForUraPCH                               BOOLEAN,
    countingForCellPCH                              BOOLEAN,
```


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```
    countingForCellFACH                             BOOLEAN
}

MBMS-CurrentCell-SCCPCH-r6 ::=      SEQUENCE {
    sccpchIdentity                      MBMS-SCCPCHIdentity                 OPTIONAL,
    secondaryCCPCH-Info                 MBMS-CommonPhyChIdentity,
    softComb-TimingOffset               MBMS-SoftComb-TimingOffset          OPTIONAL,
    -- If the IE transpCh-InfoCommonForAllTrCh is absent, the default TFCS as specified
    -- in 14.10.1 applies
    transpCh-InfoCommonForAllTrCh       MBMS-CommonCCTrChIdentity           OPTIONAL,
    transpCHInformation                 MBMS-TrCHInformation-CurrList
}

MBMS-CurrentCell-SCCPCHList-r6 ::=  SEQUENCE (SIZE (1..maxSCCPCH)) OF
                                        MBMS-CurrentCell-SCCPCH-r6

MBMS-FACHCarryingMTCH-List ::=      SEQUENCE (SIZE (1..maxFACHPCH)) OF
                                            TransportFormatSet

MBMS-JoinedInformation-r6 ::=       SEQUENCE {
    p-TMSI                              P-TMSI-GSM-MAP                      OPTIONAL
}

MBMS-L1CombiningSchedule-32 ::=     SEQUENCE {
    -- Actual L1 combining schedule values (offset, start, duration) = IE value * 4
    cycleOffset                         INTEGER (0..7)                      OPTIONAL,
    mtch-L1CombiningPeriodList          SEQUENCE (SIZE (1..maxMBMS-L1CP)) OF SEQUENCE {
        periodStart                         INTEGER (0..7),
        periodDuration                      INTEGER (1..8)
    }
}

MBMS-L1CombiningSchedule-64 ::=     SEQUENCE {
    -- Actual L1 combining schedule values (offset, start, duration) = IE value * 4
    cycleOffset                         INTEGER (0..15)                     OPTIONAL,
    mtch-L1CombiningPeriodList          SEQUENCE (SIZE (1..maxMBMS-L1CP)) OF SEQUENCE {
        periodStart                         INTEGER (0..15),
        periodDuration                      INTEGER (1..16)
    }
}

MBMS-L1CombiningSchedule-128 ::=    SEQUENCE {
    -- Actual L1 combining schedule values (offset, start, duration) = IE value * 4
    cycleOffset                         INTEGER (0..31)                     OPTIONAL,
    mtch-L1CombiningPeriodList          SEQUENCE (SIZE (1..maxMBMS-L1CP)) OF SEQUENCE {
        periodStart                         INTEGER (0..31),
        periodDuration                      INTEGER (1..32)
    }
}

MBMS-L1CombiningSchedule-256 ::=    SEQUENCE {
    -- Actual L1 combining schedule values (offset, start, duration) = IE value * 4
    cycleOffset                         INTEGER (0..63)                     OPTIONAL,
    mtch-L1CombiningPeriodList          SEQUENCE (SIZE (1..maxMBMS-L1CP)) OF SEQUENCE {
        periodStart                         INTEGER (0..63),
        periodDuration                      INTEGER (1..64)
    }
}

MBMS-L1CombiningSchedule-512 ::=    SEQUENCE {
    -- Actual L1 combining schedule values (offset, start, duration) = IE value * 4
    cycleOffset                         INTEGER (0..127)                        OPTIONAL,
    mtch-L1CombiningPeriodList          SEQUENCE (SIZE (1..maxMBMS-L1CP)) OF SEQUENCE {
        periodStart                         INTEGER (0..127),
        periodDuration                      INTEGER (1..128)
    }
}

MBMS-L1CombiningSchedule-1024 ::=   SEQUENCE {
    -- Actual L1 combining schedule values (offset, start, duration) = IE value * 4
    cycleOffset                         INTEGER (0..255)                        OPTIONAL,
    mtch-L1CombiningPeriodList          SEQUENCE (SIZE (1..maxMBMS-L1CP)) OF SEQUENCE {
        periodStart                         INTEGER (0..255),
        periodDuration                      INTEGER (1..256)
    }
}

MBMS-L1CombiningSchedule ::=        CHOICE {
```

```
    cycleLength-32                      MBMS-L1CombiningSchedule-32,
    cycleLength-64                      MBMS-L1CombiningSchedule-64,
    cycleLength-128                     MBMS-L1CombiningSchedule-128,
    cycleLength-256                     MBMS-L1CombiningSchedule-256,
    cycleLength-512                     MBMS-L1CombiningSchedule-512,
    cycleLength-1024                    MBMS-L1CombiningSchedule-1024
}

MBMS-L1CombiningTransmTimeDiff ::=  INTEGER (0..3)

MBMS-L23Configuration ::=           CHOICE {
    sameAsCurrent                       SEQUENCE {
        currentCell-SCCPCH                  MBMS-SCCPCHIdentity,
        msch-ConfigurationInfo              MBMS-MSCH-ConfigurationInfo-r6      OPTIONAL
    },
    different                           SEQUENCE {
        -- If the IE transpCh-InfoCommonForAllTrCh is absent, the default TFCS as specified
        -- in 14.10.1 applies
        transpCh-InfoCommonForAllTrCh       MBMS-CommonCCTrChIdentity           OPTIONAL,
        transpCHInformation                 MBMS-TrCHInformation-NeighbList
    }
}

MBMS-LogicalChIdentity ::=          INTEGER (1..15)

MBMS-MCCH-ConfigurationInfo-r6 ::=  SEQUENCE {
    accessInfoPeriodCoefficient         INTEGER (0..3),
    repetitionPeriodCoefficient         INTEGER (0..3),
    modificationPeriodCoefficient       INTEGER (7..10),
    rlc-Info                            RLC-Info-MCCH-r6,
    tctf-Presence                       MBMS-TCTF-Presence                  OPTIONAL
}

MBMS-MICHConfigurationInfo-r6 ::=   SEQUENCE {
    michPowerOffset                     MBMS-MICHPowerOffset,
    mode                                CHOICE {
        fdd                                 SEQUENCE {
            channelisationCode256               ChannelisationCode256,
            ni-CountPerFrame                    MBMS-NI-CountPerFrame,
            sttd-Indicator                      BOOLEAN
        },
        tdd384                              SEQUENCE {
            timeslot                            TimeslotNumber,
            midambleShiftAndBurstType           MidambleShiftAndBurstType,
            channelisationCode                  DL-TS-ChannelisationCode,
            repetitionPeriodLengthOffset        RepPerLengthOffset-MICH     OPTIONAL,
            mbmsNotificationIndLength           MBMS-MICHNotificationIndLength  DEFAULT mn4
        },
        tdd128                              SEQUENCE {
            timeslot                            TimeslotNumber-LCR-r4,
            midambleShiftAndBurstType           MidambleShiftAndBurstType-LCR-r4,
            channelisationCodeList              SEQUENCE (SIZE (1..2)) OF
                                                    DL-TS-ChannelisationCode,
            repetitionPeriodLengthOffset        RepPerLengthOffset-MICH     OPTIONAL,
            mbmsNotificationIndLength           MBMS-MICHNotificationIndLength  DEFAULT mn4
        }
    }
}

MBMS-MICHConfigurationInfo-r7 ::=   SEQUENCE {
    michPowerOffset                     MBMS-MICHPowerOffset,
    mode                                CHOICE {
        fdd                                 SEQUENCE {
            channelisationCode256               ChannelisationCode256,
            ni-CountPerFrame                    MBMS-NI-CountPerFrame,
            sttd-Indicator                      BOOLEAN
        },
        tdd384                              SEQUENCE {
            timeslot                            TimeslotNumber,
            midambleShiftAndBurstType           MidambleShiftAndBurstType-r7,
            channelisationCode                  DL-TS-ChannelisationCode,
            repetitionPeriodLengthOffset        RepPerLengthOffset-MICH     OPTIONAL,
            mbmsNotificationIndLength           MBMS-MICHNotificationIndLength  DEFAULT mn4
        },
        tdd768                              SEQUENCE {
            timeslot                            TimeslotNumber,
            midambleShiftAndBurstType           MidambleShiftAndBurstType-VHCR,
            channelisationCode                  DL-TS-ChannelisationCode,
```


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```
            repetitionPeriodLengthOffset        RepPerLengthOffset-MICH     OPTIONAL,
            mbmsNotificationIndLength           MBMS-MICHNotificationIndLength  DEFAULT mn4
        },
        tdd128                              SEQUENCE {
            timeslot                            TimeslotNumber-LCR-r4,
            midambleShiftAndBurstType           MidambleShiftAndBurstType-LCR-r4,
            channelisationCodeList              SEQUENCE (SIZE (1..2)) OF
                                                    DL-TS-ChannelisationCode,
            repetitionPeriodLengthOffset        RepPerLengthOffset-MICH     OPTIONAL,
            mbmsNotificationIndLength           MBMS-MICHNotificationIndLength  DEFAULT mn4
        }
    }
}

MBMS-MICHNotificationIndLength ::=  ENUMERATED { mn4, mn8, mn16 }

MBMS-MICHPowerOffset ::=            INTEGER (-10..5)

MBMS-ModifedService-r6 ::=          SEQUENCE {
    mbms-TransmissionIdentity           MBMS-TransmissionIdentity,
    mbms-RequiredUEAction               MBMS-RequiredUEAction-Mod,
    mbms-PreferredFrequency             CHOICE {
        mcch                                MBMS-PFLIndex,
        dcch                                MBMS-PFLInfo
    }       OPTIONAL,
    mbms-DispersionIndicator            ENUMERATED { true }                 OPTIONAL,
    continueMCCHReading                 BOOLEAN
}

MBMS-ModifedServiceList-r6 ::=      SEQUENCE (SIZE (1..maxMBMSservModif)) OF
                                        MBMS-ModifedService-r6

MBMS-MSCH-ConfigurationInfo-r6 ::=  SEQUENCE {
    mschShedulingInfo                   MBMS-MSCHSchedulingInfo             OPTIONAL,
    rlc-Info                            RLC-Info-MSCH-r6                    OPTIONAL,
    tctf-Presence                       MBMS-TCTF-Presence                  OPTIONAL
}

MBMS-MSCHSchedulingInfo ::=         CHOICE {
    schedulingPeriod-32-Offset          INTEGER (0..31),
    schedulingPeriod-64-Offset          INTEGER (0..63),
    schedulingPeriod-128-Offset         INTEGER (0..127),
    schedulingPeriod-256-Offset         INTEGER (0..255),
    schedulingPeriod-512-Offset         INTEGER (0..511),
    schedulingPeriod-1024-Offset        INTEGER (0..1023)
}

MBMS-NeighbouringCellSCCPCH-r6 ::=  SEQUENCE {
    secondaryCCPCH-Info                 MBMS-CommonPhyChIdentity,
    secondaryCCPCHPwrOffsetDiff         MBMS-SCCPCHPwrOffsetDiff            OPTIONAL,
    layer1Combining                     CHOICE {
        fdd                                 SEQUENCE {
            softComb-TimingOffset               MBMS-SoftComb-TimingOffset,
            mbms-L1CombiningTransmTimeDiff      MBMS-L1CombiningTransmTimeDiff,
            mbms-L1CombiningSchedule            MBMS-L1CombiningSchedule    OPTIONAL
        },
        tdd                                 NULL
    }       OPTIONAL,
    mbms-L23Configuration               MBMS-L23Configuration
}

MBMS-NeighbouringCellSCCPCHList-r6 ::= SEQUENCE (SIZE (1..maxSCCPCH)) OF
                                        MBMS-NeighbouringCellSCCPCH-r6

MBMS-NI-CountPerFrame ::=           ENUMERATED { ni18, ni36, ni72, ni144 }

MBMS-NumberOfNeighbourCells-r6 ::=      INTEGER (0..32)

MBMS-PFLIndex ::=                   INTEGER (1..maxMBMS-Freq)

MBMS-PFLInfo ::=                    FrequencyInfo

MBMS-PhyChInformation-r6 ::=        SEQUENCE {
    mbms-CommonPhyChIdentity            MBMS-CommonPhyChIdentity,
    secondaryCCPCHInfo-MBMS             SecondaryCCPCHInfo-MBMS-r6
}

MBMS-PhyChInformation-r7 ::=        SEQUENCE {
```


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```
    mbms-CommonPhyChIdentity            MBMS-CommonPhyChIdentity,
    secondaryCCPCHInfo-MBMS             SecondaryCCPCHInfo-MBMS-r7
}

MBMS-PhyChInformationList-r6 ::=    SEQUENCE (SIZE (1..maxMBMS-CommonPhyCh)) OF
                                        MBMS-PhyChInformation-r6

MBMS-PhyChInformationList-r7 ::=    SEQUENCE (SIZE (1..maxMBMS-CommonPhyCh)) OF
                                        MBMS-PhyChInformation-r7

MBMS-PL-ServiceRestrictInfo-r6 ::=  ENUMERATED { true }

MBMS-PreferredFrequencyInfo-r6 ::=  SEQUENCE {
    mbmsPreferredFrequency              INTEGER (1..maxMBMS-Freq)           OPTIONAL,
    layerConvergenceInformation         CHOICE {
        mbms-Qoffset                        MBMS-Qoffset,
        mbms-HCSoffset                      INTEGER (0..7)
    },
    mbms-PL-ServiceRestrictInfo         MBMS-PL-ServiceRestrictInfo-r6      OPTIONAL
}

MBMS-PreferredFrequencyList-r6 ::=  SEQUENCE (SIZE (1..maxMBMS-Freq)) OF
                                        MBMS-PreferredFrequencyInfo-r6

MBMS-PTMActivationTime-r6 ::=       INTEGER (0..2047)

MBMS-PTM-RBInformation-C ::=        SEQUENCE {
    rbInformation                       MBMS-CommonRBIdentity,
    shortTransmissionID                 MBMS-ShortTransmissionID,
    logicalChIdentity                   MBMS-LogicalChIdentity
}

MBMS-PTM-RBInformation-CList ::=    SEQUENCE (SIZE (1..maxRBperTrCh)) OF
                                        MBMS-PTM-RBInformation-C

MBMS-PTM-RBInformation-N ::=        SEQUENCE {
    shortTransmissionID                 MBMS-ShortTransmissionID,
    logicalChIdentity                   MBMS-LogicalChIdentity,
    layer1-CombiningStatus              BOOLEAN}

MBMS-PTM-RBInformation-NList ::=    SEQUENCE (SIZE (1..maxRBperTrCh)) OF
                                        MBMS-PTM-RBInformation-N

MBMS-Qoffset ::=                    ENUMERATED { q4, q8, q12, q16, q20, q30, q40, qInfinity }

MBMS-RequiredUEAction-Mod ::=       ENUMERATED {
                                        none,
                                        acquireCountingInfo,
                                        acquireCountingInfoPTM-RBsUnmodified,
                                        acquirePTM-RBInfo,
                                        requestPTPRB,
                                        releasePTM-RB }

MBMS-RequiredUEAction-UMod ::=      ENUMERATED {
                                        none,
                                        acquirePTM-RBInfo,
                                        requestPTPRB }

MBMS-SCCPCHIdentity ::=             INTEGER (1..maxSCCPCH)

MBMS-SCCPCHPwrOffsetDiff ::=        ENUMERATED { mcpo-minus6, mcpo-minus3, mcpo-plus3, mcpo-plus6 }

MBMS-SelectedServiceInfo ::=        SEQUENCE {
    status                              CHOICE {
        none                                NULL,
        some                                MBMS-SelectedServicesListFull
    }
}

MBMS-SelectedServicesListFull ::=   SEQUENCE (SIZE (1..maxMBMSservSelect)) OF
                                        MBMS-ServiceIdentity-r6

MBMS-SelectedServicesListShort ::=  SEQUENCE (SIZE (1..maxMBMSservSelect)) OF
                                        MBMS-ShortTransmissionID

MBMS-SelectedServicesShort ::=      SEQUENCE {
    mbms-SelectedServicesList           MBMS-SelectedServicesListShort,
    modificationPeriodIdentity          INTEGER (0..1)
```

```
}

MBMS-ServiceAccessInfo-r6 ::=       SEQUENCE {
    shortTransmissionID                 MBMS-ShortTransmissionID,
    accessprobabilityFactor-Idle        MBMS-AccessProbabilityFactor,
    accessprobabilityFactor-Connected   MBMS-AccessProbabilityFactor        OPTIONAL,
    mbms-ConnectedModeCountingScope     MBMS-ConnectedModeCountingScope
}

MBMS-ServiceAccessInfoList-r6 ::=   SEQUENCE (SIZE (1..maxMBMSservCount)) OF
                                    MBMS-ServiceAccessInfo-r6

MBMS-ServiceIdentity-r6 ::=         SEQUENCE {
    serviceIdentity                     OCTET STRING (SIZE (3)),
    plmn-Identity                       CHOICE {
        -- The 'sameAsMIB-PLMN-Id' choice refers to the 'PLMN Identity' (R99) in MIB.
        sameAsMIB-PLMN-Id                   NULL,
        other                               CHOICE {
            -- The 'sameAsMIB-MultiPLMN-Id' choice refers to one of the (1..5) PLMN Identities
            -- provided in the 'Multiple PLMN List' (REL-6) in MIB.
            sameAsMIB-MultiPLMN-Id              INTEGER (1..5),
            explicitPLMN-Id                     PLMN-Identity
        }
    }
}

MBMS-ServiceSchedulingInfo-r6 ::=   SEQUENCE {
    mbms-TransmissionIdentity           MBMS-TransmissionIdentity,
    mbms-ServiceTransmInfoList          MBMS-ServiceTransmInfoList          OPTIONAL,
    nextSchedulingperiod                INTEGER (0..31)
}

MBMS-ServiceSchedulingInfoList-r6 ::= SEQUENCE (SIZE (1..maxMBMSservSched)) OF
                                    MBMS-ServiceSchedulingInfo-r6

MBMS-ServiceTransmInfo ::=          SEQUENCE {
    -- Actual values (start, duration) = IE values * 4
    start                               INTEGER (0..255),
    duration                            INTEGER (1..256)
}

MBMS-ServiceTransmInfoList ::=      SEQUENCE (SIZE (1..maxMBMSTransmis)) OF
                                    MBMS-ServiceTransmInfo

MBMS-SessionIdentity ::=            OCTET STRING (SIZE (1))

MBMS-ShortTransmissionID ::=        INTEGER (1..maxMBMSservUnmodif)

MBMS-SIBType5-SCCPCH-r6 ::=         SEQUENCE {
    sccpchIdentity                      MBMS-SCCPCHIdentity,
    transpCHInformation                 MBMS-TrCHInformation-SIB5List
}

MBMS-SIBType5-SCCPCHList-r6 ::=     SEQUENCE (SIZE (1..maxSCCPCH)) OF
                                    MBMS-SIBType5-SCCPCH-r6

MBMS-SoftComb-TimingOffset ::=      ENUMERATED { ms0, ms10, ms20, ms40 }

MBMS-TCTF-Presence ::=              ENUMERATED { false }

MBMS-TimersAndCounters-r6 ::=       SEQUENCE {
    t-318                               T-318                               DEFAULT ms1000
}

MBMS-TransmissionIdentity ::=       SEQUENCE {
    mbms-ServiceIdentity                MBMS-ServiceIdentity-r6,
    mbms-SessionIdentity                MBMS-SessionIdentity                OPTIONAL
}

MBMS-TranspChInfoForCCTrCh-r6 ::=   SEQUENCE {
    commonCCTrChIdentity                MBMS-CommonCCTrChIdentity,
    transportFormatCombinationSet       TFCS
}


MBMS-TranspChInfoForEachCCTrCh-r6 ::= SEQUENCE (SIZE (1..maxMBMS-CommonCCTrCh)) OF
                                    MBMS-TranspChInfoForCCTrCh-r6
```


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```
MBMS-TranspChInfoForEachTrCh-r6 ::= SEQUENCE (SIZE (1..maxMBMS-CommonTrCh)) OF
                                    MBMS-TranspChInfoForTrCh-r6

MBMS-TranspChInfoForTrCh-r6 ::=     SEQUENCE {
    commonTrChIdentity                  MBMS-CommonTrChIdentity,
    transportFormatSet                  TransportFormatSet
}

MBMS-TrCHInformation-Curr ::=       SEQUENCE {
    transpCh-Info                       MBMS-CommonTrChIdentity,
    rbInformation                       MBMS-PTM-RBInformation-CList        OPTIONAL,
    msch-ConfigurationInfo              MBMS-MSCH-ConfigurationInfo-r6      OPTIONAL
}

MBMS-TrCHInformation-CurrList ::=   SEQUENCE (SIZE (1..maxFACHPCH)) OF
                                    MBMS-TrCHInformation-Curr

MBMS-TrCHInformation-Neighb ::=     SEQUENCE {
    transpCh-Info                       MBMS-CommonTrChIdentity,
    transpCh-CombiningStatus            BOOLEAN,
    rbInformation                       MBMS-PTM-RBInformation-NList        OPTIONAL,
    msch-ConfigurationInfo              MBMS-MSCH-ConfigurationInfo-r6      OPTIONAL
}

MBMS-TrCHInformation-NeighbList ::= SEQUENCE (SIZE (1..maxFACHPCH)) OF
                                    MBMS-TrCHInformation-Neighb

MBMS-TrCHInformation-SIB5 ::=       SEQUENCE {
    transpCh-Identity                   INTEGER (1..maxFACHPCH),
    rbInformation                       MBMS-PTM-RBInformation-CList        OPTIONAL,
    msch-ConfigurationInfo              MBMS-MSCH-ConfigurationInfo-r6      OPTIONAL
}

MBMS-TrCHInformation-SIB5List ::=   SEQUENCE (SIZE (1..maxFACHPCH)) OF
                                    MBMS-TrCHInformation-SIB5

MBMS-UnmodifiedService-r6 ::=       SEQUENCE {
    mbms-TransmissionIdentity           MBMS-TransmissionIdentity,
    mbms-RequiredUEAction               MBMS-RequiredUEAction-UMod,
    mbms-PreferredFrequency             MBMS-PFLIndex                       OPTIONAL
}

MBMS-UnmodifiedServiceList-r6 ::=   SEQUENCE (SIZE (1..maxMBMSservUnmodif)) OF
                                    MBMS-UnmodifiedService-r6

MBSFN-ClusterFrequency-r7 ::=       INTEGER (1..maxMBSFNClusters)

MBSFNFrequency ::=                  SEQUENCE {
    frequencyInfo                       FrequencyInfo,
    cellParametersID                    CellParametersID                    OPTIONAL
}

MBSFNFrequencyList ::=              SEQUENCE (SIZE (1.. maxMBSFNClusters)) OF
                                    MBSFNFrequency

MBSFNOnlyService ::=                ENUMERATED {true}

MBSFNservicesNotNotified-r7 ::=     SEQUENCE {
    notificationOfAllMBSFNServicesInTheBand
                                        ENUMERATED { true }                 OPTIONAL
}

MBSFNInterFrequencyNeighbour-r7 ::= SEQUENCE {
    mbsfnFrequency                      FrequencyInfo,
    mBSFNservicesNotification           CHOICE {
        mBSFNservicesnotified               NULL,
        mBSFNservicesNotNotified-r7         MBSFNservicesNotNotified-r7
    }
}

MBSFN-InterFrequencyNeighbourList-r7 ::= SEQUENCE (SIZE (1.. maxMBSFNClusters)) OF
                                    MBSFNInterFrequencyNeighbour-r7

MBSFN-TDM-Info ::=                  SEQUENCE {
    shortTransmissionID                 MBMS-ShortTransmissionID,
    tDMPeriod                           INTEGER (2..9),
    tDMOffset                           INTEGER (0..8)
}
```


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```
MBSFN-TDM-Info-List ::=             SEQUENCE (SIZE (1..maxMBMSservUnmodif)) OF
                                        MBSFN-TDM-Info

END
```

11.4 Constant definitions

```
Constant-definitions DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

hiPDSCHidentities           INTEGER ::= 64
hiPUSCHidentities           INTEGER ::= 64
hiRM                        INTEGER ::= 256
maxAC                       INTEGER ::= 16
maxAdditionalMeas           INTEGER ::= 4
maxASC                      INTEGER ::= 8
maxASCmap                   INTEGER ::= 7
maxASCpersist               INTEGER ::= 6
maxCCTrCH                   INTEGER ::= 8
maxCellMeas                 INTEGER ::= 32
maxCellMeas-1               INTEGER ::= 31
maxCNdomains                INTEGER ::= 4
maxCommonHRNTI              INTEGER ::= 4
maxCommonQueueID            INTEGER ::= 2
maxCPCHsets                 INTEGER ::= 16
maxDPCH-DLchan              INTEGER ::= 8
maxDPDCH-UL                 INTEGER ::= 6
maxDRACclasses              INTEGER ::= 8
maxE-DCHMACdFlow            INTEGER ::= 8
maxE-DCHMACdFlow-1          INTEGER ::= 7
maxEDCHRL                   INTEGER ::= 4
maxFACHPCH                  INTEGER ::= 8
maxFreq                     INTEGER ::= 8
maxFreqBandsFDD             INTEGER ::= 8
maxFreqBandsFDD-ext         INTEGER ::= 15  -- maxFreqBandsFDD-ext ::= 22 - (maxFreqBandsFDD - 1)
maxFreqBandsTDD             INTEGER ::= 4
maxFreqBandsGSM             INTEGER ::= 16
maxGANSS                    INTEGER ::= 8
maxGANSS-1                  INTEGER ::= 7
maxGANSSSat                 INTEGER ::= 32
maxGANSSSat-1               INTEGER ::= 31
maxGERAN-SI                 INTEGER ::= 8
maxGSMTargetCells           INTEGER ::= 32
maxHProcesses               INTEGER ::= 8
maxHS-SCCHLessTrBlk         INTEGER ::= 4
maxHSDSCHTBIndex            INTEGER ::= 64
maxHSDSCHTBIndex-tdd384     INTEGER ::= 512
maxHSSCCHs                  INTEGER ::= 4
maxInterSysMessages         INTEGER ::= 4
maxLoCHperRLC               INTEGER ::= 2
maxMAC-d-PDUsizes           INTEGER ::= 8
maxMBMS-CommonCCTrCh        INTEGER ::= 32
maxMBMS-CommonPhyCh         INTEGER ::= 32
maxMBMS-CommonRB            INTEGER ::= 32
maxMBMS-CommonTrCh          INTEGER ::= 32
maxMBMS-Freq                INTEGER ::= 4
maxMBMS-L1CP                INTEGER ::= 4
maxMBMSservCount            INTEGER ::= 8
maxMBMSservModif            INTEGER ::= 32
maxMBMSservSched            INTEGER ::= 16
maxMBMSservSelect           INTEGER ::= 8
maxMBMSservUnmodif          INTEGER ::= 64
maxMBMSTransmis             INTEGER ::= 4
maxMBSFNClusters            INTEGER ::= 16
maxMeasEvent                INTEGER ::= 8
maxMeasIntervals            INTEGER ::= 3
maxMeasParEvent             INTEGER ::= 2
maxNumCDMA2000Freqs         INTEGER ::=  8
maxNumE-AGCH                INTEGER ::= 4
maxNumE-HICH                INTEGER ::= 4
maxNumGSMFreqRanges         INTEGER ::= 32
maxNumFDDFreqs              INTEGER ::=  8
maxNumTDDFreqs              INTEGER ::=  8
maxNoOfMeas                 INTEGER ::= 16
maxOtherRAT                 INTEGER ::= 15
```


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```
maxOtherRAT-16              INTEGER ::= 16
maxPage1                    INTEGER ::= 8
maxPCPCH-APsig              INTEGER ::= 16
maxPCPCH-APsubCh            INTEGER ::= 12
maxPCPCH-CDsig              INTEGER ::= 16
maxPCPCH-CDsubCh            INTEGER ::= 12
maxPCPCH-SF                 INTEGER ::= 7
maxPCPCHs                   INTEGER ::= 64
maxPDCPAlgoType             INTEGER ::= 8
maxPDSCH                    INTEGER ::= 8
maxPDSCH-TFCIgroups         INTEGER ::= 256
maxPRACH                    INTEGER ::= 16
maxPRACH-FPACH              INTEGER ::= 8
maxPredefConfig             INTEGER ::= 16
maxPUSCH                    INTEGER ::= 8
maxQueueIDs                 INTEGER ::= 8
maxRABsetup                 INTEGER ::= 16
maxRAT                      INTEGER ::= 16
maxRB                       INTEGER ::= 32
maxRBallRABs                INTEGER ::= 27
maxRBMuxOptions             INTEGER ::= 8
maxRBperRAB                 INTEGER ::= 8
maxRBperTrCh                INTEGER ::= 16
maxReportedGSMCells         INTEGER ::= 8
maxRL                       INTEGER ::= 8
maxRL-1                     INTEGER ::= 7
maxRLCPDUsizePerLogChan     INTEGER ::= 32
maxRFC3095-CID              INTEGER ::= 16384
maxROHC-PacketSizes-r4      INTEGER ::= 16
maxROHC-Profile-r4          INTEGER ::= 8
maxSat                      INTEGER ::= 16
maxSCCPCH                   INTEGER ::= 16
maxSgnType                  INTEGER ::= 4
maxSIB                      INTEGER ::= 32
maxSIB-FACH                 INTEGER ::= 8
maxSIBperMsg                INTEGER ::= 16
maxSRBsetup                 INTEGER ::= 8
maxSystemCapability         INTEGER ::= 16
maxTF                       INTEGER ::= 32
maxTF-CPCH                  INTEGER ::= 16
maxTFC                      INTEGER ::= 1024
maxTFCsub                   INTEGER ::= 1024
maxTFCI-2-Combs             INTEGER ::= 512
maxTGPS                     INTEGER ::= 6
maxTrCH                     INTEGER ::= 32
-- maxTrCHpreconf should be 16 but has been set to 32 for compatibility
maxTrCHpreconf              INTEGER ::= 32
maxTS                       INTEGER ::= 14
maxTS-1                     INTEGER ::= 13
maxTS-2                     INTEGER ::= 12
maxTS-LCR                   INTEGER ::= 6
maxTS-LCR-1                 INTEGER ::= 5
maxURA                      INTEGER ::= 8
maxURNTI-Group              INTEGER ::= 8

END
```

11.5 RRC information between network nodes

```
Internode-definitions DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS

    HandoverToUTRANCommand,
    MeasurementReport,
    PhysicalChannelReconfiguration,
    RadioBearerReconfiguration,
    RadioBearerRelease,
    RadioBearerSetup,
    RRCConnectionSetupComplete-r3-add-ext-IEs,
    RRC-FailureInfo,
    TransportChannelReconfiguration,
    UECapabilityInformation-r3-add-ext-IEs
FROM PDU-definitions
```

```
-- Core Network IEs :
    CN-DomainIdentity,
    CN-DomainInformationList,
    CN-DomainInformationListFull,
    CN-DRX-CycleLengthCoefficient,
    NAS-SystemInformationGSM-MAP,
-- UTRAN Mobility IEs :
    CellIdentity,
    URA-Identity,
-- User Equipment IEs :
    AccessStratumReleaseIndicator,
    C-RNTI,
    ChipRateCapability,
    DL-CapabilityWithSimultaneousHS-DSCHConfig,
    DL-PhysChCapabilityFDD-v380ext,
    DL-PhysChCapabilityTDD,
    DL-PhysChCapabilityTDD-LCR-r4,
    GSM-Measurements,
    HSDSCH-physical-layer-category,
    FailureCauseWithProtErr,
    MaxHcContextSpace,
    MaximumAM-EntityNumberRLC-Cap,
    MaximumRLC-WindowSize,
    MaxNoPhysChBitsReceived,
    MaxNoDPDCH-BitsTransmitted,
    MaxPhysChPerFrame,
    MaxPhysChPerSubFrame-r4,
    MaxPhysChPerTS,
    MaxROHC-ContextSessions-r4,
    MaxTS-PerFrame,
    MaxTS-PerSubFrame-r4,
    MinimumSF-DL,
    MultiModeCapability,
    MultiRAT-Capability,
    NetworkAssistedGPS-Supported,
    PhysicalChannelCapability-edch-r6,
    PhysicalChannelCapability-r7,
    RadioFrequencyBandTDDList,
    RF-Capability-r7,
    RLC-Capability,
    RRC-MessageSequenceNumber,
    SecurityCapability,
    SimultaneousSCCPCH-DPCH-Reception,
    STARTList,
    STARTSingle,
    START-Value,
    SupportOfDedicatedPilotsForChEstimation,
    T-305,
    TransportChannelCapability,
    TxRxFrequencySeparation,
    U-RNTI,
    UE-CapabilityContainer-IEs,
    UE-GANSSPositioning-Capability,
    UE-MultiModeRAT-Capability,
    UE-PowerClassExt,
    UE-RadioAccessCapabBandFDDList,
    UE-RadioAccessCapabBandFDDList2,
    UE-RadioAccessCapabBandFDDList-ext,
    UE-RadioAccessCapability,
    UE-RadioAccessCapability-v370ext,
    UE-RadioAccessCapability-v380ext,
    UE-RadioAccessCapability-v3a0ext,
    UE-RadioAccessCapability-v3g0ext,
    UE-RadioAccessCapability-v4b0ext,
    UE-RadioAccessCapability-v590ext,
    UE-RadioAccessCapability-v5c0ext,
    UE-RadioAccessCapability-v7xyext,
    UL-PhysChCapabilityFDD,
    UL-PhysChCapabilityFDD-r6,
    UL-PhysChCapabilityTDD,
    UL-PhysChCapabilityTDD-LCR-r4,
-- Radio Bearer IEs :
    PredefinedConfigStatusList,
    PredefinedConfigValueTag,
    RAB-InformationSetupList,
    RAB-InformationSetupList-r4,
    RAB-InformationSetupList-r5,
    RAB-InformationSetupList-r6-ext,
```

```
    RAB-InformationSetupList-r6,
    RAB-InformationSetupList-v6b0ext,
    RAB-InformationSetupList-r7,
    RB-Identity,
    SRB-InformationSetupList,
    SRB-InformationSetupList-r5,
    SRB-InformationSetupList-r6,
    SRB-InformationSetupList-r7,
-- Transport Channel IEs :
    CPCH-SetID,
    DL-CommonTransChInfo,
    DL-CommonTransChInfo-r4,
    DL-AddReconfTransChInfoList,
    DL-AddReconfTransChInfoList-r4,
    DL-AddReconfTransChInfoList-r5,
    DL-AddReconfTransChInfoList-r7,
    DRAC-StaticInformationList,
    UL-CommonTransChInfo,
    UL-CommonTransChInfo-r4,
    UL-AddReconfTransChInfoList,
    UL-AddReconfTransChInfoList-r6,
    UL-AddReconfTransChInfoList-r7,
-- Physical Channel IEs :
    PrimaryCPICH-Info,
    TPC-CombinationIndex,
    ScramblingCodeChange,
    TGCFN,
    TGPSI,
    TGPS-ConfigurationParams,
-- Measurement IEs :
    Event1j-r6,
    Hysteresis,
    Inter-FreqEventCriteriaList-v590ext,
    Intra-FreqEventCriteriaList-v590ext,
    IntraFreqEvent-1d-r5,
    IntraFreqReportingCriteria-1b-r5,
    InterRATCellInfoIndication,
    MeasuredResultsOnRACHinterFreq,
    MeasurementIdentity,
    MeasurementReportingMode,
    MeasurementType,
    MeasurementType-r4,
    MeasurementType-r6,
    AdditionalMeasurementID-List,
    PositionEstimate,
    PositionEstimateGANSS,
    ReportingCellStatus,
    ThresholdSFN-GPS-TOW-us,
    TimeToTrigger,
-- MBMS IEs :
    MBMS-JoinedInformation-r6,
    MBMS-SelectedServiceInfo,
-- Other IEs :
    GERANIu-RadioAccessCapability,
    GSM-MS-RadioAccessCapability,
    InterRAT-UE-RadioAccessCapabilityList,
    InterRAT-UE-RadioAccessCapability-v590ext,
    InterRAT-UE-RadioAccessCapability-v690ext,
    UESpecificBehaviourInformation1idle,
    UESpecificBehaviourInformation1interRAT

FROM InformationElements

    maxCNdomains,
    maxGANSS,
    maxNoOfMeas,
    maxRB,
    maxRBallRABs,
    maxRFC3095-CID,
    maxSRBsetup,
    maxRL,
    maxTGPS
FROM Constant-definitions;

-- Part 1: Class definitions similar to what has been defined in 11.1 for RRC messages
-- Information that is tranferred in the same direction and across the same path is grouped

-- **************************************************
```

```
--
-- RRC information, to target RNC
--
-- **************************************************
-- RRC Information to target RNC sent either from source RNC or from another RAT

ToTargetRNC-Container ::= CHOICE {
    interRATHandoverInfo                InterRATHandoverInfoWithInterRATCapabilities-r3,
    srncRelocation                      SRNC-RelocationInfo-r3,
    rfc3095-ContextInfo                 RFC3095-ContextInfo-r5,
    extension                           NULL
}

-- **************************************************
--
-- RRC information, target RNC to source RNC
--
-- **************************************************


TargetRNC-ToSourceRNC-Container ::= CHOICE {
    radioBearerSetup                    RadioBearerSetup,
    radioBearerReconfiguration          RadioBearerReconfiguration,
    radioBearerRelease                  RadioBearerRelease,
    transportChannelReconfiguration     TransportChannelReconfiguration,
    physicalChannelReconfiguration      PhysicalChannelReconfiguration,
    rrc-FailureInfo                     RRC-FailureInfo,
    -- IE dl-DCCHmessage consists of an octet string that includes the IE DL-DCCH-Message
    dL-DCCHmessage                      OCTET STRING,
    extension                           NULL
}

-- Part 2: Container definitions, similar to the PDU definitions in 11.2 for RRC messages
-- In alphabetical order


-- **************************************************
--
-- Handover to UTRAN information
--
-- **************************************************

InterRATHandoverInfoWithInterRATCapabilities-r3 ::= CHOICE {
    r3                              SEQUENCE {
        -- IE InterRATHandoverInfoWithInterRATCapabilities-r3-IEs also
        -- includes non critical extensions
        interRATHandoverInfo-r3         InterRATHandoverInfoWithInterRATCapabilities-r3-IEs,
        v390NonCriticalExtensions       SEQUENCE {
            interRATHandoverInfoWithInterRATCapabilities-v390ext
                                        InterRATHandoverInfoWithInterRATCapabilities-v390ext-IEs,
            -- Reserved for future non critical extension
            v690NonCriticalExtensions       SEQUENCE {
                interRATHandoverInfoWithInterRATCapabilities-v690ext
                                        InterRATHandoverInfoWithInterRATCapabilities-v690ext-IEs,
                nonCriticalExtensions           SEQUENCE {} OPTIONAL
            }       OPTIONAL
        }       OPTIONAL
    },
    criticalExtensions              SEQUENCE {}
}

InterRATHandoverInfoWithInterRATCapabilities-r3-IEs ::=     SEQUENCE {
        -- The order of the IEs may not reflect the tabular format
        --  but has been chosen to simplify the handling of the information in the BSC
    --  Other IEs
        ue-RATSpecificCapability        InterRAT-UE-RadioAccessCapabilityList   OPTIONAL,
        -- interRATHandoverInfo, Octet string is used to obtain 8 bit length field prior to
        -- actual information.  This makes it possible for BSS to transparently handle information
        -- received via GSM air interface even when it includes non critical extensions.
        -- The octet string shall include the InterRATHandoverInfo information
        -- The BSS can re-use the 44.018 length field received from the MS
        interRATHandoverInfo            OCTET STRING (SIZE (0..255))
}

InterRATHandoverInfoWithInterRATCapabilities-v390ext-IEs ::= SEQUENCE {
    -- User equipment IEs
        failureCauseWithProtErr             FailureCauseWithProtErr                 OPTIONAL
}
```

```
InterRATHandoverInfoWithInterRATCapabilities-v690ext-IEs ::= SEQUENCE {
    -- Other IEs
        ue-RATSpecificCapability-v690ext    InterRAT-UE-RadioAccessCapability-v690ext   OPTIONAL
}

-- **************************************************
--
-- RFC3095 context, source RNC to target RNC
--
-- **************************************************

RFC3095-ContextInfo-r5 ::= CHOICE {
    r5                              SEQUENCE {
        rFC3095-ContextInfoList-r5      RFC3095-ContextInfoList-r5,
        -- Reserved for future non critical extension
        nonCriticalExtensions           SEQUENCE {} OPTIONAL
    },
    criticalExtensions              SEQUENCE {}
}

RFC3095-ContextInfoList-r5 ::=      SEQUENCE (SIZE (1..maxRBallRABs)) OF
                                        RFC3095-ContextInfo


-- **************************************************
--
-- SRNC Relocation information
--
-- **************************************************

SRNC-RelocationInfo-r3 ::= CHOICE {
    r3                              SEQUENCE {
        sRNC-RelocationInfo-r3          SRNC-RelocationInfo-r3-IEs,
        v380NonCriticalExtensions           SEQUENCE {
            sRNC-RelocationInfo-v380ext SRNC-RelocationInfo-v380ext-IEs,
            -- Reserved for future non critical extension
            v390NonCriticalExtensions           SEQUENCE {
                sRNC-RelocationInfo-v390ext         SRNC-RelocationInfo-v390ext-IEs,
                v3a0NonCriticalExtensions           SEQUENCE {
                    sRNC-RelocationInfo-v3a0ext         SRNC-RelocationInfo-v3a0ext-IEs,
                    v3b0NonCriticalExtensions           SEQUENCE {
                        sRNC-RelocationInfo-v3b0ext         SRNC-RelocationInfo-v3b0ext-IEs,
                        v3c0NonCriticalExtensions           SEQUENCE {
                            sRNC-RelocationInfo-v3c0ext         SRNC-RelocationInfo-v3c0ext-IEs,
                            laterNonCriticalExtensions          SEQUENCE {
                                sRNC-RelocationInfo-v3d0ext         SRNC-RelocationInfo-v3d0ext-IEs,
                                -- Container for additional R99 extensions
                                sRNC-RelocationInfo-r3-add-ext      BIT STRING
                                                (CONTAINING SRNC-RelocationInfo-v3h0ext-IEs)      OPTIONAL,
                                v3g0NonCriticalExtensions           SEQUENCE {
                                    sRNC-RelocationInfo-v3g0ext         SRNC-RelocationInfo-v3g0ext-IEs,
                                    v4b0NonCriticalExtensions           SEQUENCE {
                                        sRNC-RelocationInfo-v4b0ext         SRNC-RelocationInfo-v4b0ext-IEs,
                                        v590NonCriticalExtensions           SEQUENCE {
                                            sRNC-RelocationInfo-v590ext
                                                                                SRNC-RelocationInfo-v590ext-IEs,
                                            v5a0NonCriticalExtensions           SEQUENCE {
                                                sRNC-RelocationInfo-v5a0ext
                                                                                SRNC-RelocationInfo-v5a0ext-IEs,
                                                v5b0NonCriticalExtensions           SEQUENCE {
                                                    sRNC-RelocationInfo-v5b0ext
                                                                                SRNC-RelocationInfo-v5b0ext-IEs,
                                                    v5c0NonCriticalExtensions           SEQUENCE {
                                                        sRNC-RelocationInfo-v5c0ext
                                                                                SRNC-RelocationInfo-v5c0ext-IEs,
                                                        v690NonCriticalExtensions       SEQUENCE {
                                                            sRNC-RelocationInfo-v690ext
                                                                                SRNC-RelocationInfo-v690ext-IEs,
                                                            v6b0NonCriticalExtensions       SEQUENCE {
                                                                sRNC-RelocationInfo-v6b0ext
                                                                                SRNC-RelocationInfo-v6b0ext-IEs,
                                                                v7xyNonCriticalExtensions   SEQUENCE {
                                                                    sRNC-RelocationInfo-v7xyext
                                                                                SRNC-RelocationInfo-v7xyext-IEs,
                                                                    -- Reserved for future non critical
                                                                    -- extension
                                                                    nonCriticalExtensions
```


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```
                                                                                SEQUENCE {}  OPTIONAL
                                                                        }       OPTIONAL
                                                                    }       OPTIONAL
                                                                }       OPTIONAL
                                                            }       OPTIONAL
                                                        }       OPTIONAL
                                                    }       OPTIONAL
                                                }       OPTIONAL
                                            }       OPTIONAL
                                        }       OPTIONAL
                                    }       OPTIONAL
                                }       OPTIONAL
                            }       OPTIONAL
                        }       OPTIONAL
                    }       OPTIONAL
                }       OPTIONAL
            }       OPTIONAL
        }       OPTIONAL
    },
    later-than-r3                   CHOICE {
        r4                              SEQUENCE {
            sRNC-RelocationInfo-r4          SRNC-RelocationInfo-r4-IEs,
            v4d0NonCriticalExtensions       SEQUENCE {
                sRNC-RelocationInfo-v4d0ext     SRNC-RelocationInfo-v4d0ext-IEs,
                -- Container for adding non critical extensions after freezing REL-5
                sRNC-RelocationInfo-r4-add-ext      BIT STRING      OPTIONAL,
                v590NonCriticalExtensions           SEQUENCE {
                    sRNC-RelocationInfo-v590ext         SRNC-RelocationInfo-v590ext-IEs,
                    v5a0NonCriticalExtensions           SEQUENCE {
                        sRNC-RelocationInfo-v5a0ext         SRNC-RelocationInfo-v5a0ext-IEs,
                        v5b0NonCriticalExtensions           SEQUENCE {
                            sRNC-RelocationInfo-v5b0ext         SRNC-RelocationInfo-v5b0ext-IEs,
                            v5c0NonCriticalExtensions           SEQUENCE {
                                sRNC-RelocationInfo-v5c0ext         SRNC-RelocationInfo-v5c0ext-IEs,
                                v690NonCriticalExtensions           SEQUENCE {
                                    sRNC-RelocationInfo-v690ext     SRNC-RelocationInfo-v690ext-IEs,
                                    v6b0NonCriticalExtensions           SEQUENCE {
                                        sRNC-RelocationInfo-v6b0ext
                                                                            SRNC-RelocationInfo-v6b0ext-IEs,
                                        v7xyNonCriticalExtensions           SEQUENCE {
                                            sRNC-RelocationInfo-v7xyext
                                                                            SRNC-RelocationInfo-v7xyext-IEs,
                                                nonCriticalExtensions           SEQUENCE {} OPTIONAL
                                        }   OPTIONAL
                                    }   OPTIONAL
                                }   OPTIONAL
                            }   OPTIONAL
                        }   OPTIONAL
                    }   OPTIONAL
                }   OPTIONAL
            }   OPTIONAL
        },
        criticalExtensions              CHOICE {
            r5                              SEQUENCE {
                sRNC-RelocationInfo-r5          SRNC-RelocationInfo-r5-IEs,
                sRNC-RelocationInfo-r5-add-ext  BIT STRING      OPTIONAL,
                v5a0NonCriticalExtensions       SEQUENCE {
                    sRNC-RelocationInfo-v5a0ext     SRNC-RelocationInfo-v5a0ext-IEs,
                    v5b0NonCriticalExtensions       SEQUENCE {
                        sRNC-RelocationInfo-v5b0ext     SRNC-RelocationInfo-v5b0ext-IEs,
                        v5c0NonCriticalExtensions           SEQUENCE {
                            sRNC-RelocationInfo-v5c0ext         SRNC-RelocationInfo-v5c0ext-IEs,
                            v690NonCriticalExtensions           SEQUENCE {
                                sRNC-RelocationInfo-v690ext         SRNC-RelocationInfo-v690ext-IEs,
                                v6b0NonCriticalExtensions           SEQUENCE {
                                    sRNC-RelocationInfo-v6b0ext     SRNC-RelocationInfo-v6b0ext-IEs,
                                        v7xyNonCriticalExtensions       SEQUENCE {
                                            sRNC-RelocationInfo-v7xyext
                                                                            SRNC-RelocationInfo-v7xyext-IEs,
                                            nonCriticalExtensions           SEQUENCE {}     OPTIONAL
                                        }   OPTIONAL
                                    }   OPTIONAL
                                }   OPTIONAL
                            }   OPTIONAL
                        }   OPTIONAL
                    }   OPTIONAL
                }   OPTIONAL
            },
            criticalExtensions              CHOICE {
                r6                              SEQUENCE {
                    sRNC-RelocationInfo-r6          SRNC-RelocationInfo-r6-IEs,
```


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```
                    sRNC-RelocationInfo-r6-add-ext  BIT STRING      OPTIONAL,
                    v6b0NonCriticalExtensions       SEQUENCE {
                        sRNC-RelocationInfo-v6b0ext     SRNC-RelocationInfo-v6b0ext-IEs,
                        v7xyNonCriticalExtensions       SEQUENCE {
                            sRNC-RelocationInfo-v7xyext     SRNC-RelocationInfo-v7xyext-IEs,
                            nonCriticalExtensions           SEQUENCE {}     OPTIONAL
                        }   OPTIONAL
                    }   OPTIONAL
                },
                criticalExtensions              CHOICE {
                    r7                              SEQUENCE {
                        sRNC-RelocationInfo-r7          SRNC-RelocationInfo-r7-IEs,
                        sRNC-RelocationInfo-r7-add-ext  BIT STRING      OPTIONAL,
                        nonCriticalExtensions           SEQUENCE {} OPTIONAL
                    },
                    criticalExtensions              SEQUENCE {}
                }
            }
        }
    }
}

SRNC-RelocationInfo-r3-IEs ::=      SEQUENCE {
    -- Non-RRC IEs
        stateOfRRC                      StateOfRRC,
        stateOfRRC-Procedure            StateOfRRC-Procedure,
    -- Ciphering related information IEs
    -- If the extension v380 is included use the extension for the ciphering status per CN domain
        cipheringStatus                 CipheringStatus,
        -- If ciphering status is started and the IE latestConfiguredCN-Domain should be included,
        -- the IE cn-DomainIdentity (in SRNC-RelocationInfo-v380ext-IEs) shall be used instead.
        calculationTimeForCiphering     CalculationTimeForCiphering         OPTIONAL,
        -- The order of occurrence in the IE cipheringInfoPerRB-List is the
        -- same as the RBs in SRB-InformationSetupList in RAB-InformationSetupList.
        -- The signalling RBs are supposed to be listed
        -- first. Only UM and AM RBs that are ciphered are listed here
        cipheringInfoPerRB-List         CipheringInfoPerRB-List             OPTIONAL,
        count-C-List                    COUNT-C-List                        OPTIONAL,
        integrityProtectionStatus       IntegrityProtectionStatus,
        -- In the IE srb-SpecificIntegrityProtInfo, the first information listed corresponds to
      -- signalling radio bearer RB0 and after the order of occurrence is the same as the SRBs in
     -- SRB-InformationSetupList
        -- The target RNC may ignore the IE srb-SpecificIntegrityProtInfo if the
        -- IE integrityProtectionStatus has the value "not started".
        srb-SpecificIntegrityProtInfo   SRB-SpecificIntegrityProtInfoList,
        implementationSpecificParams    ImplementationSpecificParams        OPTIONAL,
    -- User equipment IEs
        u-RNTI                          U-RNTI,
        c-RNTI                          C-RNTI                              OPTIONAL,
        ue-RadioAccessCapability        UE-RadioAccessCapability,
        ue-Positioning-LastKnownPos     UE-Positioning-LastKnownPos         OPTIONAL,
    -- Other IEs
        ue-RATSpecificCapability        InterRAT-UE-RadioAccessCapabilityList   OPTIONAL,
    -- UTRAN mobility IEs
        ura-Identity                    URA-Identity                        OPTIONAL,
    -- Core network IEs
        cn-CommonGSM-MAP-NAS-SysInfo    NAS-SystemInformationGSM-MAP,
        cn-DomainInformationList        CN-DomainInformationList            OPTIONAL,
    -- Measurement IEs
        ongoingMeasRepList              OngoingMeasRepList                  OPTIONAL,
    -- Radio bearer IEs
        predefinedConfigStatusList      PredefinedConfigStatusList,
        srb-InformationList             SRB-InformationSetupList,
        rab-InformationList             RAB-InformationSetupList            OPTIONAL,
    -- Transport channel IEs
        ul-CommonTransChInfo            UL-CommonTransChInfo                OPTIONAL,
        ul-TransChInfoList              UL-AddReconfTransChInfoList         OPTIONAL,
        modeSpecificInfo                CHOICE {
            fdd                             SEQUENCE {
                -- dummy and dummy2 are not used in this version of the specification, they should
                -- not be sent and if received they should be ignored.
                dummy                           CPCH-SetID                  OPTIONAL,
                dummy2                          DRAC-StaticInformationList  OPTIONAL
            },
            tdd                             NULL
        },
        dl-CommonTransChInfo            DL-CommonTransChInfo                OPTIONAL,
        dl-TransChInfoList              DL-AddReconfTransChInfoList         OPTIONAL,
```

```
    -- Measurement report
        measurementReport               MeasurementReport                   OPTIONAL
}

SRNC-RelocationInfo-v380ext-IEs ::= SEQUENCE {
    -- Ciphering related information IEs
        -- In the SRNC-RelocationInfo-r3-IEs, the IE 'cn-DomainIdentity' is used to represent the
        -- IE 'Latest configured CN domain' in the tabular.
        cn-DomainIdentity                   CN-DomainIdentity,
        cipheringStatusList                 CipheringStatusList
}

SRNC-RelocationInfo-v390ext-IEs ::= SEQUENCE {
        cn-DomainInformationList-v390ext    CN-DomainInformationList-v390ext        OPTIONAL,
        ue-RadioAccessCapability-v370ext    UE-RadioAccessCapability-v370ext        OPTIONAL,
        ue-RadioAccessCapability-v380ext    UE-RadioAccessCapability-v380ext        OPTIONAL,
        dl-PhysChCapabilityFDD-v380ext      DL-PhysChCapabilityFDD-v380ext,
        failureCauseWithProtErr             FailureCauseWithProtErr                 OPTIONAL
}

SRNC-RelocationInfo-v3a0ext-IEs ::= SEQUENCE {
        cipheringInfoForSRB1-v3a0ext        CipheringInfoPerRB-List-v3a0ext,
        ue-RadioAccessCapability-v3a0ext    UE-RadioAccessCapability-v3a0ext        OPTIONAL,
        -- cn-domain identity for IE startValueForCiphering-v3a0ext is specified
        -- in subsequent extension (SRNC-RelocationInfo-v3b0ext-IEs)
        startValueForCiphering-v3a0ext      START-Value
}

SRNC-RelocationInfo-v3b0ext-IEs ::= SEQUENCE {
        -- cn-domain identity for IE startValueForCiphering-v3a0ext included in previous extension
        cn-DomainIdentity               CN-DomainIdentity,
        -- the IE startValueForCiphering-v3b0ext contains the start values for each CN Domain. The
        -- value of start indicated by the IE startValueForCiphering-v3a0ext should be set to the
        -- same value as the start-Value for the corresponding cn-DomainIdentity in the IE
        -- startValueForCiphering-v3b0ext
        startValueForCiphering-v3b0ext      STARTList2                              OPTIONAL
}

SRNC-RelocationInfo-v3c0ext-IEs ::= SEQUENCE {
        -- IE rb-IdentityForHOMessage includes the identity of the RB used by the source SRNC
        -- to send the message contained in the IE 'TargetRNC-ToSourceRNC-Container'.
        -- Only included if type is 'UE involved'
        rb-IdentityForHOMessage             RB-Identity         OPTIONAL
}

SRNC-RelocationInfo-v3d0ext-IEs ::= SEQUENCE {
    -- User equipment IEs
        uESpecificBehaviourInformation1idle     UESpecificBehaviourInformation1idle     OPTIONAL,
        uESpecificBehaviourInformation1interRAT     UESpecificBehaviourInformation1interRAT
    OPTIONAL
}

SRNC-RelocationInfo-v3g0ext-IEs ::= SEQUENCE {
        ue-RadioAccessCapability-v3g0ext    UE-RadioAccessCapability-v3g0ext        OPTIONAL
}

SRNC-RelocationInfo-v3h0ext-IEs ::= SEQUENCE {
        tpc-CombinationInfoList         TPC-CombinationInfoList     OPTIONAL,
        nonCriticalExtension                SEQUENCE {}             OPTIONAL
}

SRNC-RelocationInfo-v4d0ext-IEs ::= SEQUENCE {
        tpc-CombinationInfoList     TPC-CombinationInfoList     OPTIONAL
}

TPC-CombinationInfoList ::= SEQUENCE (SIZE (1..maxRL)) OF
        TPC-Combination-Info

STARTList2 ::=                      SEQUENCE (SIZE (2..maxCNdomains)) OF
                                        STARTSingle

SRNC-RelocationInfo-v4b0ext-IEs ::= SEQUENCE {
        ue-RadioAccessCapability-v4b0ext    UE-RadioAccessCapability-v4b0ext        OPTIONAL
}

SRNC-RelocationInfo-v590ext-IEs ::= SEQUENCE {
        ue-RadioAccessCapability-v590ext    UE-RadioAccessCapability-v590ext        OPTIONAL,
        ue-RATSpecificCapability-v590ext    InterRAT-UE-RadioAccessCapability-v590ext   OPTIONAL
```


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```
}

SRNC-RelocationInfo-v5a0ext-IEs ::= SEQUENCE {
        storedCompressedModeInfo        StoredCompressedModeInfo    OPTIONAL
}

SRNC-RelocationInfo-v5b0ext-IEs ::= SEQUENCE {
    interRATCellInfoIndication          InterRATCellInfoIndication          OPTIONAL
}

SRNC-RelocationInfo-v5c0ext-IEs ::= SEQUENCE {
        ue-RadioAccessCapability-v5c0ext    UE-RadioAccessCapability-v5c0ext        OPTIONAL
}

CipheringInfoPerRB-List-v3a0ext ::= SEQUENCE {
        dl-UM-SN                        BIT STRING (SIZE (7))
}

CipheringStatusList ::=         SEQUENCE (SIZE (1..maxCNdomains)) OF
                                CipheringStatusCNdomain

CipheringStatusCNdomain ::=             SEQUENCE {
        cn-DomainIdentity               CN-DomainIdentity,
        cipheringStatus                 CipheringStatus
}

CodeChangeStatusList ::= SEQUENCE (SIZE (1..maxRL)) OF
        CodeChangeStatus

CodeChangeStatus ::= SEQUENCE {
        primaryCPICH-Info                   PrimaryCPICH-Info,
        scramblingCodeChange                ScramblingCodeChange
}

StoredCompressedModeInfo ::= SEQUENCE {
        storedTGP-SequenceList      StoredTGP-SequenceList,
        codeChangeStatusList        CodeChangeStatusList    OPTIONAL
}

StoredTGP-SequenceList ::=          SEQUENCE (SIZE (1..maxTGPS)) OF
                                    StoredTGP-Sequence

StoredTGP-Sequence ::=              SEQUENCE {
    tgpsi                               TGPSI,
    current-tgps-Status                 CHOICE {
        active                              SEQUENCE {
            tgcfn                               TGCFN
        },
        inactive                            NULL
    },
    tgps-ConfigurationParams            TGPS-ConfigurationParams            OPTIONAL
}

SRNC-RelocationInfo-r4-IEs ::=          SEQUENCE {
    -- Non-RRC IEs
        -- IE rb-IdentityForHOMessage includes the identity of the RB used by the source SRNC
        -- to send the message contained in the IE 'TargetRNC-ToSourceRNC-Container'.
        -- Only included if type is 'UE involved'
        rb-IdentityForHOMessage         RB-Identity                         OPTIONAL,
        stateOfRRC                      StateOfRRC,
        stateOfRRC-Procedure            StateOfRRC-Procedure,
    -- Ciphering related information IEs
        cipheringStatusList             CipheringStatusList-r4,
        latestConfiguredCN-Domain       CN-DomainIdentity,
        calculationTimeForCiphering     CalculationTimeForCiphering         OPTIONAL,
        count-C-List                    COUNT-C-List                        OPTIONAL,
        cipheringInfoPerRB-List         CipheringInfoPerRB-List-r4          OPTIONAL,
    -- Integrity protection related information IEs
        integrityProtectionStatus       IntegrityProtectionStatus,
        -- The target RNC may ignore the IE srb-SpecificIntegrityProtInfo if the
        -- IE integrityProtectionStatus has the value "not started".
        srb-SpecificIntegrityProtInfo   SRB-SpecificIntegrityProtInfoList,
        implementationSpecificParams    ImplementationSpecificParams        OPTIONAL,
    -- User equipment IEs
        u-RNTI                          U-RNTI,
        c-RNTI                          C-RNTI                              OPTIONAL,
        ue-RadioAccessCapability        UE-RadioAccessCapability-r4,
        ue-RadioAccessCapability-ext    UE-RadioAccessCapabBandFDDList      OPTIONAL,
```

```
        ue-Positioning-LastKnownPos     UE-Positioning-LastKnownPos         OPTIONAL,
        uESpecificBehaviourInformation1idle     UESpecificBehaviourInformation1idle     OPTIONAL,
        uESpecificBehaviourInformation1interRAT     UESpecificBehaviourInformation1interRAT
    OPTIONAL,
    -- Other IEs
        ue-RATSpecificCapability        InterRAT-UE-RadioAccessCapabilityList   OPTIONAL,
    -- UTRAN mobility IEs
        ura-Identity                    URA-Identity                        OPTIONAL,
    -- Core network IEs
        cn-CommonGSM-MAP-NAS-SysInfo    NAS-SystemInformationGSM-MAP,
        cn-DomainInformationList        CN-DomainInformationListFull        OPTIONAL,
    -- Measurement IEs
        ongoingMeasRepList              OngoingMeasRepList-r4               OPTIONAL,
    -- Radio bearer IEs
        predefinedConfigStatusList      PredefinedConfigStatusList,
        srb-InformationList             SRB-InformationSetupList,
        rab-InformationList             RAB-InformationSetupList-r4         OPTIONAL,
    -- Transport channel IEs
        ul-CommonTransChInfo            UL-CommonTransChInfo-r4             OPTIONAL,
        ul-TransChInfoList              UL-AddReconfTransChInfoList         OPTIONAL,
        -- 'dummy', 'dummy1' and 'dummy2' are not used in this version of the specification,
        -- they should not be sent and if received they should be ignored.
        dummy                           CHOICE {
            fdd                             SEQUENCE {
                dummy1                          CPCH-SetID                  OPTIONAL,
                dummy2                          DRAC-StaticInformationList  OPTIONAL
            },
            tdd                             NULL
        }                                                                   OPTIONAL,
        dl-CommonTransChInfo            DL-CommonTransChInfo-r4             OPTIONAL,
        dl-TransChInfoList              DL-AddReconfTransChInfoList-r4      OPTIONAL,
    -- Measurement report
        measurementReport               MeasurementReport                   OPTIONAL,
        failureCause                    FailureCauseWithProtErr             OPTIONAL
}

SRNC-RelocationInfo-r5-IEs ::=          SEQUENCE {
    -- Non-RRC IEs
        -- IE rb-IdentityForHOMessage includes the identity of the RB used by the source SRNC
        -- to send the message contained in the IE 'TargetRNC-ToSourceRNC-Container'.
        -- Only included if type is "UE involved"
        rb-IdentityForHOMessage         RB-Identity                         OPTIONAL,
        stateOfRRC                      StateOfRRC,
        stateOfRRC-Procedure            StateOfRRC-Procedure,
    -- Ciphering related information IEs
        cipheringStatusList             CipheringStatusList-r4,
        latestConfiguredCN-Domain       CN-DomainIdentity,
        calculationTimeForCiphering     CalculationTimeForCiphering         OPTIONAL,
        count-C-List                    COUNT-C-List                        OPTIONAL,
        cipheringInfoPerRB-List         CipheringInfoPerRB-List-r4          OPTIONAL,
    -- Integrity protection related information IEs
        integrityProtectionStatus       IntegrityProtectionStatus,
        srb-SpecificIntegrityProtInfo   SRB-SpecificIntegrityProtInfoList   OPTIONAL,
        implementationSpecificParams    ImplementationSpecificParams        OPTIONAL,
    -- User equipment IEs
        u-RNTI                          U-RNTI,
        c-RNTI                          C-RNTI                              OPTIONAL,
        ue-RadioAccessCapability        UE-RadioAccessCapability-r5,
        ue-RadioAccessCapability-ext    UE-RadioAccessCapabBandFDDList      OPTIONAL,
        ue-Positioning-LastKnownPos     UE-Positioning-LastKnownPos         OPTIONAL,
        uESpecificBehaviourInformation1idle
                                        UESpecificBehaviourInformation1idle     OPTIONAL,
        uESpecificBehaviourInformation1interRAT
                                        UESpecificBehaviourInformation1interRAT     OPTIONAL,
    -- Other IEs
        ue-RATSpecificCapability        InterRAT-UE-RadioAccessCapabilityList-r5    OPTIONAL,
    -- UTRAN mobility IEs
        ura-Identity                    URA-Identity                        OPTIONAL,
    -- Core network IEs
        cn-CommonGSM-MAP-NAS-SysInfo    NAS-SystemInformationGSM-MAP,
        cn-DomainInformationList        CN-DomainInformationListFull        OPTIONAL,
    -- Measurement IEs
        ongoingMeasRepList              OngoingMeasRepList-r5               OPTIONAL,
    -- Radio bearer IEs
        predefinedConfigStatusList      PredefinedConfigStatusList,
        srb-InformationList             SRB-InformationSetupList-r5,
        rab-InformationList             RAB-InformationSetupList-r5         OPTIONAL,
    -- Transport channel IEs
```


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```
        ul-CommonTransChInfo            UL-CommonTransChInfo-r4             OPTIONAL,
        ul-TransChInfoList              UL-AddReconfTransChInfoList         OPTIONAL,
        -- 'dummy', 'dummy1' and 'dummy2' are not used in this version of the specification,
        -- they should not be sent and if received they should be ignored.
        dummy                           CHOICE {
            fdd                             SEQUENCE {
                dummy1                          CPCH-SetID                  OPTIONAL,
                dummy2                          DRAC-StaticInformationList  OPTIONAL
            },
            tdd                             NULL
        }                                                                   OPTIONAL,
        dl-CommonTransChInfo            DL-CommonTransChInfo-r4             OPTIONAL,
        dl-TransChInfoList              DL-AddReconfTransChInfoList-r5      OPTIONAL,
    -- PhyCH IEs
        tpc-CombinationInfoList         TPC-CombinationInfoList             OPTIONAL,
    -- Measurement report
        measurementReport               MeasurementReport                   OPTIONAL,
    -- Other IEs
        failureCause                    FailureCauseWithProtErr             OPTIONAL
}

SRNC-RelocationInfo-v690ext-IEs ::= SEQUENCE {
    -- User equipment IEs
        -- IE ueCapabilityContainer is used for the transparent transfer of capability information
        -- received from the UE
        ueCapabilityContainer           BIT STRING
                                            (CONTAINING UE-CapabilityContainer-IEs) OPTIONAL,
        -- IE ueCapabilityContainer-RSC and IE ueCapabilityContainer-UCI are used for the
        -- transparent transfer of capability information received from the UE that was introduced
        -- in a release independent manner, i.e., transferred within a VLEC. These UE capabilities
        -- are included both in the RRC CONNECTION SETUP COMPLETE and the UE CAPABILITY INFORMATION
        -- messages. Only the VLEC of one message needs to be included i.e. the one from these
        -- messages that was last received.
        -- Case 1: If the last received message was a RRC CONNECTION SETUP COMPLETE (RSC)
        ueCapabilityContainer-RSC       BIT STRING
                            (CONTAINING RRCConnectionSetupComplete-r3-add-ext-IEs)  OPTIONAL,
        -- Case 2: If the last received message was a UE CAPABILITY INFORMATION (UCI)
        ueCapabilityContainer-UCI       BIT STRING
                            (CONTAINING UECapabilityInformation-r3-add-ext-IEs)     OPTIONAL,
    -- Radio bearer IEs
        rab-InformationSetupList        RAB-InformationSetupList-r6-ext     OPTIONAL,
    -- Measurement report
        measuredResultsOnRACHinterFreq  MeasuredResultsOnRACHinterFreq      OPTIONAL,
    -- MBMS IEs
        mbms-JoinedInformation          MBMS-JoinedInformation-r6           OPTIONAL,
    -- Measurement IEs
        intraFreqReportingCriteria      IntraFreqReportingCriteria-r6-ext       OPTIONAL
}

SRNC-RelocationInfo-r6-IEs ::=          SEQUENCE {
    -- Non-RRC IEs
        -- IE rb-IdentityForHOMessage includes the identity of the RB used by the source SRNC
        -- to send the message contained in the IE 'TargetRNC-ToSourceRNC-Container'.
        -- Only included if type is "UE involved"
        rb-IdentityForHOMessage         RB-Identity                         OPTIONAL,
        stateOfRRC                      StateOfRRC,
        stateOfRRC-Procedure            StateOfRRC-Procedure,
    -- Ciphering related information IEs
        cipheringStatusList             CipheringStatusList-r4,
        latestConfiguredCN-Domain       CN-DomainIdentity,
        calculationTimeForCiphering     CalculationTimeForCiphering         OPTIONAL,
        count-C-List                    COUNT-C-List                        OPTIONAL,
        cipheringInfoPerRB-List         CipheringInfoPerRB-List-r4          OPTIONAL,
    -- Integrity protection related information IEs
        integrityProtectionStatus       IntegrityProtectionStatus,
        srb-SpecificIntegrityProtInfo   SRB-SpecificIntegrityProtInfoList   OPTIONAL,
        implementationSpecificParams    ImplementationSpecificParams        OPTIONAL,
    -- User equipment IEs
        u-RNTI                          U-RNTI,
        c-RNTI                          C-RNTI                              OPTIONAL,
        ue-RadioAccessCapability        UE-RadioAccessCapability-r6,
        ue-RadioAccessCapability-ext    UE-RadioAccessCapabBandFDDList      OPTIONAL,
        ue-Positioning-LastKnownPos     UE-Positioning-LastKnownPos         OPTIONAL,
        uESpecificBehaviourInformation1idle
                                        UESpecificBehaviourInformation1idle     OPTIONAL,
        uESpecificBehaviourInformation1interRAT
                                        UESpecificBehaviourInformation1interRAT     OPTIONAL,
        -- IE ueCapabilityContainer is used for the transparent transfer of capability information
```


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```
        -- received from the UE
        ueCapabilityContainer           BIT STRING
                                            (CONTAINING UE-CapabilityContainer-IEs) OPTIONAL,
        -- IE ueCapabilityContainer-RSC and IE ueCapabilityContainer-UCI are used for the
        -- transparent transfer of capability information received from the UE that was introduced
        -- in a release independent manner, i.e., transferred within a VLEC. These UE capabilities
        -- are included both in the RRC CONNECTION SETUP COMPLETE and the UE CAPABILITY INFORMATION
        -- messages. Only the VLEC of one message needs to be included i.e. the one from these
        -- messages that was last received.
        -- Case 1: If the last received message was a RRC CONNECTION SETUP COMPLETE (RSC)
        ueCapabilityContainer-RSC       BIT STRING
                                (CONTAINING RRCConnectionSetupComplete-r3-add-ext-IEs)  OPTIONAL,
        -- Case 2: If the last received message was a UE CAPABILITY INFORMATION (UCI)
        ueCapabilityContainer-UCI       BIT STRING
                                (CONTAINING UECapabilityInformation-r3-add-ext-IEs)     OPTIONAL,
    -- Other IEs
        ue-RATSpecificCapability        InterRAT-UE-RadioAccessCapabilityList-r5    OPTIONAL,
    -- UTRAN mobility IEs
        ura-Identity                    URA-Identity                            OPTIONAL,
    -- Core network IEs
        cn-CommonGSM-MAP-NAS-SysInfo    NAS-SystemInformationGSM-MAP,
        cn-DomainInformationList        CN-DomainInformationListFull            OPTIONAL,
    -- Measurement IEs
        ongoingMeasRepList              OngoingMeasRepList-r6                   OPTIONAL,
        interRATCellInfoIndication      InterRATCellInfoIndication              OPTIONAL,
    -- Radio bearer IEs
        predefinedConfigStatusList      PredefinedConfigStatusList,
        srb-InformationList             SRB-InformationSetupList-r6,
        rab-InformationList             RAB-InformationSetupList-r6             OPTIONAL,
    -- Transport channel IEs
        ul-CommonTransChInfo            UL-CommonTransChInfo-r4                 OPTIONAL,
        ul-TransChInfoList              UL-AddReconfTransChInfoList-r6          OPTIONAL,
        dl-CommonTransChInfo            DL-CommonTransChInfo-r4                 OPTIONAL,
        dl-TransChInfoList              DL-AddReconfTransChInfoList-r5          OPTIONAL,
    -- PhyCH IEs
        tpc-CombinationInfoList         TPC-CombinationInfoList                 OPTIONAL,
        storedCompressedModeInfo        StoredCompressedModeInfo                OPTIONAL,
    -- Measurement report
        measurementReport               BIT STRING
                                (CONTAINING MeasurementReport)                  OPTIONAL,
    -- Other IEs
        failureCause                    FailureCauseWithProtErr                 OPTIONAL,
    -- MBMS IEs
        mbms-JoinedInformation          MBMS-JoinedInformation-r6               OPTIONAL
}

SRNC-RelocationInfo-v6b0ext-IEs ::= SEQUENCE {
        -- The order of the RABs in IE rab-InformationSetupListExt is the same as
        -- in IE rab-InformationSetupList that is included in this message
        rab-InformationSetupListExt     RAB-InformationSetupList-v6b0ext    OPTIONAL,
        mbmsSelectedServiceInfo         MBMS-SelectedServiceInfo
}

SRNC-RelocationInfo-r7-IEs ::=          SEQUENCE {
    -- Non-RRC IEs
        -- IE rb-IdentityForHOMessage includes the identity of the RB used by the source SRNC
        -- to send the message contained in the IE 'TargetRNC-ToSourceRNC-Container'.
        -- Only included if type is "UE involved"
        rb-IdentityForHOMessage         RB-Identity                             OPTIONAL,
        stateOfRRC                      StateOfRRC,
        stateOfRRC-Procedure            StateOfRRC-Procedure,
    -- Ciphering related information IEs
        cipheringStatusList             CipheringStatusList-r4,
        latestConfiguredCN-Domain       CN-DomainIdentity,
        calculationTimeForCiphering     CalculationTimeForCiphering         OPTIONAL,
        count-C-List                    COUNT-C-List                            OPTIONAL,
        cipheringInfoPerRB-List         CipheringInfoPerRB-List-r4          OPTIONAL,
    -- Integrity protection related information IEs
        integrityProtectionStatus       IntegrityProtectionStatus,
        srb-SpecificIntegrityProtInfo   SRB-SpecificIntegrityProtInfoList   OPTIONAL,
        implementationSpecificParams    ImplementationSpecificParams        OPTIONAL,
    -- User equipment IEs
        u-RNTI                          U-RNTI,
        c-RNTI                          C-RNTI                                  OPTIONAL,
        ue-RadioAccessCapability        UE-RadioAccessCapability-r6,
        ue-RadioAccessCapability-ext    UE-RadioAccessCapabBandFDDList      OPTIONAL,
        ue-Positioning-LastKnownPos     UE-Positioning-LastKnownPos         OPTIONAL,
```

```
        uESpecificBehaviourInformation1idle
                                    UESpecificBehaviourInformation1idle     OPTIONAL,
        uESpecificBehaviourInformation1interRAT
                                    UESpecificBehaviourInformation1interRAT     OPTIONAL,
        -- IE ueCapabilityContainer is used for the transparent transfer of capability information
        -- received from the UE
        ueCapabilityContainer           BIT STRING
                                            (CONTAINING UE-CapabilityContainer-IEs) OPTIONAL,
        -- IE ueCapabilityContainer-RSC and IE ueCapabilityContainer-UCI are used for the
        -- transparent transfer of capability information received from the UE that was introduced
        -- in a release independent manner, i.e., transferred within a VLEC. These UE capabilities
        -- are included both in the RRC CONNECTION SETUP COMPLETE and the UE CAPABILITY INFORMATION
        -- messages. Only the VLEC of one message needs to be included i.e. the one from these
        -- messages that was last received.
        -- Case 1: If the last received message was a RRC CONNECTION SETUP COMPLETE (RSC)
        ueCapabilityContainer-RSC       BIT STRING
                            (CONTAINING RRCConnectionSetupComplete-r3-add-ext-IEs)  OPTIONAL,
        -- Case 2: If the last received message was a UE CAPABILITY INFORMATION (UCI)
        ueCapabilityContainer-UCI       BIT STRING
                            (CONTAINING UECapabilityInformation-r3-add-ext-IEs)     OPTIONAL,
    -- Other IEs
        ue-RATSpecificCapability        InterRAT-UE-RadioAccessCapabilityList-r5    OPTIONAL,
    -- UTRAN mobility IEs
        ura-Identity                    URA-Identity                            OPTIONAL,
        srns-t-305                      T-305                                   OPTIONAL,
    -- Core network IEs
        cn-CommonGSM-MAP-NAS-SysInfo    NAS-SystemInformationGSM-MAP,
        cn-DomainInformationList        CN-DomainInformationListFull            OPTIONAL,
    -- Measurement IEs
        ongoingMeasRepList              OngoingMeasRepList-r7                   OPTIONAL,
        interRATCellInfoIndication      InterRATCellInfoIndication              OPTIONAL,
    -- Radio bearer IEs
        predefinedConfigStatusList      PredefinedConfigStatusList,
        srb-InformationList             SRB-InformationSetupList-r7,
        rab-InformationList             RAB-InformationSetupList-r7             OPTIONAL,
    -- Transport channel IEs
        ul-CommonTransChInfo            UL-CommonTransChInfo-r4                 OPTIONAL,
        ul-TransChInfoList              UL-AddReconfTransChInfoList-r7          OPTIONAL,
        dl-CommonTransChInfo            DL-CommonTransChInfo-r4                 OPTIONAL,
        dl-TransChInfoList              DL-AddReconfTransChInfoList-r7          OPTIONAL,
    -- PhyCH IEs
        tpc-CombinationInfoList         TPC-CombinationInfoList                 OPTIONAL,
        storedCompressedModeInfo        StoredCompressedModeInfo                OPTIONAL,
    -- Measurement report
        measurementReport               MeasurementReport                       OPTIONAL,
    -- Other IEs
        failureCause                    FailureCauseWithProtErr                 OPTIONAL,
    -- MBMS IEs
        mbms-JoinedInformation          MBMS-JoinedInformation-r6               OPTIONAL
}

SRNC-RelocationInfo-v7xyext-IEs ::= SEQUENCE {
        ue-RadioAccessCapability-v7xyext    UE-RadioAccessCapability-v7xyext        OPTIONAL,
        thresholdSFN-GPS-TOW-us             ThresholdSFN-GPS-TOW-us                 OPTIONAL,
        srns-t-305                          T-305                                   OPTIONAL,
        ue-Positioning-GANSS-LastKnownPos   UE-Positioning-GANSS-LastKnownPos       OPTIONAL
}

-- IE definitions

CalculationTimeForCiphering ::=     SEQUENCE {
    cell-Id                             CellIdentity,
    sfn                                 INTEGER (0..4095)
}

CipheringInfoPerRB ::=              SEQUENCE {
    dl-HFN                              BIT STRING (SIZE (20..25)),
    ul-HFN                              BIT STRING (SIZE (20..25))
}

CipheringInfoPerRB-r4 ::=           SEQUENCE {
    rb-Identity                         RB-Identity,
    dl-HFN                              BIT STRING (SIZE (20..25)),
    dl-UM-SN                            BIT STRING (SIZE (7))               OPTIONAL,
    ul-HFN                              BIT STRING (SIZE (20..25))
}

-- TABULAR: CipheringInfoPerRB-List, multiplicity value numberOfRadioBearers
```

```
-- has been replaced with maxRB.
CipheringInfoPerRB-List ::=         SEQUENCE (SIZE (1..maxRB)) OF
                                        CipheringInfoPerRB

CipheringInfoPerRB-List-r4 ::=      SEQUENCE (SIZE (1..maxRB)) OF
                                        CipheringInfoPerRB-r4


CipheringStatus ::=                 ENUMERATED {
                                        started, notStarted }

CipheringStatusList-r4 ::=          SEQUENCE (SIZE (1..maxCNdomains)) OF
                                        CipheringStatusCNdomain-r4

CipheringStatusCNdomain-r4 ::=      SEQUENCE {
        cn-DomainIdentity               CN-DomainIdentity,
        cipheringStatus                 CipheringStatus,
        start-Value                     START-Value
}

CN-DomainInformation-v390ext ::=        SEQUENCE {
    cn-DRX-CycleLengthCoeff             CN-DRX-CycleLengthCoefficient
}

CN-DomainInformationList-v390ext ::=    SEQUENCE (SIZE (1..maxCNdomains)) OF
                                        CN-DomainInformation-v390ext

CompressedModeMeasCapability-r4 ::= SEQUENCE {
    fdd-Measurements                    BOOLEAN,
    -- TABULAR: The IEs tdd-Measurements, gsm-Measurements and multiCarrierMeasurements
    -- are made optional since they are conditional based on another information element.
    -- Their absence corresponds to the case where the condition is not true.
    tdd384-Measurements                 BOOLEAN                             OPTIONAL,
    tdd128-Measurements                 BOOLEAN                             OPTIONAL,
    gsm-Measurements                    GSM-Measurements                    OPTIONAL,
    multiCarrierMeasurements            BOOLEAN                             OPTIONAL
}

COUNT-C-List ::=                        SEQUENCE (SIZE (1..maxCNdomains)) OF
                                        COUNT-CSingle

COUNT-CSingle ::=                       SEQUENCE {
    cn-DomainIdentity                   CN-DomainIdentity,
    count-C                             BIT STRING (SIZE (32))
}

DL-PhysChCapabilityFDD-r4 ::=       SEQUENCE {
    -- The IE 'maxNoDPCH-PDSCH-Codes' only gives information on the maximum number of DPCH Codes.
    maxNoDPCH-PDSCH-Codes               INTEGER (1..8),
    maxNoPhysChBitsReceived             MaxNoPhysChBitsReceived,
    supportForSF-512                    BOOLEAN,
    -- dummy, dummy2 and dummy3 are not used in this version of the specification
    -- and if received they should be ignored.
    dummy                               BOOLEAN,
    dummy2                              SimultaneousSCCPCH-DPCH-Reception,
    dummy3                              SupportOfDedicatedPilotsForChEstimation     OPTIONAL
}

DL-PhysChCapabilityFDD-r5 ::=       SEQUENCE {
    -- The IE 'maxNoDPCH-PDSCH-Codes' only gives information on the maximum number of DPCH Codes.
    maxNoDPCH-PDSCH-Codes               INTEGER (1..8),
    maxNoPhysChBitsReceived             MaxNoPhysChBitsReceived,
    supportForSF-512                    BOOLEAN,
    -- dummy, dumy2 and dummy3 are not used in this version of the specification
    -- and if received they should be ignored.
    dummy                               BOOLEAN,
    dummy2                              SimultaneousSCCPCH-DPCH-Reception,
    dummy3                              SupportOfDedicatedPilotsForChEstimation     OPTIONAL,
    fdd-hspdsch                         CHOICE {
        supported                           SEQUENCE {
            hsdsch-physical-layer-category      HSDSCH-physical-layer-category,
            -- dummy and dummy2 are not used in this version of the specification
            -- and if received they should be ignored.
            dummy                               BOOLEAN,
            dummy2                              BOOLEAN
        },
        unsupported                         NULL
    }
```


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```
}

DL-PhysChCapabilityTDD-r5 ::=       SEQUENCE {
    maxTS-PerFrame                      MaxTS-PerFrame,
    maxPhysChPerFrame                   MaxPhysChPerFrame,
    minimumSF                           MinimumSF-DL,
    supportOfPDSCH                      BOOLEAN,
    maxPhysChPerTS                      MaxPhysChPerTS,
    tdd384-hspdsch                      CHOICE {
        supported                           HSDSCH-physical-layer-category,
        unsupported                         NULL
    }
}

DL-PhysChCapabilityTDD-LCR-r5 ::=   SEQUENCE {
    maxTS-PerSubFrame                   MaxTS-PerSubFrame-r4,
    maxPhysChPerFrame                   MaxPhysChPerSubFrame-r4,
    minimumSF                           MinimumSF-DL,
    supportOfPDSCH                      BOOLEAN,
    maxPhysChPerTS                      MaxPhysChPerTS,
    supportOf8PSK                       BOOLEAN,
    tdd128-hspdsch                      CHOICE {
        supported                           HSDSCH-physical-layer-category,
        unsupported                         NULL
    }
}

DL-RFC3095-Context ::=              SEQUENCE {
    rfc3095-Context-Identity            INTEGER (0..16383),
    dl-mode                             ENUMERATED {u, o, r},
    dl-ref-ir                           OCTET STRING ( SIZE (1..3000)),
    dl-ref-time                         INTEGER (0..4294967295)     OPTIONAL,
    dl-curr-time                        INTEGER (0..4294967295)     OPTIONAL,
    dl-syn-offset-id                    INTEGER (0..65535)          OPTIONAL,
    dl-syn-slope-ts                     INTEGER (0..4294967295)     OPTIONAL,
    dl-dyn-changed                      BOOLEAN
}

ImplementationSpecificParams ::=    BIT STRING (SIZE (1..512))


IntegrityProtectionStatus ::=       ENUMERATED {
                                        started, notStarted }

InterRAT-UE-RadioAccessCapabilityList-r5 ::=    SEQUENCE {
    interRAT-UE-RadioAccessCapability   InterRAT-UE-RadioAccessCapabilityList,
    geranIu-RadioAccessCapability       GERANIu-RadioAccessCapability               OPTIONAL
}

IntraFreqReportingCriteria-r6-ext ::= SEQUENCE {
    -- The content of the v690 non-critical extension should be
    -- considered as an extension of IE IntraFreqEventCriteriaList
    event                               Event1j-r6,
    hysteresis                          Hysteresis,
    timeToTrigger                       TimeToTrigger,
    reportingCellStatus                 ReportingCellStatus                 OPTIONAL
}

-- dummy is not used in this version of the specification, it should
-- not be sent and if received it should be ignored.
MaxHcContextSpace-r5 ::=            ENUMERATED {
                                        dummy, by1024, by2048, by4096, by8192,
                                        by16384, by32768, by65536, by131072 }

MeasurementCapability-r4 ::=        SEQUENCE {
    downlinkCompressedMode              CompressedModeMeasCapability-r4,
    uplinkCompressedMode                CompressedModeMeasCapability-r4
}

MeasurementCommandWithType ::=      CHOICE {
    setup                               MeasurementType,
    modify                              NULL,
    release                             NULL
}

MeasurementCommandWithType-r4 ::=   CHOICE {
    setup                               MeasurementType-r4,
    modify                              NULL,
```

```
    release                             NULL
}

MeasurementCommandWithType-r6 ::=   CHOICE {
    setup                               MeasurementType-r6,
    modify                              NULL,
    release                             NULL
}

OngoingMeasRep ::=                  SEQUENCE {
    measurementIdentity                 MeasurementIdentity,
    -- TABULAR: The CHOICE Measurement in the tabular description is included
    -- in MeasurementCommandWithType
    measurementCommandWithType          MeasurementCommandWithType,
    measurementReportingMode            MeasurementReportingMode            OPTIONAL,
    additionalMeasurementID-List        AdditionalMeasurementID-List        OPTIONAL
}

OngoingMeasRep-r4 ::=               SEQUENCE {
    measurementIdentity                 MeasurementIdentity,
    -- TABULAR: The CHOICE Measurement in the tabular description is included
    -- in MeasurementCommandWithType-r4.
    measurementCommandWithType          MeasurementCommandWithType-r4,
    measurementReportingMode            MeasurementReportingMode            OPTIONAL,
    additionalMeasurementID-List        AdditionalMeasurementID-List        OPTIONAL
}

OngoingMeasRep-r5 ::=               SEQUENCE {
    measurementIdentity                 MeasurementIdentity,
    -- TABULAR: The CHOICE Measurement in the tabular description is included
    -- in MeasurementCommandWithType-r4.
    measurementCommandWithType          MeasurementCommandWithType-r4,
    measurementReportingMode            MeasurementReportingMode            OPTIONAL,
    additionalMeasurementID-List        AdditionalMeasurementID-List        OPTIONAL,
    measurementCommand-v590ext          CHOICE {
        -- the choice "intra-frequency" shall be used for the case of intra-frequency measurement,
        -- as well as when intra-frequency events are configured for inter-frequency measurement
        intra-frequency                     Intra-FreqEventCriteriaList-v590ext,
        inter-frequency                     Inter-FreqEventCriteriaList-v590ext
    }       OPTIONAL,
    intraFreqReportingCriteria-1b-r5        IntraFreqReportingCriteria-1b-r5    OPTIONAL,
    intraFreqEvent-1d-r5                    IntraFreqEvent-1d-r5                OPTIONAL
}

OngoingMeasRep-r6 ::=               SEQUENCE {
    measurementIdentity                 MeasurementIdentity,
    measurementCommandWithType          MeasurementCommandWithType-r6,
    measurementReportingMode            MeasurementReportingMode            OPTIONAL,
    additionalMeasurementID-List        AdditionalMeasurementID-List        OPTIONAL
}

OngoingMeasRep-r7 ::=               SEQUENCE {
    measurementIdentity                 MeasurementIdentity,
    measurementCommandWithType          SEQUENCE {
        measurementCommandWithType          MeasurementCommandWithType-r6,
        thresholdSFN-GPS-TOW-us             ThresholdSFN-GPS-TOW-us         OPTIONAL
    },
    measurementReportingMode            MeasurementReportingMode            OPTIONAL,
    additionalMeasurementID-List        AdditionalMeasurementID-List        OPTIONAL
}

OngoingMeasRepList ::=              SEQUENCE (SIZE (1..maxNoOfMeas)) OF
                                        OngoingMeasRep

OngoingMeasRepList-r4 ::=           SEQUENCE (SIZE (1..maxNoOfMeas)) OF
                                        OngoingMeasRep-r4

OngoingMeasRepList-r5 ::=           SEQUENCE (SIZE (1..maxNoOfMeas)) OF
                                        OngoingMeasRep-r5

OngoingMeasRepList-r6 ::=           SEQUENCE (SIZE (1..maxNoOfMeas)) OF
                                        OngoingMeasRep-r6

OngoingMeasRepList-r7 ::=           SEQUENCE (SIZE (1..maxNoOfMeas)) OF
                                        OngoingMeasRep-r7

PDCP-Capability-r4 ::=              SEQUENCE {
    losslessSRNS-RelocationSupport      BOOLEAN,
```

```
    supportForRfc2507                   CHOICE {
        notSupported                        NULL,
        supported                           MaxHcContextSpace
    },
    supportForRfc3095                   CHOICE {
        notSupported                        NULL,
        supported                           SEQUENCE {
            maxROHC-ContextSessions             MaxROHC-ContextSessions-r4  DEFAULT s16,
            reverseCompressionDepth             INTEGER (0..65535)          DEFAULT 0
        }
    }
}

PDCP-Capability-r5 ::=              SEQUENCE {
    losslessSRNS-RelocationSupport      BOOLEAN,
    supportForRfc2507                   CHOICE {
        notSupported                        NULL,
        supported                           MaxHcContextSpace-r5
    },
    supportForRfc3095                   CHOICE {
        notSupported                        NULL,
        supported                           SEQUENCE {
            maxROHC-ContextSessions             MaxROHC-ContextSessions-r4  DEFAULT s16,
            reverseCompressionDepth             INTEGER (0..65535)          DEFAULT 0,
            supportForRfc3095ContextRelocation  BOOLEAN
        }
    }
}

PDCP-Capability-r6 ::=              SEQUENCE {
    losslessSRNS-RelocationSupport      BOOLEAN,
    losslessDLRLC-PDUSizeChange         ENUMERATED { true }                 OPTIONAL,
    supportForRfc2507                   CHOICE {
        notSupported                        NULL,
        supported                           MaxHcContextSpace-r5
    },
    supportForRfc3095                   CHOICE {
        notSupported                        NULL,
        supported                           SEQUENCE {
            maxROHC-ContextSessions             MaxROHC-ContextSessions-r4  DEFAULT s16,
            reverseCompressionDepth             INTEGER (0..65535)          DEFAULT 0,
            supportForRfc3095ContextRelocation  BOOLEAN
        }
    }
}

PhysicalChannelCapability-r4 ::=        SEQUENCE {
        fddPhysChCapability                 SEQUENCE {
            downlinkPhysChCapability            DL-PhysChCapabilityFDD-r4,
            uplinkPhysChCapability              UL-PhysChCapabilityFDD
        }                                           OPTIONAL,
        tdd384-PhysChCapability             SEQUENCE {
            downlinkPhysChCapability            DL-PhysChCapabilityTDD,
            uplinkPhysChCapability              UL-PhysChCapabilityTDD
        }                                           OPTIONAL,
        tdd128-PhysChCapability             SEQUENCE {
            downlinkPhysChCapability            DL-PhysChCapabilityTDD-LCR-r4,
            uplinkPhysChCapability              UL-PhysChCapabilityTDD-LCR-r4
        }                                           OPTIONAL
}

