**3GPP TSG-RAN WG2 Meeting #109bis** **electronic *R2-200xxxx***

**Elbonia, 20th – 30th April 2020**

|  |
| --- |
| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **36.331** | **CR** |  | **rev** |  | **Current version:** | **15.9.0** |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
|  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network | **x** | Core Network |  |

|  |
| --- |
|  |
| ***Title:***  | Additional issues to fix in the Rapporteur CR |
|  |  |
| ***Source to WG:*** | Lenovo, Motorola Mobility |
| ***Source to TSG:*** | R2 |
|  |  |
| ***Work item code:*** | TEI15 |  | ***Date:*** | 2020-04-16 |
|  |  |  |  |  |
| ***Category:*** | F |  | ***Release:*** | Rel-15 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)Rel-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)* |
|  |  |
| ***Reason for change:*** | 1. In SIB26 late NCE container can be added after the extension marker and suffix of threshS-RSSI-CBR-r14 needs to be corrected to "-r15”.
2. Suffix of crs-IntfMitigEnabled-15 needs to be corrected to “-r15” (SIB1, RadioResourceConfigDedicated IE).
3. MeasResults IE: Suffix of frequencyBandList-15 needs to be corrected to “-r15”.
4. ReportConfigEUTRA IE: suffix of h1-Hysteresis-15, h2-Hysteresis-15 needs to be corrected to “-r15”.
5. SL-V2X-ConfigDedicated field descriptions: in the description of field logicalChGroupInfoList the field “logicalChGroupInfoList-v-1520” does not exist in ASN.1 but logicalChGroupInfoList-v1530, so it needs to be corrected accordingly. And the words “priorties” and “reliablities” should be corrected to “priorities” and “reliabilities” (add missing “i”).
6. In Rel-16 UE-Capability-NB-v15x0-IEs has been introduced but definition in Rel-15 is missing.
 |
|  |  |
| ***Summary of change:*** | 1. In SIB26 late NCE container has been added after the extension marker and suffix of threshS-RSSI-CBR-r14 has been corrected to "-r15”.
2. Suffix of crs-IntfMitigEnabled-15 has been corrected to “-r15” (SIB1, RadioResourceConfigDedicated IE).
3. MeasResults IE: Suffix of frequencyBandList-15 has been corrected to “-r15”.
4. ReportConfigEUTRA IE: suffix of h1-Hysteresis-15, h2-Hysteresis-15 has been corrected to “-r15”.
5. SL-V2X-ConfigDedicated field descriptions: in the description of field logicalChGroupInfoList the suffix of “logicalChGroupInfoList-v-1520” has been corrected to “-v1530”. And the words “priorties” and “reliablities” have been corrected to “priorities” and “reliabilities” (added missing “i”).
6. Missing UE-Capability-NB-v15x0-IEs has been introduced to be aligned with Rel-16.
 |
|  |  |
| ***Consequences if not approved:*** |   |
|  |  |
| ***Clauses affected:*** | 6.2.2, 6.3.1, 6.3.2, 6.3.5, 6.3.8, 6.7.3.6 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

*Start of changes*

### 6.2.2 Message definitions

#### – *SystemInformationBlockType1*

*SystemInformationBlockType1* contains information relevant when evaluating if a UE is allowed to access a cell and defines the scheduling of other system information. *SystemInformationBlockType1-BR* uses the same structure as *SystemInformationBlockType1*.

Signalling radio bearer: N/A

RLC-SAP: TM

Logical channels: BCCH and BR-BCCH

Direction: E‑UTRAN to UE

*SystemInformationBlockType1 message*

-- ASN1START

SystemInformationBlockType1-BR-r13 ::= SystemInformationBlockType1

SystemInformationBlockType1 ::= SEQUENCE {

 cellAccessRelatedInfo SEQUENCE {

 plmn-IdentityList PLMN-IdentityList,

 trackingAreaCode TrackingAreaCode,

 cellIdentity CellIdentity,

 cellBarred ENUMERATED {barred, notBarred},

 intraFreqReselection ENUMERATED {allowed, notAllowed},

 csg-Indication BOOLEAN,

 csg-Identity CSG-Identity OPTIONAL -- Need OR

 },

 cellSelectionInfo SEQUENCE {

 q-RxLevMin Q-RxLevMin,

 q-RxLevMinOffset INTEGER (1..8) OPTIONAL -- Need OP

 },

 p-Max P-Max OPTIONAL, -- Need OP

 freqBandIndicator FreqBandIndicator,

 schedulingInfoList SchedulingInfoList,

 tdd-Config TDD-Config OPTIONAL, -- Cond TDD

 si-WindowLength ENUMERATED {

 ms1, ms2, ms5, ms10, ms15, ms20,

 ms40},

 systemInfoValueTag INTEGER (0..31),

 nonCriticalExtension SystemInformationBlockType1-v890-IEs OPTIONAL

}

SystemInformationBlockType1-v890-IEs::= SEQUENCE {

 lateNonCriticalExtension OCTET STRING (CONTAINING SystemInformationBlockType1-v8h0-IEs) OPTIONAL,

 nonCriticalExtension SystemInformationBlockType1-v920-IEs OPTIONAL

}

-- Late non critical extensions

SystemInformationBlockType1-v8h0-IEs ::= SEQUENCE {

 multiBandInfoList MultiBandInfoList OPTIONAL, -- Need OR

 nonCriticalExtension SystemInformationBlockType1-v9e0-IEs OPTIONAL

}

SystemInformationBlockType1-v9e0-IEs ::= SEQUENCE {

 freqBandIndicator-v9e0 FreqBandIndicator-v9e0 OPTIONAL, -- Cond FBI-max

 multiBandInfoList-v9e0 MultiBandInfoList-v9e0 OPTIONAL, -- Cond mFBI-max

 nonCriticalExtension SystemInformationBlockType1-v10j0-IEs OPTIONAL

}

SystemInformationBlockType1-v10j0-IEs ::= SEQUENCE {

 freqBandInfo-r10 NS-PmaxList-r10 OPTIONAL, -- Need OR

 multiBandInfoList-v10j0 MultiBandInfoList-v10j0 OPTIONAL, -- Need OR

 nonCriticalExtension SystemInformationBlockType1-v10l0-IEs OPTIONAL

}

SystemInformationBlockType1-v10l0-IEs ::= SEQUENCE {

 freqBandInfo-v10l0 NS-PmaxList-v10l0 OPTIONAL, -- Need OR

 multiBandInfoList-v10l0 MultiBandInfoList-v10l0 OPTIONAL, -- Need OR

 nonCriticalExtension SEQUENCE {} OPTIONAL

}

-- Regular non critical extensions

SystemInformationBlockType1-v920-IEs ::= SEQUENCE {

 ims-EmergencySupport-r9 ENUMERATED {true} OPTIONAL, -- Need OR

 cellSelectionInfo-v920 CellSelectionInfo-v920 OPTIONAL, -- Cond RSRQ

 nonCriticalExtension SystemInformationBlockType1-v1130-IEs OPTIONAL

}

SystemInformationBlockType1-v1130-IEs ::= SEQUENCE {

 tdd-Config-v1130 TDD-Config-v1130 OPTIONAL, -- Cond TDD-OR

 cellSelectionInfo-v1130 CellSelectionInfo-v1130 OPTIONAL, -- Cond WB-RSRQ

 nonCriticalExtension SystemInformationBlockType1-v1250-IEs OPTIONAL

}

SystemInformationBlockType1-v1250-IEs ::= SEQUENCE {

 cellAccessRelatedInfo-v1250 SEQUENCE {

 category0Allowed-r12 ENUMERATED {true} OPTIONAL -- Need OP

 },

 cellSelectionInfo-v1250 CellSelectionInfo-v1250 OPTIONAL, -- Cond RSRQ2

 freqBandIndicatorPriority-r12 ENUMERATED {true} OPTIONAL, -- Cond mFBI

 nonCriticalExtension SystemInformationBlockType1-v1310-IEs OPTIONAL

}

SystemInformationBlockType1-v1310-IEs ::= SEQUENCE {

 hyperSFN-r13 BIT STRING (SIZE (10)) OPTIONAL, -- Need OR

 eDRX-Allowed-r13 ENUMERATED {true} OPTIONAL, -- Need OR

 cellSelectionInfoCE-r13 CellSelectionInfoCE-r13 OPTIONAL, -- Need OP

 bandwidthReducedAccessRelatedInfo-r13 SEQUENCE {

 si-WindowLength-BR-r13 ENUMERATED {

 ms20, ms40, ms60, ms80, ms120,

 ms160, ms200, spare},

 si-RepetitionPattern-r13 ENUMERATED {everyRF, every2ndRF, every4thRF,

 every8thRF},

 schedulingInfoList-BR-r13 SchedulingInfoList-BR-r13 OPTIONAL, -- Cond SI-BR

 fdd-DownlinkOrTddSubframeBitmapBR-r13 CHOICE {

 subframePattern10-r13 BIT STRING (SIZE (10)),

 subframePattern40-r13 BIT STRING (SIZE (40))

