<start>  
countercheck-ies  
drb-CountMSB-InfoList  
Indicates the MSBs of the COUNT values of the DRBs.  
<endl>

<start>  
drb-countmsb-info  
countMSB-Downlink  
Indicates the value of 25 MSBs from RX\_NEXT – 1 (specified in TS 38.323 [5]) associated to this DRB.  
<endl>  
  
  
<start>  
drb-countmsb-info  
countMSB-Uplink  
Indicates the value of 25 MSBs from TX\_NEXT – 1 (specified in TS 38.323 [5]) associated to this DRB.  
<endl>

<start>  
countercheckresponse-ies  
drb-CountInfoList  
Indicates the COUNT values of the DRBs.  
<endl>

<start>  
drb-countinfo  
count-Downlink  
Indicates the value of RX\_NEXT – 1 (specified in TS 38.323 [5]) associated to this DRB.  
<endl>  
  
  
<start>  
drb-countinfo  
count-Uplink  
Indicates the value of TX\_NEXT – 1 (specified in TS 38.323 [5]) associated to this DRB.  
<endl>

<start>  
dedicatedsibrequest  
requestedSIB-List  
Contains a list of SIB(s) the UE requests while in RRC\_CONNECTED.  
<endl>  
  
  
<start>  
dedicatedsibrequest  
requestedPosSIB-List  
Contains a list of posSIB(s) the UE requests while in RRC\_CONNECTED.  
<endl>

<start>  
possib-reqinfo  
gnss-id  
The presence of this field indicates that the request positioning SIB type is for a specific GNSS. Indicates a specific GNSS (see also TS 37.355 [49])  
<endl>  
  
  
<start>  
possib-reqinfo  
sbas-id  
The presence of this field indicates that the request positioning SIB type is for a specific SBAS. Indicates a specific SBAS (see also TS 37.355 [49]).  
<endl>

<start>  
dldedicatedmessagesegment  
segmentNumber  
Identifies the sequence number of a segment within the encoded DL DCCH message. The network transmits the segments with continuously increasing segmentNumber order so that the UE's RRC layer may expect to obtain them from lower layers in the correct order. Hence, the UE is not required to perform segment re-ordering on RRC level.  
<endl>  
  
  
<start>  
dldedicatedmessagesegment  
rrc-MessageSegmentContainer  
Includes a segment of the encoded DL DCCH message. The size of the included segment in this container should be small enough so the resulting encoded RRC message PDU is less than or equal to the PDCP SDU size limit.  
<endl>  
  
  
<start>  
dldedicatedmessagesegment  
rrc-MessageSegmentType  
Indicates whether the included DL DCCH message segment is the last segment of the message or not.  
<endl>

<start>  
dlinformationtransfer  
rxTxTimeDiff-gNB  
Indicates the Rx-Tx time difference measurement at the gNB (see clause 5.2.3, TS 38.215 [9]). Upon receiving this field, the UE calculates the propagation delay based on the RTT-based PDC mechanism method as described in TS 38.300 [2]. The network does not configure this field, if the UE is configured with ta-PDC with value activate.  
<endl>  
  
  
<start>  
dlinformationtransfer  
sib9Fallback  
Indicates that the UE fallbacks to receive referenceTimeInfo in SIB9.  
<endl>  
  
  
<start>  
dlinformationtransfer  
ta-PDC  
Indicates whether the UE-side TA-based propagation delay compensation (PDC) is activated or de-activated. The network does not configure this field with activate, if the field rxTxTimeDiff-gNB is configured.  
<endl>

<start>  
dlinformationtransfermrdc  
dl-DCCH-MessageNR  
Includes the DL-DCCH-Message. In this version of the specification, the field is only used to transfer the NR RRCReconfiguration, RRCRelease, and MobilityFromNRCommand messages.  
<endl>  
  
  
<start>  
dlinformationtransfermrdc  
dl-DCCH-MessageEUTRA  
Includes the DL-DCCH-Message. In this version of the specification, the field is only used to transfer the E-UTRA RRCConnectionReconfiguration, RRCConnectionRelease, and MobilityFromEUTRACommand messages as specified in TS 36.331 [10].  
<endl>

<start>  
iabotherinformation-ies  
iab-IPv4-AddressNumReq  
This field is used to request the numbers of IPv4 address per specific usage. The specific usages include F1-C traffic, F1-U traffic, non-F1 traffic and all traffic.  
<endl>  
  
  
<start>  
iabotherinformation-ies  
iab-IPv4-AddressReport  
This field is used to report the IPv4 address per specific usage assigned by OAM for IAB-DU. The specific usages include F1-C traffic, F1-U traffic, non-F1 traffic and all traffic.  
<endl>  
  
  
<start>  
iabotherinformation-ies  
iab-IPv6-AddressNumReq  
This field is used to request the numbers of IPv6 address per specific usage. The specific usages include F1-C traffic, F1-U traffic, non-F1 traffic and all traffic.  
<endl>  
  
  
<start>  
iabotherinformation-ies  
iab-IPv6-AddressPrefixReq  
This field is used to request the prefix of IPv6 address per specific usage. The specific usages include F1-C traffic, F1-U traffic, non-F1 traffic and all traffic.  
<endl>  
  
  
<start>  
iabotherinformation-ies  
iab-IPv6-AddressReport  
This field is used to report the IPv6 address per specific usage assigned by OAM for IAB-DU. The specific usages include F1-C traffic, F1-U traffic, non-F1 traffic and all traffic.  
<endl>  
  
  
<start>  
iabotherinformation-ies  
iab-IPv6-PrefixReport  
This field is used to report the prefix of IPv6 address per specific usage assigned by OAM for IAB-DU. The specific usages include F1-C traffic, F1-U traffic, non-F1 traffic and all traffic.  
<endl>

<start>  
iab-ip-addressnumreq-ies  
all-Traffic-NumReq  
This field is used to request the numbers of IP address for all traffic.  
<endl>  
  
  
<start>  
iab-ip-addressnumreq-ies  
f1-C-Traffic-NumReq  
This field is used to request the numbers of IP address for F1-C traffic.  
<endl>  
  
  
<start>  
iab-ip-addressnumreq-ies  
f1-U-Traffic-NumReq  
This field is used to request the numbers of IP address for F1-U traffic.  
<endl>  
  
  
<start>  
iab-ip-addressnumreq-ies  
non-F1-Traffic-NumReq  
This field is used to request the numbers of IP address for non-F1 traffic.  
<endl>

<start>  
iab-ip-addressprefixreq-ies  
all-Traffic-PrefixReq  
This field is used to request the IPv6 address prefix for all traffic. The length of allocated IPv6 prefix is fixed to 64.  
<endl>  
  
  
<start>  
iab-ip-addressprefixreq-ies  
f1-C-Traffic-PrefixReq  
This field is used to request the IPv6 address prefix for F1-C traffic. The length of allocated IPv6 prefix is fixed to 64.  
<endl>  
  
  
<start>  
iab-ip-addressprefixreq-ies  
f1-U-Traffic-PrefixReq  
This field is used to request the IPv6 address prefix for F1-U traffic. The length of allocated IPv6 prefix is fixed to 64.  
<endl>  
  
  
<start>  
iab-ip-addressprefixreq-ies  
non-F1-Traffic-PrefixReq  
This field is used to request the IPv6 address prefix for non-F1 traffic. The length of allocated IPv6 prefix is fixed to 64.  
<endl>

<start>  
iab-ip-addressandtraffic-ies  
all-Traffic-IAB-IP-Address  
This field is used to report to IAB-donor-CU the IP address(es) or IPv6 address prefix for all traffic.  
<endl>  
  
  
<start>  
iab-ip-addressandtraffic-ies  
f1-C-Traffic-IP-Address  
This field is used to report to IAB-donor-CU the IP address(es) or IPv6 address prefix for F1-C traffic.  
<endl>  
  
  
<start>  
iab-ip-addressandtraffic-ies  
f1-U-Traffic-IP-Address  
This field is used to report to IAB-donor-CU the IP address(es) or IPv6 address prefix for F1-U traffic.  
<endl>  
  
  
<start>  
iab-ip-addressandtraffic-ies  
non-F1-Traffic-IP-Address  
This field is used to report to IAB-donor-CU the IP address(es) or IPv6 address prefix for non-F1 traffic.  
<endl>

<start>  
loggedmeasurementconfiguration  
absoluteTimeInfo  
Indicates the absolute time in the current cell.  
<endl>  
  
  
<start>  
loggedmeasurementconfiguration  
areaConfiguration  
Used to restrict the area in which the UE performs measurement logging to cells broadcasting either one of the included cell identities or one of the included tracking area codes/ frequencies.  
<endl>  
  
  
<start>  
loggedmeasurementconfiguration  
earlyMeasIndication  
If included, the field indicates the UE is allowed to log measurements on early measurement related frequencies in logged measurements.  
<endl>  
  