PhysicalChannelCapability-r5 ::=        SEQUENCE {
        fddPhysChCapability                 SEQUENCE {
            downlinkPhysChCapability            DL-PhysChCapabilityFDD-r5,
            uplinkPhysChCapability              UL-PhysChCapabilityFDD
        }                                           OPTIONAL,
        tdd384-PhysChCapability             SEQUENCE {
            downlinkPhysChCapability            DL-PhysChCapabilityTDD-r5,
            uplinkPhysChCapability              UL-PhysChCapabilityTDD
        }                                           OPTIONAL,
        tdd128-PhysChCapability             SEQUENCE {
            downlinkPhysChCapability            DL-PhysChCapabilityTDD-LCR-r5,
            uplinkPhysChCapability              UL-PhysChCapabilityTDD-LCR-r4
        }                                           OPTIONAL
}

RF-Capability-r4 ::=                SEQUENCE {
        fddRF-Capability                SEQUENCE {
```

```
            ue-PowerClass                   UE-PowerClassExt,
            txRxFrequencySeparation         TxRxFrequencySeparation
        }                                                           OPTIONAL,
        tdd384-RF-Capability            SEQUENCE {
            ue-PowerClass                   UE-PowerClassExt,
            radioFrequencyBandTDDList       RadioFrequencyBandTDDList,
            chipRateCapability              ChipRateCapability
        }                                                           OPTIONAL,
        tdd128-RF-Capability            SEQUENCE {
            ue-PowerClass                   UE-PowerClassExt,
            radioFrequencyBandTDDList       RadioFrequencyBandTDDList,
            chipRateCapability              ChipRateCapability
        }                                                           OPTIONAL
}

RFC3095-ContextInfo ::=             SEQUENCE {
    rb-Identity                         RB-Identity,
    rfc3095-Context-List                RFC3095-Context-List
}

RFC3095-Context-List ::=            SEQUENCE (SIZE (1..maxRFC3095-CID)) OF SEQUENCE {
    dl-RFC3095-Context                  DL-RFC3095-Context      OPTIONAL,
    ul-RFC3095-Context                  UL-RFC3095-Context      OPTIONAL
}

RLC-Capability-r5 ::=               SEQUENCE {
    totalRLC-AM-BufferSize              TotalRLC-AM-BufferSize-r5,
    maximumRLC-WindowSize               MaximumRLC-WindowSize,
    maximumAM-EntityNumber              MaximumAM-EntityNumberRLC-Cap
}


SRB-SpecificIntegrityProtInfo ::=   SEQUENCE {
    ul-RRC-HFN                          BIT STRING (SIZE (28)),
    dl-RRC-HFN                          BIT STRING (SIZE (28)),
    ul-RRC-SequenceNumber               RRC-MessageSequenceNumber,
    dl-RRC-SequenceNumber               RRC-MessageSequenceNumber
}

SRB-SpecificIntegrityProtInfoList ::= SEQUENCE (SIZE (4..maxSRBsetup)) OF
                                        SRB-SpecificIntegrityProtInfo

StateOfRRC ::=                      ENUMERATED {
                                        cell-DCH, cell-FACH,
                                        cell-PCH, ura-PCH }

StateOfRRC-Procedure ::=            ENUMERATED {
                                        awaitNoRRC-Message,
                                        awaitRB-ReleaseComplete,
                                        awaitRB-SetupComplete,
                                        awaitRB-ReconfigurationComplete,
                                        awaitTransportCH-ReconfigurationComplete,
                                        awaitPhysicalCH-ReconfigurationComplete,
                                        awaitActiveSetUpdateComplete,
                                        awaitHandoverComplete,
                                        sendCellUpdateConfirm,
                                        sendUraUpdateConfirm,
                                        -- dummy is not used in this version of specification
                                        -- It should not be sent
                                        dummy,
                                        otherStates
}

TotalRLC-AM-BufferSize-r5 ::=       ENUMERATED {
                                        kb10, kb50, kb100, kb150, kb200,
                                        kb300, kb400, kb500, kb750, kb1000 }

TPC-Combination-Info ::= SEQUENCE {
        primaryCPICH-Info                   PrimaryCPICH-Info,
        tpc-CombinationIndex                TPC-CombinationIndex
}

UE-MultiModeRAT-Capability-r5 ::=   SEQUENCE {
    multiRAT-CapabilityList             MultiRAT-Capability,
    multiModeCapability                 MultiModeCapability,
    supportOfUTRAN-ToGERAN-NACC         BOOLEAN
}
```

```
UE-Positioning-Capability-r4 ::=    SEQUENCE {
    standaloneLocMethodsSupported           BOOLEAN,
    ue-BasedOTDOA-Supported                 BOOLEAN,
    networkAssistedGPS-Supported            NetworkAssistedGPS-Supported,
    supportForUE-GPS-TimingOfCellFrames     BOOLEAN,
    supportForIPDL                          BOOLEAN,
    rx-tx-TimeDifferenceType2Capable        BOOLEAN,
    validity-CellPCH-UraPCH                 ENUMERATED { true }     OPTIONAL,
    sfn-sfnType2Capability                  ENUMERATED { true }         OPTIONAL
}

UE-Positioning-LastKnownPos ::=     SEQUENCE {
        sfn                             INTEGER (0..4095),
        cell-id                         CellIdentity,
        positionEstimate                PositionEstimate
}

UE-Positioning-GANSS-LastKnownPos ::= SEQUENCE {
    sfn                                 INTEGER (0..4095),
    cell-id                             CellIdentity,
    positionEstimateGanss               PositionEstimateGANSS
}

UE-RadioAccessCapability-r4 ::=     SEQUENCE {
    accessStratumReleaseIndicator       AccessStratumReleaseIndicator,
    pdcp-Capability                     PDCP-Capability-r4,
    rlc-Capability                      RLC-Capability,
    transportChannelCapability          TransportChannelCapability,
    rf-Capability                       RF-Capability-r4,
    physicalChannelCapability           PhysicalChannelCapability-r4,
    ue-MultiModeRAT-Capability          UE-MultiModeRAT-Capability,
    securityCapability                  SecurityCapability,
    ue-positioning-Capability           UE-Positioning-Capability-r4,
    measurementCapability               MeasurementCapability-r4        OPTIONAL
}

UE-RadioAccessCapability-r5 ::=     SEQUENCE {
    accessStratumReleaseIndicator       AccessStratumReleaseIndicator,
    dl-CapabilityWithSimultaneousHS-DSCHConfig
                                        DL-CapabilityWithSimultaneousHS-DSCHConfig  OPTIONAL,
    pdcp-Capability                     PDCP-Capability-r5,
    rlc-Capability                      RLC-Capability-r5,
    transportChannelCapability          TransportChannelCapability,
    rf-Capability                       RF-Capability-r4,
    physicalChannelCapability           PhysicalChannelCapability-r5,
    ue-MultiModeRAT-Capability          UE-MultiModeRAT-Capability-r5,
    securityCapability                  SecurityCapability,
    ue-positioning-Capability           UE-Positioning-Capability-r4,
    measurementCapability               MeasurementCapability-r4        OPTIONAL
}

UE-RadioAccessCapability-r6 ::=     SEQUENCE {
    accessStratumReleaseIndicator       AccessStratumReleaseIndicator,
    dl-CapabilityWithSimultaneousHS-DSCHConfig
                                        DL-CapabilityWithSimultaneousHS-DSCHConfig  OPTIONAL,
    pdcp-Capability                     PDCP-Capability-r6,
    rlc-Capability                      RLC-Capability-r5,
    transportChannelCapability          TransportChannelCapability,
    rf-Capability                       RF-Capability-r4,
    physicalChannelCapability           PhysicalChannelCapability-r5,
    ue-MultiModeRAT-Capability          UE-MultiModeRAT-Capability-r5,
    securityCapability                  SecurityCapability,
    ue-positioning-Capability           UE-Positioning-Capability-r4,
    measurementCapability               MeasurementCapability-r4        OPTIONAL
}

UE-RadioAccessCapability-r7 ::=     SEQUENCE {
    accessStratumReleaseIndicator       AccessStratumReleaseIndicator,
    dl-CapabilityWithSimultaneousHS-DSCHConfig
                                        DL-CapabilityWithSimultaneousHS-DSCHConfig  OPTIONAL,
    pdcp-Capability                     PDCP-Capability-r6,
    rlc-Capability                      RLC-Capability-r5,
    transportChannelCapability          TransportChannelCapability,
    rf-Capability                       RF-Capability-r7,
    physicalChannelCapability           PhysicalChannelCapability-r7,
    ue-MultiModeRAT-Capability          UE-MultiModeRAT-Capability-r5,
    securityCapability                  SecurityCapability,
    ue-positioning-Capability           UE-Positioning-Capability-r4,
```

```
    measurementCapability               MeasurementCapability-r4        OPTIONAL,
    ue-GANSSPositioning-Capability      UE-GANSSPositioning-Capability  OPTIONAL
}

UL-RFC3095-Context ::=              SEQUENCE {
    rfc3095-Context-Identity            INTEGER (0..16383),
    ul-mode                             ENUMERATED {u, o, r},
    ul-ref-ir                           OCTET STRING ( SIZE (1..3000)),
    ul-ref-time                         INTEGER (0..4294967295)     OPTIONAL,
    ul-curr-time                        INTEGER (0..4294967295)     OPTIONAL,
    ul-syn-offset-id                    INTEGER (0..65535)          OPTIONAL,
    ul-syn-slope-ts                     INTEGER (0..4294967295)     OPTIONAL,
    ul-ref-sn-1                         INTEGER (0..65535)          OPTIONAL
}

END
```

12 Message transfer syntax

Transfer syntax for RRC PDUs is derived from their ASN.1 definitions by use of Packed Encoding Rules, unaligned as specified in X.691 [49], and with adapted final padding. If special encoding is used, it is indicated in the ECN module defined for each ASN.1 module. The use of special encoding is defined in [14].

The following encoding rules apply in addition to what has been specified in X.691 [49]:

- When a bit string value is placed in a bit-field as specified in 15.6 to 15.11 in [11], the leading bit of the bit string value shall be placed in the leading bit of the bit-field, and the trailing bit of the bit string value shall be placed in the trailing bit of the bit-field.

NOTE: The terms "leading bit" and "trailing bit" are defined in ITU-T Rec. X.680 | ISO/IEC 8824-1. When using the "bstring" notation, the leading bit of the bit string value is on the left, and the trailing bit of the bit string value is on the right.

12.1 Structure of encoded RRC messages

An RRC PDU, which is the bit string that is exchanged between peer entities/ across the radio interface, is the concatenation of a basic production, an extension and padding, in that order.

RRC PDUs shall be mapped to and from RLC SDUs upon transmission and reception as follows:

- when delivering an RRC PDU as an RLC SDU to the RLC layer for transmission, the first bit of the RRC PDU shall be represented as the first bit in the RLC SDU and onwards; and
- upon reception of an RLC SDU from the RLC layer, the first bit of the RLC SDU shall represent the first bit of the RRC PDU and onwards.

12.1.1 Basic production

The 'basic production' is obtained by applying UNALIGNED PER to the abstract syntax value (the ASN.1 description) as specified in X.691, except for the 0 to 7 bits added at the end to produce a multiple of 8 bits. The basic production can have any positive number of bits, not necessarily a multiple of 8 bits.

12.1.2 Extension

Emitters compliant with this version of the specification of the protocol shall, unless indicated otherwise on a PDU type basis, set the extension part empty. Emitters compliant with a later version might send non-empty extensions.

12.1.3 Padding

Emitters compliant with this version of the specification of the protocol shall, unless indicated otherwise on a PDU type basis, pad the basic production with the smallest number of bits required to meet the size constraints of the lower layers. Padding bits shall be set to 0.

Receivers compliant with this version of the specification have no need to distinguish the extension and padding parts, and shall, unless indicated otherwise on a PDU type basis, accept RRC PDUs with any bit string in the extension and padding parts.

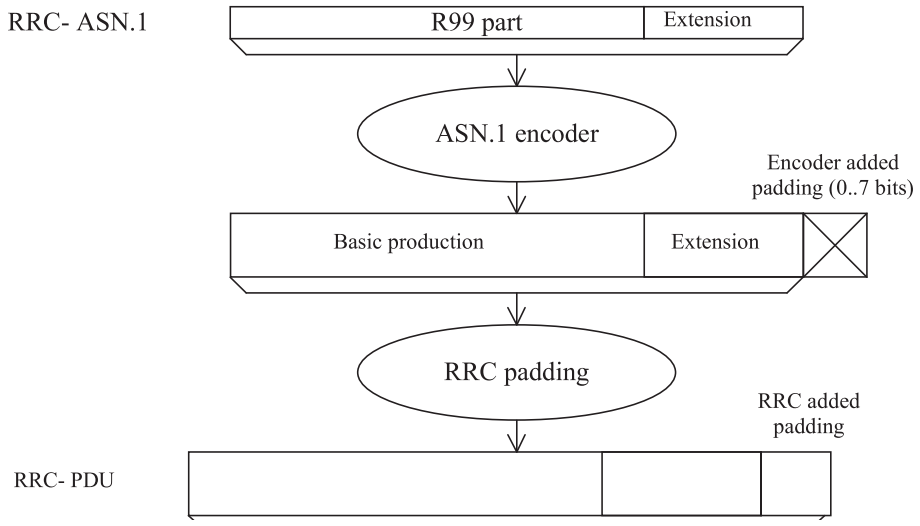


Figure 12.1.3-1: Padding

When using AM or UM mode, RLC requires that the RRC PDU length is a multiple of 8 bits.

When using Tr mode, RLC does neither impose size requirements nor perform padding. This implies that RRC has to take into account the transport format set defined for the transport channel across which the message is to be sent. RRC shall add the lowest number of padding bits required to fit the size specified for the selected transport format.

For system information blocks, building the PDU involves two steps. The first step is the building of the System Information Blocks, in which step padding is not applied (the rules for extension apply). The second step is the building of the RRC PDUs, involving segmentation and concatenation of System Information Blocks, and then padding as described above for Tr mode. The procedure is shown by means of an example as described in Figure 12.1.3-2. The example includes two System Information Blocks, SIBn and SIBn+1, of which only SIBn includes a protocol extension. The two System Information Blocks used in the example do not require segmentation and are concatenated into one SYSTEM INFORMATION message.

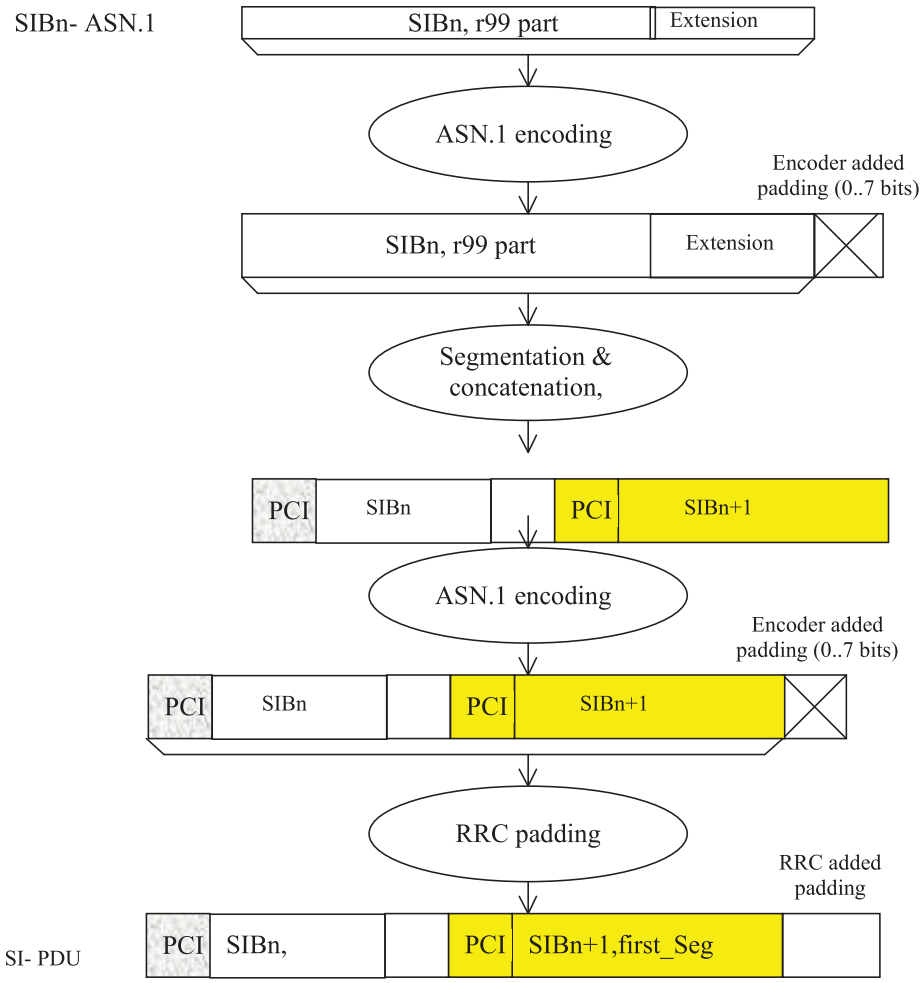


Figure 12.1.3-2: Padding for System Information

PCI: Protocol control information at SYSTEM INFORMATION message level

SI: SYSTEM INFORMATION message

For system information blocks, RRC may also add padding information at the end of IE "SIB data fixed", used both within IE "Last segment" and IE "Complete SIB". The IE "SIB data fixed" has a fixed length i.e. no length denominator used. In case the remaining amount of "SIB data" information is insufficient to fill the IE completely, RRC includes padding bits.

Since no length denominator is included, the receiving RRC cannot remove the padding added by the sender. However, since the padding used is the same as the padding added by the PER encoder to achieve octet alignment, the receiver can handle it.

NOTE 1 The mechanism described above implies that the PDU provided to the ASN.1 decoder may have more than 7 padding bits included. For a complete System Information Block of length 215 bits, 11 padding bits are added by RRC. Since the decoder requires an octet aligned input, 6 additional bits need to be added. In this (worst) case, a total of 17 padding bits is included.

NOTE 2 For the above cases, use of padding bits is possible and more efficient than including a length denominator.

When using the RRC padding described above, the segment has a fixed length, which completely fills the transport block. Therefore, in this case no RRC padding is added within the SYSTEM INFORMATION message. This is illustrated by means of the following figure.

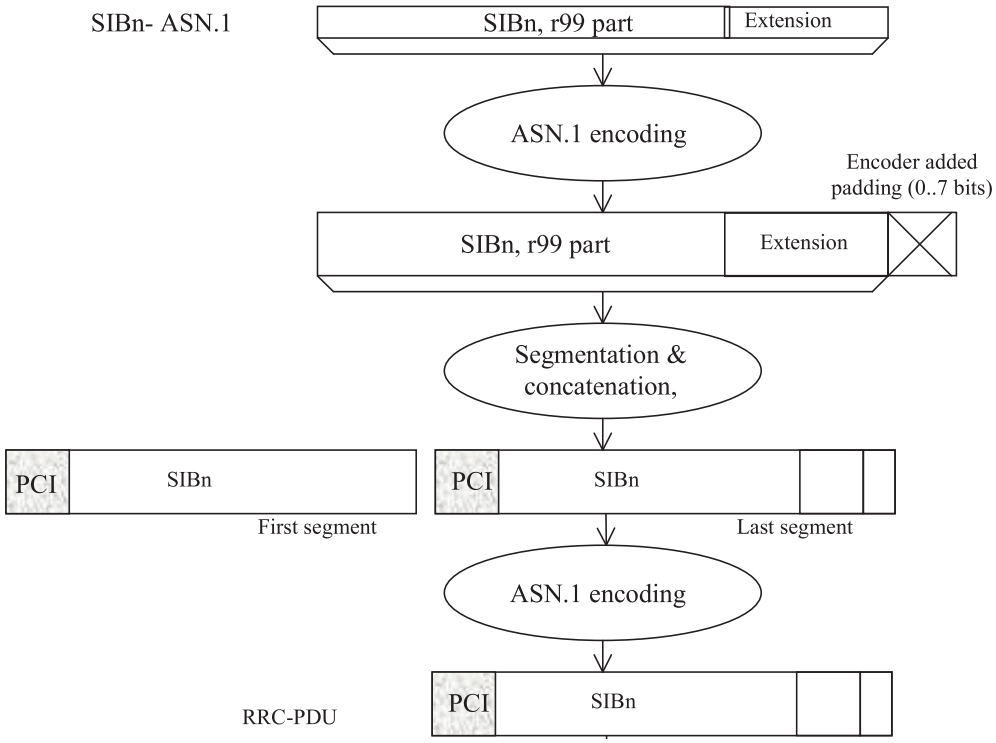


Figure 12.1.3-3: No RRC padding for System Information

12.2 ECN link module for RRC

```
RRC-ECN-Link-Module LINK-DEFINITIONS ::=
BEGIN

IMPORTS
    RRC-encodings               -- Encoding objects for RRC messages
FROM RRC-Encoding-Definitions;

ENCODE Class-definitions
    WITH RRC-encodings
    COMPLETED BY PER-BASIC-UNALIGNED

ENCODE PDU-definitions
    WITH RRC-encodings
    COMPLETED BY PER-BASIC-UNALIGNED

ENCODE InformationElements
    WITH RRC-encodings
    COMPLETED BY PER-BASIC-UNALIGNED

ENCODE Internode-definitions
    WITH RRC-encodings
    COMPLETED BY PER-BASIC-UNALIGNED

END
```


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12.3 ECN modules for RRC

The encoding definition module "RRC-Encoding-Definitions" contains definition of the encoding object set "RRC-encodings". The encoding object set contains all the specialized encoding for RRC.

```
RRC-Encoding-Definitions ENCODING-DEFINITIONS ::=

BEGIN

EXPORTS
    RRC-encodings;

RRC-encodings #ENCODINGS ::= {
    -- Trailing bits
    outer-encoding
}

--************************************************************
--
-- The trailing bits in all RRC messages shall be ignored
-- (including unknown message contents & unknown extensions).
-- This overrides the default PER behaviour which pads the last
-- octet with zero bits.
--
--************************************************************

outer-encoding #OUTER ::= {
    ENCODER-DECODER {
    }
    DECODE AS IF {
        POST-PADDING    encoder-option
    }
}