 } OPTIONAL, -- Need OP

 fdd-UplinkSubframeBitmapBR-r13 BIT STRING (SIZE (10)) OPTIONAL, -- Need OP

 startSymbolBR-r13 INTEGER (1..4),

 si-HoppingConfigCommon-r13 ENUMERATED {on,off},

 si-ValidityTime-r13 ENUMERATED {true} OPTIONAL, -- Need OP

 systemInfoValueTagList-r13 SystemInfoValueTagList-r13 OPTIONAL -- Need OR

 } OPTIONAL, -- Cond BW-reduced

 nonCriticalExtension SystemInformationBlockType1-v1320-IEs OPTIONAL

}

SystemInformationBlockType1-v1320-IEs ::= SEQUENCE {

 freqHoppingParametersDL-r13 SEQUENCE {

 mpdcch-pdsch-HoppingNB-r13 ENUMERATED {nb2, nb4} OPTIONAL, -- Need OR

 interval-DLHoppingConfigCommonModeA-r13 CHOICE {

 interval-FDD-r13 ENUMERATED {int1, int2, int4, int8},

 interval-TDD-r13 ENUMERATED {int1, int5, int10, int20}

 } OPTIONAL, -- Need OR

 interval-DLHoppingConfigCommonModeB-r13 CHOICE {

 interval-FDD-r13 ENUMERATED {int2, int4, int8, int16},

 interval-TDD-r13 ENUMERATED { int5, int10, int20, int40}

 } OPTIONAL, -- Need OR

 mpdcch-pdsch-HoppingOffset-r13 INTEGER (1..maxAvailNarrowBands-r13) OPTIONAL -- Need OR

 } OPTIONAL, -- Cond Hopping

 nonCriticalExtension SystemInformationBlockType1-v1350-IEs OPTIONAL

}

SystemInformationBlockType1-v1350-IEs ::= SEQUENCE {

 cellSelectionInfoCE1-r13 CellSelectionInfoCE1-r13 OPTIONAL, -- Need OP

 nonCriticalExtension SystemInformationBlockType1-v1360-IEs OPTIONAL

}

SystemInformationBlockType1-v1360-IEs ::= SEQUENCE {

 cellSelectionInfoCE1-v1360 CellSelectionInfoCE1-v1360 OPTIONAL, -- Cond QrxlevminCE1

 nonCriticalExtension SystemInformationBlockType1-v1430-IEs OPTIONAL

}

SystemInformationBlockType1-v1430-IEs ::= SEQUENCE {

 eCallOverIMS-Support-r14 ENUMERATED {true} OPTIONAL, -- Need OR

 tdd-Config-v1430 TDD-Config-v1430 OPTIONAL, -- Cond TDD-OR

 cellAccessRelatedInfoList-r14 SEQUENCE (SIZE (1..maxPLMN-1-r14)) OF

 CellAccessRelatedInfo-r14 OPTIONAL, -- Need OR

 nonCriticalExtension SystemInformationBlockType1-v1450-IEs OPTIONAL

}

SystemInformationBlockType1-v1450-IEs ::= SEQUENCE {

 tdd-Config-v1450 TDD-Config-v1450 OPTIONAL, -- Cond TDD-OR

 nonCriticalExtension SystemInformationBlockType1-v1530-IEs OPTIONAL

}

SystemInformationBlockType1-v1530-IEs ::= SEQUENCE {

 hsdn-Cell-r15 ENUMERATED {true} OPTIONAL, -- Need OR

 cellSelectionInfoCE-v1530 CellSelectionInfoCE-v1530 OPTIONAL, -- Need OP

 crs-IntfMitigConfig-r15 CHOICE {

 crs-IntfMitigEnabled-r15 NULL,

 crs-IntfMitigNumPRBs-r15 ENUMERATED {n6, n24}

 } OPTIONAL, -- Need OR

 cellBarred-CRS-r15 ENUMERATED {barred, notBarred},

 plmn-IdentityList-v1530 PLMN-IdentityList-v1530 OPTIONAL, -- Need OR

 posSchedulingInfoList-r15 PosSchedulingInfoList-r15 OPTIONAL, -- Need OR

 cellAccessRelatedInfo-5GC-r15 SEQUENCE {

 cellBarred-5GC-r15 ENUMERATED {barred, notBarred},

 cellBarred-5GC-CRS-r15 ENUMERATED {barred, notBarred},

 cellAccessRelatedInfoList-5GC-r15 SEQUENCE (SIZE (1..maxPLMN-r11)) OF

 CellAccessRelatedInfo-5GC-r15

 } OPTIONAL, -- Need OP

 ims-EmergencySupport5GC-r15 ENUMERATED {true} OPTIONAL, -- Need OR

 eCallOverIMS-Support5GC-r15 ENUMERATED {true} OPTIONAL, -- Need OR

 nonCriticalExtension SystemInformationBlockType1-v1540-IEs OPTIONAL

}

SystemInformationBlockType1-v1540-IEs ::= SEQUENCE {

 si-posOffset-r15 ENUMERATED {true} OPTIONAL, -- Need ON

 nonCriticalExtension SEQUENCE {} OPTIONAL

}

PLMN-IdentityList ::= SEQUENCE (SIZE (1..maxPLMN-r11)) OF PLMN-IdentityInfo

PLMN-IdentityInfo ::= SEQUENCE {

 plmn-Identity PLMN-Identity,

 cellReservedForOperatorUse ENUMERATED {reserved, notReserved}

}

PLMN-IdentityList-v1530 ::= SEQUENCE (SIZE (1..maxPLMN-r11)) OF PLMN-IdentityInfo-v1530

PLMN-IdentityInfo-v1530 ::= SEQUENCE {

 cellReservedForOperatorUse-CRS-r15 ENUMERATED {reserved, notReserved}

}

PLMN-IdentityList-r15::= SEQUENCE (SIZE (1..maxPLMN-r11)) OF PLMN-IdentityInfo-r15

PLMN-IdentityInfo-r15 ::= SEQUENCE {

 plmn-Identity-5GC-r15 CHOICE{

 plmn-Identity-r15 PLMN-Identity,

 plmn-Index-r15 INTEGER (1..maxPLMN-r11)

 },

 cellReservedForOperatorUse-r15 ENUMERATED {reserved, notReserved},

 cellReservedForOperatorUse-CRS-r15 ENUMERATED {reserved, notReserved}

}

SchedulingInfoList ::= SEQUENCE (SIZE (1..maxSI-Message)) OF SchedulingInfo

SchedulingInfo ::= SEQUENCE {

 si-Periodicity ENUMERATED {rf8, rf16, rf32, rf64, rf128, rf256, rf512},

 sib-MappingInfo SIB-MappingInfo

}

SchedulingInfoList-BR-r13 ::= SEQUENCE (SIZE (1..maxSI-Message)) OF SchedulingInfo-BR-r13

SchedulingInfo-BR-r13 ::= SEQUENCE {

 si-Narrowband-r13 INTEGER (1..maxAvailNarrowBands-r13),

 si-TBS-r13 ENUMERATED {b152, b208, b256, b328, b408, b504, b600, b712, b808, b936}

}

SIB-MappingInfo ::= SEQUENCE (SIZE (0..maxSIB-1)) OF SIB-Type

SIB-Type ::= ENUMERATED {

 sibType3, sibType4, sibType5, sibType6,

 sibType7, sibType8, sibType9, sibType10,

 sibType11, sibType12-v920, sibType13-v920,

 sibType14-v1130, sibType15-v1130,

 sibType16-v1130, sibType17-v1250, sibType18-v1250,

 ..., sibType19-v1250, sibType20-v1310, sibType21-v1430,

 sibType24-v1530, sibType25-v1530, sibType26-v1530}

SystemInfoValueTagList-r13 ::= SEQUENCE (SIZE (1..maxSI-Message)) OF SystemInfoValueTagSI-r13

SystemInfoValueTagSI-r13 ::= INTEGER (0..3)

CellSelectionInfo-v920 ::= SEQUENCE {

 q-QualMin-r9 Q-QualMin-r9,

 q-QualMinOffset-r9 INTEGER (1..8) OPTIONAL -- Need OP

}

CellSelectionInfo-v1130 ::= SEQUENCE {

 q-QualMinWB-r11 Q-QualMin-r9

}

CellSelectionInfo-v1250 ::= SEQUENCE {

 q-QualMinRSRQ-OnAllSymbols-r12 Q-QualMin-r9

}

CellAccessRelatedInfo-r14 ::= SEQUENCE {

 plmn-IdentityList-r14 PLMN-IdentityList,

 trackingAreaCode-r14 TrackingAreaCode,

 cellIdentity-r14 CellIdentity

}

CellAccessRelatedInfo-5GC-r15 ::= SEQUENCE {

 plmn-IdentityList-r15 PLMN-IdentityList-r15,

 ran-AreaCode-r15 RAN-AreaCode-r15 OPTIONAL, -- Need OR

 trackingAreaCode-5GC-r15 TrackingAreaCode-5GC-r15,

 cellIdentity-5GC-r15 CellIdentity-5GC-r15

}

CellIdentity-5GC-r15 ::= CHOICE{

 cellIdentity-r15 CellIdentity,

 cellId-Index-r15 INTEGER (1..maxPLMN-r11)

}

PosSchedulingInfoList-r15 ::= SEQUENCE (SIZE (1..maxSI-Message)) OF PosSchedulingInfo-r15

PosSchedulingInfo-r15 ::= SEQUENCE {

 posSI-Periodicity-r15 ENUMERATED {rf8, rf16, rf32, rf64, rf128, rf256, rf512},

 posSIB-MappingInfo-r15 PosSIB-MappingInfo-r15

}

PosSIB-MappingInfo-r15 ::= SEQUENCE (SIZE (1..maxSIB)) OF PosSIB-Type-r15

PosSIB-Type-r15 ::= SEQUENCE {

 encrypted-r15 ENUMERATED { true } OPTIONAL, -- Need OP

 gnss-id-r15 GNSS-ID-r15 OPTIONAL, -- Need OP

 sbas-id-r15 SBAS-ID-r15 OPTIONAL, -- Need OP

 posSibType-r15 ENUMERATED { posSibType1-1,

 posSibType1-2,

 posSibType1-3,

 posSibType1-4,

 posSibType1-5,

 posSibType1-6,

 posSibType1-7,

 posSibType2-1,

 posSibType2-2,

 posSibType2-3,

 posSibType2-4,

 posSibType2-5,

 posSibType2-6,

 posSibType2-7,

 posSibType2-8,

 posSibType2-9,

 posSibType2-10,

 posSibType2-11,

 posSibType2-12,

 posSibType2-13,

 posSibType2-14,

 posSibType2-15,

 posSibType2-16,

 posSibType2-17,

 posSibType2-18,

 posSibType2-19,

 posSibType3-1,

 ...},

 ...