  
<start>  
loggedmeasurementconfiguration  
eventType  
The value outOfCoverage indicates the UE to perform logging of measurements when the UE enters any cell selection state, and the value eventL1 indicates the UE to perform logging of measurements when the triggering condition (similar as event A2 as specified in 5.5.4.3) as configured in the event is met for the camping cell in camped normally state.  
<endl>  
  
  
<start>  
loggedmeasurementconfiguration  
plmn-IdentityList  
Indicates a set of PLMNs defining when the UE performs measurement logging as well as the associated status indication and information retrieval i.e. the UE performs these actions when the RPLMN is part of this set of PLMNs.  
<endl>  
  
  
<start>  
loggedmeasurementconfiguration  
sigLoggedMeasType  
If included, the field indicates a signalling based logged measurements (See TS 37.320 [61]).  
<endl>  
  
  
<start>  
loggedmeasurementconfiguration  
tce-Id  
Parameter Trace Collection Entity Id: See TS 32.422 [52].  
<endl>  
  
  
<start>  
loggedmeasurementconfiguration  
traceRecordingSessionRef  
Parameter Trace Recording Session Reference: See TS 32.422 [52].  
<endl>  
  
  
<start>  
loggedmeasurementconfiguration  
reportType  
Parameter configures the type of MDT configuration, specifically Periodic MDT configuration or Event Triggerd MDT configuration.  
<endl>

<start>  
mbsbroadcastconfiguration  
pdsch-ConfigMTCH  
Provides parameters for acquiring the PDSCH for MTCH. When this field is absent, the UE shall use parameters in pdsch-ConfigMCCH to acquire the PDSCH for MTCH.  
<endl>  
  
  
<start>  
mbsbroadcastconfiguration  
mbs-SessionInfoList  
Provides the configuration of each MBS session provided by MBS broadcast in the current cell.  
<endl>  
  
  
<start>  
mbsbroadcastconfiguration  
mbs-NeighbourCellList  
List of neighbour cells providing one or more MBS broadcast services via broadcast MRB that are provided by the current cell. This field is used by the UE together with mtch-NeighbourCell field signalled for each MBS session in the corresponding MBS-SessionInfo. When an empty mbs-NeighbourCellList list is signalled, the UE shall assume that MBS broadcast services signalled in mbs-SessionInfoList in the MBSBroadcastConfiguration message are not provided in any neighbour cell. When a non-empty mbs-NeighbourCellList is signalled, the current serving cell does not provide information about MBS broadcast services of a neighbour cell that is not included in mbs-NeighbourCellList, i.e., the UE cannot determine the presence or absence of an MBS service of a neighbour cell that is absent. When the field mbs-NeighbourCellList is absent, the current serving cell does not provide information about MBS broadcast services in the neighbouring cells, i.e. the UE cannot determine the presence or absence of an MBS service in neighbouring cells based on the absence of this field.  
<endl>

<start>  
mbsinterestindication  
mbs-FreqList  
List of MBS frequencies on which the UE is receiving or interested to receive MBS broadcast service via a broadcast MRB.  
<endl>  
  
  
<start>  
mbsinterestindication  
mbs-Priority  
Indicates whether the UE prioritises MBS broadcast reception above unicast and MBS multicast reception. The field is present (i.e. value true), if the UE prioritises reception of broadcast services, on frequencies indicated in mbs-FreqList, above a reception of any of the unicast bearers and multicast MRBs. Otherwise the field is absent.  
<endl>  
  
  
<start>  
mbsinterestindication  
mbs-ServiceList  
List of MBS broadcast services which the UE is receiving or interested to receive.  
<endl>

<start>  
mcgfailureinformation  
measResultFreqList  
The field contains available results of measurements on NR frequencies the UE is configured to measure by the measConfig associated with the MCG.  
<endl>  
  
  
<start>  
mcgfailureinformation  
measResultFreqListEUTRA  
The field contains available results of measurements on E-UTRA frequencies the UE is configured to measure by measConfig associated with the MCG.  
<endl>  
  
  
<start>  
mcgfailureinformation  
measResultFreqListUTRA-FDD  
The field contains available results of measurements on UTRA FDD frequencies the UE is configured to measure by measConfig associated with the MCG.  
<endl>  
  
  
<start>  
mcgfailureinformation  
measResultSCG  
The field contains the MeasResultSCG-Failure IE which includes available measurement results on NR frequencies the UE is configured to measure by the measConfig associated with the SCG.  
<endl>  
  
  
<start>  
mcgfailureinformation  
measResultSCG-EUTRA  
The field contains the EUTRA MeasResultSCG-FailureMRDC IE which includes available results of measurements on E-UTRA frequencies the UE is configured to measure by the E-UTRA RRCConnectionReconfiguration message as specified in TS 36.331 [10].  
<endl>

<start>  
measreportapplayer  
appLayerSessionStatus  
Indicates that an application layer measurement session in the application layer starts or ends.  
<endl>  
  
  
<start>  
measreportapplayer  
measReportAppLayerContainer  
The field contains the application layer measurement report container, see Annex L (normative) in TS 26.247 [68], clause 16.5 in TS 26.114 [69] and TS 26.118 [70].  
<endl>  
  
  
<start>  
measreportapplayer  
ran-VisibleMeasurements  
The field contains the RAN visible application layer measurement report.  
<endl>

<start>  
ran-visiblemeasurements  
appLayerBufferLevelList  
The field indicates a list of application layer buffer levels, and each AppLayerBufferLevel indicates the application layer buffer level in ms. Value 0 corresponds to 0ms, value 1 corresponds to 10ms, value 2 corresponds to 20 ms and so on. If the buffer level is larger than the maximum value of 30000 (5 minutes), the UE reports 30000.  
<endl>  
  
  
<start>  
ran-visiblemeasurements  
playoutDelayForMediaStartup  
Indicates the application layer playout delay for media start-up in ms. Value 0 corresponds to 0ms, value 1 corresponds to 1ms, value 2 corresponds to 2 ms and so on. If the playout delay for media start-up is larger than the maximum value of 30000ms, the UE reports 30000.  
<endl>  
  
  
<start>  
ran-visiblemeasurements  
pdu-SessionIdList  
Contains the identity of the PDU session, or the identities of the PDU sessions, used for application data flows subject to the RAN visible application layer measurements.  
<endl>

<start>  
mib  
cellBarred  
Value barred means that the cell is barred, as defined in TS 38.304 [20]. This field is ignored by IAB-MT. This field is ignored for connectivity to NTN.  
<endl>  
  
  
<start>  
mib  
dmrs-TypeA-Position  
Position of (first) DM-RS for downlink (see TS 38.211 [16], clause 7.4.1.1.2) and uplink (see TS 38.211 [16], clause 6.4.1.1.3).  
<endl>  
  
  
<start>  
mib  
intraFreqReselection  
Controls cell selection/reselection to intra-frequency cells when the highest ranked cell is barred, or treated as barred by the UE, as specified in TS 38.304 [20]. This field is ignored by IAB-MT.  
<endl>  
  
  
<start>  
mib  
pdcch-ConfigSIB1  
Determines a common ControlResourceSet (CORESET), a common search space and necessary PDCCH parameters. If the field ssb-SubcarrierOffset indicates that SIB1 is absent, the field pdcch-ConfigSIB1 indicates the frequency positions where the UE may find SS/PBCH block with SIB1 or the frequency range where the network does not provide SS/PBCH block with SIB1 (see TS 38.213 [13], clause 13).  
<endl>  
  
  
<start>  
mib  
ssb-SubcarrierOffset  
Corresponds to kSSB (see TS 38.213 [13]), which is the frequency domain offset between SSB and the overall resource block grid in number of subcarriers. (See TS 38.211 [16], clause 7.4.3.1). For operation with shared spectrum channel access in FR1 (see 37.213 [48]), this field corresponds to , and kSSB is obtained from (see TS 38.211 [16], clause 7.4.3.1); the LSB of this field is used also for deriving the QCL relation between SS/PBCH blocks as specified in TS 38.213 [13], clause 4.1.  
The value range of this field may be extended by an additional most significant bit encoded within PBCH as specified in TS 38.213 [13].  
This field may indicate that this cell does not provide SIB1 and that there is hence no CORESET#0 configured in MIB (see TS 38.213 [13], clause 13). In this case, the field pdcch-ConfigSIB1 may indicate the frequency positions where the UE may (not) find a SS/PBCH with a control resource set and search space for SIB1 (see TS 38.213 [13], clause 13).  
<endl>  
  