END

Class-definitions-ECN-Module ENCODING-DEFINITIONS ::=
BEGIN
END

PDU-definitions-ECN-Module ENCODING-DEFINITIONS ::=
BEGIN
END

InformationElements-ECN-Module ENCODING-DEFINITIONS ::=
BEGIN
END


Internode-definitions-ECN-Module ENCODING-DEFINITIONS ::=
BEGIN
END
```

12.4 RRC messages encoded otherwise

NOTE: The messages included in this section are not specified by means of ASN.1.

12.4.1 Messages using tabular encoding specification

The encoding of the message is specified by means of a table listing the information elements known in the message and their order of their appearance in the message.

When a field extends over more than one octet, the order of bit values progressively decreases as the octet number increases. The least significant bit of the field is represented by the lowest numbered bit of the highest numbered octet of the field.

12.4.1.1 TRANSPORT FORMAT COMBINATION CONTROL using transparent DCCH

12.4.1.1.1 TRANSPORT FORMAT COMBINATION CONTROL, 3 bit format

The 3 bit format is as follows:

3	**2**	**1**	Transport Format Combination Set Identity value
0	0	0	0
0	0	1	1
0	1	0	2
1	1	1	7

12.4.1.1.2 Void

12.4.1.1.3 Void

13 Protocol timers, counters, other parameters and default configurations

The information provided in subclauses 13.1 and 13.2 shall be treated as informative. The normative text is specified in the relevant subclauses in clause 8 and clause 8 shall prevail.

13.1 Timers for UE

Timer	Start	Stop	At expiry
T300	Transmission of RRC CONNECTION REQUEST in case of connection establishment for reasons other than MBMS reception	Reception of RRC CONNECTION SETUP	Retransmit RRC CONNECTION REQUEST if V300 =< N300, else go to Idle mode
T302	Transmission of CELL UPDATE/URA UPDATE	Reception of CELL UPDATE CONFIRM/URA UPDATE CONFIRM	Retransmit CELL UPDATE/URA UPDATE if V302 =< N302, else, go to Idle mode
T304	Transmission of UE CAPABILITY INFORMATION	Reception of UE CAPABILITY INFORMATION CONFIRM	Retransmit UE CAPABILITY INFORMATION if V304 =< N304, else initiate a cell update procedure
T305	Entering CELL_FACH or URA_PCH or CELL_PCH state. Reception of CELL UDPATE CONFIRM/URA UPDATE CONFIRM.	Entering another state.	Transmit CELL UPDATE if T307 is not activated and the UE detects "in service area". Otherwise, if T307 is not active, start T307.
T307	When the timer T305 has expired and the UE detects "out of service area".	When the UE detects "in service area".	Transit to idle mode
T308	Transmission of RRC CONNECTION RELEASE COMPLETE	Not stopped	Transmit RRC CONNECTION RELEASE COMPLETE if V308 <=N308, else go to idle mode.
T309	Upon reception of CELL CHANGE ORDER FROM UTRAN message	Successful response to a connection establishment request in the new cell.	Resume the connection to UTRAN
T310	Transmission of PUSCH CAPACITY REQUEST	Reception of PHYSICAL SHARED CHANNEL ALLOCATION	Transmit PUSCH CAPACITY REQUEST if V310 =< N310, else procedure stops.
T311	Reception of PHYSICAL SHARED CHANNEL ALLOCATION message with the CHOICE "*PUSCH allocation*" set to "PUSCH allocation pending".	Reception of PHYSICAL SHARED CHANNEL ALLOCATION message with CHOICE "*PUSCH allocation*" set to "PUSCH allocation assignment".	UE may initiate a PUSCH capacity request procedure.
T312	When the UE starts to establish dedicated CH	When the UE detects N312 "in sync" indication from L1.	The criteria for physical channel establishment failure is fulfilled
T313	When the UE detects consecutive N313 "out of sync" indication from L1.	When the UE detects consecutive N315 "in sync" indication from L1.	The criteria for Radio Link failure is fulfilled.
T314	When the criteria for radio link failure are fulfilled. The timer is started if radio bearer(s) that are associated with T314 exist or if only RRC connection exists only to the CS domain.	When the Cell Update procedure has been completed.	See subclause 8.3.1.13.

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Timer	Start	Stop	At expiry
T315	When the criteria for radio link failure are fulfilled. The timer is started only if radio bearer(s) that are associated with T315 exist or if RRC connection exists to PS domain.	When the Cell Update procedure has been completed.	See subclause 8.3.1.14.
T316	When the UE detects "out of service area" in URA_PCH or CELL_PCH state	When the UE detects "in service area".	Initiate cell update procedure if in service area is detected. Otherwise start timer T317, transit to CELL_FACH state and initiate cell update procedure when the UE detects "in service area".
T317	When the T316 expires or when in CELL_FACH state, the UE detects "out of service area".	When the UE detects "in service area".	T317 never expires.
T318	Transmission of RRC CONNECTION REQUEST in case of connection establishment for MBMS reception	Reception of RRC CONNECTION SETUP	Enter idle mode
T319	When entering CELL_PCH or URA_PCH.	When initiating cell update or ura update procedure	The UE activates starts the DRX cycle based on 'DRX cycle length coefficient'.

13.2 Counters for UE

Counter	Reset	Incremented	When reaching max value
V300	When initiating the procedure RRC connection establishment	Upon expiry of T300.	When V300 > N300, the UE enters idle mode.
V302	When initiating the procedure Cell update or URA update	Upon expiry of T302	When V302 > N302 the UE enters idle mode.
V304	When sending the first UE CAPABILITY INFORMATION message.	Upon expiry of T304	When V304 > N304 the UE initiates the Cell update procedure
V308	When sending the first RRC CONNECTION RELEASE COMPLETE message in a RRC connection release procedure.	Upon expiry of T308	When V308 > N308 the UE stops re-transmitting the RRC CONNECTION RELEASE COMPLETE message.
V310	When sending the first PUSCH CAPACITY REQUEST message in a PUSCH capacity request procedure	Upon expiry of T310	When V310 > N310 the UE stops re-transmitting the PUSCH CAPACITY REQUEST message.

13.3 UE constants and parameters

Constant	Usage
N300	Maximum number of retransmissions of the RRC CONNECTION REQUEST message
N302	Maximum number of retransmissions of the CELL UPDATE / URA UPDATE message
N304	Maximum number of retransmissions of the UE CAPABILITY INFORMATION message
N308	Maximum number of retransmissions of the RRC CONNECTION RELEASE COMPLETE message
N310	Maximum number of retransmission of the PUSCH CAPACITY REQUEST message
N312	Maximum number of "in sync" received from L1.
N313	Maximum number of successive "out of sync" received from L1.
N315	Maximum number of successive "in sync" received from L1 during T313 is activated.

13.4 UE variables

13.4.ob AM_RLC_ERROR_PENDING_RB234

This variable indicates whether an AM RLC unrecoverable error has been detected during the current cell update procedure on RB 2, 3, or 4.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
AM RLC error pending	MP		Boolean	TRUE means an unrecoverable error was detected on AM RLC during the current cell update procedure.. Set to FALSE when the cell update procedure is completed.

13.4.oc AM_RLC_ERROR_PENDING_RB5_AND_UP

This variable indicates whether an AM RLC unrecoverable error has been detected during the current cell update procedure on RB 5 or above.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
AM RLC error pending	MP		Boolean	TRUE means an unrecoverable error was detected on AM RLC during the current cell update procedure.. Set to FALSE when the cell update procedure is completed.

13.4.0 CELL_INFO_LIST

This variable contains cell information on intra-frequency, inter-frequency and inter-RAT cells, as received in messages System Information Block Type 11, System Information Block Type 12, and MEASUREMENT CONTROL.

The first position in Intra-frequency cell info list corresponds to Intra-frequency cell id 0, the second to Intra-frequency cell id 1, etc.

The first position in Inter-frequency cell info list corresponds to Inter-frequency cell id 0, the second to Inter-frequency cell id 1, etc.

The first position in Inter-RAT cell info list corresponds to Intra-frequency cell id 0, the second to Inter-RAT cell id 1, etc.

This variable shall be cleared at cell re-selection, when leaving UTRA RRC connected mode, when switched off as well as at selection of a new PLMN.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
Intra-frequency cell info	OP	1..<maxCellMeas>			
>CHOICE *position status*	MP				
>>Occupied					
>>>Cell info	MP		Cell info 10.3.7.2		
>>Vacant				No data	
Inter-frequency cell info	OP	1..<maxCellMeas>			
>CHOICE *position status*	MP				
>>Occupied					
>>>Frequency info	MP		Frequency info 10.3.6.36		
>>>Cell info	MP		Cell info 10.3.7.2		
>>Vacant				No data	
Inter-RAT cell info list	OP				REL-5
>Inter-RAT cell info	OP	1..<maxCellMeas>			
>>CHOICE *position status*	MP				
>>>Occupied					
>>>>CHOICE *Radio Access Technology*					
>>>>>GSM					
>>>>>>Cell selection and re-selection info	MP		Cell selection and re-selection info for SIB11/12 10.3.2.4		
>>>>>>BSIC	MP		BSIC 10.3.8.2		
>>>>>>BCCH ARFCN	MP		Integer (0..1023)	[43]	
>>>>>IS-2000					
>>>>>>System specific measurement info			enumerated (frequency, timeslot, colour code, output power, PN offset)	For IS-2000, use fields from TIA/EIA/IS-2000.5, subclause 3. 7.3.3.2.27, *Candidate Frequency Neighbour List Message*	
>>>Vacant				No data	
>CHOICE *indication status*	MP				REL-5
>>*Present*					REL-5
>>>Inter-RAT cell info indication	OP		Integer (0..3)		REL-5
>>*Not present*				No data	REL-5

13.4.00 Void

13.4.0a CELL_UPDATE_STARTED

This variable indicates whether a cell update or URA update procedure is in progress.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Cell update started	MP		Boolean	TRUE means a cell or URA update procedure is in progress. Set to FALSE when entering UTRA RRC connected mode. Set to FALSE when leaving UTRA RRC connected mode.

13.4.1 CIPHERING_STATUS

This variable contains information about the current status of ciphering in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Status for each CN domain	MP	<1 to maxCNDomains>		
>CN domain identity	MP		CN domain identity 10.3.1.1	
>Status	MP		Enumerated(Not started, Started)	Set to "Not started" when entering UTRA RRC connected mode. Set to "Not started" when leaving UTRA RRC connected mode.
Reconfiguration	MP		Boolean	TRUE means an RRC procedure performing reconfiguration of ciphering is ongoing. Set to FALSE when entering UTRA RRC connected mode. Set to FALSE when leaving UTRA RRC connected mode.

13.4.2 Void

13.4.2a CONFIGURATION_INCOMPLETE

This variable indicates whether a received measurement control message contains invalid an incomplete measurement configuration.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Configuration incomplete	MP		Boolean	TRUE: An incomplete configuration has been detected. Set to FALSE when entering UTRA RRC connected mode. Set to FALSE when leaving UTRA RRC connected mode.

13.4.3 C_RNTI

This variable stores the assigned C-RNTI for this UE when in CELL_FACH state. For FDD, this variable stores the assigned C-RNTI for this UE in CELL_PCH state, if in CELL_PCH state a HS-DSCH transport channel has been allocated.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
C-RNTI	OP		C-RNTI 10.3.3.8	Cleared when entering UTRA RRC connected mode when not otherwise stated in the procedure. Cleared when leaving UTRA RRC connected mode.

13.4.3a DEFERRED_MEASUREMENT_STATUS

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
Deferred measurement status	MP		Boolean	If TRUE, the UE can transmit RRC messages on RACH and receive RRC messages commanding it to enter CELL_DCH without having read and acted on SIB11, SIB11bis and 12.	REL-7

13.4.3b DTX_DRX_PARAMS

NOTE: For FDD only.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
UE parameters for DTX-DRX	MD		DTX-DRX Information in 10.3.6.34a		REL-7

13.4.3c DTX_DRX_STATUS

NOTE: For FDD only.

This variable indicates whether discontinuous UL DPCCH transmission and discontinuous reception of F-DPCH and HSPA DL channel procedures are ongoing. See subclause 8.5.34 for actions related to the setting of this variable.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
DTX_DRX_STATUS	MP		Boolean	TRUE: discontinuous transmission and reception is ongoing. Set to FALSE when entering UTRA RRC connected mode when not otherwise stated in the procedure. Set to FALSE when leaving UTRA RRC connected mode.	REL-7

13.4.3o DSAC_PARAM

This variable contains Domain Specific Access Restriction Parameters during the connected mode.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
CS Domain Specific Access Restriction	MP		Domain Access Restriction 10.3.1.3b	This IE contains CS Domain Specific Access Restriction Parameters	REL-6
PS Domain Specific Access Restriction	MP		Domain Access Restriction 10.3.1.3b	This IE contains PS Domain Specific Access Restriction Parameters	REL-6

13.4.3a DSCH_RNTI

In TDD this variable stores the assigned DSCH-RNTI for this UE when in CELL_DCH state.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
DSCH-RNTI	OP		DSCH-RNTI 10.3.3.9a	Cleared when entering UTRA RRC connected mode when not otherwise stated in the procedure. Cleared when leaving UTRA RRC connected mode.

13.4.4 Void

13.4.4o E_DCH_TRANSMISSION

This variable indicates whether E-DPDCH and E-DPCCH transmission procedures are ongoing. See subclause 8.5.28 for actions related to the setting of this variable.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
E-DCH transmission	MP		Boolean	TRUE: E-DCH transmission is ongoing. Set to FALSE when entering UTRA RRC connected mode when not otherwise stated in the procedure. Set to FALSE when leaving UTRA RRC connected mode.	REL-6

13.4.4a E_RNTI

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
Primary E-RNTI	OP		E-RNTI 10.3.3.10a	Cleared when entering UTRA RRC connected mode when not otherwise stated in the procedure. Cleared when leaving UTRA RRC connected mode.	REL-6
Secondary E-RNTI	OP		E-RNTI 10.3.3.10a	Cleared when entering UTRA RRC connected mode when not otherwise stated in the procedure. Cleared when leaving UTRA RRC connected mode.	REL-6

13.4.5 ESTABLISHED_RABS

This variable is used to store information about the established radio access bearers and signalling radio bearers in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
RAB information	OP	1 to <maxRABsetup>		For each RAB established. Cleared when entering UTRA RRC connected mode when not otherwise stated in the procedure. Cleared when leaving UTRA RRC connected mode.
>RAB info	MP		RAB info 10.3.4.8	
>RB information	MP	1 to <maxRBper RAB>		For each RB belonging to the RAB
>>RB identity	MP		RB identity 10.3.4.16	
>>Subflow	MP		Integer(0..<maxSubflowcount>)	Reference to the RAB subflow implemented by this RB
>>RB started	MD		Enumerated(stopped, started)	Default value is started
Signalling radio bearer information	OP	1 to <maxSRBsetup>		In the order of RB0 and upwards. Cleared when leaving UTRA RRC connected mode.
>RB started	MD		Enumerated(stopped, started)	Default value is started

13.4.5a ESTABLISHED_SIGNALLING_CONNECTIONS

This variable is used to store information about established signalling connections.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Signalling connection list	OP	1 to <maxCNdomains>		For each established signalling connection. Cleared when entering UTRA RRC connected mode when not otherwise stated in the procedure. Cleared when leaving UTRA RRC connected mode.
>Signalling connection identity	MP		CN domain identity 10.3.1.1	

13.4.6 ESTABLISHMENT_CAUSE

This variable is used to store the cause for establishment of a signalling connection received by upper layers, to be used at RRC connection establishment or Initial Direct Transfer.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Establishment cause	OP		Establishment cause 10.3.3.11	Cleared when leaving UTRA RRC connected mode.

13.4.7 FAILURE_CAUSE

This variable contains the cause for failure of a UE initiated procedure, to be reported in a retransmitted message.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Failure cause	OP		Failure cause 10.3.3.13	Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.

13.4.8 FAILURE_INDICATOR

This variable indicates whether the procedure has failed for a UE initiated procedure.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Failure indicator	MP		Boolean	TRUE: Procedure has failed. Set to FALSE when entering UTRA RRC connected mode. Set to FALSE when leaving UTRA RRC connected mode.

13.4.8o H_RNTI

This variable stores the assigned H-RNTI for this UE when in CELL-DCH, CELL_FACH (FDD only) or CELL_PCH (FDD only) state, and when an HS-DSCH transport channel has been allocated.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
H-RNTI	OP		H-RNTI 10.3.3.14a	Cleared when entering UTRA RRC connected mode when not otherwise stated in the procedure. Cleared when leaving UTRA RRC connected mode.	REL-5

13.4.8oo HS_DSCH_RECEPTION

This variable indicates whether HS-SCCH and HS-DSCH reception procedures are ongoing. See subclause 8.5.25 for actions related to the setting of this variable.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
HS-DSCH reception	MP		Boolean	TRUE: HS-DSCH reception is ongoing. Set to FALSE when entering UTRA RRC connected mode when not otherwise stated in the procedure. Set to FALSE when leaving UTRA RRC connected mode.	REL-5

13.4.8oa HS_DSCH_RECEPTION_CELL_FACH_STATE

This variable indicates whether HS-SCCH and HS-DSCH reception procedures are ongoing in CELL_FACH for BCCH, DCCH and, if configured, DTCH reception. See subclause 8.5.36 for actions related to the setting of this variable.

NOTE: FDD only.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
HS-DSCH reception in CELL_FACH state	MP		Boolean	TRUE: HS-DSCH reception in CELL_FACH is ongoing. Set to FALSE when entering UTRA RRC connected mode, CELL_PCH, URA_PCH and CELL_DCH. Set to FALSE when leaving UTRA RRC connected mode,	REL-7

13.4.8ob HS_DSCH_RECEPTION_OF_CCCH_ENABLED

This variable indicates whether HS-SCCH and HS-DSCH reception procedures are enabled for CCCH and BCCH, and for SRB1 if the UE is in CELL_FACH state. See subclause 8.5.37 for actions related to the setting of this variable.

NOTE: For FDD only.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
HS-DSCH reception of CCCH	MP		Boolean	TRUE: HS-DSCH reception for the CCCH is enabled. Set to FALSE when leaving UTRA RRC connected mode. Set to FALSE when entering CELL_PCH, URA_PCH and CELL_DCH.	REL-7

13.4.8ooo HS_SCCH_LESS_PARAMS

NOTE: For FDD only.

This variable contains the parameters for UE operation in HS-SCCH less mode. The parameters are listed in subclause 10.3.6.36ab.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
UE parameters for HS-SCCH less	MD		HS-SCCH less Information in 10.3.6.36ab		REL-7

13.4.8oooo HS_SCCH_LESS_STATUS

NOTE: For FDD only.

This variable indicates whether HS-SCCH less HS-DSCH transmission procedures are ongoing. See subclause 8.5.xa for actions related to the setting of this variable.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
HS_SCCH_LESS_STATUS	MP		Boolean	TRUE: HS-SCCH less HS-DSCH transmission is ongoing. Set to FALSE when entering UTRA RRC connected mode when not otherwise stated in the procedure. Set to FALSE when leaving UTRA RRC connected mode.	REL-7

13.4.8a INCOMPATIBLE_SECURITY_RECONFIGURATION

This variable indicates whether an incompatible simultaneous reconfiguration of a security function has been received.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Incompatible security reconfiguration	MP		Boolean	TRUE: An incompatible simultaneous security reconfiguration has been detected. Set to FALSE when entering UTRA RRC connected mode. Set to FALSE when leaving UTRA RRC connected mode.

13.4.8b HS_DSCH_RECEPTION_CELL_FACH_STATE

This variable indicates whether HS-SCCH and HS-DSCH reception procedures are ongoing in CELL_FACH for BCCH, DCCH and, if configured, DTCH reception. See subclause 8.5.36 for actions related to the setting of this variable.

NOTE: FDD only.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
HS-DSCH reception in CELL_FACH state	MP		Boolean	TRUE: HS-DSCH reception in CELL_FACH is ongoing. Set to FALSE when entering UTRA RRC connected mode, CELL_PCH, URA_PCH and CELL_DCH. Set to FALSE when leaving UTRA RRC connected mode,	REL-7

13.4.8c HS_DSCH_RECEPTION_OF_CCCH_ENABLED

This variable indicates whether HS-SCCH and HS-DSCH reception procedures are enabled for CCCH and BCCH, and for SRB1 if the UE is in CELL_FACH state. See subclause 8.5.37 for actions related to the setting of this variable.

NOTE: For FDD only.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
HS-DSCH reception of CCCH	MP		Boolean	TRUE: HS-DSCH reception for the CCCH is enabled. Set to FALSE when leaving UTRA RRC connected mode. Set to FALSE when entering CELL_PCH, URA_PCH and CELL_DCH.	REL-7

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13.4.9 INITIAL_UE_IDENTITY

In this variable the identity used by the UE when establishing an RRC connection is stored.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Initial UE identity	OP		Initial UE identity 10.3.3.15	Cleared when leaving UTRA RRC connected mode.

13.4.9a INTEGRITY_PROTECTION_ACTIVATION_INFO

This variable contains information to be sent to UTRAN about when a new integrity protection configuration shall be activated in the uplink for signalling radio bearers in case of modification of integrity protection.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Uplink Integrity protection activation info	OP		Integrity protection activation info 10.3.3.17	Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.

13.4.10 INTEGRITY_PROTECTION_INFO

This variable contains information about the current status of the integrity protection in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Status	MP		Enumerated(Not started, Started)	Set to "Not started" when entering UTRA RRC connected mode. Set to "Not started" when leaving UTRA RRC connected mode.
Reconfiguration	MP		Boolean	TRUE means a reconfiguration of integrity protection is ongoing. Set to FALSE when entering UTRA RRC connected mode. Set to FALSE when leaving UTRA RRC connected mode.
Signalling radio bearer specific integrity protection information	OP	1 to <maxSRBsetup>		When integrity protection is started, status information for RB0- RB4 in that order. Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.
>Uplink RRC HFN	MP		Bit string (28)	
>Downlink RRC HFN	MP		Bit string (28)	
>Uplink RRC Message sequence number	MP		Integer (0..15)	
>Downlink RRC Message sequence number	OP		Integer (0..15)	

13.4.10a INTER_RAT_HANDOVER_INFO_TRANSFERRED

This variable stores information about the inter RAT handover info that has been transferred to another RAT.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
Predefined configuration status information	OP		Predefined configuration status information 10.3.4.5a	Cleared upon entering connected mode in another RAT	
Predefined configuration status information compressed	OP		Predefined configuration status information compressed 10.3.4.5b	Cleared upon entering connected mode in another RAT	REL-5
UE security information	OP		UE security information 10.3.3.42b	Cleared upon entering connected mode in another RAT	
UE security information2	OP		UE security information2 10.3.3.42c	Cleared upon entering connected mode in another RAT	REL-6
UE radio access capability	OP		UE radio access capability 10.3.3.42	Cleared upon entering connected mode in another RAT	
UE radio access capability extension	OP		UE radio access capability extension 10.3.3.42a	Cleared upon entering connected mode in another RAT	
UE radio access capability compressed	OP		UE radio access capability compressed 10.3.3.42o		REL-5
UE system specific capability	OP	1 to <maxSystemCapability>	Inter-RAT UE radio access capability 10.3.8.7	Cleared upon entering connected mode in another RAT	
>Inter-RAT UE radio access capability	MP		Inter-RAT UE radio		

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			access capability 10.3.8.7		

13.4.11 INVALID_CONFIGURATION

This variable indicates whether a received message contained an invalid configuration, by means of invalid values or invalid combinations of information elements.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Invalid configuration	MP		Boolean	TRUE: An invalid configuration has been detected. Set to FALSE when entering UTRA RRC connected mode. Set to FALSE when leaving UTRA RRC connected mode.

13.4.11a LATEST_CONFIGURED_CN_DOMAIN

This variable stores the CN-domain that was most recently configured to be used for ciphering and integrity protection.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Latest configured CN domain	OP		CN domain identity 10.3.1.1	Cleared when entering UTRA RRC connected mode when not stated otherwise in the procedure. Cleared when leaving UTRA RRC connected mode.

13.4.11b LATEST_CONFIGURED_SRB_DELAY_AND_PC_PREAMBLE

This variable stores the SRB delay and PC preamble to be used for establishing the DPCH after failure of hard handover, inter-RAT handover from UTRAN, or cell change order from UTRAN.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
SRB delay	OP		Integer (0..7)	Cleared when entering UTRA RRC connected mode when not stated otherwise in the procedure.
PC preamble	OP		Integer (0..7)	Cleared when entering UTRA RRC connected mode when not stated otherwise in the procedure.

13.4.11c MBMS_ACTIVATED_services

This variable stores the MBMS multicast services the UE has joined as well as the MBMS broadcast services the UE is interested to receive. Whenever the list of joined multicast services and/ or interested broadcast services changes, upper layers provide an indication upon which the UE shall update the variable accordingly. In case upper layers de-select an MBMS Selected Services, the UE shall remove the concerned service from the variable. Likewise, when upper layers select an MBMS Selected Services, the UE shall add the concerned service to the variable.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Activated service list	OP	1 to <maxMBMS-Services>		
>Service Identity	MP		MBMS Service identity 10.3.9a.8	
>Service type	MP		Enumerated (Multicast, Broadcast)	
>MBMS Selected Services Indicator	CV-*Broadcast*		Boolean	TRUE means that the service is currently a MBMS Selected Service

Condition	Explanation
Broadcast	This IE is mandatory present if the IE "Service type" is set to "Broadcast" and not needed otherwise.

NOTE: An independent instance of the variable MBMS_ACTIVATED_SERVICES is used by UEs supporting reception of MBMS services from cells operating in MBSFN mode and will contain the services available in MBSFN mode only as indicated by higher layers.

13.4.11d MBMS_PREV_FREQUENCY_INFO

This variable stores the frequency information of the cell the UE is camped on, upon moving to the MBMS preferred layer indicated MBMS FLC preferred frequency information.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
PREV Frequency Information					
CHOICE *mode*					
>FDD cell					
>>UARFCN downlink (Nd)	MP		Integer(0 .. 16383)	[21]	
>3.84 Mcps TDD cell					
>>UARFCN (Nt)	MP		Integer(0 .. 16383)	[22]	
>1.28 Mcps TDD cell list					
>>UARFCN (Nt)	MP		Integer(0 .. 16383)	[22]	

13.4.11e MBMS_PL_Service_Restriction_Info_dedicated

This variable stores the value of the IE "MBMS PL Service Restriction Information" restriction applicable to preferred frequency received in the latest Radio Bearer Control or Cell Update Confirm message.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
MBMS_PL_SERVICE_RESTRICTION_INFO_DEDICATED	MP		Enumerated(TRUE, FALSE)	Set to FALSE when entering UTRA connected mode.	REL-6

13.4.12 MEASUREMENT_IDENTITY

This variable stores the measurements configured in the UE. For each configured measurement, the information below shall be stored.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
MEASUREMENT CONTROL	OP		MEASUREMENT CONTROL 10.2.17, System Information Block type 11 10.2.48.8.12, System Information Block type 12 10.2.48.8.13	Information as contained in these messages. Cleared when entering UTRA RRC connected mode when not stated otherwise in the procedure (8.4.1.8-8.4.1.9). Cleared when leaving UTRA RRC connected mode when not stated otherwise in the procedure (8.4.1.9a).

13.4.13 Void

13.4.13a MIMO_PARAMS

This variable indicates the values of the parameters for operation in MIMO mode. See subclause 8.5.xx for actions related to the setting of this variable.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
MIMO N_cqi_typeA/M_cqi ratio	OP		Enumerated(1/2, 2/3, 3/4, 4/5, 5/6, 6/7, 7/8, 8/9, 9/10, 1/1)		
MIMO pilot configuration	OP		MIMO pilot configuration 10.3.6.41b		

13.4.13b MIMO_STATUS

This variable indicates whether the UE is operating in MIMO mode. See subclause 8.5.ww for actions related to the setting of this variable.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
MIMO status	MP		Boolean	TRUE means the UE is operating in MIMO mode. Cleared when leaving CELL_DCH state.	

13.4.14 ORDERED_RECONFIGURATION

This variable stores information about an ongoing Reconfiguration procedure.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Ordered reconfiguration	MP		Boolean	TRUE means that a Reconfiguration procedure is ongoing. Set to FALSE when entering UTRA RRC connected mode. Set to FALSE when leaving UTRA RRC connected mode.

13.4.14a PDCP_ROHC_TARGET_MODE

This variable contains the ROHC target mode.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
Target Mode	OP		Enumerated (O-mode, R-mode)	The UE shall only transit to the signalled mode for operation of ROHC as decribed in [36].	REL-5

13.4.15 PDCP_SN_INFO

This variable contains PDCP receive sequence numbers for one or several radio bearers to be included in a response message to UTRAN.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
RB with PDCP information list	OP	1 to <maxRBallRABs>		Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.
>RB with PDCP information	MP		RB with PDCP information 10.3.4.22	

13.4.15a PHYSICAL_SHARED_CHANNEL_CONFIGURATION

This variable is used only for TDD to store information about the physical shared channel configuration in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
PUSCH configuration	OP			Cleared when entering and leaving UTRA RRC connected mode.
>PUSCH info	MP		PUSCH info 10.3.6.63	
>PUSCH Identity	OP		Integer(1.. hiPUSCHidentities)	
>PUSCH power control info	OP		PUSCH power control info 10.3.6.65	
PDSCH configuration	OP			Cleared when entering and leaving UTRA RRC connected mode.
>PDSCH Info	MP		PDSCH Info 10.3.6.44	
>PDSCH Identity	OP		Integer(1..hiPDSCHidentities)	
>PDSCH power control info	OP		PDSCH power control info 10.3.6.45	
ISCP Timeslot list	OP	1 to maxTS		Cleared when entering and leaving UTRA RRC connected mode.
>Timeslot number	MP		Timeslot number 10.3.6.84	Timeslot numbers, for which the UE shall report the timeslot ISCP in PUSCH CAPACITY REQUEST message

13.4.16 PROTOCOL_ERROR_INDICATOR

This variable indicates whether there exist a protocol error that is to be reported to UTRAN.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Protocol error indicator	MP		Protocol error indicator 10.3.3.27	Set to FALSE when entering UTRA RRC connected mode. Set to FALSE when leaving UTRA RRC connected mode.

13.4.17 PROTOCOL_ERROR_INFORMATION

This variable contains diagnostics to be reported to UTRAN for a message that was not completely understood.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Protocol error information	OP		Protocol error information 10.3.8.12	Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.

13.4.18 PROTOCOL_ERROR_REJECT

This variable indicates whether there has occurred a severe protocol error causing the ongoing procedure to fail.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Protocol error reject	MP		Boolean	TRUE: a severe protocol error has occurred. Set to FALSE when entering UTRA RRC connected mode. Set to FALSE when leaving UTRA RRC connected mode.

13.4.19 RB_TIMER_INDICATOR

This variable contains information to be sent to UTRAN if any of the timers T314 or T315 has expired when the UE sends a cell update with cause RL failure.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
RB timer indicator	OP		RB timer indicator 10.3.3.28	Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.

13.4.20 RB_UPLINK_CIPHERING_ACTIVATION_TIME_INFO

This variable contains information to be sent to UTRAN about when a new ciphering configuration shall be activated in the uplink for radio bearers using RLC-AM or RLC-UM.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
RB uplink ciphering activation time info	OP		RB activation time info 10.3.4.13	Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.

13.4.20a SECURITY_MODIFICATION

This variable contains information on which CN domain is affected by the ongoing security reconfiguration.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Status for each CN domain	MP	<1 to maxCNDomains>		
>CN domain identity	MP		CN domain identity 10.3.1.1	
>Status	MP		Enumerated(Affected, Not Affected)	

13.4.21 Void

13.4.22 START_THRESHOLD

This variable contains information about the maximum allowed value of the START for a CN domain.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
THRESHOLD	OP		Integer (0..1048576)	20 bits. Cleared when entering UTRA RRC connected mode when not stated otherwise in the procedure. Cleared when leaving UTRA RRC connected mode.

13.4.23 START_VALUE_TO_TRANSMIT

This variable contains the value of START for new radio bearer(s) to be transmitted in a response message.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
START	OP		START 10.3.3.38	Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.

13.4.24 TFC_SUBSET

This variable contains information about the TFC subset(s) applicable to the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
CHOICE *mode*	MP				
>FDD					
>>Current TFC subset	MP		Transport Format Combination Subset 10.3.5.22	Set to "Full transport format set" when entering UTRA RRC connected mode when not stated otherwise in the procedure.	
>>Duration	OP		TFC Control duration 10.3.6.80	Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.	
>>Default TFC subset	OP		Transport Format Combination Subset 10.3.5.22	The TFC subset to go back to when any temporary limitation is released. Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.	
>>TFC subset list	MP	1 to <maxTFCsub>			REL-4
>>>TFC subset	MP		Transport Format Combination Subset 10.3.5.22		REL-4
>TDD					
>>TFCS list	MP	1 to < maxCCTrCH >		One TFCS is created when entering UTRA RRC connected mode when not stated otherwise in the procedure.	

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
>>>TFCS identity	MP		Transport Format Combination Set Identity 10.3.5.21	"TFCS ID" is set to 1 when entering UTRA RRC connected mode when not stated otherwise in the procedure. "Shared channel indicator" is set to FALSE when entering UTRA RRC connected mode when not stated otherwise in the procedure.	
>>>Current TFC subset	MP		Transport Format Combination Subset 10.3.5.22	Set to "Full transport format set" when entering UTRA RRC connected mode when not stated otherwise in the procedure.	
>>>>Duration	OP		TFC Control duration 10.3.6.80	Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.	
>>>>Default TFC subset	OP		Transport Format Combination Subset 10.3.5.22	The TFC subset to go back to when any temporary limitation is released. Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.	
>>TFC subset list	MP	1 to <maxTFCsub2>			REL-4
>>>TFCS identity	MP		Transport Format Combination Set Identity 10.3.5.21		REL-4
>>>TFC subset	MP		Transport Format Combination Subset 10.3.5.22		REL-4

13.4.25 TGPS_IDENTITY

This variable contains the configuration parameters of all the configured compressed mode transmission gap pattern sequences.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Transmission gap pattern sequence	OP	1 to <maxTGPS>		Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.
>TGPSI	MP		TGPSI 10.3.6.82	
>TGPS Status Flag	MP		Enumerated(activate, deactivate)	This flag indicates whether the Transmission Gap Pattern Sequence shall be activated or

				deactivated.
> Current TGPS Status Flag	MP		Enumerated(active, inactive)	This flag indicates the current status of the Transmission Gap Pattern Sequence, whether it is active or inactive
>TGCFN	CV-*Active*		Integer (0..255)	Connection Frame Number of the first frame of the first pattern within the Transmission Gap Pattern Sequence.
>Transmission gap pattern sequence configuration parameters	MP			Information as contained in the IE group "Transmission gap pattern sequence configuration parameters" in IE "DPCH compressed mode info" 10.3.6.33.

Condition	Explanation
Active	This IE is mandatory present when the value of the IE "TGPS Status Flag" is "Activate" and not needed otherwise.

13.4.26 TGSN_REPORTED

This variable specifies whether an IE "Proposed TGSN" was reported to the UTRAN

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Proposed TGSN reported	MP		Boolean	Set to FALSE when entering UTRA RRC connected mode. Set to FALSE when leaving UTRA RRC connected mode.

13.4.26a TIMERS_AND_CONSTANTS

This variable contains the values for all timers and constants used in connected mode.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
UE Timers and constants in connected mode	MD		UE Timers and constants in connected mode 10.3.3.43	Default value means that for all timers and constants - for parameters with need MD, the defaults specified in 10.3.3.43 apply and - for parameters with need OP, the parameters are absent. All parameters are set to the default value when leaving UTRA RRC connected mode to another RAT.

13.4.27 TRANSACTIONS

This variable stores the identifications of the ongoing RRC procedure transactions.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Accepted transactions	OP	1 to <maxtransactions>		Cleared when leaving UTRA RRC connected mode.
>Message type	MP		Message Type	
>RRC transaction identifier	MP		RRC transaction identifier 10.3.3.36	
Rejected transactions	OP	1 to <maxtransactions>		Cleared when leaving UTRA RRC connected mode.
>Message type	MP		Message Type	
>RRC transaction identifier	MP		RRC transaction identifier 10.3.3.36	

13.4.27o TRIGGERED_MEASUREMENT_REPORT

This variable indicates that the measurement procedure has to be started to notify UTRAN that the UE has entered CELL_FACH after detecting the value of its variable H_RNTI in the HS-SCCH reception procedure while being in CELL_PCH state, as specified in subclause 8.5.40.

NOTE: For FDD only.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
Triggered measurement report	MP		Boolean	Set to FALSE when entering CELL_PCH and URA_PCH.	REL-7

13.4.27a TRIGGERED_1A_EVENT

This variable contains information about a 1a event that has been triggered in the UE. There is one such variable per 1a event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Cells triggered	OP	1 to < maxCellMeas>		Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.
>primary CPICH	MP		Primary CPICH info 10.3.6.60	
>sent reports	MP		Integer(1..Infinity)	Number of reports sent to UTRAN in case of event triggered periodical reporting
Cells recently triggered	OP	1 to < maxCellMeas>		
>primary CPICH	MP		Primary CPICH info 10.3.6.60	
>sent reports	MP		Integer(1..Infinity)	Number of reports sent to UTRAN in case of event triggered periodical reporting
Periodical reporting running	MP		Boolean	

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13.4.27b TRIGGERED_1B_EVENT

This variable contains information about a 1b event that has been triggered in the UE. There is one such variable per 1b event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
Cells triggered	OP	1 to < maxCell Meas>		Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.	
>primary CPICH	MP		Primary CPICH info 10.3.6.60		
>sent reports	MP		Integer(1.. Infinity)	Number of reports sent to UTRAN in case of event triggered periodical reporting	REL-5
Cells recently triggered	OP	1 to < maxCell Meas>			REL-5
>primary CPICH	MP		Primary CPICH info 10.3.6.60		REL-5
>sent reports	MP		Integer(1.. Infinity)	Number of reports sent to UTRAN in case of event triggered periodical reporting.	REL-5
Periodical reporting running	MP		Boolean		REL-5

13.4.27c TRIGGERED_1C_EVENT

This variable contains information about a 1c event that has been triggered in the UE. There is one such variable per 1c event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Cells triggered	OP	1 to < maxCellMeas>		Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.
>primary CPICH	MP		Primary CPICH info 10.3.6.60	
>sent reports	MP		Integer(1..Infinity)	Number of reports sent to UTRAN in case of event triggered periodical reporting
Cells recently triggered	OP	1 to < maxCellMeas>		
>primary CPICH	MP		Primary CPICH info 10.3.6.60	
>sent reports	MP		Integer(1..Infinity)	Number of reports sent to UTRAN in case of event triggered periodical reporting
Periodical reporting running	MP		Boolean	

13.4.27d BEST_CELL_1D_EVENT

This variable contains information about a 1d event that has been triggered in the UE. There is one such variable per 1d event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Best cell	OP		Primary CPICH info 10.3.6.60	Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.

13.4.27e TRIGGERED_1E_EVENT

This variable contains information about a 1e event that has been triggered in the UE. There is one such variable per 1e event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Cells triggered	OP	1 to < maxCellMeas>		Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.
>primary CPICH	MP		Primary CPICH info 10.3.6.60	
Cells recently triggered	OP	1 to < maxCellMeas>		
>primary CPICH	MP		Primary CPICH info 10.3.6.60	

13.4.27f TRIGGERED_1F_EVENT

This variable contains information about a 1f event that has been triggered in the UE. There is one such variable per 1f event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Cells triggered	OP	1 to < maxCellMeas>		Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.
>primary CPICH	MP		Primary CPICH info 10.3.6.60	
Cells recently triggered	OP	1 to < maxCellMeas>		
>primary CPICH	MP		Primary CPICH info 10.3.6.60	

13.4.27f1 TRIGGERED_1G_EVENT

This variable contains information about a 1g event that has been triggered in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Cells triggered	OP	1 to < maxCellMeas>		
>Primary CCPCH info	MP		Primary CCPCH info 10.3.6.57	

13.4.27f2 TRIGGERED_1H_EVENT

This variable contains information about a 1h event that has been triggered in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Cells triggered	OP	1 to < maxCellMeas>		
>Primary CCPCH info	MP		Primary CCPCH info 10.3.6.57	

13.4.27f3 TRIGGERED_1I_EVENT

This variable contains information about a 1i event that has been triggered in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Cells triggered	OP	1 to < maxCellMeas>		
>Primary CCPCH info	MP		Primary CCPCH info 10.3.6.57	

13.4.27f4 BEST_FREQUENCY_2A_EVENT

This variable contains information about a 2a event that has been configured in the UE. There is one such variable per 2a event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Best frequency	MP		Frequency info 10.3.6.36	

13.4.27f5 TRIGGERED_2B_EVENT

This variable contains information about a 2b event that has been configured in the UE. There is one such variable per 2b event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Frequency triggered	OP	1 to < maxCellMeas>		
>Frequency	MP	Frequency info 10.3.6.36		

13.4.27f6 TRIGGERED_2C_EVENT

This variable contains information about a 2c event that has been configured in the UE. There is one such variable per 2c event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Frequency triggered	OP	1 to < maxCellMeas>		
>Frequency	MP	Frequency info 10.3.6.36		

13.4.27f7 TRIGGERED_2D_EVENT

This variable contains information about a 2d event that has been configured in the UE. There is one such variable per 2d event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Event triggered	OP		Boolean	

13.4.27f8 TRIGGERED_2E_EVENT

This variable contains information about a 2e event that has been configured in the UE. There is one such variable per 2e event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Frequency triggered	OP	1 to < maxCellMeas>		
>Frequency	MP	Frequency info 10.3.6.36		

13.4.27f9 TRIGGERED_2F_EVENT

This variable contains information about a 2f event that have been configured in the UE. There is one such variable per 2f event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Event triggered	OP		Boolean	

13.4.27f10 TRIGGERED_3A_EVENT

This variable contains information about a 3a event that has been configured in the UE. There is one such variable per event 3a configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
CHOICE *system*	OP			
>GSM				
>>CHOICE *BSIC*	MP			
>>>Verified BSIC		0 to <maxCellMeas>		
>>>>Inter-RAT cell id	MP		Integer(0..<maxCellMeas>-1)	
>>>Non verified BSIC		0 to <maxCellMeas>		
>>>>BCCH ARFCN	MP		Integer (0..1023)	

13.4.27f11 TRIGGERED_3B_EVENT

This variable contains information about a 3b event that has been configured in the UE. There is one such variable per event 3b configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
CHOICE *system*	OP			
>GSM				
>>CHOICE *BSIC*	MP			
>>>Verified BSIC		0 to <maxCellMeas>		
>>>>Inter-RAT cell id	MP		Integer(0..<maxCellMeas>-1)	
>>>Non verified BSIC		0 to <maxCellMeas>		
>>>>BCCH ARFCN	MP		Integer (0..1023)	

13.4.27f12 TRIGGERED_3C_EVENT

This variable contains information about a 3c event that has been configured in the UE. There is one such variable per event 3c configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
CHOICE *system*	OP			
>GSM				
>>CHOICE *BSIC*	MP			
>>>Verified BSIC		0 to <maxCellMeas>		
>>>>Inter-RAT cell id	MP		Integer(0..<maxCellMeas>-1)	
>>>Non verified BSIC		0 to <maxCellMeas>		
>>>>BCCH ARFCN	MP		Integer (0..1023)	

13.4.27f13 BEST_CELL_3D_EVENT

This variable contains information about a 3d event that has been configured in the UE. There is one such variable per event 3a configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
CHOICE *system*				
>GSM				
>>CHOICE *BSIC*	MP			
>>>Verified BSIC				
>>>>Inter-RAT cell id	MP		Integer(0..< maxCellMeas>-1)	
>>>Non verified BSIC				
>>>>BCCH ARFCN	MP		Integer (0..1023)	

13.4.27f14 TRIGGERED_6A_EVENT

This variable contains information about a 6a event that has been configured in the UE. There is one such variable per 6a event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Event triggered	OP		Boolean	

13.4.27f15 TRIGGERED_6B_EVENT

This variable contains information about a 6b event that has been configured in the UE. There is one such variable per 6b event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Event triggered	OP		Boolean	

13.4.27f16 TRIGGERED_6C_EVENT

This variable contains information about a 6c event that has been configured in the UE. There is one such variable per 6c event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Event triggered	OP		Boolean	

13.4.27f17 TRIGGERED_6D_EVENT

This variable contains information about a 6d event that has been configured in the UE. There is one such variable per 6d event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Event triggered	OP		Boolean	

13.4.27f18 TRIGGERED_6E_EVENT

This variable contains information about a 6e event that has been configured in the UE. There is one such variable per 6e event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Event triggered	OP		Boolean	

13.4.27f19 TRIGGERED_6F_EVENT

This variable contains information about a 6f event that has been configured in the UE. There is one such variable per 6f event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
CHOICE mode					
>FDD					
Event triggered_RL	OP	<maxRL>	Boolean		
>1.28 Mcps TDD					REL-4
>>T_{ADV}	MP		TADV info 10.3.7.112		REL-4

13.4.27f20 TRIGGERED_6G_EVENT

This variable contains information about a 6g event that has been configured in the UE. There is one such variable per 6g event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Event triggered_RL	OP	<maxRL>	Boolean	

13.4.27f21 TRIGGERED_1J_EVENT

This variable contains information about a 1j event that has been triggered in the UE. There is one such variable per 1j event configured in the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
Cells triggered	OP	1 to < maxCellMeas>		Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.	REL-6
>primary CPICH	MP		Primary CPICH info 10.3.6.60		REL-6
>sent reports	MP		Integer(1..Infinity)	Number of reports sent to UTRAN in case of event triggered periodical reporting	REL-6
Cells recently triggered	OP	1 to < maxCellMeas>			REL-6
>primary CPICH	MP		Primary CPICH info 10.3.6.60		REL-6
>sent reports	MP		Integer(1..Infinity)	Number of reports sent to UTRAN in case of event triggered periodical reporting	REL-6
Periodical reporting running	MP		Boolean		REL-6

13.4.27g UE_CAPABILITY_REQUESTED

This variable stores information about the UE capabilities that have been requested by UTRAN but that have not yet been transferred to UTRAN.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
UE radio access capability	OP		UE radio access capability 10.3.3.42	Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.
UE radio access capability extension	OP		UE radio access capability extension 10.3.3.42a	Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.
UE system specific capability	OP	1 to < maxInterSysMessages >		
>Inter-RAT UE radio access capability	MP		Inter-RAT UE radio access capability 10.3.8.7	Includes inter-RAT classmark. Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.

13.4.28 UE_CAPABILITY_TRANSFERRED

This variable stores information about which UE capabilities that have been transferred to UTRAN.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
UE radio access capability	OP		UE radio access capability	Cleared when entering UTRA RRC connected mode when not stated otherwise in the	

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
			10.3.3.42	procedure. Cleared when leaving UTRA RRC connected mode.	
UE radio access capability extension	OP		UE radio access capability extension 10.3.3.42a	Cleared when entering UTRA RRC connected mode when not stated otherwise in the procedure. Cleared when leaving UTRA RRC connected mode.	
UE system specific capability	OP	1 to <maxSystemCapability>			
>Inter-RAT UE radio access capability	MP		Inter-RAT UE radio access capability 10.3.8.7	Includes inter-RAT classmark. Cleared when entering UTRA RRC connected mode when not stated otherwise in the procedure. Cleared when leaving UTRA RRC connected mode.	
UE radio access capability compressed	OP		UE radio access capability compressed 10.3.3.42o		REL-5
Security capability	OP		Security capability 10.3.3.37		REL-5

13.4.28a UE_POSITIONING_GPS_DATA

Information Element/Group name	Need	Multi	Type and reference	Semantics description
GPS Data ciphering info	OP		UE positioning Ciphering info 10.3.7.86	
GPS Deciphering Keys	OP			
>Current deciphering key	MP		Bit string(56)	
>Next deciphering key	MP		Bit string(56)	
UE positioning GPS reference time	OP		UE positioning GPS reference time 10.3.7.96	
UE positioning GPS reference UE position	OP		Ellipsoid point with altitude and uncertainty ellipsoid 10.3.8.4c	A priori knowledge of UE 3-D position.
UE positioning GPS DGPS corrections	OP		UE positioning GPS DGPS corrections 10.3.7.91	
UE positioning GPS navigation model	OP	1 to <maxSat>		
>SatID	MP		Enumerated(	Satellite ID

Information Element/Group name	Need	Multi	Type and reference	Semantics description
			0..63)	
>GPS Ephemeris and Clock Correction parameters	MP		UE positioning GPS Ephemeris and Clock Correction parameters 10.3.7.91a	
UE positioning GPS ionospheric model	OP		UE positioning GPS ionospheric model 10.3.7.92	
UE positioning GPS UTC model	OP		UE positioning GPS UTC model 10.3.7.97	
UE positioning GPS almanac	OP			
>SatID	MP	1 to <maxSatAlmanacStorage>		
>>WN_a	MP			Same as IE in 10.3.7.89
>>DataID	MP			Same as IE in 10.3.7.89
>>e	MP			Same as IE in 10.3.7.89
>>t_{oa}	MP			Same as IE in 10.3.7.89
>>δI	MP			Same as IE in 10.3.7.89
>>OMEGADOT	MP			Same as IE in 10.3.7.89
>>SV Health	MP			Same as IE in 10.3.7.89
>>$A^{1/2}$	MP			Same as IE in 10.3.7.89
>>$OMEGA_0$	MP			Same as IE in 10.3.7.89
>>M_0	MP			Same as IE in 10.3.7.89
>>ω	MP			Same as IE in 10.3.7.89
>>af_0	MP			Same as IE in 10.3.7.89
>>af_1	MP			Same as IE in 10.3.7.89
>SV Global Health	OP			Same as IE in 10.3.7.89
UE positioning GPS acquisition assistance	OP		UE positioning GPS acquisition assistance 10.3.7.88	
UE positioning GPS real-time integrity	OP		UE positioning GPS real-time integrity 10.3.7.95	

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13.4.28b UE_POSITIONING_OTDOA_DATA_UE_ASSISTED

Information Element/Group name	Need	Multi	Type and reference	Semantics description
UE positioning OTDOA reference cell info for UE-assisted	OP		UE positioning OTDOA reference cell info 10.3.7.108	
UE positioning OTDOA neighbour cell list for UE-assisted	OP	1 to <maxCellMeas>		
>UE positioning OTDOA neighbour cell info for UE-assisted	MP		UE positioning OTDOA neighbour cell info 10.3.7.106	

13.4.28c UE_POSITIONING_OTDOA_DATA_UE_BASED

Information Element/Group name	Need	Multi	Type and reference	Semantics description
OTDOA Deciphering Keys	OP			
>Current deciphering key	MP		Bit string(56)	
>Next deciphering key	MP		Bit string(56)	
OTDOA Data ciphering info	OP		UE positioning Ciphering info 10.3.7.86	
UE positioning OTDOA reference cell info for UE-based	OP		UE positioning OTDOA reference cell info for UE-based 10.3.7.108a	
UE positioning OTDOA neighbour cell list for UE-based	OP	1 to <maxCellMeas>		
>UE positioning OTDOA neighbour cell info for UE-based	MP		UE positioning OTDOA neighbour cell info for UE-based 10.3.7.106	

13.4.28d UE_POSITIONING_GANSS_DATA

Information Element/Group name	Need	Multi	Type and reference	Semantics description	V
GANSS Data ciphering info	OP		UE positioning Ciphering info 10.3.7.86		REL-7
GANSS Deciphering Keys	OP				REL-7
>Current deciphering key	MP		Bit string(56)		REL-7
>Next deciphering key	MP		Bit string(56)		REL-7
UE positioning GANSS	OP		UE		REL-7

Information Element/Group name	Need	Multi	Type and reference	Semantics description	V
reference time			positioning GANSS reference time 10.3.7.96a		
UE positioning GANSS reference UE position	OP		Ellipsoid point with altitude and uncertainty ellipsoid 10.3.8.4c	A priori knowledge of UE 3-D position.	REL-7
UE positioning GANSS ionospheric model	OP		UE positioning GANSS ionospheric model 10.3.7.92a		REL-7
GANSS Generic DataList	OP	1 to <maxGANSS>			REL-7
>GANSS ID	OP			Same as IE in 10.3.7.90a	REL-7
>GANSS Time Models List		1 to <maxGANSS-1>			REL-7
>>Positioning GANSS Time Model	OP		UE positioning GANSS time model 10.3.7.97a		
>UE positioning DGANSS corrections	OP		UE positioning DGANSS corrections 10.3.7.91b		REL-7
>UE positioning GANSS navigation model	OP		UE positioning GANSS navigation model 10.3.7.94a		REL-7
>UE positioning GANSS real-time integrity	OP		UE positioning GANSS real-time integrity 10.3.7.95a		REL-7
>UE positioning GANSS data bit assistance	OP		UE positioning GANSS data bit assistance 10.3.7.97b		REL-7
>UE positioning GANSS reference measurement information	OP		UE positioning GANSS reference measurement information 10.3.7.88b		REL-7
>UE positioning GANSS almanac	OP		UE positioning GANSS almanac 10.3.7.89a		REL-7
>UE positioning GANSS UTC model	OP		UE positioning GANSS UTC		REL-7

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Information Element/Group name	Need	Multi	Type and reference	Semantics description	V
			model 10.3.7.97c		

13.4.29 UNSUPPORTED_CONFIGURATION

This variable indicates whether a received message contained a configuration that is not supported by the UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Unsupported configuration	MP		Boolean	TRUE: An unsupported configuration has been detected. Set to FALSE when entering UTRA RRC connected mode. Set to FALSE when leaving UTRA RRC connected mode.

13.4.30 URA_IDENTITY

This variable stores the assigned URA identity for this UE when in URA_PCH state.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
URA identity	OP		URA identity 10.3.2.6	Cleared when entering UTRA RRC connected mode. Cleared when leaving UTRA RRC connected mode.

13.4.31 U_RNTI

This variable stores the assigned U-RNTI for this UE.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
U-RNTI	OP		U-RNTI 10.3.3.47	Cleared when leaving UTRA RRC connected mode.

13.4.32 VALUE_TAG

This variable contains information about the value tag for the last received system information block of a given type, for all system information blocks using value tags. The UE shall maintain one instance of this variable for the current selected cell. The UE may store several instances of this variable, one for each cell, to be used if the UE returns to these cells.

All IEs in this variable shall be cleared when switched off. All IEs in this variable except for the IE "SIB 16 value tag list" shall be cleared at selection of a new cell and this cell broadcasts an IE "PLMN Identity" in the MIB which is different from the IE "PLMN Identity" broadcast in the MIB in the previously selected cell. The IE "SIB 16 value tag list" is cleared when NAS informs AS about a new selected PLMN.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
MIB value tag	OP		MIB value tag 10.3.8.9	Value tag for the master information block	
SB 1 value tag	OP		Cell value tag 10.3.8.4	Value tag for the scheduling block type 1	

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
SB 2 value tag	OP		Cell value tag 10.3.8.4	Value tag for the scheduling block type 2	
SIB 1 value tag	CV-*GSM*		PLMN value tag 10.3.8.10	Value tag for the system information block type 1 Note: IE "PLMN value tag" is used for SIB1 but the area scope for SIB 1 is Cell.	
SIB 2 value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 2	
SIB 3 value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 3	
SIB 4 value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 4	
SIB 5 value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 5 or 5bis	
SIB 6 value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 6	
CHOICE *mode*	MP				
>FDD					
>TDD				(no data)	
SIB 11 value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 11	
SIB 11bis value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 11bis	REL-6
SIB 12 value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 12	
SIB 13 value tag	CV-*ANSI*		Cell value tag 10.3.8.4	Value tag for the system information block type 13	
SIB 13.1 value tag	CV-*ANSI*		Cell value tag 10.3.8.4	Value tag for the system information block type 13.1	
SIB 13.2 value tag	CV-*ANSI*		Cell value tag 10.3.8.4	Value tag for the system information block type 13.2	
SIB 13.3 value tag	CV-*ANSI*		Cell value tag 10.3.8.4	Value tag for the system information block type 13.3	
SIB 13.4 value tag	CV-*ANSI*		Cell value tag 10.3.8.4	Value tag for the system information block	

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Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
				type 13.4	
SIB 15 value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 15	
SIB 15.1 value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 15.1	
SIB 15.2 value tag list	OP	1 to <maxSat>		List of value tags for all stored occurrences of system information block type 15.2	
>SIB 15.2 value tag	MP		Cell value tag 10.3.8.4		
>SIB occurrence identity and value tag	MP		SIB occurrence identity and value tag 10.3.8.20b		
SIB 15.3 value tag list	OP	1 to <maxSat>		List of value tags for all stored occurrences of system information block type 15.3	
>SIB 15.3 value tag	MP		PLMN value tag 10.3.8.10	Value tag for the system information block type 15.3	
>SIB occurrence identity and value tag	MP		SIB occurrence identity and value tag 10.3.8.20b		
SIB 15.4 value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 15.4	

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Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
SIB 15.5 value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 15.5	
GANSS SIBs	OP	1 to <maxGANSS>			REL-7
>GANSS ID	MD		Integer(0..7)	Identifier for GANSS, absence of this IE means Galileo	REL-7
>SIB 15bis value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 15bis	REL-7
>SIB 15.1bis value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 15.1bis	REL-7
>SIB 15.2bis value tag list	OP	1 to <maxSat>		List of value tags for all stored occurrences of system information block type 15.2bis	REL-7
>>SIB 15.2bis value tag	MP		Cell value tag 10.3.8.4		REL-7
>>SIB occurrence identity and value tag	MP		SIB occurrence identity and value tag 10.3.8.20b		REL-7
>SIB 15.3bis value tag list	OP	1 to <maxSat>		List of value tags for all stored occurrences of system information block type 15.3bis	REL-7
>>SIB 15.3bis value tag	MP		PLMN value tag 10.3.8.10	Value tag for the system information block type 15.3bis	REL-7
>>SIB occurrence identity and value tag	MP		SIB occurrence identity and value tag 10.3.8.20b		REL-7
>SIB 15.6 value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 15.6	REL-7
>SIB 15.7 value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 15.7	REL-7
>SIB 15.8 value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 15.8	REL-7
SIB 16 value tag list	OP	1 to <maxPredefConfig>		List of value tags for all stored occurrences of the system information block type 16	

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Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
>Predefined configuration identity and value tag	MP		Predefined configuration identity and value tag 10.3.8.11		
SIB 18 value tag	OP		Cell value tag 10.3.8.4	Value tag for the system information block type 18	

Condition	Explanation
GSM	This information is optional when the UE is operating in "GSM-MAP mode" and never stored otherwise.
ANSI	This information is optional when the UE is operating in "ANSI-41 mode" and never stored otherwise.

13.5 UE RRC Procedure Performance

This subclause defines the performance requirements related to RRC procedures in the UE. Where the total delay is impacted by processing of variable length on the physical layer (e.g. physical layer synchronisation), references to appropriate specifications are given.

13.5.1 Definitions

The following definitions of N1 and N2 are valid only for this UE RRC Procedure Performance specification.

N1 = upper limit on the time required to execute modifications in UE after the reception of a UTRAN -> UE message has been completed. Where applicable (e.g. the physical layer transmission is impacted), the changes shall be adopted in the beginning of the next TTI starting after N1. N1 is specified as a multiple of 10 ms.

N2 = number of 10 ms radio frames from end of reception of UTRAN -> UE message on UE physical layer before the transmission of the UE -> UTRAN response message must be ready to start on a transport channel with no access delay other than the TTI alignment (e.g. DCH, therefore excluding delays caused by RACH procedure etc). The UE response message transmission from the physical layer shall begin at the latest (N2*10)+TTI ms after completion of the reception of the last TTI carrying the triggering UTRAN -> UE message. When Target State is CELL_DCH, the UE response message transmission from the physical layer may be additionally delayed by the value of IE "SRB delay".

N1 and N2 are independent (e.g. N2-N1 is not restricted to being less than or equal to 10ms).

13.5.2 RRC procedure performance values

NOTE: Times indicated in the table do not include cell reselection.

Procedure title:	UTRAN -> UE	UE -> UTRAN	N1	N2	Notes
RRC Connection Management Procedures					
Broadcast of system information	SYSTEM INFORMATION				N2 is not applicable for any system information messages, because there is no response message from the UE.

Procedure title:	UTRAN -> UE	UE -> UTRAN	N1	N2	Notes
Master Information Block	SYSTEM INFORMATION		5	NA	No system information data shall be lost due to processing of a MIB received with no detectable errors. This means that the UE shall buffer all system information data received after the MIB until the data can be processed according to the information in the MIB, unless the MIB was received erroneously.
System Information Block type 1	SYSTEM INFORMATION		10	NA	
System Information Block type 2	SYSTEM INFORMATION		10	NA	
System Information Block type 3	SYSTEM INFORMATION		10	NA	
System Information Block type 4	SYSTEM INFORMATION		10	NA	
System Information Block type 5 or System Information Block type 5bis	SYSTEM INFORMATION		10	NA	
System Information Block type 6	SYSTEM INFORMATION		10	NA	
System Information Block type 7	SYSTEM INFORMATION		5	NA	
System Information Block type 11	SYSTEM INFORMATION		10	NA	
System Information Block type 12	SYSTEM INFORMATION		10	NA	
System Information Block type 13	SYSTEM INFORMATION		10	NA	
System Information Block type 14	SYSTEM INFORMATION		10	NA	
System Information Block type 15	SYSTEM INFORMATION		10	NA	
System Information Block type 16	SYSTEM INFORMATION		10	NA	
System Information Block type 18	SYSTEM INFORMATION		10	NA	
RRC connection establishment *Target state CELL_DCH*	RRC CONNECTION SETUP	RRC CONNECTION SETUP COMPLETE	10	NA	N1 measures time to the start of tx / rx on DPCH. N2 cannot be specified, because RRC CONNECTION SETUP COMPLETE message is transmitted only after physical layer synchronisation, which also depends on the Node B. The performance of the physical layer synchronisation procedure is specified in [19] and [20]
RRC connection establishment *Target state CELL_FACH*	RRC CONNECTION SETUP	RRC CONNECTION SETUP COMPLETE	10	11	N1 and N2 applicable as defined (N2 can be tested from the initiation of the power ramp on RACH).

Procedure title:	UTRAN -> UE	UE -> UTRAN	N1	N2	Notes
RRC connection release *From CELL_DCH state*	RRC CONNECTION RELEASE	RRC CONNECTION RELEASE COMPLETE	5	8	N1 sets the requirement for the time from the completion of the last repetition of the RRC CONNECTION RELEASE COMPLETE message to the release of the physical channel. N2 sets the requirement from the end of successful reception of the RRC CONNECTION RELEASE message to the start of the first transmission of the RRC CONNECTION RELEASE COMPLETE message.
RRC connection release *From CELL_FACH state*	RRC CONNECTION RELEASE	RRC CONNECTION RELEASE COMPLETE	NA	11	N1 represents UE internal configuration that cannot be externally observed.
Paging	PAGING TYPE 1	CELL UPDATE	10	11+ T	T is the repetition period of SIB7 (applicable for FDD) and SIB14 (applicable for TDD)
UE capability enquiry	UE CAPABILITY ENQUIRY	UE CAPABILITY INFORMATION	NA	8	N1 is not applicable because the UE configuration does not change.
Security mode control	SECURITY MODE COMMAND	SECURITY MODE COMPLETE	5	8	
Signalling connection release procedure	SIGNALLING CONNECTION RELEASE		5	NA	N2 is not applicable because there is no response message.
Counter check	COUNTER CHECK	COUNTER CHECK RESPONSE	NA	8	N1 is not applicable because the UE configuration does not change.
Radio Bearer control procedures					
Radio bearer establishment *Target state CELL_DCH*	RADIO BEARER SETUP	RADIO BEARER SETUP COMPLETE / FAILURE	10	NA	N2 cannot be specified, because the RADIO BEARER SETUP COMPLETE / FAILURE message is transmitted only after physical layer synchronisation, which depends also on Node B.
Radio bearer establishment *From state CELL_FACH to state CELL_FACH*	RADIO BEARER SETUP	RADIO BEARER SETUP COMPLETE / FAILURE	10	11	
Radio bearer establishment *From CELL_DCH to CELL_FACH*	RADIO BEARER SETUP	RADIO BEARER SETUP COMPLETE	NA	NA	N1 and N2 cannot be specified, because UE need to read SIBs on BCH before sending RADIO BEARER SETUP COMPLETE
Radio bearer reconfiguration *Target state CELL_DCH*	RADIO BEARER RECONFIGURATION	RADIO BEARER RECONFIGURATION COMPLETE / FAILURE	5 or 10	NA	N2 cannot be specified, because the RADIO BEARER RECONFIGURATION COMPLETE / FAILURE message is transmitted only after physical layer synchronisation, which depends also on Node B. NOTE 1
Radio bearer reconfiguration *From state CELL_FACH to state CELL_FACH*	RADIO BEARER RECONFIGURATION	RADIO BEARER RECONFIGURATION COMPLETE / FAILURE	10	11	

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Procedure title:	UTRAN -> UE	UE -> UTRAN	N1	N2	Notes
Radio bearer reconfiguration *From state CELL_DCH to state CELL_FACH*	RADIO BEARER RECONFIGURATION	RADIO BEARER RECONFIGURATION COMPLETE	NA	NA	N1 and N2 cannot be specified, because UE need to read SIBs on BCH before sending RADIO BEARER RECONFIGURATION COMPLETE
Radio bearer release *Target state CELL_DCH*	RADIO BEARER RELEASE	RADIO BEARER RELEASE COMPLETE / FAILURE	10	11	
Radio bearer release *From state CELL_FACH to state CELL_FACH*	RADIO BEARER RELEASE	RADIO BEARER RELEASE COMPLETE / FAILURE	10	11	
Radio bearer release *From state CELL_DCH to state CELL_FACH*	RADIO BEARER RELEASE	RADIO BEARER RELEASE COMPLETE	NA	NA	N1 and N2 cannot be specified, because UE need to read SIBs on BCH before sending RADIO BEARER RECONFIGURATION COMPLETE
Transport channel reconfiguration *Target state CELL_DCH*	TRANSPORT CHANNEL RECONFIGURATION	TRANSPORT CHANNEL RECONFIGURATION COMPLETE / FAILURE	5 or 10	NA	N2 cannot be specified, because the TRANSPORT CHANNEL RECONFIGURATION COMPLETE / FAILURE message is transmitted only after physical layer synchronisation, which depends also on Node B. NOTE 1
Transport channel reconfiguration *From state CELL_FACH to state CELL_FACH*	TRANSPORT CHANNEL RECONFIGURATION	TRANSPORT CHANNEL RECONFIGURATION COMPLETE / FAILURE	10	11	
Transport channel reconfiguration *From state CELL_DCH to state CELL_FACH*	TRANSPORT CHANNEL RECONFIGURATION	TRANSPORT CHANNEL RECONFIGURATION COMPLETE	NA	NA	N1 and N2 cannot be specified, because UE need to read SIBs on BCH before sending TRANSPORT CHANNEL RECONFIGURATION COMPLETE
Transport format combination control *AM or UM RLC mode*	TRANSPORT FORMAT COMBINATION CONTROL	TRANSPORT FORMAT COMBINATION CONTROL FAILURE	5	8	
Transport format combination control *Transparent mode*	TRANSPORT FORMAT COMBINATION CONTROL		5	NA	N2 is not applicable because no response message is defined.
Physical channel reconfiguration *Target state CELL_DCH*	PHYSICAL CHANNEL RECONFIGURATION	PHYSICAL CHANNEL RECONFIGURATION COMPLETE / FAILURE	5 or 8	NA	N2 cannot be specified, because the PHYSICAL CHANNEL RECONFIGURATION COMPLETE / FAILURE message is transmitted only after physical layer synchronisation, which depends also on Node B. NOTE 1
Physical channel reconfiguration *From state CELL_FACH to state CELL_FACH*	PHYSICAL CHANNEL RECONFIGURATION	PHYSICAL CHANNEL RECONFIGURATION COMPLETE / FAILURE	8	9	

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Procedure title:	UTRAN -> UE	UE -> UTRAN	N1	N2	Notes
Physical channel reconfiguration *From state CELL_DCH to state CELL_FACH*	PHYSICAL CHANNEL RECONFIGURATION	PHYSICAL CHANNEL RECONFIGURATION COMPLETE	NA	NA	N1 and N2 cannot be specified, because UE need to read SIBs on BCH before sending PHYSICAL CHANNEL RECONFIGURATION COMPLETE
Physical Shared Channel Allocation [TDD only]	PHYSICAL SHARED CHANNEL ALLOCATION		5	NA	N2 is not applicable because no response message is defined.
Uplink Physical Channel Control [TDD only]	UPLINK PHYSICAL CHANNEL CONTROL		8	NA	Requirements for outer loop and timing advance adjustments are defined in [22] and [20]. N2 is not applicable because there is no response message.
RRC connection mobility procedures					
Cell update	CELL UPDATE CONFIRM	UTRAN MOBILITY INFORMATION CONFIRM	5	8	
		PHYSICAL CHANNEL RECONFIGURATION COMPLETE *Target state CELL_FACH*	8	9	
		PHYSICAL CHANNEL RECONFIGURATION COMPLETE *Target state CELL_DCH*	8	NA	N2 cannot be specified, because the PHYSICAL CHANNEL RECONFIGURATION COMPLETE / FAILURE message is transmitted only after physical layer synchronisation, which depends also on Node B.
		TRANSPORT CHANNEL RECONFIGURATION COMPLETE *Target state CELL_FACH*	10	11	
		TRANSPORT CHANNEL RECONFIGURATION COMPLETE *Target state CELL_DCH*	10	NA	N2 cannot be specified, because the PHYSICAL CHANNEL RECONFIGURATION COMPLETE / FAILURE message is transmitted only after physical layer synchronisation, which depends also on Node B.
		RADIO BEARER RECONFIGURATION COMPLETE *Target state CELL_FACH*	10	11	
		RADIO BEARER RECONFIGURATION COMPLETE *Target state CELL_DCH*	10	NA	N2 cannot be specified, because the PHYSICAL CHANNEL RECONFIGURATION COMPLETE / FAILURE message is transmitted only after physical layer synchronisation, which depends also on Node B.

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Procedure title:	UTRAN -> UE	UE -> UTRAN	N1	N2	Notes
		RADIO BEARER RELEASE COMPLETE *Target state CELL_DCH*	10	11	
URA update	URA UPDATE CONFIRM	UTRAN MOBILITY INFORMATION CONFIRM	5	8	
UTRAN mobility information	UTRAN MOBILITY INFORMATION	UTRAN MOBILITY INFORMATION CONFIRM / FAILURE	5	8	
Active set update	ACTIVE SET UPDATE	ACTIVE SET UPDATE COMPLETE / FAILURE	NA	5	The requirements on UE combining and power control performance for both UL and DL are specified by RAN WG4 in [21] and [19]. Also in case of branch addition the COMPLETE / FAILURE message is transmitted without waiting for the new branch to stabilise, therefore N2 is specified.
Inter-RAT handover to UTRAN	HANDOVER TO UTRAN COMMAND (other system)	HANDOVER TO UTRAN COMPLETE	NA	NA	The performance of this procedure is specified in 05.10.
Inter-RAT handover from UTRAN	HANDOVER FROM UTRAN COMMAND	HANDOVER FROM UTRAN FAILURE	NA	NA	The performance of this procedure is specified in [19] and [20].
Measurement procedures					
Measurement control	MEASUREMENT CONTROL	MEASUREMENT CONTROL FAILURE	5	8	Response to measurement inquiry depends on physical layer measurement. Response time is defined in [19] and [20]. N1 and N2 only define the processing of the message.

NOTE 1: The lower value applies when the UE is ordered to do a serving HS-DSCH cell change, changing no other information than contained in the IE "H-RNTI", the IE "Downlink HS-PDSCH information", the IE "Uplink DPCH power control info" and/or the IE "Serving HS-DSCH radio link indicator" (FDD only).

13.6 RB information parameters for signalling radio bearer RB 0

The following Radio Bearer parameter values apply for signalling radio bearer RB0 for TDD and for FDD, if either UE or UTRAN do not support common channel mapping on HS-DSCH:

Information element/ Group name	Value	Comment
RLC info		
>Uplink RLC mode	TM	
>>Transmission RLC discard	omitted	Neither discard is used, nor will there be a reset
>>Segmentation indication	FALSE	
>Downlink RLC mode	UM	
RB mapping info		Single multiplexing option
>Uplink mapping info		
>>UL transport channel	RACH	RACH corresponding with selected PRACH
>>RLC size list	N/A	If available the size in the IE 'Additional Dynamic Transport Format Information for CCCH' for the transport channel used. Else the first TF defined in the Transport Format Set for the transport channel is used.
>>MAC logical channel priority	1	
>Downlink mapping info		
>>DL transport channel	FACH	

Procedure descriptions in subclause 8.6.4.8 shall not be applied for the IE "RB mapping info" that is used for signalling radio bearer RB0.

13.6a RB information parameters for SHCCH

The following Radio Bearer parameter values apply for SHCCH:

Information element/ Group name	Value	Comment
RLC info		
>Uplink RLC mode	TM	
>>Transmission RLC discard	omitted	Neither discard is used, nor will there be a reset
>>Segmentation indication	FALSE	
>Downlink RLC mode	UM	
RB mapping info		
>Uplink mapping info		Option 1
>>UL transport channel	RACH	RACH corresponding with selected PRACH
>>RLC size list	N/A	The first TF defined in the Transport Format Set for the transport channel that is used
>>MAC logical channel priority	1	
>Downlink mapping info		
>>DL transport channel	FACH	
>Uplink mapping info		Option 2
>>UL transport channel	USCH	
>>UL Transport Channel Identity	1	
>>MAC logical channel priority	1	
>>RLC size list	N/A	The first TF defined in the Transport Format Set for the transport channel that is used
>Downlink mapping info		
>>DL transport channel	DSCH	
>>DL Transport Channel Identity	1	

13.6b RB information parameters for BCCH mapped to FACH

The following Radio Bearer parameter values apply for BCCH mapped to FACH:

Information element/ Group name	Value	Comment
Downlink RLC mode	TM	
Segmentation indication	FALSE	

13.6c RB information parameters for PCCH mapped to PCH

The following Radio Bearer parameter values apply for PCCH mapped to PCH:

Information element/ Group name	Value	Comment
Downlink RLC mode	TM	
Segmentation indication	FALSE	

13.6d Parameters for BCCH mapped to BCH

The transport format parameters for BCH are specified in [34].

13.6e RB information parameters for signalling radio bearer RB 0 mapped on HS-DSCH and RACH

The following Radio Bearer parameter values apply for signalling radio bearer RB0, if UE and UTRAN support common channel mapping on HS-DSCH:

NOTE: FDD only.

Information element/ Group name	Value	Comment
RLC info		
>Uplink RLC mode	TM	
>>Transmission RLC discard	omitted	Neither discard is used, nor will there be a reset
>>Segmentation indication	FALSE	
>Downlink RLC mode	UM	
RB mapping info		Single multiplexing option
>Uplink mapping info		
>>UL transport channel	RACH	RACH corresponding with selected PRACH
>>RLC size list	N/A	If available the size in the IE 'Additional Dynamic Transport Format Information for CCCH' for the transport channel used. Else the first TF defined in the Transport Format Set for the transport channel is used.
>>MAC logical channel priority	1	
>Downlink mapping info		
>>DL transport channel	HS-DSCH	

13.6f RB information parameters for BCCH mapped to HS-DSCH

The following Radio Bearer parameter values apply for BCCH mapped to HS-DSCH:

NOTE: FDD only.

Information element/ Group name	Value	Comment
Downlink RLC mode	TM	
Segmentation indication	FALSE	
MAC-ehs reordering queue	N/A	No MAC-ehs reordering queue is configured for BCCH reception.

13.6g RB information parameters for PCCH mapped to HS-DSCH

The following Radio Bearer parameter values apply for PCCH mapped to HS-DSCH:

NOTE: FDD only.

Information element/ Group name	Value	Comment
Downlink RLC mode	TM	
Segmentation indication	FALSE	
MAC-ehs reordering queue	N/A	No MAC-ehs reordering queue is configured for PCCH reception.

13.7 Parameter values for default radio configurations

The UE shall support the use of the default radio configurations that are specified in the following.

NOTE 1: These configurations are based on [41] and cover a number of RAB and signalling connection configurations.

In the table that is used to specify the parameter values for these default configurations, the following principles are used:

- Optional IEs that are not used are omitted;
- In case no parameter value is specified in a column, this means the value given the previous (left side) column applies.

NOTE 2: If needed, signalling radio bearer RB4 is established after the completion of handover.

NOTE 3: For each default configuration, the value of FDD, 3.84 Mcps TDD, 7.68 Mcps TDD and 1.28 Mcps TDD parameters are specified. All parameters apply to FDD, 3.84 Mcps TDD, 7.68 Mcps and 1.28 Mcps TDD modes, unless explicitly stated otherwise. It should be noted that in this respect default configurations differ from pre-defined configurations, which only include parameter values for one mode.

NOTE 4: The transport format sizes, indicated in the following table, concern the RLC PDU size, since all configurations concern dedicated channels. The transport block sizes indicated in TS 34.108 are different since these include the size of the MAC header.

NOTE 5: The tabular values included in this subclause, represent the actual IE values as in clause 10, and not the ASN.1 representation of these values.

Configuration	3.4 kbps signalling	13.6 kbps signalling	Unused configuration	12.2 kbps speech + 3.4 kbps signalling
Ref 34.108	2	3		4
Default configuration identity	0	1	2	3
RB INFORMATION				
rb-Identity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3		RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7
rlc-InfoChoice	Rlc-info	Rlc-info		Rlc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM		RB1: UM RB2- RB3: AM RB5-RB7: TM
>>transmissionRLC-DiscardMode	RB1: N/A RB2- RB3: NoDiscard	RB1: N/A RB2- RB3: NoDiscard		RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A
>>>maxDat	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15		RB1: N/A RB2- RB3: 15 RB5- RB7: N/A

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Configuration	3.4 kbps signalling	13.6 kbps signalling	Unused configuration	12.2 kbps speech + 3.4 kbps signalling
>>transmissionWindowSize	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise		RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A
>>timerRST	RB1: N/A RB2- RB3: 300	RB1: N/A RB2- RB3: 300		RB1: N/A RB2- RB3: 300 RB5- RB7: N/A
>>max-RST	RB1: N/A RB2- RB3: 1	RB1: N/A RB2- RB3: 1		RB1: N/A RB2- RB3: 1 RB5- RB7: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below		RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>lastTransmissionPDU-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE		RB2- RB3: FALSE
>>>lastRetransmissionPDU-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE		RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 100		RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A		RB1- RB3: N/A RB5- RB7: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM		RB1: UM RB2- RB3: AM RB5- RB7: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE	RB1: N/A RB2- RB3: TRUE		RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise		RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below		RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100		RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE		RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 300	RB2- RB3: 100		RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A		RB1- RB3: N/A RB5- RB7: FALSE
rb-MappingInfo				
>UL-LogicalChannelMappings	OneLogicalChannel	OneLogicalChannel		OneLogicalChannel
>>ul-TransportChannelType	Dch	Dch		Dch
>>>transportChannelIdentity	RB1- RB3: 1	RB1- RB3: 1		RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3		RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3: configured	RB1- RB3: configured		RB1- RB3: configured RB5- RB7: N/A
>>mac-LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3		RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5
>DL-logicalChannelMappingList				

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Configuration	3.4 kbps signalling	13.6 kbps signalling	Unused configuration	12.2 kbps speech + 3.4 kbps signalling
>>Mapping option 1	One mapping option	One mapping option		One mapping option
>>>dl-TransportChannelType	Dch	Dch		Dch
>>>>transportChannelIdentity	RB1- RB3: 1	RB1- RB3: 1		RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3		RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH				
UL-AddReconfTransChInfoList				
>Uplink transport channel type	dch	dch		dch
>transportChannelIdentity	TrCH1: 1	TrCH1: 1		TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>transportFormatSet	DedicatedTransChTFS	DedicatedTransChTFS		DedicatedTransChTFS
>>dynamicTF-information				
>>>tf0/ tf0,1	TrCH1: (0x144, 1x144)	TrCH1: (0x144, 1x144)		TrCH1: (0x81) TrCH2: (0x 103, 1x103) TrCH3: (0x 60, 1x60) TrCH4: (0x144, 1x144)
>>>>rlcSize	BitMode	BitMode		BitMode
>>>>>sizeType	TrCH1: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 2, part2= 0 (144)		TrCH1: type 1: 81 TrCH2: type 1: 103 TrCH3: type 1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1: Zero, one	TrCH1: Zero, one		TrCH1: Zero TrCH2-4: Zero, one
>>>>logicalChannelList	All	All		All
>>>tf 1	N/A	N/A		TrCH1: (1x39) TrCH2- TrCH4: N/A
>>>>numberOfTransportBlocks				TrCH1: One
>>>>rlc-Size				TrCH1: BitMode
>>>>>sizeType				TrCH1: 1: 39
>>>>numberOfTbSizeList				TrCH1: One
>>>>logicalChannelList				TrCH1: all
>>>tf 2	N/A	N/A		TrCH1: (1x81) TrCH2- TrCH4: N/A
>>>>numberOfTransportBlocks				TrCH1: One
>>>>rlc-Size				TrCH1: BitMode
>>>>>sizeType				TrCH1: type 1: 81
>>>>numberOfTbSizeList				TrCH1: One
>>>>logicalChannelList				TrCH1: all
>>semistaticTF-Information				
>>>tti	TrCH1: 40	TrCH1: 10		TrCH1- TrCH3: 20 TrCH4: 40
>>>channelCodingType	Convolutional	Convolutional		Convolutional
>>>>codingRate	TrCH1: Third	TrCH1: Third		TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third

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Configuration	3.4 kbps signalling	13.6 kbps signalling	Unused configuration	12.2 kbps speech + 3.4 kbps signalling
>>>rateMatchingAttribute	TrCH1: 160	TrCH1: 160		TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160
>>>crc-Size	TrCH1: 16	TrCH1: 16		TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16
DL-AddReconfTransChInfoList				
>Downlink transport channel type	dch	dch		dch
>dl-TransportChannelIdentity (should be as for UL)	TrCH1: 1	TrCH1: 1		TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>tfs-SignallingMode	SameAsUL	SameAsUL		Explicit <Only tf0 on TrCH1 is different and shown below>
>>transportFormatSet				DedicatedTransChTFS
>>>dynamicTF-information				
>>>>tf0/ tf0,1				TrCH1: (1x0)
>>>>rlcSize				bitMode
>>>>>sizeType				TrCH1: type 1: 0
>>>>numberOfTbSizeList				TrCH1: One
>>>>logicalChannelList				All
>>ULTrCH-Id	TrCH1: 1	TrCH1: 1		TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>dch-QualityTarget				
>>bler-QualityValue	TrCH1: $5x10^{-2}$	TrCH1: $5x10^{-2}$		TrCH1: $7x10^{-3}$ TrCH2- TrCH4: Absent
TrCH INFORMATION, COMMON				
ul-CommonTransChInfo				
>tfcs-ID (TDD only)	1	1		1
>sharedChannelIndicator (TDD only)	FALSE	FALSE		FALSE
>tfc-Subset	Absent, not required	Absent, not required		Absent, not required
>ul-TFCS	Normal TFCI signalling	Normal TFCI signalling		Normal TFCI signalling
>>explicitTFCS-ConfigurationMode	Complete	Complete		Complete
>>>ctfcSize	Ctfc2Bit	Ctfc2Bit		Ctfc6Bit
>>>>TFCS representation	Addition	Addition		Addition
>>>>>TFCS list				
>>>>>>TFCS 1	(TF0)	(TF0)		(TF0, TF0, TF0, TF0)
>>>>>>>ctfc	0	0		0
>>>>>>>gainFactorInformation	Computed	Computed		Computed
>>>>>>>>referenceTFCId	0	0		0
>>>>>>TFCS 2	(TF1)	(TF1)		(TF1, TF0, TF0, TF0)
>>>>>>>ctfc	1	1		1
>>>>>>>gainFactorInformation	Signalled	Signalled		Computed
>>>>>>>>βc (FDD only)	11	11		N/A
>>>>>>>>βd	15	15		N/A
>>>>>>>>referenceTFCId	0	0		0

Configuration	3.4 kbps signalling	13.6 kbps signalling	Unused configuration	12.2 kbps speech + 3.4 kbps signalling
>>>>>>TFCS 3				(TF2, TF1, TF1, TF0)
>>>>>>>ctfc				11
>>>>>>>gainFactorInformation				Computed
>>>>>>>>referenceTFCId				0
>>>>>>TFCS 4				(TF0, TF0, TF0, TF1)
>>>>>>>ctfc				12
>>>>>>>gainFactorInformation				Computed
>>>>>>>>βc (FDD only)				N/A
>>>>>>>>βd				N/A
>>>>>>>>referenceTFCId				0
>>>>>>TFCS 5				(TF1, TF0, TF0, TF1)
>>>>>>>ctfc				13
>>>>>>>gainFactorInformation				Computed
>>>>>>>>referenceTFCId				0
>>>>>>TFCS 6				(TF2, TF1, TF1, TF1)
>>>>>>>ctfc				23
>>>>>>>gainFactorInformation				Signalled
>>>>>>>>βc (FDD only)				11
>>>>>>>>βd				15
>>>>>>>>referenceTFCId				0
dl-CommonTransChInfo				
>tfcs-SignallingMode	Same as UL	Same as UL		Same as UL
PhyCH INFORMATION FDD				
UL-DPCH-InfoPredef				
>ul-DPCH-PowerControlInfo				
>>powerControlAlgorithm	Algorithm 1	Algorithm 1		Algorithm 1
>>>tpcStepSize	1 dB	1 dB		1 dB
>tfci-Existence	TRUE	TRUE		TRUE
>puncturingLimit	1	1		0.88
DL-CommonInformationPredef				
>dl-DPCH-InfoCommon				
>>spreadingFactor	256	128		128
>>tfci-Existence	FALSE	FALSE		FALSE
>>pilotBits	4	4		4
>>positionFixed	N/A	N/A		Fixed
PhyCH INFORMATION 3.84/7.68 Mcps TDD				
UL-DPCH-InfoPredef				
>ul-DPCH-PowerControlInfo				
>>dpch-ConstantValue	0	0		0
>commonTimeslotInfo				
>>secondInterleavingMode	frameRelated	frameRelated		frameRelated
>>tfci-Coding	4	4		16
>>puncturingLimit	1	0.92		0.88
>>repetitionPeriodAndLength	repetitionPeriod1	repetitionPeriod1		repetitionPeriod1

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Configuration	3.4 kbps signalling	13.6 kbps signalling	Unused configuration	12.2 kbps speech + 3.4 kbps signalling
DL-CommonInformationPredef				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMode	frameRelated	frameRelated		frameRelated
>>>tfci-Coding	4	4		16
>>>puncturingLimit	1	0.92		0.92
>>>repetitionPeriodAndLength	repetitionPeriod1	repetitionPeriod1		repetitionPeriod1
PhyCH INFORMATION 1.28 Mcps TDD				
UL-DPCH-InfoPredef				
>commonTimeslotInfo				
>>secondInterleavingMode	frameRelated	frameRelated		frameRelated
>>tfci-Coding	4	4		16
>>puncturingLimit	1	0.64		0.60
>>repetitionPeriodAndLength	repetitionPeriod1	repetitionPeriod1		repetitionPeriod1
DL-CommonInformationPredef				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMode	frameRelated	frameRelated		frameRelated
>>>tfci-Coding	4	4		16
>>>puncturingLimit	1	0.64		0.60
>>>repetitionPeriodAndLength	repetitionPeriod1	repetitionPeriod1		repetitionPeriod1

Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS-data + 3.4 kbps signalling	64kbps conv. CS-data + 3.4 kbps signalling	14.4 kbps streaming CS-data + 3.4 kbps signalling