}

-- ASN1STOP

### 6.3.1 System information blocks

#### – *SystemInformationBlockType26*

The IE *SystemInformationBlockType26* contains V2X sidelink communication configurations which can be used jointly with those included in *SystemInformationBlockType21*.

*SystemInformationBlockType26* information element

-- ASN1START

SystemInformationBlockType26-r15 ::= SEQUENCE {

 v2x-InterFreqInfoList-r15 SL-InterFreqInfoListV2X-r14 OPTIONAL, -- Need OR

 cbr-pssch-TxConfigList-r15 SL-CBR-PPPP-TxConfigList-r15 OPTIONAL, -- Need OR

 v2x-PacketDuplicationConfig-r15 SL-V2X-PacketDuplicationConfig-r15 OPTIONAL, -- Need OR

 syncFreqList-r15 SL-V2X-SyncFreqList-r15 OPTIONAL, -- Need OR

 slss-TxMultiFreq-r15 ENUMERATED{true} OPTIONAL, -- Need OR

 v2x-FreqSelectionConfigList-r15 SL-V2X-FreqSelectionConfigList-r15 OPTIONAL, -- Need OR

 threshS-RSSI-CBR-r15 INTEGER (0..45) OPTIONAL, -- Need OR

 ...,

 lateNonCriticalExtension OCTET STRING OPTIONAL

}

-- ASN1STOP

### 6.3.2 Radio resource control information elements

#### – *RadioResourceConfigDedicated*

The IE *RadioResourceConfigDedicated* is used to setup/modify/release RBs, to modify the MAC main configuration, to modify the SPS configuration and to modify dedicated physical configuration.

*RadioResourceConfigDedicated* information element

-- ASN1START

RadioResourceConfigDedicated ::= SEQUENCE {

 srb-ToAddModList SRB-ToAddModList OPTIONAL, -- Cond HO-Conn

 drb-ToAddModList DRB-ToAddModList OPTIONAL, -- Cond HO-toEUTRA

 drb-ToReleaseList DRB-ToReleaseList OPTIONAL, -- Need ON

 mac-MainConfig CHOICE {

 explicitValue MAC-MainConfig,

 defaultValue NULL

 } OPTIONAL, -- Cond HO-toEUTRA2

 sps-Config SPS-Config OPTIONAL, -- Need ON

 physicalConfigDedicated PhysicalConfigDedicated OPTIONAL, -- Need ON

 ...,

 [[ rlf-TimersAndConstants-r9 RLF-TimersAndConstants-r9 OPTIONAL -- Need ON

 ]],

 [[ measSubframePatternPCell-r10 MeasSubframePatternPCell-r10 OPTIONAL -- Need ON

 ]],

 [[ neighCellsCRS-Info-r11 NeighCellsCRS-Info-r11 OPTIONAL -- Need ON

 ]],

 [[ naics-Info-r12 NAICS-AssistanceInfo-r12 OPTIONAL -- Need ON

 ]],

 [[ neighCellsCRS-Info-r13 NeighCellsCRS-Info-r13 OPTIONAL, -- Cond CRSIM

 rlf-TimersAndConstants-r13 RLF-TimersAndConstants-r13 OPTIONAL -- Need ON

 ]],

 [[ sps-Config-v1430 SPS-Config-v1430 OPTIONAL -- Cond SPS

 ]],

 [[ srb-ToAddModListExt-r15 SRB-ToAddModListExt-r15 OPTIONAL, -- Need ON

 srb-ToReleaseListExt-r15 INTEGER (4) OPTIONAL, -- Need ON

 sps-Config-v1530 SPS-Config-v1530 OPTIONAL, -- Need ON

 crs-IntfMitigConfig-r15 CHOICE {

 release NULL,

 setup CHOICE {

 crs-IntfMitigEnabled-r15 NULL,

 crs-IntfMitigNumPRBs-r15 ENUMERATED {n6, n24}

 }

 } OPTIONAL, -- Need ON

 neighCellsCRS-Info-r15 NeighCellsCRS-Info-r15 OPTIONAL, -- Need ON

 drb-ToAddModList-r15 DRB-ToAddModList-r15 OPTIONAL, -- Need ON

 drb-ToReleaseList-r15 DRB-ToReleaseList-r15 OPTIONAL, -- Need ON

 dummy SEQUENCE (SIZE (1..2)) OF INTEGER (1..2) OPTIONAL -- Need ON

 ]],

 [[ sps-Config-v1540 SPS-Config-v1540 OPTIONAL -- Need ON

 ]]

}

RadioResourceConfigDedicated-v1370 ::= SEQUENCE {

 physicalConfigDedicated-v1370 PhysicalConfigDedicated-v1370 OPTIONAL -- Need ON

}

RadioResourceConfigDedicated-v13c0 ::= SEQUENCE {

 physicalConfigDedicated-v13c0 PhysicalConfigDedicated-v13c0

}

RadioResourceConfigDedicatedPSCell-r12 ::= SEQUENCE {

 -- UE specific configuration extensions applicable for an PSCell

 physicalConfigDedicatedPSCell-r12 PhysicalConfigDedicated OPTIONAL, -- Need ON

 sps-Config-r12 SPS-Config OPTIONAL, -- Need ON

 naics-Info-r12 NAICS-AssistanceInfo-r12 OPTIONAL, -- Need ON

 ...,

 [[ neighCellsCRS-InfoPSCell-r13 NeighCellsCRS-Info-r13 OPTIONAL -- Need ON

 ]],

 [[ sps-Config-v1430 SPS-Config-v1430 OPTIONAL -- Cond SPS2

 ]],

 [[ sps-Config-v1530 SPS-Config-v1530 OPTIONAL, -- Need ON

 crs-IntfMitigEnabled-r15 BOOLEAN OPTIONAL, -- Need ON

 neighCellsCRS-Info-r15 NeighCellsCRS-Info-r15 OPTIONAL -- Need ON

 ]],

 [[ sps-Config-v1540 SPS-Config-v1540 OPTIONAL -- Need ON

 ]]

}

RadioResourceConfigDedicatedPSCell-v1370 ::= SEQUENCE {

 physicalConfigDedicatedPSCell-v1370 PhysicalConfigDedicated-v1370 OPTIONAL -- Need ON

}

RadioResourceConfigDedicatedPSCell-v13c0 ::= SEQUENCE {

 physicalConfigDedicatedPSCell-v13c0 PhysicalConfigDedicated-v13c0

}

RadioResourceConfigDedicatedSCG-r12 ::= SEQUENCE {

 drb-ToAddModListSCG-r12 DRB-ToAddModListSCG-r12 OPTIONAL, -- Need ON

 mac-MainConfigSCG-r12 MAC-MainConfig OPTIONAL, -- Need ON

 rlf-TimersAndConstantsSCG-r12 RLF-TimersAndConstantsSCG-r12 OPTIONAL, -- Need ON

 ...,

 [[ drb-ToAddModListSCG-r15 DRB-ToAddModListSCG-r15 OPTIONAL -- Need ON

 ]],

 [[ srb-ToAddModListSCG-r15 SRB-ToAddModList OPTIONAL, -- Need ON

 srb-ToReleaseListSCG-r15 SRB-ToReleaseList-r15 OPTIONAL -- Need ON

 ]],

 [[ -- NE-DC additions for release of RLC bearer config for DRBs

 drb-ToReleaseListSCG-r15 DRB-ToReleaseList-r15 OPTIONAL -- Need ON

 ]]

}

RadioResourceConfigDedicatedSCell-r10 ::= SEQUENCE {

 -- UE specific configuration extensions applicable for an SCell

 physicalConfigDedicatedSCell-r10 PhysicalConfigDedicatedSCell-r10 OPTIONAL, -- Need ON

 ...,

 [[ mac-MainConfigSCell-r11 MAC-MainConfigSCell-r11 OPTIONAL -- Cond SCellAdd

 ]],

 [[ naics-Info-r12 NAICS-AssistanceInfo-r12 OPTIONAL -- Need ON

 ]],

 [[ neighCellsCRS-InfoSCell-r13 NeighCellsCRS-Info-r13 OPTIONAL -- Need ON

 ]],

 [[ physicalConfigDedicatedSCell-v1370 PhysicalConfigDedicatedSCell-v1370 OPTIONAL -- Need ON

 ]],

 [[ crs-IntfMitigEnabled-r15 BOOLEAN OPTIONAL, -- Need ON

 neighCellsCRS-Info-r15 NeighCellsCRS-Info-r15 OPTIONAL, -- Need ON

 sps-Config-v1530 SPS-Config-v1530 OPTIONAL -- Need ON

 ]]