  
<start>  
mib  
subCarrierSpacingCommon  
Subcarrier spacing for SIB1, Msg.2/4 and MsgB for initial access, paging and broadcast SI-messages. If the UE acquires this MIB on an FR1 carrier frequency, the value scs15or60 corresponds to 15 kHz and the value scs30or120 corresponds to 30 kHz. If the UE acquires this MIB on an FR2 carrier frequency, the value scs15or60 corresponds to 60 kHz and the value scs30or120 corresponds to 120 kHz. For operation with shared spectrum channel access in FR1 (see 37.213 [48]) and for operation in FR2-2, the subcarrier spacing for SIB1, Msg.2/4 and MsgB for initial access, paging and broadcast SI-messages is same as that for the corresponding SSB. For operation with shared spectrum channel access, this field instead is used for deriving the QCL relation between SS/PBCH blocks as specified in TS 38.213 [13], clause 4.1.  
<endl>  
  
  
<start>  
mib  
systemFrameNumber  
The 6 most significant bits (MSB) of the 10-bit System Frame Number (SFN). The 4 LSB of the SFN are conveyed in the PBCH transport block as part of channel coding (i.e. outside the MIB encoding), as defined in clause 7.1 in TS 38.212 [17].  
<endl>

<start>  
mobilityfromnrcommand-ies  
nas-SecurityParamFromNR  
If targetRAT-Type is eutra, this field is used to deliver the key synchronisation and Key freshness for the NR to LTE/EPC handovers and a part of the downlink NAS COUNT as specified in TS 33.501 [11]. If targetRAT-Type is utra-fdd, this field is used to deliver the key synchronisation and Key freshness for the NR to FDD UTRAN handover and a part of the downlink NAS COUNT as specified in TS 33.501 [11].  
<endl>  
  
  
<start>  
mobilityfromnrcommand-ies  
targetRAT-MessageContainer  
The field contains a message specified in another standard, as indicated by the targetRAT-Type, and carries information about the target cell identifier(s) and radio parameters relevant for the target radio access technology. A complete message is included, as specified in the other standard. See NOTE 1  
<endl>  
  
  
<start>  
mobilityfromnrcommand-ies  
targetRAT-Type  
Indicates the target RAT type.  
<endl>  
  
  
<start>  
mobilityfromnrcommand-ies  
voiceFallbackIndication  
Indicates the handover is triggered by EPS fallback for IMS voice as specified in TS 23.502 [43].  
<endl>

<start>  
pagingrecord  
accessType  
Indicates whether the Paging message is originated due to the PDU sessions from the non-3GPP access.  
<endl>  
  
  
<start>  
pagingrecord  
pagingRecordList  
If the network includes pagingRecordList-v1700, it includes the same number of entries, and listed in the same order, as in pagingRecordList (i.e. without suffix).  
<endl>  
  
  
<start>  
pagingrecord  
pagingCause  
Indicates whether the Paging message is originated due to IMS voice. If this field is present, it implies that the corresponding paging entry is for IMS voice. If upper layers indicate the support of paging cause and if this field is not present but pagingRecordList-v1700 is present, it implies that the corresponding paging entry is for a service other than IMS voice. Otherwise, paging cause is undetermined.  
<endl>

<start>  
rrcreestablishment-ies  
sl-L2RemoteUE-Config  
Contains dedicated configurations used for L2 U2N relay related operation. The network configures only the SRAP configuration used for the SRB1 and local UE ID.  
<endl>

<start>  
reestabue-identity  
physCellId  
The Physical Cell Identity of the PCell the UE was connected to prior to the failure.  
<endl>

<start>  
rrcreestablishmentrequest-ies  
reestablishmentCause  
Indicates the failure cause that triggered the re-establishment procedure. gNB is not expected to reject a RRCReestablishmentRequest due to unknown cause value being used by the UE.  
<endl>  
  
  
<start>  
rrcreestablishmentrequest-ies  
ue-Identity  
UE identity included to retrieve UE context and to facilitate contention resolution by lower layers.  
<endl>