Ref 34.108	12	14	13	15
Default configuration identity	4	5	6	7
RB INFORMATION				
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5
rlc-InfoChoice	Rlc-info	Rlc-info	Rlc-info	Rlc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5: TM
>>transmissionRLC-DiscardMode	RB1: N/A RB2- RB3: NoDiscard RB5: N/A	RB1: N/A RB2- RB3: NoDiscard RB5: N/A	RB1: N/A RB2- RB3: NoDiscard RB5: N/A	RB1: N/A RB2- RB3: NoDiscard RB5: N/A
>>>maxDat	RB1: N/A RB2- RB3: 15 RB5: N/A	RB1: N/A RB2- RB3: 15 RB5: N/A	RB1: N/A RB2- RB3: 15 RB5: N/A	RB1: N/A RB2- RB3: 15 RB5: N/A
>>transmissionWindowSize	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A
>>timerRST	RB1: N/A RB2- RB3: 300 RB5: N/A	RB1: N/A RB2- RB3: 300 RB5: N/A	RB1: N/A RB2- RB3: 300 RB5: N/A	RB1: N/A RB2- RB3: 300 RB5: N/A

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Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS-data + 3.4 kbps signalling	64kbps conv. CS-data + 3.4 kbps signalling	14.4 kbps streaming CS-data + 3.4 kbps signalling
>>max-RST	RB1: N/A RB2- RB3: 1 RB5: N/A	RB1: N/A RB2- RB3: 1 RB5: N/A	RB1: N/A RB2- RB3: 1 RB5: N/A	RB1: N/A RB2- RB3: 1 RB5: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5: N/A
>>>lastTransmissionPDU-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPDU-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE RB5: N/A	RB1: N/A RB2- RB3: TRUE RB5: N/A	RB1: N/A RB2- RB3: TRUE RB5: N/A	RB1: N/A RB2- RB3: TRUE RB5: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE
rb-MappingInfo				
>UL-LogicalChannelMappings	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel
>>ul-TransportChannelType	Dch	Dch	Dch	Dch
>>>transportChannelIdentity	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A
>>rlc-SizeList	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5: N/A
>>mac-LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5: 5
>DL-logicalChannelMappingList				
>>Mapping option 1	One mapping option	One mapping option	One mapping option	One mapping option
>>>dl-TransportChannelType	Dch	Dch	Dch	Dch
>>>>transportChannelIdentity	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A
TrCH INFORMATION PER TrCH				

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Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS-data + 3.4 kbps signalling	64kbps conv. CS-data + 3.4 kbps signalling	14.4 kbps streaming CS-data + 3.4 kbps signalling
UL-AddReconfTransChInfoList				
>Uplink transport channel type	dch	dch	dch	dch
>transportChannelIdentity	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2
>transportFormatSet	DedicatedTransChTFS	DedicatedTransChTFS	DedicatedTransChTFS	DedicatedTransChTFS
>>dynamicTF-information				
>>>tf0/ tf0,1	TrCH1: (0x576, 1x576, 2x576) TrCH2: (0x144, 1x144)	TrCH1: (0x640, 1x640) TrCH2: (0x144, 1x144)	TrCH1: (0x640, 2x640) TrCH2: (0x144, 1x144)	TrCH1: (0x576, 1x576) TrCH2: (0x144, 1x144)
>>>>rlcSize	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode
>>>>>sizeType	TrCH1: type 2, part1= 9, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 11, part2= 2 (640) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 11, part2= 2 (640) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 9, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1: Zero,1, 2 TrCH2: Zero, one	TrCH1: Zero, one TrCH2: Zero, one	TrCH1: Zero, 2 TrCH2: Zero, one	TrCH1: Zero, one, TrCH2: Zero, one
>>>>logicalChannelList	All	All	All	All
>>semiStaticTF-Information				
>>>tti	TrCH1: 40 TrCH2: 40	TrCH1: 20 TrCH2: 40	TrCH1: 20 TrCH2: 40	TrCH1: 40 TrCH2: 40
>>>channelCodingType	TrCH1: Turbo TrCH2: Convolutional	TrCH1: Turbo TrCH2: Convolutional	TrCH1: Turbo TrCH2: Convolutional	TrCH1: Turbo TrCH2: Convolutional
>>>>codingRate	TrCH1: N/A TrCH2: Third	TrCH1: N/A TrCH2: Third	TrCH1: N/A TrCH2: Third	TrCH1: N/A TrCH2: Third
>>>rateMatchingAttribute	TrCH1: 180 TrCH2: 160	TrCH1: 185 TrCH2: 160	TrCH1: 170 TrCH2: 160	TrCH1: 165 TrCH2: 160
>>>crc-Size	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16
DL-AddReconfTransChInfoList				
>Downlink transport channel type	dch	dch	dch	dch
>dl-TransportChannelIdentity (should be as for UL)	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2
>tfs-SignallingMode	SameAsUL	SameAsUL	SameAsUL	SameAsUL
>>transportFormatSet				
>>>dynamicTF-information				
>>>>tf0/ tf0,1				
>>>>rlcSize				
>>>>>sizeType				
>>>>numberOfTbSizeList				
>>>>logicalChannelList				
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2
>dch-QualityTarget				
>>bler-QualityValue	TrCH1: $2x10^{-3}$ TrCH2: Absent	TrCH1: $2x10^{-3}$ TrCH2: Absent	TrCH1: $2x10^{-3}$ TrCH2: Absent	TrCH1: $1x10^{-2}$ TrCH2: Absent
TrCH INFORMATION, COMMON				
ul-CommonTransChInfo				
>tfcs-ID (TDD only)	1	1	1	1

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Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS-data + 3.4 kbps signalling	64kbps conv. CS-data + 3.4 kbps signalling	14.4 kbps streaming CS-data + 3.4 kbps signalling
>sharedChannelIndicator (TDD only)	FALSE	FALSE	FALSE	FALSE
>tfc-Subset	Absent, not required	Absent, not required	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling
>>explicitTFCS-ConfigurationMode	Complete	Complete	Complete	Complete
>>>ctfcSize	Ctfc4Bit	Ctfc2Bit	Ctfc2Bit	Ctfc4Bit
>>>>TFCS representation	Addition	Addition	Addition	Addition
>>>>>TFCS list				
>>>>>>TFCS 1	(TF0, TF0)	(TF0, TF0)	(TF0, TF0)	(TF0, TF0)
>>>>>>>ctfc	0	0	0	0
>>>>>>>gainFactorInformation	Computed	Computed	Computed	Computed
>>>>>>>>referenceTFCId	0	0	0	0
>>>>>>TFCS 2	(TF1, TF0)	(TF1, TF0)	(TF1, TF0)	(TF1, TF0)
>>>>>>>ctfc	1	1	1	1
>>>>>>>gainFactorInformation	Computed	Computed	Computed	Computed
>>>>>>>>βc (FDD only)	N/A	N/A	N/A	N/A
>>>>>>>>βd	N/A	N/A	N/A	N/A
>>>>>>>>referenceTFCId	0	0	0	0
>>>>>>TFCS 3	(TF2, TF0)	(TF0, TF1)	(TF0, TF1)	(TF0, TF1)
>>>>>>>ctfc	2	2	2	2
>>>>>>>gainFactorInformation	Computed	Computed	Computed	Computed
>>>>>>>>referenceTFCId	0	0	0	0
>>>>>>TFCS 4	(TF0, TF1)	(TF1, TF1)	(TF1, TF1)	(TF1, TF1)
>>>>>>>ctfc	3	3	3	3
>>>>>>>gainFactorInformation	Computed	Signalled	Signalled	Signalled
>>>>>>>>βc (FDD only)	N/A	8	8	11
>>>>>>>>βd	N/A	15	15	15
>>>>>>>>referenceTFCId	0	0	0	0
>>>>>>TFCS 5	(TF1, TF1)	N/A	N/A	
>>>>>>>ctfc	4			
>>>>>>>gainFactorInformation	Computed			
>>>>>>>>referenceTFCId	0			
>>>>>>TFCS 6	(TF2, TF1)	N/A	N/A	
>>>>>>>ctfc	5			
>>>>>>>gainFactorInformation	Signalled			
>>>>>>>>βc (FDD only)	8			
>>>>>>>>βd	15			
>>>>>>>>referenceTFCId	0			
>>>>>>TFCS 7				
>>>>>>>ctfc				
>>>>>>>gainFactorInformation				
>>>>>>>>referenceTFCId				
>>>>>>TFCS 8				
>>>>>>>ctfc				
>>>>>>>gainFactorInformation				
>>>>>>>>referenceTFCId				
>>>>>>TFCS 9				
>>>>>>>ctfc				
>>>>>>>gainFactorInformation				

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Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS-data + 3.4 kbps signalling	64kbps conv. CS-data + 3.4 kbps signalling	14.4 kbps streaming CS-data + 3.4 kbps signalling
>>>>>>>>referenceTFCId				
>>>>>>TFCS 10				
>>>>>>>ctfc				
>>>>>>>gainFactorInformation				
>>>>>>>>βc (FDD only)				
>>>>>>>>βd				
>>>>>>>>referenceTFCId				
dl-CommonTransChInfo				
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL	Same as UL
PhyCH INFORMATION FDD				
UL-DPCH-InfoPredef				
>ul-DPCH-PowerControlInfo				
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize	1 dB	1 dB	1 dB	1 dB
>tfci-Existence	TRUE	TRUE	TRUE	TRUE
>puncturingLimit	0.92	0.8	0.92	1
DL-CommonInformationPredef				
>dl-DPCH-InfoCommon				
>>spreadingFactor	64	64	32	128
>>tfci-Existence	TRUE	TRUE	TRUE	TRUE
>>pilotBits	8	8	8	8
>>positionFixed	Flexible	Flexible	Flexible	Flexible
PhyCH INFORMATION 3.84/7.68 Mcps TDD				
UL-DPCH-InfoPredef				
>ul-DPCH-PowerControlInfo				
>>dpch-ConstantValue	0	0	0	0
>commonTimeslotInfo				
>>secondInterleavingMode	frameRelated	frameRelated	frameRelated	frameRelated
>>tfci-Coding	16	8	8	8
>>puncturingLimit	0.44	0.8	0.56	0.8
>>repetitionPeriodAndLength	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL-CommonInformationPredef				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMode	frameRelated	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	16	8	8	8
>>>puncturingLimit	0.44	0.64	0.56	0.8
>>>repetitionPeriodAndLength	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
PhyCH INFORMATION 1.28 Mcps TDD				
UL-DPCH-InfoPredef				
>commonTimeslotInfo				
>>secondInterleavingMode	frameRelated	frameRelated	frameRelated	frameRelated
>>tfci-Coding	16	8	8	8
>>puncturingLimit	0.64	0.60	0.64	1

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Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS-data + 3.4 kbps signalling	64kbps conv. CS-data + 3.4 kbps signalling	14.4 kbps streaming CS-data + 3.4 kbps signalling
>>repetitionPeriodAndLength	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL-CommonInformationPredef				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMode	frameRelated	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	16	8	8	8
>>>puncturingLimit	0.64	0.60	0.64	0.88
>>>repetitionPeriodAndLength	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1

Configuration	28.8 kbps streaming CS-data + 3.4 kbps signalling	57.6 kbps streaming CS-data + 3.4 kbps signalling	12.2/7.95/5.9/4.75 kbps speech + 3.4 kbps signalling
Ref 34.108	16	17	4a
Default configuration identity	8	9	10
RB INFORMATION			
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7
rlc-InfoChoice	Rlc-info	Rlc-info	Rlc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5-RB7: TM
>>transmissionRLC-DiscardMode	RB1: N/A RB2- RB3: NoDiscard RB5: N/A	RB1: N/A RB2- RB3: NoDiscard RB5: N/A	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A
>>>maxDat	RB1: N/A RB2- RB3: 15 RB5: N/A	RB1: N/A RB2- RB3: 15 RB5: N/A	RB1: N/A RB2- RB3: 15 RB5- RB7: N/A
>>transmissionWindowSize	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A
>>timerRST	RB1: N/A RB2- RB3: 300 RB5: N/A	RB1: N/A RB2- RB3: 300 RB5: N/A	RB1: N/A RB2- RB3: 300 RB5- RB7: N/A
>>max-RST	RB1: N/A RB2- RB3: 1 RB5: N/A	RB1: N/A RB2- RB3: 1 RB5: N/A	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>lastTransmissionPDU-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPDU-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5- RB7: FALSE

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Configuration	28.8 kbps streaming CS-data + 3.4 kbps signalling	57.6 kbps streaming CS-data + 3.4 kbps signalling	12.2/7.95/5.9/4.75 kbps speech + 3.4 kbps signalling
>dl-RLC-Mode	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5- RB7: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE RB5: N/A	RB1: N/A RB2- RB3: TRUE RB5: N/A	RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
rb-MappingInfo			
>UL-LogicalChannelMappings	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel
>>ul-TransportChannelType	Dch	Dch	Dch
>>>transportChannelIdentity	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5- RB7: N/A
>>mac-LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5
>DL-logicalChannelMappingList			
>>Mapping option 1	One mapping option	One mapping option	One mapping option
>>>dl-TransportChannelType	Dch	Dch	Dch
>>>>transportChannelIdentity	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH			
UL-AddReconfTransChInfoList			
>Uplink transport channel type	dch	dch	dch
>transportChannelIdentity	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>transportFormatSet	DedicatedTransChTFS	DedicatedTransChTFS	DedicatedTransChTFS
>>dynamicTF-information			

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Configuration	28.8 kbps streaming CS-data + 3.4 kbps signalling	57.6 kbps streaming CS-data + 3.4 kbps signalling	12.2/7.95/5.9/4.75 kbps speech + 3.4 kbps signalling
>>>tf0/ tf0,1	TrCH1: (0x576, 1x576, 2x576) TrCH2: (0x144, 1x144)	TrCH1: (0x576, 1x576, 2x576, 3x576, 4x576) TrCH2: (0x144, 1x144)	TrCH1: (0x81) TrCH2: (0x 103 TrCH3: (0x 60) TrCH4: (0x144)
>>>>rlcSize	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode	BitMode
>>>>>sizeType	TrCH1: type 2, part1= 9, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 9, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 81 TrCH2: type 1: 103 TrCH3: type 1: 60 TrCH4: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1: Zero, one, 2 TrCH2: Zero, one	TrCH1: Zero, one, 2, 3, 4 TrCH2: Zero, one	TrCH1-4: Zero
>>>>logicalChannelList	All	All	All
>>>tf 1			TrCH1: (1x39) TrCH2: (1x53) TrCH3: (1x60) TrCH4: (1x144)
>>>>numberOfTransportBlocks			TrCH1-4: One
>>>>rlc-Size			TrCH1-3: BitMode
>>>>>sizeType			TrCH1: type 1: 39 TrCH2: type 1: 53 TrCH3: type 1: 60 TrCH4: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList			TrCH1-4: One
>>>>logicalChannelList			TrCH1-4: all
>>>tf 2			TrCH1: (1x42) TrCH2: (1x63) TrCH3- TrCH4: N/A
>>>>numberOfTransportBlocks			TrCH1-2: One
>>>>rlc-Size			TrCH1: BitMode
>>>>>sizeType			TrCH1: type 1: 42 TrCH2: type 1: 63
>>>>numberOfTbSizeList			TrCH1-2: One
>>>>logicalChannelList			TrCH1: all
>>>tf 3			TrCH1: (1x55) TrCH2: (1x84) TrCH3- TrCH4: N/A
>>>>numberOfTransportBlocks			TrCH1-2: One
>>>>rlc-Size			TrCH1: BitMode
>>>>>sizeType			TrCH1: type 1: 55 TrCH2: type 1: 84
>>>>numberOfTbSizeList			TrCH1-2: One
>>>>logicalChannelList			TrCH1: all
>>>tf 4			TrCH1: (1x75) TrCH2: (1x103) TrCH3- TrCH4: N/A
>>>>numberOfTransportBlocks			TrCH1-2: One
>>>>rlc-Size			TrCH1: BitMode
>>>>>sizeType			TrCH1: type 1: 75 TrCH2: type 1: 103
>>>>numberOfTbSizeList			TrCH1-2: One
>>>>logicalChannelList			TrCH1: all

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Configuration	28.8 kbps streaming CS-data + 3.4 kbps signalling	57.6 kbps streaming CS-data + 3.4 kbps signalling	12.2/7.95/5.9/4.75 kbps speech + 3.4 kbps signalling
>>>tf 5			TrCH1: (1x81) TrCH2- TrCH4: N/A
>>>>numberOfTransportBlocks			TrCH1: One
>>>>rlc-Size			TrCH1: BitMode
>>>>>sizeType			TrCH1: type 1: 81
>>>>numberOfTbSizeList			TrCH1: One
>>>>logicalChannelList			TrCH1: all
>>semiStaticTF-Information			
>>>tti	TrCH1: 40 TrCH2: 40	TrCH1: 40 TrCH2: 40	TrCH1- TrCH3: 20 TrCH4: 40
>>>channelCodingType	TrCH1: Turbo TrCH2: Convolutional	TrCH1: Turbo TrCH2: Convolutional	Convolutional
>>>>codingRate	TrCH1: N/A TrCH2: Third	TrCH1: N/A TrCH2: Third	TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third
>>>rateMatchingAttribute	TrCH1: 155 TrCH2: 160	TrCH1: 145 TrCH2: 160	TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160
>>>crc-Size	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16	TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16
DL-AddReconfTransChInfoList			
>Downlink transport channel type	dch	dch	dch
>dl-TransportChannelIdentity (should be as for UL)	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>tfs-SignallingMode	SameAsUL	SameAsUL	Independent <Only tf0 on TrCH1 is different and shown below>
>>transportFormatSet			DedicatedTransChTFS
>>>dynamicTF-information			
>>>>tf0/ tf0,1			TrCH1: (1x0)
>>>>rlcSize			bitMode
>>>>>sizeType			TrCH1: type 1: 0
>>>>numberOfTbSizeList			TrCH1: One
>>>>logicalChannelList			All
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>dch-QualityTarget			
>>bler-QualityValue	TrCH1: $1x10^{-2}$ TrCH2: Absent	TrCH1: $1x10^{-2}$ TrCH2: Absent	TrCH1: $7x10^{-3}$ TrCH2- TrCH4: Absent
TrCH INFORMATION, COMMON			
ul-CommonTransChInfo			
>tfcs-ID (TDD only)	1	1	1
>sharedChannelIndicator (TDD only)	FALSE	FALSE	FALSE
>tfc-Subset	Absent, not required	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling

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Configuration	28.8 kbps streaming CS-data + 3.4 kbps signalling	57.6 kbps streaming CS-data + 3.4 kbps signalling	12.2/7.95/5.9/4.75 kbps speech + 3.4 kbps signalling
>>explicitTFCS-ConfigurationMode	Complete	Complete	Complete
>>>ctfcSize	Ctfc4Bit	Ctfc4Bit	Ctfc8Bit
>>>>TFCS representation	Addition	Addition	Addition
>>>>>TFCS list			
>>>>>>TFCS 1	(TF0, TF0)	(TF0, TF0)	(TF0, TF0, TF0, TF0)
>>>>>>>ctfc	0	0	0
>>>>>>>gainFactorInformation	Computed	Computed	Computed
>>>>>>>>referenceTFCId	0	0	0
>>>>>>TFCS 2	(TF1, TF0)	(TF1, TF0)	(TF1, TF0, TF0, TF0)
>>>>>>>ctfc	1	1	1
>>>>>>>gainFactorInformation	Computed	Computed	Computed
>>>>>>>>βc (FDD only)	N/A	N/A	N/A
>>>>>>>>βd	N/A	N/A	N/A
>>>>>>>>referenceTFCId	0	0	0
>>>>>>TFCS 3	(TF2, TF0)	(TF2, TF0)	(TF2, TF1, TF0, TF0)
>>>>>>>ctfc	2	2	8
>>>>>>>gainFactorInformation	Computed	Computed	Computed
>>>>>>>>referenceTFCId	0	0	0
>>>>>>TFCS 4	(TF0, TF1)	(TF3, TF0)	(TF3, TF2, TF0, TF0)
>>>>>>>ctfc	3	3	15
>>>>>>>gainFactorInformation	Computed	Computed	Computed
>>>>>>>>βc (FDD only)	N/A	N/A	N/A
>>>>>>>>βd	N/A	N/A	N/A
>>>>>>>>referenceTFCId	0	0	0
>>>>>>TFCS 5	(TF1, TF1)	(TF4, TF0)	(TF4, TF3, TF0, TF0)
>>>>>>>ctfc	4	4	22
>>>>>>>gainFactorInformation	Computed	Computed	Computed
>>>>>>>>referenceTFCId	0	0	0
>>>>>>TFCS 6	(TF2, TF1)	(TF0, TF1)	(TF5, TF4, TF1, TF0)
>>>>>>>ctfc	5	5	59
>>>>>>>gainFactorInformation	Signalled	Computed	Computed
>>>>>>>>βc (FDD only)	8	N/A	N/A
>>>>>>>>βd	15	N/A	N/A
>>>>>>>>referenceTFCId	0	0	0
>>>>>>TFCS 7		(TF1, TF1)	(TF0,TF0,TF0,TF1)
>>>>>>>ctfc		6	60
>>>>>>>gainFactorInformation		Computed	Computed
>>>>>>>>referenceTFCId		0	0
>>>>>>TFCS 8		(TF2, TF1)	(TF1,TF0,TF0,TF1)
>>>>>>>ctfc		7	61
>>>>>>>gainFactorInformation		Computed	Computed
>>>>>>>>referenceTFCId		0	0
>>>>>>TFCS 9		(TF3, TF1)	(TF2,TF1,TF0,TF1)
>>>>>>>ctfc		8	68

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Configuration	28.8 kbps streaming CS-data + 3.4 kbps signalling	57.6 kbps streaming CS-data + 3.4 kbps signalling	12.2/7.95/5.9/4.75 kbps speech + 3.4 kbps signalling
>>>>>>>gainFactorInformation		Computed	Computed
>>>>>>>>referenceTFCId		0	0
>>>>>>TFCS 10		(TF4, TF1)	(TF3,TF2,TF0,TF1)
>>>>>>>ctfc		9	75
>>>>>>>gainFactorInformation		Signalled	Computed
>>>>>>>>βc (FDD only)		8	N/A
>>>>>>>>βd		15	N/A
>>>>>>>>referenceTFCId		0	0
>>>>>>TFCS 11			(TF4,TF3,TF0,TF1)
>>>>>>>ctfc			82
>>>>>>>gainFactorInformation			Computed
>>>>>>>>referenceTFCId			0
>>>>>>TFCS 12			(TF5,TF4,TF1,TF1)
>>>>>>>ctfc			119
>>>>>>>gainFactorInformation			Signalled
>>>>>>>>βc (FDD only)			11
>>>>>>>>βd			15
>>>>>>>>referenceTFCId			0
dl-CommonTransChInfo			
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL
PhyCH INFORMATION FDD			
UL-DPCH-InfoPredef			
>ul-DPCH-PowerControlInfo			
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize	1 dB	1 dB	1 dB
>tfci-Existence	TRUE	TRUE	TRUE
>puncturingLimit	1	1	0.88
DL-CommonInformationPredef			
>dl-DPCH-InfoCommon			
>>spreadingFactor	64	32	128
>>tfci-Existence	TRUE	TRUE	FALSE
>>pilotBits	8	8	4
>>positionFixed	Flexible	Flexible	Fixed
PhyCH INFORMATION 3.84/7.68 Mcps TDD			
UL-DPCH-InfoPredef			
>ul-DPCH-PowerControlInfo			
>>dpch-ConstantValue	0	0	0
>commonTimeslotInfo			
>>secondInterleavingMode	frameRelated	frameRelated	frameRelated
>>tfci-Coding	16	16	16
>>puncturingLimit	0.44	0.48	0.88
>>repetitionPeriodAndLength	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL-CommonInformationPredef			
>dl-DPCH-InfoCommon			
>>commonTimeslotInfo			

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Configuration	28.8 kbps streaming CS-data + 3.4 kbps signalling	57.6 kbps streaming CS-data + 3.4 kbps signalling	12.2/7.95/5.9/4.75 kbps speech + 3.4 kbps signalling
>>>secondInterleavingMode	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	16	16	16
>>>puncturingLimit	0.44	0.48	0.92
>>>repetitionPeriodAndLength	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
PhyCH INFORMATION 1.28 Mcps TDD			
UL-DPCH-InfoPredef			
>commonTimeslotInfo			
>>secondInterleavingMode	frameRelated	frameRelated	
>>tfci-Coding	16	16	
>>puncturingLimit	0.64	0.72	
>>repetitionPeriodAndLength	repetitionPeriod1	repetitionPeriod1	
DL-CommonInformationPredef			
>dl-DPCH-InfoCommon			
>>commonTimeslotInfo			
>>>secondInterleavingMode	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	16	16	16
>>>puncturingLimit	0.64	0.72	0.92
>>>repetitionPeriodAndLength	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1

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Configuration	10.2/6.7/5.9/4.75 kbps speech + 3.4 kbps signalling + 0.15 kbps SRB#5	7.4/6.7/5.9/4.75 kbps speech + 3.4 kbps signalling + 0.15 kbps SRB#5
Ref 34.108	5a	7a
Default configuration identity	11	12
RB INFORMATION		
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7, RB8: 8	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7
rlc-InfoChoice	Rlc-info	Rlc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM RB5-RB7: TM	RB1: UM RB2- RB3: AM RB5-RB6: TM
>>transmissionRLC-DiscardMode	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A	RB1: N/A RB2- RB3: NoDiscard RB5- RB6: N/A
>>>maxDat	RB1: N/A RB2- RB3: 15 RB5- RB7: N/A	RB1: N/A RB2- RB3: 15 RB5- RB6: N/A
>>transmissionWindowSize	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB6: N/A
>>timerRST	RB1: N/A RB2- RB3: 300 RB5- RB7: N/A	RB1: N/A RB2- RB3: 300 RB5- RB6: N/A
>>max-RST	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A	RB1: N/A RB2- RB3: 1 RB5- RB6: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below RB5- RB7: N/A	RB1: N/A RB2- RB3: as below RB5- RB6: N/A
>>>lastTransmissionPDU-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPDU-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A RB5- RB7: FALSE	RB1- RB3: N/A RB5- RB6: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM RB5- RB7: TM RB8: TM	RB1: UM RB2- RB3: AM RB5- RB6: TM RB7: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE RB5- RB8: N/A	RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB8: N/A	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below RB5- RB8: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 300	RB2- RB3: 300

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>>segmentationIndication	RB1- RB3: N/A RB5- RB8: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
rb-MappingInfo		
>UL-LogicalChannelMappings	OneLogicalChannel	OneLogicalChannel
>>ul-TransportChannelType	Dch	Dch
>>>transportChannelIdentity	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3,	RB1- RB3: 3 RB5: 1, RB6: 2
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: N/A
>>rlc-SizeList	RB1- RB3: configured RB5- RB7: N/A	RB1- RB3: configured RB5- RB6: N/A
>>mac-LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: 5
>DL-logicalChannelMappingList		
>>Mapping option 1	One mapping option	One mapping option
>>>dl-TransportChannelType	Dch	Dch
>>>>transportChannelIdentity	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3, RB8: 5	RB1- RB3: 3 RB5: 1, RB6: 2, RB7:4
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5- RB8: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH		
UL-AddReconfTransChInfoList		
>Uplink transport channel type	dch	dch
>transportChannelIdentity	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4	TrCH1: 1, TrCH2: 2, TrCH3: 3
>transportFormatSet	DedicatedTransChTFS	DedicatedTransChTFS
>>dynamicTF-information		
>>>tf0/ tf0,1	TrCH1: (0x65) TrCH2: (0x 99) TrCH3: (0x 40, 1x40) TrCH4: (0x144, 1x144)	TrCH1: (0x61) TrCH2: (0x 87) TrCH3: (0x 144, 1x144)
>>>>rlcSize	BitMode	BitMode
>>>>>sizeType	TrCH1: type 1: 65 TrCH2: type 1: 99 TrCH3: type 1: 40 TrCH4: 2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 61 TrCH2: type 1: 87 TrCH3: 2: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1-2: Zero TrCH3-4: Zero, one	TrCH1-2: Zero TrCH3: Zero, one
>>>>logicalChannelList	All	All
>>>tf 1	TrCH1: (1x39) TrCH2: (1x 53) TrCH3- TrCH4: N/A	TrCH1: (1x39) TrCH2: (1x53) TrCH3: N/A
>>>>numberOfTransportBlocks	TrCH1: One TrCH2: One	TrCH1: One TrCH2: One
>>>>rlc-Size	TrCH1-2: BitMode	TrCH1-2: BitMode
>>>>>sizeType	TrCH1: 1: 39 TrCH2: 1: 53	TrCH1: 1: 39 TrCH1: 1: 53
>>>>numberOfTbSizeList	TrCH1-2: One	TrCH1-2: One

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>>>>logicalChannelList	TrCH1: all	TrCH1: all
>>>tf 2	TrCH1: (1x42) TrCH2: (1x63) TrCH3- TrCH4: N/A	TrCH1: (1x42) TrCH2: (1x63) TrCH3: N/A
>>>>numberOfTransportBlocks	TrCH1: One TrCh2: One	TrCH1: One TrCh2: One
>>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode
>>>>>sizeType	TrCH1: type 1: 42 TrCH2: type 1: 63	TrCH1: type 1: 42 TrCH2: type 1: 63
>>>>numberOfTbSizeList	TrCH1: One TrCH2: One	TrCH1: One TrCH2: One
>>>>logicalChannelList	TrCH1: all TrCH2: all	TrCH1: all TrCH2: all
>>>tf 3	TrCH1: (1x55) TrCH2: (1x76) TrCH3- TrCH4: N/A	TrCH1: (1x55) TrCH2: (1x76) TrCH3: N/A
>>>>numberOfTransportBlocks	TrCH1: One TrCh2: One	TrCH1: One TrCh2: One
>>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode
>>>>>sizeType	TrCH1: type 1: 55 TrCH2: type 1: 76	TrCH1: type 1: 55 TrCH2: type 1: 76
>>>>numberOfTbSizeList	TrCH1: One TrCH2: One	TrCH1: One TrCH2: One
>>>>logicalChannelList	TrCH1: all TrCH2: all	TrCH1: all TrCH2: all
>>>tf 4	TrCH1: (1x58) TrCH2: (1x99) TrCH3- TrCH4: N/A	TrCH1: (1x58) TrCH2: (1x87) TrCH3: N/A
>>>>numberOfTransportBlocks	TrCH1: One TrCh2: One	TrCH1: One TrCh2: One
>>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode
>>>>>sizeType	TrCH1: type 1: 58 TrCH2: type 1: 99	TrCH1: type 1: 58 TrCH2: type 1: 87
>>>>numberOfTbSizeList	TrCH1: One TrCH2: One	TrCH1: One TrCH2: One
>>>>logicalChannelList	TrCH1: all TrCH2: all	TrCH1: all TrCH2: all
>>>tf 5	TrCH1: (1x65) TrCH2- TrCH4: N/A	TrCH1: (1x61) TrCH2- TrCH4: N/A
>>>>numberOfTransportBlocks	TrCH1: One	TrCH1: One
>>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode
>>>>>sizeType	TrCH1: type 1: 65	TrCH1: type 1: 61
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
>>>>logicalChannelList	TrCH1: all	TrCH1: all
>>semistaticTF-Information		
>>>tti	TrCH1- TrCH3: 20 TrCH4: 40	TrCH1- TrCH2: 20 TrCH3: 40
>>>channelCodingType	Convolutional	Convolutional
>>>>codingRate	TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third	TrCH1- TrCH2: Third TrCH3: Third
>>>rateMatchingAttribute	TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160	TrCH1: 200 TrCH2: 190 TrCH3: 160
>>>crc-Size	TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16	TrCH1: 12 TrCH2: 0 TrCH3: 16
DL-AddReconfTransChInfoList		
>Downlink transport channel type	dch	dch
>dl-TransportChannelIdentity		

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>tfs-SignallingMode	Independent <Only tf0 on TrCH1 and tf0/tf1 on TrCH5 are different and shown below>	Independent <Only tf0 on TrCH1 and tf0/tf1 on TrCH4 are different and shown below>
>>transportFormatSet		
>>>dynamicTF-information		
>>>>tf0/ tf0,1	TrCH1: (1x0) TrCH5: (0x3, 1x3)	TrCH1: (1x0) TrCH4: (0x3, 1x3)
>>>>rlcSize	BitMode	bitMode
>>>>>sizeType	TrCH1: type 1: 0 TrCH5: type 1: 3	TrCH1: type 1: 0 TrCH4: type 1: 3
>>>>numberOfTbSizeList	TrCH1: One TrCH5: Zero, one	TrCH1: One TrCH4: Zero, one
>>>>logicalChannelList	All	All
>>>semistaticTF-Information	same as UL except for TrCH5	same as UL except for TrCH4
>>>>tti	TrCH5: 20	TrCH4: 20
>>>>channelCodingType	Convolutional	Convolutional
>>>>>codingRate	TrCH5: Third	TrCH4: Third
>>>>rateMatchingAttribute	TrCH5: 200	TrCH4: 200
>>>>crc-Size	TrCH5: 12	TrCH4: 12
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4,	TrCH1: 1, TrCH2: 2, TrCH3: 3
>dch-QualityTarget		
>>bler-QualityValue	TrCH1: $7x10^{-3}$ TrCH2- TrCH5: Absent	TrCH1: $7x10^{-3}$ TrCH2- TrCH4: Absent
TrCH INFORMATION, COMMON		
ul-CommonTransChInfo		
>tfcs-ID (TDD only)	1	1
>sharedChannelIndicator (TDD only)	FALSE	FALSE
> tfc-Subset	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI signalling	Normal TFCI signalling
>>explicitTFCS-ConfigurationMode	Complete	Complete
>>>ctfcSize	Ctfc8Bit	Ctfc6Bit
>>>>TFCS representation	Addition	Addition
>>>>>TFC list		
>>>>>>TFC 1	(TF0, TF0, TF0, TF0)	(TF0, TF0, TF0)
>>>>>>>ctfc	0	0
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 2	(TF1, TF0, TF0, TF0)	(TF1, TF0, TF0)
>>>>>>>ctfc	1	1
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>βc (FDD only)	N/A	N/A
>>>>>>>>βd	N/A	N/A
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 3	(TF2, TF1, TF0, TF0)	(TF2, TF1, TF0)
>>>>>>>ctfc	8	8
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 4	(TF3, TF2, TF0, TF0)	(TF3, TF2, TF0)
>>>>>>>ctfc	15	15

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>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>βc (FDD only)		
>>>>>>>>βd		
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 5	(TF4, TF3, TF0, TF0)	(TF4, TF3, TF0)
>>>>>>>ctfc	22	22
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 6	(TF5, TF4, TF1, TF0)	(TF5, TF4, TF0)
>>>>>>>ctfc	59	29
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>βc (FDD only)		
>>>>>>>>βd		
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 7	(TF0, TF0, TF0, TF1)	(TF0, TF0, TF1)
>>>>>>>ctfc	60	30
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 8	(TF1, TF0, TF0, TF1)	(TF1, TF0, TF1)
>>>>>>>ctfc	61	31
>>>>>>>gainFactorInformation	computed	computed
>>>>>>>>βc (FDD only)		
>>>>>>>>βd		
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 9	(TF2, TF1, TF0, TF1)	(TF2, TF1, TF1)
>>>>>>>ctfc	68	38
>>>>>>>gainFactorInformation	computed	computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 10	(TF3, TF2, TF0, TF1)	(TF3, TF2, TF1)
>>>>>>>ctfc	75	45
>>>>>>>gainFactorInformation	computed	computed
>>>>>>>>βc (FDD only)		
>>>>>>>>βd		
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 11	(TF4, TF3, TF0, TF1)	(TF4, TF3, TF1)
>>>>>>>ctfc	82	52
>>>>>>>gainFactorInformation	computed	computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 12	(TF5, TF4, TF1, TF1)	(TF5, TF4, TF1)
>>>>>>>ctfc	119	59
>>>>>>>gainFactorInformation	signalled	signalled
>>>>>>>>βc (FDD only)	11	11
>>>>>>>>βd	15	15
>>>>>>>>referenceTFCId	0	0
> TFC subset list		
>>TFC subset 1	(speech rate 10.2)	(speech rate 7.4)

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>>> Allowed transport format combination list	(TFC1, TFC2, TFC3, TFC4, TFC5, TFC7, TFC8, TFC6, TFC9, TFC10, TFC11, TFC12)	(TFC1, TFC2, TFC3, TFC4, TFC5, TFC7, TFC8, TFC6, TFC9, TFC10, TFC11, TFC12)
>>TFC subset 2	(speech rate 6.7)	(speech rate 6.7)
>>> Allowed transport format combination list	(TFC1, TFC2, TFC3, TFC4, TFC7, TFC8, TFC5, TFC9, TFC10, TFC11)	(TFC1, TFC2, TFC3, TFC4, TFC7, TFC8, TFC5, TFC9, TFC10, TFC11)
>>TFC subset 3	(speech rate 5.9)	(speech rate 5.9)
>>> Allowed transport format combination list	(TFC1, TFC2, TFC3, TFC7, TFC8, TFC4, TFC9, TFC10)	(TFC1, TFC2, TFC3, TFC7, TFC8, TFC4, TFC9, TFC10)
>>TFC subset 4	(speech rate 4.75)	(speech rate 4.75)
>>> Allowed transport format combination list	(TFC1, TFC2, TFC7, TFC8, TFC3, TFC9)	(TFC1, TFC2, TFC7, TFC8, TFC3, TFC9)
dl-CommonTransChInfo		
>tfcs-SignallingMode	Independent	Independent
>tfcs-ID (TDD only)	1	1
>sharedChannelIndicator (TDD only)	FALSE	FALSE
> tfc-Subset	Absent, not required	Absent, not required
>dl-TFCS	Normal TFCI signalling	Normal TFCI signalling
>>explicitTFCS-ConfigurationMode	Complete	Complete
>>>ctfcSize	Ctfc8Bit	Ctfc8Bit
>>>>TFCS representation	Addition	Addition
>>>>>TFCS list		
>>>>>>TFC 1	(TF0, TF0, TF0, TF0, TF0)	(TF0, TF0, TF0, TF0)
>>>>>>>ctfc	0	0
>>>>>>TFC 2	(TF1, TF0, TF0, TF0, TF0)	(TF1, TF0, TF0, TF0)
>>>>>>>ctfc	1	1
>>>>>>TFC 3	(TF2, TF1, TF0, TF0, TF0)	(TF2, TF1, TF0, TF0)
>>>>>>>ctfc	8	8
>>>>>>TFC 4	(TF3, TF2, TF0, TF0, TF0)	(TF3, TF2, TF0, TF0)
>>>>>>>ctfc	15	15
>>>>>>TFC 5	(TF4, TF3, TF0, TF0, TF0)	(TF4, TF3, TF0, TF0)
>>>>>>>ctfc	22	22
>>>>>>TFC 6	(TF5, TF4, TF1, TF0, TF0)	(TF5, TF4, TF0, TF0)
>>>>>>>ctfc	59	29
>>>>>>TFC 7	(TF0, TF0, TF0, TF1, TF0)	(TF0, TF0, TF1, TF0)
>>>>>>>ctfc	60	30
>>>>>>TFC 8	(TF1, TF0, TF0, TF1, TF0)	(TF1, TF0, TF1, TF0)
>>>>>>>ctfc	61	31
>>>>>>TFC 9	(TF2, TF1, TF0, TF1, TF0)	(TF2, TF1, TF1, TF0)
>>>>>>>ctfc	68	38
>>>>>>TFC 10	(TF3, TF2, TF0, TF1, TF0)	(TF3, TF2, TF1, TF0)
>>>>>>>ctfc	75	45
>>>>>>TFC 11	(TF4, TF3, TF0, TF1, TF0)	(TF4, TF3, TF1, TF0)
>>>>>>>ctfc	82	52

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>>>>>>TFC 12	(TF5, TF4, TF1, TF1, TF0)	(TF5, TF4, TF1, TF0)
>>>>>>>ctfc	119	59
>>>>>>TFC 13	(TF0, TF0, TF0, TF0, TF1)	(TF0, TF0, TF0, TF1)
>>>>>>>ctfc	120	60
>>>>>>TFC 14	(TF1, TF0, TF0, TF0, TF1)	(TF1, TF0, TF0, TF1)
>>>>>>>ctfc	121	61
>>>>>>TFC 15	(TF2, TF1, TF0, TF0, TF1)	(TF2, TF1, TF0, TF1)
>>>>>>>ctfc	128	68
>>>>>>TFC 16	(TF3, TF2, TF0, TF0, TF1)	(TF3, TF2, TF0, TF1)
>>>>>>>ctfc	135	75
>>>>>>TFC 17	(TF4, TF3, TF0, TF0, TF1)	(TF4, TF3, TF0, TF1)
>>>>>>>ctfc	142	82
>>>>>>TFC 18	(TF5, TF4, TF1, TF0, TF1)	(TF5, TF4, TF0, TF1)
>>>>>>>ctfc	179	89
>>>>>>TFC 19	(TF0, TF0, TF0, TF1, TF1)	(TF0, TF0, TF1, TF1)
>>>>>>>ctfc	180	90
>>>>>>TFC 20	(TF1, TF0, TF0, TF1, TF1)	(TF1, TF0, TF1, TF1)
>>>>>>>ctfc	181	91
>>>>>>TFC 21	(TF2, TF1, TF0, TF1, TF1)	(TF2, TF1, TF1, TF1)
>>>>>>>ctfc	188	98
>>>>>>TFC 22	(TF3, TF2, TF0, TF1, TF1)	(TF3, TF2, TF1, TF1)
>>>>>>>ctfc	195	105
>>>>>>TFC 23	(TF4, TF3, TF0, TF1, TF1)	(TF4, TF3, TF1, TF1)
>>>>>>>ctfc	202	112
>>>>>>TFC 24	(TF5, TF4, TF1, TF1, TF1)	(TF5, TF4, TF1, TF1)
>>>>>>>ctfc	239	119
PhyCH INFORMATION FDD		
UL-DPCH-InfoPredef		
>ul-DPCH-PowerControlInfo		
>>powerControlAlgorithm	Algorithm 1	Algorithm 1
>>>tpcStepSize	1 dB	1 dB
>tfci-Existence	TRUE	TRUE
>puncturingLimit	0.88	0.88
DL-CommonInformationPredef		
>dl-DPCH-InfoCommon		
>>spreadingFactor	128	128
>>tfci-Existence	FALSE	FALSE
>>pilotBits	4	4
>>positionFixed	Fixed	Fixed
PhyCH INFORMATION 3.84/7.68 Mcps TDD		
UL-DPCH-InfoPredef		
>ul-DPCH-PowerControlInfo		
>>dpch-ConstantValue	0	0
>commonTimeslotInfo		
>>secondInterleavingMode	frameRelated	frameRelated
>>tfci-Coding	16	16

>>puncturingLimit	0.60	0.60
>>repetitionPeriodAndLength	repetitionPeriod1	repetitionPeriod1
DL-CommonInformationPredef		
>dl-DPCH-InfoCommon		
>>commonTimeslotInfo		
>>>secondInterleavingMode	frameRelated	frameRelated
>>>tfci-Coding	16	16
>>>puncturingLimit	0.60	0.60
>>>repetitionPeriodAndLength	repetitionPeriod1	repetitionPeriod1
PhyCH INFORMATION 1.28 Mcps TDD		
UL-DPCH-InfoPredef		
>commonTimeslotInfo		
>>secondInterleavingMode	frame Related	frame Related
>>tfci-Coding	16	16
>>puncturingLimit	0.64	0.64
>>repetitionPeriodAndLength	repetitionPeriod1	repetitionPeriod1
DL-CommonInformationPredef		
>dl-DPCH-InfoCommon		
>>commonTimeslotInfo		
>>>secondInterleavingMode	frame Related	frame Related
>>>tfci-Coding	16	16
>>>puncturingLimit	0.64	0.64
>>>repetitionPeriodAndLength	repetitionPeriod1	repetitionPeriod1

NOTE : Default configuration identity 11 can not be used with release 4 UEs.

Configuration	12.65/8.85/6.6 kbps speech + 3.4 kbps signalling + 0.15 kbps SRB#5
Ref 34.108	62
Default configuration identity	13
RB INFORMATION	
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7, RB8: 8
rlc-InfoChoice	Rlc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM RB5-RB7: TM
>>transmissionRLC-DiscardMode	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A
>>>maxDat	RB1: N/A RB2- RB3: 15 RB5- RB7: N/A
>>transmissionWindowSize	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A
>>timerRST	RB1: N/A RB2- RB3: 300 RB5- RB7: N/A
>>max-RST	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>lastTransmissionPDU-Poll	RB2- RB3: FALSE
>>>lastRetransmissionPDU-Poll	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A RB5- RB7: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM RB5- RB7: TM RB8: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A RB8: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128 for UEs with more than 10 kbyte "total RLC AM buffer size" and 32 otherwise RB5- RB7: N/A RB8: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below RB5- RB7: N/A RB8: N/A

>>>timerStatusProhibit	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A RB5- RB7: FALSE RB8: FALSE
rb-MappingInfo	
>UL-LogicalChannelMappings	OneLogicalChannel
>>ul-TransportChannelType	Dch
>>>transportChannelIdentity	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3.
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3: configured RB5- RB7: N/A
>>mac-LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5
>DL-logicalChannelMappingList	
>>Mapping option 1	One mapping option
>>>dl-TransportChannelType	Dch
>>>>transportChannelIdentity	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3, RB8: 5
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A RB8: N/A
TrCH INFORMATION PER TrCH	
UL-AddReconfTransChInfoList	
>Uplink transport channel type	dch
>transportChannelIdentity	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>transportFormatSet	DedicatedTransChTFS
>>dynamicTF-information	
>>>tf0/ tf0,1	TrCH1: (0x72) TrCH2: (0x 181) TrCH3: (0x60) TrCH4: (0x144, 1x144)
>>>>rlcSize	BitMode
>>>>>sizeType	TrCH1: type 1: 72 TrCH2: type 2: part1= 6, part2= 5 TrCH3: type1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1-3: Zero TrCH4: Zero, one
>>>>logicalChannelList	All
>>>tf 1	TrCH1: (1x40) TrCH2: (1x 78) TrCH3: N/A TrCH4: N/A

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>>>>numberOfTransportBlocks	TrCH1: One TrCH2: One
>>>>rlc-Size	TrCH1-2: BitMode
>>>>>sizeType	TrCH1: 1: 40 TrCH2: 1: 78
>>>>numberOfTbSizeList	TrCH1-2: One
>>>>logicalChannelList	TrCH1: all
>>>tf 2	TrCH1: (1x54) TrCH2: (1x113) TrCH3: N/A TrCH4: N/A
>>>>numberOfTransportBlocks	TrCH1: One TrCh2: One
>>>>rlc-Size	TrCH1: BitMode
>>>>>sizeType	TrCH1: type 1: 54 TrCH2: type 1: 113
>>>>numberOfTbSizeList	TrCH1: One TrCH2: One
>>>>logicalChannelList	TrCH1: all TrCH2: all
>>>tf 3	TrCH1: (1x64) TrCH2: (1x181) TrCH3: N/A TrCH4: N/A
>>>>numberOfTransportBlocks	TrCH1: One TrCh2: One
>>>>rlc-Size	TrCH1: BitMode
>>>>>sizeType	TrCH1: type 1: 64 TrCH2: type 2: part1=6, part2= 5
>>>>numberOfTbSizeList	TrCH1: One TrCH2: One
>>>>logicalChannelList	TrCH1: all TrCH2: all
>>>tf 4	TrCH1: (1x72) TrCH2: N/A TrCH3: N/A TrCH4: N/A
>>>>numberOfTransportBlocks	TrCH1: One
>>>>rlc-Size	TrCH1: BitMode
>>>>>sizeType	TrCH1: type 1: 72
>>>>numberOfTbSizeList	TrCH1: One
>>>>logicalChannelList	TrCH1: all
>>semistaticTF-Information	
>>>tti	TrCH1- TrCH3: 20 TrCH4: 40
>>>channelCodingType	Convolutional
>>>>codingRate	TrCH1- TrCH3: Third TrCH4: Third
>>>rateMatchingAttribute	TrCH1: 200 TrCH2: 190 TrCH3: 256 TrCH4: 170
>>>crc-Size	TrCH1: 12 TrCH2: 0 TrCH3: 0 TrCH4: 16
DL-AddReconfTransChInfoList	
>Downlink transport channel type	dch
>dl-TransportChannelIdentity	

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>tfs-SignallingMode	Independent <Only tf0 on TrCH1 and tf0/tf1 on TrCH5 are different and shown below>
>>transportFormatSet	
>>>dynamicTF-information	
>>>>tf0/ tf0,1	TrCH1: (1x0) TrCH5: (0x3, 1x3)
>>>>rlcSize	BitMode
>>>>>sizeType	TrCH1: type 1: 0 TrCH5: type 1: 3
>>>>numberOfTbSizeList	TrCH1: One TrCH5: Zero, one
>>>>logicalChannelList	All
>>>semistaticTF-Information	same as UL except for TrCH5
>>>>tti	TrCH5: 20
>>>>channelCodingType	Convolutional
>>>>>codingRate	TrCH5: Third
>>>>rateMatchingAttribute	TrCH5: 205
>>>>crc-Size	TrCH5: 8
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4,
>dch-QualityTarget	
>>bler-QualityValue	TrCH1: $7x10^{-3}$ TrCH2: Absent TrCH3: Absent TrCH4- TrCH5: Absent
TrCH INFORMATION, COMMON	
ul-CommonTransChInfo	
>tfcs-ID (TDD only)	1
>sharedChannelIndicator (TDD only)	FALSE
> tfc-Subset	Absent, not required
>ul-TFCS	Normal TFCI signalling
>>explicitTFCS-ConfigurationMode	Complete
>>>ctfcSize	Ctfc6Bit
>>>>TFCS representation	Addition
>>>>>TFC list	
>>>>>>TFC 1	(TF0, TF0, TF0, TF0)
>>>>>>>ctfc	0
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFC 2	(TF1, TF0, TF0, TF0)
>>>>>>>ctfc	1
>>>>>>>gainFactorInformation	Computed
>>>>>>>>βc (FDD only)	N/A
>>>>>>>>βd	N/A
>>>>>>>>referenceTFCId	0
>>>>>>TFC 3	(TF2, TF1, TF0, TF0)
>>>>>>>ctfc	7
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0

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>>>>>>TFC 4	(TF3, TF2, TF0, TF0)
>>>>>>>ctfc	13
>>>>>>>gainFactorInformation	Computed
>>>>>>>>βc (FDD only)	
>>>>>>>>βd	
>>>>>>>>referenceTFCId	0
>>>>>>TFC 5	(TF4, TF3, TF0, TF0)
>>>>>>>ctfc	19
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFC 6	(TF0, TF0, TF0, TF1)
>>>>>>>ctfc	20
>>>>>>>gainFactorInformation	Computed
>>>>>>>>βc (FDD only)	
>>>>>>>>βd	
>>>>>>>>referenceTFCId	0
>>>>>>TFC 7	(TF1, TF0, TF0, TF1)
>>>>>>>ctfc	21
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFC 8	(TF2, TF1, TF0, TF1)
>>>>>>>ctfc	27
>>>>>>>gainFactorInformation	computed
>>>>>>>>βc (FDD only)	
>>>>>>>>βd	
>>>>>>>>referenceTFCId	0
>>>>>>TFC 9	(TF3, TF2, TF0, TF1)
>>>>>>>ctfc	33
>>>>>>>gainFactorInformation	computed
>>>>>>>>referenceTFCId	0
>>>>>>TFC 10	(TF4, TF3, TF0, TF1)
>>>>>>>ctfc	39
>>>>>>>gainFactorInformation	signalled
>>>>>>>>βc (FDD only)	11
>>>>>>>>βd	15
>>>>>>>>referenceTFCId	0
> TFC subset list	
>>TFC subset 1	(speech rate 6.6)
>>> Allowed transport format combination list	(TFC1, TFC2, TFC3, TFC6, TFC7, TFC8)
>>TFC subset 2	(speech rate 8.85)
>>> Allowed transport format combination list	(TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9)
>>TFC subset 3	(speech rate 12.65)
>>> Allowed transport format combination list	(TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)

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dl-CommonTransChInfo	
>tfcs-SignallingMode	Independent
ul-CommonTransChInfo	
>tfcs-ID (TDD only)	1
>sharedChannelIndicator (TDD only)	FALSE
> tfc-Subset	Absent, not required
>dl-TFCS	Normal TFCI signalling
>>explicitTFCS-ConfigurationMode	Complete
>>>ctfcSize	Ctfc8Bit
>>>>TFCS representation	Addition
>>>>>TFCS list	
>>>>>>TFC 1	(TF0, TF0, TF0, TF0, TF0)
>>>>>>>ctfc	0
>>>>>>TFC 2	(TF1, TF0, TF0, TF0, TF0)
>>>>>>>ctfc	1
>>>>>>TFC 3	(TF2, TF1, TF0, TF0, TF0)
>>>>>>>ctfc	7
>>>>>>TFC 4	(TF3, TF2, TF0, TF0, TF0)
>>>>>>>ctfc	13
>>>>>>TFC 5	(TF4, TF3, TF0, TF0, TF0)
>>>>>>>ctfc	19
>>>>>>TFC 6	(TF0, TF0, TF0, TF1, TF0)
>>>>>>>ctfc	20
>>>>>>TFC 7	(TF1, TF0, TF0, TF1, TF0)
>>>>>>>ctfc	21
>>>>>>TFC 8	(TF2, TF1, TF0, TF1, TF0)
>>>>>>>ctfc	27
>>>>>>TFC 9	(TF3, TF2, TF0, TF1, TF0)
>>>>>>>ctfc	33
>>>>>>TFC 10	(TF4, TF3, TF0, TF1, TF0)
>>>>>>>ctfc	39
>>>>>>TFC 11	(TF0, TF0, TF0, TF0, TF1)
>>>>>>>ctfc	40
>>>>>>TFC 12	(TF1, TF0, TF0, TF0, TF1)
>>>>>>>ctfc	41
>>>>>>TFC 13	(TF2, TF1, TF0, TF0, TF1)
>>>>>>>ctfc	47
>>>>>>TFC 14	(TF3, TF2, TF0, TF0, TF1)
>>>>>>>ctfc	53
>>>>>>TFC 15	(TF4, TF3, TF0, TF0, TF1)
>>>>>>>ctfc	59
>>>>>>TFC 16	(TF0, TF0, TF0, TF1, TF1)
>>>>>>>ctfc	60
>>>>>>TFC 17	(TF1, TF0, TF0, TF1, TF1)
>>>>>>>ctfc	61

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>>>>>>TFC 18	(TF2, TF1, TF0, TF1, TF1)
>>>>>>>ctfc	67
>>>>>>TFC 19	(TF3, TF2, TF0, TF1, TF1)
>>>>>>>ctfc	73
>>>>>>TFC 20	(TF4, TF3, TF0, TF1, TF1)
>>>>>>>ctfc	79
PhyCH INFORMATION FDD	
UL-DPCH-InfoPredef	
>ul-DPCH-PowerControlInfo	
>>powerControlAlgorithm	Algorithm 1
>>>tpcStepSize	1 dB
>tfci-Existence	TRUE
>puncturingLimit	0.84
DL-CommonInformationPredef	
>dl-DPCH-InfoCommon	
>>spreadingFactor	128
>>tfci-Existence	FALSE
>>pilotBits	4
>>positionFixed	Fixed

Configuration	**12.2/7.4/5.9/4.75 kbps speech + 3.4 kbps signalling + 0.15 kbps SRB#5**
Ref 34.108	4b
Default configuration identity	14
RB INFORMATION	
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7, RB8: 8
rlc-InfoChoice	Rlc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM RB5-RB7: TM
>>transmissionRLC-DiscardMode	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A
>>>maxDat	RB1: N/A RB2- RB3: 25 RB5- RB7: N/A
>>transmissionWindowSize	RB1: N/A RB2- RB3: 32 RB5- RB7: N/A
>>timerRST	RB1: N/A RB2- RB3: 200 RB5- RB7: N/A
>>max-RST	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>TimerPoll	RB2- RB3: 200
>>>PollPDU	RB2- RB3: n/a
>>>PollSDU	RB2- RB3: 1

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Configuration	12.2/7.4/5.9/4.75 kbps speech + 3.4 kbps signalling + 0.15 kbps SRB#5
>>>lastTransmissionPDU-Poll	RB2- RB3: FALSE
>>>lastRetransmissionPDU-Poll	RB2- RB3: TRUE
>>>PollWindow	RB2- RB3: 99
>>segmentationIndication	RB1- RB3: N/A RB5- RB7: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM RB5- RB7: TM RB8: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE RB5- RB8: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 32 RB5- RB8: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below RB5- RB8: N/A
>>>timerStatusProhibit	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: TRUE
>>segmentationIndication	RB1- RB3: N/A RB5- RB8: FALSE
rb-MappingInfo	
>UL-LogicalChannelMappings	OneLogicalChannel
>>ul-TransportChannelType	Dch
>>>transportChannelIdentity	RB1- RB3: 9 RB5: 1, RB6: 2, RB7: 3.
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3: configured RB5- RB7: N/A
>>mac-LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5
>DL-logicalChannelMappingList	
>>Mapping option 1	One mapping option
>>>dl-TransportChannelType	Dch
>>>>transportChannelIdentity	RB1- RB3: 9 RB5: 1, RB6: 2, RB7: 3, RB8: 5
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5- RB8: N/A
TrCH INFORMATION PER TrCH	
UL-AddReconfTransChInfoList	
>Uplink transport channel type	dch
>transportChannelIdentity	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 9

Configuration	12.2/7.4/5.9/4.75 kbps speech + 3.4 kbps signalling + 0.15 kbps SRB#5
>transportFormatSet	DedicatedTransChTFS
>>dynamicTF-information	
>>>tf0/ tf0,1	TrCH1: (0x81) TrCH2: (0x 103) TrCH3: (0x60) TrCH4: (0x144, 1x144)
>>>>rlcSize	BitMode
>>>>>sizeType	TrCH1: type 1: 81 TrCH2: type 1: 103 TrCH3: type1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1-3: Zero TrCH4: Zero, one
>>>>logicalChannelList	All
>>>tf 1	TrCH1: (1x39) TrCH2: (1x53) TrCH3: (1x60) TrCH4: (1x144)
>>>>numberOfTransportBlocks	TrCH1-3: One
>>>>rlc-Size	TrCH1-3: BitMode
>>>>>sizeType	TrCH1: 1: 39 TrCH2: 1: 53 TrCH3: 1: 60
>>>>numberOfTbSizeList	TrCH1-3: One
>>>>logicalChannelList	TrCH1-3: all
>>>tf 2	TrCH1: (1x42) TrCH2: (1x63) TrCH3- TrCH4: N/A
>>>>numberOfTransportBlocks	TrCH1-2: One
>>>>rlc-Size	TrCH1: BitMode
>>>>>sizeType	TrCH1: type 1: 42 TrCH2: type 1: 63
>>>>numberOfTbSizeList	TrCH1-2: One
>>>>logicalChannelList	TrCH1: all
>>>tf 3	TrCH1: (1x55) TrCH2: (1x87) TrCH3- TrCH4: N/A
>>>>numberOfTransportBlocks	TrCH1-2: One
>>>>rlc-Size	TrCH1: BitMode
>>>>>sizeType	TrCH1: type 1: 55 TrCH2: type 1: 87
>>>>numberOfTbSizeList	TrCH1-2: One
>>>>logicalChannelList	TrCH1: all
>>>tf 4	TrCH1: (1x61) TrCH2: (1x103) TrCH3- TrCH4: N/A
>>>>numberOfTransportBlocks	TrCH1-2: One
>>>>rlc-Size	TrCH1: BitMode
>>>>>sizeType	TrCH1: type 1: 61 TrCH2: type 1: 103
>>>>numberOfTbSizeList	TrCH1-2: One
>>>>logicalChannelList	TrCH1: all
>>>tf 5	TrCH1: (1x81) TrCH2- TrCH4: N/A

Configuration	12.2/7.4/5.9/4.75 kbps speech + 3.4 kbps signalling + 0.15 kbps SRB#5
>>>>numberOfTransportBlocks	TrCH1: One
>>>>rlc-Size	TrCH1: BitMode
>>>>>sizeType	TrCH1: type 1: 81
>>>>numberOfTbSizeList	TrCH1: One
>>>>logicalChannelList	TrCH1: all
>>semiStaticTF-Information	
>>>tti	TrCH1- TrCH3: 20 TrCH4: 40
>>>channelCodingType	Convolutional
>>>>codingRate	TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third
>>>rateMatchingAttribute	TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160
>>>crc-Size	TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16
DL-AddReconfTransChInfoList	
>Downlink transport channel type	
>dl-TransportChannelIdentity (should be as for UL)	
>tfs-SignallingMode	Independent <Only tf0 on TrCH1 and tf0/tf1 on TrCH5 are different and shown below>
>>transportFormatSet	
>>>dynamicTF-information	
>>>>tf0/ tf0,1	TrCH1: (1x0) TrCH5: (0x3, 1x3)
>>>>rlcSize	bitMode
>>>>>sizeType	TrCH1: type 1: 0 TrCH5: type 1: 3
>>>>numberOfTbSizeList	TrCH1: One TrCH5: Zero, one
>>>>logicalChannelList	all
>>>semistaticTF-Information	same as UL except for TrCH5
>>>>tti	TrCH5: 20
>>>>channelCodingType	Convolutional
>>>>>codingRate	TrCH5: Third
>>>>rateMatchingAttribute	TrCH5: 205
>>>>crc-Size	TrCH5: 8
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 9
>dch-QualityTarget	
>>bler-QualityValue	TrCH1: $7x10^{-3}$ TrCH2: Absent TrCH3: Absent TrCH4- TrCH5: Absent
TrCH INFORMATION, COMMON	

Configuration	12.2/7.4/5.9/4.75 kbps speech + 3.4 kbps signalling + 0.15 kbps SRB#5
ul-CommonTransChInfo	
>tfcs-ID (TDD only)	1
>sharedChannelIndicator (TDD only)	FALSE
>tfc-Subset	Absent, not required
>ul-TFCS	Normal TFCI signalling
>>explicitTFCS-ConfigurationMode	Complete
>>>ctfcSize	Ctfc8Bit
>>>>TFCS representation	Addition
>>>>>TFCS list	
>>>>>>TFCS 1	(TF0, TF0, TF0, TF0)
>>>>>>>ctfc	0
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFCS 2	(TF1, TF0, TF0, TF0)
>>>>>>>ctfc	1
>>>>>>>gainFactorInformation	Computed
>>>>>>>>βc (FDD only)	N/A
>>>>>>>>βd	N/A
>>>>>>>>referenceTFCId	0
>>>>>>TFCS 3	(TF2, TF1, TF0, TF0)
>>>>>>>ctfc	8
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFCS 4	(TF3, TF2, TF0, TF0)
>>>>>>>ctfc	15
>>>>>>>gainFactorInformation	Computed
>>>>>>>>βc (FDD only)	N/A
>>>>>>>>βd	N/A
>>>>>>>>referenceTFCId	0
>>>>>>TFCS 5	(TF4, TF3, TF0, TF0)
>>>>>>>ctfc	22
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFCS 6	(TF5, TF4, TF1, TF0)
>>>>>>>ctfc	59
>>>>>>>gainFactorInformation	Computed
>>>>>>>>βc (FDD only)	N/A
>>>>>>>>βd	N/A
>>>>>>>>referenceTFCId	0
>>>>>>TFCS 7	(TF0,TF0,TF0,TF1)
>>>>>>>ctfc	60
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFCS 8	(TF1,TF0,TF0,TF1)

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Configuration	12.2/7.4/5.9/4.75 kbps speech + 3.4 kbps signalling + 0.15 kbps SRB#5
>>>>>>>ctfc	61
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFCS 9	(TF2,TF1,TF0,TF1)
>>>>>>>ctfc	68
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFCS 10	(TF3,TF2,TF0,TF1)
>>>>>>>ctfc	75
>>>>>>>gainFactorInformation	Computed
>>>>>>>>βc (FDD only)	N/A
>>>>>>>>βd	N/A
>>>>>>>>referenceTFCId	0
>>>>>>TFCS 11	(TF4,TF3,TF0,TF1)
>>>>>>>ctfc	82
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFCS 12	(TF5,TF4,TF1,TF1)
>>>>>>>ctfc	119
>>>>>>>gainFactorInformation	Signalled
>>>>>>>>βc (FDD only)	11
>>>>>>>>βd	15
>>>>>>>>referenceTFCId	0
> TFC subset list	
>>TFC subset 1	(speech rate 4.75)
>>> Allowed transport format combination list	(TFC1, TFC2, TFC3, TFC7, TFC8, TFC9)
>>TFC subset 2	(speech rate 5.9)
>>> Allowed transport format combination list	(TFC1, TFC2, TFC3, TFC4, TFC7, TFC8, TFC9, TFC10)
>>TFC subset 3	(speech rate 7.4)
>>> Allowed transport format combination list	(TFC1, TFC2, TFC3, TFC4, TFC5, TFC7, TFC8, TFC9, TFC10, TFC11)
>>TFC subset 4	(speech rate 12.2)
>>> Allowed transport format combination list	(TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10, TFC11, TFC12)
dl-CommonTransChInfo	
>tfcs-SignallingMode	Independent
ul-CommonTransChInfo	
>tfcs-ID (TDD only)	1
>sharedChannelIndicator (TDD only)	FALSE
> tfc-Subset	Absent, not required
>dl-TFCS	Normal TFCI signalling
>>explicitTFCS-ConfigurationMode	Complete
>>>ctfcSize	Ctfc8Bit

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Configuration	12.2/7.4/5.9/4.75 kbps speech + 3.4 kbps signalling + 0.15 kbps SRB#5
>>>>TFCS representation	Addition
>>>>>TFCS list	
>>>>>>TFC 1	(TF0, TF0, TF0, TF0, TF0)
>>>>>>>ctfc	0
>>>>>>TFC 2	(TF1, TF0, TF0, TF0, TF0)
>>>>>>>ctfc	1
>>>>>>TFC 3	(TF2, TF1, TF0, TF0, TF0)
>>>>>>>ctfc	8
>>>>>>TFC 4	(TF3, TF2, TF0, TF0, TF0)
>>>>>>>ctfc	15
>>>>>>TFC 5	(TF4, TF3, TF0, TF0, TF0)
>>>>>>>ctfc	22
>>>>>>TFC 6	(TF5,TF4,TF1,TF0, TF0)
>>>>>>>ctfc	59
>>>>>>TFC 7	(TF0, TF0, TF0, TF1, TF0)
>>>>>>>ctfc	60
>>>>>>TFC 8	(TF1, TF0, TF0, TF1, TF0)
>>>>>>>ctfc	61
>>>>>>TFC 9	(TF2, TF1, TF0, TF1, TF0)
>>>>>>>ctfc	68
>>>>>>TFC 10	(TF3, TF2, TF0, TF1, TF0)
>>>>>>>ctfc	75
>>>>>>TFC 11	(TF4, TF3, TF0, TF1, TF0)
>>>>>>>ctfc	82
>>>>>>TFC 12	(TF5,TF4,TF1,TF1, TF0)
>>>>>>>ctfc	119
>>>>>>TFC 13	(TF0, TF0, TF0, TF0, TF1)
>>>>>>>ctfc	120
>>>>>>TFC 14	(TF1, TF0, TF0, TF0, TF1)
>>>>>>>ctfc	121
>>>>>>TFC 15	(TF2, TF1, TF0, TF0, TF1)
>>>>>>>ctfc	128
>>>>>>TFC 16	(TF3, TF2, TF0, TF0, TF1)
>>>>>>>ctfc	135
>>>>>>TFC 17	(TF4, TF3, TF0, TF0, TF1)
>>>>>>>ctfc	142
>>>>>>TFC 18	(TF5,TF4,TF1,TF0, TF1)
>>>>>>>ctfc	179
>>>>>>TFC 19	(TF0, TF0, TF0, TF1, TF1)
>>>>>>>ctfc	180
>>>>>>TFC 20	(TF1, TF0, TF0, TF1, TF1)

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Configuration	12.2/7.4/5.9/4.75 kbps speech + 3.4 kbps signalling + 0.15 kbps SRB#5
>>>>>>>ctfc	181
>>>>>>TFC 21	(TF2, TF1, TF0, TF1, TF1)
>>>>>>>ctfc	187
>>>>>>TFC 22	(TF3, TF2, TF0, TF1, TF1)
>>>>>>>ctfc	193
>>>>>>TFC 23	(TF4, TF3, TF0, TF1, TF1)
>>>>>>>ctfc	199
>>>>>>TFC 24	(TF5,TF4,TF1,TF1, TF1)
>>>>>>>ctfc	239
PhyCH INFORMATION FDD	
UL-DPCH-InfoPredef	
>ul-DPCH-PowerControlInfo	
>>powerControlAlgorithm	Algorithm 1
>>>tpcStepSize	1 dB
>tfci-Existence	TRUE
>puncturingLimit	0.84
DL-CommonInformationPredef	
>dl-DPCH-InfoCommon	
>>spreadingFactor	128
>>tfci-Existence	FALSE
>>pilotBits	4
>>positionFixed	Fixed
PhyCH INFORMATION 3.84/7.68 Mcps TDD	
UL-DPCH-InfoPredef	
>ul-DPCH-PowerControlInfo	
>>dpch-ConstantValue	
>commonTimeslotInfo	
>>secondInterleavingMode	
>>tfci-Coding	
>>puncturingLimit	
>>repetitionPeriodAndLength	
DL-CommonInformationPredef	
>dl-DPCH-InfoCommon	
>>commonTimeslotInfo	
>>>secondInterleavingMode	
>>>tfci-Coding	
>>>puncturingLimit	
>>>repetitionPeriodAndLength	
PhyCH INFORMATION 1.28 Mcps TDD	
UL-DPCH-InfoPredef	
>commonTimeslotInfo	
>>secondInterleavingMode	
>>tfci-Coding	

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Configuration	12.2/7.4/5.9/4.75 kbps speech + 3.4 kbps signalling + 0.15 kbps SRB#5
>>puncturingLimit	
>>repetitionPeriodAndLength	
DL-CommonInformationPredef	
>dl-DPCH-InfoCommon	
>>commonTimeslotInfo	
>>>secondInterleavingMode	
>>>tfci-Coding	
>>>puncturingLimit	
>>>repetitionPeriodAndLength	

Configuration	7.95 kbps speech + 3.4 kbps signalling
Ref 34.108	6
Default configuration identity	15
RB INFORMATION	
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7
rlc-InfoChoice	Rlc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM RB5-RB7: TM
>>transmissionRLC-DiscardMode	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A
>>>maxDat	RB1: N/A RB2- RB3: 25 RB5- RB7: N/A
>>transmissionWindowSize	RB1: N/A RB2- RB3: 32 RB5- RB7: N/A
>>timerRST	RB1: N/A RB2- RB3: 200 RB5- RB7: N/A
>>max-RST	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>TimerPoll	RB2- RB3: 200
>>>PollPDU	RB2- RB3: n/a
>>>PollSDU	RB2- RB3: 1
>>>lastTransmissionPDU-Poll	RB2- RB3: FALSE
>>>lastRetransmissionPDU-Poll	RB2- RB3: TRUE
>>>PollWindow	RB2- RB3: 99
>>segmentationIndication	RB1- RB3: N/A RB5- RB7: FALSE

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Configuration	7.95 kbps speech + 3.4 kbps signalling
>dl-RLC-Mode	RB1: UM RB2- RB3: AM RB5- RB7: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 32 RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: TRUE
>>segmentationIndication	RB1- RB3: N/A RB5- RB7: FALSE
rb-MappingInfo	
>UL-LogicalChannelMappings	OneLogicalChannel
>>ul-TransportChannelType	Dch
>>>transportChannelIdentity	RB1- RB3: 9 RB5: 1, RB6: 2, RB7: 3
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3: configured RB5- RB7: N/A
>>mac-LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5
>DL-logicalChannelMappingList	
>>Mapping option 1	One mapping option
>>>dl-TransportChannelType	Dch
>>>>transportChannelIdentity	RB1- RB3: 9 RB5: 1, RB6: 2, RB7: 3
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH	
UL-AddReconfTransChInfoList	
>Uplink transport channel type	dch
>transportChannelIdentity	TrCH1: 1, TrCH2: 2, TrCH3:3, TrCH4: 9
>transportFormatSet	DedicatedTransChTFS
>>dynamicTF-information	
>>>tf0/ tf0,1	TrCH1: (0x75) TrCH2: (0x 84 1x84) TrCH3: (0x 60) TrCH4: (0x144, 1x144)
>>>>rlcSize	BitMode

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Configuration	7.95 kbps speech + 3.4 kbps signalling
>>>>>sizeType	TrCH1: type 1: 75 TrCH2: type 1: 84 TrCH3: type 1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1: Zero TrCH2-4: Zero, one
>>>>logicalChannelList	All
>>>tf 1	TrCH1: (1x39) TrCH2- TrCH4: N/A
>>>>numberOfTransportBlocks	TrCH1: One
>>>>rlc-Size	TrCH1: BitMode
>>>>>sizeType	TrCH1: 1: 39
>>>>numberOfTbSizeList	TrCH1: One
>>>>logicalChannelList	TrCH1: all
>>>tf 2	TrCH1: (1x75) TrCH2- TrCH4: N/A
>>>>numberOfTransportBlocks	TrCH1: One
>>>>rlc-Size	TrCH1: BitMode
>>>>>sizeType	TrCH1: type 1: 75
>>>>numberOfTbSizeList	TrCH1: One
>>>>logicalChannelList	TrCH1: all
>>semistaticTF-Information	
>>>tti	TrCH1- TrCH4: 20 TrCH3: 40
>>>channelCodingType	Convolutional
>>>>codingRate	TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third
>>>rateMatchingAttribute	TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160
>>>crc-Size	TrCH1: 12 TrCH2-TrCH3: 0 TrCH4: 16
DL-AddReconfTransChInfoList	
>Downlink transport channel type	Dch
>dl-TransportChannelIdentity (should be as for UL)	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 9
>tfs-SignallingMode	Explicit <Only tf0 on TrCH1 is different and shown below>
>>transportFormatSet	DedicatedTransChTFS
>>>dynamicTF-information	
>>>>tf0/ tf0,1	TrCH1: (1x0)
>>>>rlcSize	BitMode
>>>>>sizeType	TrCH1: type 1: 0
>>>>numberOfTbSizeList	TrCH1: One
>>>>logicalChannelList	All
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2, TrCH3:3, TrCH4: 9
>dch-QualityTarget	

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Configuration	7.95 kbps speech + 3.4 kbps signalling
>>bler-QualityValue	TrCH1: 7x10-3 TrCH2- TrCH4: Absent
TrCH INFORMATION, COMMON	
ul-CommonTransChInfo	
>tfcs-ID (TDD only)	1
>sharedChannelIndicator (TDD only)	FALSE
>tfc-Subset	Absent, not required
>ul-TFCS	Normal TFCI signalling
>>explicitTFCS-ConfigurationMode	Complete
>>>ctfcSize	Ctfc4Bit
>>>>TFCS representation	Addition
>>>>>TFCS list	
>>>>>>TFCS 1	(TF0, TF0, TF0, TF0)
>>>>>>>ctfc	0
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFCS 2	(TF1, TF0, TF0, TF0)
>>>>>>>ctfc	1
>>>>>>>gainFactorInformation	Computed
>>>>>>>>βc (FDD only)	N/A
>>>>>>>>βd	N/A
>>>>>>>>referenceTFCId	0
>>>>>>TFCS 3	(TF2, TF1, TF0, TF0)
>>>>>>>ctfc	5
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFCS 4	(TF0, TF0, TF0, TF1)
>>>>>>>ctfc	6
>>>>>>>gainFactorInformation	Computed
>>>>>>>>βc (FDD only)	N/A
>>>>>>>>βd	N/A
>>>>>>>>referenceTFCId	0
>>>>>>TFCS 5	(TF1, TF0, TF0, TF1)
>>>>>>>ctfc	7
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFCS 6	(TF2, TF1, TF0, TF1)
>>>>>>>ctfc	11
>>>>>>>gainFactorInformation	Signalled
>>>>>>>>βc (FDD only)	11
>>>>>>>>βd	15
>>>>>>>>referenceTFCId	0
dl-CommonTransChInfo	

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Configuration	7.95 kbps speech + 3.4 kbps signalling
>tfcs-SignallingMode	Same as UL
PhyCH INFORMATION FDD	
UL-DPCH-InfoPredef	
>ul-DPCH-PowerControlInfo	
>>powerControlAlgorithm	Algorithm 1
>>>tpcStepSize	1 dB
>tfci-Existence	TRUE
>puncturingLimit	1
DL-CommonInformationPredef	
>dl-DPCH-InfoCommon	
>>spreadingFactor	128
>>tfci-Existence	FALSE
>>pilotBits	4
>>positionFixed	Fixed
PhyCH INFORMATION 3.84/7.68 Mcps TDD	
UL-DPCH-InfoPredef	
>ul-DPCH-PowerControlInfo	
>>dpch-ConstantValue	0
>commonTimeslotInfo	
>>secondInterleavingMode	frameRelated
>>tfci-Coding	16
>>puncturingLimit	0.52
>>repetitionPeriodAndLength	repetitionPeriod1
DL-CommonInformationPredef	
>dl-DPCH-InfoCommon	
>>commonTimeslotInfo	
>>>secondInterleavingMode	frameRelated
>>>tfci-Coding	16
>>>puncturingLimit	0.52
>>>repetitionPeriodAndLength	repetitionPeriod1
PhyCH INFORMATION 1.28 Mcps TDD	
UL-DPCH-InfoPredef	
>commonTimeslotInfo	
>>secondInterleavingMode	frameRelated
>>tfci-Coding	16
>>puncturingLimit	0.80
>>repetitionPeriodAndLength	repetitionPeriod1
DL-CommonInformationPredef	
>dl-DPCH-InfoCommon	
>>commonTimeslotInfo	
>>>secondInterleavingMode	frameRelated
>>>tfci-Coding	16
>>>puncturingLimit	0.80
>>>repetitionPeriodAndLength	repetitionPeriod1

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Configuration	12.65/8.85/6.6 kbps speech + 3.4 kbps signalling (without SRB#5)
Ref 25.993	7.1.106
Default configuration identity	16
RB INFORMATION	
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7,
rlc-InfoChoice	Rlc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM RB5-RB7: TM
>>transmissionRLC-DiscardMode	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A
>>>maxDat	RB1: N/A RB2- RB3: 25 RB5- RB7: N/A
>>transmissionWindowSize	RB1: N/A RB2- RB3: 32 RB5- RB7: N/A
>>timerRST	RB1: N/A RB2- RB3: 200 RB5- RB7: N/A
>>max-RST	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>TimerPoll	RB2- RB3: 200
>>>PollPDU	RB2- RB3: n/a
>>>PollSDU	RB2- RB3: 1
>>>lastTransmissionPDU-Poll	RB2- RB3: FALSE
>>>lastRetransmissionPDU-Poll	RB2- RB3: TRUE
>>>PollWindow	RB2- RB3: 99
>>segmentationIndication	RB1- RB3: N/A RB5- RB7: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM RB5- RB7: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 32 RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: TRUE
>>segmentationIndication	RB1- RB3: N/A RB5- RB7: FALSE
rb-MappingInfo	
>UL-LogicalChannelMappings	OneLogicalChannel
>>ul-TransportChannelType	Dch

>>>transportChannelIdentity	RB1- RB3: 9 RB5: 1, RB6: 2, RB7: 3.
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3: configured RB5- RB7: N/A
>>mac-LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5
>DL-logicalChannelMappingList	
>>Mapping option 1	One mapping option
>>>dl-TransportChannelType	Dch
>>>>transportChannelIdentity	RB1- RB3: 9 RB5: 1, RB6: 2, RB7: 3,
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH	
UL-AddReconfTransChInfoList	
>Uplink transport channel type	Dch
>transportChannelIdentity	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 9
>transportFormatSet	DedicatedTransChTFS
>>dynamicTF-information	
>>>tf0/ tf0,1	TrCH1: (0x72) TrCH2: (0x 181) TrCH3: (0x60) TrCH4: (0x144, 1x144)
>>>>rlcSize	BitMode
>>>>>sizeType	TrCH1: type 1: 72 TrCH2: type 2: part1= 6, part2= 5 TrCH3: type1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1-3: Zero TrCH4: Zero, one
>>>>logicalChannelList	All
>>>tf 1	TrCH1: (1x40) TrCH2: (1x 78) TrCH3: N/A TrCH4: N/A
>>>>numberOfTransportBlocks	TrCH1: One TrCH2: One
>>>>rlc-Size	TrCH1-2: BitMode
>>>>>sizeType	TrCH1: 1: 40 TrCH2: 1: 78
>>>>numberOfTbSizeList	TrCH1-2: One
>>>>logicalChannelList	TrCH1: all
>>>tf 2	TrCH1: (1x54) TrCH2: (1x113) TrCH3: N/A TrCH4: N/A

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>>>>numberOfTransportBlocks	TrCH1: One TrCh2: One
>>>>rlc-Size	TrCH1: BitMode
>>>>>sizeType	TrCH1: type 1: 54 TrCH2: type 1: 113
>>>>numberOfTbSizeList	TrCH1: One TrCH2: One
>>>>logicalChannelList	TrCH1: all TrCH2: all
>>>tf 3	TrCH1: (1x64) TrCH2: (1x181) TrCH3: N/A TrCH4: N/A
>>>>numberOfTransportBlocks	TrCH1: One TrCh2: One
>>>>rlc-Size	TrCH1: BitMode
>>>>>sizeType	TrCH1: type 1: 64 TrCH2: type 2: part1=6, part2= 5
>>>>numberOfTbSizeList	TrCH1: One TrCH2: One
>>>>logicalChannelList	TrCH1: all TrCH2: all
>>>tf 4	TrCH1: (1x72) TrCH2: N/A TrCH3: N/A TrCH4: N/A
>>>>numberOfTransportBlocks	TrCH1: One
>>>>rlc-Size	TrCH1: BitMode
>>>>>sizeType	TrCH1: type 1: 72
>>>>numberOfTbSizeList	TrCH1: One
>>>>logicalChannelList	TrCH1: all
>>semistaticTF-Information	
>>>tti	TrCH1- TrCH2: 20 TrCH4: 40
>>>channelCodingType	Convolutional
>>>>codingRate	TrCH1- TrCH3: Third TrCH4: Third
>>>rateMatchingAttribute	TrCH1: 200 TrCH2: 190 TrCH3: 256 TrCH4: 170
>>>crc-Size	TrCH1: 12 TrCH2: 0 TrCH3: 0 TrCH4: 16
DL-AddReconfTransChInfoList	
>Downlink transport channel type	Dch
>dl-TransportChannelIdentity	
>tfs-SignallingMode	Independent
>>transportFormatSet	
>>>dynamicTF-information	
>>>>tf0/ tf0,1	TrCH1: (1x0)
>>>>rlcSize	BitMode
>>>>>sizeType	TrCH1: type 1: 0
>>>>numberOfTbSizeList	TrCH1: One
>>>>logicalChannelList	All
>>>semistaticTF-Information	same as UL
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 9,

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>dch-QualityTarget	
>>bler-QualityValue	TrCH1: $7x10^{-3}$ TrCH2: Absent TrCH3: Absent TrCH4: Absent
TrCH INFORMATION, COMMON	
ul-CommonTransChInfo	
>tfcs-ID (TDD only)	1
>sharedChannelIndicator (TDD only)	FALSE
> tfc-Subset	Absent, not required
>ul-TFCS	Normal TFCI signalling
>>explicitTFCS-ConfigurationMode	Complete
>>>ctfcSize	Ctfc6Bit
>>>>TFCS representation	Addition
>>>>>TFC list	
>>>>>>TFC 1	(TF0, TF0, TF0, TF0)
>>>>>>>ctfc	0
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFC 2	(TF1, TF0, TF0, TF0)
>>>>>>>ctfc	1
>>>>>>>gainFactorInformation	Computed
>>>>>>>>βc (FDD only)	N/A
>>>>>>>>βd	N/A
>>>>>>>>referenceTFCId	0
>>>>>>TFC 3	(TF2, TF1, TF0, TF0)
>>>>>>>ctfc	7
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFC 4	(TF3, TF2, TF0, TF0)
>>>>>>>ctfc	13
>>>>>>>gainFactorInformation	Computed
>>>>>>>>βc (FDD only)	
>>>>>>>>βd	
>>>>>>>>referenceTFCId	0
>>>>>>TFC 5	(TF4, TF3, TF0, TF0)
>>>>>>>ctfc	19
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFC 6	(TF0, TF0, TF0, TF1)
>>>>>>>ctfc	20
>>>>>>>gainFactorInformation	Computed
>>>>>>>>βc (FDD only)	
>>>>>>>>βd	
>>>>>>>>referenceTFCId	0
>>>>>>TFC 7	(TF1, TF0, TF0, TF1)
>>>>>>>ctfc	21

>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFC 8	(TF2, TF1, TF0, TF1)
>>>>>>>ctfc	27
>>>>>>>gainFactorInformation	computed
>>>>>>>>βc (FDD only)	
>>>>>>>>βd	
>>>>>>>>referenceTFCId	0
>>>>>>TFC 9	(TF3, TF2, TF0, TF1)
>>>>>>>ctfc	33
>>>>>>>gainFactorInformation	computed
>>>>>>>>referenceTFCId	0
>>>>>>TFC 10	(TF4, TF3, TF0, TF1)
>>>>>>>ctfc	39
>>>>>>>gainFactorInformation	signalled
>>>>>>>>βc (FDD only)	11
>>>>>>>>βd	15
>>>>>>>>referenceTFCId	0
> TFC subset list	
>>TFC subset 1	(speech rate 6.6)
>>> Allowed transport format combination list	(TFC1, TFC2, TFC3, TFC6, TFC7, TFC8)
>>TFC subset 2	(speech rate 8.85)
>>> Allowed transport format combination list	(TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9)
>>TFC subset 3	(speech rate 12.65)
>>> Allowed transport format combination list	(TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)
dl-CommonTransChInfo	
>tfcs-SignallingMode	Independent
ul-CommonTransChInfo	
>tfcs-ID (TDD only)	1
>sharedChannelIndicator (TDD only)	FALSE
> tfc-Subset	Absent, not required
>dl-TFCS	Normal TFCI signalling
>>explicitTFCS-ConfigurationMode	Complete
>>>ctfcSize	Ctfc8Bit
>>>>TFCS representation	Addition
>>>>>TFCS list	
>>>>>>TFC 1	(TF0, TF0, TF0, TF0)
>>>>>>>ctfc	0
>>>>>>TFC 2	(TF1, TF0, TF0, TF0)
>>>>>>>ctfc	1
>>>>>>TFC 3	(TF2, TF1, TF0, TF0)
>>>>>>>ctfc	7
>>>>>>TFC 4	(TF3, TF2, TF0, TF0)
>>>>>>>ctfc	13

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>>>>>>TFC 5	(TF4, TF3, TF0, TF0)
>>>>>>>ctfc	19
>>>>>>TFC 6	(TF0, TF0, TF0, TF1)
>>>>>>>ctfc	20
>>>>>>TFC 7	(TF1, TF0, TF0, TF1)
>>>>>>>ctfc	21
>>>>>>TFC 8	(TF2, TF1, TF0, TF1)
>>>>>>>ctfc	27
>>>>>>TFC 9	(TF3, TF2, TF0, TF1)
>>>>>>>ctfc	33
>>>>>>TFC 10	(TF4, TF3, TF0, TF1)
>>>>>>>ctfc	39
>>>>>>TFC 11	(TF0, TF0, TF0, TF0)
>>>>>>>ctfc	40
>>>>>>TFC 12	(TF1, TF0, TF0, TF0)
>>>>>>>ctfc	41
>>>>>>TFC 13	(TF2, TF1, TF0, TF0)
>>>>>>>ctfc	47
>>>>>>TFC 14	(TF3, TF2, TF0, TF0)
>>>>>>>ctfc	53
>>>>>>TFC 15	(TF4, TF3, TF0, TF0)
>>>>>>>ctfc	59
>>>>>>TFC 16	(TF0, TF0, TF0, TF1)
>>>>>>>ctfc	60
>>>>>>TFC 17	(TF1, TF0, TF0, TF1)
>>>>>>>ctfc	61
>>>>>>TFC 18	(TF2, TF1, TF0, TF1)
>>>>>>>ctfc	67
>>>>>>TFC 19	(TF3, TF2, TF0, TF1)
>>>>>>>ctfc	73
>>>>>>TFC 20	(TF4, TF3, TF0, TF1)
>>>>>>>ctfc	79
PhyCH INFORMATION FDD	
UL-DPCH-InfoPredef	
>ul-DPCH-PowerControlInfo	
>>powerControlAlgorithm	Algorithm 1
>>>tpcStepSize	1 dB
>tfci-Existence	TRUE
>puncturingLimit	0.84
DL-CommonInformationPredef	
>dl-DPCH-InfoCommon	
>>spreadingFactor	128
>>tfci-Existence	FALSE
>>pilotBits	4
>>positionFixed	Fixed

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Configuration	Signalling on E-DCH on UL depending based on minimum E-DCH UE category + Signalling on HS-DSCH based minimum HS-DSCH UE category
Ref 25.993	7.5.10
Default configuration identity	17
RB INFORMATION	
rb-Identity	RB1: 1, RB2: 2, RB3: 3
rlc-InfoChoice	Rlc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM
>>transmissionRLC-DiscardMode	RB1: N/A RB2- RB3: NoDiscard
>>>maxDat	RB1: N/A RB2- RB3: 25
>>transmissionWindowSize	RB1: N/A RB2- RB3: 128
>>timerRST	RB1: N/A RB2- RB3: 200
>>max-RST	RB1: N/A RB2- RB3: 1
>>pollingInfo	RB1: N/A RB2- RB3: as below
>>>TimerPoll	RB2- RB3: 100
>>>PollPDU	RB2- RB3: n/a
>>>PollSDU	RB2- RB3: 1
>>>lastTransmissionPDU-Poll	RB2- RB3: FALSE
>>>lastRetransmissionPDU-Poll	RB2- RB3: FALSE
>>>PollWindow	RB2- RB3: 99
>>segmentationIndication	RB1- RB3: N/A
>dl-RLC-Mode	RB1: UM RB2- RB3: AM
>>DL RLC PDU size	RB1-RB3: 144
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE
>>receivingWindowSize	RB1: N/A RB2- RB3: 128
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below
>>>timerStatusProhibit	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: TRUE
>>segmentationIndication	RB1- RB3: N/A
>>dl-UM-RLC-LI-size	7
Rb-MappingInfo	
>UL-LogicalChannelMappings	OneLogicalChannel
>>UplinkTransport ChannelTypeChoice	
>>ul-TransportChannelType	E-DCH
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3
>>>E-DCH MAC-d flow identity	RB1-RB3:0
>>>DDI	RB1: 1, RB2: 2, RB3: 3
>>>>RLC PDU size	144
>>mac-LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3
>DL-logicalChannelMappings	OneLogicalChannel
>>Mapping option 1	One mapping option

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Configuration	Signalling on E-DCH on UL depending based on minimum E-DCH UE category + Signalling on HS-DSCH based minimum HS-DSCH UE category
>>>dl-TransportChannelType	HS-DSCH
>>>>Mac-d flow identity	RB1- RB3: 0
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3
TrCH INFORMATION PER TrCH	
UL-AddReconfTransChInfoList	
>Uplink transport channel type	E-DCH
>UL Transport channel identity	
> UL-ParametersChoice	
>> E-DCH Transmission Time Interval	10
>> HARQ info for E-DCH	
>>> HARQ RV Configuration	Rvtable
>> Added or reconfigured E-DCH MAC-d flow	One MAC-d flow
>>> E-DCH MAC-d flow identity	0
>>> E-DCH MAC-d flow power offset	4
>>> E-DCH MAC-d flow maximum number of retransmissions	5
>>> E-DCH MAC-d flow multiplexing list	0
>>> transmission grant typeChoice	
>>>> Non-scheduled transmission grant info	Non-scheduled
>>>>> Max MAC-e PDU contents size	162
DL-AddReconfTransChInfoList	
>Downlink transport channel type	HS-DSCH
>DL-ParametersChoice	
>>HARQ Info	
>>>Number of Processes	6
>>>Memory PartitioningChoice	
>>>>Implicit	
>>Added or reconfigured MAC-d flow	
>>> MAC-hs queue to add or reconfigure list	
>>>>MAC-hs queue Id	0
>>>>MAC-d Flow Identity	0
>>>>T1	100
>>>>MAC-hs window size	12
>>>>MAC-d PDU size info	
>>>>>MAC-d PDU size	148
>>>>>MAC-d PDU size index	0
TrCH INFORMATION, COMMON	*Null*

Configuration	12.2 kbps speech + 13.6 kbps signalling	12.2/7.95/5.9/4.75 kbps speech + 13.6 kbps signalling
Ref 25.993	7.1.131	7.1.132
Default configuration identity	18	19
RB INFORMATION		
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7
rlc-InfoChoice	Rlc-info	Rlc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM RB5-RB7: TM	RB1: UM RB2- RB3: AM RB5-RB7: TM
>>transmissionRLC-DiscardMode	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A
>>>maxDat	RB1: N/A RB2- RB3: 15 RB5- RB7: N/A	RB1: N/A RB2- RB3: 15 RB5- RB7: N/A
>>transmissionWindowSize	RB1: N/A RB2- RB3: 32 RB5- RB7: N/A	RB1: N/A RB2- RB3: 32 RB5- RB7: N/A
>>timerRST	RB1: N/A RB2- RB3: 200 RB5- RB7: N/A	RB1: N/A RB2- RB3: 200 RB5- RB7: N/A
>>max-RST	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below RB5- RB7: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>TimerPoll	RB2- RB3: 100	RB2- RB3: 100
>>>PollPDU	RB2- RB3: n/a	RB2- RB3: n/a
>>>PollSDU	RB2- RB3: 1	RB2- RB3: 1
>>>lastTransmissionPDU-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPDU-Poll	RB2- RB3: TRUE	RB2- RB3: TRUE
>>>PollWindow	RB2- RB3: 99	RB2- RB3: 99
>>>timerPollPeriodic	RB2- RB3: n/a	RB2- RB3: n/a
>>segmentationIndication	RB1- RB3: N/A RB5- RB7: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM RB5- RB7: TM	RB1: UM RB2- RB3: AM RB5- RB7: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A	RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 32 RB5- RB7: N/A	RB1: N/A RB2- RB3: 32 RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below RB5- RB7: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: TRUE	RB2- RB3: TRUE
>>>timerStatusPeriodic	RB2- RB3: n/a	RB2- RB3: n/a

Configuration	12.2 kbps speech + 13.6 kbps signalling	12.2/7.95/5.9/4.75 kbps speech + 13.6 kbps signalling
>>segmentationIndication	RB1- RB3: N/A RB5- RB7: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
rb-MappingInfo		
>UL-LogicalChannelMappings	OneLogicalChannel	OneLogicalChannel
>>ul-TransportChannelType	Dch	Dch
>>>transportChannelIdentity	RB1- RB3: 9 RB5: 1, RB6: 2, RB7: 3	RB1- RB3: 9 RB5: 1, RB6: 2, RB7: 3
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3: configured RB5- RB7: N/A	RB1- RB3: configured RB5- RB7: N/A
>>mac-LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5
>DL-logicalChannelMappingList		
>>Mapping option 1	One mapping option	One mapping option
>>>dl-TransportChannelType	Dch	Dch
>>>>transportChannelIdentity	RB1- RB3: 9 RB5: 1, RB6: 2, RB7: 3	RB1- RB3: 9 RB5: 1, RB6: 2, RB7: 3
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH		
UL-AddReconfTransChInfoList		
>Uplink transport channel type	dch	dch
>transportChannelIdentity	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 9	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 9
>transportFormatSet	DedicatedTransChTFS	DedicatedTransChTFS
>>dynamicTF-information		
>>>tf0/ tf0,1	TrCH1: (0x81) TrCH2: (0x 103, 1x103) TrCH3: (0x 60, 1x60) TrCH4: (0x144, 1x144, 2x144, 3x144, 4x144)	TrCH1: (0x 81) TrCH2: (0x 103) TrCH3: (0x 60) TrCH4: (0x144)
>>>>rlcSize	BitMode	BitMode
>>>>>sizeType	TrCH1: type 1: 81 TrCH2: type 1: 103 TrCH3: type 1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 81 TrCH2: type 1: 103 TrCH3: type 1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1: Zero TrCH2-3: Zero, One TrCH4: Zero, one, 2, 3, 4	TrCH1-4: Zero
>>>>logicalChannelList	All	All

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Configuration	12.2 kbps speech + 13.6 kbps signalling	12.2/7.95/5.9/4.75 kbps speech + 13.6 kbps signalling
>>>tf 1	TrCH1: (1x39) TrCH2- TrCH4: N/A	TrCH1: (1x39) TrCH2: (1x53) TrCH3: (1x60) TrCH4: (1x144, 2x144, 3x144, 4x144)
>>>>numberOfTransportBlocks	TrCH1: One	TrCH1-3: One TrCH4: One, 2, 3, 4
>>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode
>>>>>sizeType	TrCH1: 1: 39	TrCH1: 1: 39 TrCH2: 1: 53 TrCH3: 1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
>>>>logicalChannelList	TrCH1: all	TrCH1: all
>>>tf 2	TrCH1: (1x81) TrCH2- TrCH4: N/A	TrCH1: (1x42) TrCH2: (1x63) TrCH3- TrCH4: N/A
>>>>numberOfTransportBlocks	TrCH1: One	TrCH1-2: One
>>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode
>>>>>sizeType	TrCH1: type 1: 81	TrCH1: type 1: 42 TrCH2: type 1: 63
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
>>>>logicalChannelList	TrCH1: all	TrCH1: all
>>>tf 3		TrCH1: (1x55) TrCH2: (1x84) TrCH3- TrCH4: N/A
>>>>numberOfTransportBlocks		TrCH1-2: One
>>>>rlc-Size		TrCH1: BitMode
>>>>>sizeType		TrCH1: type 1: 55 TrCH2: type 1: 84
>>>>numberOfTbSizeList		TrCH1-2: One
>>>>logicalChannelList		TrCH1: all
>>>tf 4		TrCH1: (1x75) TrCH2: (1x103) TrCH3- TrCH4: N/A
>>>>numberOfTransportBlocks		TrCH1-2: One
>>>>rlc-Size		TrCH1: BitMode
>>>>>sizeType		TrCH1: type 1: 75 TrCH2: type 1: 103
>>>>numberOfTbSizeList		TrCH1-2: One
>>>>logicalChannelList		TrCH1: all
>>>tf 5		TrCH1: (1x81) TrCH2- TrCH4: N/A
>>>>numberOfTransportBlocks		TrCH1: One
>>>>rlc-Size		TrCH1: BitMode
>>>>>sizeType		TrCH1: type 1: 81
>>>>numberOfTbSizeList		TrCH1: One
>>>>logicalChannelList		TrCH1: all
>>semistaticTF-Information		
>>>tti	TrCH1- TrCH3: 20 TrCH4: 40	TrCH1- TrCH3: 20 TrCH4: 40
>>>channelCodingType	Convolutional	Convolutional

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Configuration	12.2 kbps speech + 13.6 kbps signalling	12.2/7.95/5.9/4.75 kbps speech + 13.6 kbps signalling
>>>>codingRate	TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third	TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third
>>>rateMatchingAttribute	TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160	TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160
>>>crc-Size	TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16	TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16
DL-AddReconfTransChInfoList		
>Downlink transport channel type	dch	
>dl-TransportChannelIdentity (should be as for UL)	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 9	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 9
>tfs-SignallingMode	Explicit <Only tf0 on TrCH1 is different and shown below>	Explicit <Only tf0 on TrCH1 is different and shown below>
>>transportFormatSet	DedicatedTransChTFS	DedicatedTransChTFS
>>>dynamicTF-information		
>>>>tf0/ tf0,1	TrCH1: (1x0)	TrCH1: (1x0)
>>>>rlcSize	bitMode	bitMode
>>>>>sizeType	TrCH1: type 1: 0	TrCH1: type 1: 0
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
>>>>logicalChannelList	All	All
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 9	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 9
>dch-QualityTarget		
>>bler-QualityValue	TrCH1: $7x10^{-3}$ TrCH2- TrCH4: Absent	TrCH1: $7x10^{-3}$ TrCH2- TrCH4: Absent
TrCH INFORMATION, COMMON		
ul-CommonTransChInfo		
>tfcs-ID (TDD only)	1	1
>sharedChannelIndicator (TDD only)	FALSE	FALSE
>tfc-Subset	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI signalling	Normal TFCI signalling
>>explicitTFCS-ConfigurationMode	Complete	Complete
>>>ctfcSize	Ctfc6Bit	Ctfc8Bit
>>>>TFCS representation	Addition	Addition
>>>>>TFCS list		
>>>>>>TFC 1	(TF0, TF0, TF0, TF0)	(TF0, TF0, TF0, TF0)
>>>>>>>ctfc	0	0
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 2	(TF1, TF0, TF0, TF0)	(TF1, TF0, TF0, TF0)
>>>>>>>ctfc	1	1
>>>>>>>gainFactorInformation	Computed	Computed

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Configuration	12.2 kbps speech + 13.6 kbps signalling	12.2/7.95/5.9/4.75 kbps speech + 13.6 kbps signalling
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 3	(TF2, TF1, TF1, TF0)	(TF2, TF1, TF0, TF0)
>>>>>>>ctfc	11	8
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 4	(TF0, TF0, TF0, TF1)	(TF3, TF2, TF0, TF0)
>>>>>>>ctfc	12	15
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 5	(TF1, TF0, TF0, TF1)	(TF4, TF3, TF0, TF0)
>>>>>>>ctfc	13	22
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 6	(TF2, TF1, TF1, TF1)	(TF5, TF4, TF1, TF0)
>>>>>>>ctfc	23	59
>>>>>>>gainFactorInformation	Signalled	Computed
>>>>>>>>βc (FDD only)	10	N/A
>>>>>>>>βd	15	N/A
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 7	(TF0, TF0, TF0, TF2)	(TF0,TF0,TF0,TF1)
>>>>>>>ctfc	24	60
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 8	(TF1, TF0, TF0, TF2)	(TF1,TF0,TF0,TF1)
>>>>>>>ctfc	25	61
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 9	(TF0, TF0, TF0, TF3)	(TF2,TF1,TF0,TF1)
>>>>>>>ctfc	36	68
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 10	(TF1, TF0, TF0, TF3)	(TF3,TF2,TF0,TF1)
>>>>>>>ctfc	37	75
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 11	(TF0, TF0, TF0, TF4)	(TF4,TF3,TF0,TF1)
>>>>>>>ctfc	48	82
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 12		(TF5,TF4,TF1,TF1)
>>>>>>>ctfc		119

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Configuration	12.2 kbps speech + 13.6 kbps signalling	12.2/7.95/5.9/4.75 kbps speech + 13.6 kbps signalling
>>>>>>>gainFactorInformation		Signalled
>>>>>>>>referenceTFCId		10
>>>>>>TFC 13		15
>>>>>>>ctfc		0
>>>>>>>gainFactorInformation		(TF0,TF0,TF0,TF2)
>>>>>>>>βc (FDD only)		120
>>>>>>>>βd		Computed
>>>>>>>>referenceTFCId		0
>>>>>>TFC 14		(TF1, TF0, TF0, TF2)
>>>>>>>ctfc		121
>>>>>>>gainFactorInformation		Computed
>>>>>>>>referenceTFCId		0
>>>>>>TFC 15		(TF0,TF0,TF0,TF3)
>>>>>>>ctfc		180
>>>>>>>gainFactorInformation		Computed
>>>>>>>>referenceTFCId		0
>>>>>>TFC 16		(TF1, TF0, TF0, TF3)
>>>>>>>ctfc		181
>>>>>>>gainFactorInformation		Computed
>>>>>>>>referenceTFCId		0
>>>>>>TFC 17		(TF0,TF0,TF0,TF4)
>>>>>>>ctfc		240
>>>>>>>gainFactorInformation		Computed
>>>>>>>>referenceTFCId		0
dl-CommonTransChInfo		
>tfcs-SignallingMode	Same as UL	Same as UL
PhyCH INFORMATION FDD		
UL-DPCH-InfoPredef		
>ul-DPCH-PowerControlInfo		
>>powerControlAlgorithm	Algorithm 1	Algorithm 1
>>>tpcStepSize	1 dB	1 dB
>tfci-Existence	TRUE	TRUE
>puncturingLimit	0.96	0.96
DL-CommonInformationPredef		
>dl-DPCH-InfoCommon		
>>spreadingFactor	128	128
>>tfci-Existence	TRUE	TRUE
>>pilotBits	4	4
>>positionFixed	Flexible	Flexible

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Configuration	64kbps conv. CS-data + 13.6 kbps signalling	12.65/8.85/6.6 kbps speech + 13.6 kbps signalling (without SRB#5)
Ref 25.993	7.1.133	7.1.134
Default configuration identity	20	21
RB INFORMATION		
Rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7,
rlc-InfoChoice	Rlc-info	Rlc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5-RB7: TM
>>transmissionRLC-DiscardMode	RB1: N/A RB2- RB3: NoDiscard RB5: N/A	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A
>>>maxDat	RB1: N/A RB2- RB3: 25 RB5: N/A	RB1: N/A RB2- RB3: 25 RB5- RB7: N/A
>>transmissionWindowSize	RB1: N/A RB2- RB3: 32 RB5: N/A	RB1: N/A RB2- RB3: 32 RB5- RB7: N/A
>>timerRST	RB1: N/A RB2- RB3: 200 RB5: N/A	RB1: N/A RB2- RB3: 200 RB5- RB7: N/A
>>max-RST	RB1: N/A RB2- RB3: 1 RB5: N/A	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>TimerPoll	RB2- RB3: 100	RB2- RB3: 100
>>>PollPDU	RB2- RB3: n/a	RB2- RB3: n/a
>>>PollSDU	RB2- RB3: 1	RB2- RB3: 1
>>>lastTransmissionPDU-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPDU-Poll	RB2- RB3: TRUE	RB2- RB3: TRUE
>>>PollWindow	RB2- RB3: 99	RB2- RB3: 99
>>segmentationIndication	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5- RB7: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE RB5: N/A	RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 32 RB5: N/A	RB1: N/A RB2- RB3: 32 RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: TRUE	RB2- RB3: TRUE
>>segmentationIndication	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
rb-MappingInfo		
>UL-LogicalChannelMappings	OneLogicalChannel	OneLogicalChannel
>>ul-TransportChannelType	Dch	Dch
>>>transportChannelIdentity	RB1- RB3: 9 RB5: 1	RB1- RB3: 9 RB5: 1, RB6: 2, RB7: 3.
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A

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>>rlc-SizeList	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5- RB7: N/A
>>mac-LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5
>DL-logicalChannelMappingList		
>>Mapping option 1	One mapping option	One mapping option
>>>dl-TransportChannelType	Dch	Dch
>>>>transportChannelIdentity	RB1- RB3: 9 RB5: 1	RB1- RB3: 9 RB5: 1, RB6: 2, RB7: 3,
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH		
UL-AddReconfTransChInfoList		
>Uplink transport channel type	dch	Dch
>transportChannelIdentity	TrCH1: 1, TrCH2: 9	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 9
>transportFormatSet	DedicatedTransChTFS	DedicatedTransChTFS
>>dynamicTF-information		
>>>tf0/ tf0,1,2,3,4	TrCH1: (0x640, 2x640) TrCH2: (0x144, 1x144, 2x144, 3x144, 4x144)	TrCH1: (0x72) TrCH2: (0x 181) TrCH3: (0x60) TrCH4: (0x144, 1x144, 2x144, 3x144, 4x144)
>>>>rlcSize	TrCH1: OctetMode TrCH2:BitMode	BitMode
>>>>>sizeType	TrCH1: type 2, part1= 11, part2= 2 (640) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 72 TrCH2: type 2: part1= 6, part2= 5 TrCH3: type1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1: Zero, 2 TrCH2: Zero, one, 2, 3, 4	TrCH1-3: Zero TrCH4: Zero, one, 2, 3, 4
>>>>logicalChannelList	All	All
>>>tf 1		TrCH1: (1x40) TrCH2: (1x 78) TrCH3: N/A TrCH4: N/A
>>>>numberOfTransportBlocks		TrCH1: One TrCH2: One
>>>>rlc-Size		TrCH1-2: BitMode
>>>>>sizeType		TrCH1: 1: 40 TrCH2: 1: 78
>>>>numberOfTbSizeList		TrCH1-2: One
>>>>logicalChannelList		TrCH1: all
>>>tf 2		TrCH1: (1x54) TrCH2: (1x113) TrCH3: N/A TrCH4: N/A
>>>>numberOfTransportBlocks		TrCH1: One TrCh2: One
>>>>rlc-Size		TrCH1: BitMode
>>>>>sizeType		TrCH1: type 1: 54 TrCH2: type 1: 113
>>>>numberOfTbSizeList		TrCH1: One TrCH2: One
>>>>logicalChannelList		TrCH1: all TrCH2: all

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>>>tf 3		TrCH1: (1x64) TrCH2: (1x181) TrCH3: N/A TrCH4: N/A
>>>>numberOfTransportBlocks		TrCH1: One TrCh2: One
>>>>rlc-Size		TrCH1: BitMode
>>>>>sizeType		TrCH1: type 1: 64 TrCH2: type 2: part1=6, part2= 5
>>>>numberOfTbSizeList		TrCH1: One TrCH2: One
>>>>logicalChannelList		TrCH1: all TrCH2: all
>>>tf 4		TrCH1: (1x72) TrCH2: N/A TrCH3: N/A TrCH4: N/A
>>>>numberOfTransportBlocks		TrCH1: One
>>>>rlc-Size		TrCH1: BitMode
>>>>>sizeType		TrCH1: type 1: 72
>>>>numberOfTbSizeList		TrCH1: One
>>>>logicalChannelList		TrCH1: all
>>semistaticTF-Information		
>>>tti	TrCH1: 20 TrCH2: 40	TrCH1- TrCH2: 20 TrCH4: 40
>>>channelCodingType	TrCH1: Turbo TrCH2: Convolutional	Convolutional
>>>>codingRate	TrCH1: N/A TrCH2: Third	TrCH1- TrCH3: Third TrCH4: Third
>>>rateMatchingAttribute	TrCH1: 170 TrCH2: 160	TrCH1: 200 TrCH2: 190 TrCH3: 256 TrCH4: 170
>>>crc-Size	TrCH1: 16 TrCH2: 16	TrCH1: 12 TrCH2: 0 TrCH3: 0 TrCH4: 16
DL-AddReconfTransChInfoList		
>Downlink transport channel type	dch	Dch
>dl-TransportChannelIdentity	TrCH1: 1, TrCH2: 9	
>tfs-SignallingMode	SameAsUL	Independent
>>transportFormatSet		
>>>dynamicTF-information		
>>>>tf0/ tf0,1		TrCH1: (1x0)
>>>>rlcSize		BitMode
>>>>>sizeType		TrCH1: type 1: 0
>>>>numberOfTbSizeList		TrCH1: One
>>>>logicalChannelList		All
>>>semistaticTF-Information		same as UL
>>ULTrCH-Id	TrCH1: 1, TrCH2: 9	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 9,
>dch-QualityTarget		
>>bler-QualityValue	TrCH1: $2x10^{-3}$ TrCH2: Absent	TrCH1: $7x10^{-3}$ TrCH2: Absent TrCH3: Absent TrCH4: Absent
TrCH INFORMATION, COMMON		
ul-CommonTransChInfo		
>tfcs-ID (TDD only)	1	1
>sharedChannelIndicator (TDD only)	FALSE	FALSE

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> tfc-Subset	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI signalling	Normal TFCI signalling
>>explicitTFCS-ConfigurationMode	Complete	Complete
>>>ctfcSize	Ctfc2Bit	Ctfc6Bit
>>>>TFCS representation	Addition	Addition
>>>>>TFC list		
>>>>>>TFC 1	(TF0, TF0)	(TF0, TF0, TF0, TF0)
>>>>>>>ctfc	0	0
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 2	(TF1, TF0)	(TF1, TF0, TF0, TF0)
>>>>>>>ctfc	1	1
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>βc (FDD only)	N/A	N/A
>>>>>>>>βd	N/A	N/A
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 3	(TF0, TF1)	(TF2, TF1, TF0, TF0)
>>>>>>>ctfc	2	7
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 4	(TF1, TF1)	(TF3, TF2, TF0, TF0)
>>>>>>>ctfc	3	13
>>>>>>>gainFactorInformation	Signalled	Computed
>>>>>>>>βc (FDD only)	8	N/A
>>>>>>>>βd	15	N/A

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>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 5	(TF0, TF2)	(TF4, TF3, TF0, TF0)
>>>>>>>ctfc	4	19
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 6	(TF0, TF3)	(TF0, TF0, TF0, TF1)
>>>>>>>ctfc	6	20
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 7	(TF0, TF4)	(TF1, TF0, TF0, TF1)
>>>>>>>ctfc	8	21
>>>>>>>gainFactorInformation	Computed	Computed
>>>>>>>>referenceTFCId	0	0
>>>>>>TFC 8		(TF2, TF1, TF0, TF1)
>>>>>>>ctfc		27
>>>>>>>gainFactorInformation		computed
>>>>>>>>referenceTFCId		0
>>>>>>TFC 9		(TF3, TF2, TF0, TF1)
>>>>>>>ctfc		33
>>>>>>>gainFactorInformation		computed
>>>>>>>>referenceTFCId		0
>>>>>>TFC 10		(TF4, TF3, TF0, TF1)
>>>>>>>ctfc		39
>>>>>>>gainFactorInformation		signalled
>>>>>>>>βc (FDD only)		10
>>>>>>>>βd		15
>>>>>>>>referenceTFCId		0
>>>>>>TFC 11		(TF0, TF0, TF0, TF2)
>>>>>>>ctfc		40
>>>>>>>gainFactorInformation		Computed
>>>>>>>>referenceTFCId		0
>>>>>>TFC 12		(TF1, TF0, TF0, TF2)
>>>>>>>ctfc		41
>>>>>>>gainFactorInformation		Computed
>>>>>>>>referenceTFCId		0
>>>>>>TFC 13		(TF0, TF0, TF0, TF3)
>>>>>>>ctfc		60
>>>>>>>gainFactorInformation		Computed
>>>>>>>>referenceTFCId		0
>>>>>>TFC 14		(TF1, TF0, TF0, TF3)
>>>>>>>ctfc		61
>>>>>>>gainFactorInformation		Computed
>>>>>>>>referenceTFCId		0
>>>>>>TFC 15		(TF0, TF0, TF0, TF4)
>>>>>>>ctfc		80
>>>>>>>gainFactorInformation		Computed
>>>>>>>>referenceTFCId		0
dl-CommonTransChInfo		
>tfcs-SignallingMode	Same as UL	Same as UL
ul-CommonTransChInfo		
>tfcs-ID (TDD only)		1
>sharedChannelIndicator (TDD only)		FALSE
> tfc-Subset		Absent, not required
PhyCH INFORMATION FDD		
UL-DPCH-InfoPredef		
>ul-DPCH-PowerControlInfo		
>>powerControlAlgorithm	Algorithm 1	Algorithm 1
>>>tpcStepSize	1 dB	1 dB
>tfci-Existence	TRUE	TRUE
>puncturingLimit	1	0.96
DL-CommonInformationPredef		
>dl-DPCH-InfoCommon		
>>spreadingFactor	32	128

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>>tfci-Existence	TRUE	TRUE
>>pilotBits	8	4
>>positionFixed	Flexible	Flexible
PhyCH INFORMATION 3.84 Mcps TDD		
UL-DPCH-InfoPredef		
>ul-DPCH-PowerControlInfo		
>>dpch-ConstantValue		
>commonTimeslotInfo		
>>secondInterleavingMode		
>>tfci-Coding		
>>puncturingLimit		
>>repetitionPeriodAndLength		
DL-CommonInformationPredef		
>dl-DPCH-InfoCommon		
>>commonTimeslotInfo		
>>>secondInterleavingMode		
>>>tfci-Coding		
>>>puncturingLimit		
>>>repetitionPeriodAndLength		
PhyCH INFORMATION 1.28 Mcps TDD		
UL-DPCH-InfoPredef		
>commonTimeslotInfo		
>>secondInterleavingMode		
>>tfci-Coding		
>>puncturingLimit		
>>repetitionPeriodAndLength		
DL-CommonInformationPredef		
>dl-DPCH-InfoCommon		
>>commonTimeslotInfo		
>>>secondInterleavingMode		
>>>tfci-Coding		
>>>puncturingLimit		
>>>repetitionPeriodAndLength		

Configuration	**13.6 kbps signalling**
Ref 34.108	3
Default configuration identity	22
RB INFORMATION	
rb-Identity	RB1: 1, RB2: 2, RB3: 3
rlc-InfoChoice	Rlc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM
>>transmissionRLC-DiscardMode	RB1: N/A RB2- RB3: NoDiscard
>>>maxDat	RB1: N/A RB2- RB3: 25
>>transmissionWindowSize	RB1: N/A RB2- RB3: 32
>>timerRST	RB1: N/A RB2- RB3: 200
>>max-RST	RB1: N/A RB2- RB3: 1
>>pollingInfo	RB1: N/A RB2- RB3: as below
>>>TimerPoll	RB2- RB3: 100
>>>PollPDU	RB2- RB3: n/a
>>>PollSDU	RB2- RB3: 1

Configuration	13.6 kbps signalling
>>>lastTransmissionPDU-Poll	RB2- RB3: FALSE
>>>lastRetransmissionPDU-Poll	RB2- RB3: TRUE
>>>PollWindow	RB2- RB3: 99
>>segmentationIndication	RB1- RB3: N/A
>dl-RLC-Mode	RB1: UM RB2- RB3: AM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE
>>receivingWindowSize	RB1: N/A RB2- RB3: 32
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below
>>>timerStatusProhibit	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: TRUE
>>segmentationIndication	RB1- RB3: N/A
rb-MappingInfo	
>UL-LogicalChannelMappings	OneLogicalChannel
>>ul-TransportChannelType	Dch
>>>transportChannelIdentity	RB1- RB3:9
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3
>>rlc-SizeList	RB1- RB3: configured
>>mac-LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3
>DL-logicalChannelMappingList	
>>Mapping option 1	One mapping option