}

RadioResourceConfigDedicatedSCell-v13c0 ::= SEQUENCE {

 physicalConfigDedicatedSCell-v13c0 PhysicalConfigDedicatedSCell-v13c0

}

SRB-ToAddModList ::= SEQUENCE (SIZE (1..2)) OF SRB-ToAddMod

SRB-ToAddModListExt-r15 ::= SEQUENCE (SIZE (1)) OF SRB-ToAddMod

SRB-ToAddMod ::= SEQUENCE {

 srb-Identity INTEGER (1..2),

 rlc-Config CHOICE {

 explicitValue RLC-Config,

 defaultValue NULL

 } OPTIONAL, -- Cond Setup

 logicalChannelConfig CHOICE {

 explicitValue LogicalChannelConfig,

 defaultValue NULL

 } OPTIONAL, -- Cond Setup

 ...,

 [[ pdcp-verChange-r15 ENUMERATED {true} OPTIONAL, -- Cond NR-PDCP

 rlc-Config-v1530 RLC-Config-v1530 OPTIONAL, -- Need ON

 rlc-BearerConfigSecondary-r15 RLC-BearerConfig-r15 OPTIONAL, -- Need ON

 srb-Identity-v1530 INTEGER (4) OPTIONAL -- Need ON

 ]],

 [[ rlc-Config-v1560 RLC-Config-v1510 OPTIONAL -- Need ON

 ]]

}

DRB-ToAddModList ::= SEQUENCE (SIZE (1..maxDRB)) OF DRB-ToAddMod

DRB-ToAddModList-r15 ::= SEQUENCE (SIZE (1..maxDRB-r15)) OF DRB-ToAddMod

DRB-ToAddModListSCG-r12 ::= SEQUENCE (SIZE (1..maxDRB)) OF DRB-ToAddModSCG-r12

DRB-ToAddModListSCG-r15 ::= SEQUENCE (SIZE (1..maxDRB-r15)) OF DRB-ToAddModSCG-r12

DRB-ToAddMod ::= SEQUENCE {

 eps-BearerIdentity INTEGER (0..15) OPTIONAL, -- Cond DRB-Setup

 drb-Identity DRB-Identity,

 pdcp-Config PDCP-Config OPTIONAL, -- Cond PDCP

 rlc-Config RLC-Config OPTIONAL, -- Cond SetupM

 logicalChannelIdentity INTEGER (3..10) OPTIONAL, -- Cond DRB-SetupM

 logicalChannelConfig LogicalChannelConfig OPTIONAL, -- Cond SetupM

 ...,

 [[ drb-TypeChange-r12 ENUMERATED {toMCG} OPTIONAL, -- Need OP

 rlc-Config-v1250 RLC-Config-v1250 OPTIONAL -- Need ON

 ]],

 [[ rlc-Config-v1310 RLC-Config-v1310 OPTIONAL, -- Need ON

 drb-TypeLWA-r13 BOOLEAN OPTIONAL, -- Need ON

 drb-TypeLWIP-r13 ENUMERATED {lwip, lwip-DL-only,

 lwip-UL-only, eutran} OPTIONAL -- Need ON

 ]],

 [[ rlc-Config-v1430 RLC-Config-v1430 OPTIONAL, -- Need ON

 lwip-UL-Aggregation-r14 BOOLEAN OPTIONAL, -- Cond LWIP

 lwip-DL-Aggregation-r14 BOOLEAN OPTIONAL, -- Cond LWIP

 lwa-WLAN-AC-r14 ENUMERATED {ac-bk, ac-be, ac-vi, ac-vo} OPTIONAL -- Cond UL-LWA

 ]],

 [[ rlc-Config-v1510 RLC-Config-v1510 OPTIONAL -- Need ON

 ]],

 [[ rlc-Config-v1530 RLC-Config-v1530 OPTIONAL, -- Need ON

 rlc-BearerConfigSecondary-r15 RLC-BearerConfig-r15 OPTIONAL, -- Need ON

 logicalChannelIdentity-r15 INTEGER (32..38) OPTIONAL -- Need ON

 ]]

}

DRB-ToAddModSCG-r12 ::= SEQUENCE {

 drb-Identity-r12 DRB-Identity,

 drb-Type-r12 CHOICE {

 split-r12 NULL,

 scg-r12 SEQUENCE {

 eps-BearerIdentity-r12 INTEGER (0..15) OPTIONAL, -- Cond DRB-Setup

 pdcp-Config-r12 PDCP-Config OPTIONAL -- Cond PDCP-S

 }

 } OPTIONAL, -- Cond SetupS2

 rlc-ConfigSCG-r12 RLC-Config OPTIONAL, -- Cond SetupS

 rlc-Config-v1250 RLC-Config-v1250 OPTIONAL, -- Need ON

 logicalChannelIdentitySCG-r12 INTEGER (3..10) OPTIONAL, -- Cond DRB-SetupS

 logicalChannelConfigSCG-r12 LogicalChannelConfig OPTIONAL, -- Cond SetupS

 ...,

 [[ rlc-Config-v1430 RLC-Config-v1430 OPTIONAL -- Need ON

 ]],

 [[ logicalChannelIdentitySCG-r15 INTEGER (32..38) OPTIONAL, -- Need ON

 rlc-Config-v1530 RLC-Config-v1530 OPTIONAL, -- Need ON

 rlc-BearerConfigSecondary-r15 RLC-BearerConfig-r15 OPTIONAL -- Need ON

 ]],

 [[ rlc-Config-v1560 RLC-Config-v1510 OPTIONAL -- Need ON

 ]]

}

DRB-ToReleaseList ::= SEQUENCE (SIZE (1..maxDRB)) OF DRB-Identity

DRB-ToReleaseList-r15 ::= SEQUENCE (SIZE (1..maxDRB-r15)) OF DRB-Identity

SRB-ToReleaseList-r15 ::= SEQUENCE (SIZE (1..2)) OF INTEGER (1..2)

MeasSubframePatternPCell-r10 ::= CHOICE {

 release NULL,

 setup MeasSubframePattern-r10

}

NeighCellsCRS-Info-r11 ::= CHOICE {

 release NULL,

 setup CRS-AssistanceInfoList-r11

}

CRS-AssistanceInfoList-r11 ::= SEQUENCE (SIZE (1..maxCellReport)) OF CRS-AssistanceInfo-r11

CRS-AssistanceInfo-r11 ::= SEQUENCE {

 physCellId-r11 PhysCellId,

 antennaPortsCount-r11 ENUMERATED {an1, an2, an4, spare1},

 mbsfn-SubframeConfigList-r11 MBSFN-SubframeConfigList,

 ...,

 [[ mbsfn-SubframeConfigList-v1430 MBSFN-SubframeConfigList-v1430 OPTIONAL -- Need ON

 ]]

}

NeighCellsCRS-Info-r13 ::= CHOICE {

 release NULL,

 setup CRS-AssistanceInfoList-r13

}

CRS-AssistanceInfoList-r13 ::= SEQUENCE (SIZE (1..maxCellReport)) OF CRS-AssistanceInfo-r13

CRS-AssistanceInfo-r13 ::= SEQUENCE {

 physCellId-r13 PhysCellId,

 antennaPortsCount-r13 ENUMERATED {an1, an2, an4, spare1},

 mbsfn-SubframeConfigList-r13 MBSFN-SubframeConfigList OPTIONAL, -- Need ON

 ...,

 [[ mbsfn-SubframeConfigList-v1430 MBSFN-SubframeConfigList-v1430 OPTIONAL -- Need ON

 ]]

}

NeighCellsCRS-Info-r15 ::= CHOICE {

 release NULL,

 setup CRS-AssistanceInfoList-r15

}

CRS-AssistanceInfoList-r15 ::= SEQUENCE (SIZE (1..maxCellReport)) OF CRS-AssistanceInfo-r15

CRS-AssistanceInfo-r15 ::= SEQUENCE {

 physCellId-r15 PhysCellId,

 crs-IntfMitigEnabled-r15 ENUMERATED {enabled} OPTIONAL -- Need ON

}

NAICS-AssistanceInfo-r12 ::= CHOICE {

 release NULL,

 setup SEQUENCE {

 neighCellsToReleaseList-r12 NeighCellsToReleaseList-r12 OPTIONAL , -- Need ON

 neighCellsToAddModList-r12 NeighCellsToAddModList-r12 OPTIONAL, -- Need ON

 servCellp-a-r12 P-a OPTIONAL -- Need ON

 }

}

NeighCellsToReleaseList-r12 ::= SEQUENCE (SIZE (1..maxNeighCell-r12)) OF PhysCellId

NeighCellsToAddModList-r12 ::= SEQUENCE (SIZE (1..maxNeighCell-r12)) OF NeighCellsInfo-r12

NeighCellsInfo-r12 ::= SEQUENCE {

 physCellId-r12 PhysCellId,

 p-b-r12 INTEGER (0..3),

 crs-PortsCount-r12 ENUMERATED {n1, n2, n4, spare},

 mbsfn-SubframeConfig-r12 MBSFN-SubframeConfigList OPTIONAL, -- Need ON

 p-aList-r12 SEQUENCE (SIZE (1..maxP-a-PerNeighCell-r12)) OF P-a,

 transmissionModeList-r12 BIT STRING (SIZE(8)),

 resAllocGranularity-r12 INTEGER (1..4),

 ...

}

P-a ::= ENUMERATED { dB-6, dB-4dot77, dB-3, dB-1dot77,

 dB0, dB1, dB2, dB3}

RLC-BearerConfig-r15 ::= CHOICE {

 release NULL,

 setup SEQUENCE {

 rlc-Config-r15 RLC-Config-r15 OPTIONAL, -- Need ON

 logicalChannelIdentityConfig-r15 CHOICE {

 logicalChannelIdentity-r15 INTEGER (1..10),

 logicalChannelIdentityExt-r15 INTEGER (32..38)

 },

 logicalChannelConfig-r15 LogicalChannelConfig OPTIONAL -- Need ON

 }

}

-- ASN1STOP

### 6.3.5 Measurement information elements

#### – *MeasResults*

The IE *MeasResults* covers measured results for intra-frequency, inter-frequency and inter- RAT mobility.