<start>  
rrcreconfiguration-ies  
appLayerMeasConfig  
This field is used to configure application layer measurements. This field is absent when the UE is configured to operate with shared spectrum channel access or if sl-L2RemoteUE-Config-r17 is configured or not released.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
bap-Config  
This field is used to configure the BAP entity for IAB nodes.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
bap-Address  
Indicates the BAP address of an IAB-node. The BAP address of an IAB-node cannot be changed once configured for the cell group to the BAP entity.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
conditionalReconfiguration  
Configuration of candidate target SpCell(s) and execution condition(s) for conditional handover, conditional PSCell addition or conditional PSCell change. The field is absent if any DAPS bearer is configured or if the masterCellGroup includes ReconfigurationWithSync or if the sl-L2RemoteUE-Config or sl-L2RelayUE-Config is configured. For conditional PSCell change, the field is absent if the secondaryCellGroup includes ReconfigurationWithSync. The RRCReconfiguration message contained in DLInformationTransferMRDC cannot contain the field conditionalReconfiguration for conditional PSCell change or for conditional PSCell addition.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
daps-SourceRelease  
Indicates to UE that the source cell part of DAPS operation is to be stopped and the source cell part of DAPS configuration is to be released.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
dedicatedNAS-MessageList  
This field is used to transfer UE specific NAS layer information between the network and the UE. The RRC layer is transparent for each PDU in the list.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
dedicatedPagingDelivery  
This field is used to transfer Paging message for the associated L2 U2N Remote UE to the L2 U2N Relay UE in RRC\_CONNECTED.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
dedicatedPosSysInfoDelivery  
This field is used to transfer SIBPos to the UE in RRC\_CONNECTED.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
dedicatedSIB1-Delivery  
This field is used to transfer SIB1 to the UE (including L2 U2N Remote UE). The field has the same values as the corresponding configuration in servingCellConfigCommon.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
dedicatedSystemInformationDelivery  
This field is used to transfer SIB6, SIB7, SIB8, SIB19, SIB21 to the UE with an active BWP with no common search space configured or the L2 U2N Remote UE in RRC\_CONNECTED. For UEs in RRC\_CONNECTED (including L2 U2N Remote UE), this field is also used to transfer the SIBs requested on-demand.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
defaultUL-BAP-RoutingID  
This field is used for IAB-node to configure the default uplink Routing ID, which is used by IAB-node during IAB-node bootstrapping, migration, IAB-MT RRC resume and IAB-MT RRC re-establishment for F1-C and non-F1 traffic. The defaultUL-BAP-RoutingID can be (re-)configured when IAB-node IP address for F1-C related traffic changes. This field is mandatory only for IAB-node bootstrapping.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
defaultUL-BH-RLC-Channel  
This field is used for IAB-nodes to configure the default uplink BH RLC channel, which is used by IAB-node during IAB-node bootstrapping, migration, IAB-MT RRC resume and IAB-MT RRC re-establishment for F1-C and non-F1 traffic. The defaultUL-BH-RLC-Channel can be (re-)configured when IAB-node IP address for F1-C related traffic changes, and the new IP address is anchored at a different IAB-donor-DU. This field is mandatory for IAB-node bootstrapping. If the IAB-MT is operating in EN-DC, the default uplink BH RLC channel is referring to an RLC channel on the SCG; Otherwise, it is referring to an RLC channel either on the MCG or on the SCG depending on whether the MN or the SN configures this field.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
flowControlFeedbackType  
This field is only used for IAB-node that support hop-by-hop flow control to configure the type of flow control feedback. Value perBH-RLC-Channel indicates that the IAB-node shall provide flow control feedback per BH RLC channel, value perRoutingID indicates that the IAB-node shall provide flow control feedback per routing ID, and value both indicates that the IAB-node shall provide flow control feedback both per BH RLC channel and per routing ID.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
fullConfig  
Indicates that the full configuration option is applicable for the RRCReconfiguration message for intra-system intra-RAT HO. For inter-RAT HO from E-UTRA to NR, fullConfig indicates whether or not delta signalling of SDAP/PDCP from source RAT is applicable. This field is absent if any DAPS bearer is configured or when the RRCReconfiguration message is transmitted on SRB3, and in an RRCReconfiguration message for SCG contained in another RRCReconfiguration message (or RRCConnectionReconfiguration message, see TS 36.331 [10]) transmitted on SRB1.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
iab-IP-Address  
This field is used to provide the IP address information for IAB-node.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
iab-IP-AddressIndex  
This field is used to identify a configuration of an IP address.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
iab-IP-AddressToAddModList  
List of IP addresses allocated for IAB-node to be added and modified.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
iab-IP-AddressToReleaseList  
List of IP address allocated for IAB-node to be released.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
iab-IP-Usage  
This field is used to indicate the usage of the assigned IP address. If this field is not configured, the assigned IP address is used for all traffic.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
iab-donor-DU-BAP-Address  
This field is used to indicate the BAP address of the IAB-donor-DU where the IP address is anchored.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
keySetChangeIndicator  
Indicates whether UE shall derive a new KgNB. If reconfigurationWithSync is included, value true indicates that a KgNB key is derived from a KAMF key taken into use through the latest successful NAS SMC procedure, or N2 handover procedure with KAMF change, as described in TS 33.501 [11] for KgNB re-keying. Value false indicates that the new KgNB key is obtained from the current KgNB key or from the NH as described in TS 33.501 [11].  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
masterCellGroup  
Configuration of master cell group.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
mrdc-ReleaseAndAdd  
This field indicates that the current SCG configuration is released and a new SCG is added at the same time.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
mrdc-SecondaryCellGroup  
Includes an RRC message for SCG configuration in NR-DC or NE-DC.  
For NR-DC (nr-SCG), mrdc-SecondaryCellGroup contains the RRCReconfiguration message as generated (entirely) by SN gNB. In this version of the specification, the RRC message can only include fields secondaryCellGroup, otherConfig, conditionalReconfiguration, measConfig, bap-Config and IAB-IP-AddressConfigurationList.  
For NE-DC (eutra-SCG), mrdc-SecondaryCellGroup includes the E-UTRA RRCConnectionReconfiguration message as specified in TS 36.331 [10]. In this version of the specification, the E-UTRA RRC message can only include the field scg-Configuration.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
musim-GapConfig  
Indicates the MUSIM gap configuration and controls setup/release of MUSIM gaps. In this version of the specification, the network does not configure MUSIM gap together with concurrent measurement gap or preconfigured measurement gap for positioning.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
nas-Container  
This field is used to transfer UE specific NAS layer information between the network and the UE. The RRC layer is transparent for this field, although it affects activation of AS security after inter-system handover to NR. The content is defined in TS 24.501 [23].  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
needForGapsConfigNR  
Configuration for the UE to report measurement gap requirement information of NR target bands in the RRCReconfigurationComplete and RRCResumeComplete message.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
needForGapNCSG-ConfigEUTRA  
Configuration for the UE to report measurement gap and NCSG requirement information of E-UTRA target bands in the RRCReconfigurationComplete and RRCResumeComplete message.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
needForGapNCSG-ConfigNR  
Configuration for the UE to report measurement gap and NCSG requirement information of NR target bands in the RRCReconfigurationComplete and RRCResumeComplete message.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
nextHopChainingCount  
Parameter NCC: See TS 33.501 [11]  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
onDemandSIB-Request  
If the field is present, the UE is allowed to request SIB(s) on-demand while in RRC\_CONNECTED according to clause 5.2.2.3.5.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
onDemandSIB-RequestProhibitTimer  
Prohibit timer for requesting SIB(s) on-demand while in RRC\_CONNECTED according to clause 5.2.2.3.5. Value in seconds. Value s0 means prohibit timer is set to 0 seconds, value s0dot5 means prohibit timer is set to 0.5 seconds, value s1 means prohibit timer is set to 1 second and so on.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
otherConfig  
Contains configuration related to other configurations. When configured for the SCG, only fields drx-PreferenceConfig, maxBW-PreferenceConfig, maxBW-PreferenceConfigFR2-2, maxCC-PreferenceConfig, maxMIMO-LayerPreferenceConfig, maxMIMO-LayerPreferenceConfigFR2-2, minSchedulingOffsetPreferenceConfig, minSchedulingOffsetPreferenceConfigExt, rlm-RelaxationReportingConfig, bfd-RelaxationReportingConfig, btNameList, wlanNameList, sensorNameList and obtainCommonLocation can be included.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
radioBearerConfig  
Configuration of Radio Bearers (DRBs, SRBs, multicast MRBs) including SDAP/PDCP. In (NG)EN-DC this field may only be present if the RRCReconfiguration is transmitted over SRB3. SRB4 should not be configured if sl-L2RemoteUE-Config-r17 is configured or not released.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
radioBearerConfig2  
Configuration of Radio Bearers (DRBs, SRBs) including SDAP/PDCP. This field can only be used if the UE supports NR-DC or NE-DC.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
scg-State  
Indicates that the SCG is in deactivated state.  
This field is not used  
- in an RRCReconfiguration message received:  
- within mrdc-SecondaryCellGroup, or  
- in an E-UTRA RRCConnectionReconfiguration message, or  
- in an E-UTRA RRCConnectionResume message or  
- in an RRCReconfiguration message received via SRB3, except if the RRCReconfiguration message is included in DLInformationTransferMRDC.  
The field is absent if CPA or CPC is configured for the UE, or if the RRCReconfiguration message is contained in CondRRCReconfig.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
sl-L2RelayUE-Config  
Contains L2 U2N relay operation related configurations used by a UE acting as or to be acting as a L2 U2N Relay UE. The field is absent if conditionalReconfiguration is configured for CHO.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
sl-L2RemoteUE-Config  
Contains L2 U2N relay operation related configurations used by a UE acting as or to be acting as a L2 U2N Remote UE. The field is absent if conditionalReconfiguration is configured for CHO, or if appLayerMeasConfig or SRB4 is configured/not released.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
secondaryCellGroup  
Configuration of secondary cell group ((NG)EN-DC or NR-DC).  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
sk-Counter  
A counter used upon initial configuration of S-KgNB or S-KeNB, as well as upon refresh of S-KgNB or S-KeNB. This field is always included either upon initial configuration of an NR SCG or upon configuration of the first RB with keyToUse set to secondary, whichever happens first. This field is absent if there is neither any NR SCG nor any RB with keyToUse set to secondary.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
sl-ConfigDedicatedNR  
This field is used to provide the dedicated configurations for NR sidelink communication/discovery.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
sl-ConfigDedicatedEUTRA-Info  
This field includes the E-UTRA RRCConnectionReconfiguration as specified in TS 36.331 [10]. In this version of the specification, the E-UTRA RRCConnectionReconfiguration can only includes sidelink related fields for V2X sidelink communication, i.e. sl-V2X-ConfigDedicated, sl-V2X-SPS-Config, measConfig and/or otherConfig.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
sl-TimeOffsetEUTRA  
This field indicates the possible time offset to (de)activation of V2X sidelink transmission after receiving DCI format 3\_1 used for scheduling V2X sidelink communication. Value ms0dpt75 corresponds to 0.75ms, ms1 corresponds to 1ms and so on. The network includes this field only when sl-ConfigDedicatedEUTRA is configured.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
targetCellSMTC-SCG  
The SSB periodicity/offset/duration configuration of target cell for NR PSCell addition and SN change. When UE receives this field, UE applies the configuration based on the timing reference of NR PCell for PSCell addition and PSCell change for the case of no reconfiguration with sync of MCG, and UE applies the configuration based on the timing reference of target NR PCell for the case of reconfiguration with sync of MCG. If both this field and the smtc in secondaryCellGroup -> SpCellConfig -> reconfigurationWithSync are absent, the UE uses the SMTC in the measObjectNR having the same SSB frequency and subcarrier spacing, as configured before the reception of the RRC message.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
t316  
Indicates the value for timer T316 as described in clause 7.1. Value ms50 corresponds to 50 ms, value ms100 corresponds to 100 ms and so on. This field can be configured only if the UE is configured with split SRB1 or SRB3.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
ue-TxTEG-RequestUL-TDOA-Config  
Configures the periodicity of UE reporting for the association between Tx TEG and SRS Positioning resources. When configured with oneShot UE reports the association only one time. When configured with periodicReporting UE reports the association periodically and the periodicReporting indicates the periodicity. Value ms160 corresponds to 160ms, value ms320 corresponds to 320ms and so on.  
<endl>  
  
  
<start>  
rrcreconfiguration-ies  
ul-GapFR2-Config  
Indicates the FR2 UL gap configuration to UE. In EN-DC and NGEN-DC, the SN decides and configures the FR2 UL gap pattern. In NE-DC, the MN decides and configures the FR2 UL gap pattern. In NR-DC without FR2-FR2 band combination, the network entity which is configured with FR2 serving cell(s) decides and configures the FR2 UL gap pattern.  
<endl>

<start>  
rrcreconfigurationcomplete-ies  
needForGapsInfoNR  
This field is used to indicate the measurement gap requirement information of the UE for NR target bands.  
<endl>  
  
  
<start>  
rrcreconfigurationcomplete-ies  
needForGapNCSG-InfoEUTRA  
This field is used to indicate the measurement gap and NCSG requirement information of the UE for E-UTRA target bands.  
<endl>  
  
  
<start>  
rrcreconfigurationcomplete-ies  
needForGapNCSG-InfoNR  
This field is used to indicate the measurement gap and NCSG requirement information of the UE for NR target bands.  
<endl>  
  
  
<start>  
rrcreconfigurationcomplete-ies  
scg-Response  
In case of NR-DC (nr-SCG-Response), this field includes the RRCReconfigurationComplete message. In case of NE-DC (eutra-SCG-Response), this field includes the E-UTRA RRCConnectionReconfigurationComplete message as specified in TS 36.331 [10].  
<endl>  
  