>>>dl-TransportChannelType	Dch
>>>>transportChannelIdentity	RB1- RB3: 9
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3
TrCH INFORMATION PER TrCH	
UL-AddReconfTransChInfoList	
>Uplink transport channel type	Dch
>transportChannelIdentity	TrCH1: 9
>transportFormatSet	DedicatedTransChTFS
>>dynamicTF-information	
>>>tf0/ tf0,1	TrCH1: (0x144, 1x144)
>>>>rlcSize	BitMode
>>>>>sizeType	TrCH1: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1: Zero, one
>>>>logicalChannelList	All
>>>tf 1	N/A
>>>>numberOfTransportBlocks	
>>>>rlc-Size	
>>>>>sizeType	
>>>>numberOfTbSizeList	

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Configuration	13.6 kbps signalling
>>>>logicalChannelList	
>>>tf 2	N/A
>>>>numberOfTransportBlocks	
>>>>rlc-Size	
>>>>>sizeType	
>>>>numberOfTbSizeList	
>>>>logicalChannelList	
>>semistaticTF-Information	
>>>tti	TrCH1: 10
>>>channelCodingType	Convolutional
>>>>codingRate	TrCH1: Third
>>>rateMatchingAttribute	TrCH1: 160
>>>crc-Size	TrCH1: 16
DL-AddReconfTransChInfoList	
>Downlink transport channel type	Dch
>dl-TransportChannelIdentity (should be as for UL)	TrCH1: 9
>tfs-SignallingMode	SameAsUL
>>transportFormatSet	
>>>dynamicTF-information	
>>>>tf0/ tf0,1	
>>>>rlcSize	
>>>>>sizeType	
>>>>numberOfTbSizeList	
>>>>logicalChannelList	
>>ULTrCH-Id	TrCH1: 9
>dch-QualityTarget	
>>bler-QualityValue	TrCH1: $1x10^{-2}$
TrCH INFORMATION, COMMON	
ul-CommonTransChInfo	
>tfcs-ID (TDD only)	1
>sharedChannelIndicator (TDD only)	FALSE
>tfc-Subset	Absent, not required
>ul-TFCS	Normal TFCI signalling
>>explicitTFCS-ConfigurationMode	Complete
>>>ctfcSize	Ctfc2Bit
>>>>TFCS representation	Addition
>>>>>TFCS list	
>>>>>>TFCS 1	(TF0)
>>>>>>>ctfc	0
>>>>>>>gainFactorInformation	Computed
>>>>>>>>referenceTFCId	0
>>>>>>TFCS 2	(TF1)
>>>>>>>ctfc	1
>>>>>>>gainFactorInformation	Signalled
>>>>>>>>βc (FDD only)	11
>>>>>>>>βd	15
>>>>>>>>referenceTFCId	0
dl-CommonTransChInfo	
>tfcs-SignallingMode	Same as UL
PhyCH INFORMATION FDD	

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Configuration	13.6 kbps signalling
UL-DPCH-InfoPredef	
>ul-DPCH-PowerControlInfo	
>>powerControlAlgorithm	Algorithm 1
>>>tpcStepSize	1 dB
>tfci-Existence	TRUE
>puncturingLimit	1
DL-CommonInformationPredef	
>dl-DPCH-InfoCommon	
>>spreadingFactor	128
>>tfci-Existence	FALSE
>>pilotBits	4
>>positionFixed	N/A
PhyCH INFORMATION 3.84 / 7.68 Mcps TDD	
UL-DPCH-InfoPredef	
>ul-DPCH-PowerControlInfo	
>>dpch-ConstantValue	0
>commonTimeslotInfo	
>>secondInterleavingMode	frameRelated
>>tfci-Coding	4
>>puncturingLimit	0.92
>>repetitionPeriodAndLength	repetitionPeriod1
DL-CommonInformationPredef	
>dl-DPCH-InfoCommon	
>>commonTimeslotInfo	
>>>secondInterleavingMode	frameRelated
>>>tfci-Coding	4
>>>puncturingLimit	0.92
>>>repetitionPeriodAndLength	repetitionPeriod1
PhyCH INFORMATION 1.28 Mcps TDD	
UL-DPCH-InfoPredef	
>commonTimeslotInfo	
>>secondInterleavingMode	frameRelated
>>tfci-Coding	4
>>puncturingLimit	0.64
>>repetitionPeriodAndLength	repetitionPeriod1
DL-CommonInformationPredef	
>dl-DPCH-InfoCommon	
>>commonTimeslotInfo	
>>>secondInterleavingMode	frameRelated
>>>tfci-Coding	4
>>>puncturingLimit	0.64
>>>repetitionPeriodAndLength	repetitionPeriod1

NOTE: the difference between default configuration #22 and default configuration #1 (13.6 kbps signalling) resides in the RLC configuration and the DCH quality target.

14 Specific functions

14.1 Intra-frequency measurements

14.1.1 Intra-frequency measurement quantities

A measurement quantity is used to evaluate whether an intra-frequency event has occurred or not. It can be:

1 Downlink E_c/N_0.

2 Downlink path loss.

For FDD:

Pathloss in dB = Primary CPICH Tx power - CPICH RSCP.

For Primary CPICH Tx power the IE "Primary CPICH Tx power" shall be used. The unit is dBm.

CPICH RSCP is the result of the CPICH RSCP measurement. The unit is dBm.

For TDD:

Pathloss in dB = Primary CCPCH TX power - Primary CCPCH RSCP.

For Primary CCPCH TX power the IE "Primary CCPCH TX Power" shall be used. The unit is dBm.

Primary CCPCH RSCP is the result of the Primary CCPCH RSCP measurement. The unit is dBm.

If necessary Pathloss shall be rounded up to the next higher integer.
Results higher than 158 shall be reported as 158.
Results lower than 46 shall be reported as 46.

3 Downlink received signal code power (RSCP) after despreading.

4 ISCP measured on Timeslot basis.

A description of those values can be found in [7] and [8].

14.1.2 Intra-frequency reporting events for FDD

Within the measurement reporting criteria field in the Measurement Control message the UTRAN notifies the UE which events should trigger a measurement report. The listed events are the toolbox from which the UTRAN can choose the reporting events that are needed for the implemented handover evaluation function, or other radio network functions.

All the specified events are measured with respect to any of the measurement quantities given in subclause 14.1.1. The measurement quantities are measured on the monitored primary common pilot channels (CPICH) of the cell defined in the measurement object.

Special mechanisms for the events are illustrated in subclause 14.1.4 and 14.1.5.

NOTE: The events below are numbered 1A, 1B, 1C,… since all intra-frequency reporting events would be labelled 1X, inter-frequency reporting events would be labelled 2X, and so on for the other measurement types.

When one intra-frequency measurement identity corresponds to multiple intra-frequency events with identical event identities, the UE behaviour is not specified.

14.1.2.1 Reporting event 1A: A Primary CPICH enters the reporting range

When an intra-frequency measurement configuring event 1a is set up, the UE shall:

1> create a variable TRIGGERED_1A_EVENT related to that measurement, which shall initially be empty;

1> delete this variable when the measurement is released.

When event 1A is configured in the UE, the UE shall:

1> if "Measurement quantity" is "pathloss" and Equation 1 below is fulfilled for one or more primary CPICHs, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 2 below is fulfilled for one or more primary CPICHs, for each of these primary CPICHs:

2> if all required reporting quantities are available for that cell; and

2> if the equations have been fulfilled for a time period indicated by "Time to trigger", and if that primary CPICH is part of cells allowed to trigger the event according to "Triggering condition 2", and if that primary CPICH is not included in the "cells triggered" in the variable TRIGGERED_1A_EVENT:

3> include that primary CPICH in the "cells recently triggered" in the variable TRIGGERED_1A_EVENT.

1> if the value of "Reporting deactivations threshold" for this event is greater than or equal to the current number of cells in the active set or equal to 0 and any primary CPICHs are stored in the "cells recently triggered" in the variable TRIGGERED_1A_EVENT:

2> if "Reporting interval" for this event is not equal to 0:

3> if the IE "Periodical reporting running" in the variable TRIGGERED_1A_EVENT is set to FALSE:

4> start a timer with the value of "Reporting interval" for this event and set the IE "Periodical reporting running" in the variable TRIGGERED_1A_EVENT to TRUE;

3> set "sent reports" for the primary CPICHs in "cells recently triggered" in the variable TRIGGERED_1A_EVENT to 1.

2> send a measurement report with IEs set as below:

3> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1a"; and

3> include in "cell measurement event results" all entries of the "cells recently triggered" in the variable TRIGGERED_1A_EVENT in descending order according to the configured measurement quantity taking into account the cell individual offset for each of those cells;

3> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell.

2> move all entries from "cells recently triggered" to "cells triggered" in the variable TRIGGERED_1A_EVENT.

1> if the timer for the periodical reporting has expired:

2> if any primary CPICH is included in the "cells triggered" in the variable TRIGGERED_1A_EVENT:

3> if "Reporting interval" for this event is not equal to 0, and if "Amount of reporting" is greater than "sent reports" stored for any of these primary CPICHs, in "cells triggered" in the variable TRIGGERED_1A_EVENT:

4> increment the stored counter "sent reports" for all CPICHs in "cell triggered" in variable TRIGGERED_1A_EVENT;

4> start a timer with the value of "Reporting interval" for this event;

4> send a measurement report with IEs set as below:

5> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1a"; and

5> include in "cell measurement event results" all entries of the variable TRIGGERED_1A_EVENT with value of IE "sent reports" equal to or smaller than value of "Amount of reporting" in descending order according to the configured measurement quantity taking into account the cell individual offset for each of those cells;

5> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell.

4> if "sent reports" in variable TRIGGERED_1A_EVENT is equal to "Amount of reporting" for all entries:

5> set the IE "Periodical Reporting running" in the variable TRIGGERED_1A_EVENT to FALSE and disable the timer for the periodical reporting.

1> if "Measurement quantity" is "pathloss" and Equation 3 below is fulfilled for a primary CPICH, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 4 below is fulfilled for a primary CPICH; or

1> if a primary CPICH is no longer part of the cells allowed to trigger the event according to the "Triggering condition 2":

2> if that primary CPICH is included in the "cells triggered" or "cells recently triggered" in the variable TRIGGERED_1A_EVENT:

3> remove the entry of that primary CPICH from "cells triggered" or "cells recently triggered" in the variable TRIGGERED_1A_EVENT.

3> if no entry in the variable TRIGGERED_1A_EVENT has a value of "sent reports" smaller than "Amount of reporting"; or

3> if there is no entry in the variable TRIGGERED_1A_EVENT:

4> if the reporting interval timer is running:

5> stop the reporting interval timer;

5> set the IE "Periodical reporting running" in the variable TRIGGERED_1A_EVENT to FALSE.

This event is only applicable to the CELL_DCH state. When the measurement is setup in CELL_DCH or upon transition to CELL_DCH the UE shall:

1> if the "Triggering condition 2" includes active set cells:

2> include the primary CPICH of all cells in the current active set into the "cells triggered" in the variable TRIGGERED_1A_EVENT with the counter "sent reports" set to "Amount of reporting".

Equation 1 (Triggering condition for pathloss)

$$10 \cdot LogM_{New} + CIO_{New} \le W \cdot 10 \cdot Log\left(1/\sum_{i=1}^{N_A}(1/M_i)\right) + (1-W) \cdot 10 \cdot LogM_{Best} + (R_{1a} - H_{1a}/2),$$

Equation 2 (Triggering condition for all the other measurement quantities)

$$10 \cdot LogM_{New} + CIO_{New} \ge W \cdot 10 \cdot Log\left(\sum_{i=1}^{N_A} M_i\right) + (1-W) \cdot 10 \cdot LogM_{Best} - (R_{1a} - H_{1a}/2),$$

Equation 3 (Leaving triggering condition for pathloss)

$$10 \cdot LogM_{New} + CIO_{New} > W \cdot 10 \cdot Log\left(1/\sum_{i=1}^{N_A}(1/M_i)\right) + (1-W) \cdot 10 \cdot LogM_{Best} + (R_{1a} + H_{1a}/2),$$

Equation 4 (Leaving triggering condition for all the other measurement quantities)

$$10 \cdot LogM_{New} + CIO_{New} < W \cdot 10 \cdot Log\left(\sum_{i=1}^{N_A} M_i\right) + (1-W) \cdot 10 \cdot LogM_{Best} - (R_{1a} + H_{1a}/2),$$

The variables in the formula are defined as follows:

$\boldsymbol{M_{New}}$ is the measurement result of the cell entering the reporting range.

CIO_{New} is the individual cell offset for the cell entering the reporting range if an individual cell offset is stored for that cell. Otherwise it is equal to 0.

M_i is a measurement result of a cell not forbidden to affect reporting range in the active set.

N_A is the number of cells not forbidden to affect reporting range in the current active set.

For pathloss

M_{Best} is the measurement result of the cell not forbidden to affect reporting range in the active set with the lowest measurement result, not taking into account any cell individual offset.

for other measurements quantities.

M_{Best} is the measurement result of the cell not forbidden to affect reporting range in the active set with the highest measurement result, not taking into account any cell individual offset.

W is a parameter sent from UTRAN to UE.

R_{1a} is the reporting range constant.

H_{1a} is the hysteresis parameter for the event 1a.

If the measurement results are pathloss or CPICH-Ec/No then M_{New}, M_i and M_{Best} are expressed as ratios.

If the measurement result is CPICH-RSCP then M_{New}, M_i and M_{Best} are expressed in mW.

14.1.2.2 Reporting event 1B: A primary CPICH leaves the reporting range

When an intra-frequency measurement configuring event 1b is set up, the UE shall:

1> create a variable TRIGGERED_1B_EVENT related to that measurement, which shall initially be empty;

1> delete this variable when the measurement is released.

When event 1B is configures in the UE, the UE shall:

1> if "Measurement quantity" is "pathloss" and Equation 1 below is fulfilled for one or more primary CPICHs, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 2 below is fulfilled for one or more primary CPICHs, for each of these primary CPICHs:

2> if all required reporting quantities are available for that cell, and if the equations have been fulfilled for a time period indicated by "Time to trigger", and if that primary CPICH is part of cells allowed to trigger the event according to "Triggering condition 1", and if that primary CPICH is not included in the "cells triggered" in the variable TRIGGERED_1B_EVENT:

3> include that primary CPICH in the "cells recently triggered" in the variable TRIGGERED_1B_EVENT.

1> if any primary CPICHs are stored in the "cells recently triggered" in the variable TRIGGERED_1B_EVENT:

2> if "Periodic reporting info-1b" is present, and "Reporting interval" for this event is not equal to 0:

3> if the IE "Periodical reporting running" in the variable TRIGGERED_1B_EVENT is set to FALSE:

4> start a timer with the value of "Reporting interval" for this event and set the IE "Periodical reporting running" in the variable TRIGGERED_1B_EVENT to TRUE;

3> set "sent reports" for the primary CPICHs in "cells recently triggered" in the variable TRIGGERED_1B_EVENT to 1.

2> send a measurement report with IEs set as below:

3> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1b"; and

3> include in "cell measurement event results" all entries of "cells recently triggered" in the variable TRIGGERED_1B_EVENT in ascending order according to the configured measurement quantity taking into account the cell individual offset for each of those cells;

3> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell.

2> move all entries from IE "cells recently triggered" to "cells triggered" in the variable TRIGGERED_1B_EVENT.

1> if the timer for the periodical reporting has expired:

2> if any primary CPICH is included in the "cells triggered" in the variable TRIGGERED_1B_EVENT:

3> if "Periodic reporting info-1b" is present:

4> if "Reporting interval" is not equal to 0, and if "Amount of reporting" is greater than "sent reports" stored for any of these primary CPICHs, in "cells triggered" in the variable TRIGGERED_1B_EVENT:

5> increment the stored counter "sent reports" for all CPICHs in "cell triggered" in variable TRIGGERED_1B_EVENT;

5> start a timer with the value of "Reporting interval-1b" for this event;

5> send a measurement report with IEs set as below:

6> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1b"; and

6> include in "cell measurement event results" all entries of the variable TRIGGERED_1B_EVENT with value of IE "sent reports" equal to or smaller than value of "Amount of reporting" in ascending order according to the configured measurement quantity taking into account the cell individual offset for each of those cells;

6> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell.

5> if "sent reports" in variable TRIGGERED_1B_EVENT is equal to "Amount of reporting" for all entries:

6> set the IE "Periodical Reporting running" in the variable TRIGGERED_1B_EVENT to FALSE and disable the timer for the periodical reporting.

1> if "Measurement quantity" is "pathloss" and Equation 3 below is fulfilled for a primary CPICH, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 4 below is fulfilled for a primary CPICH; or

1> if a primary CPICH is no longer part of the cells allowed to trigger the event according to the "Triggering condition 1":

2> if that primary CPICH is included in the "cells triggered" in the variable TRIGGERED_1B_EVENT:

3> remove the entry of that primary CPICH from "cells triggered" in the variable TRIGGERED_1B_EVENT;

3> if there is no entry in the variable TRIGGERED_1B_EVENT:

4> if the reporting interval timer is running:

5> stop the reporting interval timer;

5> set the IE "Periodical reporting running" in the variable TRIGGERED_1B_EVENT to FALSE.

Equation 1 (Triggering condition for pathloss)

$$10 \cdot LogM_{Old} + CIO_{Old} \geq W \cdot 10 \cdot Log\left(1/\sum_{i=1}^{N_A}(1/M_i)\right) + (1-W) \cdot 10 \cdot LogM_{Best} + (R_{1b} + H_{1b}/2),$$ Equation 2 (Triggering condition for all the other measurement quantities)

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$$10 \cdot LogM_{Old} + CIO_{Old} \leq W \cdot 10 \cdot Log\left(\sum_{i=1}^{N_A} M_i\right) + (1-W) \cdot 10 \cdot LogM_{Best} - (R_{1b} + H_{1b}/2),$$ Equation 3 (Leaving triggering condition for pathloss)

$$10 \cdot LogM_{Old} + CIO_{Old} < W \cdot 10 \cdot Log\left(1/\sum_{i=1}^{N_A}(1/M_i)\right) + (1-W) \cdot 10 \cdot LogM_{Best} + (R_{1b} - H_{1b}/2),$$ Equation 4 (Leaving triggering condition for all the other measurement quantities)

$$10 \cdot LogM_{Old} + CIO_{Old} > W \cdot 10 \cdot Log\left(\sum_{i=1}^{N_A} M_i\right) + (1-W) \cdot 10 \cdot LogM_{Best} - (R_{1b} - H_{1b}/2),$$ The variables in the formula are defined as follows:

M_{Old} is the measurement result of the cell leaving the reporting range.

CIO_{Old} is the individual cell offset for the cell leaving the reporting range if an individual cell offset is stored for that cell. Otherwise it is equal to 0.

M_i is a measurement result of a cell not forbidden to affect reporting range in the active set.

N_A is the number of cells not forbidden to affect reporting range in the current active set.

For pathloss

M_{Best} is the measurement result of the cell not forbidden to affect reporting range in the active set with the lowest measurement result, not taking into account any cell individual offset.

for other measurements quantities.

M_{Best} is the measurement result of the cell not forbidden to affect reporting range in the active set with the highest measurement result, not taking into account any cell individual offset.

W is a parameter sent from UTRAN to UE.

R_{1b} is the reporting range constant.

H_{1b} is the hysteresis parameter for the event 1b.

If the measurement results are pathloss or CPICH-Ec/No then ***M_{Old}***, ***M_i*** and ***M_{Best}*** are expressed as ratios.

If the measurement result is CPICH-RSCP then ***M_{Old}***, ***M_i*** and ***M_{Best}*** are expressed in mW.

14.1.2.3 Reporting event 1C: A non-active primary CPICH becomes better than an active primary CPICH

When an intra-frequency measurement configuring event 1c is set up, the UE shall:

1> create a variable TRIGGERED_1C_EVENT related to that measurement, which shall initially be empty;

1> delete this variable when the measurement is released.

When event 1C is configured in the UE, the UE shall:

1> if "Measurement quantity" is "pathloss" and Equation 1 below is fulfilled for one or more primary CPICHs, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 2 below is fulfilled for one or more primary CPICHs, for each of these primary CPICHs:

2> if all required reporting quantities are available for that cell; and

2> if the equations have been fulfilled for a time period indicated by "Time to trigger", and if the primary CPICH that is better is not included in the active set but the other primary CPICH is any of the primary CPICHs included in the active set, and if that first primary CPICH is not included in the "cells triggered" in the variable TRIGGERED_1C_EVENT:

3> include that primary CPICH in the "cells recently triggered" in the variable TRIGGERED_1C_EVENT.

1> if the value of "Replacement activation threshold" for this event is less than or equal to the current number of cells in the active set or equal to 0 and if any primary CPICHs are stored in the "cells recently triggered" in the variable TRIGGERED_1C_EVENT:

2> if "Reporting interval" for this event is not equal to 0:

3> if the IE "Periodical reporting running" in the variable TRIGGERED_1C_EVENT is set to FALSE:

4> start a timer for with the value of "Reporting interval" for this event and set the IE "Periodical reporting running" in the variable TRIGGERED_1C_EVENT to TRUE.

3> set "sent reports" for that primary CPICH in the variable TRIGGERED_1C_EVENT to 1.

2> send a measurement report with IEs set as below:

3> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1c"; and

3> include in "cell measurement event results" all entries of the "cells recently triggered" in the variable TRIGGERED_1C_EVENT not in the active set as well as the "primary CPICH info" of all the primary CPICHs in the active set for which the measured value is worse (i.e. greater for pathloss and less for the other measurement quantities) than the one of the entry in "cell recently triggered" that has the best measured value taking into account their cell individual offset. The "primary CPICH info" for those cells shall be ordered according to their measured value taking into account their cell individual offset, beginning with the best cell to the worst one;

3> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell.

2> move all entries from "cells recently triggered" to "cells triggered" in the variable TRIGGERED_1C_EVENT.

1> if the timer for the periodical reporting has expired:

2> if any primary CPICH is included in the "cells triggered" in the variable TRIGGERED_1C_EVENT, and not included in the current active set:

3> if "Reporting interval" for this event is not equal to 0, and if "Amount of reporting" is greater than "sent reports" stored for that primary CPICH, in "cells triggered" in the variable TRIGGERED_1C_EVENT:

4> increment the stored counter "sent reports" for all CPICH in "cell triggered" in variable TRIGGERED_1C_EVENT;

4> start a timer with the value of "Reporting interval" for this event;

4> send a measurement report with IEs set as below:

5> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1c"; and

5> include in "cell measurement event results" all entries of the variable TRIGGERED_1C_EVENT with value of IE "sent report" equal to or smaller than value of "Amount of reporting" and that are not part of the active set as well as the "primary CPICH info" of all the primary CPICHs in the active set for which the measured value is worse (i.e. greater for pathloss and less for the other measurement quantities) than the one of the entry in "cell triggered" that has the best measured value, ordering the "primary CPICH info" according to their measured value beginning with the best cell to the worst one, taking into account the cell individual offset for each cell;

5> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell.

4> if "sent reports" in variable TRIGGERED_1C_EVENT is equal to "Amount of reporting" for all entries:

5> set the IE "Periodical Reporting running" in the variable TRIGGERED_1C_EVENT to FALSE and disable the timer for the periodical reporting.

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1> if "Measurement quantity" is "pathloss" and Equation 3 below is fulfilled for a primary CPICH, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 4 below is fulfilled for a primary CPICH or;

1> if a primary CPICH is added to the active set:

2> if that primary CPICH is included in the "cells triggered" or "cells recently triggered" in the variable TRIGGERED_1C_EVENT:

3> remove the entry of that primary CPICH from "cells triggered" or "cells recently triggered" in the variable TRIGGERED_1C_EVENT.

3> if no entry in the variable TRIGGERED_1C_EVENT has a value of "sent reports" smaller than "Amount of reporting" or

3> if there is no entry in the variable TRIGGERED_1C_EVENT:

4> if the reporting interval timer is running:

5> stop the reporting interval timer;

5> set the IE "Periodical reporting running" in the variable TRIGGERED_1C_EVENT to FALSE.

Equation 1 (Triggering condition for pathloss)

$$10 \cdot Log M_{New} + CIO_{New} \leq 10 \cdot Log M_{InAS} + CIO_{InAS} - H_{1c}/2,$$

Equation 2 (Triggering condition for all the other measurement quantities)

$$10 \cdot Log M_{New} + CIO_{New} \geq 10 \cdot Log M_{InAS} + CIO_{InAS} + H_{1c}/2,$$

Equation 3 (Leaving triggering condition for pathloss)

$$10 \cdot Log M_{New} + CIO_{New} > 10 \cdot Log M_{InAS} + CIO_{InAS} + H_{1c}/2,$$

Equation 4 (Leaving triggering condition for all the other measurement quantities)

$$10 \cdot Log M_{New} + CIO_{New} < 10 \cdot Log M_{InAS} + CIO_{InAS} - H_{1c}/2,$$

The variables in the formula are defined as follows:

M_{New} is the measurement result of the cell not included in the active set.

CIO_{New} is the individual cell offset for the cell becoming better than the cell in the active set if an individual cell offset is stored for that cell. Otherwise it is equal to 0.

For pathloss:

M_{InAS} is the measurement result of the cell in the active set with the highest measurement result.

For other measurement quantities:

M_{InAS} is the measurement result of the cell in the active set with the lowest measurement result.

CIO_{InAS} is the individual cell offset for the cell in the active set that is becoming worse than the new cell.

H_{1c} is the hysteresis parameter for the event 1c.

If the measurement results are pathloss or CPICH-Ec/No then M_{New} and M_{inAS} are expressed as ratios.

If the measurement result is CPICH-RSCP then M_{New} and M_{inAS} are expressed in mW.

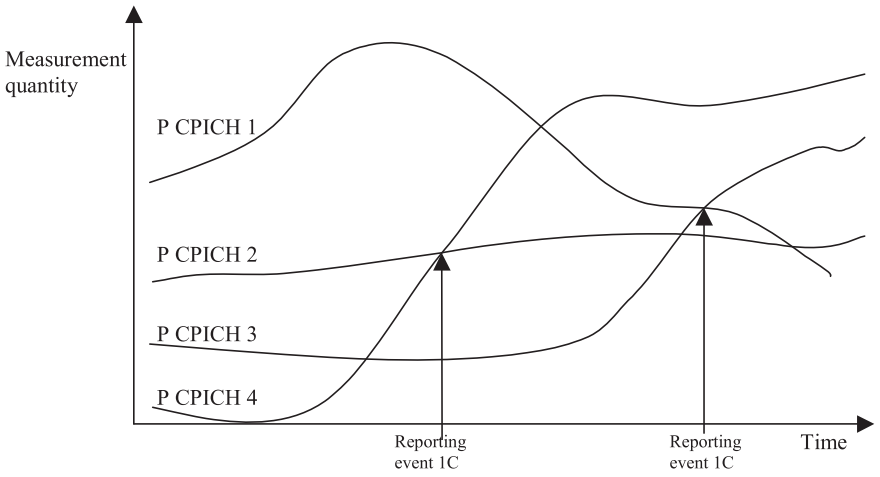


Figure 14.1.2.3-1 [Informative]: A primary CPICH that is not included in the active set becomes better than a primary CPICH that is in the active set

In this figure, the parameters hysteresis and time to trigger, as well as the cell individual offsets for all cells are equal to 0. In this example the cells belonging to primary CPICH 1 and 2 are in the active set, but the cells transmitting primary CPICH 3 and CPICH 4 are not (yet) in the active set.

The first measurement report is sent when primary CPICH 4 becomes better than primary CPICH 2. The "cell measurement event result" of the measurement report contains the information of primary CPICH 4 and CPICH 2.

Assuming that the active set has been updated after the first measurement report (active set is now primary CPICH 1 and primary CPICH 4), the second report is sent when primary CPICH 3 becomes better than primary CPICH 1. The "cell measurement event result" of the second measurement report contains the information of primary CPICH 3 and primary CPICH 1.

14.1.2.4 Reporting event 1D: Change of best cell

When an intra-frequency measurement configuring event 1d is set up, the UE shall:

1> create a variable TRIGGERED_1D_EVENT related to that measurement, which shall initially contain the best cell in the active set when the measurement is initiated;

1> delete this variable when the measurement is released.

1> As soon as the best cell in the active set has been evaluated by the UE (and stored in the TRIGGERED_1D_EVENT variable) and provided that there is more than one cell in the active set, trigger an immediate measurement report with IEs set as below:

2> set in "intra-frequency measurement event results"; "Intrafrequency event identity" to "1d" and "cell measurement event results" to the CPICH info of the primary CPICH stored in the TRIGGERED_1D_EVENT variable;

2> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2

When event 1D is configured in the UE, the UE shall:

1> if IE "useCIO" is present and its value is TRUE, take into account the Cell Individual Offset for evaluation of the Equation 1 and 2, otherwise do not take it into account.

1> if "Measurement quantity" is "pathloss" and Equation 1 below is fulfilled for a primary CPICH that is not stored in "Best cell" in variable BEST_CELL_1D_EVENT, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 2 below is fulfilled for a primary CPICH that is not stored in "Best cell" in variable BEST_CELL_1D_EVENT:

NOTE: If the equations are simultaneously fulfilled for more than one primary CPICH, the UE should report only one event 1D, triggered by the best primary CPICH.

2> if all required reporting quantities are available for that cell, and if the equations have been fulfilled for a time period indicated by "Time to trigger" and if IE "Triggering condition 2" is absent or if it is present and that primary CPICH is part of cells allowed to trigger the event according to "Triggering condition 2":

3> set "best cell" in the variable BEST_CELL_1D_EVENT to that primary CPICH that triggered the event;

3> send a measurement report with IEs set as below:

4> set in "intra-frequency measurement event results"; "Intrafrequency event identity" to "1d" and "cell measurement event results" to the CPICH info of the primary CPICH that triggered the report.

4> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2.

This event is only applicable to the CELL_DCH state. Upon transition to CELL_DCH the UE shall:

1> set "best cell" in the variable BEST_CELL_1D_EVENT to the best cell of the primary CPICHs included in the active set.

Equation 1 (Triggering condition for pathloss)

$$10 Log M_{NotBest} + CIO_{NotBest} \leq 10 Log M_{Best} + CIO_{Best} - H_{1d} / 2,$$

Equation 2 (Triggering condition for all the other measurement quantities)

$$10 Log M_{NotBest} + CIO_{NotBest} \geq 10 Log M_{Best} + CIO_{Best} + H_{1d} / 2,$$

The variables in the formula are defined as follows:

$M_{NotBest}$ is the measurement result of a cell not stored in "best cell" in the variable BEST_CELL_1D_EVENT.

$CIO_{NotBest}$ is the cell individual offset of a cell not stored in "best cell" in the variable BEST_CELL_1D_EVENT.

M_{Best} is the measurement result of the cell stored in "best cell" in variable BEST_CELL_1D_EVENT.

CIO_{Best} is the cell individual offset of a cell stored in "best cell" in the variable BEST_CELL_1D_EVENT.

H_{1d} is the hysteresis parameter for the event 1d.

If the measurement results are pathloss or CPICH-Ec/No then $M_{Not\ Best}$ and M_{Best} are expressed as ratios.

If the measurement result is CPICH-RSCP then $M_{Not\ Best}$ and M_{Best} are expressed in mW.

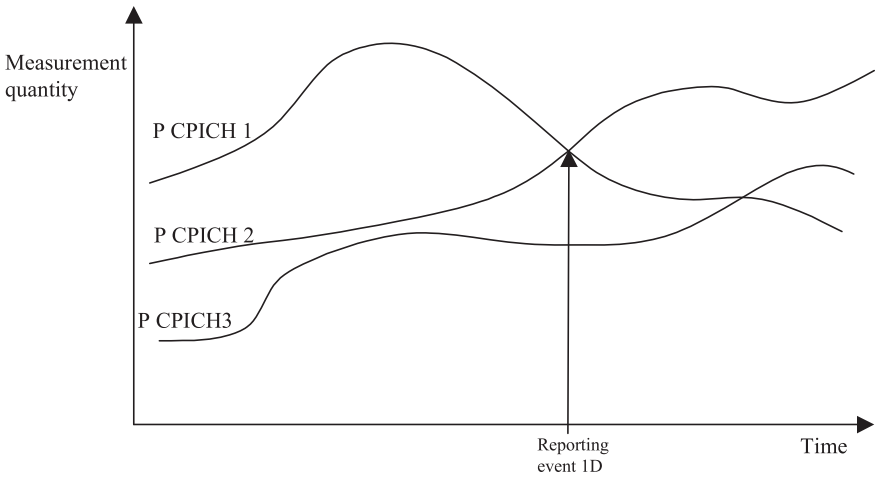


Figure 14.1.2.4-1 [Informative]: A primary CPICH becomes better than the previously best primary CPICH

In this figure, the parameters hysteresis and time to trigger, as well as the cell individual offsets for all cells are equal to 0.

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14.1.2.5 Reporting event 1E: A Primary CPICH becomes better than an absolute threshold

When an intra-frequency measurement configuring event 1e is set up, the UE shall:

1> create a variable TRIGGERED_1E_EVENT related to that measurement, which shall initially be empty;

1> delete this variable when the measurement is released.

When event 1E is configured in the UE, the UE shall:

1> if "Measurement quantity" is "pathloss" and Equation 1 below is fulfilled for a primary CPICH, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 2 below is fulfilled for one or more primary CPICHs, for each of these primary CPICHs:

2> if all required reporting quantities are available for that cell, and if the equations have been fulfilled for a time period indicated by "Time to trigger", and if that primary CPICH is part of cells allowed to trigger the event according to "Triggering condition 2", and that primary CPICH is not included in the "cells triggered" in the variable TRIGGERED_1E_EVENT:

3> include that primary CPICH in the "cells recently triggered" in the variable TRIGGERED_1E_EVENT.

1> if any primary CPICHs are stored in the "cells recently triggered" in the variable TRIGGERED_1E_EVENT:

2> send a measurement report with IEs set as below:

3> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1e"; and

3> include in "cell measurement event results" all entries of the "cells recently triggered" in the variable TRIGGERED_1E_EVENT in descending order according to the configured measurement quantity taking into account the cell individual offset for each of those cells;

3> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell.

2> move all entries from "cells recently triggered" to "cells triggered" in the variable TRIGGERED_1E_EVENT.

1> if "Measurement quantity" is "pathloss" and Equation 3 below is fulfilled for a primary CPICH, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 4 below is fulfilled for a primary CPICH; or

1> if a primary CPICH is no longer part of the cells allowed to trigger the event according to the "Triggering condition 2":

2> if that primary CPICH is included in the "cells triggered" in the variable TRIGGERED_1E_EVENT:

3> remove that primary CPICH and sent reports from "cells triggered" in the variable TRIGGERED_1E_EVENT.

This event is only applicable to the CELL_DCH state. When the measurement is setup in CELL_DCH or upon transition to CELL_DCH the UE shall:

1> if the "Triggering condition 2" includes active set cells:

2> include the primary CPICH of all cells in the current active set that fulfil the equations 1 or 2 according to the "Measurement quantity" of event 1e into the "cells triggered" in the variable TRIGGERED_1E_EVENT.

Equation 1 (Triggering condition for pathloss)

$$10 Log M_{New} + CIO_{New} \leq T_{1e} - H_{1e}/2,$$

Equation 2 (Triggering condition for all the other measurement quantities)

$$10 Log M_{New} + CIO_{New} \geq T_{1e} + H_{1e}/2,$$

Equation 3 (Leaving triggering condition for pathloss)

$$10 Log M_{New} + CIO_{New} > T_{1e} + H_{1e}/2,$$

Equation 4 (Leaving triggering condition for all the other measurement quantities)

$$10 Log M_{New} + CIO_{New} < T_{1e} - H_{1e}/2,$$

The variables in the formula are defined as follows:

M_{New} is the measurement result of a cell that becomes better than an absolute threshold.

CIO_{New} is the individual cell offset for the cell becoming better than the absolute threshold. Otherwise it is equal to 0.

T_{1e} is an absolute threshold.

H_{1e} is the hysteresis parameter for the event 1e.

If the measurement results are pathloss or CPICH-Ec/No then ***M_{New}*** is expressed as ratios.

If the measurement result is CPICH-RSCP then ***M_{New}*** is expressed in mW.

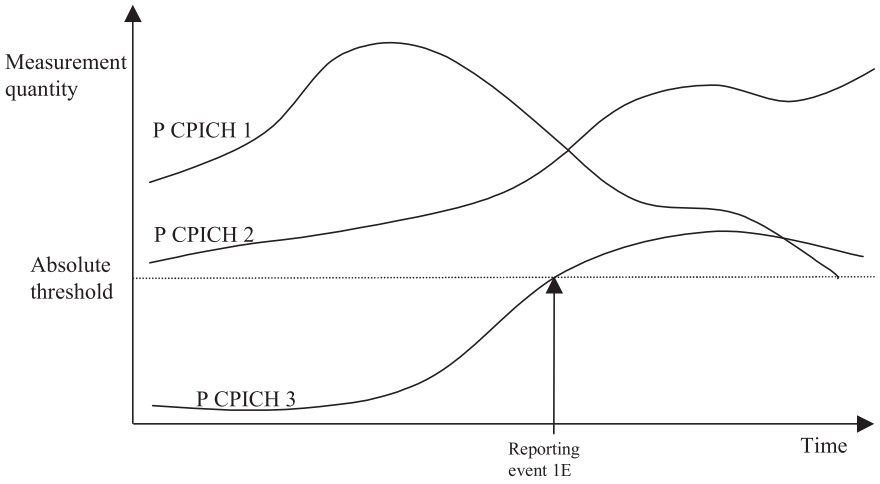


Figure 14.1.2.5-1 [Informative]: Event-triggered report when a Primary CPICH becomes better than an absolute threshold

In this figure, the parameters hysteresis and time to trigger, as well as the cell individual offsets for all cells are equal to 0.

14.1.2.6 Reporting event 1F: A Primary CPICH becomes worse than an absolute threshold

When an intra-frequency measurement configuring event 1F is set up, the UE shall:

1> create a variable TRIGGERED_1F_EVENT related to that measurement, which shall initially be empty;

1> delete this variable when the measurement is released.

When event 1F is configured in the UE, the UE shall:

1> if "Measurement quantity" is "pathloss" and Equation 1 below is fulfilled for one or more primary CPICHs, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 2 below is fulfilled for one or more primary CPICHs, for each of these primary CPICHs:

2> if all required reporting quantities are available for that cell, and if the equations have been fulfilled for a time period indicated by "Time to trigger", and if that primary CPICH is part of cells allowed to trigger the event

according to "Triggering condition 1", and that primary CPICH is not included in the "cells triggered" in the variable TRIGGERED_1F_EVENT:

3> include that primary CPICH in the "cells recently triggered" in the variable TRIGGERED_1F_EVENT.

1> if any primary CPICHs are stored in the "cells recently triggered" in the variable TRIGGERED_1F_EVENT:

2> send a measurement report with IEs set as below:

3> set in "intra-frequency event measurement results": "Intrafrequency event identity" to "1f"; and

3> include in "cell measurement event results" all entries of the "cells recently triggered" in the variable TRIGGERED_1F_EVENT in descending order according to the configured measurement quantity taking into account the cell individual offset for each of those cells;

3> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell;

2> move all entries from "cells recently triggered" to "cells triggered" in the variable TRIGGERED_1F_EVENT.

1> if "Measurement quantity" is "pathloss" and Equation 3 below is fulfilled for a primary CPICH, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 4 below is fulfilled for a primary CPICH; or

1> if a primary CPICH is no longer part of the cells allowed to trigger the event according to the "Triggering condition 1":

2> if that primary CPICH is included in the "cells triggered" in the variable TRIGGERED_1F_EVENT:

3> remove that primary CPICH from "cells triggered" in the variable TRIGGERED_1F_EVENT.

Equation 1 (Triggering condition for pathloss)

$$10 \cdot Log M_{Old} + CIO_{Old} \geq T_{1f} + H_{1f} / 2,$$

Equation 2 (Triggering condition for all the other measurement quantities)

$$10 \cdot Log M_{Old} + CIO_{Old} \leq T_{1f} - H_{1f} / 2,$$

Equation 3 (Leaving triggering condition for pathloss)

$$10 \cdot Log M_{Old} + CIO_{Old} < T_{1f} - H_{1f} / 2,$$

Equation 4 (Leaving triggering condition for all the other measurement quantities)

$$10 \cdot Log M_{Old} + CIO_{Old} > T_{1f} + H_{1f} / 2,$$

The variables in the formula are defined as follows:

M_{Old} is the measurement result of a cell that becomes worse than an absolute threshold

CIO_{Old} is the individual cell offset for the cell becoming worse than the absolute threshold. Otherwise it is equal to 0.

T_{1f} is an absolute threshold

H_{1f} is the hysteresis parameter for the event 1f.

If the measurement results are pathloss or CPICH-Ec/No then M_{Old} is expressed as ratios.

If the measurement result is CPICH-RSCP then M_{Old} is expressed in mW.

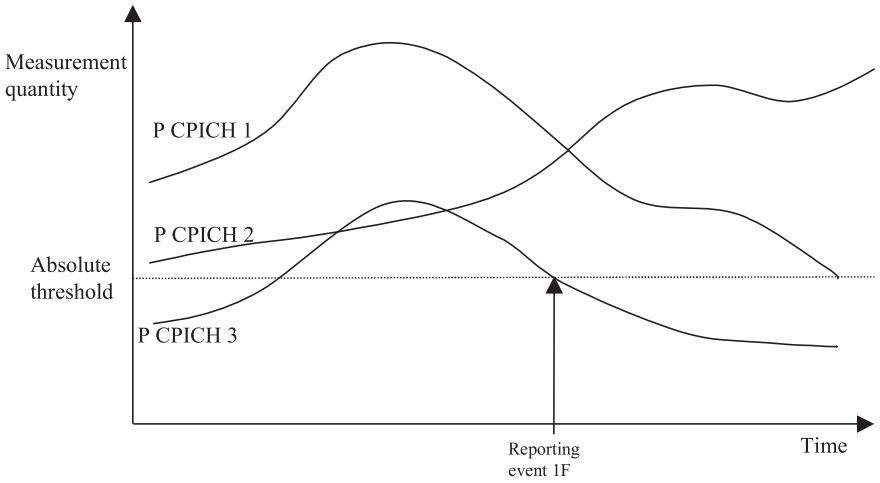


Figure 14.1.2.6-1 [Informative]: Event-triggered report when a Primary CPICH becomes worse than an absolute threshold

In this figure, the parameters hysteresis and time to trigger, as well as the cell individual offsets for all cells are equal to 0.

14.1.2.7 Reporting event 1J: A non-active E-DCH but active DCH primary CPICH becomes better than an active E-DCH primary CPICH

When an intra-frequency measurement configuring event 1j is set up, the UE shall:

1> create a variable TRIGGERED_1J_EVENT related to that measurement, which shall initially be empty;

1> delete this variable when the measurement is released.

When event 1J is configured in the UE, the UE shall:

1> if "Measurement quantity" is "pathloss" and Equation 1 below is fulfilled for one or more primary CPICHs, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 2 below is fulfilled for one or more primary CPICHs, for each of these primary CPICHs:

2> if all required reporting quantities are available for that cell; and

2> if the equations have been fulfilled for a time period indicated by "Time to trigger", and if the primary CPICH that is better is not included in the E-DCH active set but included in DCH active set and the other primary CPICH is any of the primary CPICHs included in the E-DCH active set, and if that first primary CPICH is not included in the "cells triggered" in the variable TRIGGERED_1J_EVENT:

3> include that primary CPICH in the "cells recently triggered" in the variable TRIGGERED_1J_EVENT.

1> if the value of "Replacement activation threshold" for this event is less than or equal to the current number of cells in the E-DCH active set or equal to 0 and if any primary CPICHs are stored in the "cells recently triggered" in the variable TRIGGERED_1J_EVENT:

2> if "Reporting interval" for this event is not equal to 0:

3> if the IE "Periodical reporting running" in the variable TRIGGERED_1J_EVENT is set to FALSE:

4> start a timer for with the value of "Reporting interval" for this event and set the IE "Periodical reporting running" in the variable TRIGGERED_1J_EVENT to TRUE.

3> set "sent reports" for that primary CPICH in the variable TRIGGERED_1J_EVENT to 1.

2> send a measurement report with IEs set as below:

3> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1J"; and

3> include in "cell measurement event results" all entries of the "cells recently triggered" in the variable TRIGGERED_1J_EVENT not in the E-DCH active set but included in DCH active set as well as the "primary CPICH info" of all the primary CPICHs in the E-DCH active set for which the measured value is worse (i.e. greater for pathloss and less for the other measurement quantities) than the one of the entry in "cell recently triggered" that has the best measured value taking into account their cell individual offset. The "primary CPICH info" for those cells shall be ordered according to their measured value taking into account their cell individual offset, beginning with the best cell to the worst one;

3> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell.

2> move all entries from "cells recently triggered" to "cells triggered" in the variable TRIGGERED_1J_EVENT.

1> if the timer for the periodical reporting has expired:

2> if any primary CPICH is included in the "cells triggered" in the variable TRIGGERED_1J_EVENT, and not included in the current E-DCH active set but included in DCH active set:

3> if "Reporting interval" for this event is not equal to 0, and if "Amount of reporting" is greater than "sent reports" stored for that primary CPICH, in "cells triggered" in the variable TRIGGERED_1J_EVENT:

4> increment the stored counter "sent reports" for all CPICH in "cell triggered" in variable TRIGGERED_1J_EVENT;

4> start a timer with the value of "Reporting interval" for this event;

4> send a measurement report with IEs set as below:

5> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1J"; and

5> include in "cell measurement event results" all entries of the variable TRIGGERED_1J_EVENT with value of IE "sent report" equal to or smaller than value of "Amount of reporting" and that are not part of the E-DCH active set but included in DCH active set as well as the "primary CPICH info" of all the primary CPICHs in the E-DCH active set for which the measured value is worse (i.e. greater for pathloss and less for the other measurement quantities) than the one of the entry in "cell triggered" that has the best measured value, ordering the "primary CPICH info" according to their measured value beginning with the best cell to the worst one, taking into account the cell individual offset for each cell;

5> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell.

4> if "sent reports" in variable TRIGGERED_1J_EVENT is equal to "Amount of reporting" for all entries:

5> set the IE "Periodical Reporting running" in the variable TRIGGERED_1J_EVENT to FALSE and disable the timer for the periodical reporting.

1> if "Measurement quantity" is "pathloss" and Equation 3 below is fulfilled for a primary CPICH, or if "Measurement quantity" is "CPICH Ec/N0" or "CPICH RSCP", and Equation 4 below is fulfilled for a primary CPICH or;

1> if a primary CPICH is added to the E-DCH active set:

2> if that primary CPICH is included in the "cells triggered" or "cells recently triggered" in the variable TRIGGERED_1J_EVENT:

3> remove the entry of that primary CPICH from "cells triggered" or "cells recently triggered" in the variable TRIGGERED_1J_EVENT.

3> if no entry in the variable TRIGGERED_1J_EVENT has a value of "sent reports" smaller than "Amount of reporting" or

3> if there is no entry in the variable TRIGGERED_1J_EVENT:

4> if the reporting interval timer is running:

5> stop the reporting interval timer;

5> set the IE "Periodical reporting running" in the variable TRIGGERED_1J_EVENT to FALSE.

Equation 1 (Triggering condition for pathloss)

$$10 Log M_{New} + CIO_{New} \leq 10 Log M_{InAS} + CIO_{InAS} - H_{1j}/2,$$

Equation 2 (Triggering condition for all the other measurement quantities)

$$10 Log M_{New} + CIO_{New} \geq 10 Log M_{InAS} + CIO_{InAS} + H_{1j}/2,$$

Equation 3 (Leaving triggering condition for pathloss)

$$10 Log M_{New} + CIO_{New} > 10 Log M_{InAS} + CIO_{InAS} + H_{1j}/2,$$

Equation 4 (Leaving triggering condition for all the other measurement quantities)

$$10 Log M_{New} + CIO_{New} < 10 Log M_{InAS} + CIO_{InAS} - H_{1j}/2,$$

The variables in the formula are defined as follows:

M_{New} is the measurement result of the cell not included in the E-DCH active set but included in DCH active set.

CIO_{New} is the individual cell offset for the cell not included in the E-DCH active set but included in DCH active set becoming better than the cell in the E-DCH active set if an individual cell offset is stored for that cell. Otherwise it is equal to 0.

For pathloss:

M_{InAS} is the measurement result of the cell in the E-DCH active set with the highest measurement result.

For other measurement quantities:

M_{InAS} is the measurement result of the cell in the E-DCH active set with the lowest measurement result.

CIO_{InAS} is the individual cell offset for the cell in the E-DCH active set that is becoming worse than the new cell.

H_{1J} is the hysteresis parameter for the event 1J.

If the measurement results are pathloss or CPICH-Ec/No then M_{New} and M_{inAS} are expressed as ratios.

If the measurement result is CPICH-RSCP then M_{New} and M_{inAS} are expressed in mW.

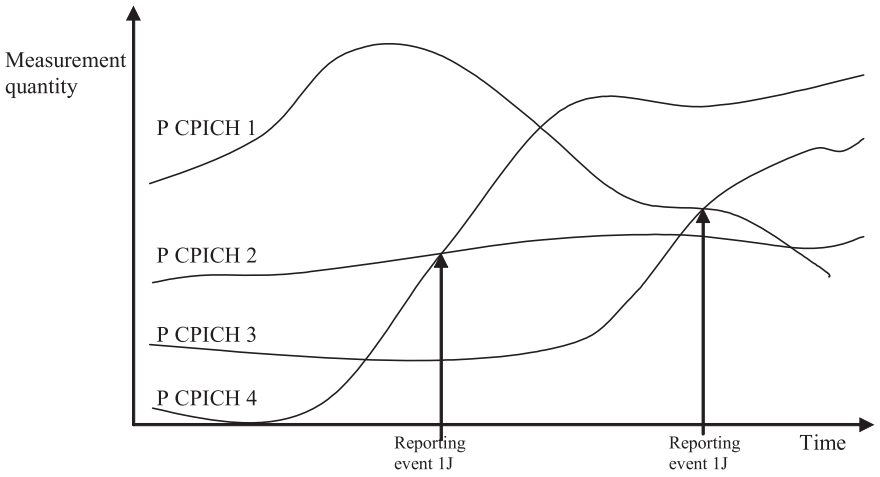


Figure 14.1.2.7-1 [Informative]: A primary CPICH that is not included in the E-DCH active set but included in DCH active set becomes better than a primary CPICH that is in the E-DCH active set

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In this figure, the parameters hysteresis and time to trigger, as well as the cell individual offsets for all cells are equal to 0 and replacement activation threshold is equal to 0 or 1 or 2. In this example the cells belonging to primary CPICH 1 and 2 are in the E-DCH active set, but the cells transmitting primary CPICH 3 and CPICH 4 are not (yet) in the E-DCH active set but included in DCH active set.

The first measurement report is sent when primary CPICH 4 becomes better than primary CPICH 2. The "cell measurement event result" of the measurement report contains the information of primary CPICH 4 and CPICH 2.

Assuming that the E-DCH active set has been updated after the first measurement report (E-DCH active set is now primary CPICH 1 and primary CPICH 4), the second report is sent when primary CPICH 3 becomes better than primary CPICH 1. The "cell measurement event result" of the second measurement report contains the information of primary CPICH 3 and primary CPICH 1.

14.1.3 Intra-frequency reporting events for TDD

14.1.3.1 Reporting event 1G: Change of best cell (TDD)

When event 1G is configured in the UE, the UE shall:

1> if the equation 1 is fulfilled for a P-CCPCHs during the time "Time to trigger" and if that P-CCPCH is not included in the "primary CCPCH info" in the variable TRIGGERED_1G_EVENT:

2> include that P-CCPCH in "cells triggered" in the variable TRIGGERED_1G_EVENT;

2> send a measurement report with IEs set as below:

3> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1g";

3> set the first entry in "cell measurement event results" to the "Cell parameters ID" of the P-CCPCH which was stored in the variable TRIGGERED_1G_EVENT;

3> include all entries in "cells triggered" in variable TRIGGERED_1G_EVENT in "cell measurement event results" in the measurement report in descending order according to:

$$10 \cdot LogM + O$$

where ***M*** is the P-CCPCH RSCP and ***O*** the individual offset of a cell;

3> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell.

1> if Equation 2 below is fulfilled for a primary CCPCH:

2> if a primary CCPCH is included in the "cells triggered" in the variable TRIGGERED_1G_EVENT:

3> remove the entry of that primary CCPCH from "cells triggered" in the variable TRIGGERED_1G_EVENT;

The UE shall use the equations below for evaluation of reporting event 1g:

Equation 1

$$10 \cdot LogM_i + O_i - H_{1g} > 10 \cdot LogM_{previous\_best} + O_{previous\_best}$$

The variables in the formula are defined as follows:

$M_{previous\_best}$ is the current P-CCPCH RSCP of the previous best cell expressed in mW

$O_{previous\_best}$ is the cell individual offset of the previous best cell

M_i is the current P-CCPCH RSCP of the currently evaluated cell ***i*** expressed in mW

O_i is the cell individual offset of the currently evaluated cell ***i***

H_{1g} is the hysteresis parameter for the event 1g.

Equation 2

$$10 \cdot LogM_i + O_i + H_{1g} < 10 \cdot LogM_{previous\_best} + O_{previous\_best}$$

The variables in the formula are defined as follows:

$M_{previous\_best}$ is the current P-CCPCH RSCP of the previous best cell expressed in mW

$O_{previous\_best}$ is the cell individual offset of the previous best cell

M_i is the current P-CCPCH RSCP of the currently evaluated cell ***i*** expressed in mW

O_i is the cell individual offset of the currently evaluated cell ***i***

H_{1g} is the hysteresis parameter for the event 1g.

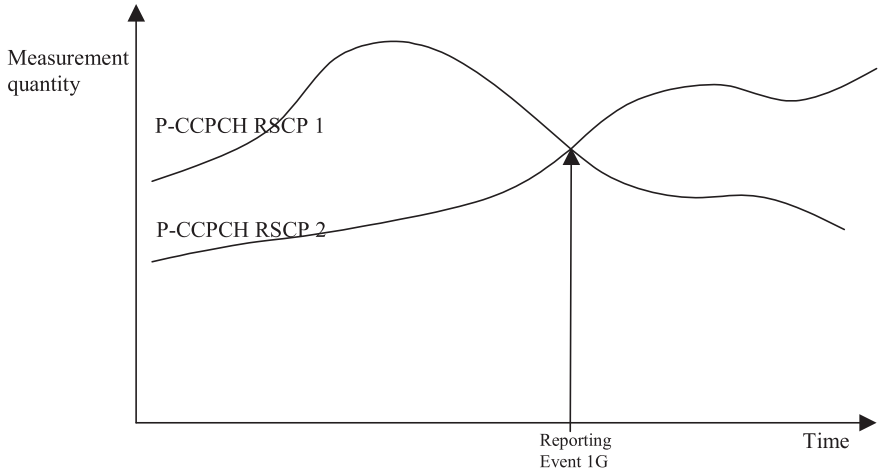


Figure 14.1.3.1-1: A P-CCPCH RSCP becomes better than the previous best P-CCPCH RSCP

14.1.3.2 Reporting event 1H: Timeslot ISCP below a certain threshold (TDD)

When event 1h is configured in the UE, the UE shall:

1> if equation 1 is fulfilled for a time period indicated by "Time to trigger" and if that P-CCPCH is not included in the IE "cells triggered" in the variable TRIGGERED_1H_EVENT:

2> include that P-CCPCH in the IE "cells triggered" in the variable TRIGGERED_1H_EVENT;

2> send a measurement report with the IEs set as below:

3> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1h" and in "cell measurement event results" the "Cell parameters ID" of the P-CCPCH that triggered the report;

3> include in "Cell measured results" the "Timeslot ISCP" of those cells that are included in the variable TRIGGERED_1H_EVENT.

1> if a primary CCPCH is included in the "cells triggered" in the variable TRIGGERED_1H_EVENT:

2> send a measurement report with IEs set as below:

3> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1h" and "cell measurement event results" to the "Cell parameters ID" of the P-CCPCH that triggered the report;

3> set in "measured results " the "Timeslot ISCP" of those cells that are included in the variable TRIGGERED_1H_EVENT and "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset for each cell.

1> if Equation 2 below is fulfilled for a primary CCPCH:

2> if a primary CCPCH is included in the "cells triggered" in the variable TRIGGERED_1H_EVENT:

3> remove the entry of that primary CCPCH from "cells triggered" in the variable TRIGGERED_1H_EVENT.

The UE shall use the equations below for evaluation of reporting event 1h:

Equation 1

$$10 \cdot LogM_i + H_{1h} + O_i < T_{1h},$$

Equation 2

$$10 \cdot LogM_i - H_{1h} + O_i > T_{1h},$$

The variables in the formula are defined as follows:

$\boldsymbol{M_i}$ is the Timeslot ISCP of the currently evaluated cell ***i*** expressed in mW

$\boldsymbol{O_i}$ is the cell individual offset of the currently evaluated cell ***i***

$\boldsymbol{T_{1h}}$ is the Threshold for event 1h

$\boldsymbol{H_{1h}}$ is the hysteresis parameter for the event 1h.

Before any evaluation is done, the Timeslot ISCP expressed in mW is filtered according to subclause 8.6.7.2.

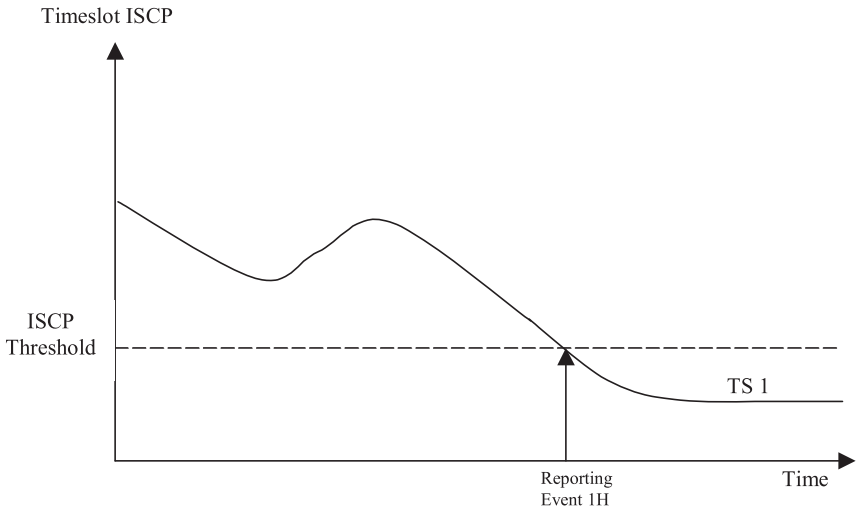


Figure 14.1.3.2-1: An ISCP value of a timeslot drops below an absolute threshold

14.1.3.3 Reporting event 1I: Timeslot ISCP above a certain threshold (TDD)

When event 1i is configured in the UE, the UE shall:

1> if equation 1 is fulfilled for a time period indicated by "Time to trigger" and if that P-CCPCH is not included in the IE "cells triggered" in the variable TRIGGERED_1I_EVENT:

2> include that P-CCPCH in the IE "cells triggered" in the variable TRIGGERED_1I_EVENT;

2> send a measurement report with the IEs set as below:

3> set in "intra-frequency measurement event results": "Intrafrequency event identity" to "1i" and in "cell measurement event results" to the "Cell parameters ID" of the P-CCPCH that triggered the report;

3> include in "measured results" the "Timeslot ISCP" of those cells that are included in the variable TRIGGERED_1I_EVENT and "additional measured results" according to 8.4.2, not taking into account the cell individual offset for each cell.

1> if a primary CCPCH is included in the "cells triggered" in the variable TRIGGERED_1I_EVENT:

2> if Equation 2 below is fulfilled for a primary CCPCH:

3> if a primary CCPCH is included in the "cells triggered" in the variable TRIGGERED_1I_EVENT:

4> remove the entry of that primary CCPCH from "cells triggered" in the variable TRIGGERED_1I_EVENT.

The UE shall use the equation below for evaluation of reporting event 1i:

Equation 1

$$10 \cdot LogM_i - H_{1i} + O_i > T_{1h},$$

Equation 2

$$10 \cdot LogM_i + H_{1i} + O_i < T_{1h},$$

The variables in the formula are defined as follows:

M_i is the Timeslot ISCP of the currently evaluated cell ***i*** expressed in mW

O_i is the cell individual offset of the currently evaluated cell ***i***

T_{1i} is the Threshold for event 1i

H_{1i} is the hysteresis parameter for the event 1i.

Before any evaluation is done, the Timeslot ISCP expressed in mW is filtered according to subclause 8.6.7.2.

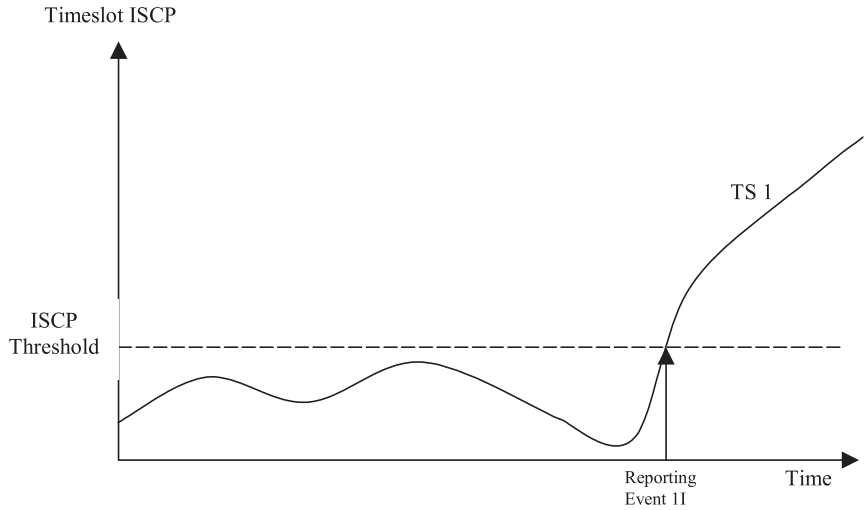


Figure 14.1.3.3-1: An ISCP value of a timeslot exceeds a certain threshold

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14.1.4 Event-triggered periodic intra-frequency measurement reports (informative)

14.1.4.1 Cell addition failure (FDD only)

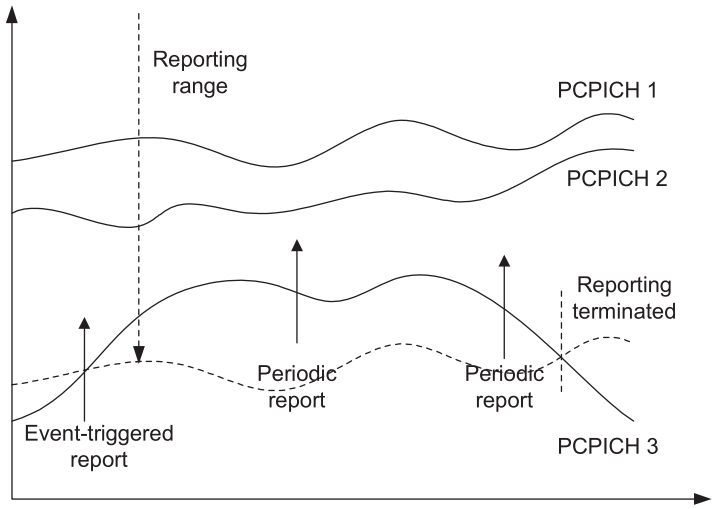


Figure 14.1.4.1-1: Periodic reporting triggered by event 1A

When a cell enters the reporting range and triggers event 1A, the UE shall transmit a MEASUREMENT REPORT to the UTRAN and typically this may result in an update of the active set. However, in some situations the UTRAN may be unable to add a strong cell to the active set typically due to capacity shortage for example.

The UE shall continue reporting after the initial report by reverting to periodical measurement reporting if the reported cell is not added to the active set. This is illustrated in Figure 14.1.4.1-1. During periodic reporting the UE shall transmit MEASUREMENT REPORT messages to the UTRAN at predefined intervals. The reports shall include reporting information of the cells in the current active set and of the monitored cell(s) in the reporting range.

Event-triggered periodic measurement reporting shall be terminated if:

1> there are no longer any monitored cell(s) within the reporting range; or

1> the UTRAN has added cells to the active set so that it includes the maximum number of cells (defined by the **reporting deactivation threshold** parameter), which are allowed for event 1A to be triggered; or

1> the UE has sent the maximum number of MEASUREMENT REPORT messages (defined by the **amount of reporting** parameter).

The reporting period is assigned by the UTRAN (with the **Reporting interval** parameter). If the reporting interval is set to zero event-triggered periodic measurement reporting shall not be applied.

14.1.4.1a Cell removal failure (FDD only)

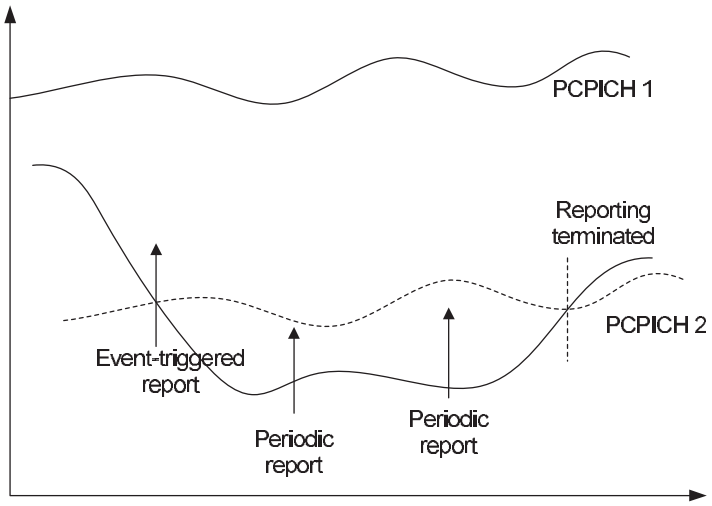


Figure 14.1.4.1a: Periodic reporting triggered by event 1B

When a cell enters the removal range and triggers event 1B, the UE shall transmit a MEASUREMENT REPORT to the UTRAN and typically this may result in the removal of the weakest active cell. If the UTRAN is unable to receive MEASUREMENT REPORT after the maximum retransmission, it is beneficial to receive continuous reports in this case as well.

The UE shall revert to periodical measurement reporting if the UTRAN does not update the active set after the transmission of the measurement report. This is illustrated in Figure 14.1.4.1a. During periodic reporting the UE shall transmit MEASUREMENT REPORT messages to the UTRAN at predefined intervals.

Event-triggered periodic measurement reporting shall be terminated if:

1> there are no longer any monitored cell(s) within the removal range; or

1> the UTRAN has removed cells from the active set so that there are no longer the minimum amount of active cells for event 1B to be triggered; or

1> the UE has sent the maximum number of MEASUREMENT REPORT messages (defined by the "amount of reporting" parameter).

The reporting period is assigned by the UTRAN (with the "Reporting interval" parameter). If the reporting interval is set to zero, event-triggered periodic measurement reporting shall not be applied.

14.1.4.2 Cell replacement failure (FDD only)

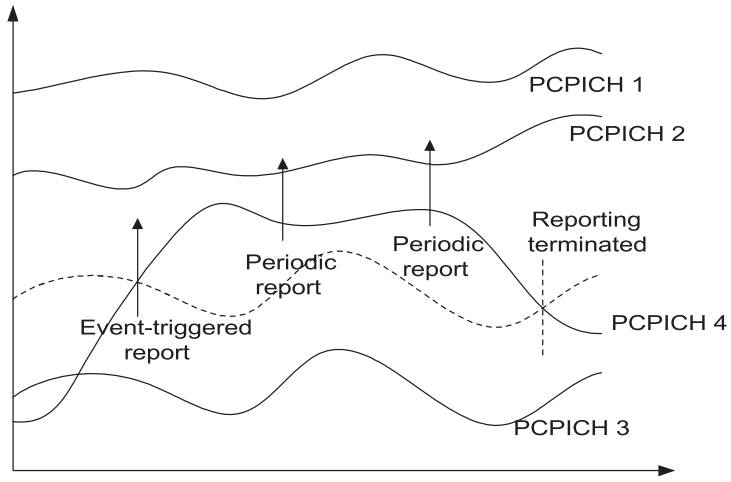


Figure 14.1.4.1-2: Periodic reporting triggered by event 1C

When a cell enters the replacement range and triggers event 1C, the UE shall transmit a MEASUREMENT REPORT to the UTRAN and typically this may result in the replacement of the weakest active cell. If the UTRAN is unable to replace the cell due to for example capacity shortage, it is beneficial to receive continuous reports in this case as well.

The UE shall revert to periodical measurement reporting if the UTRAN does not update the active set after the transmission of the measurement report. This is illustrated in Figure 14.1.4.1-2. During periodic reporting the UE shall transmit MEASUREMENT REPORT messages to the UTRAN at predefined intervals. The reports shall include reporting information of the cells in the current active set and of the monitored cell(s) in the replacement range.

Event-triggered periodic measurement reporting shall be terminated if:

1> there are no longer any monitored cell(s) within the replacement range; or

1> the UTRAN has removed cells from the active set so that there are no longer the minimum amount of active cells for event 1C to be triggered (as defined by the **replacement activation threshold** parameter); or

1> the UE has sent the maximum number of MEASUREMENT REPORT messages (defined by the **amount of reporting** parameter).

The reporting period is assigned by the UTRAN (with the **Reporting interval** parameter). If the reporting interval is set to zero, event-triggered periodic measurement reporting shall not be applied.

14.1.5 Mechanisms available for modifying intra-frequency measurement reporting behaviour (informative)

14.1.5.1 Hysteresis

To limit the amount of event-triggered reports, a hysteresis parameter may be connected with each reporting event given above. The value of the hysteresis is given to the UE in the Reporting criteria field of the Measurement Control message.

In the example in Figure 14.1.5.1-1, the hysteresis ensures that the event 1D (FDD) or IG(TDD) (primary CPICH(FDD)/CCPCH(TDD) 2 becomes the best cell) is not reported until the difference is equal to the hysteresis value. The fact that primary CPICH(FDD)/CCPCH(TDD) 1 becomes best afterwards is not reported at all in the example since the primary CPICH(FDD)/CCPCH(TDD) 1 does not become sufficiently better than the primary CPICH(FDD)/CCPCH(TDD) 2.

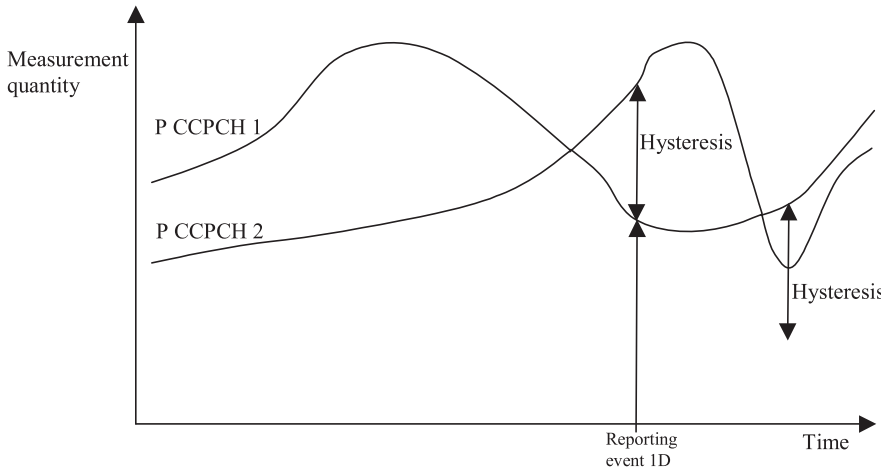


Figure 14.1.5.1-1: Hysteresis limits the amount of measurement reports

14.1.5.2 Time-to-trigger

To limit the measurement signalling load, a time-to-trigger parameter could be connected with each reporting event given above. The value of the time-to-trigger is given to the UE in the Reporting criteria field of the Measurement Control message.

The effect of the time-to-trigger is that the report is triggered only after the conditions for the event have existed for the specified time-to-trigger. In the following FDD example in Figure 14.1.5.2-1, the use of time-to-trigger means that the event (primary CPICH 3 enters the reporting range) is not reported until is has been within the range for the time given by the time-to-trigger parameter.

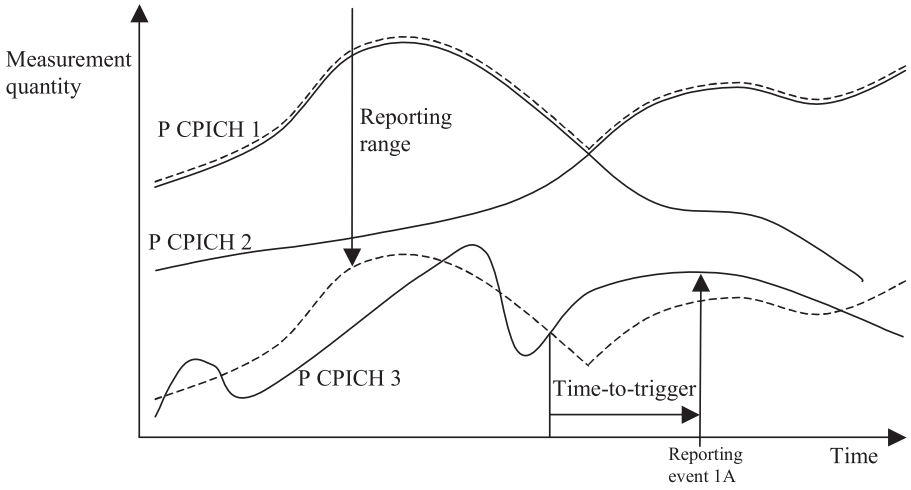


Figure 14.1.5.2-1: Time-to-trigger limits the amount of measurement reports

In the following TDD example in Figure 14.1.5.2-2, the use of time-to-trigger means that the event (Timeslot ISCP upon certain threshold) is not reported until it has been upon the threshold for the time given by the time-to trigger parameter.

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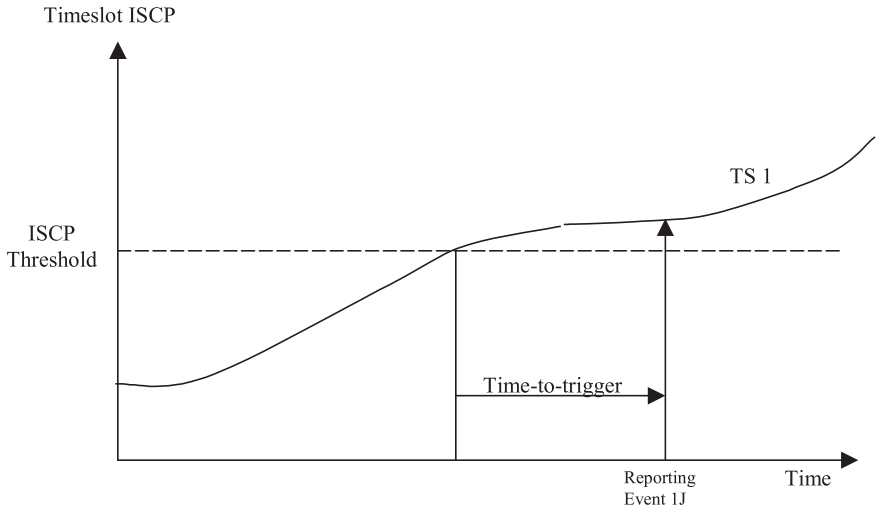


Figure 14.1.5.2-2: Time-to-trigger limits the amount of measurement reports

NOTE: The time-to-trigger could be combined with hysteresis, i.e. a hysteresis value is added to the measurement quantity before evaluating if the time-to-trigger timer should be started.

14.1.5.3 Cell individual offsets

For each cell that is monitored, an offset can be assigned with inband signalling. The offset can be either positive or negative. The offset is added to the measurement quantity before the UE evaluates if an event has occurred. The UE receives the cell individual offsets for each primary CPICH(FDD)/CCPCH(TDD) in the IE "Cell individual offset" included in the IE "Cell info" associated with each measurement object included in the MEASUREMENT CONTROL message.

For the FDD example, in Figure 14.1.5.3-1, since an offset is added to primary CPICH 3, it is the dotted curve that is used to evaluate if an event occurs. Hence, this means that measurement reports from UE to UTRAN are triggered when primary CPICH plus the corresponding offset, i.e. the dotted curve, leaves and enters the reporting range and when it gets better than primary CPICH 1 (if these events have been ordered by UTRAN). This offset mechanism provides the network with an efficient tool to change the reporting of an individual primary CPICH.

By applying a positive offset, as in Figure 14.1.5.3-1, the UE will send measurement reports as if the primary CPICH is offset *x* dB better than what it really is. This could be useful if the operator knows that a specific cell is interesting to monitor more carefully, even though it is not so good for the moment. In the example in Figure 14.1.5.3-1, the operator might know by experience that in this area primary CPICH 3 can become good very quickly (e.g. due to street corners) and therefore that it is worth reporting more intensively. Depending on the implemented handover evaluation algorithm, this may result in the cell with primary CPICH 3 being included in the active set earlier than would have been the case without the positive offset.

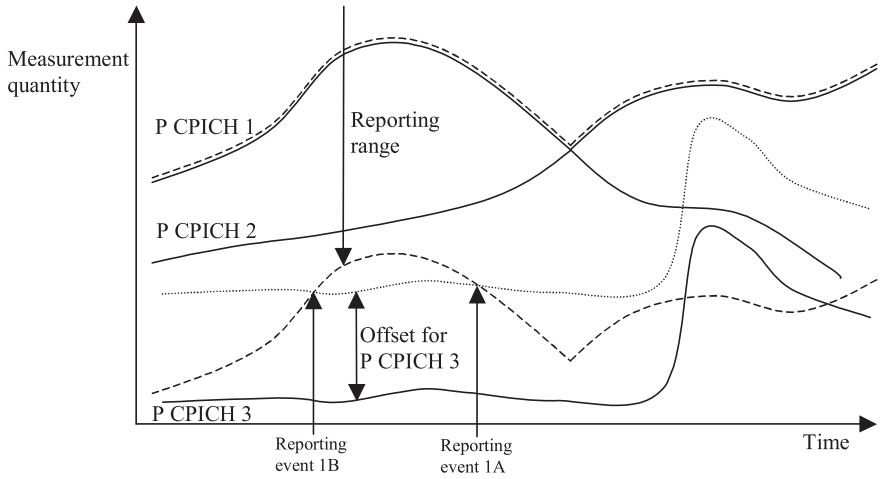


Figure 14.1.5.3-1: A positive offset is applied to primary CPICH 3 before event evaluation in the UE

For the TDD example, in Figure 14.1.5.3-2, an offset is added to primary CCPCH2, it is the dotted curve that is used to evaluate if the primary CCPCH2 becomes better than primary CCPCH1 (ordered by the UTRAN).

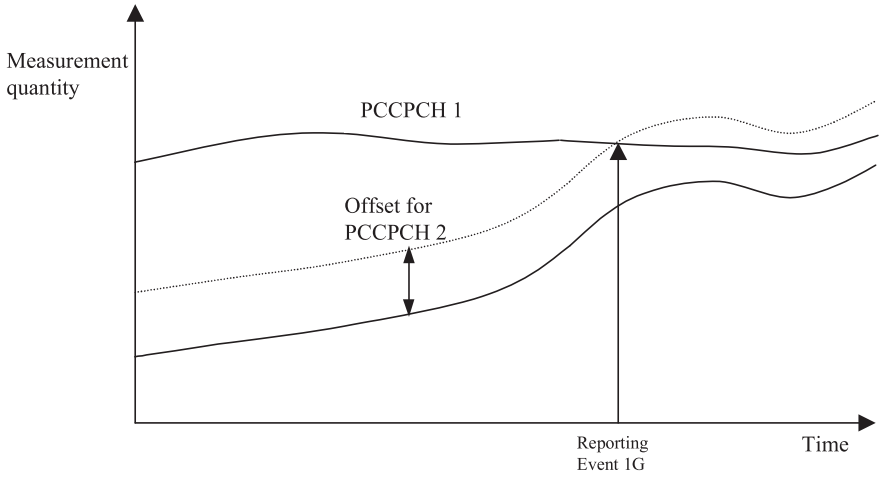


Figure 14.1.5.3-2: A positive offset is applied to primary CCPCH 2

Correspondingly, the operator can choose to apply a negative offset to a primary CCPCH. Then the reporting on that primary CCPCH is limited and the corresponding cell may be, at least temporarily excluded from the active set or as a target cell for handover.

It is important to note that the offset is added before triggering events, i.e. the offset is added by the UE before evaluating if a measurement report should be sent as opposed to offsets that are applied in the network and used for the actual handover evaluation. It should also be noted that the cell individual offset is not used in all measurement reporting events, and that it is not applied to all events in the same way.

14.1.5.4 Forbid a Primary CPICH to affect the reporting range (FDD only)

The reporting range affects the reporting events 1A and 1B presented above. The reporting range is defined as a function of all the Primary CPICHs in the active set (see 14.1.2.1 and 14.1.2.2). If the parameter W is set to 0, the reporting range is defined relative to the best Primary CPICH. However, there could be cases where it is good to forbid a specific Primary CPICH to affect the reporting range. For example in Figure 14.1.5.4-1 the network has requested the UE to not let Primary CPICH 3 affect the reporting range. This mechanism could be effective if the operator knows by experience that the quality of Primary CPICH 3 is very unstable in a specific area and therefore should not affect the reporting of the other Primary CPICHs.

The UE shall ignore that a Primary CPICH is forbidden to affect the reporting range if all of the following conditions are fulfilled:

- the Primary CPICH is included in active set; and
- all cells in active set are defined as Primary CPICHs forbidden to affect the reporting range.

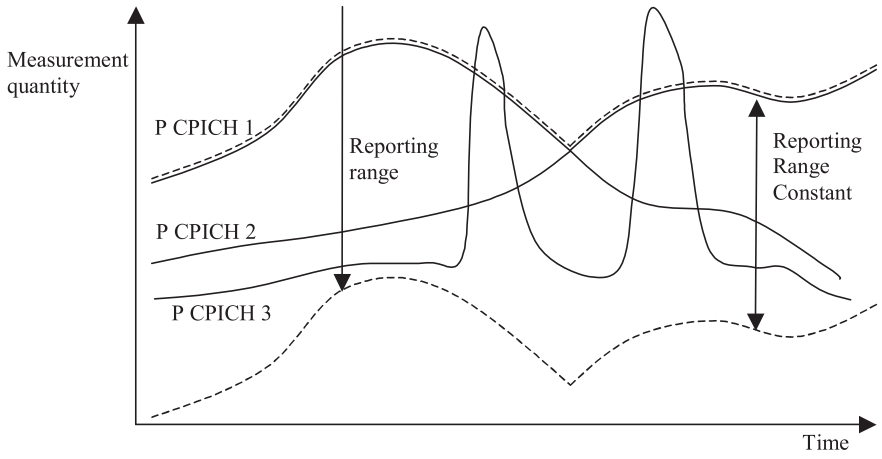


Figure 14.1.5.4-1: Primary CPICH 3 is forbidden to affect the reporting range

14.1.6 Report quantities in intra-frequency measurements

The quantities that the UE shall report to UTRAN when the event is triggered for an intra-frequency measurement are given by the IE "Intra-frequency reporting quantity" stored for this measurement and can be the following:

1 SFN-SFN observed time difference

2 Cell synchronisation information

3 Cell Identity

4 Downlink E_c/N_0 (FDD).

5 Downlink path loss.

For FDD:

Pathloss in dB = Primary CPICH Tx power - CPICH RSCP.

- For Primary CPICH Tx power the IE "Primary CPICH Tx power" shall be used. The unit is dBm.
- CPICH RSCP is the result of the CPICH RSCP measurement. The unit is dBm.

For TDD:

Pathloss in dB = Primary CCPCH TX power - Primary CCPCH RSCP.

- For Primary CCPCH TX power the IE "Primary CCPCH TX Power" shall be used. The unit is dBm.
- Primary CCPCH RSCP is the result of the Primary CCPCH RSCP measurement. The unit is dBm.

If necessary Pathloss shall be rounded up to the next higher integer.
Results higher than 158 shall be reported as 158.
Results lower than 46 shall be reported as 46.

6 Downlink received signal code power (RSCP) after despreading (of a primary CPICH for FDD, and of a primary CCPCH for TDD).

7 ISCP measured on Timeslot basis. (TDD)

8 Proposed TGSN (TDD)

A description of those values can be found in [7] and [8].

14.2 Inter-frequency measurements

14.2.0a Inter-frequency measurement quantities

The two first measurement quantities listed below are used by the UE to evaluate whether an inter-frequency measurement event has occurred or not, through the computation of a frequency quality estimate. The quantity to use to compute the frequency quality estimate for an inter-frequency measurement is given in the "Inter-frequency measurement quantity" stored for that measurement.

1 Downlink Ec/No (FDD)

2 Downlink received signal code power (RSCP) after despreading.

3 Downlink path loss.

For FDD:

Pathloss in dB = Primary CPICH Tx power - CPICH RSCP.

- For Primary CPICH Tx power the IE "Primary CPICH Tx power" shall be used. The unit is dBm.
- CPICH RSCP is the result of the CPICH RSCP measurement. The unit is dBm.

For TDD:

Pathloss in dB = Primary CCPCH TX power - Primary CCPCH RSCP.

- For Primary CCPCH TX power the IE "Primary CCPCH TX Power" shall be used. The unit is dBm.
- Primary CCPCH RSCP is the result of the Primary CCPCH RSCP measurement. The unit is dBm.

A description of those values can be found in [7] and [8].

14.2.0b Frequency quality estimate

14.2.0b.1 FDD cells

The frequency quality estimate used in events 2a, 2b 2c, 2d, 2e and 2f is defined as:

$$Q_{frequencyj} = 10 \cdot LogM_{frequency\,j} = W_j \cdot 10 \cdot Log\left(\sum_{i=1}^{N_{A\,j}} M_{i\,j}\right) + (1 - W_j) \cdot 10 \cdot LogM_{Best\,j},$$

The variables in the formula are defined as follows ("the virtual active set on frequency j" should be understood as the active set if frequency j is the used frequency. If frequency j is a non-used frequency, the way the virtual active set is initiated and updated is described in subclause 14.11):

$Q_{frequency\,j}$ is the estimated quality of the virtual active set on frequency j.

$M_{frequency\,j}$ is the estimated quality of the virtual active set on frequency j.

$M_{i\,j}$ is a measurement result of cell i in the virtual active set on frequency j.

$N_{A\,j}$ is the number of cells in the virtual active set on frequency j.

$M_{Best\,j}$ is the measurement result of the cell in the virtual active set on frequency j with the highest measurement result.

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W_j is a parameter sent from UTRAN to UE and used for frequency j.

If the measurement result is CPICH-Ec/No then $M_{Frequency}$, $M_{i\,j}$ and M_{Best} are expressed as ratios.

If the measurement result is CPICH-RSCP or PCCPCH-RSCP then $M_{Frequency}$, $M_{i\,j}$ and M_{Best} are expressed in mW.

14.2.0b.2 TDD cells

$$Q_{i,frequency\ \ j} = 10 \cdot LogM_{\ i,frequency\ \ j} + O_{i,j}$$

$Q_{i\,,frequency\,j}$ is the estimated quality of cell i on frequency j.

$M_{\text{frequency j}}$ is the measurement result for Primary CCPCH RSCP of cell i on frequency j expressed in mW.

$O_{i,j}$ is the cell individual offset of the currently evaluated cell *i* on frequency j. O_{ij} is set by IE " Cell individual offset"

14.2.0c Inter-frequency reporting quantities

The quantities that the UE shall report for each cell to UTRAN when the event is triggered for an inter-frequency measurement is given by the "Inter-frequency reporting quantity" IE stored for this measurement and can be the following, from 1 to 8. The quantity number 9 can be reported for each frequency that triggered the report.

1 Cell identity

2 SFN-SFN observed time difference

3 Cell synchronisation information

4 Downlink Ec/No (FDD)

5 Downlink path loss.

For FDD:

Pathloss in dB = Primary CPICH Tx power - CPICH RSCP.

- For Primary CPICH Tx power the IE "Primary CPICH Tx power" shall be used. The unit is dBm.
- CPICH RSCP is the result of the CPICH RSCP measurement. The unit is dBm.

For TDD:

Pathloss in dB = Primary CCPCH TX power - Primary CCPCH RSCP.

- For Primary CCPCH TX power the IE "Primary CCPCH TX Power" shall be used. The unit is dBm.
- Primary CCPCH RSCP is the result of the Primary CCPCH RSCP measurement. The unit is dBm.

If necessary Pathloss shall be rounded up to the next higher integer.
Results higher than 158 shall be reported as 158.
Results lower than 46 shall be reported as 46.

6 Downlink received signal code power (RSCP) after despreading (of a primary CPICH for FDD, and of a primary CCPCH for TDD).

7 ISCP measured on Timeslot basis. (TDD)

8 Proposed TGSN (TDD)

9 UTRA carrier RSSI

A description of those values can be found in [7] and [8].

14.2.1 Inter-frequency reporting events

Within the measurement reporting criteria field in the MEASUREMENT CONTROL message UTRAN notifies the UE which events should trigger the UE to send a MEASUREMENT REPORT message. The listed events are the toolbox from which the UTRAN can choose the reporting events that are needed for the implemented handover evaluation function, or other radio network functions.

All events are evaluated with respect to one of the measurement quantities given in subclause 14.2.0a. The measurement quantities are measured on the monitored primary common pilot channels (CPICH) in FDD mode and the monitored primary common control channels (PCCPCH) in TDD mode of the cell defined in the measurement object. A "non-used frequency" is a frequency that the UE has been ordered to measure upon but is not used for the connection. A "used frequency" is a frequency that the UE has been ordered to measure upon and is also currently used for the connection.

The "monitored set on non-used frequency" consists of cells in "cells for measurement" (or all cells in CELL_INFO_LIST if "cells for measurement" is not present) that are not part of the virtual active set on that non-used frequency.

When one inter-frequency measurement identity corresponds to multiple inter-frequency events with identical event identities, the UE behaviour is not specified.

14.2.1.1 Event 2a: Change of best frequency.

When event 2a is configured in the UE within a measurement, the UE shall:

1> when the measurement is initiated or resumed:

2> store the used frequency in the variable BEST_FREQUENCY_2A_EVENT.

1> if equation 1 below has been fulfilled for a time period indicated by "Time to trigger" for a frequency included for that event and which is not stored in the variable BEST_FREQUENCY_2A_EVENT:

2> send a measurement report with IEs set as below:

3> set in "inter-frequency measurement event results":

4> "inter-frequency event identity" to "2a"; and

4> "Frequency info" to the frequency that triggered the event; and

4> "Non frequency related measurement event results" to the "Primary CPICH info" of the best primary CPICH for FDD cells or "Primary CCPCH info" to the "Cells parameters ID" of the best primary CCPCH for TDD cells on that frequency, not taking into account the cell individual offset.

3> if a non-used frequency triggered the measurement report:

4> include in IE "Inter-frequency measured results list" the measured results for the non-used frequency that triggered the event, not taking into account the cell individual offset.

3> if the used frequency triggered the measurement report:

4> do not include the IE "Inter-frequency measured results list" in the measurement report.

3> set the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset;

2> update the variable BEST_FREQUENCY_2A_EVENT with that frequency.

Equation 1:

$$Q_{NotBest} \geq Q_{Best} + H_{2a}/2$$

The variables in the formula are defined as follows:

$Q_{Not\ Best}$ is the quality estimate of a frequency not stored the "best frequency" in the variable BEST_FREQUENCY_2A_EVENT.

Q_{Best} is the quality estimate of the frequency stored in "best frequency" in the variable BEST_FREQUENCY_2A_EVENT.

H_{2a} is the hysteresis parameter for the event 2a in that measurement.

14.2.1.2 Event 2b: The estimated quality of the currently used frequency is below a certain threshold **and** the estimated quality of a non-used frequency is above a certain threshold.

When an inter-frequency measurement configuring event 2b is set up, the UE shall:

1> create a variable TRIGGERED_2B_EVENT related to that measurement, which shall initially be empty;

1> delete this variable when the measurement is released.

When event 2b is configured in the UE within a measurement, the UE shall:

1> if equations 1 and 2 below have been fulfilled for a time period indicated by "Time to Trigger" from the same instant, respectively for one or several non-used frequencies included for that event and for the used frequency:

2> if any of those non-used frequency is not stored in the variable TRIGGERED_2B_EVENT:

3> store the non-used frequencies that triggered the event and that were not previously stored in the variable TRIGGERED_2B_EVENT into that variable;

3> send a measurement report with IEs set as below:

4> set in "inter-frequency measurement event results":

5> "inter-frequency event identity" to "2b"; and

5> for each non-used frequency that triggered the event, beginning with the best frequency:

6> "Frequency info" to that non-used frequency; and

6> "Non frequency related measurement event results" to the "Primary CPICH info" of the best primary CPICH for FDD cells or "Primary CCPCH info" to the "Cell parameters ID" of the best primary CCPCH for TDD cells on that non-used frequency, not taking into account the cell individual offset.

4> include in IE "Inter-frequency measured results list" the measured results for each non-used frequency that triggered the event, not taking into account the cell individual offset;

4> set the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset.

1> if equation 3 below is fulfilled for a non-used frequency stored in the variable TRIGGERED_2B_EVENT:

2> remove that non-used frequency from the variable TRIGGERED_2B_EVENT.

1> if equation 4 below is fulfilled for the used frequency:

2> clear the variable TRIGGERED_2B_EVENT.

Triggering conditions:

Equation 1:

$$Q_{Nonused} \geq T_{Nonused2b} + H_{2b}/2$$

The variables in the formula are defined as follows:

$Q_{Non\ used}$ is the quality estimate of a non-used frequency that becomes better than an absolute threshold.

$T_{Non\ used\ 2b}$ is the absolute threshold that applies for this non-used frequency in that measurement.

H_{2b} is the hysteresis parameter for the event 2b.

Equation 2:

$$Q_{Used} \leq T_{Used\ 2b} - H_{2b}/2$$

The variables in the formula are defined as follows:

Q_{Used} is the quality estimate of the used frequency.

$T_{Used\ 2b}$ is the absolute threshold that applies for the used frequency in that measurement.

H_{2b} is the hysteresis parameter for the event 2b.

Leaving triggered state condition:

Equation 3:

$$Q_{Non used} < T_{Non used\ 2b} - H_{2b}/2$$

The variables in the formula are defined as follows:

$Q_{Non\ used}$ is the quality estimate of a non-used frequency that is stored in the variable TRIGGERED_2B_EVENT.

$T_{Non\ used\ 2b}$ is the absolute threshold that applies for this non-used frequency in that measurement.

H_{2b} is the hysteresis parameter for the event 2b.

Equation 4:

$$Q_{Used} > T_{Used\ 2b} + H_{2b}/2$$

The variables in the formula are defined as follows:

Q_{Used} is the quality estimate of the used frequency.

$T_{Used\ 2b}$ is the absolute threshold that applies for the used frequency in that measurement.

H_{2b} is the hysteresis parameter for the event 2b.

14.2.1.3 Event 2c: The estimated quality of a non-used frequency is above a certain threshold

When an inter-frequency measurement configuring event 2c is set up, the UE shall:

1> create a variable TRIGGERED_2C_EVENT related to that measurement, which shall initially be empty;

1> delete this variable when the measurement is released.

When event 2c is configured in the UE within a measurement, the UE shall:

1> if equation 1 below has been fulfilled for one or several non-used frequencies included for that event during the time "Time to trigger":

2> if any of those non-used frequencies is not stored in the variable TRIGGERED_2C_EVENT:

3> store the non-used frequencies that triggered the event and that were not previously stored in the variable TRIGGERED_2C_EVENT into that variable;

3> send a measurement report with IEs set as below:

4> set in "inter-frequency measurement event results":

5> "inter-frequency event identity" to "2c"; and

5> for each non-used frequency that triggered the event, beginning with the best frequency:

6> "Frequency info" to that non-used frequency; and

6> "Non frequency related measurement event results" to the "Primary CPICH info" of the best primary CPICH for FDD cells or "Primary CCPCH info" to the "Cell parameters ID" of the best primary CCPCH for TDD cells on that non-used frequency, not taking into account the cell individual offset.

4> include in IE "Inter-frequency measured results list" the measured results for each non-used frequency that triggered the event, not taking into account the cell individual offset;

4> set the IE "additional measured results" according to subclause 8.4.2 not taking into account the cell individual offset.

1> if equation 2 below is fulfilled for a non-used frequency stored in the variable TRIGGERED_2C_EVENT:

2> remove that non-used frequency from the variable TRIGGERED_2C_EVENT.

Triggering condition:

Equation 1:

$$Q_{Nonused} \geq T_{Nonused2c} + H_{2c}/2$$

The variables in the formula are defined as follows:

$\boldsymbol{Q_{Non\ used}}$ is the quality estimate of a non-used frequency that becomes better than an absolute threshold.

$\boldsymbol{T_{Non\ used\ 2c}}$ is the absolute threshold that applies for this non-used frequency in that measurement.

$\boldsymbol{H_{2c}}$ is the hysteresis parameter for the event 2c.

Leaving triggered state condition:

Equation 2:

$$Q_{Nonused} < T_{Nonused2c} - H_{2c}/2$$

The variables in the formula are defined as follows:

$\boldsymbol{Q_{Non\ used}}$ is the quality estimate of a non-used frequency stored in the variable TRIGGERED_2C_EVENT.

$\boldsymbol{T_{Non\ used\ 2c}}$ is the absolute threshold that applies for this non-used frequency in that measurement.

$\boldsymbol{H_{2c}}$ is the hysteresis parameter for the event 2c.

14.2.1.4 Event 2d: The estimated quality of the currently used frequency is below a certain threshold

A UE shall be able to perform this measurement and the corresponding event reporting without requiring compressed mode.

When an inter-frequency measurement configuring event 2d is set up, the UE shall:

1> create a variable TRIGGERED_2D_EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When event 2d is configured in the UE within a measurement, the UE shall:

1> if equation 1 below has been fulfilled for the used frequency during the time "Time to trigger":

2> if the variable TRIGGERED_2D_EVENT is set to FALSE:

3> set the variable TRIGGERED_2D_EVENT to TRUE;

3> send a measurement report with IEs set as below:

4> set in "inter-frequency event results": "inter-frequency event identity" to "2d" and no IE "Inter-frequency cells", not taking into account the cell individual offset;

4> include in IE "Inter-frequency measured results list" the measured results for the used frequency, not taking into account the cell individual offset;

4> set the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset.

1> if the variable TRIGGERED_2D_EVENT is set to TRUE and if equation 2 is fulfilled for the used frequency:

2> set the variable TRIGGERED_2D_EVENT to FALSE.

Triggering condition:

Equation 1:

$$Q_{Used} \leq T_{Used\,2d} - H_{2d}/2$$

The variables in the formula are defined as follows:

$\boldsymbol{Q_{Used}}$ is the quality estimate of the used frequency.

$\boldsymbol{T_{Used\ 2d}}$ is the absolute threshold that applies for the used frequency and event 2d.

$\boldsymbol{H_{2d}}$ is the hysteresis parameter for the event 2d.

Leaving triggered state condition:

Equation 2:

$$Q_{Used} > T_{Used\,2d} + H_{2d}/2$$

The variables in the formula are defined as follows:

$\boldsymbol{Q_{Used}}$ is the quality estimate of the used frequency.

$\boldsymbol{T_{Used\ 2d}}$ is the absolute threshold that applies for the used frequency and event 2d.

$\boldsymbol{H_{2d}}$ is the hysteresis parameter for the event 2d.

14.2.1.5 Event 2e: The estimated quality of a non-used frequency is below a certain threshold

When an inter-frequency measurement configuring event 2e is set up, the UE shall:

1> create a variable TRIGGERED_2E_EVENT related to that measurement, which shall initially be empty;

1> delete this variable when the measurement is released.

When event 2e is configured in the UE within a measurement, the UE shall:

1> if equation 1 below has been fulfilled for one or several non-used frequencies included for that event during the time "Time to trigger":

2> if any of those non-used frequencies is not stored in the variable TRIGGERED_2E_EVENT:

3> store the non-used frequencies that triggered the event and that were not previously stored in the variable TRIGGERED_2E_EVENT into that variable;

3> send a measurement report with IEs set as below:

4> set in "inter-frequency measurement event results":

5> "inter-frequency event identity" to "2e"; and

5> for each non-used frequency that triggered the event, beginning with the best frequency:

6> "Frequency info" to that non-used frequency; and

6> "Non frequency related measurement event results" to the "Primary CPICH info" of the best primary CPICH for FDD cells or "Primary CCPCH info" to the "Cell parameters ID" of the best primary CCPCH for TDD cells on that non-used frequency, not taking into account the cell individual offset.

4> include in the IE "Inter-frequency measured results list" the measured results for each non-used frequency that triggered the event, not taking into account the cell individual offset;

4> set the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset.

1> if equation 2 below is fulfilled for a non-used frequency stored in the variable TRIGGERED_2E_EVENT:

2> remove that non-used frequency from the variable TRIGGERED_2E_EVENT.

Triggering condition:

Equation 1:

$$Q_{Nonused} \leq T_{Nonused2e} - H_{2e}/2$$

The variables in the formula are defined as follows:

$\boldsymbol{Q_{Non\ used}}$ is the quality estimate of a non-used frequency that becomes worse than an absolute threshold.

$\boldsymbol{T_{Non\ used\ 2e}}$ is the absolute threshold that applies for that non-used frequency for that event.

$\boldsymbol{H_{2e}}$ is the hysteresis parameter for the event 2e.

Leaving triggered state condition:

Equation 2:

$$Q_{Nonused} > T_{Nonused2e} + H_{2e}/2$$

The variables in the formula are defined as follows:

$\boldsymbol{Q_{Non\ used}}$ is the quality estimate of a non-used frequency stored in the variable TRIGGERED_2E_EVENT.

$\boldsymbol{T_{Non\ used\ 2e}}$ is the absolute threshold that applies for that non-used frequency for that event.

$\boldsymbol{H_{2e}}$ is the hysteresis parameter for the event 2e.

14.2.1.6 Event 2 f: The estimated quality of the currently used frequency is above a certain threshold

A UE shall be able to perform this measurement and the corresponding event reporting without requiring compressed mode.

When an inter-frequency measurement configuring event 2f is set up, the UE shall:

1> create a variable TRIGGERED_2F_EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When event 2f is configured in the UE within a measurement, the UE shall:

1> if equation 1 below has been fulfilled for the used frequency during the time "Time to trigger":

2> if the variable TRIGGERED_2F_EVENT is set to FALSE:

3> set the variable TRIGGERED_2F_EVENT to TRUE;

3> send a measurement report with IEs set as below:

4> set in "inter-frequency event results": "inter-frequency event identity" to "2f", and no IE "Inter-frequency cells";

4> include in IE "Inter-frequency measured results list" the measured results for the used frequency, not taking into account the cell individual offset;

4> set the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset.

1> if the variable TRIGGERED_2F_EVENT is set to TRUE and if equation 2 is fulfilled for the used frequency:

2> set the variable TRIGGERED_2F_EVENT to FALSE.

Triggering condition:

Equation 1:

$$Q_{Used} \geq T_{Used\,2f} + H_{2f}/2$$

The variables in the formula are defined as follows:

$\boldsymbol{Q_{Used}}$ is the quality estimate of the used frequency.

$\boldsymbol{T_{Used\ 2f}}$ is the absolute threshold that applies for the used frequency and event 2f.

$\boldsymbol{H_{2f}}$ is the hysteresis parameter for the event 2f.

Leaving triggered state condition:

Equation 2:

$$Q_{Used} < T_{Used\,2f} - H_{2f}/2$$

The variables in the formula are defined as follows:

$\boldsymbol{Q_{Used}}$ is the quality estimate of the used frequency.

$\boldsymbol{T_{Used\ 2f}}$ is the absolute threshold that applies for the used frequency and event 2f.

$\boldsymbol{H_{2f}}$ is the hysteresis parameter for the event 2f.

14.3 Inter-RAT measurements

14.3.0a Inter-RAT measurement quantities

A measurement quantity is used by the UE to evaluate whether an inter-RAT measurement event has occurred or not.

The measurement quantity for UTRAN is used to compute the frequency quality estimate for the active set, as described in the next subclause, and can be:

1 Downlink Ec/No.

2 Downlink received signal code power (RSCP) after despreading.

The measurement quantity for GSM can be:

1 GSM Carrier RSSI

A description of those values can be found in [7] and [8].

14.3.0b Frequency quality estimate of the UTRAN frequency

The estimated quality of the active set in UTRAN in event 3a is defined as:

$$Q_{UTRAN} = 10 \cdot LogM_{UTRAN} = W \cdot 10 \cdot Log\left(\sum_{i=1}^{N_A} M_i\right) + (1-W) \cdot 10 \cdot LogM_{Best},$$

The variables in the formula are defined as follows:

$\boldsymbol{Q_{UTRAN}}$ is the estimated quality of the active set on the currently used UTRAN frequency.

M_{UTRAN} is the estimated quality of the active set on currently used UTRAN frequency expressed in another unit.

M_i is the measurement result of cell i in the active set, according to what is indicated in the IE "Measurement quantity for UTRAN quality estimate".

N_A is the number of cells in the active set.