*MeasResults* information element

-- ASN1START

MeasResults ::= SEQUENCE {

 measId MeasId,

 measResultPCell SEQUENCE {

 rsrpResult RSRP-Range,

 rsrqResult RSRQ-Range

 },

 measResultNeighCells CHOICE {

 measResultListEUTRA MeasResultListEUTRA,

 measResultListUTRA MeasResultListUTRA,

 measResultListGERAN MeasResultListGERAN,

 measResultsCDMA2000 MeasResultsCDMA2000,

 ...,

 measResultNeighCellListNR-r15 MeasResultCellListNR-r15

 } OPTIONAL,

 ...,

 [[ measResultForECID-r9 MeasResultForECID-r9 OPTIONAL

 ]],

 [[ locationInfo-r10 LocationInfo-r10 OPTIONAL,

 measResultServFreqList-r10 MeasResultServFreqList-r10 OPTIONAL

 ]],

 [[ measId-v1250 MeasId-v1250 OPTIONAL,

 measResultPCell-v1250 RSRQ-Range-v1250 OPTIONAL,

 measResultCSI-RS-List-r12 MeasResultCSI-RS-List-r12 OPTIONAL

 ]],

 [[ measResultForRSSI-r13 MeasResultForRSSI-r13 OPTIONAL,

 measResultServFreqListExt-r13 MeasResultServFreqListExt-r13 OPTIONAL,

 measResultSSTD-r13 MeasResultSSTD-r13 OPTIONAL,

 measResultPCell-v1310 SEQUENCE {

 rs-sinr-Result-r13 RS-SINR-Range-r13

 } OPTIONAL,

 ul-PDCP-DelayResultList-r13 UL-PDCP-DelayResultList-r13 OPTIONAL,

 measResultListWLAN-r13 MeasResultListWLAN-r13 OPTIONAL

 ]],

 [[ measResultPCell-v1360 RSRP-Range-v1360 OPTIONAL

 ]],

 [[ measResultListCBR-r14 MeasResultListCBR-r14 OPTIONAL,

 measResultListWLAN-r14 MeasResultListWLAN-r14 OPTIONAL

 ]],

 [[ measResultServFreqListNR-r15 MeasResultServFreqListNR-r15 OPTIONAL,

 measResultCellListSFTD-r15 MeasResultCellListSFTD-r15 OPTIONAL

 ]],

 [[ logMeasResultListBT-r15 LogMeasResultListBT-r15 OPTIONAL,

 logMeasResultListWLAN-r15 LogMeasResultListWLAN-r15 OPTIONAL,

 measResultSensing-r15 MeasResultSensing-r15 OPTIONAL,

 heightUE-r15 INTEGER (-400..8880) OPTIONAL

 ]]

}

MeasResultListEUTRA ::= SEQUENCE (SIZE (1..maxCellReport)) OF MeasResultEUTRA

MeasResultEUTRA ::= SEQUENCE {

 physCellId PhysCellId,

 cgi-Info SEQUENCE {

 cellGlobalId CellGlobalIdEUTRA,

 trackingAreaCode TrackingAreaCode,

 plmn-IdentityList PLMN-IdentityList2 OPTIONAL

 } OPTIONAL,

 measResult SEQUENCE {

 rsrpResult RSRP-Range OPTIONAL,

 rsrqResult RSRQ-Range OPTIONAL,

 ...,

 [[ additionalSI-Info-r9 AdditionalSI-Info-r9 OPTIONAL

 ]],

 [[ primaryPLMN-Suitable-r12 ENUMERATED {true} OPTIONAL,

 measResult-v1250 RSRQ-Range-v1250 OPTIONAL

 ]],

 [[ rs-sinr-Result-r13 RS-SINR-Range-r13 OPTIONAL,

 cgi-Info-v1310 SEQUENCE {

 freqBandIndicator-r13 FreqBandIndicator-r11 OPTIONAL,

 multiBandInfoList-r13 MultiBandInfoList-r11 OPTIONAL,

 freqBandIndicatorPriority-r13 ENUMERATED {true} OPTIONAL

 } OPTIONAL

 ]],

 [[

 measResult-v1360 RSRP-Range-v1360 OPTIONAL

 ]],

 [[

 cgi-Info-5GC-r15 SEQUENCE (SIZE (1..maxPLMN-r11)) OF CellAccessRelatedInfo-5GC-r15 OPTIONAL

 ]]

 }

}

MeasResultListIdle-r15 ::= SEQUENCE (SIZE (1..maxIdleMeasCarriers-r15)) OF MeasResultIdle-r15

MeasResultIdle-r15 ::= SEQUENCE {

 measResultServingCell-r15 SEQUENCE {

 rsrpResult-r15 RSRP-Range,

 rsrqResult-r15 RSRQ-Range-r13

 },

 measResultNeighCells-r15 CHOICE {

 measResultIdleListEUTRA-r15 MeasResultIdleListEUTRA-r15,

 ...

 } OPTIONAL,

 ...

}

MeasResultIdleListEUTRA-r15 ::= SEQUENCE (SIZE (1..maxCellMeasIdle-r15)) OF MeasResultIdleEUTRA-r15

MeasResultIdleEUTRA-r15 ::= SEQUENCE {

 carrierFreq-r15 ARFCN-ValueEUTRA-r9,

 physCellId-r15 PhysCellId,

 measResult-r15 SEQUENCE {

 rsrpResult-r15 RSRP-Range,

 rsrqResult-r15 RSRQ-Range-r13

 },

 ...

}

MeasResultServFreqListNR-r15 ::= SEQUENCE (SIZE (1..maxServCell-r13)) OF MeasResultServFreqNR-r15

MeasResultServFreqNR-r15 ::= SEQUENCE {

 carrierFreq-r15 ARFCN-ValueNR-r15,

 measResultSCell-r15 MeasResultCellNR-r15 OPTIONAL,

 measResultBestNeighCell-r15 MeasResultCellNR-r15 OPTIONAL,

 ...

}

MeasResultCellListNR-r15::= SEQUENCE (SIZE (1..maxCellReport)) OF MeasResultCellNR-r15

MeasResultCellNR-r15 ::= SEQUENCE {

 pci-r15 PhysCellIdNR-r15,

 measResultCell-r15 MeasResultNR-r15,

 measResultRS-IndexList-r15 MeasResultSSB-IndexList-r15 OPTIONAL,

 ...,

 [[ cgi-Info-r15 CGI-InfoNR-r15 OPTIONAL

 ]]

}

MeasResultNR-r15 ::= SEQUENCE {

 rsrpResult-r15 RSRP-RangeNR-r15 OPTIONAL,

 rsrqResult-r15 RSRQ-RangeNR-r15 OPTIONAL,

 rs-sinr-Result-r15 RS-SINR-RangeNR-r15 OPTIONAL,

 ...

}

MeasResultSSB-IndexList-r15::= SEQUENCE (SIZE (1..maxRS-IndexReport-r15)) OF MeasResultSSB-Index-r15

MeasResultSSB-Index-r15 ::= SEQUENCE {

 ssb-Index-r15 RS-IndexNR-r15,

 measResultSSB-Index-r15 MeasResultNR-r15 OPTIONAL,

 ...

}

MeasResultServFreqList-r10 ::= SEQUENCE (SIZE (1..maxServCell-r10)) OF MeasResultServFreq-r10

MeasResultServFreqListExt-r13 ::= SEQUENCE (SIZE (1..maxServCell-r13)) OF MeasResultServFreq-r13

MeasResultServFreq-r10 ::= SEQUENCE {

 servFreqId-r10 ServCellIndex-r10,

 measResultSCell-r10 SEQUENCE {

 rsrpResultSCell-r10 RSRP-Range,

 rsrqResultSCell-r10 RSRQ-Range

 } OPTIONAL,

 measResultBestNeighCell-r10 SEQUENCE {

 physCellId-r10 PhysCellId,

 rsrpResultNCell-r10 RSRP-Range,

 rsrqResultNCell-r10 RSRQ-Range

 } OPTIONAL,

 ...,

 [[ measResultSCell-v1250 RSRQ-Range-v1250 OPTIONAL,

 measResultBestNeighCell-v1250 RSRQ-Range-v1250 OPTIONAL

 ]],

 [[ measResultSCell-v1310 SEQUENCE {

 rs-sinr-Result-r13 RS-SINR-Range-r13

 } OPTIONAL,

 measResultBestNeighCell-v1310 SEQUENCE {

 rs-sinr-Result-r13 RS-SINR-Range-r13

 } OPTIONAL

 ]]

}

MeasResultServFreq-r13 ::= SEQUENCE {

 servFreqId-r13 ServCellIndex-r13,

 measResultSCell-r13 SEQUENCE {

 rsrpResultSCell-r13 RSRP-Range,

 rsrqResultSCell-r13 RSRQ-Range-r13,

 rs-sinr-Result-r13 RS-SINR-Range-r13 OPTIONAL

 } OPTIONAL,

 measResultBestNeighCell-r13 SEQUENCE {

 physCellId-r13 PhysCellId,

 rsrpResultNCell-r13 RSRP-Range,

 rsrqResultNCell-r13 RSRQ-Range-r13,

 rs-sinr-Result-r13 RS-SINR-Range-r13 OPTIONAL

 } OPTIONAL,

 ...,

 [[ measResultBestNeighCell-v1360 SEQUENCE {

 rsrpResultNCell-v1360 RSRP-Range-v1360

 } OPTIONAL

 ]]

}

MeasResultCSI-RS-List-r12 ::= SEQUENCE (SIZE (1..maxCellReport)) OF MeasResultCSI-RS-r12

MeasResultCSI-RS-r12 ::= SEQUENCE {

 measCSI-RS-Id-r12 MeasCSI-RS-Id-r12,

 csi-RSRP-Result-r12 CSI-RSRP-Range-r12,

 ...