  
<start>  
rrcreconfigurationcomplete-ies  
selectedCondRRCReconfig  
This field indicates the ID of the selected conditional reconfiguration the UE applied upon the execution of CPA or inter-SN CPC.  
<endl>  
  
  
<start>  
rrcreconfigurationcomplete-ies  
uplinkTxDirectCurrentList  
The Tx Direct Current locations for the configured serving cells and BWPs if requested by the NW (see reportUplinkTxDirectCurrent in CellGroupConfig).  
<endl>  
  
  
<start>  
rrcreconfigurationcomplete-ies  
uplinkTxDirectCurrentMoreCarrierList  
The Tx Direct Current locations for the configured intra-band CA requested by reportUplinkTxDirectCurrentMoreCarrier-r17.  
<endl>  
  
  
<start>  
rrcreconfigurationcomplete-ies  
uplinkTxDirectCurrentTwoCarrierList  
The Tx Direct Current locations for the configured uplink intra-band CA with two carriers if requested by the NW (see reportUplinkTxDirectCurrentTwoCarrier-r16 in CellGroupConfig).  
<endl>

<start>  
rrcreject-ies  
waitTime  
Wait time value in seconds. The field is always included.  
<endl>

<start>  
rrcrelease-ies  
cellReselectionPriorities  
Dedicated priorities to be used for cell reselection as specified in TS 38.304 [20]. The maximum number of NR carrier frequencies that the network can configure through FreqPriorityListNR and FreqPriorityListDedicatedSlicing together is eight. If the same frequency is configured in both FreqPriorityListNR and FreqPriorityListDedicatedSlicing, the frequency is only counted once.  
<endl>  
  
  
<start>  
rrcrelease-ies  
cnType  
Indicate that the UE is redirected to EPC or 5GC.  
<endl>  
  
  
<start>  
rrcrelease-ies  
deprioritisationReq  
Indicates whether the current frequency or RAT is to be de-prioritised.  
<endl>  
  
  
<start>  
rrcrelease-ies  
deprioritisationTimer  
Indicates the period for which either the current carrier frequency or NR is deprioritised. Value minN corresponds to N minutes.  
<endl>  
  
  
<start>  
rrcrelease-ies  
measIdleConfig  
Indicates measurement configuration to be stored and used by the UE while in RRC\_IDLE or RRC\_INACTIVE.  
<endl>  
  
  
<start>  
rrcrelease-ies  
mpsPriorityIndication  
Indicates the UE can set the establishment cause to mps-PriorityAccess for a new connection following a redirect to NR. If the target RAT is E-UTRA, see TS 36.331 [10]. The gNB sets the indication only for UEs authorized to receive MPS treatment as indicated by ARP and/or QoS characteristics at the gNB, and it is applicable only for this instance of release with redirection to carrier/RAT included in the redirectedCarrierInfo field in the RRCRelease message.  
<endl>  
  
  
<start>  
rrcrelease-ies  
noLastCellUpdate  
Presence of the field indicates that the last used cell for PEI shall not be updated. When the field is absent, the PEI-capable UE shall update its last used cell with the current cell. The UE shall not update its last used cell with the current cell if the AS security is not activated.  
<endl>  
  
  
<start>  
rrcrelease-ies  
srs-PosRRC-InactiveConfig  
SRS for positioning configuration during RRC\_INACTIVE state.  
<endl>  
  
  
<start>  
rrcrelease-ies  
suspendConfig  
Indicates configuration for the RRC\_INACTIVE state. The network does not configure suspendConfig when the network redirect the UE to an inter-RAT carrier frequency or if the UE is configured with a DAPS bearer.  
<endl>  
  
  
<start>  
rrcrelease-ies  
redirectedCarrierInfo  
Indicates a carrier frequency (downlink for FDD) and is used to redirect the UE to an NR or an inter-RAT carrier frequency, by means of cell selection at transition to RRC\_IDLE or RRC\_INACTIVE as specified in TS 38.304 [20]. Based on UE capability, the network may include redirectedCarrierInfo in RRCRelease message with suspendConfig if this message is sent in response to an RRCResumeRequest or an RRCResumeRequest1 which is triggered by the NAS layer (see 5.3.1.4 in TS 24.501 [23]).  
<endl>  
  
  
<start>  
rrcrelease-ies  
voiceFallbackIndication  
Indicates the RRC release is triggered by EPS fallback for IMS voice as specified in TS 23.502 [43].  
<endl>

<start>  
carrierinfonr  
carrierFreq  
Indicates the redirected NR frequency.  
<endl>  
  
  
<start>  
carrierinfonr  
ssbSubcarrierSpacing  
Subcarrier spacing of SSB in the redirected SSB frequency.  
Only the following values are applicable depending on the used frequency:  
FR1: 15 or 30 kHz  
FR2-1: 120 or 240 kHz  
FR2-2: 120, 480, or 960 kHz  
<endl>  
  
  
<start>  
carrierinfonr  
smtc  
The SSB periodicity/offset/duration configuration for the redirected SSB frequency. It is based on timing reference of PCell. If the field is absent, the UE uses the SMTC configured in the measObjectNR having the same SSB frequency and subcarrier spacing.  
<endl>

<start>  
ran-notificationareainfo  
cellList  
A list of cells configured as RAN area.  
<endl>  
  
  
<start>  
ran-notificationareainfo  
ran-AreaConfigList  
A list of RAN area codes or RA code(s) as RAN area.  
<endl>

<start>  
plmn-ran-areaconfig  
plmn-Identity  
PLMN Identity to which the cells in ran-Area belong. If the field is absent the UE not in SNPN access mode uses the ID of the registered PLMN. This field is not included for UE in SNPN access mode (for UE in SNPN access mode the ran-Area always belongs to the registered SNPN).  
<endl>  
  
  
<start>  
plmn-ran-areaconfig  
ran-AreaCodeList  
The total number of RAN-AreaCodes of all PLMNs does not exceed 32.  
<endl>  
  
  
<start>  
plmn-ran-areaconfig  
ran-Area  
Indicates whether TA code(s) or RAN area code(s) are used for the RAN notification area. The network uses only TA code(s) or both TA code(s) and RAN area code(s) to configure a UE. The total number of TACs across all PLMNs does not exceed 16.  
<endl>

<start>  
plmn-ran-areacell  
plmn-Identity  
PLMN Identity to which the cells in ran-AreaCells belong. If the field is absent the UE not in SNPN access mode uses the ID of the registered PLMN. This field is not included for UE in SNPN access mode (for UE in SNPN access mode the ran-AreaCells always belongs to the registered SNPN).  
<endl>  
  
  
<start>  
plmn-ran-areacell  
ran-AreaCells  
The total number of cells of all PLMNs does not exceed 32.  
<endl>

<start>  
sdt-config  
sdt-DRB-ContinueROHC  
Indicates whether the PDCP entity of the radio bearers configured for SDT continues or resets the ROHC header compression protocol during PDCP re-establishment during SDT procedure, as specified in TS 38.323 [5]. Value cell indicates that ROHC header compression continues when the UE resumes for SDT in the same cell as the PCell when the RRCRelease message was received. Value rna indicates that ROHC header compression continues when the UE resumes for SDT in a cell belonging to the same RNA as the PCell where the RRCRelease message was received. If the field is absent, the UE releases any stored value for this field and the PDCP entity of the radio bearers configured for SDT always resets the ROHC header compression protocol during PDCP re-establishment when SDT procedure is initiated, as specified in TS 38.323 [5].  
<endl>  
  
  
<start>  
sdt-config  
sdt-DRB-List  
Indicates the ID(s) of the DRB(s) that are configured for SDT. If size of the sequence is zero, then the UE assumes that none of the DRBs are configured for SDT. The network only configures MN terminated MCG bearers for SDT.  
<endl>  
  
  
<start>  
sdt-config  
sdt-SRB2-Indication  
Indiates whether SRB2 is configured for SDT or not.  
<endl>

<start>  
sdt-mac-phy-cg-config  
cg-SDT-ConfigInitialBWP-DL  
Downlink BWP configuration for CG-SDT. If a UE is a RedCap UE and if the initialDownlinkBWP-RedCap is configured in downlinkConfigCommon in SIB1, this field is configured for initialDownlinkBWP-RedCap, otherwise it is configured for initialDownlinkBWP.  
<endl>  
  
  
<start>  
sdt-mac-phy-cg-config  
cg-SDT-ConfigInitialBWP-NUL  
UL BWP configuration for CG-SDT on NUL carrier. If a UE is a RedCap UE and if the initialUplinkBWP-RedCap is configured in uplinkConfigCommon in SIB1, this field is configured for initialUplinkBWP-RedCap, otherwise it is configured for initialUplinkBWP for NUL.  
<endl>  
  
  
<start>  
sdt-mac-phy-cg-config  
cg-SDT-ConfigInitialBWP-SUL  
UL BWP configuration for CG-SDT on SUL carrier configured for the initialUplinkBWP for SUL.  
<endl>  
  