M_{Best} is the measurement result of the cell in the active set with the highest measurement result.

W is a parameter sent from UTRAN to UE.

If the measurement result is CPICH-Ec/No $\boldsymbol{M_{UTRAN}}$, $\boldsymbol{M_i}$ and $\boldsymbol{M_{Best}}$ are expressed as ratios.

If the measurement result is CPICH-RSCP or PCCPCH-RSCP, $\boldsymbol{M_{UTRAN}}$, $\boldsymbol{M_i}$ and $\boldsymbol{M_{Best}}$ are expressed in mW.

14.3.0c Inter-RAT reporting quantities

The quantities that the UE shall report to UTRAN when the event is triggered for an inter-RAT measurement are given by the IE "Inter-RAT reporting quantity" stored for that measurement, and can be the following:

In the case the other RAT is GSM:

1 GSM carrier RSSI

A description of those values can be found in [7] and [8].

14.3.1 Inter-RAT reporting events

Within the measurement reporting criteria field in the MEASUREMENT CONTROL message the UTRAN notifies the UE which events should trigger the UE to send a MEASUREMENT REPORT message. The listed events are the toolbox from which the UTRAN can choose the reporting events that are needed for the implemented handover evaluation function, or other radio network functions.

All events are measured with respect to one of the measurement quantities given in subclause 14.3.0a, and of the frequency quality estimate given in subclause 14.3.0b. For UTRAN the measurement quantities are measured on the monitored primary common pilot channels (CPICH) in FDD mode and the monitored primary common control channels (PCCPCH) in TDD mode of the cell defined in the measurement object. For other RATs the measurement quantities are system-specific. A "used UTRAN frequency" is a frequency that the UE have been ordered to measure upon and is also currently used for the connection to UTRAN. "Other system" is e.g. GSM.

In the text below describing the events:

- "The BCCH ARFCN and BSIC combinations considered in that inter-RAT measurement" shall be understood as the BCCH ARFCN and BSIC combinations of the inter-RAT cells pointed at in the IE "Cells for measurement" if it has been received for that inter-RAT measurement, or otherwise of the cells included in the "inter-RAT cell info" part of the variable CELL_INFO LIST.
- "The BCCH ARFCNs considered in that inter-RAT measurement" shall be understood as the BCCH ARFCNs of the inter-RAT cells pointed at in the IE "Cells for measurement" if it has been received for that inter-RAT measurement, or otherwise of the cells included in the "inter-RAT cell info" part of the variable CELL_INFO LIST.

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When one inter-RAT measurement identity corresponds to multiple inter-RAT events with identical event identities, the UE behaviour is not specified.

14.3.1.1 Event 3a: The estimated quality of the currently used UTRAN frequency is below a certain threshold **and** the estimated quality of the other system is above a certain threshold.

When an inter-RAT measurement configuring event 3a is set up, the UE shall:

1> create a variable TRIGGERED_3A_EVENT related to that measurement, which shall initially be empty;

1> delete this variable when the measurement is released.

When event 3a is configured in the UE within a measurement, the UE shall:

1> if the other RAT is GSM, and if IE "BSIC verification required" is set to "required":

2> if equations 1 and 2 below have both been fulfilled for a time period indicated by "Time to trigger" from the same instant, respectively for the used UTRAN frequency and for one or several GSM cells that match any of the BCCH ARFCN and BSIC combinations considered in that inter-RAT measurement:

3> if the Inter-RAT cell id of any of those GSM cells is not stored in the variable TRIGGERED_3A_EVENT:

4> store the Inter-RAT cell ids of the GSM cells that triggered the event and that were not previously stored in the variable TRIGGERED_3A_EVENT into that variable.

4> send a measurement report with IEs set as below:

5> in "inter-RAT measurement event result": "inter-RAT event identity" to "3a", "CHOICE BSIC" to "verified BSIC" and "Inter-RAT cell id" to the GSM cells that triggered the event (best one first), taking into account the cell individual offset of the GSM cells;

5> "measured results" and possible "additional measured results" according to subclause 8.6.7.5 and 8.4.2, respectively, not taking into account the cell individual offset.

2> if equation 4 is fulfilled for a GSM cell whose inter-RAT cell id is stored in the variable TRIGGERED_3A_EVENT:

3> remove the inter-RAT cell id of that GSM cell from the variable TRIGGERED_3A_EVENT.

2> if equation 3 is fulfilled for the used frequency in UTRAN:

3> clear the variable TRIGGERED_3A_EVENT.

1> if the other RAT is GSM, and if IE "BSIC verification required" is set to "not required":

2> if equations 1 and 2 below have been fulfilled for a time period indicated by "Time to trigger" from the same instant, respectively for the used UTRAN frequency and for one or several BCCH ARFCNs considered in that inter-RAT measurement:

3> if any of those BCCH ARFCNs is not stored into the variable TRIGGERED_3A_EVENT:

4> store the BCCH ARFCNs that triggered the event and that were not previously stored in the variable TRIGGERED_3A_EVENT into that variable;

4> send a measurement report with IEs set as below:

5> in "inter-RAT measurement event result": "inter-RAT event identity" to "3a", "CHOICE BSIC" to "non verified BSIC" and "BCCH ARFCN" to BCCH ARFCNs that triggered the event (best one first), taking into account the cell individual offset of the GSM cells;

5> "measured results" and possible "additional measured results" according to subclause 8.6.7.5 and 8.4.2, respectively, not taking into account the cell individual offset.

2> if equation 4 is fulfilled for a BCCH ARFCN that is stored in the variable TRIGGERED_3A_EVENT:

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3> remove that BCCH ARFCN from the variable TRIGGERED_3A_EVENT.

2> if equation 3 is fulfilled for the used frequency in UTRAN:

3> clear the variable TRIGGERED_3A_EVENT.

Triggering conditions:

Equation 1:

$$Q_{Used} \leq T_{Used} - H_{3a}/2$$

The variables in the formula are defined as follows:

$\boldsymbol{Q_{Used}}$ is the quality estimate of the used UTRAN frequency.

$\boldsymbol{T_{Used}}$ is the absolute threshold that applies for the used frequency in that measurement.

$\boldsymbol{H_{3a}}$ is the hysteresis parameter for event 3a.

Equation 2:

$$M_{Other\,RAT} + CIO_{otheRAT} \geq T_{Other\,RAT} + H_{3a}/2$$

The variables in the formula are defined as follows:

$\boldsymbol{M_{Other\ RAT}}$ is the measurement quantity for the cell of the other system.

$\boldsymbol{CIO_{Other\ RAT}}$ is the cell individual offset for the cell of the other system.

$\boldsymbol{T_{Other\ RAT}}$ is the absolute threshold that applies for the other system in that measurement.

$\boldsymbol{H_{3a}}$ is the hysteresis parameter for event 3a.

Leaving triggered state conditions:

Equation 3:

$$Q_{Used} > T_{Used} + H_{3a}/2$$

The variables in the formula are defined as follows:

$\boldsymbol{Q_{Used}}$ is the quality estimate of the used UTRAN frequency.

$\boldsymbol{T_{Used}}$ is the absolute threshold that applies for the used frequency in that measurement.

$\boldsymbol{H_{3a}}$ is the hysteresis parameter for event 3a.

Equation 4:

$$M_{Other\,RAT} + CIO_{otheRAT} < T_{Other\,RAT} - H_{3a}/2$$

The variables in the formula are defined as follows:

$\boldsymbol{M_{Other\ RAT}}$ is the measurement quantity for the cell of the other system. $\boldsymbol{M_{Other\ RAT}}$ is expressed in dBm.

$\boldsymbol{CIO_{Other\ RAT}}$ is the cell individual offset for the cell of the other system.

$\boldsymbol{T_{Other\ RAT}}$ is the absolute threshold that applies for the other system in that measurement.

$\boldsymbol{H_{3a}}$ is the hysteresis parameter for event 3a.

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14.3.1.2 Event 3b: The estimated quality of other system is below a certain threshold

When an inter-RAT measurement configuring event 3b is set up, the UE shall:

1> create a variable TRIGGERED_3B_EVENT related to that measurement, which shall initially be empty;

1> delete this variable when the measurement is released.

When event 3b is configured in the UE within a measurement, the UE shall:

1> if the other RAT is GSM, and if IE "BSIC verification required" is set to "required":

2> if equation 1 below has been fulfilled for a time period indicated by "time to trigger" for one or several GSM cells that match any of the BCCH ARFCN and BSIC combinations considered in that inter-RAT measurement:

3> if the inter-RAT cell id of any of those GSM cell is not stored in the variable TRIGGERED_3B_EVENT:

4> store the inter-RAT cell ids of the GSM cells that triggered the event and that were not previously stored in the variable TRIGGERED_3B_EVENT into that variable;

4> send a measurement report with IEs set as below:

5> set in "inter-RAT measurement event result": "inter-RAT event identity" to "3b", "CHOICE BSIC" to "verified BSIC" and "Inter-RAT cell id" to the GSM cells that triggered the event (worst one first), taking into account the cell individual offset of the GSM cells;

5> set the IE "measured results" and the IE "additional measured results" according to subclause 8.6.7.5 and 8.4.2, respectively, not taking into account the cell individual offset.

2> if equation 2 below is fulfilled for a GSM cell whose inter-RAT cell id is stored in the variable TRIGGERED_3B_EVENT:

3> remove the inter-RAT cell id of that GSM cell from the variable TRIGGERED_3B_EVENT.

1> if the other RAT is GSM, and if IE "BSIC verification required" is set to "not required":

2> if equation 1 below has been fulfilled for a time period indicated by "time to trigger" for one or several of the BCCH ARFCNs considered in that inter-RAT measurement:

3> if any of those BCCH ARFCN is not stored into the variable TRIGGERED_3B_EVENT:

4> store the BCCH ARFCNs that triggered the event and that were not previously stored in the variable TRIGGERED_3B_EVENT into that variable;

4> send a measurement report with IEs set as below:

5> set in "inter-RAT measurement event result": "inter-RAT event identity" to "3b", "CHOICE BSIC" to "non verified BSIC" and "BCCH ARFCN" to BCCH ARFCNs that triggered the event (worst one first), taking into account the cell individual offset of the GSM cells;

5> set the IE "measured results" and the IE "additional measured results" according to subclause 8.6.7.5 and 8.4.2, respectively, not taking into account the cell individual offset.

2> if equation 2 below is fulfilled for a BCCH ARFCN that is stored in the variable TRIGGERED_3B_EVENT:

3> remove that BCCH ARFCN from the variable TRIGGERED_3B_EVENT.

Triggering condition:

Equation 1:

$$M_{Other\,RAT}+CIO_{other\,RAT}\leq T_{Other\,RAT}-H_{3b}/2$$

The variables in the formula are defined as follows:

$M_{Other\,RAT}$ is the measurement quantity for the cell of the other system.

$CIO_{Other\ RAT}$ is the cell individual offset for the cell of the other system.

$T_{Other\ RAT}$ is the absolute threshold that applies for the other system in that measurement.

H_{3b} is the hysteresis parameter for event 3b.

Leaving triggered state condition:

Equation 2:

$$M_{Other\ RAT}+CIO_{Other\ RAT}>T_{Other\ RAT}+H_{3b}/2$$

The variables in the formula are defined as follows:

$M_{Other\ RAT}$ is the measurement quantity for the cell of the other system. $M_{Other\ RAT}$ is expressed in dBm.

$CIO_{Other\ RAT}$ is the cell individual offset for the cell of the other system.

$T_{Other\ RAT}$ is the absolute threshold that applies for the other system in that measurement.

H_{3b} is the hysteresis parameter for event 3b.

14.3.1.3 Event 3c: The estimated quality of other system is above a certain threshold

When an inter-RAT measurement configuring event 3c is set up, the UE shall:

1> create a variable TRIGGERED_3C_EVENT related to that measurement, which shall initially be empty;

1> delete this variable when the measurement is released.

When event 3c is configured in the UE within a measurement, the UE shall:

1> if the other RAT is GSM, and if IE "BSIC verification required" is set to "required":

2> if equation 1 below has been fulfilled for a time period indicated by "time to trigger" for one or several GSM cells that match any of the BCCH ARFCN and BSIC combinations considered in that inter-RAT measurement:

3> if the inter-RAT cell id of any of those GSM cell is not stored in the variable TRIGGERED_3C_EVENT:

4> store the Inter-RAT cell ids of the GSM cells that triggered the event and that were not previously stored in the variable TRIGGERED_3C_EVENT into that variable;

4> send a measurement report with IEs set as below:

5> set in "inter-RAT measurement event result": "inter-RAT event identity" to "3c", "CHOICE BSIC" to "verified BSIC" and "Inter-RAT cell id" to the GSM cells that triggered the event (best one first), taking into account the cell individual offset of the GSM cells;

5> set the IE "measured results" and the IE "additional measured results" according to subclause 8.6.7.5 and 8.4.2, respectively, not taking into account the cell individual offset.

2> if equation 2 below is fulfilled for a GSM cell whose inter-RAT cell id is stored in the variable TRIGGERED_3C_EVENT:

3> remove the inter-RAT cell id of that GSM cell from the variable TRIGGERED_3C_EVENT.

1> if the other RAT is GSM, and if IE "BSIC verification required" is set to "not required":

2> if equation 1 below has been fulfilled for a time period indicated by "time to trigger" for one or several of the BCCH ARFCNs considered in that inter-RAT measurement:

3> if any of those BCCH ARFCN is not stored into the variable TRIGGERED_3C_EVENT:

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4> store the BCCH ARFCNs that triggered the event and that were not previously stored in the variable TRIGGERED_3C_EVENT into that variable;

4> send a measurement report with IEs set as below:

5> set in "inter-RAT measurement event result": "inter-RAT event identity" to "3c", "CHOICE BSIC" to "non verified BSIC" and "BCCH ARFCN" to BCCH ARFCNs that triggered the event (best one first), taking into account the cell individual offset of the GSM cells;

5> set the IE "measured results" and the IE "additional measured results" according to subclause 8.6.7.5 and 8.4.2, respectively, not taking into account the cell individual offset.

2> if equation 2 is fulfilled for a BCCH ARFCN that is stored in the variable TRIGGERED_3C_EVENT:

3> remove that BCCH ARFCN from the variable TRIGGERED_3C_EVENT.

Triggering condition:

Equation 1:

$$M_{Other\ RAT}+CIO_{other\ RAT} \geq T_{Other\ RAT}+H_{3c}/2$$

The variables in the formula are defined as follows:

$\boldsymbol{M_{Other\ RAT}}$ is the measurement quantity for the cell of the other system. $\boldsymbol{M_{Other\ RAT}}$ is expressed in dBm.

$\boldsymbol{CIO_{Other\ RAT}}$ is the cell individual offset for the cell of the other system.

$\boldsymbol{T_{Other\ RAT}}$ is the absolute threshold that applies for the other system in that measurement.

$\boldsymbol{H_{3c}}$ is the hysteresis parameter for event 3c.

Leaving triggered state condition:

Equation 2:

$$M_{Other\ RAT}+CIO_{other\ RAT} < T_{Other\ RAT}-H_{3c}/2$$

The variables in the formula are defined as follows:

$\boldsymbol{M_{Other\ RAT}}$ is the measurement quantity for the cell of the other system. $\boldsymbol{M_{Other\ RAT}}$ is expressed in dBm.

$\boldsymbol{CIO_{Other\ RAT}}$ is the cell individual offset for the cell of the other system.

$\boldsymbol{T_{Other\ RAT}}$ is the absolute threshold that applies for the other system in that measurement.

$\boldsymbol{H_{3c}}$ is the hysteresis parameter for event 3c.

14.3.1.4 Event 3d: Change of best cell in other system

When an inter-RAT measurement configuring event 3d is set up, the UE shall:

1> create a variable BEST_CELL_3D_EVENT related to that measurement;

1> delete this variable when the measurement is released.

When event 3d is configured in the UE within a measurement, the UE shall:

1> if the other RAT is GSM, and if IE "BSIC verification required" is set to "required":

2> when the measurement is initiated or resumed:

3> store in the variable BEST_CELL_3D_EVENT the Inter-RAT cell id of the GSM cell that has the best measured quantity among the GSM cells that match any of the BCCH ARFCN and BSIC combinations considered in that inter-RAT measurement, not taking into account the cell individual offset of the GSM cells;

3> send a measurement report with IE set as below:

4> set in "inter-RAT measurement event result": "inter-RAT event identity" to "3d", "CHOICE BSIC" to "verified BSIC" and "Inter-RAT cell id" to the GSM cell that is stored in the variable BEST_CELL_3D_EVENT;

4> set the IE "measured results" and the IE "additional measured results" according to subclause 8.6.7.5 and 8.4.2, respectively, not taking into account the cell individual offset.

2> if equation 1 has been fulfilled for a time period indicated by "time to trigger" for a GSM cell that is different from the one stored in BEST_CELL_3D_EVENT and that matches any of the BCCH ARFCN and BSIC combinations considered in that inter-RAT measurement:

3> store the Inter-RAT cell id of that GSM cell in the variable BEST_CELL_3D_EVENT;

3> send a measurement report with IEs set as below:

4> set in "inter-RAT measurement event result": "inter-RAT event identity" to "3d", "CHOICE BSIC" to "verified BSIC" and "Inter-RAT cell id" to the GSM cell is now stored in BEST_CELL_3D_EVENT;

4> set the IE "measured results" and the IE "additional measured results" according to subclause 8.6.7.5 and 8.4.2, respectively, not taking into account the cell individual offset.

1> if the other RAT is GSM, and if IE "BSIC verification required" is set to "not required":

2> when the measurement is initiated or resumed:

3> store in the variable BEST_CELL_3D_EVENT the BCCH ARFCN of the GSM cell that has the best measured quantity among the BCCH ARFCNs considered in that inter-RAT measurement;

3> send a measurement report with IE set as below:

4> set in "inter-RAT measurement event result": "inter-RAT event identity" to "3d", "CHOICE BSIC" to "non verified BSIC" and "BCCH ARFCN" to the BCH ARFCN that is stored in the variable BEST_CELL_3D_EVENT;

4> set the IE "measured results" and the IE "additional measured results" according to subclause 8.6.7.5 and 8.4.2, respectively, not taking into account the cell individual offset.

2> if equation 1 below has been fulfilled for a time period indicated by "time to trigger" for one of the BCCH ARFCNs considered in that inter-RAT measurement and different from the one stored in BEST_CELL_3D_EVENT:

3> store the BCCH ARFCN of that GSM cell in the variable BEST_CELL_3D_EVENT;

3> send a measurement report with IEs set as below:

4> set in "inter-RAT measurement event result": "inter-RAT event identity" to "3d", "CHOICE BSIC" to "non verified BSIC" and "BCCH ARFCN" to the BCCH ARFCN that is now stored in the variable BEST_CELL_3D_EVENT;

4> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2, not taking into account the cell individual offset.

Equation 1:

$$M_{New} \geq M_{Best} + H_{3d}/2$$

The variables in the formula are defined as follows:

M_{New} is the measurement quantity for a GSM cell that is not stored in the variable BEST_CELL_3D_EVENT.

M_{Best} is the measurement quantity for a GSM cell that is stored in the variable BEST_CELL_3D_EVENT.

H_{3d} is the hysteresis parameter for event 3d.

14.3.2 GSM measurements in compressed mode

14.3.2.1 GSM RSSI measurements

The UE shall perform GSM RSSI measurements in the gaps of compressed mode pattern sequence specified for GSM RSSI measurement purpose.

14.3.2.2 Initial BSIC identification

The UE shall perform Initial BSIC identification in compressed mode pattern sequence specified for Initial BSIC identification measurement purpose.

The parameter "N identify abort" in the IE "DPCH compressed mode info" indicates the maximum number of patterns that the UE shall use to attempt to decode the unknown BSIC of the GSM cell in the initial BSIC identification procedure.

The BSIC identification procedure is defined in detail in [19].

14.3.2.3 BSIC re-confirmation

The UE shall perform BSIC re-confirmation in compressed mode pattern sequence specified for BSIC re-confirmation measurement purpose.

The parameter "T reconfirm abort" in the IE "DPCH compressed mode info" indicates the maximum time allowed for the re-confirmation of the BSIC of one GSM cell in the BSIC re-confirmation procedure.

The BSIC re-confirmation procedure is defined in detail in [19].

14.4 Traffic Volume Measurements

14.4.1 Traffic Volume Measurement Quantity

Traffic volume measurements may be configured by RRC to assist with dynamic radio bearer control. The reported quantities that can be configured are:

1 Buffer Occupancy.

2 Average of Buffer Occupancy.

3 Variance of Buffer Occupancy.

A description of these values can be found in [15].

When a report is triggered, the UE shall provide the requested quantities for the acknowledged and unacknowledged mode RBs mapped onto the transport channels identified.

When the RLC buffer payload, Average of RLC buffer payload or Variance of RLC buffer payload is reported, the measured quantity shall be rounded upwards to the closest higher value possible to report. When the measured quantity is over the highest value possible to report, it shall be set to the highest value.

14.4.2 Traffic Volume reporting triggers

Traffic volume measurement reports can be triggered using two different mechanisms, periodical and event triggered. The reporting criteria are specified in the measurement control message.

All the specified events are evaluated with respect to the Transport Channel Traffic Volume (TCTV). This quantity is equal to the sum of the Buffer Occupancy for all logical channels mapped onto a transport channel. The events on a given transport channel shall be evaluated at least at every TTI (may be more often) as described in [15].

When one traffic volume measurement identity corresponds to multiple traffic volume events with identical event identities for the same transport channel, the UE behaviour is not specified.

When a traffic volume measurement is set up, the UE shall:

1> if the IE "report criteria" is set to "Traffic volume measurement reporting criteria":

2> for each IE "Parameters sent for each transport channel":

3> if the IE "Uplink transport channel type" is not included; or

3> if the IE "Uplink Transport Channel Type" has the value "DCH" or "USCH" and the IE "UL transport channel id" is not included:

4> for each IE "Parameters required for each Event":

5> for each uplink transport channel on which the UE is supposed to report (see below):

6> configure an event trigger defined by the values in the IEs "Measurement Identity", "Traffic volume event identity", "Reporting threshold", "Time to trigger", "Pending time after trigger" and "Tx Interruption after trigger".

3> else:

4> for each IE "Parameters required for each Event":

5> for the uplink transport channel defined by the IEs "Uplink transport channel type" and "UL transport channel id":

6> configure an event trigger defined by the values in the IEs "Measurement Identity", "Traffic volume event identity", "Reporting threshold", "Time to trigger", "Pending time after trigger" and "Tx Interruption after trigger".

1> else:

2> if the IE "report criteria" is set to "Periodical reporting criteria":

2> configure periodical triggers with period equal to the value in the IE "Reporting Interval" and with number of transmissions equal to the value in the IE "Amount of reporting" for the measurement identified by the IE "Measurement Identity".

For each transport channel for which an event trigger has been configured, the UE shall:

1> for each event configured for this transport channel:

2> if the TCTV is larger than the threshold in IE "Reporting threshold" at TVM setup or modify; or

2> if the TCTV becomes larger than the threshold in IE "Reporting threshold" while the event is configured:

3> if the IE "Traffic volume event identity" has value "4a":

4> if the IE "Time to trigger" is not present; and

4> if the Pending-time-after-trigger timer for this event is not active:

5> if the IE "Pending time after trigger" is included:

6> start the Pending-time-after-trigger timer for this event with the value in this IE.

5> trigger a report for the measurement identified by the IE "Measurement Identity".

4> else:

5> start the Time-to-trigger timer for this event with the value in the IE "Time to trigger".

3> if the IE "Traffic volume event identity" has value "4b":

4> if the Time-to-trigger timer for this event is active:

5> stop this timer.

2> if the TCTV is smaller than the threshold in IE "Reporting threshold" at TVM setup or modify; or

2> if the TCTV becomes smaller than the threshold in IE "Reporting threshold" while the event is configured:

3> if the IE "Traffic volume event identity" has value "4a":

4> if the Time-to-trigger timer for this event is active:

5> stop this timer.

3> if the IE "Traffic volume event identity" has value "4b":

4> if the IE "Time to trigger" is not present; and

4> if the Pending-time-after-trigger timer for this event is not active:

5> if the IE "Pending time after trigger" is included:

6> start the Pending-time-after-trigger timer for this event with the value in this IE.

5> trigger a report for the measurement identified by the IE "Measurement Identity".

4> else:

5> start the Time-to-trigger timer for this event with the value in the IE "Time to trigger".

When the Time-to-trigger timer for an event elapses:

1> if the Pending-time-after-trigger timer for this event is not active:

2> trigger a report for the measurement identified by the IE "Measurement Identity" corresponding to this event;

2> if the IE "Pending time after trigger" is included:

3> start the Pending-time-after-trigger timer for this event with the value in this IE.

When the Pending-time-after-trigger for an event elapses:

1> if the IE "Traffic volume event identity" has value "4a":

2> if the TCTV is larger than the threshold in IE "Reporting threshold":

3> if the IE "Time to trigger" is not present:

4> trigger a report for the measurement identified by the IE "Measurement Identity" corresponding to this event;

4> start the Pending-time-after-trigger timer for this event with the value in the IE "Pending time after trigger".

3> else:

4> start the Time-to-trigger timer for this event with the value in the IE "Time to trigger".

1> if the IE "Traffic volume event identity" has value "4b":

2> if the TCTV is smaller than the threshold in IE "Reporting threshold":

3> if the IE "Time to trigger" is not present:

4> trigger a report for the measurement identified by the IE "Measurement Identity" corresponding to this event;

4> start the Pending-time-after-trigger timer for this event with the value in the IE "Pending time after trigger".

3> else:

4> start the Time-to-trigger timer for this event with the value in the IE "Time to trigger".

When a periodical trigger elapses, the UE shall:

1> trigger a report for the measurement identified by the IE "Measurement Identity";

1> if the number of reports triggered by this periodical trigger reaches the value in the IE "Amount of reporting":

2> disable this periodical trigger.

When a report is triggered for a given IE "Measurement Identity", the UE shall:

1> consider the variable MEASUREMENT_IDENTITY corresponding to this measurement identity;

1> if the report is triggered by an event trigger:

2> include the IE "Event results";

2> set the IE "Uplink transport channel type causing the event" to the type of the transport channel which triggered the report;

2> if the transport channel type is "DCH" or "USCH":

3> include the IE "UL Transport Channel identity" and set it to the identity of the transport channel which triggered the report.

2> else:

3> not include the IE "UL Transport Channel identity".

2> set the IE "Traffic volume event identity" to the identity of the event that triggered the report;

2> if the IE "Tx interruption after trigger" for the event that triggered the report is included:

3> if the UE is in CELL_FACH state:

4> prohibit DTCH transmissions on the RACH;

4> if the Tx interruption timer is not running; or

4> if the Tx interruption timer is running and still has a value larger than the IE "Tx interruption after trigger" for the event, i.e. it was started earlier by another event with a larger value in IE "Tx interruption after trigger":

5> start the Tx interruption timer with the value in the IE "Tx interruption after trigger" for this event.

4> when it receives from the UTRAN a message causing the transition to CELL_DCH state; or

4> when the Tx interruption timer elapses:

5> stop the timer;

5> resume these transmissions.

1> if the IE "Traffic volume measurement object" is not included:

2> report on all the uplink transport channels as specified below.

1> if the IE "Traffic volume measurement object" is included:

2> report on the uplink transport channels identified in this IE as specified below.

1> for each UM or AM RB mapped onto a transport channel on which the UE is expected to report:

2> add an element in the IE "Traffic volume measurement results";

2> set the value of the IE "RB Identity" to the identity of the considered radio bearer;

2> if the RB is mapped onto one logical channel:

3> if the IE "RLC Buffer Payload for each RB" is set to TRUE:

4> include the IE "RLC Buffers Payload" and set it to the Buffer Occupancy value for this logical channel, rounded up to the next allowed value.

3> if the IE "Average of RLC Buffer Payload for each RB" is set to TRUE:

4> include and set the IE "Average of RLC Buffer Payload" to the Buffer Occupancy for this logical channel averaged over the interval specified in the IE "Time Interval to take an average or a variance" (see [15]), rounded up to the next allowed value.

3> if the IE "Variance of RLC Buffer Payload for each RB" is set to TRUE:

4> include and set the IE "Variance of RLC Buffer Payload" to the variance of the Buffer Occupancy for this logical channel computed over the interval specified in the IE "Time Interval to take an average or a variance" (see [15]), rounded up to the next allowed value.

2> if the RB is mapped onto two logical channels:

3> if one logical channel is mapped onto transport channels on which the UE is supposed to report:

4> if the IE "RLC Buffer Payload for each RB" is set to TRUE:

5> include and set the IE "RLC Buffers Payload" to the Buffer Occupancy value for this logical channel, rounded up to the next allowed value.

4> if the IE "Average of RLC Buffer Payload for each RB" is set to TRUE:

5> include and set the IE "Average of RLC Buffer Payload" to the Buffer Occupancy for this logical channel averaged over the interval specified in the IE "Time Interval to take an average or a variance" (see [15]), rounded up to the next allowed value.

4> if the IE "Variance of RLC Buffer Payload for each RB" is set to TRUE:

5> include and set the IE "Variance of RLC Buffer Payload" to the variance of the Buffer Occupancy for this logical channel computed over the interval specified in the IE "Time Interval to take an average or a variance" (see [15]), rounded up to the next allowed value.

3> if both logical channels are mapped onto transport channels on which the UE is supposed to report:

4> if the IE "RLC Buffer Payload for each RB" is set to TRUE:

5> include and set the IE "RLC Buffers Payload" to the sum of the Buffer Occupancy values for the two logical channels, rounded up to the next allowed value.

4> if the IE "Average of RLC Buffer Payload for each RB" is set to TRUE:

5> include and set the IE "Average of RLC Buffer Payload" to the sum of the Buffer Occupancy for the two logical channels averaged over the interval specified in the IE "Time Interval to take an average or a variance" (see [15]) and rounded up to the next allowed value.

4> if the IE "Variance of RLC Buffer Payload for each RB" is set to TRUE:

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5> include and set the IE "Variance of RLC Buffer Payload" to the variance of the sum of the Buffer Occupancy for the two logical channels, computed over the interval specified in the IE "Time Interval to take an average or a variance" (see [15]) and rounded up to the next allowed value.

14.4.2.1 Reporting event 4 A: Transport Channel Traffic Volume becomes larger than an absolute threshold

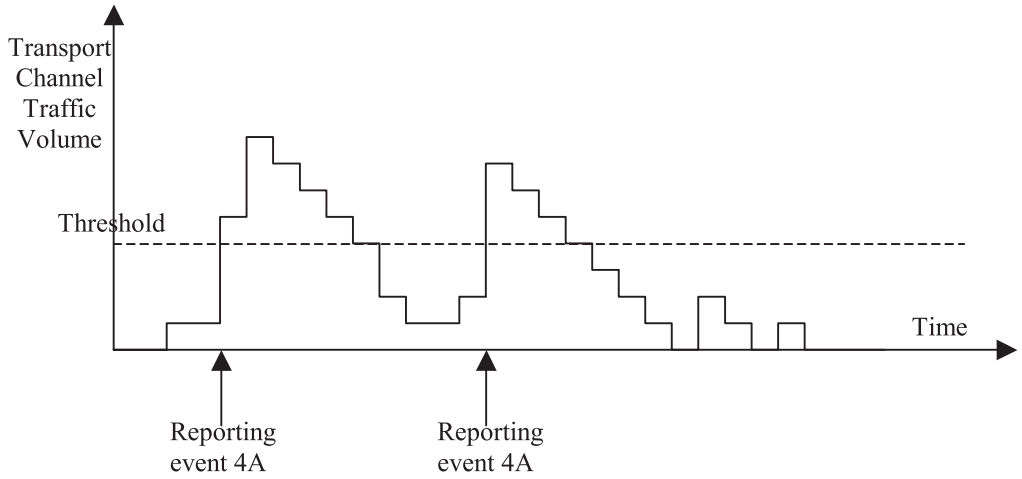


Figure 14.4.2.1-1: Event triggered report when Transport Channel Traffic Volume becomes larger than a certain threshold

If the monitored Transport Channel Traffic Volume (TCTV) [15] is larger than an absolute threshold at TVM setup or modify, or is larger at activation of the monitored transport channel, or becomes larger than an absolute threshold while the event is configured i.e. if TCTV>Reporting threshold, this event could trigger a report. The event could be triggered again only if TCTV becomes smaller than the Reporting threshold and later TCTV>Reporting threshold is verified again.

14.4.2.2 Reporting event 4 B: Transport Channel Traffic Volume becomes smaller than an absolute threshold

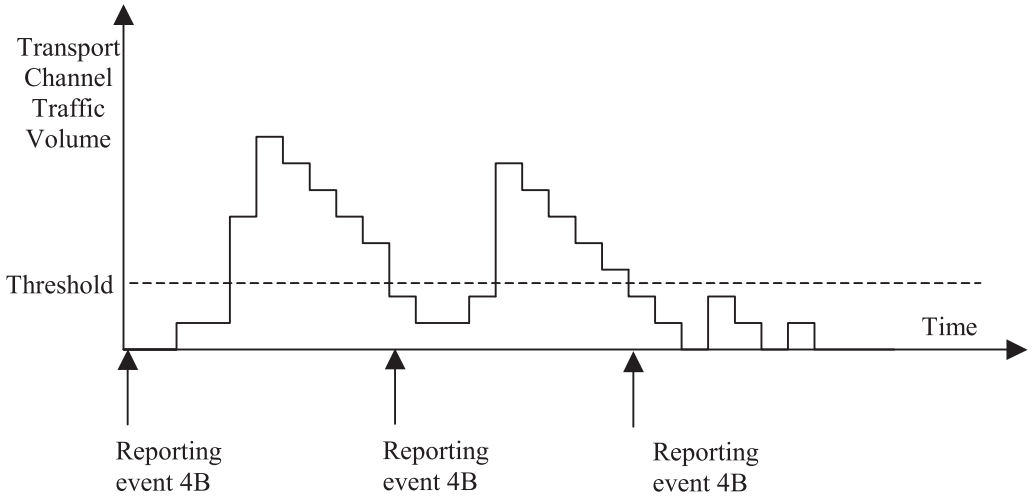


Figure 14.4.2.1-2: Event triggered report when Transport Channel Traffic Volume becomes smaller than certain threshold

If the monitored Transport Channel Traffic Volume (TCTV) [15] is smaller than an absolute threshold at TVM setup or modify, or is smaller at activation of the monitored transport channel, or becomes smaller than an absolute threshold while the event is configured i.e. if TCTV<Reporting threshold, this event could trigger a report. The event could be

triggered again only if TCTV becomes bigger than the Reporting threshold and later TCTV<Reporting threshold is verified again.

14.4.3 Traffic volume reporting mechanisms

Traffic volume measurement triggering could be associated with both a *time-to-trigger* and a *pending time after trigger.* The time-to-trigger is used to get time domain hysteresis, i.e. the condition must be fulfilled during the time-to-trigger time before a report is sent. Pending time after trigger is used to limit consecutive reports when one traffic volume measurement report already has been sent and enables periodic reporting while the TCTV remains above(4a) or below(4b) the threshold. This is described in detail below.

14.4.3.1 Pending time after trigger

This timer is started in the UE when a measurement report has been triggered by a given event. The UE is then forbidden to send new measurement reports triggered by the same event during this time period. Instead the UE waits until the timer has expired. If the Transport Channel Traffic Volume [15] is still above the threshold for event 4a, or below the threshold for event 4b when the timer expires, the UE sends a new measurement report, and the timer is restarted. Otherwise it waits for a new triggering.

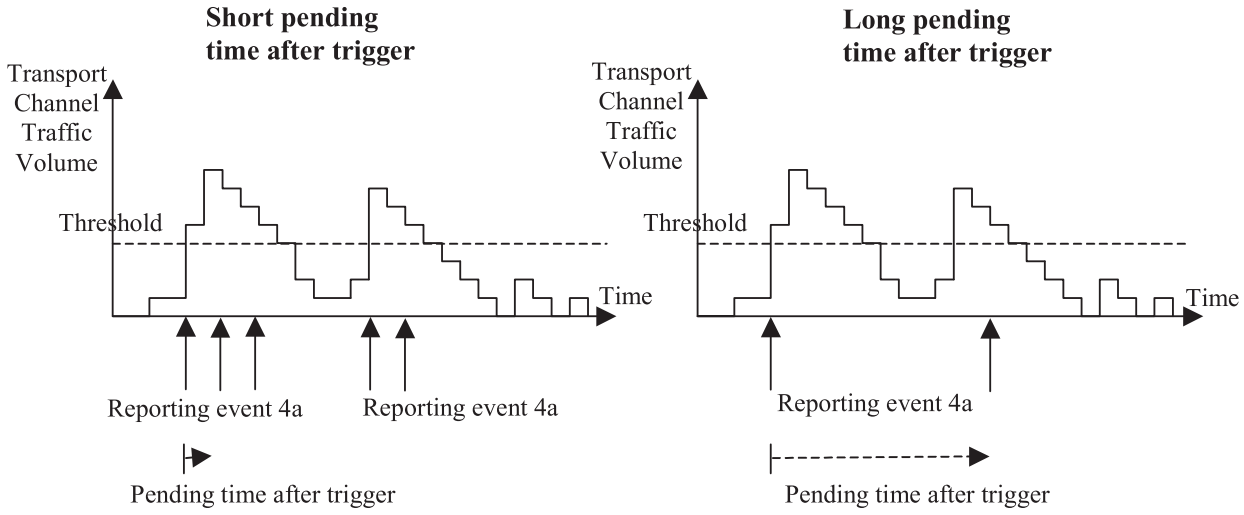


Figure 14.4.3.1-1: Pending time after trigger limits the amount of consecutive measurement reports

Figure 14.4.3.1-1 shows that by increasing the pending time after trigger a triggered second event does not result in a measurement report. The figure assumes absence of the IE "Time to trigger".

14.4.3.2 Time-to-trigger

The timer is started in the UE when the Transport Channel Traffic Volume triggers the event. If the TCTV crosses the threshold before the timer expires, the timer is stopped. If the timer expires then a report is triggered.

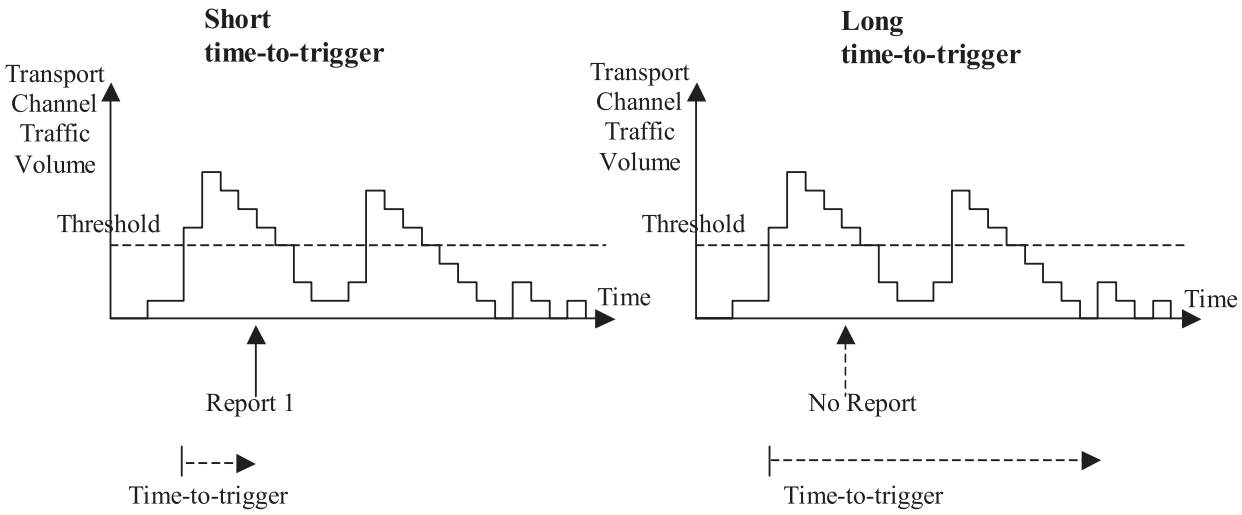


Figure 14.4.3.1-2: Time-to-trigger is used to achieve time hysteresis

Figure 14.4.3.1-2 shows that by increasing the time-to-trigger the report is not triggered.

14.4.4 Interruption of user data transmission

By including the IE "Tx Interruption after trigger", a UE in CELL_FACH state may be instructed by the UTRAN to prohibit transmission of user data on the RACH temporarily after a measurement report has been triggered.

The UE shall only resume transmission of user data, when:

1> it receives from the UTRAN a message allocating a dedicated physical channel, leading to the transition to CELL_DCH state; or

1> the time period indicated by the IE "Tx Interruption after trigger" elapses.

The transmission on signalling radio bearers shall not be interrupted.

14.5 Quality Measurements

14.5.1 Quality reporting measurement quantities

For quality measurements, the following measurement quantities are used:

1. Downlink transport channel BLER
2. Timeslot SIR (TDD only)

14.5.2 Quality reporting events

When one measurement identity corresponds to multiple quality events for the same transport channel, the UE behaviour is not specified.

14.5.2.1 Reporting event 5A: A predefined number of bad CRCs is exceeded

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report when the amount of bad CRCs during a predefined sliding window exceeds a predefined number.

The following three parameters are used in the scheme:

- **Total CRC** = the length of the sliding window over which the number of bad CRCs are counted.

- **Bad CRC** = the number of bad CRC that is required within the latest "Total CRC" received CRCs for the event to be triggered.
- **Pending after trigger** = a new event can not be triggered until "Pending after trigger" CRCs have been received,

When a DCH is established, the UE shall begin to count the number of bad CRCs within the last "Total CRC" received CRCs. No event can be triggered until at least "Total CRC" CRCs have been received. For each new received CRC, the UE shall compare the number of bad CRCs within the latest "Total CRC" received CRCs with the parameter "Bad CRC". An event shall be triggered if the number of bad CRCs is equal or larger than "Bad CRC".

At the time when the event is triggered a pending time after trigger timer is started with the length of "Pending after trigger" CRCs. A new event can not be triggered until Pending after trigger" CRCs have been received. When Pending after trigger" CRCs have been received the event evaluation start again and a new event can be triggered.

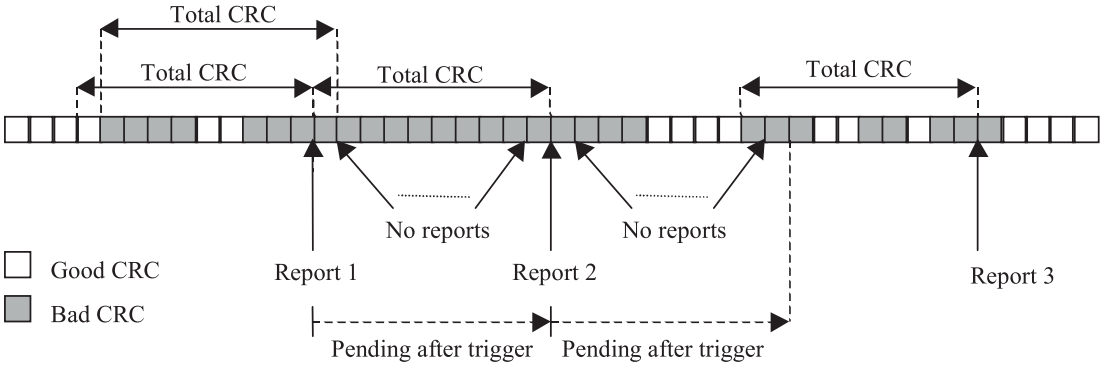


Figure 14.5.2.1-1: Event triggered CRC error reporting

14.6 UE internal measurements

14.6.1 UE internal measurement quantities

For UE internal measurements the following measurement quantities exist:

1. UE transmission (Tx) power, for TDD measured on a timeslot basis.
2. UE received signal strength power (RSSI).
3. UE Rx-Tx time difference (FDD only).
4. T_{ADV} (1.28 Mcps TDD).

14.6.2 UE internal measurement reporting events

In the Measurement reporting criteria field in the Measurement Control messages, the UTRAN notifies the UE of which events should trigger a measurement report. UE internal measurement reporting events that can trigger a report are given below. The reporting events are marked with vertical arrows in the figures below. All events can be combined with time-to-trigger.

NOTE: The reporting events are numbered 6A, 6B, 6C,.. where 6 denotes that the event belongs to the type UE internal measurements.

When one measurement identity corresponds to multiple internal events with identical event identities, the UE behaviour is not defined.

14.6.2.1 Reporting event 6A: The UE Tx power becomes larger than an absolute threshold

When a UE internal measurement configuring event 6a is set up, the UE shall:

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1> create a variable TRIGGERED_6A_EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Tx power (for TDD within a single TS) is greater than the value in IE "UE Transmitted Power Tx power threshold" stored for this event in the variable MEASUREMENT_IDENTITY for a time period indicated by the IE "time_to_trigger":

2> if the variable TRIGGERED_6A_EVENT is set to FALSE:

3> set the variable TRIGGERED_6A_EVENT to TRUE;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6a";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED_6A_EVENT is set to TRUE and if the UE Tx power (for TDD within a single TS) is less or equal the value in IE "UE Transmitted Power Tx power threshold" stored for this event in the variable MEASUREMENT_IDENTITY:

2> set the variable TRIGGERED_6A_EVENT to FALSE.

14.6.2.2 Reporting event 6B: The UE Tx power becomes less than an absolute threshold

When a UE internal measurement configuring event 6b is set up, the UE shall:

1> create a variable TRIGGERED_6B_EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Tx power (for TDD within a single TS) is less than the value in IE "UE Transmitted Power Tx power threshold" stored for this event in the variable MEASUREMENT_IDENTITY for a time period indicated by the IE "time_to_trigger":

2> if the variable TRIGGERED_6B_EVENT is set to FALSE:

3> set the variable TRIGGERED_6B_EVENT to TRUE;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6b";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED_6B_EVENT is set to TRUE and if the UE Tx power (for TDD within a single TS) is greater or equal the value in IE "UE Transmitted Power Tx power threshold" stored for this event in the variable MEASUREMENT_IDENTITY:

2> set the variable TRIGGERED_6B_EVENT to FALSE.

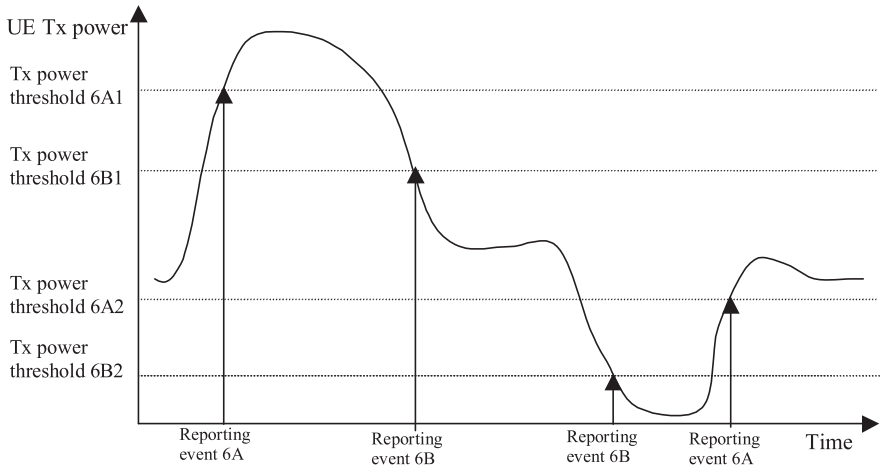


Figure 14.6.2.2-1: Event-triggered measurement reports when the UE Tx power becomes larger or less than absolute thresholds

14.6.2.3 Reporting event 6C: The UE Tx power reaches its minimum value

When a UE internal measurement configuring event 6c is set up, the UE shall:

1> create a variable TRIGGERED_6C_EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Tx power is equal its minimum value (for TDD its minimum value on a single TS) for a time period indicated by the IE "time_to_trigger":

2> if the variable TRIGGERED_6C_EVENT is set to FALSE:

3> set the variable TRIGGERED_6C_EVENT to TRUE;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6c";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED_6C_EVENT is set to TRUE and if the UE Tx power is greater than its minimum value:

2> set the variable TRIGGERED_6C_EVENT to FALSE.

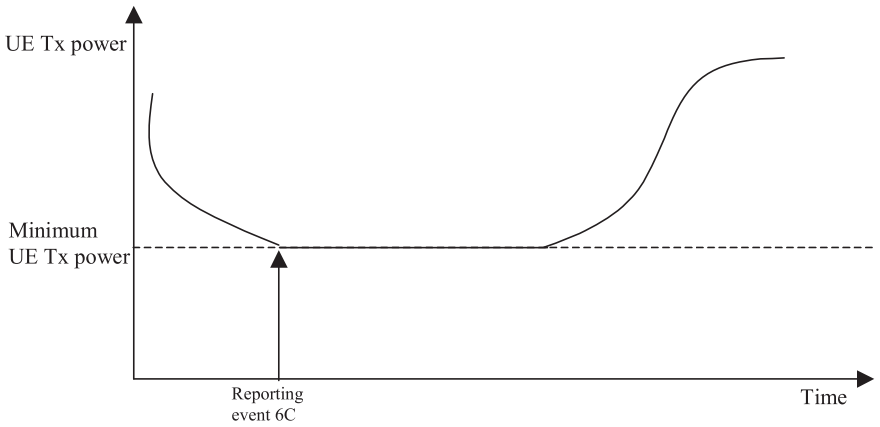


Figure 14.6.2.3-1: Event-triggered measurement report when the UE Tx power reaches its minimum value

14.6.2.4 Reporting event 6D: The UE Tx power reaches its maximum value

When a UE internal measurement configuring event 6d is set up, the UE shall:

1> create a variable TRIGGERED_6D_EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Tx power equals the maximum UE TX power (for TDD its maximum value on a single TS) for a time period indicated by the IE "time_to_trigger":

2> if the variable TRIGGERED_6D_EVENT is set to FALSE:

3> set the variable TRIGGERED_6D_EVENT to TRUE;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6d";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED_6D_EVENT is set to TRUE and if the UE Tx power is less than the maximum UE TX power:

2> set the variable TRIGGERED_6D_EVENT to FALSE.

NOTE: The maximum UE TX power is defined in subclause 8.6.6.8.

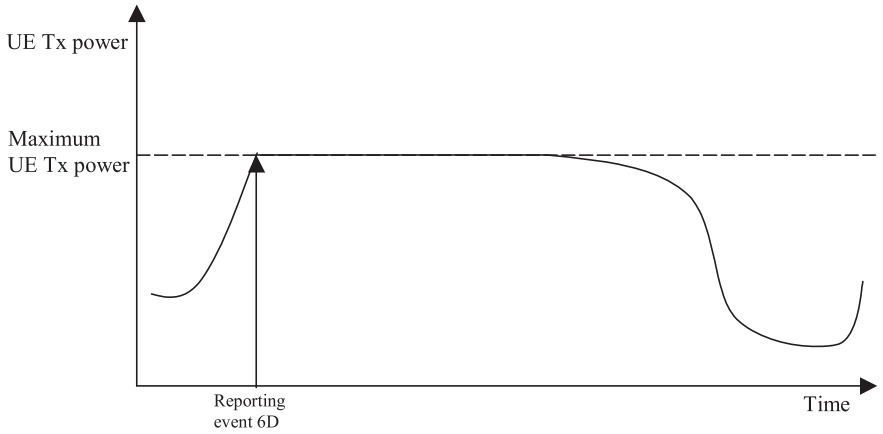


Figure 14.6.2.4-1: Event-triggered report when the UE Tx power reaches its maximum value

14.6.2.5 Reporting event 6E: The UE RSSI reaches the UE's dynamic receiver range

When a UE internal measurement configuring event 6e is set up, the UE shall:

1> create a variable TRIGGERED_6E_EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE RSSI is greater or equal the UE's dynamic receiver range for a time period indicated by the IE "time_to_trigger":

2> if the variable TRIGGERED_6E_EVENT is set to FALSE:

3> set the variable TRIGGERED_6E_EVENT to TRUE;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6e";

4> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2.

1> if the variable TRIGGERED_6E_EVENT is set to TRUE and if the UE RSSI is less than the UE's dynamic receiver range:

2> set the variable TRIGGERED_6E_EVENT to FALSE.

14.6.2.6 Reporting event 6F (FDD): The UE Rx-Tx time difference for a RL included in the active set becomes larger than an absolute threshold

When a UE internal measurement configuring event 6f is set up, the UE shall:

1> create a variable TRIGGERED_6F_EVENT related to that measurement, which shall initially be set to FALSE for each RL;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Rx-Tx time difference for a RL included in the active set is greater than the value in the IE "UE Rx-Tx time difference threshold" stored for this event in the variable MEASUREMENT_IDENTITY for a time period indicated by the IE "time_to_trigger":

2> if the variable TRIGGERED_6F_EVENT is set to FALSE for this RL:

3> set the variable TRIGGERED_6F_EVENT to TRUE for this RL;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6f";

4> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2.

1> if the variable TRIGGERED_6F_EVENT is set to TRUE for a RL and if the UE RX-Tx time difference for this RL included in the active set is less than or equal to the value in the IE "UE Rx-Tx time difference threshold" stored for this event in the variable MEASUREMENT_IDENTITY:

2> set the variable TRIGGERED_6F_EVENT to FALSE for this RL.

14.6.2.6a Reporting event 6F (1.28 Mcps TDD): The time difference indicated by T_{ADV} becomes larger than an absolute threshold

When a UE internal measurement configuring event 6f is set up, the UE shall:

1> create a variable TRIGGERED_6F_EVENT related to that measurement, which shall initially be set to the currently measured T_{ADV};

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the absolute value of the difference between the measured T_{ADV} and the T_{ADV} stored in the variable TRIGGERED_6F_EVENT is greater than the predefined threshold configured with the IE "T_{ADV} Threshold" for this event in the variable MEASUREMENT_IDENTITY for a time period indicated by the IE "time_to_trigger":

2> set the variable TRIGGERED_6F_EVENT to the currently measured T_{ADV};

2> send a measurement report with IEs set as below:

3> set the IE "T_{ADV}" to the measured value, and the IE "SFN" to the SFN during which the latest measurement was performed, in the IE "T_{ADV} Info";

3> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2.

14.6.2.7 Reporting event 6G: The UE Rx-Tx time difference for a RL included in the active set becomes less than an absolute threshold

When a UE internal measurement configuring event 6g is set up, the UE shall:

1> create a variable TRIGGERED_6G_EVENT related to that measurement, which shall initially be set to FALSE for each RL;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Rx-Tx time difference for a RL included in the active set is less than the value in IE "UE Rx-Tx time difference threshold" stored for this event in the variable MEASUREMENT_IDENTITY for a time period indicated by the IE "time_to_trigger":

2> if the variable TRIGGERED_6G_EVENT is set to FALSE for this RL:

3> set the variable TRIGGERED_6G_EVENT to TRUE for this RL;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6g";

4> set the IE "measured results" and the IE "additional measured results" according to subclause 8.4.2.

1> if the variable TRIGGERED_6G_EVENT is set to TRUE for a RL and if the UE RX-Tx time difference for this RL included in the active set is greater or equal the value in IE "UE Rx-Tx time difference threshold" stored for this event in the variable MEASUREMENT_IDENTITY:

2> set the variable TRIGGERED_6G_EVENT to FALSE for this RL.

14.7 UE positioning measurements

14.7.1 UE positioning measurement quantities

The quantity to measure for UE positioning is dependent on the positioning method and the method type requested in the IE "UE positioning reporting quantity".

1 SFN-SFN observed time difference type 2, optional.

2 Rx-Tx time difference type 2, optional.

3 GPS timing of cell fames, optional.

The definition of other GPS measurements is not within the scope of this specification.

14.7.2 Void

14.7.3 UE positioning reporting events

In the IE "UE positioning reporting criteria" in the Measurement Control messages, the UTRAN notifies the UE of which events should trigger a measurement report. UE positioning reporting events that can trigger a report are given below. The content of the measurement report is dependant on the positioning method and method type requested in the IE "UE positioning reporting quantity" of the Measurement Control message and is described in detail in [18].

When one measurement identity corresponds to multiple positioning events with identical event identities, the UE behaviour is not defined.

14.7.3.1 Reporting Event 7a: The UE position changes more than an absolute threshold

This event is used for UE-based methods only.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE changes its position compared to the last reported position by more than the threshold defined by the IE "Threshold position change"; or

1> if no position has been reported since the event was configured and the UE changes its position compared to the first position estimate obtained after the event was configured by more than the threshold defined by the IE "Threshold position change":

2> send a measurement report as specified in subclause 8.6.7.19.1b;

2> if the value of IE "Amount of Reporting" in variable MEASUREMENT_IDENTITY for this event is greater than zero:

3> decrease IE "Amount of Reporting" in variable MEASUREMENT_IDENTITY for this event by one.

2> if the value of IE "Amount of Reporting" in variable MEASUREMENT_IDENTITY for this event is equal to zero:

3> delete this event from the list of events in variable MEASUREMENT_IDENTITY.

1> if the UE is unable to evaluate the event because a position measurement is not available:

2> not send a report.

14.7.3.2 Reporting Event 7b: SFN-SFN measurement changes more than an absolute threshold

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> send a measurement report when the SFN-SFN time difference measurement type 2 of any measured cell changes more than the threshold defined by the IE "Threshold SFN-SFN change"; and

1> if UTRAN set IE "Method Type" in "UE positioning reporting quantity" in the MEASUREMENT CONTROL message to "UE-based":

2> act as specified in subclause 8.6.7.19.1b.

1> if UTRAN set IE "Method Type" in "UE positioning reporting quantity" in the MEASUREMENT CONTROL message to "UE-assisted":

2> act as specified in subclause 8.6.7.19.1a.

1> if UTRAN set IE "Method Type" in "UE positioning reporting quantity" in the MEASUREMENT CONTROL message to "UE-assisted preferred but UE-based allowed" or "UE-based preferred but UE-assisted allowed":

2> the UE may choose to act according to either subclause 8.6.7.19.1a or 8.6.7.19.1b.

1> if the value of IE "Amount of Reporting" in variable MEASUREMENT_IDENTITY for this event is greater than zero:

2> decrease IE "Amount of Reporting" in variable MEASUREMENT_IDENTITY for this event by one.

1> if the value of IE "Amount of Reporting" in variable MEASUREMENT_IDENTITY for this event is equal to zero:

2> delete this event from the list of events in variable MEASUREMENT_IDENTITY.

14.7.3.3 Reporting Event 7c: GPS time and SFN time have drifted apart more than an absolute threshold

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> send a measurement report when the GPS Time Of Week and the SFN timer have drifted apart more than the threshold defined by the IE "Threshold SFN-GPS TOW"; and

1> if UTRAN set IE "Method Type" in "UE positioning reporting quantity" in the MEASUREMENT CONTROL message to "UE based":

2> act as specified in subclause 8.6.7.19.1b.

1> if UTRAN set IE "Method Type" in "UE positioning reporting quantity" in the MEASUREMENT CONTROL message to "UE assisted":

2> act as specified in subclause 8.6.7.19.1a.

1> if UTRAN set IE "Method Type" in "UE positioning reporting quantity" in the MEASUREMENT CONTROL message to "UE assisted preferred but UE based allowed" or "UE based preferred but UE assisted allowed":

2> act as specified in subclause 8.6.7.19.1a or in subclause 8.6.7.19.1b depending on the method type chosen by the UE.

1> if the value of IE "Amount of Reporting" in variable MEASUREMENT_IDENTITY for this event is greater than zero:

2> decrease IE "Amount of Reporting" in variable MEASUREMENT_IDENTITY for this event by one.

1> if the value of IE "Amount of Reporting" in variable MEASUREMENT_IDENTITY for this event is equal to zero:

2> delete this event from the list of events in variable MEASUREMENT_IDENTITY.

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14.7.3.4 Reporting Event 7d: GANSS time and SFN time have drifted apart more than an absolute threshold

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> send a measurement report when the GANSS Time Of Week and the SFN timer have drifted apart more than the threshold defined by the IE "Threshold SFN-GANSS TOW"; and

1> if UTRAN set IE "Method Type" in "UE positioning reporting quantity" in the MEASUREMENT CONTROL message to "UE based":

2> act as specified in subclause 8.6.7.19.1b.

1> if UTRAN set IE "Method Type" in "UE positioning reporting quantity" in the MEASUREMENT CONTROL message to "UE assisted":

2> act as specified in subclause 8.6.7.19.1a.

1> if UTRAN set IE "Method Type" in "UE positioning reporting quantity" in the MEASUREMENT CONTROL message to "UE assisted preferred but UE based allowed" or "UE based preferred but UE assisted allowed":

2> act as specified in subclause 8.6.7.19.1a or in subclause 8.6.7.19.1b depending on the method type chosen by the UE.

1> if the value of IE "Amount of Reporting" in variable MEASUREMENT_IDENTITY for this event is greater than zero:

2> decrease IE "Amount of Reporting" in variable MEASUREMENT_IDENTITY for this event by one.

1> if the value of IE "Amount of Reporting" in variable MEASUREMENT_IDENTITY for this event is equal to zero:

2> delete this event from the list of events in variable MEASUREMENT_IDENTITY.

14.8 Void

14.9 Downlink power control

14.9.1 Generalities

This function is implemented in the UE in order to set the SIR target value on each CCTrCH used for the downlink power control. This SIR value shall be adjusted according to an autonomous function in the UE in order to achieve the same measured quality as the quality target set by UTRAN. The quality target is set as the transport channel BLER value for each transport channel as signalled by UTRAN.

When transport channel BLER is used the UE shall run a quality target control loop such that the quality requirement is met for each transport channel, which has been assigned a BLER target.

The UE shall set the SIR target when the physical channel has been set up or reconfigured. It shall not increase the SIR target value before the power control has converged on the current value. The UE may estimate whether the power control has converged on the current value, by comparing the averaged measured SIR to the SIR target value.

NOTE: The power control function for F-DPCH is specified in [29].

14.9.2 Downlink power control in compressed mode

In compressed mode, the target SIR needs to be changed in several frames compared to normal mode. For this purpose, four values DeltaSIR1, DeltaSIRafter1, DeltaSIR2 and DeltaSIRafter2 are signalled by the UTRAN to the UE (see subclause 10.2.9).

For each frame, the target SIR offset during compressed mode, compared to normal mode is:

$$\Delta SIR = \max(\Delta SIR1\_compression, \ldots, \Delta SIRn\_compression) + \Delta SIR1\_coding + \Delta SIR2\_coding$$

where n is the number of TTI lengths for all TrChs of the CCTrCh, F_i is the length in number of frames of the i-th TTI and where ΔSIR_coding fulfils:

- ΔSIR1_coding= DeltaSIR1 if the start of the first transmission gap in the transmission gap pattern is within the current frame.
- ΔSIR1_coding= DeltaSIRafter1 if the current frame just follows a frame containing the start of the first transmission gap in the transmission gap pattern.
- ΔSIR2_coding= DeltaSIR2 if the start of the second transmission gap in the transmission gap pattern is within the current frame.
- ΔSIR2_coding= DeltaSIRafter2 if the current frame just follows a frame containing the start of the second transmission gap in the transmission gap pattern.
- ΔSIR1_coding= 0 and ΔSIR2_coding= 0 otherwise.

and ΔSIRi_compression is defined by :

- ΔSIRi_compression = 3 dB for downlink frames compressed by reducing the spreading factor by 2.
- ΔSIRi_compression = 0 dB in all other cases.

Several compressed mode patterns applying to the same frames should be avoided as much as possible.

In case several compressed mode patterns are used simultaneously, a ΔSIR offset is computed for each compressed mode pattern and the sum of all ΔSIR offsets is applied to the frame.

14.10 Calculated Transport Format Combination

The Calculated Transport Format Combination (CTFC) is a tool for efficient signalling of transport format combinations.

Let *I* be the number of transport channels that are included in the transport format combination. For DCHs, all configured DCHs are included in the transport format combination. Each transport channel $TrCH_i$, $i = 1, 2, \ldots, I$, has L_i transport formats, i.e. the transport format indicator TFI_i can take L_i values, $TFI_i \in \{0,1,2,\ldots,L_i - 1\}$.

Define $P_i = \prod_{j=0}^{i-1} L_j$ *, where i = 1, 2, ..., I, and* $L_0 = 1$.

Let $TFC(TFI_1, TFI_2, \ldots, TFI_I)$ be the transport format combination for which $TrCH_1$ has transport format TFI_1, $TrCH_2$ has transport format TFI_2, etc. The corresponding $CTFC(TFI_1, TFI_2, \ldots, TFI_I)$ is then computed as:

$$CTFC(TFI_1, TFI_2, \ldots, TFI_I) = \sum_{i=1}^{I} TFI_i \cdot P_i .$$

For FACH and PCH transport channels, "$TrCH_1$" corresponds to the transport channel listed at the first position in IE "FACH/PCH information" in IE "Secondary CCPCH System Information", "$TrCH_2$" corresponds to the transport channel listed at the second position in IE "FACH/PCH information" and so on.

For all other transport channels in FDD and for all configured transport channels of the same transport channel type (i.e. DCH, DSCH, USCH) in TDD, "$TrCH_1$" corresponds to the transport channel having the lowest transport channel identity in the transport format combination mapped to the TFCI field. "$TrCH_2$" corresponds to the transport channel having the next lowest transport channel identity, and so on.

14.10.1 Default TFCS for MBMS

14.10.1.1 S-CCPCH configuration including a FACH carrying MSCH

In case the S-CCPCH configuration includes a FACH carrying MSCH, the default TFCS is defined according to the following:

Let TrCH 1 be the FACH carrying MSCH, TrCH 2 be the first TrCH carrying MTCH listed in the IE "TrCh information list", TrCH 3 be the second TrCH carrying MTCH listed in the IE "TrCh information list" etc. and let TrCH I be the last TrCH carrying MTCH listed in the IE "TrCh information list".

Each transport channel $TrCH_i$, i = 1, 2, …, I, has L_i transport formats, i.e. the transport format indicator TFI_i can take L_i values.

Each transport format combination set is defined by the transport formats of each transport channel mapped on this S-CCPCH:

TFC = (TFI_1, TFI_2, …, TFI_I).

The "MBMS implicit TFCS" contains then the following set of TFCs:

TFCS = {(0,0,…,0),(0,1,…,0),…,(0,L_2,…,0),(0,0,1,…,0),…,(0,0,L_3,…,0),…,(0,0,0,…,1),…,(0,0,0,…,L_I),
(1,0,…,0),(1,1,…,0),…,(1,L_2,…,0),(1,0,1,…,0),…,(1,0,L_3,…,0),…,(1,0,0,…,1),…,(1,0,0,…,L_I),
(2,0,…,0),…,(L_1,0,…,0)}

14.10.1.2 S-CCPCH configuration not including a FACH carrying MSCH

In case the S-CCPCH configuration does not include a FACH carrying MSCH, the default TFCS is defined according to the following:

Let TrCH 1 be the first TrCH listed in the IE "TrCh information list", TrCH 2 be the second TrCH listed in the IE "TrCh information list" etc. and let TrCH I be the last TrCH listed in the IE "TrCh information list".

Each transport channel $TrCH_i$, i = 1, 2, …, I, has L_i transport formats, i.e. the transport format indicator TFI_i can take L_i values.

Each transport format combination set is defined by the transport formats of each transport channel mapped on this S-CCPCH:

TFC = (TFI_1, TFI_2, …, TFI_I).

The "MBMS implicit TFCS" contains then the following set of TFCs:

TFCS = {(0,…,0), (1,…,0),…,(L_1,…,0),(0,1,…,0),…,(0,L_2,…,0),…,(0,0,…,1),…,(0,0,…,L_I)}

14.11 UE autonomous update of virtual active set on non-used frequency (FDD only)

In the text that follows:

- a "non-used frequency" is a frequency that the UE has been ordered to measure upon but is not used for the connection. A "used frequency" is a frequency that the UE has been ordered to measure upon and is also currently used for the connection;

- a "non-used frequency (resp. cell) considered in an inter-frequency measurement" shall be understood as a non-used frequency (resp. cell) included in the list of cells pointed at in the IE "cells for measurement" if it was received for that measurement, or otherwise as a non-used frequency (resp. cell) included in the "Inter-frequency cell info" part of the variable CELL_INFO_LIST.

For event-triggered inter frequency measurements it is possible to use intra-frequency measurement reporting events for support of maintenance of an active set associated with a non-used frequency considered in that measurement, a "virtual

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active set" and used in the evaluation of the frequency quality estimates. The "initial virtual active set" for a frequency is the virtual active set that is associated to that frequency just after a message was received that sets up or modifies the inter-frequency measurement.

The way the virtual active sets are initiated and updated for the non-used frequencies considered in an inter-frequency measurement is described in the two subclauses below.

The UE shall support a single virtual active set per non-used frequency.

The virtual active set is not initialised and maintained for an inter frequency measurement with periodic reporting. A virtual active set initialised and maintained by another inter-frequency measurement does not affect reporting of the periodic inter-frequency measurement.

14.11.1 Initial virtual active set

If the UE receives a MEASUREMENT CONTROL message that sets up or modifies an inter-frequency measurement and includes the IE "Inter-frequency set update"; or

If at least one cell can be measured on a non-used frequency for which the current virtual active set is empty (see subclause 14.11.2), the UE shall:

1> for each non-used frequency F_i considered in the measurement where cells can be measured:

2> if event 1a is configured for the used frequency in an intra-frequency measurement:

3> include in the initial virtual active set the N_i cells that have either the greatest downlink E_c/N_0 or the greatest downlink RSCP after despreading or the lowest pathloss (the measurement quantity to be used is determined by the IE "intra-frequency measurement quantity" of the intra-frequency measurement from which the event 1a configuration is taken), among the cells on frequency F_i considered in that inter-frequency measurement, where:

$$N_i = \min(N_{1a} \ , \ N_{Cells\ Fi}) \text{ if } N_{1a} \neq 0 \text{ and } N_i = N_{Cells\ Fi} \text{ otherwise.}$$

where:

N_{1a} is the "Reporting deactivation threshold" included in the intra-frequency measurement for the first event 1a defined in the intra-frequency measurement with the lowest identity at the time the inter-frequency measurement was received with the IE "Inter-frequency set update" present.

$N_{Cells\ Fi}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.

2> else:

$$N_i = N_{Cells\ Fi}$$

where:

$N_{Cells\ Fi}$ is the number of cells on frequency F_i considered in that inter-frequency measurement.

NOTE1: The UE initialises the virtual active set with up to the maximum number of inter-frequency cells supported by the UE as defined in [19].

NOTE2: If the UTRAN configures more than one measurement using events 2A, 2B, 2C or 2E the UE measurement capabilities may be exceeded due to the necessary copying of 1A, 1B, 1C criteria. To avoid this the UTRAN may configure one measurement to apply to multiple frequencies so that the 1A, 1B, and 1C criteria will only be copied once.

NOTE3: After a hard handover (see subclause 8.3.5), if the MEASUREMENT CONTROL message that restarts an inter-frequency measurement using the virtual active set does not include the IE "Inter-frequency set update", the UE behaviour regarding the virtual active set is not specified.

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14.11.2 Virtual active set update during an inter-frequency measurement

For an inter-frequency measurement, the UE shall:

1> apply the events of type 1a, 1b and 1c that were defined for the used frequency in other stored measurements of type "intra-frequency" at the time the inter-frequency measurement was last received with the IE "Inter-frequency set update" present; and

1> update the virtual active set for the non-used frequencies considered in that measurement according to the following rules:

2> if several events of type 1a (resp. 1b,1c) were defined for the used frequency when the inter-frequency measurement was last received with the IE "Inter-frequency set update" present, only the first 1a event (resp 1b, 1c) that was defined in the measurement with the lowest measurement identity shall apply to the non-used frequencies;

2> all the cells considered in the inter-frequency measurements shall be able to affect the reporting range for event 1a and 1b. (i.e. the IE "Cells forbidden to affect reporting range" possibly stored for the intra-frequency measurements on the used frequency does not apply to the non-used frequencies considered in the inter-frequency measurement);

2> the IEs "amount of reporting" and "reporting interval" that were stored for the intra-frequency measurements on the used frequency shall not be considered if reports of the virtual active set updates are needed.

2> the measurement quantity and filter coefficient to be used is determined by the IE "intra-frequency measurement quantity" of the intra-frequency measurement from which the intra-frequency event configuration configuration is taken.

NOTE: If the measurement quantity and filter coefficients to be used differ for the 1a, 1b, and 1c events applied then the UE behaviour is unspecified.

1> if event 1a is applicable to the non-used frequencies considered in the inter-frequency measurement, always only consider monitored cells that are not in the virtual active set for this event, and:

2> when this event is triggered (according to the criteria described in subclause 14.1.2.1) by a cell for a non-used frequency considered in that measurement:

3> if the "Reporting deactivation threshold" is equal to 0, or if the "Reporting deactivation threshold" is different from 0 and the number of cells included in the virtual active set for that frequency is less than or equal to the "Reporting deactivation threshold":

4> add the primary CPICH that enters the reporting range to the "virtual active set".

2> if event 1b is applicable for the non-used frequencies considered in that inter-frequency measurement, always only consider cells in the virtual active set for this event, and when this event is triggered (according to the criteria described in subclause 14.1.2.2) by a cell for a non-used frequency considered in that measurement:

3> if the number of cells included in the virtual active set is greater than 1:

4> remove the primary CPICH that leaves the reporting range from the "virtual active set".

2> if event 1c is applicable for the non-used frequencies considered in that inter-frequency measurement, always only consider monitored cells for this event, and when this event is triggered (according to the criteria described in subclause 14.1.2.3) by a cell for a non-used frequency considered in that measurement:

3> if the "Reporting activation threshold" is equal to 0, or if the "Reporting activation threshold" is different from 0 and the number of cells included in the virtual active set for that frequency is greater than or equal to the "Reporting activation threshold":

4> rank all active and non-active primary CPICHs and take the *n* best cells to create a new "virtual active set", where *n* is the number of active primary CPICHs in the "virtual active set".

1> if Event 1a is not defined for the used frequency in other stored measurements of type "intra-frequency" at the time the inter-frequency measurement was set up:

2> the UE shall continuously update the virtual active set to consist of all cells on frequency F_i considered in that inter-frequency measurement.

NOTE: The UE needs to only update the virtual active set with up to the maximum number of interfrequency cells supported by the UE as defined in [19].

If none of the cells that are considered in the measurement on this frequency were measured, the UE may treat the virtual active set as empty and follow the appropriate initialisation procedured in subclause 14.11.1 when any relevant cell can first be measured.

If a cell is a member of the virtual active set and is removed from the variable CELL_INFO_LIST or removed from the list of cells pointed at by the IE "Cells for measurement" for the inter-frequency measurement then the UE shall remove the cell from the virtual active set.

If an inter-frequency measurement that initialised a virtual active set is released, then any virtual active set associated with this measurement shall also be released.

14.12 Provision and reception of RRC information between network nodes

14.12.0 General

In certain cases, e.g., when performing handover to UTRAN or when performing SRNC relocation, RRC information may need to be transferred between UTRAN nodes, between UTRAN and another RAT, between nodes within another RAT or between the UE and another RAT.

The RRC information exchanged between network nodes or between the UE and another RAT is typically transferred by means of RRC information containers. An RRC information container is a self-contained and extensible RRC information unit that may be used to transfer a number of different RRC messages, one at a time. As stated before, RRC information containers may be used to transfer RRC messages across interfaces other than the Uu interface. The RRC messages that may be included in RRC information containers have similar characteristics as the RRC messages that are transferred across the Uu interface.

The RRC messages that are sent to/ from the UE, e.g., HANDOVER TO UTRAN COMMAND, INTER RAT HANDOVER INFO are covered by (sub)clauses 8, 9, 10, 11.0-11.4 and 12 of this specification. The following subclauses concern RRC messages exchanged between network nodes.

In future versions of this specification, it is possible to extend the RRC messages transferred across interfaces other than Uu. For these RRC messages the same extension mechanism applies as defined for RRC messages transferred across the Uu interface, as is specified in subclause 10.1, i.e., both critical and non-critical extensions may be added.

The transfer syntax for RRC information containers and RRC messages transferred between network nodes is derived from their ASN.1 definitions by use of Packed Encoding Rules, unaligned (X.691). It should be noted that the encoder adds final padding to achieve octet alignment. The resulting octet string is, carried in a container, transferred between the network nodes.

When using a separate RRC information container for each endpoint, the receiving RRC protocol entity is able to interpret the received container; this means that the receiver need not take into account information about the (network interface) message used in transferring the container.

The following encoding rules apply in addition to what has been specified in X.691 [49]:

1> When a bit string value is placed in a bit-field as specified in 15.6 to 15.11 in [11], the leading bit of the bit string value shall be placed in the leading bit of the bit-field, and the trailing bit of the bit string value shall be placed in the trailing bit of the bit-field.

NOTE: The terms "leading bit" and "trailing bit" are defined in ITU-T Rec. X.680 | ISO/IEC 8824-1. When using the "bstring" notation, the leading bit of the bit string value is on the left, and the trailing bit of the bit string value is on the right.

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14.12.0a General error handling for RRC messages exchanged between network nodes

The error handling for RRC messages that are exchanged between network nodes applies the same principles as defined for other RRC messages.

Although the same principles apply for network nodes receiving unknown, unforeseen and erroneous RRC messages received in RRC information containers, the notification of the error should be done in a different manner, as specified in the following:

The network node receiving an invalid RRC message from another network node should:

1> if the received RRC message was unknown, unforeseen or erroneous:

2> prepare an RRC FAILURE INFO message, including the IE "Failure cause" set to "Protocol error" and the IE "Protocol error information" including an IE "Protocol error cause" which should be set as follows:

3> to "ASN.1 violation or encoding error" upon receiving an RRC message for which the encoded message does not result in any valid abstract syntax value;

3> to "Message type non-existent or not implemented" upon receiving an unknown RRC message type;

3> to "Message extension not comprehended" upon receiving an RRC message including an undefined critical message extension;

3> to "Information element value not comprehended" upon receiving an RRC message including an mandatory IE for which no default value is defined and for which either the value is set to spare or for which the encoded IE does not result in a valid transfer syntax. The same applies for conditional IEs, for which the conditions for presence are met, the IE is present but has a value set to spare or for which the encoded IE does not result in a valid transfer syntax;

3> to "Information element missing" upon receiving an RRC information container with an absent conditional IE for which the conditions for presence are met.

1> if there was another failure to perform the operation requested by the received RRC message:

2> prepare an RRC FAILURE INFO message, including the IE "Failure cause" set to a value that reflects the failure cause.

1> send the RRC FAILURE INFO message to the network node from which the invalid RRC protocol information was received.

NOTE 1: The appropriate (failure) messages used across the network interfaces may not support the inclusion of a RRC information container. In this case, the information contained in the RRC FAILURE INFO message may need to be transferred otherwise e.g. by mapping to a cause value (e.g. a cause value in the RR-HANDOVER FAILURE message when there is a error associated with the RRC-HANDOVER TO UTRAN COMMAND message).

NOTE 2 In case the RRC procedure used to perform SRNS relocation fails e.g. due to non comprehension, the source RNC may notify the target RNC by including the diagnostics information (IEs "Protocol error" and "Protocol error information") in the "RRC message "SRNS Relocation" Info sent in the RRC information container" used for a subsequent relocation request.

14.12.1 RRC Information to target RNC

The RRC information container "RRC Information to target RNC" may either be sent from source RNC or from another RAT. In case of handover to UTRAN, this information originates from another RAT, while in case of SRNC relocation the RRC information originates from the source RNC. In case of handover to UTRAN, the RRC information transferred may provide UTRAN specific information, as defined in the INTER RAT HANDOVER INFO WITH INTER RAT CAPABILITIES message, that the target RNC needs when preparing the handover command message. In case of SRNC relocation and handover/cell reselection from GERAN *Iu mode*, the RRC information transferred specifies the configuration of RRC and the lower layers it controls, e.g., including the radio bearer and transport channel configuration. It is used by the target RNC to initialise RRC and the lower layer protocols to facilitate SRNC relocation and handover/cell reselection from GERAN *Iu mode* in a manner transparent to the UE.

RFC 3095 CONTEXT INFO is used to transfer the compressor and decompressor context information of the RFC 3095 protocol from source RNC to target RNC.

Information Element/Group Name	Need	Multi	Type and reference	Semantics description	Version
CHOICE *case*	MP			At least one spare choice, Criticality: Reject, is needed	
>Handover to UTRAN			INTER RAT HANDOVER INFO WITH INTER RAT CAPABILITIES 14.12.4.1		
>SRNC relocation			SRNS RELOCATION INFO 14.12.4.2		
>RFC 3095 context info			RFC 3095 CONTEXT INFO 14.12.4.4		REL-5

14.12.2 RRC information, target RNC to source RNC

There are 2 possible cases for RNC relocation:

1. The UE is already under control of target RNC; and
2. The SRNC Relocation with Hard Handover (UE still under control of SRNC), but UE is moving to a location controlled by the target RNC (based on measurement information).

In case 1 the relocation is transparent to the UE and there is no "reverse" direction container. The SRNC just assigns the 'serving' function to the target RNC, which then becomes the Serving RNC.

In case 2 the relocation is initiated by SRNC, which also provides the RRC Initialisation Information to the target RNC. Base on this information, the target RNC prepares the Hard Handover Message ("Physical channel reconfiguration" (subclause 8.2.6), "radio bearer establishment" (subclause 8.2.1), "Radio bearer reconfiguration" (subclause 8.2.2), "Radio bearer release" (subclause 8.2.3) or "Transport channel reconfiguration" (subclause 8.2.4).

In case 2 two possibilities are defined in order to transmit the relocation message from the target RNC to the source RNC which can be chosen by the source RNC by including or not including the IE "RB Id for handover message" in the IE "SRNS Relocation Info".

In case the IE "RB Id for handover message" has been received by the target RNC in the IE "SRNS Relocation Info", the target RNC should choose the IE "DL DCCH message" and include the DL DCCH message that should be transmitted transparently to the UE by the source RNC. In that case, the target RNC is integrity protecting the message if applicable.

If the target RNC did not receive the IE "RB Id for handover message" in the IE "SRNS Relocation Info" the target RNC should use another choice. In that case, the source RNC should integrity protect the message before transmitting it to the UE if applicable.

The source RNC then transmits the Handover Message to the UE, which then performs the handover.

In the successful case, the UE transmits an XXX COMPLETE message, using the new configuration, to the target RNC.

In case of failure, the UE transmits an XXX FAILURE, using the old configuration, to the source RNC and the RRC context remains unchanged (has to be confirmed and checked with the SRNS relocation procedure).

Information Element/Group name	Need	Multi	Type and reference	Semantics description
CHOICE *RRC message*	MP			At least one spare choice, Criticality: Reject, is needed

Information Element/Group name	Need	Multi	Type and reference	Semantics description
>RADIO BEARER SETUP			RADIO BEARER SETUP 10.2.31	
>RADIO BEARER RECONFIGURATION			RADIO BEARER RECONFIGURATION 10.2.25	
>RADIO BEARER RELEASE			RADIO BEARER RELEASE 10.2.28	
>TRANSPORT CHANNEL RECONFIGURATION			TRANSPORT CHANNEL RECONFIGURATION 10.2.51	
>PHYSICAL CHANNEL RECONFIGURATION			PHYSICAL CHANNEL RECONFIGURATION 10.2.20	
>RRC FAILURE INFO			RRC FAILURE INFO 10.2.41a	
>DL DCCH message			OCTET STRING	

14.12.3 Void

14.12.4 RRC messages exchanged between network nodes

14.12.4.0 HANDOVER TO UTRAN COMMAND

This RRC message is sent between network nodes to transfer the actual handover command including the details of the radio configuration to be used upon handover to UTRAN as compiled by the target RNC.

Direction: target RNC →source RAT

The message is exactly the same as the HANDOVER TO UTRAN COMMAND defined in subclause 10.2.16a.

14.12.4.0a INTER RAT HANDOVER INFO

This RRC message is sent between network nodes to transfer information relevant for the target RNC when preparing for handover to UTRAN.

Direction: source RNC/RAT→target RAT

The message is exactly the same as the INTER RAT HANDOVER INFO defined in subclause 10.2.16d

14.12.4.1 INTER RAT HANDOVER INFO WITH INTER RAT CAPABILITIES

This RRC message is sent between network nodes when preparing for an inter RAT handover to UTRAN.

Direction: source RAT→target RNC

Information Element/Group Name	Need	Multi	Type and reference	Semantics description
UE Information elements				
Predefined configuration status information	OP		Predefined configuration status information 10.3.4.5a	
Predefined configuration status information compressed	OP		Predefined configuration status information compressed 10.3.4.5b	REL-5
UE security information	OP		UE security information 10.3.3.42b	
UE security information2	OP		UE security information2 10.3.3.42c	REL-6
UE Specific Behaviour Information 1 interRAT	OP		UE Specific Behaviour Information 1 interRAT 10.3.3.52	This IE shall not be included in this version of the protocol
UE capability container	OP			
>UE radio access capability	MP		UE radio access capability 10.3.3.42	
>UE radio access capability extension	MP		UE radio access capability extension 10.3.3.42a	Although this IE is not always required, the need has been set to MP to align with the ASN.1
UE radio access capability compressed	OP		UE radio access capability compressed 10.3.3.42o	REL-5
UE radio access capability comp 2	OP		UE radio access capability comp 2 10.3.3.42oa	REL-6
Other Information elements				
UE system specific capability	OP	1 to <maxSystemCapability>		
>Inter-RAT UE radio access capability	MP		Inter-RAT UE radio access capability 10.3.8.7	
Failure cause	OP		Failure cause 10.3.3.13	Diagnostics information related to an earlier handover to UTRAN request
Protocol error information	CV-*ProtErr*		Protocol error information 10.3.8.12	

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Condition	Explanation
ProtErr	This IE is mandatory present if the IE "Protocol error indicator" is included and has the value "TRUE". Otherwise it is not needed.

NOTE1: To facilitate that network nodes can transparently forward the RRC information received, the INTER RAT HANDOVER INFO WITH INTER RAT CAPABILITIES should include the entire INTER RAT HANDOVER INFO message. The network node, which may not be able to decode the information received, may only append some information to what was received.

NOTE2: The above table does not need to reflect the order of the information elements in the actual encoded message. The order, that is reflected in the ASN.1, should be chosen in a manner that avoids that network nodes need to perform reordering of information elements.

14.12.4.2 SRNS RELOCATION INFO

This RRC message is sent between network nodes when preparing for an SRNS relocation or a handover/cell reselection from GERAN *Iu mode*.

With the presence or absence of the IE "RB identity for Hard Handover message" the source RNC indicates to the target SRNC whether the source RNC expects to receive the choice "DL DCCH message" in the IE "RRC information, target RNC to source RNC" in case the SRNS relocation is of type "UE involved". Furthermore the target RNC uses this information for the calculation of the MAC-I.

Direction: source RNC/RAT→target RNC

Information Element/Group Name	Need	Multi	Type and reference	Semantics description	Version
Non RRC IEs					
>RB identity for Handover message	OP		RB identity 10.3.4.16	Gives the id of the radio bearer on which the source RNC will transmit the RRC message in the case the relocation is of type "UE involved". In handover from GERAN *Iu mode* this IE is always set to 2.	
>State of RRC	MP		RRC state indicator, 10.3.3.35a		
>State of RRC procedure	MP		Enumerated (await no RRC message, await RB Release Complete, await RB Setup Complete, await RB Reconfiguration Complete, await Transport CH Reconfiguration Complete, await Physical CH Reconfiguration Complete, await Active		

Information Element/Group Name	Need	Multi	Type and reference	Semantics description	Version
			Set Update Complete, await Handover Complete, send Cell Update Confirm, send URA Update Confirm, , others)		
Ciphering related information					
>Ciphering status for each CN domain	MP	<1 to maxCNDomains>			
>>CN domain identity	MP		CN domain identity 10.3.1.1		
>>Ciphering status	MP		Enumerated(Not started, Started)		
>>START	MP		START 10.3.3.38	START value to be used in this CN domain.	
>Latest configured CN domain	MP		CN domain identity 10.3.1.1	Value contained in the variable of the same name. In case this variable is empty, the source RNC can set any CN domain identity. In that case, the Ciphering status and the Integrity protection status should be Not started and the target RNC should not initialise the variable Latest configured CN domain.	
>Calculation time for ciphering related information	CV-*Ciphering*			Time when the ciphering information of the message were calculated, relative to a cell of the target RNC. In handover and cell reselection from GERAN *Iu mode* this field is not present.	
>>Cell Identity	MP		Cell Identity 10.3.2.2	Identity of one of the cells under the target RNC and included in the active set of the current call	
>>SFN	MP		Integer(0..4095)		
>COUNT-C list	OP	1 to <maxCNdomains>		COUNT-C values for radio bearers using transparent mode RLC	
>>CN domain identity	MP		CN domain identity 10.3.1.1		
>>COUNT-C	MP		Bit string(32)		
>Ciphering info per radio bearer	OP	1 to <maxRB>		For signalling radio bearers this IE is mandatory.	
>>RB identity	MP		RB identity 10.3.4.16		
>>Downlink HFN	MP		Bit string(20..25)	This IE is either RLC AM HFN (20 bits) or RLC UM HFN (25 bits)	
>>Downlink SN	CV-*SRB1*		Bit String(7)	VT(US) of RLC UM	
>>Uplink HFN	MP		Bit string(20..25	This IE is either RLC AM HFN (20 bits) or RLC UM HFN (25	

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Information Element/Group Name	Need	Multi	Type and reference	Semantics description	Version
			)	bits)	
Integrity protection related information					
>Integrity protection status	MP		Enumerated(Not started, Started)		
>Signalling radio bearer specific integrity protection information	CV-*IP*	4 to <maxSRBsetup>			
>>Uplink RRC HFN	MP		Bit string (28)	For each SRB, in the case activation times for the next IP configuration to be applied on this SRB have already been reached this IE corresponds to the last value used. Else this value corresponds to the value the source would have initalized the HFN to at the activation time, not considering any increment of HFN due to RRC SN roll over. Increment of HFN due to RRC SN roll over is taken care of by target based on value sent by the source.	
>>Downlink RRC HFN	MP		Bit string (28)	For each SRB, in the case activation times for the next IP configuration to be applied on this SRB have already been reached this IE corresponds to the last value used. Else this value corresponds to the value the source would have initalized the HFN to at the activation time, not considering any increment of HFN due to RRC SN roll over. Increment of HFN due to RRC SN roll over is taken care of by target based on value sent by the source. In particular, for SRB2, this IE should not take into account the RRC message that will trigger the relocation. NOTE: In order to have the possibility of sending downlink messages after the construction of the IE "SRNS RELOCATION INFO", the source may choose a value ahead of the last value used.	
>>Uplink RRC Message sequence number	MP		Integer (0..15)	For each SRB, this IE corresponds to the last value received or in the case activation time was not reached for a configuration the value equals (activation time - 1).	
>>Downlink RRC Message sequence number	MP		Integer (0..15)	For each SRB, this IE corresponds to the last value used or in the case activation time was not reached for a configuration the value equals (activation time -1). In particular, for SRB2, this IE should not take into account	

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Information Element/Group Name	Need	Multi	Type and reference	Semantics description	Version
				the RRC message that will trigger the relocation. NOTE: In order to have the possibility of sending downlink messages after the construction of the IE "SRNS RELOCATION INFO", the source may choose a value ahead of the last value used for SRB3 and SRB4.	