}

MeasResultListUTRA ::= SEQUENCE (SIZE (1..maxCellReport)) OF MeasResultUTRA

MeasResultUTRA ::= SEQUENCE {

 physCellId CHOICE {

 fdd PhysCellIdUTRA-FDD,

 tdd PhysCellIdUTRA-TDD

 },

 cgi-Info SEQUENCE {

 cellGlobalId CellGlobalIdUTRA,

 locationAreaCode BIT STRING (SIZE (16)) OPTIONAL,

 routingAreaCode BIT STRING (SIZE (8)) OPTIONAL,

 plmn-IdentityList PLMN-IdentityList2 OPTIONAL

 } OPTIONAL,

 measResult SEQUENCE {

 utra-RSCP INTEGER (-5..91) OPTIONAL,

 utra-EcN0 INTEGER (0..49) OPTIONAL,

 ...,

 [[ additionalSI-Info-r9 AdditionalSI-Info-r9 OPTIONAL

 ]],

 [[ primaryPLMN-Suitable-r12 ENUMERATED {true} OPTIONAL

 ]]

 }

}

MeasResultListGERAN ::= SEQUENCE (SIZE (1..maxCellReport)) OF MeasResultGERAN

MeasResultGERAN ::= SEQUENCE {

 carrierFreq CarrierFreqGERAN,

 physCellId PhysCellIdGERAN,

 cgi-Info SEQUENCE {

 cellGlobalId CellGlobalIdGERAN,

 routingAreaCode BIT STRING (SIZE (8)) OPTIONAL

 } OPTIONAL,

 measResult SEQUENCE {

 rssi INTEGER (0..63),

 ...

 }

}

MeasResultsCDMA2000 ::= SEQUENCE {

 preRegistrationStatusHRPD BOOLEAN,

 measResultListCDMA2000 MeasResultListCDMA2000

}

MeasResultListCDMA2000 ::= SEQUENCE (SIZE (1..maxCellReport)) OF MeasResultCDMA2000

MeasResultCDMA2000 ::= SEQUENCE {

 physCellId PhysCellIdCDMA2000,

 cgi-Info CellGlobalIdCDMA2000 OPTIONAL,

 measResult SEQUENCE {

 pilotPnPhase INTEGER (0..32767) OPTIONAL,

 pilotStrength INTEGER (0..63),

 ...

 }

}

MeasResultListWLAN-r13 ::= SEQUENCE (SIZE (1..maxCellReport)) OF MeasResultWLAN-r13

MeasResultListWLAN-r14 ::= SEQUENCE (SIZE (1..maxWLAN-Id-Report-r14)) OF MeasResultWLAN-r13

MeasResultWLAN-r13 ::= SEQUENCE {

 wlan-Identifiers-r13 WLAN-Identifiers-r12,

 carrierInfoWLAN-r13 WLAN-CarrierInfo-r13 OPTIONAL,

 bandWLAN-r13 WLAN-BandIndicator-r13 OPTIONAL,

 rssiWLAN-r13 WLAN-RSSI-Range-r13,

 availableAdmissionCapacityWLAN-r13 INTEGER (0..31250) OPTIONAL,

 backhaulDL-BandwidthWLAN-r13 WLAN-backhaulRate-r12 OPTIONAL,

 backhaulUL-BandwidthWLAN-r13 WLAN-backhaulRate-r12 OPTIONAL,

 channelUtilizationWLAN-r13 INTEGER (0..255) OPTIONAL,

 stationCountWLAN-r13 INTEGER (0..65535) OPTIONAL,

 connectedWLAN-r13 ENUMERATED {true} OPTIONAL,

 ...

}

MeasResultListCBR-r14 ::= SEQUENCE (SIZE (1..maxCBR-Report-r14)) OF MeasResultCBR-r14

MeasResultCBR-r14 ::= SEQUENCE {

 poolIdentity-r14 SL-V2X-TxPoolReportIdentity-r14,

 cbr-PSSCH-r14 SL-CBR-r14,

 cbr-PSCCH-r14 SL-CBR-r14 OPTIONAL

}

MeasResultSensing-r15 ::= SEQUENCE {

 sl-SubframeRef-r15 INTEGER (0..10239),

 sensingResult-r15 SEQUENCE (SIZE (0..400)) OF SensingResult-r15

}

SensingResult-r15 ::= SEQUENCE {

 resourceIndex-r15 INTEGER (1..2000)

}

MeasResultForECID-r9 ::= SEQUENCE {

 ue-RxTxTimeDiffResult-r9 INTEGER (0..4095),

 currentSFN-r9 BIT STRING (SIZE (10))

}

PLMN-IdentityList2 ::= SEQUENCE (SIZE (1..5)) OF PLMN-Identity

AdditionalSI-Info-r9 ::= SEQUENCE {

 csg-MemberStatus-r9 ENUMERATED {member} OPTIONAL,

 csg-Identity-r9 CSG-Identity OPTIONAL

}

MeasResultForRSSI-r13 ::= SEQUENCE {

 rssi-Result-r13 RSSI-Range-r13,

 channelOccupancy-r13 INTEGER (0..100),

 ...

}

UL-PDCP-DelayResultList-r13 ::= SEQUENCE (SIZE (1..maxQCI-r13)) OF UL-PDCP-DelayResult-r13

UL-PDCP-DelayResult-r13 ::= SEQUENCE {

 qci-Id-r13 ENUMERATED {qci1, qci2, qci3, qci4, spare4, spare3, spare2, spare1},

 excessDelay-r13 INTEGER (0..31),

 ...

}

CGI-InfoNR-r15 ::= SEQUENCE {

 plmn-IdentityInfoList-r15 PLMN-IdentityInfoListNR-r15 OPTIONAL,

 frequencyBandList-r15 MultiFrequencyBandListNR-r15 OPTIONAL,

 noSIB1-r15 SEQUENCE {

 ssb-SubcarrierOffset-r15 INTEGER (0..15),

 pdcch-ConfigSIB1-r15 INTEGER (0..255)

 } OPTIONAL,

 ...

}

CellIdentityNR-r15 ::= BIT STRING (SIZE (36))

PLMN-IdentityListNR-r15 ::= SEQUENCE (SIZE (1.. maxPLMN-NR-r15)) OF PLMN-Identity

PLMN-IdentityInfoListNR-r15 ::= SEQUENCE (SIZE (1..maxPLMN-NR-r15)) OF PLMN-IdentityInfoNR-r15

PLMN-IdentityInfoNR-r15 ::= SEQUENCE {

 plmn-IdentityList-r15 PLMN-IdentityListNR-r15,

 trackingAreaCode-r15 TrackingAreaCodeNR-r15 OPTIONAL,

 ran-AreaCode-r15 RAN-AreaCode-r15 OPTIONAL,

 cellIdentity-r15 CellIdentityNR-r15

}

TrackingAreaCodeNR-r15 ::= BIT STRING (SIZE (24))

-- ASN1STOP

#### – *ReportConfigEUTRA*

The IE *ReportConfigEUTRA* specifies criteria for triggering of an E‑UTRA measurement reporting event. The E‑UTRA measurement reporting events concerning CRS are labelled A*N* with *N* equal to 1, 2 and so on.

Event A1: Serving becomes better than absolute threshold;

Event A2: Serving becomes worse than absolute threshold;

Event A3: Neighbour becomes amount of offset better than PCell/ PSCell;

Event A4: Neighbour becomes better than absolute threshold;

Event A5: PCell/ PSCell becomes worse than absolute threshold1 AND Neighbour becomes better than another absolute threshold2;

Event A6: Neighbour becomes amount of offset better than SCell.

The E‑UTRA measurement reporting events concerning CSI-RS are labelled C*N* with *N* equal to 1 and 2.

Event C1: CSI-RS resource becomes better than absolute threshold;

Event C2: CSI-RS resource becomes amount of offset better than reference CSI-RS resource.

The E-UTRA measurement reporting events concerning CBR are labelled VN with N equal to 1 and 2.

Event V1: CBR becomes larger than absolute threshold;

Event V2: CBR becomes smaller than absolute threshold.

The E-UTRA reporting events concerning Aerial UE height are labelled H*N* with *N* equal to 1 and 2.

Event H1: Aerial UE height becomes higher than absolute threshold;

Event H2: Aerial UE height becomes lower than absolute threshold.