  
<start>  
sdt-mac-phy-cg-config  
cg-SDT-CS-RNTI  
The CS-RNTI value for CG-SDT as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
sdt-mac-phy-cg-config  
cg-SDT-RSRP-ThresholdSSB  
An RSRP threshold configured for SSB selection for CG-SDT as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
sdt-mac-phy-cg-config  
cg-SDT-TA-ValidationConfig  
Configuration for the RSRP based TA validation. If this field is not configured, then the UE does not perform RSRP based TA validation.  
<endl>  
  
  
<start>  
sdt-mac-phy-cg-config  
cg-SDT-timeAlignmentTimer  
TAT value for CG-SDT as specified in TS 38.321 [3]. The network always configures this field when sdt-MAC-PHY-CG-Config is configured.  
<endl>

<start>  
cg-sdt-configlch-restriction  
allowedCG-List  
This restriction applies only when the UL grant is a configured grant for CG-SDT. If present, UL MAC SDUs from this logical channel can only be mapped to the indicated CG-SDT configured grant configuration. If the size of the sequence is zero, then UL MAC SDUs from this logical channel cannot be mapped to any CG-SDT configured grant configurations. If the field is not present, UL MAC SDUs from this logical channel can be mapped to any CG-SDT configured grant configurations. If the field configuredGrantType1Allowed is present, only those CG-SDT configured grant type 1 configurations indicated in this sequence are allowed for use by this logical channel; otherwise, this sequence shall not include any CG-SDT configured grant type 1 configuration. Corresponds to "allowedCG-List" as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
cg-sdt-configlch-restriction  
configuredGrantType1Allowed  
If present, or if the capability lcp-Restriction as specified in TS 38.306 [26] is not supported, UL MAC SDUs from this logical channel can be transmitted on a configured grant type 1 for CG-SDT. Otherwise, UL MAC SDUs from this logical channel cannot be transmitted on a configured grant type 1 for CG-SDT. Corresponds to "configuredGrantType1Allowed" in TS 38.321 [3].  
<endl>  
  
  
<start>  
cg-sdt-configlch-restriction  
logicalChannelIdentity  
ID used commonly for the MAC logical channel and for the RLC bearer associated with a servedRadioBearer configured for SDT.  
<endl>

<start>  
cg-sdt-ta-validationconfig  
cg-SDT-RSRP-ChangeThreshold  
The RSRP threshold for TA validation for CG-SDT as specified in TS 38.321 [3]. Value dB2 corresponds to 2 dB, value dB4 corresponds to 4 dB and so on.  
<endl>

<start>  
srs-posrrc-inactiveconfig  
bwp-NUL  
BWP configuration for SRS for Positioning during the RRC\_INACTIVE state in Normal Uplink Carrier. If the field is absent UE is configured with an SRS for Positioning associated with the initial UL BWP and transmitted, during the RRC\_INACTIVE state, inside the initial UL BWP with the same CP and SCS as configured for initial UL BWP.  
<endl>  
  
  
<start>  
srs-posrrc-inactiveconfig  
bwp-SUL  
BWP configuration for SRS for Positioning during the RRC\_INACTIVE state in Supplementary Uplink Carrier. If the field is absent UE is configured with an SRS for Positioning associated with the initial UL BWP and transmitted, during the RRC\_INACTIVE state, inside the initial UL BWP with the same CP and SCS as configured for initial UL BWP.  
<endl>  
  
  
<start>  
srs-posrrc-inactiveconfig  
inactivePosSRS-RSRP-ChangeThreshold  
RSRP threshold for the increase/decrease of RSRP for time alignment validation as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
srs-posrrc-inactiveconfig  
inactivePosSRS-TimeAlignmentTimer  
TAT value for SRS for positioning transmission during RRC\_INACTIVE state as specified in TS 38.321 [3]. The network always configures this field when srs-PosRRC-Inactive is configured.  
<endl>  
  
  
<start>  
srs-posrrc-inactiveconfig  
srs-PosConfigNUL  
SRS for Positioning configuration in RRC\_INACTIVE state in Normal Uplink Carrier.  
<endl>  
  
  
<start>  
srs-posrrc-inactiveconfig  
srs-PosConfigSUL  
SRS for Positioning configuration in RRC\_INACTIVE state in Supplementary Uplink Carrier.  
<endl>

<start>  
suspendconfig  
ncd-SSB-RedCapInitialBWP-SDT  
Indicates that the UE uses the RedCap-specific initial DL BWP associated with the NCD-SSB for SDT. The network configures this field if a RedCap UE is configured with SDT in the RedCap-specific initial DL BWP not associated with CD-SSB. If configured, the NCD-SSB indicated by this field can only be used during the SDT procedure for CG-SDT or RA-SDT. ncd-SSB-RedCapInitialBWP-SDT  
Indicates that the UE uses the RedCap-specific initial DL BWP associated with the NCD-SSB for SDT. The network configures this field if a RedCap UE is configured with SDT in the RedCap-specific initial DL BWP not associated with CD-SSB. If configured, the NCD-SSB indicated by this field can only be used during the SDT procedure for CG-SDT or RA-SDT.  
<endl>  
  
  
<start>  
suspendconfig  
ran-ExtendedPagingCycle  
The extended DRX (eDRX) cycle for RAN-initiated paging to be applied by the UE. Value rf256 corresponds to 256 radio frames, value rf512 corresponds to 512 radio frames and so on. Value of the field indicates an eDRX cycle which is shorter or equal to the IDLE mode eDRX cycle configured for the UE. ran-NotificationAreaInfo  
Network ensures that the UE in RRC\_INACTIVE always has a valid ran-NotificationAreaInfo.  
<endl>  
  
  
<start>  
suspendconfig  
ran-NotificationAreaInfo  
Network ensures that the UE in RRC\_INACTIVE always has a valid ran-NotificationAreaInfo. ran-PagingCycle  
Refers to the UE specific cycle for RAN-initiated paging. Value rf32 corresponds to 32 radio frames, value rf64 corresponds to 64 radio frames and so on.  
<endl>  
  
  
<start>  
suspendconfig  
ran-PagingCycle  
Refers to the UE specific cycle for RAN-initiated paging. Value rf32 corresponds to 32 radio frames, value rf64 corresponds to 64 radio frames and so on. sl-UEIdentityRemote  
Indicates the C-RNTI to the L2 U2N Remote UE.  
<endl>  
  
  
<start>  
suspendconfig  
sl-UEIdentityRemote  
Indicates the C-RNTI to the L2 U2N Remote UE. t380  
Refers to the timer that triggers the periodic RNAU procedure in UE. Value min5 corresponds to 5 minutes, value min10 corresponds to 10 minutes and so on.  
<endl>  
  
  
<start>  
suspendconfig  
t380  
Refers to the timer that triggers the periodic RNAU procedure in UE. Value min5 corresponds to 5 minutes, value min10 corresponds to 10 minutes and so on.  
<endl>

<start>  
rrcresume-ies  
appLayerMeasConfig  
This field is used to configure application layer measurements. This field is absent when the UE is configured to operate with shared spectrum channel access.  
<endl>  
  
  
<start>  
rrcresume-ies  
idleModeMeasurementReq  
This field indicates that the UE shall report the idle/inactive measurements, if available, to the network in the RRCResumeComplete message  
<endl>  
  
  
<start>  
rrcresume-ies  
masterCellGroup  
Configuration of the master cell group.  
<endl>  
  
  
<start>  
rrcresume-ies  
mrdc-SecondaryCellGroup  
Includes an RRC message for SCG configuration in NR-DC or NE-DC.  
For NR-DC (nr-SCG), mrdc-SecondaryCellGroup contains the RRCReconfiguration message as generated (entirely) by SN gNB. In this version of the specification, the RRC message can only include fields secondaryCellGroup (with at least reconfigurationWithSync), otherConfig and measConfig.  
For NE-DC (eutra-SCG), mrdc-SecondaryCellGroup includes the E-UTRA RRCConnectionReconfiguration message as specified in TS 36.331 [10]. In this version of the specification, the E-UTRA RRC message only include the field scg-Configuration with at least mobilityControlInfoSCG.  
<endl>  
  
  
<start>  
rrcresume-ies  
needForGapsConfigNR  
Configuration for the UE to report measurement gap requirement information of NR target bands in the RRCReconfigurationComplete and RRCResumeComplete message.  
<endl>  
  
  
<start>  
rrcresume-ies  
needForGapNCSG-ConfigEUTRA  
Configuration for the UE to report measurement gap and NCSG requirement information of E-UTRA target bands in the RRCReconfigurationComplete and RRCResumeComplete message.  
<endl>  
  
  
<start>  
rrcresume-ies  
needForGapNCSG-ConfigNR  
Configuration for the UE to report measurement gap and NCSG requirement information of NR target bands in the RRCReconfigurationComplete and RRCResumeComplete message.  
<endl>  
  