>Implementation specific parameters	OP		Bit string (1..512)		
RRC IEs					
UE Information elements					
>U-RNTI	MP		U-RNTI 10.3.3.47	G-RNTI is placed in this field when performing handover or cell reselection from GERAN *Iu mode.*	
>C-RNTI	OP		C-RNTI 10.3.3.8		
>UE radio access Capability	MP		UE radio access capability 10.3.3.42		
>UE radio access capability extension	OP		UE radio access capability extension 10.3.3.42a		
>Last known UE position	OP				
>>SFN	MP		Integer (0..4095)	Time when position was estimated	
>>Cell ID	MP		Cell identity; 10.3.2.2	Indicates the cell, the SFN is valid for.	
>>CHOICE *Position estimate*	MP				
>>>Ellipsoid Point			Ellipsoid Point; 10.3.8.4a		
>>>Ellipsoid point with uncertainty circle			Ellipsoid point with uncertainty circle 10.3.8.4d		
>>>Ellipsoid point with uncertainty ellipse			Ellipsoid point with uncertainty ellipse 10.3.8.4e		
>>>Ellipsoid point with altitude			Ellipsoid point with altitude 10.3.8.4b		
>>>Ellipsoid point with altitude and uncertainty ellipsoid			Ellipsoid point with altitude and uncertainty ellipsoid 10.3.8.4c		

Information Element/Group Name	Need	Multi	Type and reference	Semantics description	Version
>UE Specific Behaviour Information 1 idle	OP		UE Specific Behaviour Information idle 1 10.3.3.51	This IE should be included if received via the "INTER RAT HANDOVER INFO", the "RRC CONNECTION REQUEST", the IE "SRNS RELOCATION INFO" or the "Inter RAT Handover Info with Inter RAT Capabilities"	
>UE Specific Behaviour Information 1 interRAT	OP		UE Specific Behaviour Information 1 interRAT 10.3.3.52	This IE should be included if received via the "INTER RAT HANDOVER INFO", the "RRC CONNECTION REQUEST", the IE "SRNS RELOCATION INFO" or the "Inter RAT Handover Info with Inter RAT Capabilities"	
Other Information elements					
>UE system specific capability	OP	1 to <maxSystemCapability>			
>>Inter-RAT UE radio access capability	MP		Inter-RAT UE radio access capability 10.3.8.7		
UTRAN Mobility Information elements					
>URA Identifier	OP		URA identity 10.3.2.6		
>T305	OP		Integer (5, 10, 30, 60, 120, 360, 720, infinity)	If UE is in CELL_FACH state, this information element shall be included. Value in minutes. Infinity means no update.	REL-7
CN Information Elements					
>CN common GSM-MAP NAS system information	MP		NAS system information (GSM-MAP) 10.3.1.9		
>CN domain related information	OP	1 to <MaxCNdomains>		CN related information to be provided for each CN domain	
>>CN domain identity	MP				
>>CN domain specific GSM-MAP NAS system info	MP		NAS system information (GSM-MAP) 10.3.1.9		
>>CN domain specific DRX cycle length coefficient	MP		CN domain specific DRX cycle length coefficient, 10.3.3.6		
Measurement Related Information elements					
>For each ongoing measurement reporting	OP	1 to <MaxNoOfMeas>		The source RNC should include the measurement IEs for each measurement configured and ongoing in the UE.	
>>Measurement Identity	MP		Measurement identity 10.3.7.48		
>>Measurement Command	MP		Measurement command 10.3.7.46	This IE should have the value Setup.	
>>Measurement Type	CV-*Setup*		Measuremen		

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Information Element/Group Name	Need	Multi	Type and reference	Semantics description	Version
			t type 10.3.7.50		
>>Measurement Reporting Mode	OP		Measurement reporting mode 10.3.7.49		
>>Additional Measurements list	OP		Additional measurements list 10.3.7.1		
>>CHOICE *Measurement*	CV-*Setup*				
>>>Intra-frequency					
>>>>Intra-frequency cell info	OP		Intra-frequency cell info list 10.3.7.33		
>>>>Intra-frequency measurement quantity	OP		Intra-frequency measurement quantity 10.3.7.38		
>>>>Intra-frequency reporting quantity	OP		Intra-frequency reporting quantity 10.3.7.41		
>>>>Reporting cell status	OP		Reporting cell status 10.3.7.61		
>>>>Measurement validity	OP		Measurement validity 10.3.7.51		
>>>>CHOICE *report criteria*	OP				
>>>>>Intra-frequency measurement reporting criteria			Intra-frequency measurement reporting criteria 10.3.7.39		
>>>>>Periodical reporting			Periodical reporting criteria 10.3.7.53		
>>>>>No reporting			NULL		
>>>Inter-frequency					
>>>>Inter-frequency cell info	OP		Inter-frequency cell info list 10.3.7.13		
>>>>Inter-frequency measurement quantity	OP		Inter-frequency measurement quantity 10.3.7.18		
>>>>Inter-frequency reporting quantity	OP		Inter-frequency reporting quantity 10.3.7.21		
>>>>Reporting cell status	OP		Reporting cell status 10.3.7.61		
>>>>Measurement validity	OP		Measurement validity 10.3.7.51		

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Information Element/Group Name	Need	Multi	Type and reference	Semantics description	Version
>>>>Inter-frequency set update	OP		Inter-frequency set update 10.3.7.22		
>>>>CHOICE *report criteria*	OP				
>>>>>Intra-frequency measurement reporting criteria			Intra-frequency measurement reporting criteria 10.3.7.39		
>>>>>Inter-frequency measurement reporting criteria			Inter-frequency measurement reporting criteria 10.3.7.19		
>>>>>Periodical reporting			Periodical reporting criteria 10.3.7.53		
>>>>>No reporting			NULL		
>>>Inter-RAT					
>>>>Inter-RAT cell info	OP		Inter-RAT cell info list 10.3.7.23		
>>>>Inter-RAT measurement quantity	OP		Inter-RAT measurement quantity 10.3.7.29		
>>>>Inter-RAT reporting quantity	OP		Inter-RAT reporting quantity 10.3.7.32		
>>>>Reporting cell status	OP		Reporting cell status 10.3.7.61		
>>>>Measurement validity	OP		Measurement validity 10.3.7.51		
>>>>CHOICE *report criteria*	OP				
>>>>>Inter-RAT measurement reporting criteria			Inter-RAT measurement reporting criteria 10.3.7.30		
>>>>>Periodical reporting			Periodical reporting criteria 10.3.7.53		
>>>>>No reporting			NULL		
>>>Traffic Volume					
>>>>Traffic volume measurement Object	OP		Traffic volume measurement object 10.3.7.70		
>>>>Traffic volume measurement quantity	OP		Traffic volume measurement quantity 10.3.7.71		
>>>>Traffic volume reporting quantity	OP		Traffic volume reporting		

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Information Element/Group Name	Need	Multi	Type and reference	Semantics description	Version
			quantity 10.3.7.74		
>>>>Measurement validity	OP		Measurement validity 10.3.7.51		
>>>>CHOICE *report criteria*	OP				
>>>>>Traffic volume measurement reporting criteria			Traffic volume measurement reporting criteria 10.3.7.72		
>>>>>Periodical reporting			Periodical reporting criteria 10.3.7.53		
>>>>>No reporting			NULL		
>>>Quality					
>>>>Quality measurement quantity	OP		Quality measurement quantity 10.3.7.59		
>>>>CHOICE *report criteria*	OP				
>>>>>Quality measurement reporting criteria			Quality measurement reporting criteria 10.3.7.58		
>>>>>Periodical reporting			Periodical reporting criteria 10.3.7.53		
>>>>>No reporting			NULL		
>>>UE internal					
>>>>UE internal measurement quantity	OP		UE internal measurement quantity 10.3.7.79		
>>>>UE internal reporting quantity	OP		UE internal reporting quantity 10.3.7.82		
>>>>CHOICE *report criteria*	OP				
>>>>>UE internal measurement reporting criteria			UE internal measurement reporting criteria 10.3.7.80		
>>>>>Periodical reporting			Periodical reporting criteria 10.3.7.53		
>>>>>No reporting			NULL		
>>>UE positioning					
>>>>LCS reporting quantity	OP		LCS reporting quantity 10.3.7.111		
>>>>CHOICE *report criteria*	OP				
>>>>>LCS reporting criteria			LCS reporting criteria 10.3.7.110		
>>>>>Periodical reporting			Periodical reporting		

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Information Element/Group Name	Need	Multi	Type and reference	Semantics description	Version
			criteria 10.3.7.53		
>>>>>No reporting					
Radio Bearer Information Elements					
>Predefined configuration status information	OP		Predefined configuration status information 10.3.4.5a		
>Signalling RB information list	MP	1 to <maxSRBsetup>		For each signalling radio bearer	
>>Signalling RB information	MP		Signalling RB information to setup 10.3.4.24		
>RAB information list	OP	1 to <maxRABsetup>		Information for each RAB	
>>RAB information	MP		RAB information to setup 10.3.4.10		
Transport Channel Information Elements					
Uplink transport channels					
>UL Transport channel information common for all transport channels	OP		UL Transport channel information common for all transport channels 10.3.5.24		
>UL transport channel information list	OP	1 to <MaxTrCH>			
>>UL transport channel information	MP		Added or reconfigured UL TrCH information 10.3.5.2		
Downlink transport channels					
>DL Transport channel information common for all transport channels	OP		DL Transport channel information common for all transport channels 10.3.5.6		
>DL transport channel information list	OP	1 to <MaxTrCH>			
>>DL transport channel information	MP		Added or reconfigured DL TrCH information 10.3.5.1		

Information Element/Group Name	Need	Multi	Type and reference	Semantics description	Version
PhyCH information elements					
>TPC Combination Info list	OP	1 to <maxRL>			
>>Primary CPICH info	MP		Primary CPICH info 10.3.6.60		
>>TPC combination index	MP		TPC combination index 10.3.6.85		
>Transmission gap pattern sequence	OP	1 to <maxTGPS>			REL-5
>>TGPSI	MP		TGPSI 10.3.6.82		REL-5
>> Current TGPS Status Flag	MP		Enumerated(active, inactive)	This flag indicates the current status of the Transmission Gap Pattern Sequence, whether it is active or inactive	REL-5
>>TGCFN	CV-*Active*		Integer (0..255)	Connection Frame Number of the latest past frame of the first pattern within the Transmission Gap Pattern Sequence.	REL-5
>>Transmission gap pattern sequence configuration parameters	OP				REL-5
>>>TGMP	MP		Enumerated(TDD measurement, FDD measurement, GSM carrier RSSI measurement, GSM Initial BSIC identification, GSM BSIC re-confirmation, Multi-carrier measurement)	Transmission Gap pattern sequence Measurement Purpose.	REL-5
>>>TGPRC	MP		Integer (1..511, Infinity)	The number of remaining transmission gap patterns within the Transmission Gap Pattern Sequence.	REL-5
>>>TGSN	MP		Integer (0..14)	Transmission Gap Starting Slot Number The slot number of the first transmission gap slot within the TGCFN.	REL-5
>>>TGL1	MP		Integer(1..14)	The length of the first Transmission Gap within the transmission gap pattern expressed in number of slots	REL-5
>>>TGL2	MD		Integer (1..14)	The length of the second Transmission Gap within the transmission gap pattern. If omitted, then TGL2=TGL1. The value of TGL2 shall be ignored if TGD is set to 'undefined'	REL-5
>>>TGD	MP		Integer(15..269,	Transmission gap distance indicates the number of slots	REL-5

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Information Element/Group Name	Need	Multi	Type and reference	Semantics description	Version
			undefined)	between starting slots of two consecutive transmission gaps within a transmission gap pattern. If there is only one transmission gap in the transmission gap pattern, this parameter shall be set to undefined.	
>>>TGPL1	MP		Integer (1..144)	The duration of transmission gap pattern 1.	REL-5
>>>RPP	MP		Enumerated (mode 0, mode 1).	Recovery Period Power control mode during the frame after the transmission gap within the compressed frame. Indicates whether normal PC mode or compressed PC mode is applied	REL-5
>>>ITP	MP		Enumerated (mode 0, mode 1).	Initial Transmit Power is the uplink power control method to be used to compute the initial transmit power after the compressed mode gap.	REL-5
>>>CHOICE *UL/DL mode*	MP				REL-5
>>>>DL only				Compressed mode used in DL only	REL-5
>>>>>Downlink compressed mode method	MP		Enumerated (SF/2, higher layer scheduling)	Method for generating downlink compressed mode gap	REL-5
>>>>UL only				Compressed mode used in UL only	REL-5
>>>>>Uplink compressed mode method	MP		Enumerated (SF/2, higher layer scheduling)	Method for generating uplink compressed mode gap	REL-5
>>>>UL and DL				Compressed mode used in UL and DL	REL-5
>>>>>Downlink compressed mode method	MP		Enumerated (SF/2, higher layer scheduling)	Method for generating downlink compressed mode gap	REL-5
>>>>>Uplink compressed mode method	MP		Enumerated (SF/2, higher layer scheduling)	Method for generating uplink compressed mode gap	REL-5
>>>Downlink frame type	MP		Enumerated (A, B)		REL-5
>>>DeltaSIR1	MP		Real(0..3 by step of 0.1)	Delta in DL SIR target value to be set in the UE during the frame containing the start of the first transmission gap in the transmission gap pattern (without including the effect of the bit-rate increase)	REL-5
>>>DeltaSIRafter1	MP		Real(0..3 by step of 0.1)	Delta in DL SIR target value to be set in the UE one frame after the frame containing the start of the first transmission gap in the transmission gap pattern.	REL-5
>>>DeltaSIR2	OP		Real(0..3 by step of 0.1)	Delta in DL SIR target value to be set in the UE during the frame containing the start of the second transmission gap in the transmission gap pattern	REL-5

Information Element/Group Name	Need	Multi	Type and reference	Semantics description	Version
				(without including the effect of the bit-rate increase) When omitted, DeltaSIR2 = DeltaSIR1.	
>>>DeltaSIRafter2	OP		Real(0..3 by step of 0.1)	Delta in DL SIR target value to be set in the UE one frame after the frame containing the start of the second transmission gap in the transmission gap pattern. When omitted, DeltaSIRafter2 = DeltaSIRafter1.	REL-5
>>>N Identify abort	CV-*Initial BSIC*		Integer(1..128)	Indicates the maximum number of repeats of patterns that the UE shall use to attempt to decode the unknown BSIC of the GSM cell in the initial BSIC identification procedure	REL-5
>>>T Reconfirm abort	CV-*Re-confirm BSIC*		Real(0.5..10.0 by step of 0.5)	Indicates the maximum time allowed for the re-confirmation of the BSIC of one GSM cell in the BSIC re-confirmation procedure. The time is given in steps of 0.5 seconds.	REL-5
>Scrambling Code Change List	CH-*SF/2*	1 to <maxRL>			REL-5
>>Primary CPICH info	MP		Primary CPICH info 10.3.6.60		REL-5
>>Scrambling code change	MP		Enumerated (code change, no code change)	Indicates whether the alternative scrambling code is used for compressed mode method 'SF/2'.	REL-5
Other Information elements					
>Measurement report	OP		MEASUREMENT REPORT 10.2.19	The source RNC should include the Measurement report the UE sent that triggered the SRNS relocation. This information could e.g. be used by the target RNC to set initial power when establishing a DCH.	
>Failure cause	OP		Failure cause 10.3.3.13	Diagnostics information related to an earlier SRNC Relocation request (see NOTE 2 in 14.12.0a)	
>Protocol error information	CV-*ProtErr*		Protocol error information 10.3.8.12		
MBMS joined information	OP			Included if the UE has joined one or more MBMS services	REL-6
>P-TMSI	OP		P-TMSI (GSM-MAP) 10.3.1.13	In case the UE is in PMM-Idle	REL-6
MBMS Selected Service Info	OP		MBMS Selected Services Info 10.3.9a.7b		REL-6

Multi Bound	Explanation
MaxNoOfMeas	Maximum number of active measurements, upper limit 16

Condition	Explanation
Setup	The IE is mandatory present when the IE Measurement command has the value "Setup", otherwise the IE is not needed.
Ciphering	The IE is mandatory present when the IE Ciphering Status has the value "started" and the ciphering counters need not be reinitialised, otherwise the IE is not needed.
IP	The IE is mandatory present when the IE Integrity protection status has the value "started" and the integrity protection counters need not be reinitialised, otherwise the IE is not needed.
ProtErr	This IE is mandatory present if the IE "Protocol error indicator" is included and has the value "TRUE". Otherwise it is not needed.
SRB1	The IE is mandatory present for RB1. Otherwise it is not needed.
Active	This IE is mandatory present when the value of the IE "Current TGPS Status Flag" is "Active" and not needed otherwise.
Initial BSIC	This IE is mandatory present when the value of the IE "TGMP" is set to "GSM Initial BSIC identification" and not needed otherwise.
Re-confirm BSIC	This IE is mandatory present when the value of the IE "TGMP" is set to "GSM BSIC re-confirmation" and not needed otherwise.
SF/2	The IE is mandatory present if the IE 'Transmission Gap Pattern Sequence' is included and has the value 'SF/2' as the compressed mode method, and already sent the UE the IE 'Scrambling Code Change' for each RL in the active set. Otherwise the IE is not needed.

14.12.4.3 Void

14.12.4.4 RFC 3095 CONTEXT INFO

This RRC message is sent between network nodes in SRNS relocation. It is used to transfer the compressor and decompressor context information of the RFC 3095 protocol.

Direction: source RNC →target RNC

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
RFC 3095 context	MP	1 to <maxRBallRABs>			REL-5
>RB identity	MP		RB identity 10.3.4.16		REL-5
>RFC 3095 context list	MP	1 to <maxRFC3095-CID>			REL-5
>>Downlink RFC 3095 context	OP				REL-5
>>>Downlink RFC 3095 context identity	MP		Integer (0..16383)		REL-5
>>>DL_MODE	MP		Enumerated (u, o, r)	RFC 3095 mode in downlink before SRNS relocation.	REL-5
>>>REF_IR	MP		Octet string (1..3000)	The RTP IR header (see section 5.7.7 of RFC3095 for detailed format) corresponding to the oldest header in the compressor sliding window.	REL-5
>>>REF_TIME	OP		Integer (0..4294967295)	Arrival time (at the compressor) of REF_IR in milliseconds. See sections 4.5.4 and 6.5.1 of RFC3095.	REL-5
>>>CURR_TIME	OP		Integer (0..4294967295)	Current time in milliseconds. See section 6.5.1 of RFC3095.	REL-5
>>>SYN_OFFSET_ID	OP		Integer (0..65535)	Last synchronized offset of IP-ID. See section 4.5.5 and 6.5.1 of RFC3095 (termed "Offset_I"). It is related to the compression and decompression of IP-ID and is the synchronized offset between the IP-ID value and the SN value (in the same header) during the last SO state before the relocation procedure.	REL-5
>>>SYN_SLOPE_TS	OP		Integer (0..4294967295)	Last synchronized slope of TS. See sections 5.5.1.2 and 5.7 of RFC3095. In SO state, TS(n) = TS(m) + (n-m) * SYN_SLOPE_TS, where n and m are, the RTP SN of the current and	REL-5

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				the reference packet, respectively. The unit of SYN_SLOPE_TS depends on whether TS is scaled before compression or not.	
>>>DYN_CHANGED	MP		Boolean	Information whether dynamic fields other than RTP SN, RTP TS and IP-ID have changed in the headers that are stored in the sliding window. Set to TRUE if changed and FALSE if not changed.	REL-5
>>Uplink RFC 3095 context	OP				REL-5
>>>Uplink RFC 3095 context identity	MP		Integer (0..16383)		REL-5
>>>UL_MODE	MP		Enumerated (u, o, r)	RFC 3095 mode in uplink	REL-5
>>>REF_IR	MP		Octet string (1..3000)	The RTP IR header (see section 5.7.7 of IETF RFC3095 for detailed format) corresponding to the last correctly decompressed header.	REL-5
>>>REF_TIME	OP		Integer (0..4294967295)	Arrival time (at the decompressor) of REF_IR in milliseconds. See sectionss 4.5.4 and 6.5.1 of RFC3095.	REL-5
>>>CURR_TIME	OP		Integer (0..4294967295)	Current time in milliseconds. See section 6.5.1 of RFC3095.	REL-5
>>>SYN_OFFSET_ID	OP		Integer (0..65535)	Last synchronized offset of IP-ID. See sectionss 4.5.5 and 6.5.1 of RFC3095 (termed"Offset_I") . It is related to the compression and decompression of IP-ID and is the synchronized offset between the IP-ID value and the SN value (in the same header) during the last SO state before the relocation	REL-5

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				procedure.	
>>>SYN_SLOPE_TS	OP		Integer (0..4294967 295)	Last synchronized slope of TS. See sectionss 5.5.1.2 and 5.7 of RFC3095. In SO state, TS(n) = TS(m) + (n-m) * SYN_SLOPE_TS, where n and m are, the RTP SN of the current and the reference packet, respectively. The unit of SYN_SLOPE_TS depends on whether TS is scaled before compression or not.	REL-5
>>>REF_SN_1	OP		Integer (0..65535)	Corresponds to the RTP Sequence Number of the predecessor of the latest RTP packet. This could be used to perform local repair of context by decompressor in U or O mode (see 'ref - 1' in section5.3.2.2.5 in IETF RFC3095 for further explanation).	REL-5

14.13 Void

14.14 Void

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Annex A (informative): USIM parameters

A.1 Introduction

This annex contains recommendations about the RRC parameters to be stored in the USIM.

A.2 Ciphering information

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Cipher key for each CN domain	MP	<1 to maxCNDomains>		Cipher key is described in [40].
>CK	MP		Bit string (128)	
Integrity key for each CN domain	MP	<1 to maxCNDomains>		Integrity key is described in [40].
>IK	MP		Bit string (128)	
THRESHOLD	MP		Bit string (20)	
START value for each CN domain	MP	<1 to maxCNDomains>		START value is described in [40].
>START	MP		Bit string (20)	
KSI, Key set identifier for each CN domain	MP	<1 to maxCNDomains>		Key set identifier is described in [40].
>KSI	MP		Bit string (3)	

A.3 Frequency information

Neighbour cell list.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
FDD cell list	OP	<1 to maxFDDFreqList>			
>UARFCN downlink (Nd)	MP		Integer(0 .. 16383)	[21]	
>Primary scrambling code	OP	<1 to maxFDDFreqCellList>	Primary CPICH info 10.3.6.60		
3.84 Mcps TDD cell list	OP	<1 to maxTDDFreqList>			
>UARFCN (Nt)	MP		Integer(0 .. 16383)	[22]	
>Cell parameters ID	OP	<1 to maxTDDFreqCellList>	Integer (0..127)	The Cell parameters ID is described in [32].	
1.28 Mcps TDD cell list	OP	<1 to maxTDDFreqList>			REL-4
>UARFCN (Nt)	MP		Integer(0 ..	[22]	REL-4

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
			16383)		
>Cell parameters ID	OP	<1 to maxTDDFreqCellList>	Integer (0..127)	The Cell parameters ID is described in [32].	REL-4
GSM Neighbour cell list	OP				
>GSM neighbour cell info	MP	<1 to maxGSMCellList>			
>>BSIC	MP				
>>BCCH ARFCN	MP				

A.4 Multiplicity values and type constraint values

Constant	Explanation	Value
Ciphering information		
maxCNDomains	Maximum number of CN domains	4
Frequency information		
maxFDDFreqList	Maximum number of FDD carrier frequencies to be stored in USIM	4
maxTDDFreqList	Maximum number of TDD carrier frequencies to be stored in USIM	4
maxFDDFreqCellList	Maximum number of neighbouring FDD cells on one carrier to be stored in USIM	32
maxTDDFreqCellList	Maximum number of neighbouring TDD cells on one carrier to be stored in USIM	32
maxGSMCellList	Maximum number of GSM cells to be stored in USIM	32

Annex B (informative): Description of RRC state transitions

This annex contains Stage 2 description of RRC states and state transitions.

B.1 RRC states and state transitions including GSM

After power on, the UE stays in Idle Mode until it transmits a request to establish an RRC Connection. In Idle Mode the connection of the UE is closed on all layers of the access stratum. In Idle Mode the UE is identified by non-access stratum identities such as IMSI, TMSI and P-TMSI. In addition, the UTRAN has no own information about the individual Idle Mode UEs, and it can only address e.g. all UEs in a cell or all UEs monitoring a paging occasion. The UE behaviour within this mode is described in [4].

The UTRA RRC Connected Mode is entered when the RRC Connection is established. The UE is assigned a radio network temporary identity (RNTI) to be used as UE identity on common transport channels.

The RRC states within UTRA RRC Connected Mode reflect the level of UE connection and which transport channels that can be used by the UE.

For inactive stationary data users the UE may fall back to PCH on both the Cell and URA levels. That is, upon the need for paging, the UTRAN checks the current level of connection of the given UE, and decides whether the paging message is sent within the URA, or should it be sent via a specific cell.

B.2 Transition from Idle Mode to UTRA RRC Connected Mode

The transition to the UTRA RRC Connected Mode from the Idle Mode can only be initiated by the UE by transmitting a request for an RRC Connection. The event is triggered either by a paging request from the network or by a request from upper layers in the UE.

When the UE receives a message from the network that confirms the RRC connection establishment, the UE enters the CELL_FACH or CELL_DCH state of UTRA RRC Connected Mode.

In the case of a failure to establish the RRC Connection the UE goes back to Idle Mode. Possible causes are radio link failure, a received reject response from the network or lack of response from the network (timeout).

B.2.1 Transitions for Emergency Calls

Refer to [4] for all states and procedures referred to in this subclause. When UE leaves idle mode from state *Camped on any cell* in order to make an emergency call, moving to state *Connected mode (emergency calls only),* the UE shall attempt to access the current serving cell. If the access attempt to the serving cell fails the UE shall use the *Cell Reselection* procedure. If no acceptable cell is found, the UE shall use the *Any cell selection*. When returning to idle mode, the UE shall use the procedure *Cell selection when leaving connected mode* in order to find an acceptable cell to camp on, state *Camped on any cell*.

B.3 UTRA RRC Connected Mode States and Transitions

B.3.1 CELL_DCH state

The CELL_DCH state is characterised by

- For TDD: A dedicated physical channel is allocated to the UE in uplink and downlink or a dedicated physical channel is allocated to the UE in the uplink and HS_DSCH_RECEPTION is set to TRUE.

- A dedicated physical channel is allocated to the UE in uplink and downlink.
- For TDD:
  - E_DCH_TRANSMISSION is set to TRUE and HS_DSCH_RECEPTION is set to TRUE.
  - E_DCH_TRANSMISSION is set to TRUE and a dedicated physical channel is allocated to the UE in the downlink.
- The UE is known on cell level according to its current active set.
- Dedicated transport channels, downlink and uplink (TDD) shared transport channels, and a combination of these transport channels can be used by the UE.

The CELL_DCH-state is entered from the Idle Mode through the setup of an RRC connection, or by establishing a dedicated physical channel from the CELL_FACH state.

In TDD a PDSCH may be assigned to the UE in this state, to be used for a DSCH. A PUSCH may also be assigned to the UE in this state, to be used for a USCH. If PDSCH or PUSCH are used for TDD, a FACH transport channel may be assigned to the UE for reception of physical shared channel allocation messages.

B.3.1.1 Transition from CELL_DCH to Idle Mode

Transition to Idle Mode is realised through the release of the RRC connection.

B.3.1.2 Transition from CELL_DCH to CELL_FACH state

Transition to CELL_FACH state occurs when all dedicated channels have been released, which may be

a) via explicit signalling (e.g. PHYSICAL CHANNEL RECONFIGURATION, RADIO BEARER RECONFIGURATION, RADIO BEARER RELEASE, RADIO BEARER SETUP, TRANSPORT CHANNEL RECONFIGURATION, etc.).

at the end of the time period for which the dedicated channel was allocated (TDD)

B.3.1.3 Transition from CELL_DCH to CELL_PCH state

Transition to CELL_PCH state occurs via explicit signalling (e.g. PHYSICAL CHANNEL RECONFIGURATION, RADIO BEARER RECONFIGURATION, RADIO BEARER RELEASE, RADIO BEARER SETUP, TRANSPORT CHANNEL RECONFIGURATION, etc.).

B.3.1.4 Transition from CELL_DCH to URA_PCH state

Transition to URA_PCH state occurs via explicit signalling (e.g. PHYSICAL CHANNEL RECONFIGURATION, RADIO BEARER RECONFIGURATION, RADIO BEARER RELEASE, RADIO BEARER SETUP, TRANSPORT CHANNEL RECONFIGURATION, etc.).

B.3.1.5 Radio Resource Allocation tasks (CELL_DCH)

For the DCH, several physical channel allocation strategies may be applied. The allocations can be either permanent (needing a DCH release message) or based on time or amount-of-data.

Resource allocation can be done separately for each packet burst with fast signalling on the DCH

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For each radio frame the UE and the network indicate the current data rate (in uplink and downlink respectively) using the transport format combination indicator (TFCI). However, in TDD, DCH and DSCH or USCH may be mapped on different CCTrCHs, their TFCI are totally independent. DCH transmission is not modified by the simultaneous existence of DSCH/USCH. If the configured set of combinations (i.e. transport format set for one transport channel) are found to be insufficient to retain the QoS requirements for a transport channel, the network initiates a reconfiguration of the transport format set (TFS) for that transport channel. This reconfiguration can be done during or in between data transmission. Further, the network can reconfigure the physical channel allowing an increase or decrease of the peak data rate.

For the uplink data transmission, the UE reports the observed traffic volume to the network in order for the network to re-evaluate the current allocation of resources. This report contains e.g. the amount of data to be transmitted or the buffer status in the UE.

B.3.1.6 RRC Connection mobility tasks (CELL_DCH)

Depending on the amount and frequency of data macrodiversity (soft handover) may or may not be applied.

The RRC Connection mobility is handled by measurement reporting, soft handover and Timing re-initialised or Timing-maintained hard handover procedures.

B.3.1.7 UE Measurements (CELL_DCH)

The UE performs measurements and transmit measurement reports according to the measurement control information.

The UE uses the connected mode measurement control information received in other states until new measurement control information has been assigned to the UE.

B.3.1.8 Acquisition of system information (CELL_DCH)

FDD UEs with certain capabilities reads system information broadcast on FACH.

TDD UEs reads the BCH to acquire valid system information. For each acquisition, the UE may need different combinations of system information broadcast on BCH. The scheduling on the broadcast channel is done in such way that the UE knows when the requested information can be found.

B.3.2 CELL_FACH state

The CELL_FACH state is characterised by:

- No dedicated physical channel is allocated to the UE.
- The UE continuously monitors in the downlink:
  - In TDD mode:
    - a FACH.
  - In FDD mode:
    - a FACH; or
    - an HS-DSCHs and optionally a FACH for MBMS reception.
- The UE is assigned a default common or shared transport channel in the uplink (e.g. RACH) that it can use anytime according to the access procedure for that transport channel.
- The position of the UE is known by UTRAN on cell level according to the cell where the UE last made a cell update.
- In TDD mode, one or several USCH or DSCH transport channels may have been established.

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B.3.2.1 Transition from CELL_FACH to CELL_DCH state

A transition occurs, when a dedicated physical channel is established via explicit signalling (e.g. PHYSICAL CHANNEL RECONFIGURATION, RADIO BEARER RECONFIGURATION, RADIO BEARER RELEASE, RADIO BEARER SETUP, TRANSPORT CHANNEL RECONFIGURATION, etc.).

B.3.2.2 Transition from CELL_FACH to CELL_PCH state

The transition occurs when UTRAN orders the UE to move to CELL_PCH state, which is done via explicit signalling (e.g. CELL UPDATE CONFIRM, RADIO BEARER RECONFIGURATION, etc.).

B.3.2.3 Transition from CELL_FACH to Idle Mode

Upon release of the RRC connection, the UE moves to the idle mode.

B.3.2.4 Transition from CELL_FACH to URA_PCH State

The transition occurs when UTRAN orders the UE to move to URA _PCH state, which is done via explicit signalling (e.g. URA UPDATE CONFIRM, RADIO BEARER RECONFIGURATION, etc.).

B.3.2.5 Radio Resource Allocation Tasks (CELL_FACH)

For TDD, in the CELL_ FACH state the UE will monitor a FACH.

For FDD in the CELL_FACH state the UE will monitor a FACH, if the UE does not support HS-DSCH reception or IE "HS-DSCH common system information" is not included in the system information. Otherwise the UE will monitor the common HS-DSCH(s), and FACH monitoring is restricted to MBMS reception.

The UE is enabled to transmit uplink control signals and it may be able to transmit small data packets on the RACH.

The network can assign the UE transport channel parameters (e.g. transport format sets) in advance, to be used when a DCH is used. Upon assignment of the physical channel for DCH, the UE moves to CELL_DCH state and uses the pre-assigned TFS for the DCH.

If no UE dedicated physical channel or transport channel configuration has been assigned, the UE uses the common physical channel and transport channel configuration according to the system information.

For the uplink data transmission, the UE reports the observed traffic volume to the network in order for the network to re-evaluate the current allocation of resources. This report contains e.g. the amount of data to be transmitted or the buffer status in the UE.

When there is either user or control data to transmit, a selection procedure determines whether the data should be transmitted on a common transport channel, or if a transition to CELL_DCH should be executed. The selection is dynamic and depends on e.g. traffic parameters (amount of data, packet burst frequency).

In the TDD mode, the UTRAN can assign USCH / DSCH resources to the UE in CELL_FACH state. When USCH / DSCH resources are assigned, the UE will continue to monitor FACHs, depending on the UE capability. The UE may use the USCH / DSCH to transmit signalling messages or user data in the uplink and / or the downlink using USCH and / or DSCH when resources are allocated to cell and UE is assigned use of those USCH / DSCH.

For the uplink data transmission on USCH the UE reports to the network the traffic volume (current size of RLC data buffers), The UTRAN can use these measurement reports to re-evaluate the current allocation of the USCH / DSCH resources.

B.3.2.6 RRC Connection mobility tasks (CELL_FACH)

In this state the location of the UE is known on cell level. A cell update procedure is used to report to the UTRAN, when the UE selects a new cell to observe the common downlink channels of a new cell. Downlink data transmission on the FACH can be started without prior paging.

The UE monitors the broadcast channel and system information on BCCH of its own and neighbour cells and from this the need for the updating of cell location is identified.

The UE performs cell reselection and upon selecting a new UTRA cell, it initiates a cell update procedure. Upon selecting a new cell belonging to another radio access system than UTRA, the UE enters idle mode and makes an access to that system according to its specifications.

B.3.2.7 UE Measurements (CELL_FACH)

The UE performs measurements and transmit measurement reports according to the measurement control information.

By default, the UE uses the measurement control information broadcast within the system information. However, for measurements for which the network also provides measurement control information within a MEASUREMENT CONTROL message, the latter information takes precedence.

B.3.2.8 Transfer and update of system information (CELL_FACH)

The UE reads the BCH to acquire valid system information. For each acquisition, the UE may need different combinations of system information broadcast on BCH. The scheduling on the broadcast channel is done in such way that the UE knows when the requested information can be found.

When the system information is modified, the scheduling information is updated to reflect the changes in system information transmitted on BCH. The new scheduling information is broadcast on FACH and/or on the common HS-DSCH(s) (FDD only) in order to inform UEs about the changes. If the changes are applicable for the UE, the modified system information is read on BCH.

B.3.3 CELL_PCH state

The CELL_PCH state is characterised by:

- For FDD, if "HS-DSCH paging system information" is not included in System Information or the UE does not support HS-DSCH reception, and for TDD, no dedicated physical channel is allocated to the UE.

  For FDD, if "HS-DSCH paging system information" is included in System Information and the UE does support HS-DSCH reception, dedicated physical channel may be allocated to the UE.

- For FDD, if "HS-DSCH paging system information" is not included in System Information or the UE does not support HS-DSCH reception, and for TDD, the UE selects a PCH with the algorithm specified in subclause 8.5.19, and uses DRX for monitoring the selected PCH via an associated PICH.

- For FDD, if "HS-DSCH paging system information" is included in System Information and the UE supports HS-DSCH reception, the UE selects a HS-DSCH mapped on the HS-PDSCH with algorithms specified in 8.5.41, 8.5.39 and 8.5.40, and uses DRX for monitoring the selected HS-DSCH via an associated PICH.

- No uplink activity is possible.

- The position of the UE is known by UTRAN on cell level according to the cell where the UE last made a cell update in CELL_FACH state.

The DCCH logical channel cannot be used in this state. If the network wants to initiate any activity, it needs to make a paging request on the PCCH logical channel in the known cell to initiate any downlink activity.

B.3.3.1 Transition from CELL_PCH to CELL_FACH state

The UE is transferred to CELL_FACH state:

a) by paging from UTRAN (PAGING TYPE1 message)

b) through any uplink access

B.3.3.2 Radio Resource Allocation Tasks (CELL_PCH)

In CELL_PCH state no resources have been granted for data transmission. For this purpose, a transition to another state has to be executed.

The UE may use Discontinuous Reception (DRX) in order to reduce power consumption. When DRX is used the UE needs only to receive at one paging occasion per DRX cycle. The UE may be instructed to use specific DRX cycle lengths by the network. The UE determines its paging occasions in the same way as for Idle Mode, see [4].

B.3.3.3 RRC Connection mobility tasks (CELL_PCH)

In the CELL_PCH state, the UE mobility is performed through cell reselection procedures, which may differ from the one defined in [4].

The UE performs cell reselection and upon selecting a new UTRA cell, it moves to CELL_FACH state and initiates a cell update procedure in the new cell. After the cell update procedure has been performed, the UE changes its state back to CELL_PCH state if neither the UE nor the network has any more data to transmit.

Upon selecting a new cell belonging to another radio access system than UTRA, the UE enters idle mode and make an access to that system according to its specifications.

In case of low UE activity, UTRAN may want to reduce the cell-updating overhead by ordering the UE to move to the URA_PCH State. This transition is made via the CELL_FACH state. UTRAN may apply an inactivity timer, and optionally, a counter, which counts the number of cell updates e.g. UTRAN orders the UE to move to URA_PCH when the number of cell updates has exceeded certain limits (network parameter).

B.3.3.4 UE Measurements (CELL_PCH)

The UE performs measurements and transmit measurement reports according to the measurement control information.

The UE uses the measurement control information according to the system information when no UE dedicated measurement control information has been assigned.

B.3.3.5 Transfer and update of system information (CELL_PCH)

The UE reads the BCH to acquire valid system information. For each acquisition, the UE may need different combinations of system information broadcast on BCH. The scheduling on the broadcast channel is done in such way that the UE knows when the requested information can be found.

B.3.4 URA_PCH State

The URA_PCH state is characterised by:

- No dedicated channel is allocated to the UE.
- For FDD, if "HS-DSCH paging system information" is not included in System Information or the UE does not support HS-DSCH reception, and for TDD, the UE selects a PCH with the algorithm specified in subclause 8.5.19, and uses DRX for monitoring the selected PCH via an associated PICH.
- For FDD, if "HS-DSCH paging system information" is included in System Information and the UE supports HS-DSCH reception, the UE selects a HS-DSCH mapped on the HS-PDSCH with algorithms specified in 8.5.41, 8.5.39 and 8.5.40, and uses DRX for monitoring the selected HS-DSCH via an associated PICH.
- No uplink activity is possible.
- The location of the UE is known on UTRAN Registration area level according to the URA assigned to the UE during the last URA update in CELL_FACH state.

The DCCH logical channel cannot be used in this state. If the network wants to initiate any activity, it needs to make a paging request on the PCCH logical channel within the URA where the location of the UE is known. If the UE needs to transmit anything to the network, it goes to the CELL_FACH state. The transition to URA_PCH State can be controlled with an inactivity timer, and optionally, with a counter that counts the number of cell updates. When the number of cell updates has exceeded certain limits (a network parameter), then the UE changes to the URA_PCH State.

URA updating is initiated by the UE, which, upon the detection of the Registration area, sends the network the Registration area update information on the RACH of the new cell.

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B.3.4.1 Transition from URA_PCH State to CELL_FACH State (URA_PCH)

Any activity causes the UE to be transferred to CELL_ FACH State.

a) Uplink access is performed by RACH.

b) by paging from UTRAN (PAGING TYPE1 message).

NOTE: The release of an RRC connection is possible in the URA_PCH state. UE in URA_PCH is able to go to idle when triggered by paging type 1 message in case "Release indicator" has the value "Release".

B.3.4.2 Radio Resource Allocation Tasks (URA_PCH)

In URA_PCH State no resources have been granted for data transmission. For this purpose, a transition to CELL_FACH State has to be executed.

The UE may use Discontinuous Reception (DRX) in order to reduce power consumption. When DRX is used the UE needs only to receive at one paging occasion per DRX cycle. The UE may be instructed to use specific DRX cycle lengths by the network. The UE determines its paging occasions in the same way as for Idle Mode, see [4].

B.3.4.3 RRC Connection mobility tasks (URA_PCH)

In URA_PCH State the location of a UE is known on UTRAN Registration area level.

In this state, the UE mobility is performed through URA reselection procedures, which may differ from the definitions in [4]. The UE performs cell reselection and upon selecting a new UTRA cell belonging to a URA that does not match the URA used by the UE, the UE moves to CELL_FACH state and initiates a URA update towards the network. After the URA update procedure has been performed, the UE changes its state back to URA_PCH state if neither the UE nor the network has any more data to transmit.

Upon selecting a new cell belonging to another radio access system than UTRA, the UE enters idle mode and makes an access to that system according to its specifications.

B.3.4.4 UE Measurements (URA_PCH)

The UE performs measurements and transmit measurement reports according to the measurement control information.

The UE uses the measurement control information according to the system information when no UE dedicated measurement control information has been assigned.

B.3.4.5 Transfer and update of system information (URA_PCH)

The same mechanisms to transfer and update system information as for state CELL_PCH are applicable for UEs in URA_PCH state.

B.3.5 States and Transitions for Cell Reselection in URA_PCH, CELL_PCH, and CELL_FACH

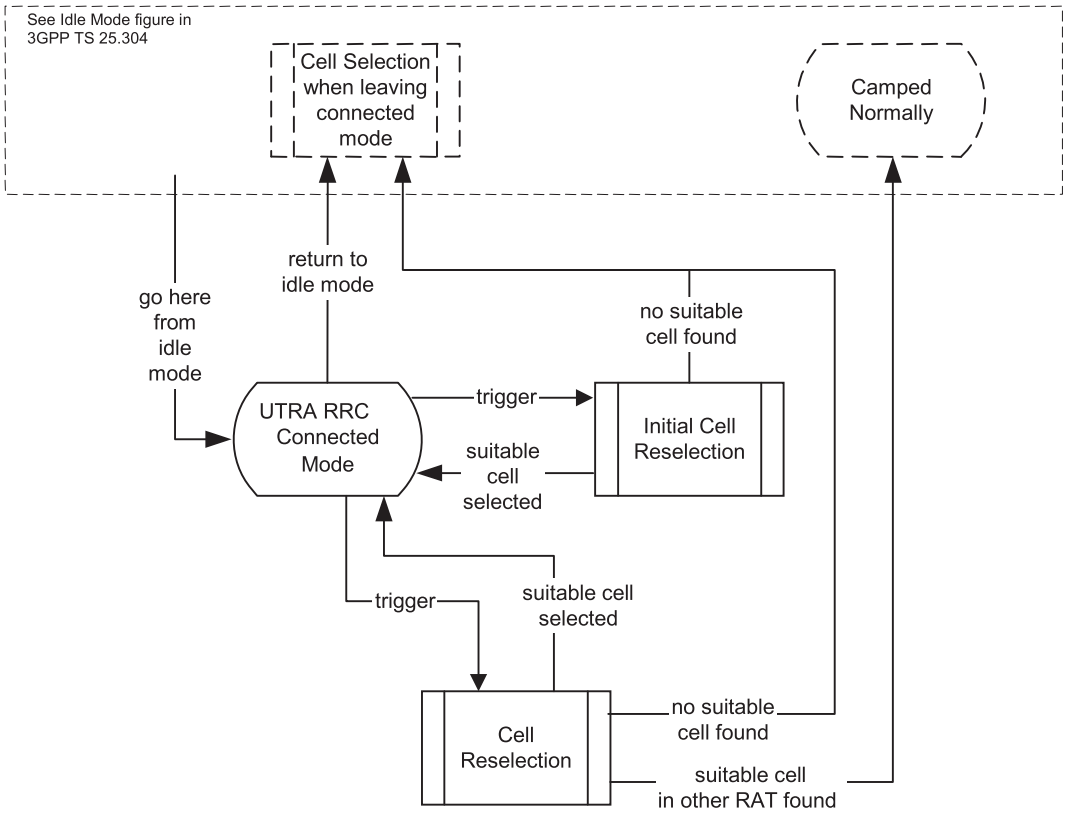


Figure B.3.5-1: UTRA RRC Connected mode cell reselection for URA_PCH, CELL_PCH, and CELL_FACH

In some states the UE performs cell reselection procedures. The UE selects a suitable cell (defined in [4]) and radio access technology based on connected mode radio measurements and cell reselection criteria.

Figure B.3.5-1 shows the states and procedures in the cell reselection process in connected mode.

When a cell reselection is triggered, the UE evaluates the cell reselection criteria based on radio measurements, and if a better cell is found that cell is selected, procedure Cell reselection (see [4]). If the change of cell implies a change of radio access technology, the RRC connection is released, and the UE enters idle mode of the other RAT. If no suitable cell is found in the cell reselection procedure, the UE eventually enters idle mode.

When an Initial cell reselection is triggered, the UE shall use the Initial cell reselection procedure (see [4]) to find a suitable cell. One example where this procedure is triggered is at radio link failure, where the UE may trigger an initial cell reselection in order to request re-establishment of the RRC connection. If the UE is unable to find a suitable cell, the UE eventually enters idle mode.

B.4 Inter-RAT handover with CS domain services

When using CS domain services, UTRAN is using an Inter-Radio access system Handover Procedure and GSM is using a Handover procedure for the transition from UTRA RRC Connected Mode to GSM Connected Mode.

B.5 Inter-RAT handover with PS domain services

When using PS domain services, the UE can initiate cell reselection from a GSM/GPRS cell to a UTRAN cell and then uses the RRC Connection Establishment procedure for the transition to UTRA RRC Connected mode. It is also possible for the BSS to initiate a UTRA Inter-RAT Handover to seamlessly relocate the UE to UTRAN. In this latter case there is no need to return the UE to Idle Mode (GPRS Packet Idle Mode) and the UE immediately moves to RRC connected state in the UTRAN.

In the case that cell reselection is used, when the RRC Connection is established from Idle Mode (GPRS Packet Idle Mode) the RRC CONNECTION REQUEST message contains an indication, that UTRAN needs to continue an already established GPRS UE context from the CN. This indication allows UTRAN to e.g. prioritise the RRC CONNECTION REQUEST from the UE.

In UTRA RRC connected mode UTRAN may use UE or network initiated cell reselection to change from a UTRAN cell to a GSM/GPRS cell. If the cell reselection was successful the UE enters Idle Mode (GPRS Packet Idle Mode). The UE sends a packet channel request from Idle Mode (GPRS Packet Idle mode) to establish a Temporary Block flow and enter GPRS Packet Transfer Mode. In the GPRS Packet Transfer Mode the UE sends a RA Update request message. The RA Update Request message sent from the UE contains an indication that GSM/GPRS need to continue an already established UTRAN UE context from the CN. This means that the RA Update request is always sent for the transition from UTRA RRC Connected Mode to GSM/GPRS regardless if the RA is changed or not.

Alternatively, the UTRAN may use an Inter-System Relocation (PS Handover) to relocate a UTRA RRC connected UE directly to GPRS Packet Transfer Mode in GERAN.

NOTE: The reason for using RA update instead of a new message is to reduce the impact on the existing GSM/GPRS specification.

B.6 Inter-RAT handover with simultaneous PS and CS domain services

B.6.1 Inter-RAT handover UTRAN to GSM / BSS

For a UE in CELL_DCH state using both CS and PS Domain services the Inter-RAT handover procedure is based on measurement reports from the UE but initiated from UTRAN.

The UE performs the Inter-RAT handover from UTRA RRC Connected Mode to GSM Connected Mode first. When the UE has sent handover complete message to GSM / BSS the UE initiates a temporary block flow towards GPRS and sends a RA update request.

If the Inter-RAT handover from UTRA RRC Connected Mode to GSM Connected Mode was successful the handover is considered as successful regardless if the UE was able to establish a temporary block flow or not towards GPRS.

In case of Inter-RAT handover failure the UE has the possibility to go back to UTRA RRC Connected Mode and re-establish the connection in the state it originated from.

B.6.2 Inter-RAT handover GSM / BSS to UTRAN

For a UE in GSM Connected Mode using both CS and PS domain services the Inter-RAT handover procedure is based on measurement reports from the UE but initiated from GSM / BSS.

The UE performs the Inter-RAT handover from GSM Connected Mode to UTRA RRC Connected Mode.

In UTRA RRC Connected Mode both services are established in parallel.

If the Inter-RAT handover from GSM Connected mode to UTRA RRC Connected Mode was successful the handover is considered as successful.

In case of Inter-RAT handover failure the UE has the possibility to go back to GSM Connected Mode and re-establish the connection in the state it originated from.

Annex C (informative): Description for the Compressed Coding of Pre-defined configurations included in the INTER RAT HANDOVER INFO message

This annex contains a description of the compressed coding of the IE "Predefined configuration status information compressed" (see subclause 10.3.4.5b) included in the INTER RAT HANDOVER INFO message.

C.1 Definitions

Pre-defined configuration set with different value tags: This is a set of consecutive positions for which pre-defined configurations are stored with different value tags. The set cannot include positions for which no pre-defined configuration is stored.

Pre-defined configuration list with variable size: This is the variable sized list consisting of the value tags corresponding to the remaining positions after the "Pre-defined configuration sets with different value tags" have been formed. This will also indicate not stored pre-defined configurations, either explicitly or implicitly (i.e. in the case that there are no more stored configurations until the end of the variable sized list). This is highlighted in figures C.2-1 and C.2-2.

C.2 Examples of the methodology

From figure C.2-1 it can be seen that there are two "Pre-defined configuration sets with different value tags".

The start position of Set1 is "1" with a list of 7 pre-defined configurations {1, 2, 3, 4, 5, 6, 7}.

The start position of Set2 is "10" with a list of 6 pre-defined configurations {10, 11, 12, 13, 14, 15}.

The "Pre-defined configurations list with variable size" has a start position of 0, and includes all of the pre-defined configurations not included in the sets {0, 8, 9}. The value tag at position 9 is not stored. This does not need to be explicitly indicated in the coding as "not stored" because there are no stored pre-defined configurations positioned after this in the list.

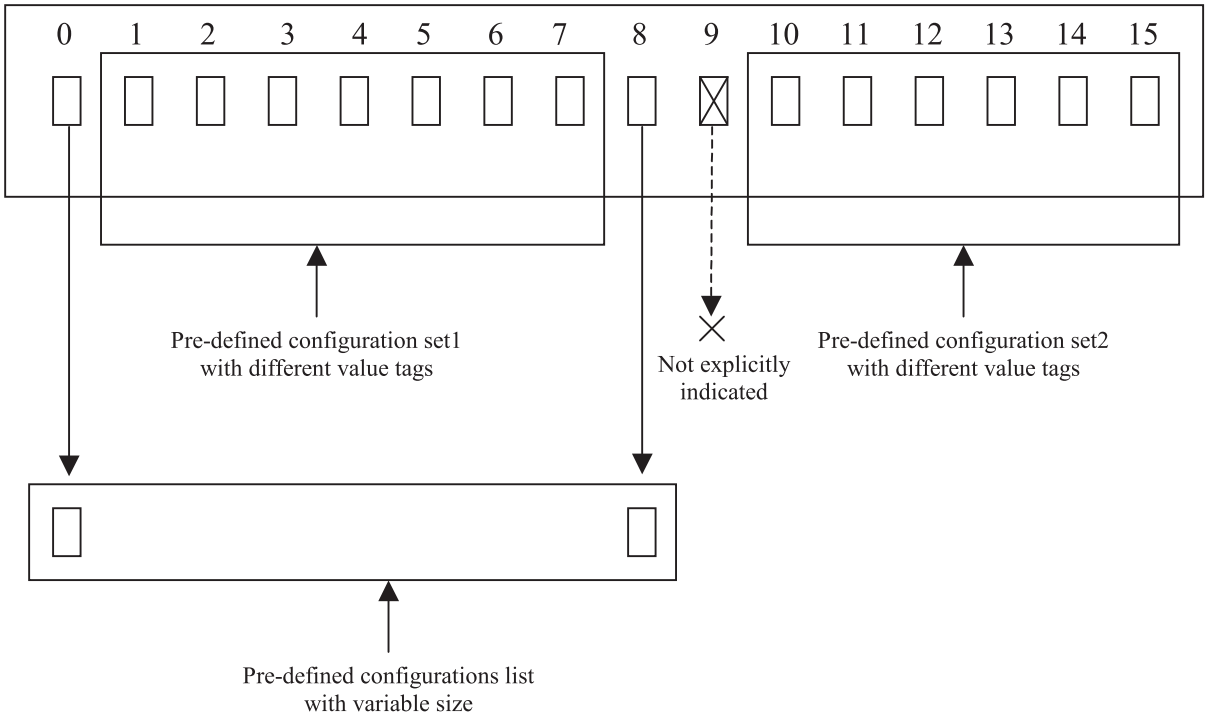


Figure C.2-1: Example scenario where non-stored pre-defined configurations do not need to be explicitly indicated

Figure C.2-2 is similar to Figure C.2-1. However in this case for the "Pre-defined configurations list with variable size", the pre-defined configuration in position 8 is not stored. This needs to be explicitly indicated in the coding as "not stored" because there is a stored pre-defined configuration (position 9) positioned after this in the list.

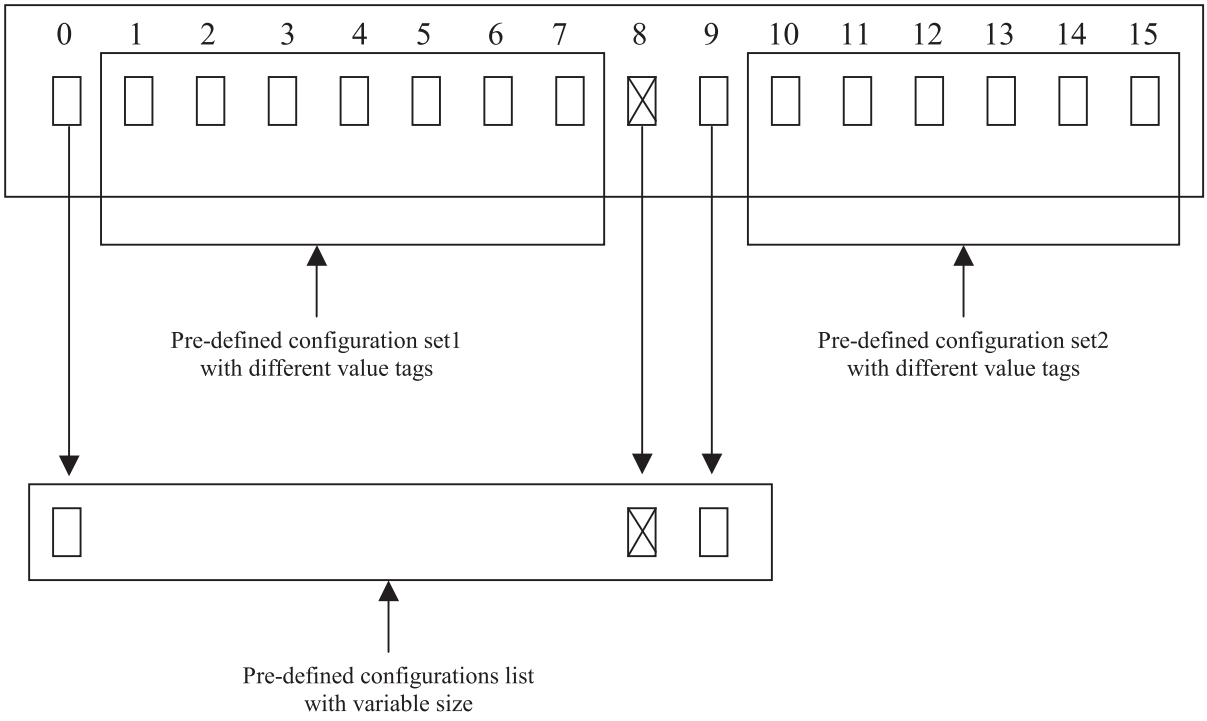


Figure C.2-2: Example scenario where non-stored pre-defined configurations need to be explicitly indicated

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Annex D (Normative): Implementation of Domain Specific Access Control (DSAC) in UEs of 3GPP Release 5

UEs of 3GPP Release 5 implementing the domain specific access class control feature but not implementing the network sharing feature shall act on the domain specific access class restriction indicated by the IE "Domain Specific Access Restriction Parameters For PLMN Of MIB" if present, and otherwise apply the access restrictions indicated by the IE "Cell Access Restriction".

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Annex E (informative): Change history

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
10/1999	RP-05	RP-99524	-		Approved at TSG-RAN #5 and placed under Change Control	-	3.0.0
12/1999	RP-06	RP-99650	001		Modification of RRC procedure specifications	3.0.0	3.1.0
	RP-06	RP-99654	005	1	Introduction of Information Element for Power Control Algorithm	3.0.0	3.1.0
	RP-06	RP-99654	007	1	RRC parameters for SSDT	3.0.0	3.1.0
	RP-06	RP-99656	009	1	Inclusion of information elements for integrity protection	3.0.0	3.1.0
	RP-06	RP-99656	010	2	Security mode control procedure	3.0.0	3.1.0
	RP-06	RP-99656	011	3	Updates of the system information procedure	3.0.0	3.1.0
	RP-06	RP-99656	012	2	Inter-frequency measurements and reporting	3.0.0	3.1.0
	RP-06	RP-99656	013	1	Inter-system measurements and reporting	3.0.0	3.1.0
	RP-06	RP-99656	014	1	Additional measurements in RRC measurement messages	3.0.0	3.1.0
	RP-06	RP-99656	015	3	Value range for Measurement Information Elements	3.0.0	3.1.0
	RP-06	RP-99656	016	2	Message contents for inter system handover to UTRAN	3.0.0	3.1.0
	RP-06	RP-99652	017		Inclusion of ciphering information elements	3.0.0	3.1.0
	RP-06	RP-99651	018		Corrections and editorial changes	3.0.0	3.1.0
	RP-06	RP-99654	019	1	Algorithm for CTCF Calculation	3.0.0	3.1.0
	RP-06	RP-99651	025		Logical CH for RRC Connection Re-establishment (RRC Connection Re-establishment deleted in RAN_10, RP-000715)	3.0.0	3.1.0
	RP-06	RP-99719	026	1	Gain Factors	3.0.0	3.1.0
	RP-06	RP-99654	027	1	Parameters for CELL UPDATE CONFIRM message	3.0.0	3.1.0
	RP-06	RP-99651	028		Cell Update Cause	3.0.0	3.1.0
	RP-06	RP-99654	029	1	RRC Initialisation Information	3.0.0	3.1.0
	RP-06	RP-99656	034	1	Open loop power control for PRACH	3.0.0	3.1.0
	RP-06	RP-99652	038		Addition of the UE controlled AMR mode adaptation	3.0.0	3.1.0
	RP-06	RP-99651	039		Information elements for RLC reset	3.0.0	3.1.0
	RP-06	RP-99656	040		Support for DS-41 Initial UE Identity	3.0.0	3.1.0
	RP-06	RP-99656	042	2	Integration of Cell Broadcast Service (CBS)	3.0.0	3.1.0
	RP-06	RP-99654	044	1	Gated transmission of DPCCH	3.0.0	3.1.0
	RP-06	RP-99656	045		Modification to the Transport Format Combination Control message	3.0.0	3.1.0
	RP-06	RP-99656	046		New Information elements and modifications to messages required in order to support configuration and re-configuration of the DSCH in FDD mode	3.0.0	3.1.0
	RP-06	RP-99654	047	1	Editorial Corrections and Alignments with Layer 1 specifications	3.0.0	3.1.0
	RP-06	RP-99654	048	1	Information elements for TDD shared channel operation	3.0.0	3.1.0
	RP-06	RP-99656	049		Description of CN dependent IEs in Master Information Block	3.0.0	3.1.0
	RP-06	RP-99650	050		UE capability information elements	3.0.0	3.1.0
	RP-06	RP-99656	051	1	UTRAN response time to uplink feedback commands of TX diversity control	3.0.0	3.1.0
	RP-06	RP-99654	052		New and corrected CPCH parameters	3.0.0	3.1.0
	RP-06	RP-99654	053	2	Compressed mode parameters without gating	3.0.0	3.1.0
	RP-06	RP-99654	054		Transport format combination set and transport format combination subset	3.0.0	3.1.0
	RP-06	RP-99656	055	1	Information elements for cell selection and reselection	3.0.0	3.1.0
	RP-06	RP-99654	056		Corrections and Alignments of the RRC to the L1 for TDD	3.0.0	3.1.0
	RP-06	RP-99656	057	1	Introduction of a SCCH procedure	3.0.0	3.1.0
	RP-06	RP-99656	061		Support for DS-41 Paging UE Identity	3.0.0	3.1.0
	RP-06	RP-99656	062	2	Support for cdma2000 Hard Handover	3.0.0	3.1.0
	RP-06	RP-99656	063	1	Provide necessary signalling to support FDD DSCH	3.0.0	3.1.0
	RP-06	RP-99654	064		RRC procedure interactions	3.0.0	3.1.0
	RP-06	RP-99654	066	1	Transfer of UE capabilities	3.0.0	3.1.0
	RP-06	RP-99654	067		Selection of initial UE identity	3.0.0	3.1.0
	RP-06	RP-99657	069		UE capability verification in the security mode control procedure	3.0.0	3.1.0
	RP-06	RP-99657	070	1	DPCH initial power	3.0.0	3.1.0
	RP-06	RP-99657	071		Actions when entering idle mode	3.0.0	3.1.0
	RP-06	RP-99657	072		Specification of inter-frequency and inter-system reporting events	3.0.0	3.1.0

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Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
					for FDD		
	RP-06	RP-99657	073	1	Signalling radio bearers	3.0.0	3.1.0
	RP-06	RP-99654	074		CN information elements	3.0.0	3.1.0
	RP-06	RP-99654	076		UE information elements	3.0.0	3.1.0
	RP-06	RP-99657	077	1	Radio bearer, transport channel and physical channel information elements	3.0.0	3.1.0
	RP-06	RP-99654	078		Other information elements	3.0.0	3.1.0
	RP-06	RP-99657	079	2	RRC signalling for PDCP	3.0.0	3.1.0
	RP-06	RP-99654	080		Content of Measurement Control Messages	3.0.0	3.1.0
	RP-06	RP-99654	081		RRC Information Elements to support Block STTD transmission diversity in TDD	3.0.0	3.1.0
	RP-06	RP-99657	082	1	Signalling connection release	3.0.0	3.1.0
	RP-06	RP-99657	083	1	Addition of cell access restriction information elements to System Information	3.0.0	3.1.0
	RP-06	RP-99655	085	1	RRC Connection Establishment parameters	3.0.0	3.1.0
	RP-06	RP-99657	092	1	Support of UE autonomous update of a active set on a non-used frequency	3.0.0	3.1.0
	RP-06	RP-99657	095	1	TPC combining for power control	3.0.0	3.1.0
	RP-06	RP-99653	096	1	Editorial Modification of IEs in RRC messages	3.0.0	3.1.0
	RP-06	RP-99655	097		Selection of SCCPCH	3.0.0	3.1.0
	RP-06	RP-99655	098	1	RRC Initialisation Information	3.0.0	3.1.0
	RP-06	RP-99657	100	1	Support of physical channel establishment and failure criteria in the UE	3.0.0	3.1.0
	RP-06	RP-99655	102	1	RRC Connection Re-establishment (Message deleted in RAN_10, RP-000715)	3.0.0	3.1.0
	RP-06	RP-99657	106	1	System information on FACH	3.0.0	3.1.0
	RP-06	RP-99657	108	1	SAPs and Primitives for DS-41 mode	3.0.0	3.1.0
	RP-06	RP-99655	109	1	TX Diversity Mode for Dedicated Channel	3.0.0	3.1.0
	RP-06	RP-99657	110	1	RACH message length signalling on System Information	3.0.0	3.1.0
	RP-06	RP-99657	113	1	Routing of NAS messages in UTRAN	3.0.0	3.1.0
	RP-06	RP-99655	116	3	TBS Identification in TFS	3.0.0	3.1.0
	RP-06	RP-99657	117	1	Merging the hard handover and some radio bearer control procedures	3.0.0	3.1.0
	RP-06	RP-99653	120	1	Selected RRC message transfer syntax	3.0.0	3.1.0
	RP-06	RP-99657	121		Efficient rate command signalling	3.0.0	3.1.0
03/2000	RP-07	RP-000043	122		TDD Mode BCH Reception in Cell DCH State	3.1.0	3.2.0
	RP-07	RP-000043	123		Uplink Outer Loop Power Control in TDD Mode	3.1.0	3.2.0
	RP-07	RP-000043	124	1	TFS TB Size Calculation with Bit Aligned TDD MAC Headers	3.1.0	3.2.0
	RP-07	RP-000043	125		Grouping of DRAC IEs, and detailed definitions of these IEs	3.1.0	3.2.0
	RP-07	RP-000043	126		Correction of specifications for the 'Dynamic Resource Allocation Control of Uplink DCH' Procedure	3.1.0	3.2.0
	RP-07	RP-000043	131	2	Clarification of PDCP info and PDCP capability IEs	3.1.0	3.2.0
	RP-07	RP-000043	132		Editorial change to "Specification of system information block characteristics"	3.1.0	3.2.0
	RP-07	RP-000043	133		Additions of CBS related Information Elements	3.1.0	3.2.0
	RP-07	RP-000043	134		Signalling for computed gain factors	3.1.0	3.2.0
	RP-07	RP-000043	137	1	General error handling procedures	3.1.0	3.2.0
	RP-07	RP-000043	138	1	RRC message extensions	3.1.0	3.2.0
	RP-07	RP-000043	139		Padding of RRC messages using RLC transparent mode	3.1.0	3.2.0
	RP-07	RP-000043	140	2	UE information elements	3.1.0	3.2.0
	RP-07	RP-000043	141		Other information elements	3.1.0	3.2.0
	RP-07	RP-000043	142	3	Integrity protection function	3.1.0	3.2.0
	RP-07	RP-000043	143	4	RAB-RB relations	3.1.0	3.2.0
	RP-07	RP-000043	144	1	Inter-system handover from UTRAN	3.1.0	3.2.0
	RP-07	RP-000043	145	3	Handover to UTRAN including procedure for pre- configuration	3.1.0	3.2.0
	RP-07	RP-000043	146	2	RRC measurement filtering parameters	3.1.0	3.2.0
	RP-07	RP-000043	147		New event "RL out of UE Rx window"	3.1.0	3.2.0
	RP-07	RP-000044	148	1	Access control on RACH	3.1.0	3.2.0
	RP-07	RP-000044	149	2	cdma2000 Hard Handover	3.1.0	3.2.0
	RP-07	RP-000044	150	1	CPCH parameters with corrections	3.1.0	3.2.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-07	RP-000044	152		U-plane AM RLC reconfiguration by cell update procedure	3.1.0	3.2.0
	RP-07	RP-000044	154	3	CPCH	3.1.0	3.2.0
	RP-07	RP-000044	155	1	Information elements for ASC in TDD	3.1.0	3.2.0
	RP-07	RP-000044	156		Addition of timing advance value in handover related messages	3.1.0	3.2.0
	RP-07	RP-000044	157	2	Physical channel description for TDD	3.1.0	3.2.0
	RP-07	RP-000044	159		Message contents for the intersystem command message to UTRAN operating in TDD mode	3.1.0	3.2.0
	RP-07	RP-000044	160		Corrections on use of PUSCH power control info and minor corrections	3.1.0	3.2.0
	RP-07	RP-000044	162	2	UE individual DRX cycles in CELL_PCH and URA_PCH states	3.1.0	3.2.0
	RP-07	RP-000044	163		Correction to Transport Format Combination Control procedure	3.1.0	3.2.0
	RP-07	RP-000044	164	3	Downlink outer loop power control	3.1.0	3.2.0
	RP-07	RP-000044	165	2	Redirection of RRC connection setup	3.1.0	3.2.0
	RP-07	RP-000044	166	2	Inter-frequency measurements in CELL_FACH state	3.1.0	3.2.0
	RP-07	RP-000044	167		List of found editorial mistakes in the Dec99 version of 25.331 (V3.1.0)	3.1.0	3.2.0
	RP-07	RP-000044	168	1	Transport block size	3.1.0	3.2.0
	RP-07	RP-000044	169	1	Cell Access Restriction	3.1.0	3.2.0
	RP-07	RP-000044	170		Editorial modification	3.1.0	3.2.0
	RP-07	RP-000044	171		Modification of DPCH info	3.1.0	3.2.0
	RP-07	RP-000045	172	1	Measurement control message	3.1.0	3.2.0
	RP-07	RP-000045	173	2	Reporting cell status	3.1.0	3.2.0
	RP-07	RP-000045	174		Additional IE for RB release	3.1.0	3.2.0
	RP-07	RP-000045	175		Available SF in PRACH info	3.1.0	3.2.0
	RP-07	RP-000045	176		Traffic volume measurement event	3.1.0	3.2.0
	RP-07	RP-000045	177		Report of multiple cells on an event result	3.1.0	3.2.0
	RP-07	RP-000045	178		Editorial modification on Direct Transfer	3.1.0	3.2.0
	RP-07	RP-000045	179		Correction of the Security Mode Control procedure	3.1.0	3.2.0
	RP-07	RP-000045	180	1	Maximum calculated Transport Format Combination	3.1.0	3.2.0
	RP-07	RP-000045	183		Additional DPCH IEs to align 25.331 with 25.214	3.1.0	3.2.0
	RP-07	RP-000045	184	1	RB – DCH mapping	3.1.0	3.2.0
	RP-07	RP-000045	188	1	Modifications related to FDD mode DSCH	3.1.0	3.2.0
	RP-07	RP-000045	189	1	Identification of Shared Channel Physical Configuration in TDD Mode	3.1.0	3.2.0
	RP-07	RP-000045	192	1	Uplink Outer Loop Power Control During Hard Handover	3.1.0	3.2.0
	RP-07	RP-000045	193		Support of Multiple CCTrCH's in TDD Mode	3.1.0	3.2.0
	RP-07	RP-000045	194	1	Uplink Physical Channel Control in TDD Mode	3.1.0	3.2.0
	RP-07	RP-000045	201	1	Transfer of initial information from UE to target RNC prior to handover to UTRAN	3.1.0	3.2.0
	RP-07	RP-000045	202	1	CN information elements	3.1.0	3.2.0
	RP-07	RP-000045	203		UTRAN mobility information elements	3.1.0	3.2.0
	RP-07	RP-000045	204	1	RB information elements	3.1.0	3.2.0
	RP-07	RP-000046	205	1	Physical channel information elements	3.1.0	3.2.0
	RP-07	RP-000046	206	1	UE capability information elements	3.1.0	3.2.0
	RP-07	RP-000046	207		UE variables	3.1.0	3.2.0
	RP-07	RP-000046	208	1	Actions when entering idle mode	3.1.0	3.2.0
	RP-07	RP-000046	209		Usage of pilot bits	3.1.0	3.2.0
	RP-07	RP-000046	210		System information procedure corrections	3.1.0	3.2.0
	RP-07	RP-000046	212		Reconfiguration of ciphering	3.1.0	3.2.0
	RP-07	RP-000046	213	1	Enhancements to RRC connection re-establishment procedure (Message subsequently deleted in RAN_!), RP-000715)	3.1.0	3.2.0
	RP-07	RP-000046	215		Updates to RRC Initialisation Information transparent container and addition of reverse direction container description	3.1.0	3.2.0
	RP-07	RP-000046	220	1	Changes in RRC messages to support lossless SRNC relocation	3.1.0	3.2.0
	RP-07	RP-000046	229	1	Measurements of unlisted neighbouring cells	3.1.0	3.2.0
	RP-07	RP-000046	234	2	Inclusion of Location Services	3.1.0	3.2.0
	RP-07	RP-000046	236	1	Application of Access Service Classes and relation to Access Classes	3.1.0	3.2.0
	RP-07	RP-000046	252	1	DRX indicator presence and state entering mechanism at the end of a procedure	3.1.0	3.2.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-07	RP-000046	254	1	Physical shared channel allocation procedure	3.1.0	3.2.0
	RP-07	RP-000046	255		Corrections to TDD specific parameters in PICH info	3.1.0	3.2.0
	RP-07	RP-000046	256		Editorial modifications	3.1.0	3.2.0
	RP-07	RP-000046	259	2	Introduction of mapping function information in Cell selection and	3.1.0	3.2.0
	RP-07	RP-000046	263		Ciphering and integrity HFN	3.1.0	3.2.0
	RP-07	RP-000046	267		New SIB for UP	3.1.0	3.2.0
	RP-07	RP-000047	268		Removal of synchronization Case 3	3.1.0	3.2.0
	RP-07	RP-000047	271		TX Diversity	3.1.0	3.2.0
	RP-07	RP-000047	272		Update of tabular format clause 10	3.1.0	3.2.0
	RP-07	RP-000047	273		ASN.1 description	3.1.0	3.2.0
06/2000	RP-08	RP-000222	228	5	Downlink power control in compressed mode	3.2.0	3.3.0
	RP-08	RP-000222	260	1	Clarification on physical channel allocations in TDD	3.2.0	3.3.0
	RP-08	RP-000222	261	4	TDD Measurements and Reporting	3.2.0	3.3.0
	RP-08	RP-000222	262	4	Signalling of IEs related to System Information on FACH	3.2.0	3.3.0
	RP-08	RP-000222	265	3	Transport Format Combination Control	3.2.0	3.3.0
	RP-08	RP-000222	269	1	Signalling of partial failure in radio bearer related procedures	3.2.0	3.3.0
	RP-08	RP-000222	275		Clarification on PDCP info	3.2.0	3.3.0
	RP-08	RP-000222	279		Editorial modification on Transport Ch capability	3.2.0	3.3.0
	RP-08	RP-000222	280		Editorial modification on CN IE	3.2.0	3.3.0
	RP-08	RP-000222	281	3	Editorial modification on Physical CH IE	3.2.0	3.3.0
	RP-08	RP-000222	282	1	Editorial modification on ASN.1 description	3.2.0	3.3.0
	RP-08	RP-000222	283	1	IEs on SIB5/6	3.2.0	3.3.0
	RP-08	RP-000222	285	2	Re-establishment timer	3.2.0	3.3.0
	RP-08	RP-000222	286	1	CN DRX cycle coefficient	3.2.0	3.3.0
	RP-08	RP-000222	287	1	Cell Access Restriction	3.2.0	3.3.0
	RP-08	RP-000222	288	1	Cell selection and re-selection parameters	3.2.0	3.3.0
	RP-08	RP-000222	289	2	Modification on Measurement IE	3.2.0	3.3.0
	RP-08	RP-000222	291	1	RACH Transmission parameters	3.2.0	3.3.0
	RP-08	RP-000222	292	1	SCCPCH System Info	3.2.0	3.3.0
	RP-08	RP-000222	293	1	Addition of HFN for RRC CONNECTION RE-ESTABLISHMENT COMPLETE	3.2.0	3.3.0
	RP-08	RP-000223	294	1	RLC reconfiguration indicator	3.2.0	3.3.0
	RP-08	RP-000223	296	3	RLC Info	3.2.0	3.3.0
	RP-08	RP-000223	297	1	Usage of Transport CH ID	3.2.0	3.3.0
	RP-08	RP-000223	298	2	Transport format combination set	3.2.0	3.3.0
	RP-08	RP-000223	300	1	Usage of U-RNTI and C-RNTI in DL DCCH message	3.2.0	3.3.0
	RP-08	RP-000223	301		Description of Cell Update Procedure	3.2.0	3.3.0
	RP-08	RP-000223	304	1	System information modification procedure	3.2.0	3.3.0
	RP-08	RP-000223	305		Functional descriptions of the RRC messages	3.2.0	3.3.0
	RP-08	RP-000223	306		Clarification of CTFC calculation	3.2.0	3.3.0
	RP-08	RP-000223	307	3	Compressed mode parameters	3.2.0	3.3.0
	RP-08	RP-000223	309	2	Signalling procedure for periodic local authentication	3.2.0	3.3.0
	RP-08	RP-000223	310	5	Editorial corrections on security	3.2.0	3.3.0
	RP-08	RP-000223	311	2	Security capability	3.2.0	3.3.0
	RP-08	RP-000223	312	1	Corrections on ASN.1 definitions	3.2.0	3.3.0
	RP-08	RP-000223	313	2	DRX cycle lower limit	3.2.0	3.3.0
	RP-08	RP-000223	314	1	Removal of CPICH SIR measurement quantity	3.2.0	3.3.0
	RP-08	RP-000223	315	1	Signalling connection release request	3.2.0	3.3.0
	RP-08	RP-000223	318	1	Change to IMEI coding from BCD to hexadecimal	3.2.0	3.3.0
	RP-08	RP-000223	319	1	Removal of RLC sequence numbers from RRC initialisation information	3.2.0	3.3.0
	RP-08	RP-000223	320	3	Addition of the length of PDCP sequence numbers into PDCP info	3.2.0	3.3.0
	RP-08	RP-000224	323	1	BSIC verification of GSM cells	3.2.0	3.3.0
	RP-08	RP-000224	324		Reporting cell status	3.2.0	3.3.0
	RP-08	RP-000224	325		RRC measurement filtering parameters	3.2.0	3.3.0
	RP-08	RP-000224	326		Cell-reselection parameter signalling	3.2.0	3.3.0
	RP-08	RP-000224	328	3	Multiplicity values	3.2.0	3.3.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-08	RP-000224	329		Quality measurements	3.2.0	3.3.0
	RP-08	RP-000224	330	4	CPCH Status Indication mode correction	3.2.0	3.3.0
	RP-08	RP-000224	331	4	End of CPCH transmission	3.2.0	3.3.0
	RP-08	RP-000224	332		Handover to UTRAN procedure	3.2.0	3.3.0
	RP-08	RP-000224	333		Harmonization of access service classes in FDD and TDD	3.2.0	3.3.0
	RP-08	RP-000224	334	1	Correction to usage of primary CCPCH info and primary CPICH info	3.2.0	3.3.0
	RP-08	RP-000224	335		Corrections and clarifications on system information handling	3.2.0	3.3.0
	RP-08	RP-000224	336		Editorial corrections	3.2.0	3.3.0
	RP-08	RP-000224	337	1	Editorial corrections on uplink timing advance	3.2.0	3.3.0
	RP-08	RP-000224	339		Correction of Transport Format Combination tabular format and ASN.1	3.2.0	3.3.0
	RP-08	RP-000224	340	1	UE variables	3.2.0	3.3.0
	RP-08	RP-000224	342	1	General error handling	3.2.0	3.3.0
	RP-08	RP-000224	344	1	System Information extensibility in ASN.1 definitions	3.2.0	3.3.0
	RP-08	RP-000224	345		Usage of pilot bits	3.2.0	3.3.0
	RP-08	RP-000224	346	3	RRC connection release procedure	3.2.0	3.3.0
	RP-08	RP-000225	347	1	Alignment of Section 10.3 on methodology defined in 25.921	3.2.0	3.3.0
	RP-08	RP-000225	348		Modifications of cell (re)selection parameters	3.2.0	3.3.0
	RP-08	RP-000225	350	1	GPS time-of-week represented as seconds and fractions of seconds	3.2.0	3.3.0
	RP-08	RP-000225	351	2	CPCH corrections	3.2.0	3.3.0
	RP-08	RP-000225	352		PLMN type selection	3.2.0	3.3.0
	RP-08	RP-000225	353	3	Paging and establishment cause values	3.2.0	3.3.0
	RP-08	RP-000225	354		Common channel configurations	3.2.0	3.3.0
	RP-08	RP-000225	355	2	Clarification of prioritization of logical channels in UE	3.2.0	3.3.0
	RP-08	RP-000225	357	2	UE capability corrections	3.2.0	3.3.0
	RP-08	RP-000225	358	2	Clarification of HFN	3.2.0	3.3.0
	RP-08	RP-000225	359	3	Clarification of Integrity Protection	3.2.0	3.3.0
	RP-08	RP-000225	360	1	RRC message size optimization regarding TrCH parameters	3.2.0	3.3.0
	RP-08	RP-000225	361		Protocol extensions in ASN	3.2.0	3.3.0
	RP-08	RP-000225	362	1	Downloading of pre- defined configurations via SIB 16	3.2.0	3.3.0
	RP-08	RP-000225	363	1	Optimization of System Information	3.2.0	3.3.0
	RP-08	RP-000225	364	1	CPCH gain factor	3.2.0	3.3.0
	RP-08	RP-000225	368	2	SFN Transmission Rate in TDD Mode	3.2.0	3.3.0
	RP-08	RP-000225	371	1	Integrity Control	3.2.0	3.3.0
	RP-08	RP-000225	372		Modification to measurement event evaluation	3.2.0	3.3.0
	RP-08	RP-000225	373		System Information related parameters	3.2.0	3.3.0
	RP-08	RP-000226	375	1	Changes in RB mapping info	3.2.0	3.3.0
	RP-08	RP-000226	377		Editorial corrections to PRACH system information and Cell info	3.2.0	3.3.0
	RP-08	RP-000226	378		Editorial Corrections to 25.331 Procedures and Tabular Format	3.2.0	3.3.0
	RP-08	RP-000226	379	1	Corrections to figures and procedures for the failure cases	3.2.0	3.3.0
	RP-08	RP-000226	380		Corrections on use of ORDERED_CONFIG	3.2.0	3.3.0
	RP-08	RP-000226	382	1	Corrections to Transport Channel and RB Reconfiguration procedures	3.2.0	3.3.0
	RP-08	RP-000226	383	1	Corrections to INITIAL DIRECT TRANSFER and UE CAPABILITY INFORMATION CONFIRM procedures	3.2.0	3.3.0
	RP-08	RP-000226	384		Corrections to Transparent mode signalling info Tabular format and ASN.1	3.2.0	3.3.0
	RP-08	RP-000226	385		Corrections to Soft Handover messages and procedures	3.2.0	3.3.0
	RP-08	RP-000226	387		Corrections to RRC CONNECTION REJECT procedures	3.2.0	3.3.0
	RP-08	RP-000226	388	1	Transport format combination in TDD and Transport channel ID	3.2.0	3.3.0
	RP-08	RP-000226	389	1	Signalling for dynamic TTI in TDD	3.2.0	3.3.0
	RP-08	RP-000226	390	1	Usage of DCCH for Shared Channel Allocation message	3.2.0	3.3.0
	RP-08	RP-000226	391	1	Correction to physical channel IEs in TDD	3.2.0	3.3.0
	RP-08	RP-000226	392	1	TDD preconfiguration for Handover to UTRAN	3.2.0	3.3.0
	RP-08	RP-000226	393		Corrections to measurement control descriptions and messages	3.2.0	3.3.0
	RP-08	RP-000226	394	1	Corrections on ASN.1 definitions	3.2.0	3.3.0
	RP-08	RP-000226	395		Addition of the Segmentation indication field for transparent	3.2.0	3.3.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
					mode RLC in the RLC Info		
	RP-08	RP-000226	396	1	Radio Bearer identity for CCCH	3.2.0	3.3.0
	RP-08	RP-000226	397	1	ASN.1 definitions for RRC information between network nodes	3.2.0	3.3.0
	RP-08	RP-000227	398	1	NAS Routing	3.2.0	3.3.0
	RP-08	RP-000227	399		DPCCH power control preamble	3.2.0	3.3.0
	RP-08	RP-000227	400	2	Modifications of Assisted GPS Messages	3.2.0	3.3.0
	RP-08	RP-000227	401		Choice of Initial UE Identity	3.2.0	3.3.0
	RP-08	RP-000227	402		ANSI-41 information elements	3.2.0	3.3.0
	RP-08	RP-000227	404	1	RLC value ranges	3.2.0	3.3.0
	RP-08	RP-000227	408	1	HFN Reset	3.2.0	3.3.0
	RP-08	RP-000227	409	1	Clarification on ciphering parameters and integrity protection procedure in case of SRNS relocation	3.2.0	3.3.0
	RP-08	RP-000227	410	1	Clarification of compressed mode activation and configuration failure	3.2.0	3.3.0
	RP-08	RP-000227	412	1	Modification of the RLC Size IE	3.2.0	3.3.0
	RP-08	RP-000227	414		CPCH DL Power control	3.2.0	3.3.0
	RP-08	RP-000227	415	1	SFN measurements in TDD	3.2.0	3.3.0
09/2000	RP-09	RP-000361	356	3	Clarification on multiplicity of PCH and PICH and S-CCPCH selection	3.3.0	3.4.0
	RP-09	RP-000361	403	3	Parameters to be stored in the USIM	3.3.0	3.4.0
	RP-09	RP-000361	413	3	Optimization of Inter-system handover message	3.3.0	3.4.0
	RP-09	RP-000361	416	2	Timing Advance in Handover Procedures	3.3.0	3.4.0
	RP-09	RP-000361	417	2	Synchronization of Timing Advance and Timing Deviation Measurement	3.3.0	3.4.0
	RP-09	RP-000361	418		Downlink Physical Channels Per Timeslot	3.3.0	3.4.0
	RP-09	RP-000361	419		TDD Mode DCH Reception in Cell DCH State	3.3.0	3.4.0
	RP-09	RP-000361	420	2	Downlink Power Control During DTX in TDD Mode	3.3.0	3.4.0
	RP-09	RP-000361	421	1	Paging Indicator Length Definition	3.3.0	3.4.0
	RP-09	RP-000361	422		Updating & alignment of RRC containers & handover to UTRAN information transfer	3.3.0	3.4.0
	RP-09	RP-000361	424		Default values for UE timers and counters	3.3.0	3.4.0
	RP-09	RP-000361	425	1	Security mode control	3.3.0	3.4.0
	RP-09	RP-000361	426	1	Corrections and Editorial updates to chapter 8	3.3.0	3.4.0
	RP-09	RP-000361	427		Corrections and editorial updates to chapter 10	3.3.0	3.4.0
	RP-09	RP-000361	428		Transition from CELL_DCH to CELL_PCH and URA_PCH state	3.3.0	3.4.0
	RP-09	RP-000361	430		Assisted GPS Messaging and Procedures	3.3.0	3.4.0
	RP-09	RP-000361	431	2	Corrections to Activation Time use	3.3.0	3.4.0
	RP-09	RP-000361	432		Editorial Corrections to measurement reporting range	3.3.0	3.4.0
	RP-09	RP-000361	434	4	Default DPCH offset value and DPCH offset	3.3.0	3.4.0
	RP-09	RP-000361	435	3	RLC info	3.3.0	3.4.0
	RP-09	RP-000362	437		Clarification of the description of IE semantics in "RB with PDCP information"	3.3.0	3.4.0
	RP-09	RP-000362	438	1	Editorial corrections on security	3.3.0	3.4.0
	RP-09	RP-000362	439		Editorial correction to RB mapping info	3.3.0	3.4.0
	RP-09	RP-000362	440	1	Compressed mode configuration failure	3.3.0	3.4.0
	RP-09	RP-000362	441		Gain factors for TDD	3.3.0	3.4.0
	RP-09	RP-000362	442		Introduction of Default DPCH Offset Value in TDD	3.3.0	3.4.0
	RP-09	RP-000362	444	1	Optimization of handover to UTRAN command	3.3.0	3.4.0
	RP-09	RP-000362	445		Editorial corrections	3.3.0	3.4.0
	RP-09	RP-000362	448	1	Mapping of channelisation code	3.3.0	3.4.0
	RP-09	RP-000362	449	2	DL TFCS Limitation	3.3.0	3.4.0
	RP-09	RP-000362	450		SIB offset	3.3.0	3.4.0
	RP-09	RP-000362	451		RRC CONNECTION RELEASE cause	3.3.0	3.4.0
	RP-09	RP-000362	452		Addition of RACH TFCS	3.3.0	3.4.0
	RP-09	RP-000362	453	2	Cell Identity	3.3.0	3.4.0
	RP-09	RP-000362	454		Editorial Modifications	3.3.0	3.4.0
	RP-09	RP-000362	455	1	TDD PRACH Power Control for Spreading Factor 8/16	3.3.0	3.4.0
	RP-09	RP-000362	456		TDD CCTrCH Repetition Length Definition	3.3.0	3.4.0
	RP-09	RP-000362	457	1	Reporting threshold of traffic volume measurements	3.3.0	3.4.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-09	RP-000362	459	2	UP GPS assistance data for SIB	3.3.0	3.4.0
	RP-09	RP-000362	461	1	Support of cell update confirm on CCCH	3.3.0	3.4.0
	RP-09	RP-000363	462	1	Max Window Size in RLC capabilities	3.3.0	3.4.0
	RP-09	RP-000363	463	3	UE handling of CFN	3.3.0	3.4.0
	RP-09	RP-000363	464	1	Correction of padding description in clause 12	3.3.0	3.4.0
	RP-09	RP-000363	465	1	Window size in RLC info	3.3.0	3.4.0
	RP-09	RP-000363	466	1	TFC Control Duration	3.3.0	3.4.0
	RP-09	RP-000363	467		System Information Block Tabular Information	3.3.0	3.4.0
	RP-09	RP-000363	469	1	Frequency encoding in inter-system handover messages	3.3.0	3.4.0
	RP-09	RP-000363	470		RRC message size optimization regarding TFS parameters	3.3.0	3.4.0
	RP-09	RP-000363	471	2	RACH selection	3.3.0	3.4.0
	RP-09	RP-000363	472		DRX cycle lower limit	3.3.0	3.4.0
	RP-09	RP-000363	474		Rx window size in RLC info	3.3.0	3.4.0
	RP-09	RP-000363	476	1	Corrections & optimizations regarding system information blocks of length 215..221	3.3.0	3.4.0
	RP-09	RP-000363	477	1	Corrections on 8.1.1 resulting from RRC review at R2#14	3.3.0	3.4.0
	RP-09	RP-000363	478	1	Corrections to the RRC connection release procedure	3.3.0	3.4.0
	RP-09	RP-000363	479	1	New release cause for signalling connection re-establishment	3.3.0	3.4.0
	RP-09	RP-000363	480	1	Correction to IE midamble shift and burst type	3.3.0	3.4.0
	RP-09	RP-000363	481	1	Correction in RLC info	3.3.0	3.4.0
	RP-09	RP-000363	483		Description of CTCH occasions	3.3.0	3.4.0
	RP-09	RP-000363	485	1	TDD CCTrCH UL/DL Pairing for Inner Loop Power Control	3.3.0	3.4.0
	RP-09	RP-000363	486	1	DCCH and BCCH Signalling of TDD UL OL PC Information	3.3.0	3.4.0
	RP-09	RP-000364	487	1	Broadcast SIBs for TDD UL OL PC Information	3.3.0	3.4.0
	RP-09	RP-000364	490	1	CPCH corrections	3.3.0	3.4.0
	RP-09	RP-000364	492	3	Corrections to Security IEs	3.3.0	3.4.0
	RP-09	RP-000364	494	1	Corrections to parameters to be stored in the USIM	3.3.0	3.4.0
	RP-09	RP-000364	496		Editorial corrections	3.3.0	3.4.0
	RP-09	RP-000364	497	2	Physical Shared Channel Allocation procedure	3.3.0	3.4.0
	RP-09	RP-000364	498		Correction to Transport Format Combination Control Message	3.3.0	3.4.0
	RP-09	RP-000364	499	1	Usage of Cell Parameter ID	3.3.0	3.4.0
	RP-09	RP-000364	500		RB description for SHCCH	3.3.0	3.4.0
	RP-09	RP-000364	501	1	Use of LI in UM	3.3.0	3.4.0
	RP-09	RP-000364	502	1	Minor Corrections to RRC Protocol Specification	3.3.0	3.4.0
	RP-09	RP-000364	503	1	Correction to Cell Update Cause	3.3.0	3.4.0
	RP-09	RP-000364	504		Correction on T307 definition	3.3.0	3.4.0
	RP-09	RP-000364	505		Corrections to relative priorities in RRC Protocol	3.3.0	3.4.0
	RP-09	RP-000364	506		Unification of Reconfiguration Procedures	3.3.0	3.4.0
	RP-09	RP-000364	507	1	Changes to section 8.2 proposed at Paris RRC Ad Hoc	3.3.0	3.4.0
	RP-09	RP-000364	508		Establishment Cause	3.3.0	3.4.0
	RP-09	RP-000364	509	1	PRACH partitioning	3.3.0	3.4.0
	RP-09	RP-000364	510		Editorial Correction on Active Set Update	3.3.0	3.4.0
	RP-09	RP-000364	511		Editorial Correction regarding system information	3.3.0	3.4.0
	RP-09	RP-000365	512	1	Clarification on Reporting Cell Status	3.3.0	3.4.0
	RP-09	RP-000365	513	1	Editorial corrections on RRC Connection Establishment and Release procedures NOTE: In subclause 8.1.4.6, the change from "decrease" to "increase" for V308 was decided to be incorrect after discussion on the TSG-RAN WG2 reflector and was not implemented	3.3.0	3.4.0
	RP-09	RP-000365	514		Gated Transmission Control Info	3.3.0	3.4.0
	RP-09	RP-000365	515	1	Cell selection/reselection parameters for SIB 3/4	3.3.0	3.4.0
	RP-09	RP-000365	516		Implementation of Ec/N0 parameters and optimization of SIB 11/12	3.3.0	3.4.0
	RP-09	RP-000365	517		PRACH Info	3.3.0	3.4.0
	RP-09	RP-000365	518	1	Uplink DPCH power control info	3.3.0	3.4.0
	RP-09	RP-000365	519		AICH power offset value range	3.3.0	3.4.0
	RP-09	RP-000365	520		Direct paging of RRC connected UE in CELL_PCH/URA_PCH NOTE: This CR was postponed in TSG-RAN #9 and was wrongly included in v3.4.0. This was corrected in v3.4.1	3.3.0	3.4.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-09	RP-000365	521		Corrections to Sections 1-7	3.3.0	3.4.0
	RP-09	RP-000365	522		Error handling for Uplink Physical Channel Control procedure	3.3.0	3.4.0
	RP-09	RP-000365	523		Corrections to downlink outer loop power control in compressed mode	3.3.0	3.4.0
	RP-09	RP-000365	524	1	Clarification on measurement procedure using compressed mode	3.3.0	3.4.0
	RP-09	RP-000365	525	1	Updates to cell and URA update procedures based on RRC Ad Hoc	3.3.0	3.4.0
	RP-09	RP-000365	526	1	Updates to RNTI allocation procedure based on RRC Ad Hoc	3.3.0	3.4.0
	RP-09	RP-000365	528		PRACH constant value	3.3.0	3.4.0
	RP-09	RP-000365	530	1	Corrections to the paging procedure	3.3.0	3.4.0
	RP-09	RP-000365	532	1	Moving of text from 25.304	3.3.0	3.4.0
	RP-09	RP-000365	533	1	Message extensibility	3.3.0	3.4.0
	RP-09	RP-000365	534	1	Additions to "State of RRC Procedure" in RRC Initialisation information, source RNC to target RNC	3.3.0	3.4.0
	RP-09	RP-000365	535	1	Support of codec negotiation	3.3.0	3.4.0
	-	-	-		Removal of contents of CR 520 from v3.4.0, because it was postponed at TSG-RAN #9 and by accident included anyway.	3.4.0	3.4.1
12/2000	RP-10	RP-000570	536		Downlink outer-loop power control in compressed mode	3.4.1	3.5.0
	RP-10	RP-000570	537	1	Correction in the use of "U-RNTI Short"	3.4.1	3.5.0
	RP-10	RP-000570	538		Corrections related to UE Timing	3.4.1	3.5.0
	RP-10	RP-000570	539		Corrections to SFN-SFN definition	3.4.1	3.5.0
	RP-10	RP-000570	541	1	Corrections to definition and use of Activation Time	3.4.1	3.5.0
	RP-10	RP-000570	542		Corrections to logical channel priorities	3.4.1	3.5.0
	RP-10	RP-000570	543	1	Correction to codec negotiation	3.4.1	3.5.0
	RP-10	RP-000570	544	1	CFN-SFN observed time difference measurement	3.4.1	3.5.0
	RP-10	RP-000570	545	1	Correction to timing indication for hard handover	3.4.1	3.5.0
	RP-10	RP-000570	546	1	UE Radio Access Capability Corrections	3.4.1	3.5.0
	RP-10	RP-000570	548	1	RRC establishment and paging causes for NAS signalling	3.4.1	3.5.0
	RP-10	RP-000570	549		Corrections to Intra-frequency measurements and Traffic volume measurements	3.4.1	3.5.0
	RP-10	RP-000570	551	1	PRACH/RACH System information	3.4.1	3.5.0
	RP-10	RP-000570	553	1	GSM Measurement reporting	3.4.1	3.5.0
	RP-10	RP-000570	554	1	BLER measurement and quality target	3.4.1	3.5.0
	RP-10	RP-000570	556	1	Clarification of PDCP sequence number window terminology	3.4.1	3.5.0
	RP-10	RP-000570	559	1	Clarification on Error Handling	3.4.1	3.5.0
	RP-10	RP-000570	560		Removal of compressed mode measurement purpose "other"	3.4.1	3.5.0
	RP-10	RP-000570	561		Clarification of compressed mode measurement purpose "GSM"	3.4.1	3.5.0
	RP-10	RP-000570	564	2	Reporting multiple GSM cells	3.4.1	3.5.0
	RP-10	RP-000571	566	1	Number of RLs that can be removed in Active Set update	3.4.1	3.5.0
	RP-10	RP-000571	568	1	Clarification on Segment Index	3.4.1	3.5.0
	RP-10	RP-000571	571	3	RRC procedure performance requirements	3.4.1	3.5.0
	RP-10	RP-000571	572	1	Correction of newInterSystemCellList and MeasurementControlSysInfo in ASN.1	3.4.1	3.5.0
	RP-10	RP-000571	573	4	Removal of Flow Id concept while maintaining Iu interface flexibility	3.4.1	3.5.0
	RP-10	RP-000571	574	2	Ciphering and reset	3.4.1	3.5.0
	RP-10	RP-000571	575	1	Corrections and clarifications concerning inter-RAT change procedures	3.4.1	3.5.0
	RP-10	RP-000571	576	1	General Security Clarifications	3.4.1	3.5.0
	RP-10	RP-000571	577		Clarification on RB 0	3.4.1	3.5.0
	RP-10	RP-000571	578		Clarification on the transition of RRC state	3.4.1	3.5.0
	RP-10	RP-000571	580	1	UP measurements for RRC information to target RNC	3.4.1	3.5.0
	RP-10	RP-000571	581		Correction on LCS reporting criteria	3.4.1	3.5.0
	RP-10	RP-000574	583	1	CSICH Corrections	3.4.1	3.5.0
	RP-10	RP-000571	584	1	Clarification to handling of satellite health issues	3.4.1	3.5.0
	RP-10	RP-000571	585		Clarification on activation time	3.4.1	3.5.0
	RP-10	RP-000571	586		Clarification on activation time for ciphering in TM	3.4.1	3.5.0
	RP-10	RP-000571	587	2	Measurement procedures and messages	3.4.1	3.5.0
	RP-10	RP-000571	590	1	Inter-RAT UE radio access capability	3.4.1	3.5.0
	RP-10	RP-000571	592	1	Clarification on cell update/URA update procedures	3.4.1	3.5.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-10	RP-000571	595	4	Protocol States and Process	3.4.1	3.5.0
	RP-10	RP-000571	596	1	System Information	3.4.1	3.5.0
	RP-10	RP-000715	597	5	RRC Connection Management Procedures, Generic procedures and actions	3.4.1	3.5.0
	RP-10	RP-000572	598	1	Paging Procedures	3.4.1	3.5.0
	RP-10	RP-000572	599		NAS signalling Procedures	3.4.1	3.5.0
	RP-10	RP-000572	600	3	Radio Bearer Control Procedures	3.4.1	3.5.0
	RP-10	RP-000572	601	1	Corrections to the Counter Check Procedure	3.4.1	3.5.0
	RP-10	RP-000572	602		Tabular Information and ASN.1	3.4.1	3.5.0
	RP-10	RP-000572	604	2	Corrections to Measurement Occasion concept	3.4.1	3.5.0
	RP-10	RP-000572	606		Corrections concerning optimisation of RB information	3.4.1	3.5.0
	RP-10	RP-000572	608	1	Corrections to security	3.4.1	3.5.0
	RP-10	RP-000572	609	1	Ciphering activation time for DPCH	3.4.1	3.5.0
	RP-10	RP-000572	610		Confirmation of signalling connection establishment	3.4.1	3.5.0
	RP-10	RP-000572	611	2	RACH Sub-channel signalling	3.4.1	3.5.0
	RP-10	RP-000572	613	2	Assistance data delivery for UP	3.4.1	3.5.0
	RP-10	RP-000572	614	1	Clarification of LCS measurements	3.4.1	3.5.0
	RP-10	RP-000572	615	2	Configuration of RLC PDU sizes for logical channels	3.4.1	3.5.0
	RP-10	RP-000574	616		PICH power offset for TDD	3.4.1	3.5.0
	RP-10	RP-000572	617		Correction for PDSCH power control for TDD	3.4.1	3.5.0
	RP-10	RP-000574	618		Usage of dynamic spreading factor in uplink	3.4.1	3.5.0
	RP-10	RP-000572	619		Correction of Midamble Shift for Burst Type 3	3.4.1	3.5.0
	RP-10	RP-000572	621		Correction of text concerning Scheduling of System Information	3.4.1	3.5.0
	RP-10	RP-000572	622	1	Alignment of GSM'99 BA Range concept and its inclusion in UTRA	3.4.1	3.5.0
	RP-10	RP-000572	623	1	Clarification of RB mapping info	3.4.1	3.5.0
	RP-10	RP-000572	624	1	Correction to UE multi-RAT capability	3.4.1	3.5.0
	RP-10	RP-000573	625		Correction to PDCP sequence number exchange during hard handover	3.4.1	3.5.0
	RP-10	RP-000573	628	2	DCH Quality Target	3.4.1	3.5.0
	RP-10	RP-000573	629	1	Simultaneous release of RBs and signalling connection	3.4.1	3.5.0
	RP-10	RP-000573	630		Correction on Transport Channel Reconfiguration	3.4.1	3.5.0
	RP-10	RP-000573	631		Limitation of DRX cycle length	3.4.1	3.5.0
	RP-10	RP-000574	632		Signalling of the alpha value in TDD for open loop power control	3.4.1	3.5.0
	RP-10	RP-000573	633		Support for improved compressed mode handling for TDD measurements	3.4.1	3.5.0
	RP-10	RP-000573	636		Usage of secondary CPICH and secondary scrambling code	3.4.1	3.5.0
	RP-10	RP-000573	639		Expiration time of SIB type 7, 14	3.4.1	3.5.0
	RP-10	RP-000573	640		Correction to integrity protection	3.4.1	3.5.0
	RP-10	RP-000684	641		Downlink Outer Loop Control	3.4.1	3.5.0
03/2001	RP-11	RP-010029	642	2	RL Failure in cell update procedure	3.5.0	3.6.0
	RP-11	RP-010029	645	1	Clarification on COUNTER CHECK	3.5.0	3.6.0
	RP-11	RP-010029	646	2	Traffic Volume Measurement corrections	3.5.0	3.6.0
	RP-11	RP-010029	650	2	Reserved TFCI for the TDD Special Burst	3.5.0	3.6.0
	RP-11	RP-010029	653		Correction to description of RRC state transitions	3.5.0	3.6.0
	RP-11	RP-010029	657		RLC re-establish correction	3.5.0	3.6.0
	RP-11	RP-010029	658	1	Removal of RLC logical channel mapping indicator	3.5.0	3.6.0
	RP-11	RP-010029	659		New paging and establishment cause "Unknown"	3.5.0	3.6.0
	RP-11	RP-010029	660	1	Miscellaneous procedure corrections	3.5.0	3.6.0
	RP-11	RP-010029	661		Corrections to compressed mode pattern sequence handling	3.5.0	3.6.0
	RP-11	RP-010029	662		Inter-system change clarifications	3.5.0	3.6.0
	RP-11	RP-010029	663	1	RLC status transmission in CELL_PCH and URA_PCH	3.5.0	3.6.0
	RP-11	RP-010029	665	1	Clarification of RB information parameter values for SRB0	3.5.0	3.6.0
	RP-11	RP-010029	666		Encoding for RRC- container	3.5.0	3.6.0
	RP-11	RP-010029	667	2	Update of message extension and encoding descriptions	3.5.0	3.6.0
	RP-11	RP-010032	668	4	Introduction of default pre-defined configurations	3.5.0	3.6.0
	RP-11	RP-010029	669	2	Security corrections	3.5.0	3.6.0
	RP-11	RP-010029	670		Clarifications on Blind Handover Support	3.5.0	3.6.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-11	RP-010029	671	1	Missing descriptions of UE actions	3.5.0	3.6.0
	RP-11	RP-010029	672	2	Corrections on UE Positioning information	3.5.0	3.6.0
	RP-11	RP-010029	674	1	Security related corrections to SRNS	3.5.0	3.6.0
	RP-11	RP-010032	675	2	Downlink power offsets	3.5.0	3.6.0
	RP-11	RP-010274	676	2	Checking the integrity of UE security capabilities	3.5.0	3.6.0
	RP-11	RP-010030	678	1	Clarification to Secondary CCPCH info	3.5.0	3.6.0
	RP-11	RP-010030	679	1	Miscellaneous corrections	3.5.0	3.6.0
	RP-11	RP-010030	680		Removal of Layer 3 filtering for RACH	3.5.0	3.6.0
	RP-11	RP-010030	681	2	Correction of compressed mode parameters	3.5.0	3.6.0
	RP-11	RP-010030	682		Removal of immediate cell evaluation	3.5.0	3.6.0
	RP-11	RP-010030	684	2	Scheduling of SIB 15.2 and SIB 15.3	3.5.0	3.6.0
	RP-11	RP-010030	685	1	Correction to ECN modules	3.5.0	3.6.0