*ReportConfigEUTRA* information element

-- ASN1START

ReportConfigEUTRA ::= SEQUENCE {

 triggerType CHOICE {

 event SEQUENCE {

 eventId CHOICE {

 eventA1 SEQUENCE {

 a1-Threshold ThresholdEUTRA

 },

 eventA2 SEQUENCE {

 a2-Threshold ThresholdEUTRA

 },

 eventA3 SEQUENCE {

 a3-Offset INTEGER (-30..30),

 reportOnLeave BOOLEAN

 },

 eventA4 SEQUENCE {

 a4-Threshold ThresholdEUTRA

 },

 eventA5 SEQUENCE {

 a5-Threshold1 ThresholdEUTRA,

 a5-Threshold2 ThresholdEUTRA

 },

 ...,

 eventA6-r10 SEQUENCE {

 a6-Offset-r10 INTEGER (-30..30),

 a6-ReportOnLeave-r10 BOOLEAN

 },

 eventC1-r12 SEQUENCE {

 c1-Threshold-r12 ThresholdEUTRA-v1250,

 c1-ReportOnLeave-r12 BOOLEAN

 },

 eventC2-r12 SEQUENCE {

 c2-RefCSI-RS-r12 MeasCSI-RS-Id-r12,

 c2-Offset-r12 INTEGER (-30..30),

 c2-ReportOnLeave-r12 BOOLEAN

 },

 eventV1-r14 SEQUENCE {

 v1-Threshold-r14 SL-CBR-r14

 },

 eventV2-r14 SEQUENCE {

 v2-Threshold-r14 SL-CBR-r14

 },

 eventH1-r15 SEQUENCE {

 h1-ThresholdOffset-r15 INTEGER (0..300),

 h1-Hysteresis-r15 INTEGER (1..16)

 },

 eventH2-r15 SEQUENCE {

 h2-ThresholdOffset-r15 INTEGER (0..300),

 h2-Hysteresis-r15 INTEGER (1..16)

 }

 },

 hysteresis Hysteresis,

 timeToTrigger TimeToTrigger

 },

 periodical SEQUENCE {

 purpose ENUMERATED {

 reportStrongestCells, reportCGI}

 }

 },

 triggerQuantity ENUMERATED {rsrp, rsrq},

 reportQuantity ENUMERATED {sameAsTriggerQuantity, both},

 maxReportCells INTEGER (1..maxCellReport),

 reportInterval ReportInterval,

 reportAmount ENUMERATED {r1, r2, r4, r8, r16, r32, r64, infinity},

 ...,

 [[ si-RequestForHO-r9 ENUMERATED {setup} OPTIONAL, -- Cond reportCGI

 ue-RxTxTimeDiffPeriodical-r9 ENUMERATED {setup} OPTIONAL -- Need OR

 ]],

 [[ includeLocationInfo-r10 ENUMERATED {true} OPTIONAL, -- Need OR

 reportAddNeighMeas-r10 ENUMERATED {setup} OPTIONAL -- Need OR

 ]],

 [[ alternativeTimeToTrigger-r12 CHOICE {

 release NULL,

 setup TimeToTrigger

 } OPTIONAL, -- Need ON

 useT312-r12 BOOLEAN OPTIONAL, -- Need ON

 usePSCell-r12 BOOLEAN OPTIONAL, -- Need ON

 aN-Threshold1-v1250 RSRQ-RangeConfig-r12 OPTIONAL, -- Need ON

 a5-Threshold2-v1250 RSRQ-RangeConfig-r12 OPTIONAL, -- Need ON

 reportStrongestCSI-RSs-r12 BOOLEAN OPTIONAL, -- Need ON

 reportCRS-Meas-r12 BOOLEAN OPTIONAL, -- Need ON

 triggerQuantityCSI-RS-r12 BOOLEAN OPTIONAL -- Need ON

 ]],

 [[ reportSSTD-Meas-r13 BOOLEAN OPTIONAL, -- Need ON

 rs-sinr-Config-r13 CHOICE {

 release NULL,

 setup SEQUENCE {

 triggerQuantity-v1310 ENUMERATED {sinr} OPTIONAL, -- Need ON

 aN-Threshold1-r13 RS-SINR-Range-r13 OPTIONAL, -- Need ON

 a5-Threshold2-r13 RS-SINR-Range-r13 OPTIONAL, -- Need ON

 reportQuantity-v1310 ENUMERATED {rsrpANDsinr, rsrqANDsinr, all}

 }

 } OPTIONAL, -- Need ON

 useWhiteCellList-r13 BOOLEAN OPTIONAL, -- Need ON

 measRSSI-ReportConfig-r13 MeasRSSI-ReportConfig-r13 OPTIONAL, -- Need ON

 includeMultiBandInfo-r13 ENUMERATED {true} OPTIONAL, -- Cond reportCGI

 ul-DelayConfig-r13 UL-DelayConfig-r13 OPTIONAL -- Need ON

 ]],

 [[ ue-RxTxTimeDiffPeriodicalTDD-r13 BOOLEAN OPTIONAL -- Need ON

 ]],

 [[

 purpose-v1430 ENUMERATED {reportLocation, sidelink, spare2, spare1}

 OPTIONAL -- Need ON

 ]],

 [[

 maxReportRS-Index-r15 INTEGER (0..maxRS-IndexReport-r15) OPTIONAL -- Need ON

 ]],

 [[ includeBT-Meas-r15 BT-NameListConfig-r15 OPTIONAL, -- Need ON

 includeWLAN-Meas-r15 WLAN-NameListConfig-r15 OPTIONAL, -- Need ON

 purpose-r15 ENUMERATED {sensing} OPTIONAL, -- Need ON

 numberOfTriggeringCells-r15 INTEGER (2..maxCellReport) OPTIONAL, -- Cond a3a4a5

 a4-a5-ReportOnLeave-r15 BOOLEAN OPTIONAL -- Cond a4a5

 ]]

}

RSRQ-RangeConfig-r12 ::= CHOICE {

 release NULL,

 setup RSRQ-Range-v1250

}

ThresholdEUTRA ::= CHOICE{

 threshold-RSRP RSRP-Range,

 threshold-RSRQ RSRQ-Range

}

ThresholdEUTRA-v1250 ::= CSI-RSRP-Range-r12

MeasRSSI-ReportConfig-r13 ::= SEQUENCE {

 channelOccupancyThreshold-r13 RSSI-Range-r13 OPTIONAL -- Need OR

}

-- ASN1STOP

### 6.3.8 Sidelink information elements

#### – *SL-V2X-ConfigDedicated*

The IE *SL-V2X-ConfigDedicated* specifies the dedicated configuration information for V2X sidelink communication.

*SL-V2X-ConfigDedicated* information element

-- ASN1START

SL-V2X-ConfigDedicated-r14 ::= SEQUENCE {

 commTxResources-r14 CHOICE {

 release NULL,

 setup CHOICE {

 scheduled-r14 SEQUENCE {

 sl-V-RNTI-r14 C-RNTI,

 mac-MainConfig-r14 MAC-MainConfigSL-r12,

 v2x-SchedulingPool-r14 SL-CommResourcePoolV2X-r14 OPTIONAL, -- Need ON

 mcs-r14 INTEGER (0..31) OPTIONAL, -- Need OR

 logicalChGroupInfoList-r14 LogicalChGroupInfoList-r13

 },

 ue-Selected-r14 SEQUENCE {

 -- Pool for normal usage

 v2x-CommTxPoolNormalDedicated-r14 SEQUENCE {

 poolToReleaseList-r14 SL-TxPoolToReleaseListV2X-r14 OPTIONAL, -- Need ON

 poolToAddModList-r14 SL-TxPoolToAddModListV2X-r14 OPTIONAL, -- Need ON

 v2x-CommTxPoolSensingConfig-r14 SL-CommTxPoolSensingConfig-r14

 OPTIONAL -- Need ON

 }

 }

 }

 } OPTIONAL, -- Need ON

 v2x-InterFreqInfoList-r14 SL-InterFreqInfoListV2X-r14 OPTIONAL, -- Need ON

 thresSL-TxPrioritization-r14 SL-Priority-r13 OPTIONAL, -- Need OR

 typeTxSync-r14 SL-TypeTxSync-r14 OPTIONAL, -- Need OR

 cbr-DedicatedTxConfigList-r14 SL-CBR-CommonTxConfigList-r14 OPTIONAL, -- Need OR

 ...,

 [[ commTxResources-v1530 CHOICE {

 release NULL,

 setup CHOICE {

 scheduled-v1530 SEQUENCE {

 logicalChGroupInfoList-v1530 LogicalChGroupInfoList-v1530 OPTIONAL, -- Need OR

 mcs-r15 INTEGER (0..31) OPTIONAL -- Need OR

 },

 ue-Selected-v1530 SEQUENCE {

 v2x-FreqSelectionConfigList-r15 SL-V2X-FreqSelectionConfigList-r15 OPTIONAL --Need OR

 }

 }

 } OPTIONAL, -- Need ON

 v2x-PacketDuplicationConfig-r15 SL-V2X-PacketDuplicationConfig-r15 OPTIONAL, -- Need OR

 syncFreqList-r15 SL-V2X-SyncFreqList-r15 OPTIONAL, -- Need OR

 slss-TxMultiFreq-r15 ENUMERATED {true} OPTIONAL -- Need OR

 ]],

 [[

 slss-TxDisabled-r15 ENUMERATED {true} OPTIONAL -- Need OR

 ]]

}

LogicalChGroupInfoList-v1530 ::= SEQUENCE (SIZE (1..maxLCG-r13)) OF SL-ReliabilityList-r15

SL-TxPoolToAddModListV2X-r14 ::= SEQUENCE (SIZE (1.. maxSL-V2X-TxPool-r14)) OF SL-TxPoolToAddMod-r14

SL-TxPoolToAddMod-r14 ::= SEQUENCE {

 poolIdentity-r14 SL-V2X-TxPoolIdentity-r14,

 pool-r14 SL-CommResourcePoolV2X-r14

}

SL-TxPoolToReleaseListV2X-r14 ::= SEQUENCE (SIZE (1.. maxSL-V2X-TxPool-r14)) OF SL-V2X-TxPoolIdentity-r14