  
<start>  
rrcresume-ies  
radioBearerConfig  
Configuration of Radio Bearers (DRBs, SRBs, multicast MRBs) including SDAP/PDCP.  
<endl>  
  
  
<start>  
rrcresume-ies  
radioBearerConfig2  
Configuration of Radio Bearers (DRBs, SRBs) including SDAP/PDCP. This field can only be used if the UE supports NR-DC or NE-DC.  
<endl>  
  
  
<start>  
rrcresume-ies  
restoreMCG-SCells  
Indicates that the UE shall restore the MCG SCells from the UE Inactive AS Context, if stored.  
<endl>  
  
  
<start>  
rrcresume-ies  
restoreSCG  
Indicates that the UE shall restore the SCG configurations from the UE Inactive AS Context, if stored.  
<endl>  
  
  
<start>  
rrcresume-ies  
scg-State  
Indicates that the SCG is in deactivated state.  
<endl>  
  
  
<start>  
rrcresume-ies  
sk-Counter  
A counter used to derive S-KgNB or S-KeNB based on the newly derived KgNB during RRC Resume. The field is only included when there is one or more RB with keyToUse set to secondary or mrdc-SecondaryCellGroup is included.  
<endl>  
  
  
<start>  
rrcresume-ies  
sl-ConfigDedicatedNR  
This field is used to provide the dedicated configurations for NR sidelink communication/discovery used by L2 U2N Remote UE.  
<endl>  
  
  
<start>  
rrcresume-ies  
sl-L2RemoteUE-Config  
Contains L2 U2N relay operation related configurations used by L2 U2N Remote UE. The field is absent if appLayerMeasConfig or SRB4 is configured/not released.  
<endl>

<start>  
rrcresumecomplete-ies  
idleMeasAvailable  
Indication that the UE has idle/inactive measurement report available.  
<endl>  
  
  
<start>  
rrcresumecomplete-ies  
measResultIdleEUTRA  
EUTRA measurement results performed during RRC\_INACTIVE.  
<endl>  
  
  
<start>  
rrcresumecomplete-ies  
measResultIdleNR  
NR measurement results performed during RRC\_INACTIVE.  
<endl>  
  
  
<start>  
rrcresumecomplete-ies  
needForGapsInfoNR  
This field is used to indicate the measurement gap requirement information of the UE for NR target bands.  
<endl>  
  
  
<start>  
rrcresumecomplete-ies  
needForGapNCSG-InfoEUTRA  
This field is used to indicate the measurement gap and NCSG requirement information of the UE for E-UTRA target bands  
<endl>  
  
  
<start>  
rrcresumecomplete-ies  
needForGapNCSG-InfoNR  
This field is used to indicate the measurement gap and NCSG requirement information of the UE for NR target bands  
<endl>  
  
  
<start>  
rrcresumecomplete-ies  
selectedPLMN-Identity  
Index of the PLMN selected by the UE from the plmn-IdentityInfoList or npn-IdentityInfoList fields included in SIB1.  
<endl>  
  
  
<start>  
rrcresumecomplete-ies  
uplinkTxDirectCurrentList  
The Tx Direct Current locations for the configured serving cells and BWPs if requested by the NW (see reportUplinkTxDirectCurrent in CellGroupConfig).  
<endl>  
  
  
<start>  
rrcresumecomplete-ies  
uplinkTxDirectCurrentMoreCarrierList  
The Tx Direct Current locations for the configured intra-band CA requested by reportUplinkTxDirectCurrentMoreCarrier-r17.  
<endl>  
  
  
<start>  
rrcresumecomplete-ies  
uplinkTxDirectCurrentTwoCarrierList  
The Tx Direct Current locations for the configured uplink intra-band CA with two carriers if requested by the NW (see reportUplinkTxDirectCurrentTwoCarrier-r16 in CellGroupConfig).  
<endl>

<start>  
rrcresumerequest-ies  
resumeCause  
Provides the resume cause for the RRC connection resume request as provided by the upper layers or RRC. The network is not expected to reject an RRCResumeRequest due to unknown cause value being used by the UE.  
<endl>  
  
  
<start>  
rrcresumerequest-ies  
resumeIdentity  
UE identity to facilitate UE context retrieval at gNB.  
<endl>  
  
  
<start>  
rrcresumerequest-ies  
resumeMAC-I  
Authentication token to facilitate UE authentication at gNB. The 16 least significant bits of the MAC-I calculated using the AS security configuration as specified in 5.3.13.3.  
<endl>

<start>  
rrcresumerequest1-ies  
resumeCause  
Provides the resume cause for the RRCResumeRequest1 as provided by the upper layers or RRC. A gNB is not expected to reject an RRCResumeRequest1 due to unknown cause value being used by the UE.  
<endl>  
  
  
<start>  
rrcresumerequest1-ies  
resumeIdentity  
UE identity to facilitate UE context retrieval at gNB.  
<endl>  
  
  
<start>  
rrcresumerequest1-ies  
resumeMAC-I  
Authentication token to facilitate UE authentication at gNB. The 16 least significant bits of the MAC-I calculated using the AS security configuration as specified in 5.3.13.3.  
<endl>

<start>  
rrcsetup-ies  
masterCellGroup  
The network configures only the RLC bearer for the SRB1, mac-CellGroupConfig, physicalCellGroupConfig and spCellConfig.  
<endl>  
  
  
<start>  
rrcsetup-ies  
radioBearerConfig  
Only SRB1 can be configured in RRC setup.  
<endl>  
  
  
<start>  
rrcsetup-ies  
sl-ConfigDedicatedNR  
Contains dedicated configurations for NR sidelink communication. The network configures only the PC5 Relay RLC channel and sl-PHY-MAC-RLC-Config used for the SRB1.  
<endl>  
  
  
<start>  
rrcsetup-ies  
sl-L2RemoteUE-Config  
Contains dedicated configurations used for L2 U2N relay related operation. The network configures only the SRAP configuration used for the SRB1 and local UE ID.  
<endl>

<start>  
rrcsetupcomplete-ies  
guami-Type  
This field is used to indicate whether the GUAMI included is native (derived from native 5G-GUTI) or mapped (from EPS, derived from EPS GUTI) as specified in TS 24.501 [23].  
<endl>  
  
  
<start>  
rrcsetupcomplete-ies  
iab-NodeIndication  
This field is used to indicate that the connection is being established by an IAB-node as specified in TS 38.300 [2].  
<endl>  
  
  
<start>  
rrcsetupcomplete-ies  
idleMeasAvailable  
Indication that the UE has idle/inactive measurement report available.  
<endl>  
  
  
<start>  
rrcsetupcomplete-ies  
mobilityState  
This field indicates the UE mobility state (as defined in TS 38.304 [20], clause 5.2.4.3) just prior to UE going into RRC\_CONNECTED state. The UE indicates the value of medium and high when being in Medium-mobility and High-mobility states respectively. Otherwise the UE indicates the value normal.  
<endl>  
  
  
<start>  
rrcsetupcomplete-ies  
ng-5G-S-TMSI-Part2  
The leftmost 9 bits of 5G-S-TMSI.  
<endl>  
  
  
<start>  
rrcsetupcomplete-ies  
onboardingRequest  
This field indicates that the connection is being established for UE onboarding in the selected onboarding SNPN, see TS 23.501 [32].  
<endl>  
  
  
<start>  
rrcsetupcomplete-ies  
registeredAMF  
This field is used to transfer the GUAMI of the AMF where the UE is registered, as provided by upper layers, see TS 23.003 [21].  
<endl>  
  
  
<start>  
rrcsetupcomplete-ies  
selectedPLMN-Identity  
Index of the PLMN or SNPN selected by the UE from the plmn-IdentityInfoList or npn-IdentityInfoList fields included in SIB1.  
<endl>  
  
  
<start>  
rrcsetupcomplete-ies  
ul-RRC-Segmentation  
This field indicates the UE supports uplink RRC segmentation of UECapabilityInformation.  
<endl>

<start>  
rrcsetuprequest-ies  
establishmentCause  
Provides the establishment cause for the RRCSetupRequest in accordance with the information received from upper layers. gNB is not expected to reject an RRCSetupRequest due to unknown cause value being used by the UE.  
<endl>  
  
  
<start>  
rrcsetuprequest-ies  
ue-Identity  
UE identity included to facilitate contention resolution by lower layers.  
<endl>

<start>  
initialue-identity  
ng-5G-S-TMSI-Part1  
The rightmost 39 bits of 5G-S-TMSI.  
<endl>  
  
  
<start>  
initialue-identity  
randomValue  
Integer value in the range 0 to 239 – 1.  
<endl>