	RP-11	RP-010030	686	1	Improvement of the description of timing advance for TDD	3.5.0	3.6.0
	RP-11	RP-010030	687		Correction on timing advance and allocation for shared channels	3.5.0	3.6.0
	RP-11	RP-010030	688	1	Clarification on SF 1 signalling	3.5.0	3.6.0
	RP-11	RP-010030	689	1	Correction to power control in TDD	3.5.0	3.6.0
	RP-11	RP-010030	690		Midamble - Channelisation code association for TDD	3.5.0	3.6.0
	RP-11	RP-010030	691		Network requested reporting for physical shared channel allocation	3.5.0	3.6.0
	RP-11	RP-010030	693		System Information	3.5.0	3.6.0
	RP-11	RP-010030	694	1	Clarification on Transport Channel Identity	3.5.0	3.6.0
	RP-11	RP-010030	696	1	Editorial Correction	3.5.0	3.6.0
	RP-11	RP-010030	698	2	Correction to add coding of intra domain NAS node selector	3.5.0	3.6.0
	RP-11	RP-010030	700	1	Corrections to system information block characteristics in TDD	3.5.0	3.6.0
	RP-11	RP-010030	701	2	ASN.1 corrections	3.5.0	3.6.0
	RP-11	RP-010030	702	2	Measurement related corrections	3.5.0	3.6.0
	RP-11	RP-010031	703	1	Clarifications on TFC Control procedure	3.5.0	3.6.0
	RP-11	RP-010031	704	2	Association of PLMN ID to neighbour cells	3.5.0	3.6.0
	RP-11	RP-010031	705	1	TFCS Selection Guidelines	3.5.0	3.6.0
	RP-11	RP-010031	710		Special Burst Scheduling During DTX in TDD	3.5.0	3.6.0
	RP-11	RP-010031	711	1	Radio Link Failure Criteria in TDD	3.5.0	3.6.0
	RP-11	RP-010031	712	1	Correction & Clarification to TDD RACH Subchannels	3.5.0	3.6.0
	RP-11	RP-010031	713	1	Number of retransmission of RRC CONNECTION REQUEST	3.5.0	3.6.0
	RP-11	RP-010031	714		Uplink Frequency Notification	3.5.0	3.6.0
	RP-11	RP-010031	715		Clarification of Radio Bearer Mapping for DCH/DSCH Transport Channels	3.5.0	3.6.0
	RP-11	RP-010031	716		Correction of mismatches between tabular and ASN.1	3.5.0	3.6.0
	RP-11	RP-010031	717		Correction to discontinuous reception in TDD	3.5.0	3.6.0
	RP-11	RP-010031	718		Power control preamble	3.5.0	3.6.0
	RP-11	RP-010031	719		Maximum number of AM entity	3.5.0	3.6.0
	RP-11	RP-010031	720	1	Real-time Integrity Broadcast	3.5.0	3.6.0
	RP-11	RP-010031	721	3	Moving Real-time Integrity description to different chapter	3.5.0	3.6.0
	RP-11	RP-010031	723	1	Removal of the payload unit concept	3.5.0	3.6.0
	RP-11	RP-010031	724		Security related corrections to SRNS	3.5.0	3.6.0
	RP-11	RP-010031	725		Periodic PLMN selection correction	3.5.0	3.6.0
	RP-11	RP-010042	683	1	Modification of "SSDT Information" IE parameters to indicate if SSDT is used in the UL only	3.6.0	4.0.0
	RP-11	RP-010041	692	1	Idle allocation for Node B synchronisation	3.6.0	4.0.0
	RP-11	RP-010037	706	1	Physical channel configuration information elements for 1.28 Mcps TDD	3.6.0	4.0.0
	RP-11	RP-010037	707	2	Changes to Measurement Related Signalling and Introduction of Cell (Re)selection Parameters for 1.28Mcps TDD	3.6.0	4.0.0
	RP-11	RP-010037	708	1	Introduction of RACH Parameters for 1.28 Mcps TDD	3.6.0	4.0.0
	RP-11	RP-010037	709		Introduction of UE radio access capability Parameters for 1.28 Mcps TDD	3.6.0	4.0.0
	RP-11	RP-010040	722	1	Introduction of IPDLs for TDD	3.6.0	4.0.0
	RP-11	RP-010039	726	1	ROHC updates to RRC	3.6.0	4.0.0
06/2001	RP-12	RP-010311	731		Clarification of the IE 'spreading factor' in Uplink DPCH info for FDD mode	4.0.0	4.1.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-12	RP-010311	733		Correction of UE Radio Access Capability depending on UTRAN FDD bands	4.0.0	4.1.0
	RP-12	RP-010311	735		Clarification on Security mode control	4.0.0	4.1.0
	RP-12	RP-010311	738		Correction of TrCH parameter handling	4.0.0	4.1.0
	RP-12	RP-010311	740		TFC Subsets in TDD	4.0.0	4.1.0
	RP-12	RP-010311	746		RRC containers	4.0.0	4.1.0
	RP-12	RP-010311	748		Various corrections	4.0.0	4.1.0
	RP-12	RP-010311	750		General error handling for system information	4.0.0	4.1.0
	RP-12	RP-010311	752		Order of elements in strings	4.0.0	4.1.0
	RP-12	RP-010311	754		Configuration consistency checks	4.0.0	4.1.0
	RP-12	RP-010312	756		Compressed mode corrections	4.0.0	4.1.0
	RP-12	RP-010312	758		Correction concerning inter-RAT procedures	4.0.0	4.1.0
	RP-12	RP-010312	762		Measurement corrections	4.0.0	4.1.0
	RP-12	RP-010312	764		RLC Tr Discard	4.0.0	4.1.0
	RP-12	RP-010312	766		Annex B CPCH Correction	4.0.0	4.1.0
	RP-12	RP-010312	768		SIB Correction for CSICH Power Offset	4.0.0	4.1.0
	RP-12	RP-010312	770		Transfer of Last known position in case of SRNS relocation	4.0.0	4.1.0
	RP-12	RP-010312	772		Corrections to UE Positioning measurements	4.0.0	4.1.0
	RP-12	RP-010312	779		GSM measurements in compressed mode	4.0.0	4.1.0
	RP-12	RP-010312	781		Correction of Activation Time in Inter-Rat HO Commands	4.0.0	4.1.0
	RP-12	RP-010313	785		Clarification of FRESH in SRNS relocation	4.0.0	4.1.0
	RP-12	RP-010313	789		Correction to UE timers and constants in idle mode	4.0.0	4.1.0
	RP-12	RP-010313	793		Clarification on multiframe allocation in TDD	4.0.0	4.1.0
	RP-12	RP-010313	795		Predefined parameters for logical channels	4.0.0	4.1.0
	RP-12	RP-010313	797		Pathloss calculation	4.0.0	4.1.0
	RP-12	RP-010313	799		Clarification on periodic measurement reporting	4.0.0	4.1.0
	RP-12	RP-010313	803	1	Handling of IE PRACH TFCS and Primary CPICH/Primary CCPCH info	4.0.0	4.1.0
	RP-12	RP-010313	805		Correction to FACH measurement occasion in TDD	4.0.0	4.1.0
	RP-12	RP-010313	807		Clarification of L1 synchronization procedures	4.0.0	4.1.0
	RP-12	RP-010313	809		Correction of Activation Time definition	4.0.0	4.1.0
	RP-12	RP-010314	813		Corrections to RRC procedure performance	4.0.0	4.1.0
	RP-12	RP-010314	815		Removal of mapping function	4.0.0	4.1.0
	RP-12	RP-010314	817		Security clarifications	4.0.0	4.1.0
	RP-12	RP-010314	819		Corrections to UE Positioning	4.0.0	4.1.0
	RP-12	RP-010314	825		Definition of DPCH numbering	4.0.0	4.1.0
	RP-12	RP-010314	827		Corrections to System Information Procedure	4.0.0	4.1.0
	RP-12	RP-010314	829		Relation between DOFF and DPCH Frame Offset	4.0.0	4.1.0
	RP-12	RP-010314	831		Procedures for "same as UL"	4.0.0	4.1.0
	RP-12	RP-010314	837		Editorial and minor corrections	4.0.0	4.1.0
	RP-12	RP-010314	839		Editorial Correction	4.0.0	4.1.0
	RP-12	RP-010315	843		Corrections on OTDOA-IPDL specific burst parameter semantic description	4.0.0	4.1.0
	RP-12	RP-010315	845		Error handling for messages sent from another RAT	4.0.0	4.1.0
	RP-12	RP-010315	849		Needed TFC in the TFCS for TDD	4.0.0	4.1.0
	RP-12	RP-010315	855		Clarification of TFCS selection guidelines	4.0.0	4.1.0
	RP-12	RP-010315	861		Clarification of Traffic Volume measurements	4.0.0	4.1.0
	RP-12	RP-010315	863		CFN synchronisation problems at timing re-initialised hard handover	4.0.0	4.1.0
	RP-12	RP-010315	866		Corrections on UP Assistance Message Descriptions	4.0.0	4.1.0
	RP-12	RP-010315	868		Correction on Area Scope of SIB 15.3	4.0.0	4.1.0
	RP-12	RP-010315	872		Correction to AICH power offset	4.0.0	4.1.0
	RP-12	RP-010316	875		Clarification on IE 'Downlink rate matching restriction information'	4.0.0	4.1.0
	RP-12	RP-010316	877		Corrections on Tabular/ASN.1	4.0.0	4.1.0
	RP-12	RP-010316	879		Corrections on Tabular and ASN.1 inconsistencies	4.0.0	4.1.0
	RP-12	RP-010316	881		Editorial corrections on Tabular and ASN.1 inconsistencies	4.0.0	4.1.0
	RP-12	RP-010316	883		UE Positioning corrections to ASN.1 and tabular	4.0.0	4.1.0
	RP-12	RP-010316	885		Corrections to resolve inconsistencies between Tabular and ASN.1	4.0.0	4.1.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-12	RP-010316	887		UE positioning OTDOA Neighbour Cell Info	4.0.0	4.1.0
	RP-12	RP-010316	889		DRAC corrections	4.0.0	4.1.0
	RP-12	RP-010316	893		ASN.1 Correction of IE TFCS ID	4.0.0	4.1.0
	RP-12	RP-010316	895		Correction of IE IODE range in AGPS Positioning	4.0.0	4.1.0
	RP-12	RP-010317	897		Correction to BurstModeParameters in IPDL	4.0.0	4.1.0
	RP-12	RP-010317	899		Corrections on inconsistencies between Tabular and ASN.1	4.0.0	4.1.0
	RP-12	RP-010317	901		Naming of message abstract types in ASN.1	4.0.0	4.1.0
	RP-12	RP-010317	904		Information elements outside the extension container	4.0.0	4.1.0
	RP-12	RP-010317	906		Correction concerning DRX cycle upon inter-RAT change towards UTRAN	4.0.0	4.1.0
	RP-12	RP-010323	773		Corrections to IPDLs for TDD	4.0.0	4.1.0
	RP-12	RP-010323	850	2	Correction to 1.28Mcps TDD RACH parameters and operation	4.0.0	4.1.0
	RP-12	RP-010323	851		TFCI coding in case of 8PSK	4.0.0	4.1.0
	RP-12	RP-010323	902	1	Structure and naming of information elements	4.0.0	4.1.0
09/2001	RP-13	RP-010544	0870		UL Transport Channel Type Correction	4.1.0	4.2.0
	RP-13	RP-010544	0908		Guidelines concerning conditions, spares, defaults and correction of inconsistencies	4.1.0	4.2.0
	RP-13	RP-010544	0910		Correction to TDD DL DPCH Common Timeslot Info	4.1.0	4.2.0
	RP-13	RP-010544	0912		TDD System Information Update in Cell_DCH	4.1.0	4.2.0
	RP-13	RP-010544	0914		Editorial Corrections	4.1.0	4.2.0
	RP-13	RP-010544	0916		UL DPCH Power Control Info in TDD	4.1.0	4.2.0
	RP-13	RP-010544	0918		CN-originated paging in CELL_PCH and URA_PCH state	4.1.0	4.2.0
	RP-13	RP-010544	0920		Corrections to UE variable handling	4.1.0	4.2.0
	RP-13	RP-010544	0922		Inter-frequency measurements	4.1.0	4.2.0
	RP-13	RP-010544	0924		Inter-RAT measurements	4.1.0	4.2.0
	RP-13	RP-010671	0926	1	Intra-frequency measurements	4.1.0	4.2.0
	RP-13	RP-010545	0928		Multiplexing configuration corrections	4.1.0	4.2.0
	RP-13	RP-010545	0930		Reception of non-dedicated control channels mapped on FACH in CELL_FACH state	4.1.0	4.2.0
	RP-13	RP-010545	0932		Removal of C-RNTI when entering CELL_DCH	4.1.0	4.2.0
	RP-13	RP-010545	0935		TF and TFC set definition	4.1.0	4.2.0
	RP-13	RP-010545	0937		Correction of remaining ASN.1/Tabular inconsistencies	4.1.0	4.2.0
	RP-13	RP-010545	0939		CPICH Ec/N0 Range	4.1.0	4.2.0
	RP-13	RP-010545	0941		Priorities for IDNNS coding	4.1.0	4.2.0
	RP-13	RP-010545	0943		Dedicated pilots and S-CPICH specification related to UE specific beamforming	4.1.0	4.2.0
	RP-13	RP-010545	0945		Security corrections	4.1.0	4.2.0
	RP-13	RP-010546	0953		Intra-frequency measurement events for TDD corrections	4.1.0	4.2.0
	RP-13	RP-010546	0955		Inconsistencies between ASN.1 and tabular format	4.1.0	4.2.0
	RP-13	RP-010546	0957		TDD PICH corrections and clarifications	4.1.0	4.2.0
	RP-13	RP-010546	0959		Messages on CCCH	4.1.0	4.2.0
	RP-13	RP-010546	0961		Clarification of Parameter Values for Default Radio Configurations	4.1.0	4.2.0
	RP-13	RP-010546	0963		Clarification to usage of default values in "Cell Selection and Reselection for SIB11/12Info"	4.1.0	4.2.0
	RP-13	RP-010546	0965		Clarification of handling of System information block 14	4.1.0	4.2.0
	RP-13	RP-010546	0967		Description of UE behaviour when receiving UE positioning related information	4.1.0	4.2.0
	RP-13	RP-010546	0982		Clarification on periodic measurement reporting	4.1.0	4.2.0
	RP-13	RP-010546	0984		Corrections and clarifications on Measurement procedures description	4.1.0	4.2.0
	RP-13	RP-010547	0986		Lossless Criteria in PDCP Info	4.1.0	4.2.0
	RP-13	RP-010547	0988		Corrections to cell reselection parameter values	4.1.0	4.2.0
	RP-13	RP-010547	0990		Correction to signalling connection release	4.1.0	4.2.0
	RP-13	RP-010547	0992		Corrections to cell update procedures	4.1.0	4.2.0
	RP-13	RP-010547	0994		PDCP configuration and PS domain configuration checks	4.1.0	4.2.0
	RP-13	RP-010547	0996		Correction to handling of RRC transaction identifier for Cell Update, URA Update and RRC connection setup	4.1.0	4.2.0
	RP-13	RP-010547	0998	1	Correction of UE capabilities regarding Rx-Tx time difference type 2 measurement	4.1.0	4.2.0
	RP-13	RP-010547	1000		Correction to handling of IE 'Downlink info for each radio link'	4.1.0	4.2.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-13	RP-010547	1004		Redundant IE in Traffic volume measurement system information	4.1.0	4.2.0
	RP-13	RP-010547	1006		Editorial corrections	4.1.0	4.2.0
	RP-13	RP-010548	1008		MAC logical channel priority added to definition of RB0 and SHCCH	4.1.0	4.2.0
	RP-13	RP-010548	1010		Control of primary CCPCH RSCP measurement in PUSCH CAPACITY REQUEST message	4.1.0	4.2.0
	RP-13	RP-010548	1014		Various minor corrections	4.1.0	4.2.0
	RP-13	RP-010548	1016		Range of T312	4.1.0	4.2.0
	RP-13	RP-010548	1018		Bitstring of channelisationCodeIndices	4.1.0	4.2.0
	RP-13	RP-010548	1020		Transmission of UE CAPABILITY INFORMATION message	4.1.0	4.2.0
	RP-13	RP-010548	1022		Multiple UE capabilities procedures	4.1.0	4.2.0
	RP-13	RP-010548	1024		Corrections to information elements outside the extension container	4.1.0	4.2.0
	RP-13	RP-010548	1026		SFN reporting	4.1.0	4.2.0
	RP-13	RP-010548	1028		TFCI combining indicator	4.1.0	4.2.0
	RP-13	RP-010549	1030		RLC reset on a Signalling Radio Bearer	4.1.0	4.2.0
	RP-13	RP-010549	1034		Quality Indication for UE Positioning Parameters	4.1.0	4.2.0
	RP-13	RP-010549	1036		Editorial Correction for UE Positioning	4.1.0	4.2.0
	RP-13	RP-010549	1038		Clarification on the current status of ciphering	4.1.0	4.2.0
	RP-13	RP-010549	1048		Clarification on HFN initialization at SRB and RB setup	4.1.0	4.2.0
	RP-13	RP-010549	1050		Clarification on Inter-RAT measurement	4.1.0	4.2.0
	RP-13	RP-010549	1052		Clarification on re-assembly of segments	4.1.0	4.2.0
	RP-13	RP-010549	1062		Minor Corrections	4.1.0	4.2.0
	RP-13	RP-010549	1066		Support of dedicated pilots for channel estimation	4.1.0	4.2.0
	RP-13	RP-010549	1068		Correction to SRNS relocation handling	4.1.0	4.2.0
	RP-13	RP-010550	1076		Correction to RLC state variables	4.1.0	4.2.0
	RP-13	RP-010550	1082		Reading of CN information in SIB 1 inRRC Connected Mode	4.1.0	4.2.0
	RP-13	RP-010550	1086		Restricting the maximum amount of preconfigurations in case of equivalent PLMNs	4.1.0	4.2.0
	RP-13	RP-010554	0933		Order of bits in bitstrings	4.1.0	4.2.0
	RP-13	RP-010554	0946		Selection of the RFC3095 CID transmission	4.1.0	4.2.0
	RP-13	RP-010554	0970		Correction of IPDL parameters for TDD enhancements in ASN.1 description	4.1.0	4.2.0
	RP-13	RP-010554	0971	1	1.28 Mcps TDD PICH, Midamble and UL timing advance control corrections	4.1.0	4.2.0
	RP-13	RP-010554	0972		Introduction of 1.28 Mcps TDD Mode in clause 13.7	4.1.0	4.2.0
	RP-13	RP-010554	0973		Tadv in 1.28 Mcps TDD	4.1.0	4.2.0
	RP-13	RP-010554	0974		Correction and clarification to PRACH in 1.28 Mcps TDD	4.1.0	4.2.0
10/2001	-	-	-		Replacement of incorrect (R'99) version of ASN.1 by correct (Rel-4) version of ASN.1.	4.2.0	4.2.1
12/2001	RP-14	RP-010763	1088		Corrections to RRC information containers	4.2.1	4.3.0
	RP-14	RP-010763	1090		Removal of Block SSTD	4.2.1	4.3.0
	RP-14	RP-010763	1098		COUNT-C-SFN frame difference measurement	4.2.1	4.3.0
	RP-14	RP-010763	1100		Trigger for deletion of ciphering and integrity keys	4.2.1	4.3.0
	RP-14	RP-010763	1102		Correction to P_compensation calculation for GSM neighbour cells	4.2.1	4.3.0
	RP-14	RP-010763	1104		Preconfigurations in case of equivalent PLMNs	4.2.1	4.3.0
	RP-14	RP-010763	1109		Handling of DRX cycle and U-RNTI in RRC connection setup and handling of TrCH information	4.2.1	4.3.0
	RP-14	RP-010763	1111		Correction to Information Element names	4.2.1	4.3.0
	RP-14	RP-010763	1113		Correction of Description of IE "SSDT Information"	4.2.1	4.3.0
	RP-14	RP-010763	1115		Clarification on Cell Identity and correction to reference to BAND_INDICATOR	4.2.1	4.3.0
	RP-14	RP-010764	1117		Clarification to Measured Results on RACH and Measurement Events	4.2.1	4.3.0
	RP-14	RP-010764	1119		Inconsistency between ASN.1 and tabular wrt. RPLMN information	4.2.1	4.3.0
	RP-14	RP-010764	1124		General clarification on Establishment of Access Service Classes	4.2.1	4.3.0
	RP-14	RP-010764	1126		Clarification on TX diversity indicator IE and STTD indicator IE	4.2.1	4.3.0
	RP-14	RP-010764	1132		Different diversity modes used in the same active set	4.2.1	4.3.0
	RP-14	RP-010764	1134		Issues regarding signalling connection establishment and RRC connection release	4.2.1	4.3.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-14	RP-010764	1136		Presence of AC to ASC mapping in SIB5 and SIB6	4.2.1	4.3.0
	RP-14	RP-010764	1138		RRC establishment cause at inter-RAT cell change order to UTRAN	4.2.1	4.3.0
	RP-14	RP-010764	1142		Start of timers at radio link failure	4.2.1	4.3.0
	RP-14	RP-010765	1144		Handling of the number of FBI bits sent in Uplink DPCH info	4.2.1	4.3.0
	RP-14	RP-010765	1146		Bit string order when using PER	4.2.1	4.3.0
	RP-14	RP-010765	1148		Clarification on DRX cycle length in connected mode	4.2.1	4.3.0
	RP-14	RP-010765	1152		Correction to error condition on downlink information for each radio link	4.2.1	4.3.0
	RP-14	RP-010765	1154		Correction of inconsistencies between tabular and ASN.1	4.2.1	4.3.0
	RP-14	RP-010765	1156		Measurement related corrections	4.2.1	4.3.0
	RP-14	RP-010765	1158		Inconsistency between hard-coded preconfigurations parameters and procedure text	4.2.1	4.3.0
	RP-14	RP-010765	1166		PLMN search in CELL_PCH/URA_PCH states with 80ms DRX cycle	4.2.1	4.3.0
	RP-14	RP-010765	1168		Correction to CFN calculation for FDD	4.2.1	4.3.0
	RP-14	RP-010765	1170		Correction to radio bearer control	4.2.1	4.3.0
	RP-14	RP-010766	1172		Handling of IE "frequency info"	4.2.1	4.3.0
	RP-14	RP-010766	1174		Correction to Radio Bearer Release	4.2.1	4.3.0
	RP-14	RP-010940	1178	1	Correction to RACH reporting	4.2.1	4.3.0
	RP-14	RP-010766	1180		Correction to URA/Cell update and other minor corrections	4.2.1	4.3.0
	RP-14	RP-010766	1182		Correction to Active Set Update	4.2.1	4.3.0
	RP-14	RP-010766	1184		Correction of Traffic Volume Measurement Criteria	4.2.1	4.3.0
	RP-14	RP-010941	1186	1	Correction of UE Positioning	4.2.1	4.3.0
	RP-14	RP-010766	1203		Invalid RRC CONNECTION REJECT	4.2.1	4.3.0
	RP-14	RP-010766	1214		Security baseline for corrections	4.2.1	4.3.0
	RP-14	RP-010766	1220		Pending integrity protection activation time for UL RB0	4.2.1	4.3.0
	RP-14	RP-010767	1222		Correction of rate matching restriction function	4.2.1	4.3.0
	RP-14	RP-010773	1096		Usage of UM RLC Special Length Indicator	4.2.1	4.3.0
	RP-14	RP-010773	1120		Corrections to REL-4 LCR Tabular Description and ASN1 Code	4.2.1	4.3.0
	RP-14	RP-010773	1199		Correction of FPACH parameter definition for 1.28Mcps TDD	4.2.1	4.3.0
	RP-14	RP-010773	1200		Correction of 1.28Mcps TDD	4.2.1	4.3.0
	RP-14	RP-010773	1201		Correction and Clarification to Open Loop Power Control in 1.28 Mcps TDD	4.2.1	4.3.0
	RP-14	RP-010773	1206		Extensions of IE value ranges in tabular	4.2.1	4.3.0
03/2002	RP-15	RP-020070	1229		Constant value range correction for DPCH and PUSCH in TDD mode	4.3.0	4.4.0
	RP-15	RP-020070	1231		Corrections to open loop power control for TDD and RB information parameters for SHCCH	4.3.0	4.4.0
	RP-15	RP-020070	1233		Removal of unnecessary replication of TFCS ID in Physical Shared Channel Allocation message	4.3.0	4.4.0
	RP-15	RP-020070	1237		Correction to TF selection when using UL RLC TM	4.3.0	4.4.0
	RP-15	RP-020070	1239		Correction to the UE behaviour in case of SRNS relocation	4.3.0	4.4.0
	RP-15	RP-020070	1241		Header Compression protocols re-initialisation during SRNS Relocation	4.3.0	4.4.0
	RP-15	RP-020070	1243		Misalignments between tabular and ASN.1 related to UE Positioning, tabular correction	4.3.0	4.4.0
	RP-15	RP-020070	1245		Corrections to comments in ASN.1	4.3.0	4.4.0
	RP-15	RP-020070	1247		Correction to restarting of T308	4.3.0	4.4.0
	RP-15	RP-020070	1249		Clarification of the use of T309 during inter-RAT cell reselections	4.3.0	4.4.0
	RP-15	RP-020071	1251		Measurement Corrections	4.3.0	4.4.0
	RP-15	RP-020239	1253	1	Existence of TFCI bits	4.3.0	4.4.0
	RP-15	RP-020071	1258		Corrections of inconsistency between procedural description, tabular and ASN.1	4.3.0	4.4.0
	RP-15	RP-020071	1260		Corrections to Expiration Time Factor and Expiration Time formula for SIB 7 and SIB 14	4.3.0	4.4.0
	RP-15	RP-020071	1262		Corrections to Reporting Cell Status	4.3.0	4.4.0
	RP-15	RP-020071	1268		Correction to inter frequency measurements	4.3.0	4.4.0
	RP-15	RP-020071	1271		Actions at reception of system information block type 1	4.3.0	4.4.0
	RP-15	RP-020071	1273		Tx diversity and no diversity in the same active set	4.3.0	4.4.0
	RP-15	RP-020071	1275		Correction to cell update	4.3.0	4.4.0
	RP-15	RP-020071	1277		Successful and unsuccessful procedures	4.3.0	4.4.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-15	RP-020072	1279		Measurement related corrections	4.3.0	4.4.0
	RP-15	RP-020072	1281		Clarifications on Event 1D	4.3.0	4.4.0
	RP-15	RP-020205	1283	1	Security corrections	4.3.0	4.4.0
	RP-15	RP-020072	1285		Transition from CELL_DCH to CELL_FACH state	4.3.0	4.4.0
	RP-15	RP-020072	1287		Corrections and clarifications of Radio link timing	4.3.0	4.4.0
	RP-15	RP-020072	1289		Spare values in ASN.1	4.3.0	4.4.0
	RP-15	RP-020072	1294		Actions on reception of measurement related IEs	4.3.0	4.4.0
	RP-15	RP-020231	1296	1	Removal of channel coding option "no coding" for FDD and 3.84 Mcps TDD	4.3.0	4.4.0
	RP-15	RP-020072	1298		Timing Indication when moving to CELL_DCH state	4.3.0	4.4.0
	RP-15	RP-020072	1307		Correction to processing RB mapping info	4.3.0	4.4.0
	RP-15	RP-020072	1313		RRC Connection Release following network authentication failure	4.3.0	4.4.0
	RP-15	RP-020072	1317		Clarification on serving cell in SIB11	4.3.0	4.4.0
	RP-15	RP-020073	1319		Treatment of optional elements in RB control messages	4.3.0	4.4.0
	RP-15	RP-020073	1323		Procedure Performance for TDD UL physical Channel Control	4.3.0	4.4.0
	RP-15	RP-020250	1331	1	Clarification to physical channel establishment criteria	4.3.0	4.4.0
	RP-15	RP-020249	1333	1	OTDOA Assistance Data	4.3.0	4.4.0
	RP-15	RP-020073	1337		Retransmission of uplink direct transfer at RLC re-establishment and inter-RAT change	4.3.0	4.4.0
	RP-15	RP-020073	1339		Correction to IE "UL interference" for UTRA TDD	4.3.0	4.4.0
	RP-15	RP-020074	1343		Corrections of UE Positioning requirements	4.3.0	4.4.0
	RP-15	RP-020074	1345		Multimode speech in default configurations	4.3.0	4.4.0
	RP-15	RP-020073	1347		Correction to UE Id for DSCH	4.3.0	4.4.0
	RP-15	RP-020073	1349		Corrections to support combined Cell/URA update and SRNS relocation	4.3.0	4.4.0
	RP-15	RP-020073	1351		Number of UTRAN and Inter-RAT frequencies	4.3.0	4.4.0
	RP-15	RP-020073	1353		Abortion of signalling connection establishment	4.3.0	4.4.0
	RP-15	RP-020073	1358		Modification of GPS timing representation to avoid large integers	4.3.0	4.4.0
	RP-15	RP-020074	1360		Additional TFCS selection guidelines	4.3.0	4.4.0
	RP-15	RP-020074	1362		Clarification of layer 3 filtering of measurements in the UE	4.3.0	4.4.0
	RP-15	RP-020210	1364		Improved readability of procedural text	4.3.0	4.4.0
	RP-15	RP-020228	1366		Clarification on ICS version within UE radio access capabilities	4.3.0	4.4.0
	RP-15	RP-020233	1368		Clarification of Maximum number of TFC in the TFCS	4.3.0	4.4.0
	RP-15	RP-020238	1370		Support of UP measurement reporting in CELL_PCH/URA_PCH	4.3.0	4.4.0
	RP-15	RP-020082	1122	2	Correction to include Cell ID for Cell_DCH state	4.3.0	4.4.0
	RP-15	RP-020082	1187	2	Correction of Transparent mode signalling for UL rate control	4.3.0	4.4.0
	RP-15	RP-020082	1188	2	Introduction of default radio configurations for UMTS_AMR2 with four speech modes	4.3.0	4.4.0
	RP-15	RP-020082	1223	1	Acquisition of PLMN identity of neighbour cells via SIB 18	4.3.0	4.4.0
	RP-15	RP-020082	1254		Various ASN.1 Corrections	4.3.0	4.4.0
	RP-15	RP-020082	1290		Handover from UTRAN failure	4.3.0	4.4.0
	RP-15	RP-020082	1335		Corrections to indicate that SIB 14 is not used by 1.28 TDD	4.3.0	4.4.0
	RP-15	RP-020084	1129	2	Support of flexible hard split mode	4.4.0	5.0.0
	RP-15	RP-020090	1225	1	Introduction of the parameters of OTDOA with IPDL for 1.28 Mcps TDD	4.4.0	5.0.0
	RP-15	RP-020085	1291	1	Radio link timing	4.4.0	5.0.0
	RP-15	RP-020094	1305	2	Introduction of HSDPA	4.4.0	5.0.0
06/2002	RP-16	RP-020330	1373		ASN.1 Corrections	5.0.0	5.1.0
	RP-16	RP-020330	1376		Clarification of unnecessary MP IEs in RADIO BEARER RECONFIGURATION	5.0.0	5.1.0
	RP-16	RP-020330	1379		Correction on SIB type	5.0.0	5.1.0
	RP-16	RP-020330	1382		Clarification to the handling of IE "Cells for measurement" received in SIB 11/12	5.0.0	5.1.0
	RP-16	RP-020330	1385	1	Correction to Cell Update procedure	5.0.0	5.1.0
	RP-16	RP-020330	1388		Correction to handling of FACH measurement occasion info in SIB12	5.0.0	5.1.0
	RP-16	RP-020331	1392		Actions when optional IE "Maximum allowed UL TX power" is missing	5.0.0	5.1.0
	RP-16	RP-020331	1395		Corrections concerning default configurations	5.0.0	5.1.0
	RP-16	RP-020331	1398		Correction concerning when hard handover specific handling applies	5.0.0	5.1.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-16	RP-020331	1401		Handling of variables CELL_INFO_LIST and MEASUREMENT_IDENTITY	5.0.0	5.1.0
	RP-16	RP-020331	1404		IE "Cell Synchronisation Information"	5.0.0	5.1.0
	RP-16	RP-020331	1407		Corrections to Cell Individual Offset	5.0.0	5.1.0
	RP-16	RP-020332	1410		Clarification to Compressed Mode Status Info	5.0.0	5.1.0
	RP-16	RP-020332	1413		Clarification of OTDOA quality figure	5.0.0	5.1.0
	RP-16	RP-020332	1416		Correction to Cell Access Restriction for SIB4	5.0.0	5.1.0
	RP-16	RP-020332	1419		Corrections concerning spare values and comments	5.0.0	5.1.0
	RP-16	RP-020332	1423		Variable for shared channel configurations	5.0.0	5.1.0
	RP-16	RP-020332	1426	1	Integrity protection on RB0	5.0.0	5.1.0
	RP-16	RP-020333	1429	1	Periodic cell update clarifications	5.0.0	5.1.0
	RP-16	RP-020333	1432		Multiple cells triggering event 1D	5.0.0	5.1.0
	RP-16	RP-020333	1435		Disjoint Active Sets in the Active Set Update procedure	5.0.0	5.1.0
	RP-16	RP-020333	1438		Deletion on compressed mode patterns when moving to CELL_FACH state	5.0.0	5.1.0
	RP-16	RP-020333	1441		TDD C-RNTI in Cell DCH	5.0.0	5.1.0
	RP-16	RP-020333	1444	1	CCTrCH Release in TDD	5.0.0	5.1.0
	RP-16	RP-020334	1447		Layer 3 retransmission of SIGNALLING CONNECTION RELEASE INDICATION	5.0.0	5.1.0
	RP-16	RP-020334	1450		Alignment of tabular and ASN.1 for UTRAN GPS timing of cell frames resolution	5.0.0	5.1.0
	RP-16	RP-020334	1453		Correction to Default Radio Configuration Timers	5.0.0	5.1.0
	RP-16	RP-020334	1456		Clarification to number of L3 filters	5.0.0	5.1.0
	RP-16	RP-020334	1459	1	Correction to 3G to 2G Inter-RAT handover for multi-domain RABs	5.0.0	5.1.0
	RP-16	RP-020334	1462		DCH quality target	5.0.0	5.1.0
	RP-16	RP-020335	1465		Correction to RB Mapping Info	5.0.0	5.1.0
	RP-16	RP-020335	1468	1	Ciphering activation for TM bearers	5.0.0	5.1.0
	RP-16	RP-020335	1471		TFCS selection guideline correction	5.0.0	5.1.0
	RP-16	RP-020382	1480	1	Clarification of Measurement Validity and Valid Measurement Objects	5.0.0	5.1.0
	RP-16	RP-020363	1483		Remaining clarification of Measurement Validity and Valid Measurement Objects	5.0.0	5.1.0
	RP-16	RP-020381	1486	1	Traffic Volume Measurement clarifications	5.0.0	5.1.0
	RP-16	RP-020335	1489		Correction to handling of IE 'Downlink information for each RL'	5.0.0	5.1.0
	RP-16	RP-020336	1492		Corrections to Security procedure on Missing integrity protection reset on relocation and counter check response actions for asymmetric bearer configurations	5.0.0	5.1.0
	RP-16	RP-020336	1495		Corrections to cell update interactions with security and SRNS Relocation	5.0.0	5.1.0
	RP-16	RP-020336	1498		"Out of service" area definition	5.0.0	5.1.0
	RP-16	RP-020339	1473		RRC connection release procedure in CELL_DCH state	5.0.0	5.1.0
	RP-16	RP-020339	1475		Correction to DL TM DCCH TF size for Default Configurations	5.0.0	5.1.0
	RP-16	RP-020339	1477		Corrections in ASN.1 related to SRNS relocation	5.0.0	5.1.0
	RP-16	RP-020341	1499		HS-DSCH related corrections	5.0.0	5.1.0
	RP-16	RP-020341	1500		Removal of BLER threshold from IE "Measurement Feedback info"	5.0.0	5.1.0
	RP-16	RP-020345	1501		RFC 3095 context relocation	5.0.0	5.1.0
09/2002	RP-17	RP-020541	1504	1	UE behaviour when active set cells are not included in CELL_INFO_LIST	5.1.0	5.2.0
	RP-17	RP-020541	1507	1	Corrections to handling of IE "Cells for measurement"	5.1.0	5.2.0
	RP-17	RP-020541	1510		Clarification on the use of UE radio access capability extensions within the INTER RAT HANDOVER INFO message	5.1.0	5.2.0
	RP-17	RP-020541	1513		Correction to RRC connection procedure	5.1.0	5.2.0
	RP-17	RP-020541	1516		Correction to the variable TGPS_IDENTITY	5.1.0	5.2.0
	RP-17	RP-020541	1522		Missing IEs in RLC info	5.1.0	5.2.0
	RP-17	RP-020542	1528	1	Corrections of UE internal measurement reporting events	5.1.0	5.2.0
	RP-17	RP-020542	1531	2	UE behaviour upon reception of reconfiguration	5.1.0	5.2.0
	RP-17	RP-020542	1534		Application of integrity keys in case of a pending CN domain switch during a SRNS relocation	5.1.0	5.2.0
	RP-17	RP-020542	1537	1	Clarifications on Quality Measurements	5.1.0	5.2.0
	RP-17	RP-020542	1540		Correction of DPCH constant value in TDD default radio configurations	5.1.0	5.2.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-17	RP-020542	1543		Handling of UE internal measurement information in broadcast	5.1.0	5.2.0
	RP-17	RP-020543	1546		Observed time difference to GSM reporting indicator	5.1.0	5.2.0
	RP-17	RP-020543	1551		Corrections on Security relative to ciphering of TM bearers and to SRNS relocation	5.1.0	5.2.0
	RP-17	RP-020543	1554		Coding of IE NC mode	5.1.0	5.2.0
	RP-17	RP-020543	1557		Clarification to filtered measurement quantities	5.1.0	5.2.0
	RP-17	RP-020543	1560		Inconsistencies in triggering and reporting for events 1a, 1b,1c, 1e and 1f	5.1.0	5.2.0
	RP-17	RP-020543	1563	1	Optional and Mandatory fields in Measurement Control	5.1.0	5.2.0
	RP-17	RP-020544	1566		Clarifications to Reporting Cell Status	5.1.0	5.2.0
	RP-17	RP-020544	1569		Clarification to minimum SF	5.1.0	5.2.0
	RP-17	RP-020544	1572		Clarifications to inter-frequency measurements	5.1.0	5.2.0
	RP-17	RP-020544	1578	2	Ciphering when HO to UMTS of signalling only connection	5.1.0	5.2.0
	RP-17	RP-020544	1581		Inter RAT handover from UTRAN	5.1.0	5.2.0
	RP-17	RP-020544	1584		Correction to Cell Update procedure with cause "Radio link failure"	5.1.0	5.2.0
	RP-17	RP-020545	1587		Correction to the handling of IE "UTRAN DRX cycle length coefficient" in CELL/URA UPDATE procedure	5.1.0	5.2.0
	RP-17	RP-020545	1590		Correction to RLC unrecoverable error occurs in CELL_DCH state	5.1.0	5.2.0
	RP-17	RP-020545	1593		Use of scrambling change when activating CM pattern using SF/2 by MEASUREMENT CONTROL	5.1.0	5.2.0
	RP-17	RP-020545	1596		Actions when optional IE "Maximum allowed UL TX power" is missing	5.1.0	5.2.0
	RP-17	RP-020630	1599	1	IP_offset correction	5.1.0	5.2.0
	RP-17	RP-020545	1602		Clarification on the IE "Frequency Info"	5.1.0	5.2.0
	RP-17	RP-020546	1605		Correction of RNTI used in PUSCH capacity request and physical shared channel allocation	5.1.0	5.2.0
	RP-17	RP-020546	1608		Correction to allowed logical channel list choice for RACH transport channels	5.1.0	5.2.0
	RP-17	RP-020654	1611	1	Clarification of SRNS Relocation Info	5.1.0	5.2.0
	RP-17	RP-020546	1614		DCH quality target	5.1.0	5.2.0
	RP-17	RP-020546	1617		Handling of variables CELL_INFO_LIST and MEASUREMENT_IDENTITY(2)	5.1.0	5.2.0
	RP-17	RP-020546	1620	1	Correction of secondary CCPCH selection and PRACH selection	5.1.0	5.2.0
	RP-17	RP-020547	1623		RRC TVM Corrections	5.1.0	5.2.0
	RP-17	RP-020547	1626		Correction of Transmission Gap Distance semantics description	5.1.0	5.2.0
	RP-17	RP-020547	1629		Corrections to Active Set Update and simultaneous reconfiguration	5.1.0	5.2.0
	RP-17	RP-020547	1632		UE behaviour following RLC size change	5.1.0	5.2.0
	RP-17	RP-020547	1635		RRC SN in uplink	5.1.0	5.2.0
	RP-17	RP-020547	1638		Multiplexing of Tr mode RBs of different CN domains on the same transport channel	5.1.0	5.2.0
	RP-17	RP-020548	1641		Security clarifications	5.1.0	5.2.0
	RP-17	RP-020548	1644		Correction to the actions of "out of service area" and "in service area"	5.1.0	5.2.0
	RP-17	RP-020548	1647		TVM: pending time after trigger and initial conditions	5.1.0	5.2.0
	RP-17	RP-020548	1650	1	Handling of Downlink information for each RL in reconfiguration messages	5.1.0	5.2.0
	RP-17	RP-020548	1655		Corrections to Cell Update/URA Update Procedure in case of nested cell updates and simultaneous SRNS relocation	5.1.0	5.2.0
	RP-17	RP-020548	1670		Corrections to security	5.1.0	5.2.0
	RP-17	RP-020631	1673	1	SRNS relocation with integrity	5.1.0	5.2.0
	RP-17	RP-020549	1676		Reception of MEASUREMENT CONTROL in state CELL_FACH	5.1.0	5.2.0
	RP-17	RP-020549	1679		Unsupported configuration	5.1.0	5.2.0
	RP-17	RP-020549	1682		Handover corrections	5.1.0	5.2.0
	RP-17	RP-020558	1575	1	Correction of SFN-SFN Measurement	5.1.0	5.2.0
	RP-17	RP-020559	1661		Corrections to Synchronisation for 1.28 Mcps TDD	5.1.0	5.2.0
	RP-17	RP-020553	1657		Corrections on Power Control for 1.28 Mcps TDD	5.1.0	5.2.0
	RP-17	RP-020553	1659		Correction to RLC entity re-establishment during SRNS relocation	5.1.0	5.2.0
	RP-17	RP-020553	1663		Reintroduction of IE "SRB delay" in Rel-4 ASN.1	5.1.0	5.2.0
	RP-17	RP-020553	1665		Corrections to ASN.1 for SRNC relocation container	5.1.0	5.2.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-17	RP-020553	1667		Unused elements in ASN.1	5.1.0	5.2.0
	RP-17	RP-020557	1547		Correction on Radio link timing	5.1.0	5.2.0
	RP-17	RP-020662	1651	2	Physical layer IEs for HSDPA	5.1.0	5.2.0
	RP-17	RP-020557	1652		Transport channel information elements for HSDPA	5.1.0	5.2.0
	RP-17	RP-020590	1683		TX diversity on radio links in the active set	5.1.0	5.2.0
	RP-17	RP-020557	1684		Mandatory Support of dedicated pilots for channel estimation	5.1.0	5.2.0
12/2002	RP-18	RP-020721	1687		Corrections to IEs "Ellipsoid point with Altitude and uncertainty Ellipsoid" and "Ellipsoid point with uncertainty Ellipse"	5.2.0	5.3.0
	RP-18	RP-020721	1690	1	Handling of Ciphering and integrity protection activation times	5.2.0	5.3.0
	RP-18	RP-020721	1693		Handling of measurements at state transitions to/from DCH state.	5.2.0	5.3.0
	RP-18	RP-020721	1696	2	Measurement related corrections	5.2.0	5.3.0
	RP-18	RP-020721	1699		ASN.1 of the SRNS relocation info	5.2.0	5.3.0
	RP-18	RP-020721	1710	1	Corrections to PRACH selection	5.2.0	5.3.0
	RP-18	RP-020722	1713		TDD Downlink Path Loss for interfrequency measurement	5.2.0	5.3.0
	RP-18	RP-020892	1716	1	Correction on coding of GSM Classmark 2 and 3	5.2.0	5.3.0
	RP-18	RP-020722	1719		Correction on Frame Allocation Calculation	5.2.0	5.3.0
	RP-18	RP-020722	1722		Inter-frequency measurements	5.2.0	5.3.0
	RP-18	RP-020722	1725		Maximum Allowed UL TX Power	5.2.0	5.3.0
	RP-18	RP-020722	1728		START values for the initialisation of SRB counters and UTRAN incorrect actions	5.2.0	5.3.0
	RP-18	RP-020723	1731		Correction to the RRC transaction table management	5.2.0	5.3.0
	RP-18	RP-020723	1803		Use of DCH Quality Target with Blind Transport Format Detection	5.2.0	5.3.0
	RP-18	RP-020723	1742		Correction to storing current TFC subset in variable TFC_SUBSET for TDD	5.2.0	5.3.0
	RP-18	RP-020723	1745		Security at inter-RAT handover	5.2.0	5.3.0
	RP-18	RP-020723	1748		Integrity protection activations times	5.2.0	5.3.0
	RP-18	RP-020723	1751		Additional measurements	5.2.0	5.3.0
	RP-18	RP-020724	1754		DPCH compressed mode info in Downlink information common for all RLs	5.2.0	5.3.0
	RP-18	RP-020724	1757	1	Handling of RB mapping	5.2.0	5.3.0
	RP-18	RP-020724	1766		RLC window size in default configurations	5.2.0	5.3.0
	RP-18	RP-020724	1769		Corrections to Activation time	5.2.0	5.3.0
	RP-18	RP-020724	1772		Numbering of "ASC Setting" IEs included in "PRACH partitioning" IE	5.2.0	5.3.0
	RP-18	RP-020724	1779	2	Correction on support for compressed mode	5.2.0	5.3.0
	RP-18	RP-020903	1734	3	Introduction of backwards compatible correction mechanism	5.2.0	5.3.0
	RP-18	RP-020727	1776		Signalling of the timing adjustment mode for closed loop Tx diversity	5.2.0	5.3.0
	RP-18	RP-020893	1810		Handling of hyper frame numbers	5.2.0	5.3.0
	RP-18	RP-020726	1760	2	Early UE Specific Behaviour Information in RRC Connection Request / interRAT info	5.2.0	5.3.0
	RP-18	RP-020858	1701		Correction of ASN1 IE "InterFreqCellInfoList-r4"	5.2.0	5.3.0
	RP-18	RP-020858	1703		Correction of Special Burst Scheduling for TDD	5.2.0	5.3.0
	RP-18	RP-020858	1705		Correction of measurement reporting event 6f for 1.28 Mcps TDD	5.2.0	5.3.0
	RP-18	RP-020858	1781		Ciphering during SRNS relocation without reuse of COUNT-C	5.2.0	5.3.0
	RP-18	RP-020858	1783		Correction to IE 'Intra Domain NAS Node Selector'	5.2.0	5.3.0
	RP-18	RP-020858	1785		Correction to PRACH selection	5.2.0	5.3.0
	RP-18	RP-020859	1787		Correction to reporting event 6f for FDD	5.2.0	5.3.0
	RP-18	RP-020859	1802		ASN.1 corrections	5.2.0	5.3.0
	RP-18	RP-020859	1805		Asymmetric ROHC Configuration	5.2.0	5.3.0
	RP-18	RP-020859	1807		Reference Cell for GSM OTD Measurement	5.2.0	5.3.0
	RP-18	RP-020736	1707		RRC container for RFC3095 context	5.2.0	5.3.0
	RP-18	RP-020736	1791		Correction to IE 'Access stratum release indicator'	5.2.0	5.3.0
	RP-18	RP-020736	1792		RLC capability for HSDPA	5.2.0	5.3.0
	RP-18	RP-020736	1794		Dedicated pilot bits for HS-DSCH	5.2.0	5.3.0
	RP-18	RP-020736	1795		Expansion of CPICH RSCP range	5.2.0	5.3.0
	RP-18	RP-020736	1796		L3 Retransmission of event 1b	5.2.0	5.3.0
	RP-18	RP-020736	1797		DPC mode change in ACTIVE SET UPDATE message	5.2.0	5.3.0
	RP-18	RP-020736	1798		Correction to handling of IE 'Downlink information for each RL'	5.2.0	5.3.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-18	RP-020896	1793	2	HSDPA parameter value ranges	5.2.0	5.3.0
03/2003	RP-19	RP-030103	1813		ASN.1 of the SRNS relocation Info	5.3.0	5.4.0
	RP-19	RP-030103	1816		Correction to procedural text for Physical Shared Channel Allocation (TDD only)	5.3.0	5.4.0
	RP-19	RP-030103	1819	1	CM and state transition related to measurements, additional measurements, virtual active set and periodic measurements	5.3.0	5.4.0
	RP-19	RP-030103	1822		Physical channel failure and radio link re-establishment	5.3.0	5.4.0
	RP-19	RP-030103	1825		Correction concerning bit numbering convention	5.3.0	5.4.0
	RP-19	RP-030104	1831		Additional Measurement reporting list	5.3.0	5.4.0
	RP-19	RP-030104	1834	2	Correction on RRC integrity protection procedure	5.3.0	5.4.0
	RP-19	RP-030104	1837		Reporting Cell Status and Event 2A	5.3.0	5.4.0
	RP-19	RP-030104	1840		Correction to the handling of variable TGPS_IDENTITY and IE 'Triggering condition 1/2'	5.3.0	5.4.0
	RP-19	RP-030104	1843	1	Hard handover with pending ciphering activation times	5.3.0	5.4.0
	RP-19	RP-030105	1846		Correction of default configurations	5.3.0	5.4.0
	RP-19	RP-030105	1849		Correction to UE behaviour on entering RRC Connected mode	5.3.0	5.4.0
	RP-19	RP-030105	1855		Update of Start values in USIM on inter-RAT transitions and transitions to idle mode	5.3.0	5.4.0
	RP-19	RP-030082	1858		Corrections to Channelisation Code TFCI Mapping for TDD	5.3.0	5.4.0
	RP-19	RP-030111	1860		Correction of PNBSCH for 1.28Mcps TDD	5.3.0	5.4.0
	RP-19	RP-030111	1862		Correction of SFN-SFN observed time difference for 1.28Mcps TDD	5.3.0	5.4.0
	RP-19	RP-030111	1864	3	ASN.1 corrections concerning missing UE capability extensions	5.3.0	5.4.0
	RP-19	RP-030111	1866		Extensions for 1.28 Mcps specific elements in system information	5.3.0	5.4.0
	RP-19	RP-030111	1868		Corrections to power control parameter signalling for 1.28 Mcps TDD	5.3.0	5.4.0
	RP-19	RP-030117	1872		TDD HS-SICH Power Control	5.3.0	5.4.0
	RP-19	RP-030117	1873		Usage of separate scrambling code for HSDPA	5.3.0	5.4.0
	RP-19	RP-030119	1874		TDD HS-DSCH midamble shift and burst type	5.3.0	5.4.0
	RP-19	RP-030117	1875		Corrections to the IE "Added or Reconfigured MAC-d flow" and the associated table in 10.3.10	5.3.0	5.4.0
	RP-19	RP-030117	1877	1	Network Assisted Cell Change from UTRAN to GERAN	5.3.0	5.4.0
	RP-19	RP-030117	1878	1	Defining more than one DSCH / USCH transport channel in PDSCH and PUSCH system information (TDD only)	5.3.0	5.4.0
	RP-19	RP-030117	1879		Introducing the use of pre-defined configurations within UTRA	5.3.0	5.4.0
	RP-19	RP-030120	1880		Group release (without security	5.3.0	5.4.0
	RP-19	RP-030105	1884		Correction to Inter-RAT Measurement Report	5.3.0	5.4.0
	RP-19	RP-030106	1887		Correction of signalling of transport block size for DSCH	5.3.0	5.4.0
	RP-19	RP-030106	1890		PS service continuity when moving between 3G and 2G	5.3.0	5.4.0
	RP-19	RP-030106	1893	1	Multiple activations of the same compressed mode pattern	5.3.0	5.4.0
	RP-19	RP-030106	1896		Setting of ciphering activation time for TM bearers	5.3.0	5.4.0
	RP-19	RP-030117	1897		Correction of shadow CR implementation	5.3.0	5.4.0
	RP-19	RP-030111	1899		Removal of MRRU parameter in PDCP info	5.3.0	5.4.0
	RP-19	RP-030117	1900		Measurement event for evaluation of best HS-DSCH cel	5.3.0	5.4.0
	RP-19	RP-030105	1902	1	NAS and Integrity procedure interaction	5.3.0	5.4.0
	RP-19	RP-030117	1903		Correction to USBI	5.3.0	5.4.0
	RP-19	RP-030187	1909		GPS navigation model update mechanism	5.3.0	5.4.0
	RP-19	RP-030201	1910		Layer 3 filtering definition	5.3.0	5.4.0
	RP-20	RP-030293	1913		Handling of UP Assistance Data	5.4.0	5.5.0
	RP-20	RP-030293	1916	1	Concerns on Procedures for Cell-ID Positioning Method	5.4.0	5.5.0
	RP-20	RP-030293	1919		Inconsistency between Procedural, ASN.1, and Tabular Aspects of UE Positioning Error	5.4.0	5.5.0
	RP-20	RP-030293	1922		Removal of FFS (For further Study) and references to other working groups	5.4.0	5.5.0
	RP-20	RP-030293	1926		Key handling when entering idle mode and coding of security capabilities	5.4.0	5.5.0
	RP-20	RP-030293	1929		Security actions when SIM is present on RRC Connection Request	5.4.0	5.5.0
	RP-20	RP-030294	1932		Update of interfrequency measurement cell info list, reading of SIB11/12, inclusion of Measured Results on RACH	5.4.0	5.5.0
	RP-20	RP-030294	1937		Additional measurements without measurement validity	5.4.0	5.5.0
	RP-20	RP-030294	1940		Handover to UTRAN in macrodiversity	5.4.0	5.5.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-20	RP-030294	1943	1	TVM Reporting in CELL_PCH state	5.4.0	5.5.0
	RP-20	RP-030294	1946	1	Initialisation of the Virtual Active Set	5.4.0	5.5.0
	RP-20	RP-030295	1949		IE 'Tx diversity mode' in ACTIVE SET UPDATE message	5.4.0	5.5.0
	RP-20	RP-030295	1952	1	Correction to transport channel traffic volume measurement events 4a and 4b	5.4.0	5.5.0
	RP-20	RP-030295	1955		Maximum Number of GPS Almanac Messages to be Stored in UE_POSITIONING_GPS_DATA	5.4.0	5.5.0
	RP-20	RP-030374	1958	2	Stopping of RLC entities at relocation	5.4.0	5.5.0
	RP-20	RP-030369	1978	4	Ciphering Mode info IE in 2G-3G Handover	5.4.0	5.5.0
	RP-20	RP-030295	1981		START values on 2G-3G handover	5.4.0	5.5.0
	RP-20	RP-030298	1983		ROHC profile signalling	5.4.0	5.5.0
	RP-20	RP-030298	1959	1	Optimisation of the INTER RAT HANDOVER INFO message	5.4.0	5.5.0
	RP-20	RP-030350	1987	2	Corrections to security procedures in case of pending security configurations at SRNS Relocation	5.4.0	5.5.0
	RP-20	RP-030371	1990		Setting of T317 to infinity and out of service behaviour	5.4.0	5.5.0
	RP-20	RP-030303	1960		Correction to the IE "HS-DSCH capability class"	5.4.0	5.5.0
	RP-20	RP-030303	1961		Correction of 'RB mapping info' in case HS-DSCH + DCH	5.4.0	5.5.0
	RP-20	RP-030303	1963		Explanation of CV-UE for the IE MidambleShift in the tabular	5.4.0	5.5.0
09/2003	RP-21	RP-030484	1993		Handling of key sets at Inter-RAT Handover to UTRAN	5.5.0	5.6.0
	RP-21	RP-030484	1996		Correction to UE Positioning privacy procedures	5.5.0	5.6.0
	RP-21	RP-030520	2003	2	START calculation in connected mode	5.5.0	5.6.0
	RP-21	RP-030506	2000	1	Reconfiguration with state transition to an indicated cell on a different frequency	5.5.0	5.6.0
	RP-21	RP-030484	2006		PRACH channelisation code list limitation to align with TS 25.221	5.5.0	5.6.0
	RP-21	RP-030484	2009		Handling of transport channel information at radio bearer release	5.5.0	5.6.0
	RP-21	RP-030485	2015		Corrections for TDD for the IEs 'Downlink DPCH info common for all radio links'	5.5.0	5.6.0
	RP-21	RP-030485	2018		TFCS selection guidelines for TFC Subset	5.5.0	5.6.0
	RP-21	RP-030485	2025		Value range of UE Rx-Tx time difference type 2 measurement	5.5.0	5.6.0
	RP-21	RP-030485	2033		Activation Time for DSCH	5.5.0	5.6.0
	RP-21	RP-030485	2044		Correction of PDCP Configuration for RFC 2507	5.5.0	5.6.0
	RP-21	RP-030486	2048		Corrections to event list handling	5.5.0	5.6.0
	RP-21	RP-030486	2051		Corrections to RACH reporting	5.5.0	5.6.0
	RP-21	RP-030486	2054		Corrections to modification of Additional Measurement lists	5.5.0	5.6.0
	RP-21	RP-030486	2057		UE positioning support in the UE	5.5.0	5.6.0
	RP-21	RP-030478	2064		Elimination of EPC mechanism	5.5.0	5.6.0
	RP-21	RP-030486	2069		UE behaviour in transition from CELL_DCH to CELL_FACH/ CELL_PCH/URA_PCH and Out of Service is detected	5.5.0	5.6.0
	RP-21	RP-030505	2072	1	Radio link failure during reconfiguration procedure	5.5.0	5.6.0
	RP-21	RP-030491	2020		Ciphering of TM SRBs	5.5.0	5.6.0
	RP-21	RP-030491	2022	1	Correction on PDCP Header compression Configuration	5.5.0	5.6.0
	RP-21	RP-030491	2027		Corrections for TDD PUSCH	5.5.0	5.6.0
	RP-21	RP-030495	1997		Correction to UE behaviour on T317 expiry	5.5.0	5.6.0
	RP-21	RP-030495	2029		Correcting value range of MAC-hs buffer ID	5.5.0	5.6.0
	RP-21	RP-030495	2030		Correction of handling of IE "MAC-hs reset indicator" in Added or Reconfigured DL TrCH information	5.5.0	5.6.0
	RP-21	RP-030495	2035	1	UE capability signalling for UMTS1800	5.5.0	5.6.0
	RP-21	RP-030495	2039		Handover between UTRAN and GERAN Iu mode	5.5.0	5.6.0
	RP-21	RP-030495	2040		Updated references to the RRC State Indicator IE	5.5.0	5.6.0
	RP-21	RP-030495	2041		Corrections to Event 1D	5.5.0	5.6.0
	RP-21	RP-030449	2028		Reconfiguration of MAC-d flow	5.5.0	5.6.0
	RP-21	RP-030462	2061		HS-SCCH transmit diversity mode	5.5.0	5.6.0
	RP-21	RP-030503	2066		Scrambling code & phase reference combinations for HS-DSCH (solution 2)	5.5.0	5.6.0
12/2003	RP-22	RP-030617	2075		Unsuccessful security mode control procedure and Integrity Protection	5.6.0	5.7.0
	RP-22	RP-030625	2076		START value calculation for RLC size change	5.6.0	5.7.0
	RP-22	RP-030617	2079		UE Positioning UE based assisted GPS	5.6.0	5.7.0
	RP-22	RP-030617	2085		Handling of zero-rate TrCHs in TFCS	5.6.0	5.7.0
	RP-22	RP-030617	2091	3	Measurement control for A-GPS	5.6.0	5.7.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-22	RP-030621	2093		Corrections to 1.28 Mcps TDD power control: ASN1/Tabular consistency, correction of omissions	5.6.0	5.7.0
	RP-22	RP-030621	2095		UpPCH power control for 1.28Mcps	5.6.0	5.7.0
	RP-22	RP-030617	2102	1	Interaction between compressed mode pattern activation and message activation time	5.6.0	5.7.0
	RP-22	RP-030625	2103		Initialisation of virtual active set	5.6.0	5.7.0
	RP-22	RP-030611	2106	1	Correction to Redirection procedure at RRC Connection Setup	5.6.0	5.7.0
	RP-22	RP-030610	2112	2	SFN associated with GPS timing of cell frame	5.6.0	5.7.0
	RP-22	RP-030618	2115		Correction to Handling SIB1	5.6.0	5.7.0
	RP-22	RP-030618	2118		Measurement Handling In State Transition for UE Positioning	5.6.0	5.7.0
	RP-22	RP-030618	2124		Corrections to UE positioning reporting for UE assisted and UE based methods	5.6.0	5.7.0
	RP-22	RP-030662	2127	1	SIB 7 reading	5.6.0	5.7.0
	RP-22	RP-030662	2130		HFN initialisation in case of pending security configurations	5.6.0	5.7.0
	RP-22	RP-030621	2132	1	General protocol error handling failure for DL CCCH messages due to ASN.1 error	5.6.0	5.7.0
	RP-22	RP-030621	2136		Corrections relating to 1.28 Mcps TDD	5.6.0	5.7.0
	RP-22	RP-030621	2138		Missing CHOICE RLC Info type in the ASN.1 IE "RB-InformationSetup-r4"	5.6.0	5.7.0
	RP-22	RP-030625	2139	1	RRM in PCH/FACH	5.6.0	5.7.0
	RP-22	RP-030625	2140		Correction of operating band reference	5.6.0	5.7.0
	RP-22	RP-030713	2141	1	Re-ordering Queue and HARQ Ids	5.6.0	5.7.0
	RP-22	RP-030625	2142		Correction to the procedural description: Reconfiguration of MAC-d flow	5.6.0	5.7.0
	RP-22	RP-030625	2143	1	Enhancement of RRC transaction identifier for measurement control message	5.6.0	5.7.0
	RP-22	RP-030629	2144		Inclusion of a default configuration identity for AMR-WB	5.6.0	5.7.0
	RP-22	RP-030625	2145		TDD C-RNTI in Cell DCH	5.6.0	5.7.0
	RP-22	RP-030662	2148		Additional Measurements List Modify	5.6.0	5.7.0
	RP-22	RP-030625	2149		IP activation time for RB0	5.6.0	5.7.0
	RP-22	RP-030722	2152	3	Minimum UE capability class	5.6.0	5.7.0
	RP-22	RP-030612	2158	4	Measured results on RACH	5.6.0	5.7.0
	RP-22	RP-030625	2159		COUNT-I reverting in case Security Mode Control procedure failure	5.6.0	5.7.0
	RP-21	RP-030548	2034	1	Maintaining the RRC Connection while Emergency camped on a F-PLMN during OOS (note: it was decided that this CR would not be implemented until the Rel-6 would be created)	5.5.0	6.0.0
	RP-22	RP-030630	2133		Introduction of UMTS800	5.7.0	6.0.0
	RP-22	RP-030721	2134	1	AS capability indication	5.7.0	6.0.0
	RP-22	RP-030630	2160		Introduction of new bands	5.7.0	6.0.0
		Editorial			Repair of corrupted figures	6.0.0	6.0.1
03/2004	RP-23	RP-040095	2168	2	Response on SRNS Relocation with Cell Update	6.0.1	6.1.0
	RP-23	RP-040095	2172		TPC Combination Index in SRNC relocation	6.0.1	6.1.0
	RP-23	RP-040107	2176	1	Correction to "Current TGPS Status Flag"	6.0.1	6.1.0
	RP-23	RP-040095	2180	1	Invalidation of START value in USIM/UE.	6.0.1	6.1.0
	RP-23	RP-040095	2184	1	Uplink Integrity protection handling in case of N302 increment	6.0.1	6.1.0
	RP-23	RP-040095	2188	1	Amount of reporting for UE-based and UE assisted A-GPS	6.0.1	6.1.0
	RP-23	RP-040101	2191	1	Ensuring decoding possibility related to Introduction of new bands	6.0.1	6.1.0
	RP-23	RP-040101	2197	2	Clarification to multimode indication	6.0.1	6.1.0
	RP-23	RP-040101	2200		Correction for 1.28 Mcps TDD Power Control	6.0.1	6.1.0
	RP-23	RP-040101	2203		Missing "pdcp-SN-info" in ASN.1 IE "RB-InformationReconfig-r4"	6.0.1	6.1.0
	RP-23	RP-040107	2207		Correction to HS-SCCH info	6.0.1	6.1.0
	RP-23	RP-040107	2209		Correction to HS-SCCH info	6.0.1	6.1.0
	RP-23	RP-040107	2213		Correction to activation time for HS-DSCH reconfiguration in TDD	6.0.1	6.1.0
	RP-23	RP-040131	2217	3	Connected mode handling IE 'CN domain system information' in SIB1	6.0.1	6.1.0
	RP-23	RP-040096	2221		Correction to event 6D	6.0.1	6.1.0
	RP-23	RP-040096	2225	1	Correction to UE positioning reporting for GPS standalone operation mode	6.0.1	6.1.0
	RP-23	RP-040092	2229		Frequency band alignment with 25.101	6.0.1	6.1.0
	RP-23	RP-040096	2235		UTRAN setting of the activation time for TM bearers in Ciphering	6.0.1	6.1.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
					Mode info IE		
	RP-23	RP-040096	2239		Corrections to "Entered parameter"	6.0.1	6.1.0
	RP-23	RP-040097	2243		Corrections to TFC Subset Functionality	6.0.1	6.1.0
	RP-23	RP-040097	2247	1	Waiting for RLC-ACK on UMI	6.0.1	6.1.0
	RP-23	RP-040105	2249		Invalid Simultaneous Reconfiguration Criteria	6.0.1	6.1.0
	RP-23	RP-040101	2252	1	General correction and alignment of the ASN.1 and tabular	6.0.1	6.1.0
	RP-23	RP-040121	2253	1	Introduction of UMTS1700/2100 (Band IV)	6.0.1	6.1.0
	RP-23	RP-040091	2254		Introduction of UMTS850 (Band V)	6.0.1	6.1.0
	RP-23	RP-040101	2257		Introduction of VLEC in every message branch	6.0.1	6.1.0
	RP-23	RP-040107	2259		Simultaneous Reception of S-CCPCH and HS-DSCH	6.0.1	6.1.0
	RP-23	RP-040107	2261		Cell reselection between UTRAN and GERAN Iu mode	6.0.1	6.1.0
	RP-23	RP-040108	2263		HSDPA related corrections on buffer flushing on state transitions, RAT transitions, error cases, MAC-hs reconfiguration and readiness to receive HS-PDSCH	6.0.1	6.1.0
	RP-23	RP-040106	2265	2	Signalling of MAC-hs Reset	6.0.1	6.1.0
	RP-23	RP-040131	2267	2	Modification of Inter-frequency CELL_INFO_LIST	6.0.1	6.1.0
	RP-23	RP-040131	2269	1	[VAS] 1B-1C conflicts when 1A is not configured	6.0.1	6.1.0
	RP-23	RP-040131	2271	1	Handling of wait time in RRC connection reject	6.0.1	6.1.0
	RP-23	RP-040108	2274		Misalignments between R'99 and Rel-5 procedures	6.0.1	6.1.0
	RP-23	RP-040097	2281		Issues related to Inter-RAT and Inter-frequency handovers	6.0.1	6.1.0
	RP-23	RP-040097	2285	1	Corrections to reconfiguration scenarios and ciphering of TM RBs	6.0.1	6.1.0
	RP-23	RP-040110	2286	4	Addition of "cell selection indication" for cell selection at release of RRC connection and RRC connection reject with re-direction	6.0.1	6.1.0
	RP-23	RP-040129	2288		HSDPA capability for multimode FDD-TDD terminals	6.0.1	6.1.0
	RP-23	RP-040095	2168	2	Response on SRNS Relocation with Cell Update	6.0.1	6.1.0
06/2004	RP-24	RP-040203	2292		Empty non-critical extensions	6.1.0	6.2.0
	RP-24	RP-040211	2294	1	Missing 'v3g0' extension in the UE CAPABILITY INFORMATION	6.1.0	6.2.0
	RP-24	RP-040203	2303		Correction on System Information in TDD	6.1.0	6.2.0
	RP-24	RP-040236	2305		Corrections to Cell Change Order from UTRAN procedure	6.1.0	6.2.0
	RP-24	RP-040206	2308		Correction on SFN-SFN time difference misalignment in 1.28 Mcps TDD	6.1.0	6.2.0
	RP-24	RP-040207	2311		ASN.1 correction leftovers	6.1.0	6.2.0
	RP-24	RP-040210	2313		Closing the REL-5 extensions in the ASN.1	6.1.0	6.2.0
	RP-24	RP-040207	2316		Incorrect presence of UE-RadioAccessCapability extension in RRC CONNECTION SETUP COMPLETE	6.1.0	6.2.0
	RP-24	RP-040210	2318		Unnecessary MAC-d flow identity in the IE 'DL-TrCH-Type-r5'	6.1.0	6.2.0
	RP-24	RP-040211	2320	1	UE capability enquiry for GERAN Iu mode	6.1.0	6.2.0
	RP-24	RP-040207	2323		Clean up of SRNS Relocation Info REL-4 version	6.1.0	6.2.0
	RP-24	RP-040210	2325		Tabular correction for RADIO BEARER RELEASE message	6.1.0	6.2.0
	RP-24	RP-040210	2327		Misalignments betwen R"99 and Rel-5 procedures	6.1.0	6.2.0
	RP-24	RP-040210	2329		Erroneous setting of Re-establsish Indicator in case of SRNS relocation	6.1.0	6.2.0
	RP-24	RP-040207	2332		Correction to IE 'Cell Info'	6.1.0	6.2.0
	RP-24	RP-040210	2334		Correction Concerning UE Positioning Measurement	6.1.0	6.2.0
	RP-24	RP-040236	2336		Pending compressed mode reconfigurations	6.1.0	6.2.0
		RP-040236	2338		Active compressed mode patterns with same measurement purpose	6.1.0	6.2.0
	RP-24	RP-040211	2340		Correction to Information Elements for UE Rx-Tx time difference	6.1.0	6.2.0
	RP-24	RP-040210	2342		Naming correction in the HS-DSCH IE Measurement Feedback Information	6.1.0	6.2.0
	RP-24	RP-040206	2345		Clarification about open loop power control in 1.28Mcps TDD	6.1.0	6.2.0
	RP-24	RP-040206	2348		Clarification about measurement control system information in TDD mode	6.1.0	6.2.0
	RP-24	RP-040211	2350		Correction to timing-maintained hard handover regarding the UL transmission timing	6.1.0	6.2.0
	RP-24	RP-040236	2354	2	Selection of suitable cell	6.1.0	6.2.0
	RP-24	RP-040236	2356		Check of the PLMN identity in the MIB when selecting a new cell	6.1.0	6.2.0
	RP-24	RP-040211	2358		Compressed INTER RAT HANDOVER INFO message modifications/corrections	6.1.0	6.2.0
	RP-24	RP-040215	2359		The ASN.1 definition of IE 'SysInfoType5bis'	6.1.0	6.2.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-24	RP-040224	2361		RLC size handling and RLC re-establishment	6.1.0	6.2.0
	RP-24	RP-040212	2363		Restrict operation of the virtual active set	6.1.0	6.2.0
	RP-24	RP-040213	2365		Usage of different RB mapping info	6.1.0	6.2.0
	RP-24	RP-040256	2367	1	Clarification on UE procedure in case of HHO failure	6.1.0	6.2.0
09/2004	RP-25	RP-040327	2373		TDD misalignment between tabular and ASN.1 definitions of UL Transport channel information common for all transport channels and special burst scheduling	6.2.0	6.3.0
	RP-25	RP-040327	2377		Definition of parameters for UE-assisted A-GPS	6.2.0	6.3.0
	RP-25	RP-040339	2378	2	Addition of UMTS850 (Band V) in the tabular	6.2.0	6.3.0
	RP-25	RP-040360	2381		Default Configurations for multiple AMR Rate Configurations	6.2.0	6.3.0
	RP-25	RP-040319	2384		Correction on PRACH selection in 1.28Mcps TDD	6.2.0	6.3.0
	RP-25	RP-040334	2386		Inconsistency in UE action for HFN initialisation	6.2.0	6.3.0
	RP-25	RP-040334	2388		Usage of different RB mapping info for TDD	6.2.0	6.3.0
	RP-25	RP-040334	2390		TDD HS-DSCH Corrections	6.2.0	6.3.0
	RP-25	RP-040334	2392		Alignment of Tabular Definition with ASN.1 for HS-SCCH Info	6.2.0	6.3.0
	RP-25	RP-040348	2394	1	Correction to HS-DSCH reception conditions	6.2.0	6.3.0
	RP-25	RP-040334	2396		Correction to RB mapping check	6.2.0	6.3.0
	RP-25	RP-040334	2398		Position Timestamp for A-GPS	6.2.0	6.3.0
	RP-25	RP-040334	2400		Pending compressed mode reconfigurations	6.2.0	6.3.0
	RP-25	RP-040335	2402		Predefined configurations for the RRC connection request	6.2.0	6.3.0
	RP-25	RP-040335	2404		Cell update during reconfiguration from CELL_FACH to CELL_PCH	6.2.0	6.3.0
	RP-25	RP-040335	2406		UE actions for Delta_ACK/NACK and repetition factor	6.2.0	6.3.0
	RP-25	RP-040335	2408		Calculation of UL transmit power for HS-SICH (TDD)	6.2.0	6.3.0
	RP-25	RP-040335	2410		Handling of Timer T302 Expiry	6.2.0	6.3.0
	RP-25	RP-040335	2412		Correct naming for HS-DSCH with DCH multiplexing option	6.2.0	6.3.0
	RP-25	RP-040335	2414		Compressed Pre-defined configurations description in new Annex C	6.2.0	6.3.0
	RP-25	RP-040335	2416		Integration between integrity protection and the sending of downlink messages during SRNS relocation	6.2.0	6.3.0
	RP-25	RP-040328	2418		Corrections to restrictions of operation of the virtual active set	6.2.0	6.3.0
	RP-25	RP-040336	2420		UE actions for received new keys	6.2.0	6.3.0
	RP-25	RP-040336	2422	1	Scrambling Code Change	6.2.0	6.3.0
	RP-25	RP-040328	2428		Clarifications to VAS functionality	6.2.0	6.3.0
	RP-25	RP-040336	2430		UE security capability in INTER_RAT handover	6.2.0	6.3.0
	RP-25	RP-040336	2432		Correction to the Radio Link Failure behaviour	6.2.0	6.3.0
12/2004	RP-26	RP-040481	2434		Correction to measured results on RACH	6.3.0	6.4.0
	RP-26	RP-040481	2436		T305 handling upon a state transition	6.3.0	6.4.0
	RP-26	RP-040481	2438		Handling of pending AM RLC unrecoverable errors signalled by cell update	6.3.0	6.4.0
	RP-26	RP-040476	2442		Correction to maximum length of CTCH period	6.3.0	6.4.0
	RP-26	RP-040481	2444		TPC step size in default configurations	6.3.0	6.4.0
	RP-26	RP-040474	2448		References to ITU-T Recommendations on ASN.1	6.3.0	6.4.0
	RP-26	RP-040477	2451		ASN.1 clarification on Measurement Report for 1.28 Mcps TDD	6.3.0	6.4.0
	RP-26	RP-040481	2453		Correction to HS-DSCH reception conditions	6.3.0	6.4.0
	RP-26	RP-040481	2455	1	MAC-hs Reset procedure	6.3.0	6.4.0
	RP-26	RP-040526	2457	2	Cell selection and reselection parameters	6.3.0	6.4.0
	RP-26	RP-040482	2459	1	Clarification the PDCP capability- Max HC context space	6.3.0	6.4.0
	RP-26	RP-040482	2461		Corrections to IE 'WAIT TIME' = 0	6.3.0	6.4.0
	RP-26	RP-040482	2463	1	RRC transaction identifier in the MEASUREMENT CONTROL message	6.3.0	6.4.0
	RP-26	RP-040482	2465		Correction to intra-frequency measurement handling in SIB11	6.3.0	6.4.0
	RP-26	RP-040477	2468	1	Missing OTDOA TDD related v4b0 extension in MEASUREMENT CONTROL	6.3.0	6.4.0
	RP-26	RP-040482	2470	2	Clarification of Radio Bearer Downlink Ciphering Activation Time Info	6.3.0	6.4.0
	RP-26	RP-040520	2472	2	TFC Subset Variable Usage and Application of Transport Format Combination Subset	6.3.0	6.4.0
	RP-26	RP-040505	2474		Use of preconfiguration in the RADIO BEARER RECONFIGURATION message	6.3.0	6.4.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-26	RP-040505	2476		UTRAN setting of ciphering activation time for SRB2	6.3.0	6.4.0
	RP-26	RP-040505	2478		Correction to ASN1 IE 'srb-SpecificIntegrityProtInfo'	6.3.0	6.4.0
	RP-26	RP-040522	2480	2	Criteria for initiating cell update on receiving 'Frequency info' IE in CELL UPDATE CONFIRM message	6.3.0	6.4.0
	RP-26	RP-040505	2482		Traffic volume measurements in PCH states	6.3.0	6.4.0
	RP-26	RP-040505	2484		Failure cause indication on Cell Update	6.3.0	6.4.0
	RP-26	RP-040495	2487	1	Network Sharing and multiple PLMN identities	6.3.0	6.4.0
	RP-26	RP-040505	2493		Inter-RAT measurement control information used	6.3.0	6.4.0
	RP-26	RP-040491	2494		ASN.1 update for the introduction of MBMS	6.3.0	6.4.0
	RP-26	RP-040491	2495	1	Introduction of MBMS	6.3.0	6.4.0
	RP-26	RP-040543	2496	2	Preamble and Postamble to reduce HS-DPCCH transmit power	6.3.0	6.4.0
	RP-26	RP-040507	2497		Introduction of E-DCH	6.3.0	6.4.0
03/2005	RP-27	RP-050038	2491	2	Removal of TGPL2	6.4.0	6.5.0
	RP-27	RP-050069	2499		Minor HSDPA related corrections	6.4.0	6.5.0
	RP-27	RP-050169	2501		Integrity protection related information in the SRNS relocation info	6.4.0	6.5.0
	RP-27	RP-050069	2503		Number of timeslots that can be used for HS-PDSCH resource for 3.84 Mcps TDD	6.4.0	6.5.0
	RP-27	RP-050089	2504		HS-DSCH operation without a DL DPCH for 3.84 Mcps TDD	6.4.0	6.5.0
	RP-27	RP-050114	2506		Removal of unnecessary cell updates on receiving 'Frequency info' IE in CELL UPDATE CONFIRM message	6.4.0	6.5.0
	RP-27	RP-050069	2508		ASN.1 clarification on Cell and Channel Identity info for 1.28 Mcps TDD	6.4.0	6.5.0
	RP-27	RP-050070	2510		Handling of TM SRB"s at radio link failure	6.4.0	6.5.0
	RP-27	RP-050070	2513		Removal of the UARFCN uplink (Nu) in the informative Annex A.3	6.4.0	6.5.0
	RP-27	RP-050070	2515	1	Correction on PRACH selection	6.4.0	6.5.0
	RP-27	RP-050067	2517	3	Lossless DL RLC PDU size change	6.4.0	6.5.0
	RP-27	RP-050069	2519		Clarification of GERAN (P)SI message coding in NACC	6.4.0	6.5.0
	RP-27	RP-050070	2521		Unsupported RLC mode reconfigurations	6.4.0	6.5.0
	RP-27	RP-050070	2523		Correction to Inter RAT cell info indication	6.4.0	6.5.0
	RP-27	RP-050086	2524		Correction to network sharing functionality	6.4.0	6.5.0
	RP-27	RP-050086	2525		Network sharing corrections	6.4.0	6.5.0
	RP-27	RP-050110	2526	1	CN domain specific Access Class Barring	6.4.0	6.5.0
	RP-27	RP-050081	2527		Corrections to "selected PLMN" in access stratum	6.4.0	6.5.0
	RP-27	RP-050074	2528		Introduction of F-DPCH	6.4.0	6.5.0
	RP-27	RP-050084	2529		Minor E-DCH related corrections	6.4.0	6.5.0
	RP-27	RP-050079	2530	2	Miscellaneous MBMS corrections	6.4.0	6.5.0
	RP-27	RP-050087	2532		Additional Frequency Bands	6.4.0	6.5.0
	RP-27	RP-050084	2534		Introduction of E-DCH in the ASN.1	6.4.0	6.5.0
	RP-27	RP-050097	2535		Improvements to uplink closed loop power control for 1.28 Mcps TDD	6.4.0	6.5.0
	RP-27	RP-050079	2536	1	MBMS Corrections to 25.331 ASN.1	6.4.0	6.5.0
	RP-27	RP-050128	2538	1	Correction to cell selection and reselection parameters to enable enhanced cell reselection	6.4.0	6.5.0
06/2005	RP-28	RP-050253	2539	3	Faster L1 DCH synchronization	6.5.0	6.6.0
	RP-28	RP-050339	2540	3	Timing maintained hard handover	6.5.0	6.6.0
	RP-28	RP-050320	2541	1	Removal of unnecessary Start values	6.5.0	6.6.0
	RP-28	RP-050329	2542		Merged CR alignement w.r.t. network sharing functionality	6.5.0	6.6.0
	RP-28	RP-050302	2545		Timing Reinitialized Handover & Radio Link Timing Adjustmen	6.5.0	6.6.0
	RP-28	RP-050302	2547		Addition of omitted IE 'report criteria' in MEASUREMENT CONTROL message 'modify' command	6.5.0	6.6.0
	RP-28	RP-050316	2548	2	Miscellaneous MBMS corrections (set II)	6.5.0	6.6.0
	RP-28	RP-050316	2549	1	Correction to MBMS notification procedure	6.5.0	6.6.0
	RP-28	RP-050316	2550	1	FACH Measurement Occasion when UE receives MBMS	6.5.0	6.6.0
	RP-28	RP-050316	2551		Frequency layer dispersion	6.5.0	6.6.0
	RP-28	RP-050303	2553	2	Signalling of target mode for ROHC operation	6.5.0	6.6.0
	RP-28	RP-050320	2554	2	Introduction of inter-frequency RACH measurement reporting	6.5.0	6.6.0
	RP-28	RP-050324	2555		Closed-Loop Power Control Improvements for 1.28 Mcps TDD – ASN1 Corrections	6.5.0	6.6.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-28	RP-050322	2556		Release 6 HS-DSCH operation without a DL DPCH for 3.84 Mcps TDD – Setting of Dhs-sync	6.5.0	6.6.0
	RP-28	RP-050320	2557	1	Correction to the Amount of Reporting	6.5.0	6.6.0
	RP-28	RP-050320	2558		Measurement report message definition when Inter-RAT cell info indication is used	6.5.0	6.6.0
	RP-28	RP-050320	2559		Direct transition to DCH	6.5.0	6.6.0
	RP-28	RP-050316	2560	1	Addition of the number of MBMS Neighbour Cell PTM Information messages to the MBMS Modified Services Information message	6.5.0	6.6.0
	RP-28	RP-050316	2561	1	Addition of MBMS counting for UEs in Cell_PCH and Cell_FACH states and addition of UE requested p-t-p bearer establishmen	6.5.0	6.6.0
	RP-28	RP-050320	2562		Introduction of IE 'RB information to reconfigure' in RB SETUP, RB RELEASE messages	6.5.0	6.6.0
	RP-28	RP-050320	2564		Including HS-DSCH serving cell change in ASU	6.5.0	6.6.0
	RP-28	RP-050320	2566	1	Detection of Activation CFN wraparound in the UE during HS-DSCH cell change	6.5.0	6.6.0
	RP-28	RP-050304	2568		Correction to handling of keys at inter-RAT handove	6.5.0	6.6.0
	RP-28	RP-050302	2572		CTFC calculation for DCH	6.5.0	6.6.0
	RP-28	RP-050302	2574		Default RB identity in IE 'Signalling RB information to setup	6.5.0	6.6.0
	RP-28	RP-050302	2576		Default configuration 13	6.5.0	6.6.0
	RP-28	RP-050320	2577		UE L3 requirements for HS-DSCH mobility	6.5.0	6.6.0
	RP-28	RP-050374	2579	3	Support for out-of-sequence PDUs in RLC-UM	6.5.0	6.6.0
	RP-28	RP-050305	2581		Feature Clean Up: Removal of 80 ms TTI for DCH for all other cases but when the UE supports SF512	6.5.0	6.6.0
	RP-28	RP-050306	2583		Feature Clean Up: Removal of observed time difference to GSM cell	6.5.0	6.6.0
	RP-28	RP-050307	2585		Feature Clean Up: Removal of SSDT	6.5.0	6.6.0
	RP-28	RP-050308	2586		Feature Clean-up: Removal of DSCH (FDD)	6.5.0	6.6.0
	RP-28	RP-050309	2589		Feature Clean Up: Removal of CPCH	6.5.0	6.6.0
	RP-28	RP-050310	2591		Feature Clean Up: Removal of dedicated pilot as sole phase reference	6.5.0	6.6.0
	RP-28	RP-050311	2593		Feature Clean Up: Removal of DRAC	6.5.0	6.6.0
	RP-28	RP-050312	2595		Feature Clean Up: Removal of TX diversity closed loop mode 2	6.5.0	6.6.0
	RP-28	RP-050313	2597		Feature Clean Up: Removal of Compressed mode by puncturing	6.5.0	6.6.0
	RP-28	RP-050327	2598	2	Alignment of EUDCH RRC Stage-3 to Stage-2 status, including handling of 2 E-RNTIs	6.5.0	6.6.0
	RP-28	RP-050336	2599		Radio link failure in F-DPCH	6.5.0	6.6.0
	RP-28	RP-050323	2600	1	Setting up F-DPCH and E-DCH in RRC connection setup	6.5.0	6.6.0
	RP-28	RP-050316	2601	1	Validity of PtM configurations	6.5.0	6.6.0
	RP-28	RP-050392	2602	1	CCCH message enhancements	6.5.0	6.6.0
	RP-28	RP-050320	2604		Quality measurement corrections	6.5.0	6.6.0
	RP-28	RP-050328	2605		Clean-up of R6 ASN.1 leftovers	6.5.0	6.6.0
	RP-28	RP-050346	2607	2	UE behaviour for DCH SIR target setting for Downlink power control	6.5.0	6.6.0
	RP-28	RP-050317	2608		RLC LI Optimization for VoiP	6.5.0	6.6.0
	RP-28	RP-050316	2609	2	Introduction of an S-CCPCH power offset difference in order to improve cell selection for soft and selective combining	6.5.0	6.6.0
	RP-28	RP-050320	2610		Erroneous implementation of CR#2501 in RRC specification v6.5.0.	6.5.0	6.6.0
	RP-28	RP-050329	2611		Correction to network sharing	6.5.0	6.6.0
	RP-28	RP-050316	2613		MBMS asn1 issues	6.5.0	6.6.0
	RP-28	RP-050316	2614		SCCPCH timing offset information for FDD MBMS soft combining	6.5.0	6.6.0
	RP-28	RP-050316	2615		MBMS corrections on signalling optimization	6.5.0	6.6.0
09/2005	RP-29	RP-050486	2616		Support of Domain Specific Access control in Rel-5 Ues	6.6.0	6.7.0
	RP-29	RP-050465	2619		ASN1 update for InterRATReportingQuantity	6.6.0	6.7.0
	RP-29	RP-050465	2621	1	IE 'RB information to reconfigure' for RADIO BEARER RECONFIGURATION message	6.6.0	6.7.0
	RP-29	RP-050465	2623		Size of TFC Subset List for Transport Format Combination Control	6.6.0	6.7.0
	RP-29	RP-050465	2626		RB mapping rules	6.6.0	6.7.0
	RP-29	RP-050587	2628	3	Rules for triggering hard handover	6.6.0	6.7.0
	RP-29	RP-050465	2630		RSCP value range extension	6.6.0	6.7.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-29	RP-050465	2632		H-RNTI validity	6.6.0	6.7.0
	RP-29	RP-050482	2633		Removal RLC-SDU alignment capability	6.6.0	6.7.0
	RP-29	RP-050458	2635		Feature Clean Up: Removal of DRAC	6.6.0	6.7.0
	RP-29	RP-050458	2637		DRAC & Dedicated pilots removal leftovers (asn1)	6.6.0	6.7.0
	RP-29	RP-050458	2639		DRAC & CPCH removal leftovers (sib8,9,10)	6.6.0	6.7.0
	RP-29	RP-050458	2641	1	Feature remove (Tabular/asn1 alignment)	6.6.0	6.7.0
	RP-29	RP-050482	2642		Correction to UE L3 requirements for HS-DSCH mobility	6.6.0	6.7.0
	RP-29	RP-050482	2643		Rate Control Correction	6.6.0	6.7.0
	RP-29	RP-050482	2644		Introduction of container to facilitate transparent transfer of UE capabilities	6.6.0	6.7.0
	RP-29	RP-050482	2645		Minor ASN.1 correction for TDD IEs Beacon PL Est and DHS-Sync	6.6.0	6.7.0
	RP-29	RP-050482	2646		Addition of ongoing reconfiguration indicator in cell update	6.6.0	6.7.0
	RP-29	RP-050482	2648		Faster L1 DCH synchronization	6.6.0	6.7.0
	RP-29	RP-050482	2649		Direct transition to DCH	6.6.0	6.7.0
	RP-29	RP-050482	2650		PSI messages in CELL CHANGE ORDER FROM UTRAN	6.6.0	6.7.0
	RP-29	RP-050482	2651		SRNS relocation info	6.6.0	6.7.0
	RP-29	RP-050482	2652		Correction to UE-assisted OTDOA support	6.6.0	6.7.0
	RP-29	RP-050482	2653		Correction to undefined UE behaviour in case of Cell-ID positioning with method type UE-based	6.6.0	6.7.0
	RP-29	RP-050482	2654		Receiving "Frequency info" IE in CELL UPDATE CONFIRM message	6.6.0	6.7.0
	RP-29	RP-050483	2655		Re-entry in service in CELL_PCH before T316 expiry	6.6.0	6.7.0
	RP-29	RP-050483	2656		ASN.1 alignment to Rel-5 of InterRATCellInfoIndication	6.6.0	6.7.0
	RP-29	RP-050483	2657		Addition of Inter-frequency measurements reporting on RACH reporting in the ASN.1 of RRC CONNECTION REQUEST and CELL UPDATE messages	6.6.0	6.7.0
	RP-29	RP-050483	2658		Correction to the Amount of Reporting	6.6.0	6.7.0
	RP-29	RP-050483	2659		Minor correction of HS-DSCH/ E-DCH capability indication	6.6.0	6.7.0
	RP-29	RP-050476	2660		Modification of TPC command error rate granularity and range	6.6.0	6.7.0
	RP-29	RP-050473	2661	1	Introduction of PS handover between UTRAN and GERAN	6.6.0	6.7.0
	RP-29	RP-050483	2662		Including HS-DPCCH power offset and HARQ preamble mode in active set update	6.6.0	6.7.0
	RP-29	RP-050468	2663		Minor MBMS corrections (set IV)	6.6.0	6.7.0
	RP-29	RP-050468	2664		Clarification on MBMS modified services information IE	6.6.0	6.7.0
	RP-29	RP-050468	2665		MBMS correction for recounting	6.6.0	6.7.0
	RP-29	RP-050468	2666	1	MBMS asn1 issues	6.6.0	6.7.0
	RP-29	RP-050471	2667		E-DCH corrections and additions	6.6.0	6.7.0
	RP-29	RP-050471	2668		E-DCH corrections	6.6.0	6.7.0
	RP-29	RP-050472	2669	4	E-DCH additions to active set update	6.6.0	6.7.0
	RP-29	RP-050471	2670	1	UE capabilities for E-DCH in 25.331	6.6.0	6.7.0
	RP-29	RP-050468	2671		Conditional suspension of CELL_FACH measurements to enable reception of MCCH	6.6.0	6.7.0
	RP-29	RP-050468	2672		MBMS message order on MCCH	6.6.0	6.7.0
	RP-29	RP-050468	2673		MSCH configuration information in case of soft combining Timing Offset	6.6.0	6.7.0
	RP-29	RP-050469	2674	1	Removal of fixed position for S-CCPCHs carrying MBMS channels	6.6.0	6.7.0
	RP-29	RP-050467	2675		Introduction of Band VII	6.6.0	6.7.0
	RP-29	RP-050483	2676		Introducing pre- configuration upon radio bearer establishment	6.6.0	6.7.0
	RP-29	RP-050484	2677	1	Introduction of the device type indication in UE capability	6.6.0	6.7.0
	RP-29	RP-050471	2680		E-DCH TTI Reconfiguration	6.6.0	6.7.0
	RP-29	RP-050483	2681		Maximum number of reference ETFCI"s	6.6.0	6.7.0
	RP-29	RP-050561	2682		F-DPCH power control	6.6.0	6.7.0
12/2005	RP-30	RP-050801	2617	2	Introduction of UMTS1700	6.7.0	6.8.0
	RP-30	RP-050787	2683	4	Introduction of the HSDPA and E-DCH Capable Cell Indicator	6.7.0	6.8.0
	RP-30	RP-050785	2685	1	PRACH for CCCH in SIB 6	6.7.0	6.8.0
	RP-30	RP-050796	2686	1	Tx/Rx frequency separation capability (FDD)	6.7.0	6.8.0
	RP-30	RP-050827	2687	1	E-DCH mobility corrections and multi-step handling for E-RGCH	6.7.0	6.8.0
	RP-30	RP-050797	2688	1	L1 synchronisation at HHO	6.7.0	6.8.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-30	RP-050786	2690		Correction to UE positioning measurements in CELL_PCH/URA_PCH state	6.7.0	6.8.0
	RP-30	RP-050785	2692		Clarification of Delta in Inter/Intra-frequency measurement reporting criteria	6.7.0	6.8.0
	RP-30	RP-050785	2694		Clarification of the usage of "Ack-Nack Power Offset" in HSDPA for TDD	6.7.0	6.8.0
	RP-30	RP-050785	2696		Modification of WB-AMR default configuration	6.7.0	6.8.0
	RP-30	RP-050785	2698		Serving E-DCH radio link indication	6.7.0	6.8.0
	RP-30	RP-050800	2699		Introduction of UMTS 900 (Band VIII)	6.7.0	6.8.0
	RP-30	RP-050788	2700		MCCH configuration information	6.7.0	6.8.0
	RP-30	RP-050788	2701		Correction of default TFCS for MBMS	6.7.0	6.8.0
	RP-30	RP-050797	2702		Unidirectional RLC reconfiguration	6.7.0	6.8.0
	RP-30	RP-050793	2703	1	Misalignments for E-DCH	6.7.0	6.8.0
	RP-30	RP-050793	2704		Update for E-DCH Serving Grant IE value range	6.7.0	6.8.0
	RP-30	RP-050793	2705		Clarification on MAC-d flow multiplexing list	6.7.0	6.8.0
	RP-30	RP-050793	2706		Addition of E-DCH power offsets to active set update	6.7.0	6.8.0
	RP-30	RP-050793	2707		E-RNTI validity	6.7.0	6.8.0
	RP-30	RP-050793	2708		Clarification of bit strings for EUL	6.7.0	6.8.0
	RP-30	RP-050793	2709	1	Modification of SI periodicity	6.7.0	6.8.0
	RP-30	RP-050793	2710		E-DCH PO signalling	6.7.0	6.8.0
	RP-30	RP-050793	2711	1	MAC es/e reset indicator	6.7.0	6.8.0
	RP-30	RP-050788	2714	1	MBMS corrections on default TFCS, service identity and PL Service Information	6.7.0	6.8.0
	RP-30	RP-050831	2717	1	Corrections of inconsistencies in Rel-6 RRC messages (ASN.1 review)	6.7.0	6.8.0
	RP-30	RP-050861	2718	1	Introduction of Support of Handover to GAN	6.7.0	6.8.0
03/2006	RP-31	RP-060087	2716	5	E-DCH Measurement Event 1J	6.8.0	6.9.0
	RP-31	RP-060083	2720	-	Default configuration 11 for multirate AMR with SRB5	6.8.0	6.9.0
	RP-31	RP-060081	2722	1	Addition of synchronization parameters in RRC for HS-SICH in 1.28Mcps TDD	6.8.0	6.9.0
	RP-31	RP-060091	2723	-	Integrity Protection check for NAS messages	6.8.0	6.9.0
	RP-31	RP-060087	2724	-	E-DCH radio link addition using ASU of RL already in DCH active set	6.8.0	6.9.0
	RP-31	RP-060087	2725	-	Addition of SF128 and SF256 in E-DCH maximum channelisation codes	6.8.0	6.9.0
	RP-31	RP-060087	2726	2	RRC signaling efficiency changes for E-DCH	6.8.0	6.9.0
	RP-31	RP-060087	2727	-	E-DCH HARQ Info signalling	6.8.0	6.9.0
	RP-31	RP-060087	2728	-	Secondary Scrambling Code in F-DPCH RL information	6.8.0	6.9.0
	RP-31	RP-060087	2729	-	Correction to E-DCH IEs	6.8.0	6.9.0
	RP-31	RP-060087	2730	-	Non-scheduled grant	6.8.0	6.9.0
	RP-31	RP-060087	2731	-	IE handling for E-DCH	6.8.0	6.9.0
	RP-31	RP-060087	2732	-	E-RNTI handling in Active Set Update procedure	6.8.0	6.9.0
	RP-31	RP-060087	2733	-	Editorial correction on 'E-DCH information'	6.8.0	6.9.0
	RP-31	RP-060120	2734	1	Corrections of inconsistencies in Rel-6 RRC messages (ASN.1 review)	6.8.0	6.9.0
	RP-31	RP-060091	2735	-	Correction to Modifying Integrity Protection Configuration for TM SRB	6.8.0	6.9.0
	RP-31	RP-060091	2736	-	Correction to Security Mode Control Procedure	6.8.0	6.9.0
	RP-31	RP-060091	2737	-	Resolving problems from CR implementation	6.8.0	6.9.0
	RP-31	RP-060093	2738	-	Removal of GPRS encryption algorithm info	6.8.0	6.9.0
	RP-31	RP-060092	2739	1	Default configurations for Multi-mode AMR	6.8.0	6.9.0
	RP-31	RP-060091	2740	-	Periodic URA Update in OOS	6.8.0	6.9.0
	RP-31	RP-060091	2741	-	Correction in IE UE positioning capability	6.8.0	6.9.0
	RP-31	RP-060091	2742	-	F-DPCH, HSDPA and E-DCH in HANDOVER TO UTRAN COMMAND (Rel-6 ASN.1 review issue 013)	6.8.0	6.9.0
	RP-31	RP-060091	2743	-	Representation of IE "latestConfiguredCN-Domain" in the r3 branch of SRNS Relocation Info	6.8.0	6.9.0
	RP-31	RP-060083	2746	1	7.95kbps NB AMR Default Configuration removal	6.8.0	6.9.0
	RP-31	RP-060091	2747	-	Periodic BMC Schedule Message	6.8.0	6.9.0
	RP-31	RP-060092	2748	1	Introduction of additional Default configuration identities	6.8.0	6.9.0
	RP-31	RP-060095	2749	1	PS default configurations	6.8.0	6.9.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-31	RP-060091	2751	-	Configuration of DL TFCS as 'Same as UL'	6.8.0	6.9.0
	RP-31	RP-060091	2752	-	NAS synchronization indicator in RB setup	6.8.0	6.9.0
	RP-31	RP-060088	2753	-	General error handling in case of ASN.1 violation and for MBMS channels	6.8.0	6.9.0
	RP-31	RP-060091	2754	-	Clarification of UE action upon receiving the IE RB information to change list	6.8.0	6.9.0
	RP-31	RP-060091	2755	-	Removal of unnecessary checking for HS-DSCH and E-DCH configuration	6.8.0	6.9.0
	RP-31	RP-060091	2756	-	Introduction of WB-AMR default configuration without SRB#5	6.8.0	6.9.0
	RP-31	RP-060091	2757	-	Initial DPCH frame offset for F-DPCH	6.8.0	6.9.0
	RP-31	RP-060086	2760	1	Support for different E-DCH and HS-DSCH serving cells	6.8.0	6.9.0
	RP-31	RP-060088	2761	-	Correction to S-CCPCH power offset for MBMS	6.8.0	6.9.0
	RP-31	RP-060093	2764	-	Inter-RAT PS Handover capability	6.8.0	6.9.0
	RP-31	RP-060095	2765	-	Indication of HSPA capability and conversation call type for CS	6.8.0	6.9.0
	RP-31	RP-060097	2713	3	Enabling the Providing of Velocity	6.9.0	7.0.0
	RP-31	RP-060096	2758		Release 7 HS-DSCH operation without a DL DPCH for 1.28 Mcps TDD – synchronisation and power control of UL DPCH via PLCCH	6.9.0	7.0.0
	RP-31	RP-060098	2759		7.68 Mcps TDD Option (Release 7)	6.9.0	7.0.0
	RP-31	RP-060099	2762		Introduction of REL-7 access stratum release indicator	6.9.0	7.0.0
06/2006	RP-32	RP-060374	2769	1	RoHC Segmentation, padding and Packet_sizes_allowed parameter removal	7.0.0	7.1.0
	RP-32	RP-060360	2772	1	Corrections of procedures dealing with 'Serving HS-DSCH radio link indicator' and 'Serving E-DCH radio link indicator'	7.0.0	7.1.0
	RP-32	RP-060361	2774	1	MAC-HS handling for "return in case of failure"	7.0.0	7.1.0
	RP-32	RP-060383	2776	1	'RB' terminology in security procedures	7.0.0	7.1.0
	RP-32	RP-060368	2778	-	Clarification on IE 'MBMS re-acquire MCCH'	7.0.0	7.1.0
	RP-32	RP-060368	2780	-	Clarification on MCCH Acquisition Initiation	7.0.0	7.1.0
	RP-32	RP-060368	2782	-	Clarification of encoding of TB size for FDD common transport channels	7.0.0	7.1.0
	RP-32	RP-060368	2784	-	HCS parameters for MBMS cell reselection	7.0.0	7.1.0
	RP-32	RP-060354	2786	-	Clarification on MAC-e/es reset	7.0.0	7.1.0
	RP-32	RP-060361	2788	-	Modification to the 'BLER target'configuration method in RRC spec for 3.84Mcps TDD	7.0.0	7.1.0
	RP-32	RP-060361	2790	-	Add some IEs regarding HS-SICH power control parameter updating in UPLINK PHYSICAL CHANNEL CONTROL message in 1.28Mcps TDD mode	7.0.0	7.1.0
	RP-32	RP-060364	2792	-	Corrections on Inter-RAT cell info indication	7.0.0	7.1.0
	RP-32	RP-060364	2794	-	Clarifications regarding virtual active set	7.0.0	7.1.0
	RP-32	RP-060358	2796	-	PS Handover Capability	7.0.0	7.1.0
	RP-32	RP-060364	2798	-	Handling of System Information Block type 5bis.	7.0.0	7.1.0
	RP-32	RP-060364	2800	-	Introducing container for Measurement Report informaton within SRNS relocation	7.0.0	7.1.0
	RP-32	RP-060364	2802	-	Removal of GSM OTD reference cell	7.0.0	7.1.0
	RP-32	RP-060364	2804	-	Error handling of 'dummy' IEs introduced in ASN.1 by recent feature removal	7.0.0	7.1.0
	RP-32	RP-060365	2806	-	START value in Cell Update	7.0.0	7.1.0
	RP-32	RP-060365	2808	-	Default configurations 10 and 13	7.0.0	7.1.0
	RP-32	RP-060365	2810	-	Inter-frequency measurement reporting on RACH	7.0.0	7.1.0
	RP-32	RP-060365	2812	-	Radio bearer mapping for SRBs	7.0.0	7.1.0
	RP-32	RP-060365	2814	-	Correction to RLC default configuration	7.0.0	7.1.0
	RP-32	RP-060366	2816	-	New standalone SRB default configuration	7.0.0	7.1.0
	RP-32	RP-060366	2818	-	Introduction of default configurations with "flexible TFCS"	7.0.0	7.1.0
	RP-32	RP-060366	2820	-	Small IE corrections: "RB information to change list", "Access Class Barred"	7.0.0	7.1.0
	RP-32	RP-060366	2822	-	Correction to IE Default Configuration Identity	7.0.0	7.1.0
	RP-32	RP-060366	2824	-	Correction to TFC subset for default configurations 11&12	7.0.0	7.1.0
	RP-32	RP-060366	2826	-	HSDPA/E-DCH info in INTER RAT HANDOVER INFO WITH INTER RAT CAPABILITIES	7.0.0	7.1.0
	RP-32	RP-060373	2827	1	Adding CS Call Type to Cell Update Message	7.0.0	7.1.0
	RP-32	RP-060359	2829	-	Correct indication of Rel-7 tabular entries	7.0.0	7.1.0
	RP-32	RP-060359	2830	-	Corrections to REL-7 ASN.1	7.0.0	7.1.0
	RP-32	RP-060362	2831	-	Measurement control ASN.1 error	7.0.0	7.1.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-32	RP-060368	2833	-	Clarification on MBMS Radio Bearer Release	7.0.0	7.1.0
	RP-32	RP-060354	2835	-	Correction on E-DCH DL Scrambling Code	7.0.0	7.1.0
	RP-32	RP-060366	2837	-	Reinstatement of missing IE "Periodical reporting information-1b" in ASN.1	7.0.0	7.1.0
	RP-32	RP-060366	2839	-	SRB2 suspension	7.0.0	7.1.0
	RP-32	RP-060369	2842	-	Release 7 Timing Advance (3.84 Mpcs and 7.68 Mcps TDD)	7.0.0	7.1.0
	RP-32	RP-060369	2843	-	Introduction of REL-7 access stratum release indicator	7.0.0	7.1.0
	RP-32	RP-060369	2844	-	Positioning velocity ASN.1	7.0.0	7.1.0
	RP-32	RP-060386	2845	1	Correction of positioning confidence reporting inconsistencies	7.0.0	7.1.0
09/2006	RP-33	RP-060573	2848	-	Removal of CID indication in PDCP PID	7.1.0	7.2.0
	RP-33	RP-060574	2852	-	Correction to the tabulars for Serving Grant value	7.1.0	7.2.0
	RP-33	RP-060575	2854	-	Range of the encoding of E-DCH physical layer category and HS-DSCH physical layer category	7.1.0	7.2.0
	RP-33	RP-060574	2856	-	3-index step 2-index step clarifications	7.1.0	7.2.0
	RP-33	RP-060597	2858	2	Introduction of SIB 11bis	7.1.0	7.2.0
	RP-33	RP-060581	2859	-	Power class for UMTS2600 (VII) internal / 900 (VIII)	7.1.0	7.2.0
	RP-33	RP-060576	2861	-	Corrections to MBMS Downlink Timeslots and Codes for TDD	7.1.0	7.2.0
	RP-33	RP-060576	2865	-	Clarification on MBMS notification for UEs in CELL_DCH state	7.1.0	7.2.0
	RP-33	RP-060576	2867	-	Clarification on MBMS p-t-m activation time IE	7.1.0	7.2.0
	RP-33	RP-060576	2869	-	Access probability factor	7.1.0	7.2.0
	RP-33	RP-060575	2871	-	Modification to the HS-SCCH set configuration method in RRC spec for 1.28Mcps TDD	7.1.0	7.2.0
	RP-33	RP-060575	2873	-	Correction to tabular for IE 'Delay restriction Flag'	7.1.0	7.2.0
	RP-33	RP-060575	2877	-	Corretion on 3G-2G Handover	7.1.0	7.2.0
	RP-33	RP-060575	2879	-	Pending security configuration for SRB2	7.1.0	7.2.0
	RP-33	RP-060593	2881	-	UE radio access capability for Single-band UE	7.1.0	7.2.0
	RP-33	RP-060593	2883	-	Inter-RAT handover to UTRAN (HSPA)	7.1.0	7.2.0
	RP-33	RP-060593	2885	-	Tabular & reference corrections	7.1.0	7.2.0
	RP-33	RP-060593	2887	-	F-DPCH Tx Diversity	7.1.0	7.2.0
	RP-33	RP-060593	2889	1	Expiration of RRC timer T314/T315 associated to CS/PS RABs	7.1.0	7.2.0
	RP-33	RP-060583	2892	-	Clarification on Exceeding Variance in Traffic Volume Measurement	7.1.0	7.2.0
	RP-33	RP-060573	2897	1	Use of CM_PATTERN_ACTIVATION_ABORTED	7.1.0	7.2.0
	RP-33	RP-060573	2900	1	Corrections of procedures dealing with Hard Handover	7.1.0	7.2.0
	RP-33	RP-060585	2901	-	Correction to spreading factors used for 7.68 Mcps TDD PRACH	7.1.0	7.2.0
	RP-33	RP-060583	2902	-	Corrections to ASN.1 (3.84 Mcps and 7.68 Mcps TDD)	7.1.0	7.2.0
	RP-33	RP-060586	2903	-	Introduction of 3.84 Mcps and 7.68 Mcps TDD E-DCH	7.1.0	7.2.0
	RP-33	RP-060582	2904	-	Support of 2570 – 2620 MHz band for TDD	7.1.0	7.2.0
	RP-33	RP-060593	2907	-	ASN1 correction on Inter-frequency RACH measurement reporting, backward compatible solution	7.1.0	7.2.0
	RP-33	RP-060584	2908	-	CS Call type indication in CELL_FACH	7.1.0	7.2.0
	RP-33	RP-060584	2910	1	UE behaviour in RRC Connection Re-establishment scenarios	7.1.0	7.2.0
	RP-33	RP-060624	2911	2	Enhancing MBMS support for Mobile TV	7.1.0	7.2.0
	RP-33	RP-060574	2913	-	E-DCH gain factor computation	7.1.0	7.2.0
	RP-33	RP-060593	2915	-	Correction to default configuration #22	7.1.0	7.2.0
	RP-33	RP-060622	2917		Correction to coding of PLCCH for 1.28Mcps TDD	7.1.0	7.2.0
	RP-33	RP-060578	2919		MAC-hs reset	7.1.0	7.2.0
12/2006	RP-34	RP-060722	2916	2	UE based OTDOA positioning in WCDMA cells with extended range	7.2.0	7.3.0
	RP-34	RP-060717	2922	1	Correction on acceptable configurations for compression entities	7.2.0	7.3.0
	RP-34	RP-060715	2923	-	Introduction of Band X (Extended UMTS 1.7/2.1 GHz) in 25.331	7.2.0	7.3.0
	RP-34	RP-060716	2925	-	Grant and MAC-e/es headers for E-DCH and References	7.2.0	7.3.0
	RP-34	RP-060804	2927	2	Correction to E-DCH reconfiguration	7.2.0	7.3.0
	RP-34	RP-060718	2931	-	Removal of MSCH configuration information from S-CCPCH system information	7.2.0	7.3.0
	RP-34	RP-060718	2933	-	Correction relating to the formation of a list of services	7.2.0	7.3.0
	RP-34	RP-060718	2935	-	Indentation error in handling MBMS establishment cause values	7.2.0	7.3.0
	RP-34	RP-060718	2936	-	MSCH configuration information	7.2.0	7.3.0
	RP-34	RP-060719	2938	-	Tabular/ASN.1 mismatch for IE "UE radio access capability comp 2"	7.2.0	7.3.0
	RP-34	RP-060716	2940	-	Correction to Radio Bearer Mapping for UE in CELL_DCH state	7.2.0	7.3.0
	RP-34	RP-060726	2941	1	State transition diagram from URA_PCH/Cell_PCH to idle	7.2.0	7.3.0
	RP-34	RP-060719	2943	-	Usage of Band Indicator in Inter-RAT cell info list	7.2.0	7.3.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
	RP-34	RP-060716	2945	-	Correction for support of HS-DSCH in RRC Connection Setup	7.2.0	7.3.0
	RP-34	RP-060720	2947	-	Corrections related to 3.84 and 7.68 Mcps TDD E-DCH and the support of TDD at 2.6 GHz	7.2.0	7.3.0
	RP-34	RP-060712	2948	1	Introduction of the UE speed information at the CELL_DCH transition	7.2.0	7.3.0
	RP-34	RP-060713	2949	2	Introduction of the new security algorithms UEA2 and UIA2.	7.2.0	7.3.0
	RP-34	RP-060718	2951	-	RAB ID for mobile TV	7.2.0	7.3.0
	RP-34	RP-060718	2953	-	MBMS PL Service Restriction Information and preferred frequency layer	7.2.0	7.3.0
	RP-34	RP-060724	2954	2	Introduction of inter-RAT DTM Handover	7.2.0	7.3.0
	RP-34	RP-060718	2956	-	MBMS short transmission ID and Mobile TV	7.2.0	7.3.0
03/2007	RP-35	RP-070159	2957	2	Deferred SIB11/12 reading and acting	7.3.0	7.4.0
	RP-35	RP-070159	2958	-	UE Positioning Fine Time Assistance for GPS	7.3.0	7.4.0
	RP-35	RP-070159	2959	-	Correction of "Threshold SFN-GPS TOW"	7.3.0	7.4.0
	RP-35	RP-070159	2960	1	Correction to standalone UE positioning	7.3.0	7.4.0
	RP-35	RP-070159	2961	-	Clarification on introduction of the new security algorithms	7.3.0	7.4.0
	RP-35	RP-070159	2962	-	Change to area scope of SIB1 value tag	7.3.0	7.4.0
	RP-35	RP-070159	2963	-	Correction of the tabular description of the IE Downlink information for each radio link Post	7.3.0	7.4.0
	RP-35	RP-070159	2964	-	Removal of redundant ASN1 element DL-CCTrChTPCList	7.3.0	7.4.0
	RP-35	RP-070151	2966	-	Correction of MBMS MODIFICATION REQUEST	7.3.0	7.4.0
	RP-35	RP-070151	2968	-	Wording of MBMS PL Service Restriction Information and preferred frequency layer	7.3.0	7.4.0
	RP-35	RP-070151	2970	-	maxMBMS-Services definition	7.3.0	7.4.0
	RP-35	RP-070151	2972	1	MBMS selected services indication	7.3.0	7.4.0
	RP-35	RP-070151	2973	1	Correction of RAB release procedure for Mobile TV	7.3.0	7.4.0
	RP-35	RP-070153	2975	-	Tabular Alignment for Uplink DPCH Info	7.3.0	7.4.0
	RP-35	RP-070151	2977	1	Update the IE' RAB information to reconfigure' for Mobile TV	7.3.0	7.4.0
	RP-35	RP-070154	2979	-	Absence of MS Classmark 2 and 3 in IE "Inter-RAT UE radio access capability"	7.3.0	7.4.0
	RP-35	RP-070153	2981	-	Handling of TFCS with no DCH configured	7.3.0	7.4.0
	RP-35	RP-070163	2983	1	Introducing 64QAM downlink support	7.3.0	7.4.0
	RP-35	RP-070157	2984	-	Introduction of 1.28 Mcps TDD E-DCH	7.3.0	7.4.0
	RP-35	RP-070161	2985	1	Introducing MIMO in RRC specification	7.3.0	7.4.0
	RP-35	RP-070172	2986	-	Alignment of Tabular with ASN.1	7.3.0	7.4.0
	RP-35	RP-070160	2987	-	Corrections to Tabular for 3.84 and 7.68 McpsTDD E-DCH	7.3.0	7.4.0
	RP-35	RP-070151	2989	1	MICH reception for services scheduled with MSCH	7.3.0	7.4.0
	RP-35	RP-070158	2990	-	Introduction of DTX-DRX and HS-SCCH less in RRC	7.3.0	7.4.0
06/2007	RP-36	RP-070402	2982	6	Introducing 16QAM uplink support	7.4.0	7.5.0
	RP-36	RP-070407	2992		Use of Integrity protection algorithm UIA/2: removal of a 'shall' in a note	7.4.0	7.5.0
	RP-36	RP-070407	2993		RRC Cellid encoding alignment on RANAP	7.4.0	7.5.0
	RP-36	RP-070407	2994		Signalling connection release at T314/315 expiry	7.4.0	7.5.0
	RP-36	RP-070408	2995		Cell Update Confirm with RLC re-establish indicator	7.4.0	7.5.0
	RP-36	RP-070408	2996		Correction of STTD Indicator for F-DPCH Tx Diversity	7.4.0	7.5.0
	RP-36	RP-070395	2997		Introduction of GAN PS handover	7.4.0	7.5.0
	RP-36	RP-070408	2998		Feature Clean Up leftover: Removal of DRAC leftover	7.4.0	7.5.0
	RP-36	RP-070408	2999		Initialisation of CFN calculation for CELL_FACH	7.4.0	7.5.0
	RP-36	RP-070408	3000		PLMN selection ping-pong control	7.4.0	7.5.0
	RP-36	RP-070408	3001		Optimization of switching beteween MBMS broadcast TV channels transmitted on ptp bearers (MBMS for Mobile TV)	7.4.0	7.5.0
	RP-36	RP-070408	3002		Alignment of tabular to ASN.1 for SIB11/SIB12 and event 1J	7.4.0	7.5.0
	RP-36	RP-070403	3003	2	Introduction of HS-DSCH reception in CELL_FACH, URA_PCH and CELL_PCH	7.4.0	7.5.0
	RP-36	RP-070408	3004	1	Introduction two DRX schemes in URA_PCH and CELL_PCH	7.4.0	7.5.0
	RP-36	RP-070416	3008		Maintenance of PMM connection for MBMS PTP reception	7.4.0	7.5.0
	RP-36	RP-070401	3010		Content of MSI message when sent on DCCH	7.4.0	7.5.0
	RP-36	RP-070401	3012		Relative ordering of MBMS Selected Services when indicated to the network	7.4.0	7.5.0
	RP-36	RP-070416	3013		Background scan during MBMS PTM reception	7.4.0	7.5.0
	RP-36	RP-070401	3015		Default MBMS activation time and 'MBMS all unmodified p-t-m services'	7.4.0	7.5.0
	RP-36	RP-070401	3017		Problem with the IE 'MBMS service identity' included in the IE	7.4.0	7.5.0

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Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
					'RAB info'		
	RP-36	RP-070406	3019		Correction of SRB delay	7.4.0	7.5.0
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