-- ASN1STOP

| *SL-V2X-ConfigDedicated* field descriptions |
| --- |
| ***cbr-DedicatedTxConfigList***Indicates the dedicated list of CBR range division and the list of PSCCH TX configurations available to configure congestion control to the UE for V2X sidelink communication. |
| ***logicalChGroupInfoList***Indicates for each logical channel group the list of associated priorities and reliabilities, used as specified in TS 36.321 [6], in order of increasing logical channel group identity. If E-UTRAN includes *logicalChGroupInfoList-v1530*, it includes the same number of entries, and listed in the same order, as in*logicalChGroupInfoList–r14*, anda logical channel group identity of the same entry in *logicalChGroupInfoList-r14* and in *logicalChGroupInfo-v1530* is associated with both the priorities (as in *logicalChGroupInfoList-r14)* and reliabilities (as in *logicalChGroupInfoList-v1530)* of that entry. If *logicalChGroupInfoList-v1530* is not included, this field indicates for each logical channel group the list of associated priorities. |
| ***mcs***Indicates the MCS as defined in TS 36.213 [23], clause 14.2.1. If not configured, the selection of MCS is up to UE implementation. If included, *mcs-r14* corresponds to the MCS table in Table 8.6.1-1 with 64QAM indices overridden by 16QAM used for transmission on PSSCH. If included, *mcs-r15* corresponds to both the MCS table in Table 8.6.1-1 in TS 36.213 [23] and the MCS table supporting 64QAM in Table 14.1.1-2 in TS 36.213 [23] used for transmission on PSSCH. If this field is present, E-UTRAN shall configure both *mcs-r14* and *mcs-r15*. |
| ***scheduled***Indicates the configuration for the case E-UTRAN schedules the transmission resources based on sidelink specific BSR from the UE. |
| ***sl-V-RNTI***Indicates the RNTI used for DCI dynamically scheduling sidelink resources for V2X sidelink communication. |
| ***slss-TxDisabled***Value TRUE indicates that the primary carrier, even though equipped with synchronisation resources, cannot be used as a synchronisation carrier frequency to transmit SLSS or PSBCH. |
| ***thresSL-TxPrioritization***Indicates the threshold used to determine whether SL V2X transmission is prioritized over uplink transmission if they overlap in time (see TS 36.321 [6]). This value shall overwrite *thresSL-TxPrioritization* configured in *SIB21* or *SL-V2X-Preconfiguration* if any. |
| ***typeTxSync***Indicates the prioritized synchronization type (i.e. eNB or GNSS) for performing V2X sidelink communication on PCell.  |
| ***ue-Selected***Indicates the configuration for the case the UE selects the transmission resources from a pool of resources configured by E-UTRAN.  |
| ***v2x-InterFreqInfoList***Indicates synchronization and resource allocation configurations of other carrier frequencies than the serving carrier frequency for V2X sidelink communication. For inter-carrier scheduled resource allocation, CIF=1 in DCI-5A corresponds to the first entry in this frequency list, CIF=2 corresponds to the second entry, and so on (see TS 36.213 [23]). CIF=0 in DCI-5A corresponds to the frequency where the DCI is received. |
| ***v2x-SchedulingPool***Indicates a pool of resources when E-UTRAN schedules Tx resources for V2X sidelink communications. |

#### 6.7.3.6 NB-IoT Other information elements

#### – *UE-Capability-NB*

The IE *UE-Capability-NB* is used to convey the NB-IoT UE Radio Access Capability Parameters, see TS 36.306 [5]. The IE *UE-Capability-NB* is transferred in NB-IoT only.

*UE-Capability-NB* information element

-- ASN1START

UE-Capability-NB-r13 ::= SEQUENCE {

 accessStratumRelease-r13 AccessStratumRelease-NB-r13,

 ue-Category-NB-r13 ENUMERATED {nb1} OPTIONAL,

 multipleDRB-r13 ENUMERATED {supported} OPTIONAL,

 pdcp-Parameters-r13 PDCP-Parameters-NB-r13 OPTIONAL,

 phyLayerParameters-r13 PhyLayerParameters-NB-r13,

 rf-Parameters-r13 RF-Parameters-NB-r13,

 dummy SEQUENCE {} OPTIONAL

}

UE-Capability-NB-Ext-r14-IEs ::= SEQUENCE {

 ue-Category-NB-r14 ENUMERATED {nb2} OPTIONAL,

 mac-Parameters-r14 MAC-Parameters-NB-r14 OPTIONAL,

 phyLayerParameters-v1430 PhyLayerParameters-NB-v1430 OPTIONAL,

 rf-Parameters-v1430 RF-Parameters-NB-v1430,

 nonCriticalExtension UE-Capability-NB-v1440-IEs OPTIONAL

}

UE-Capability-NB-v1440-IEs ::= SEQUENCE {

 phyLayerParameters-v1440 PhyLayerParameters-NB-v1440 OPTIONAL,

 nonCriticalExtension UE-Capability-NB-v14x0-IEs OPTIONAL

}

UE-Capability-NB-v14x0-IEs ::= SEQUENCE {

-- Following field is only to be used for late REL-14 extensions

 lateNonCriticalExtension OCTET STRING OPTIONAL,

 nonCriticalExtension UE-Capability-NB-v1530-IEs OPTIONAL

}

UE-Capability-NB-v1530-IEs ::= SEQUENCE {

 earlyData-UP-r15 ENUMERATED {supported} OPTIONAL,

 rlc-Parameters-r15 RLC-Parameters-NB-r15,

 mac-Parameters-v1530 MAC-Parameters-NB-v1530,

 phyLayerParameters-v1530 PhyLayerParameters-NB-v1530 OPTIONAL,

 tdd-UE-Capability-r15 TDD-UE-Capability-NB-r15 OPTIONAL, nonCriticalExtension UE-Capability-NB-v15x0-IEs OPTIONAL

}

UE-Capability-NB-v15x0-IEs ::= SEQUENCE {

-- Following field is only to be used for late REL-15 extensions

 lateNonCriticalExtension OCTET STRING OPTIONAL,

 nonCriticalExtension SEQUENCE {} OPTIONAL

}

TDD-UE-Capability-NB-r15 ::= SEQUENCE {

 ue-Category-NB-r15 ENUMERATED {nb2} OPTIONAL,

 phyLayerParametersRel13-r15 PhyLayerParameters-NB-r13 OPTIONAL,

 phyLayerParametersRel14-r15 PhyLayerParameters-NB-v1430 OPTIONAL,

 phyLayerParameters-v1530 PhyLayerParameters-NB-v1530 OPTIONAL,

 ...

}

AccessStratumRelease-NB-r13 ::= ENUMERATED {rel13, rel14, rel15, spare5, spare4, spare3, spare2, spare1, ...}

PDCP-Parameters-NB-r13 ::= SEQUENCE {

 supportedROHC-Profiles-r13 SEQUENCE {

 profile0x0002 BOOLEAN,

 profile0x0003 BOOLEAN,

 profile0x0004 BOOLEAN,

 profile0x0006 BOOLEAN,

 profile0x0102 BOOLEAN,

 profile0x0103 BOOLEAN,

 profile0x0104 BOOLEAN

 },

 maxNumberROHC-ContextSessions-r13 ENUMERATED {cs2, cs4, cs8, cs12} DEFAULT cs2,

 ...

}

RLC-Parameters-NB-r15 ::= SEQUENCE {

 rlc-UM-r15 ENUMERATED {supported} OPTIONAL

}

MAC-Parameters-NB-r14 ::= SEQUENCE {

 dataInactMon-r14 ENUMERATED {supported} OPTIONAL,

 rai-Support-r14 ENUMERATED {supported} OPTIONAL

}

MAC-Parameters-NB-v1530 ::= SEQUENCE {

 sr-SPS-BSR-r15 ENUMERATED {supported} OPTIONAL

}

PhyLayerParameters-NB-r13 ::= SEQUENCE {

 multiTone-r13 ENUMERATED {supported} OPTIONAL,

 multiCarrier-r13 ENUMERATED {supported} OPTIONAL

 }

PhyLayerParameters-NB-v1430 ::= SEQUENCE {

 multiCarrier-NPRACH-r14 ENUMERATED {supported} OPTIONAL,

 twoHARQ-Processes-r14 ENUMERATED {supported} OPTIONAL

}

PhyLayerParameters-NB-v1440 ::= SEQUENCE {

 interferenceRandomisation-r14 ENUMERATED {supported} OPTIONAL

}

PhyLayerParameters-NB-v1530 ::= SEQUENCE {

 mixedOperationMode-r15 ENUMERATED {supported} OPTIONAL,

 sr-WithHARQ-ACK-r15 ENUMERATED {supported} OPTIONAL,

 sr-WithoutHARQ-ACK-r15 ENUMERATED {supported} OPTIONAL,

 nprach-Format2-r15 ENUMERATED {supported} OPTIONAL,

 additionalTransmissionSIB1-r15 ENUMERATED {supported} OPTIONAL,

 npusch-3dot75kHz-SCS-TDD-r15 ENUMERATED {supported} OPTIONAL

}

RF-Parameters-NB-r13 ::= SEQUENCE {

 supportedBandList-r13 SupportedBandList-NB-r13,

 multiNS-Pmax-r13 ENUMERATED {supported} OPTIONAL

}

RF-Parameters-NB-v1430 ::= SEQUENCE {

 powerClassNB-14dBm-r14 ENUMERATED {supported} OPTIONAL

}

SupportedBandList-NB-r13 ::= SEQUENCE (SIZE (1..maxBands)) OF SupportedBand-NB-r13

SupportedBand-NB-r13 ::= SEQUENCE {

 band-r13 FreqBandIndicator-NB-r13,

 powerClassNB-20dBm-r13 ENUMERATED {supported} OPTIONAL

}

-- ASN1STOP

*End of changes*