<start>  
rrcsysteminforequest-ies  
requested-SI-List  
Contains a list of requested SI messages which are configured by schedulingInfoList in si-SchedulingInfo and schedulingInfoList2 in si-SchedulingInfo-v1700 (if present) in SIB1.  
If si-SchedulingInfo-v1700 is not present:  
- According to the order of entry in the list of SI messages configured by schedulingInfoList in si-SchedulingInfo in SIB1, first bit corresponds to first/leftmost listed SI message, second bit corresponds to second listed SI message, and so on.  
If si-SchedulingInfo-v1700 is present:  
- The UE generates a list of concatenated SI messages by appending the SI messages containing type1 SIB configured by schedulingInfoList2 in si-SchedulingInfo-v1700 to the SI messages configured by schedulingInfoList in si-SchedulingInfo.  
- According to the order of entry in the list of concatenated SI messages, first bit corresponds to first/leftmost listed SI message, second bit corresponds to second listed SI message, and so on.  
<endl>  
  
  
<start>  
rrcsysteminforequest-ies  
requestedPosSI-List  
Contains a list of requested SI messages which are configured by posSchedulingInfoList in posSI-SchedulingInfo and schedulingInfoList2 in si-SchedulingInfo-v1700 (if present) in SIB1.  
If si-SchedulingInfo-v1700 is not present:  
- According to the order of entry in the list of SI messages configured by posSchedulingInfoList in posSI-SchedulingInfo in SIB1, first bit corresponds to first/leftmost listed SI message, second bit corresponds to second listed SI message, and so on.  
If si-SchedulingInfo-v1700 is present:  
- The UE creates a list of concatenated SI messages by appending the SI messages containing type2 SIB configured by schedulingInfoList2 in si-SchedulingInfo-v1700 to the SI messages configured by posSchedulingInfoList in posSI-SchedulingInfo.  
- According to the order of entry in the list of concatenated SI messages, first bit corresponds to first/leftmost listed SI message, second bit corresponds to second listed SI message, and so on.  
<endl>

<start>  
scgfailureinformation  
measResultFreqList  
The field contains available results of measurements on NR frequencies the UE is configured to measure by measConfig.  
<endl>  
  
  
<start>  
scgfailureinformation  
measResultSCG-Failure  
The field contains the MeasResultSCG-Failure IE which includes available results of measurements on NR frequencies the UE is configured to measure by the NR SCG RRCReconfiguration message.  
<endl>  
  
  
<start>  
scgfailureinformation  
previousPSCellId  
This field indicates the physical cell id and carrier frequency of the cell that is the source PSCell of the last PSCell change.  
<endl>  
  
  
<start>  
scgfailureinformation  
failedPSCellId  
This field indicates the physical cell id and carrier frequency of the cell in which SCG failure is detected or the target PSCell of the failed PSCell change or failed PSCell addition.  
<endl>  
  
  
<start>  
scgfailureinformation  
timeSCGFailure  
This field is used to indicate the time elapsed since the last execution of RRCReconfiguration with reconfigurationWithSync for the SCG until the SCG failure. Actual value = field value \* 100ms. The maximum value 1023 means 102.3s or longer.  
<endl>

<start>  
scgfailureinformationeutra  
measResultFreqListMRDC  
The field contains available results of measurements on E-UTRA frequencies the UE is configured to measure by measConfig.  
<endl>  
  
  
<start>  
scgfailureinformationeutra  
measResultSCG-FailureMRDC  
Includes the E-UTRA MeasResultSCG-FailureMRDC IE as specified in TS 36.331 [10]. The field contains available results of measurements on E-UTRA frequencies the UE is configured to measure by the E-UTRA RRCConnectionReconfiguration message.  
<endl>

<start>  
sib1  
cellBarredNTN  
Value barred means that the cell is barred for connectivity to NTN, as defined in TS 38.304 [20]. Value notBarred means that the cell is allowed for connectivity to NTN. If not present, the UE considers the cell is not allowed for connectivity to NTN, as defined in TS 38.304 [20]. This field is only applicable to NTN-capable UEs.  
<endl>  
  
  
<start>  
sib1  
cellBarredRedCap1Rx  
Value barred means that the cell is barred for a RedCap UE with 1 Rx branch, as defined in TS 38.304 [20]. This field is ignored by non-RedCap UEs.  
<endl>  
  
  
<start>  
sib1  
cellBarredRedCap2Rx  
Value barred means that the cell is barred for a RedCap UE with 2 Rx branches, as defined in TS 38.304 [20]. This field is ignored by non-RedCap UEs.  
<endl>  
  
  
<start>  
sib1  
cellSelectionInfo  
Parameters for cell selection related to the serving cell.  
<endl>  
  
  
<start>  
sib1  
eCallOverIMS-Support  
Indicates whether the cell supports eCall over IMS services as defined in TS 23.501 [32]. If absent, eCall over IMS is not supported by the network in the cell.  
<endl>  
  
  
<start>  
sib1  
eDRX-AllowedIdle  
The presence of this field indicates that extended DRX for CN paging is allowed in the cell for UEs in RRC\_IDLE or RRC\_INACTIVE. The UE shall stop using extended DRX for CN paging in RRC\_IDLE or RRC\_INACTIVE if eDRX-AllowedIdle is not present.  
<endl>  
  
  
<start>  
sib1  
eDRX-AllowedInactive  
The presence of this field indicates that extended DRX for RAN paging is allowed in the cell for UEs in RRC\_INACTIVE. The UE shall stop using extended DRX for RAN paging in RRC\_INACTIVE if eDRX-AllowedInactive is not present.  
<endl>  
  
  
<start>  
sib1  
featurePriorities  
Indicates priorities for features, such as RedCap, Slicing, SDT and MSG3-Repetitions for Coverage Enhancements. These priorities are used to determine which FeatureCombinationPreambles the UE shall use when a feature maps to more than one FeatureCombinationPreambles, as specified in TS 38.321 [3]. A lower value means a higher priority. The network does not signal the same priority for more than one feature. The network signals a priority for all feature that map to at least one FeatureCombinationPreambles.  
<endl>  
  
  
<start>  
sib1  
halfDuplexRedCap-Allowed  
The presence of this field indicates that the cell supports half-duplex FDD RedCap UEs.  
<endl>  
  
  
<start>  
sib1  
hsdn-Cell  
This field indicates this is a HSDN cell as specified in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib1  
hyperSFN  
Indicates hyper SFN which increments by one when the SFN wraps around. This field is excluded when determining changes in system information, i.e. changes of hyper SFN should not result in system information change notifications.  
<endl>  
  
  
<start>  
sib1  
idleModeMeasurementsEUTRA  
This field indicates that a UE that is configured for EUTRA idle/inactive measurements shall perform the measurements while camping in this cell and report availability of these measurements when establishing or resuming a connection in this cell. If absent, a UE is not required to perform EUTRA idle/inactive measurements.  
<endl>  
  
  
<start>  
sib1  
idleModeMeasurementsNR  
This field indicates that a UE that is configured for NR idle/inactive measurements shall perform the measurements while camping in this cell and report availability of these measurements when establishing or resuming a connection in this cell. If absent, a UE is not required to perform NR idle/inactive measurements.  
<endl>  
  
  
<start>  
sib1  
ims-EmergencySupport  
Indicates whether the cell supports IMS emergency bearer services for UEs in limited service mode. If absent, IMS emergency call is not supported by the network in the cell for UEs in limited service mode.  
<endl>  
  
  
<start>  
sib1  
intraFreqReselectionRedCap  
Controls cell selection/reselection to intra-frequency cells for RedCap UEs when this cell is barred, or treated as barred by the RedCap UE, as specified in TS 38.304 [20]. If not present, a RedCap UE treats the cell as barred, i.e.,the UE considers that the cell does not support RedCap.  
<endl>  
  
  
<start>  
sib1  
q-QualMin  
Parameter "Qqualmin" in TS 38.304 [20], applicable for serving cell. If the field is absent, the UE applies the (default) value of negative infinity for Qqualmin.  
<endl>  
  
  
<start>  
sib1  
q-QualMinOffset  
Parameter "Qqualminoffset" in TS 38.304 [20]. Actual value Qqualminoffset = field value [dB]. If the field is absent, the UE applies the (default) value of 0 dB for Qqualminoffset. Affects the minimum required quality level in the cell.  
<endl>  
  
  
<start>  
sib1  
q-RxLevMin  
Parameter "Qrxlevmin" in TS 38.304 [20], applicable for serving cell.  
<endl>  
  
  
<start>  
sib1  
q-RxLevMinOffset  
Parameter "Qrxlevminoffset" in TS 38.304 [20]. Actual value Qrxlevminoffset = field value \* 2 [dB]. If absent, the UE applies the (default) value of 0 dB for Qrxlevminoffset. Affects the minimum required Rx level in the cell.  
<endl>  
  
  
<start>  
sib1  
q-RxLevMinSUL  
Parameter "Qrxlevmin" in TS 38.304 [20], applicable for serving cell.  
<endl>  
  
  
<start>  
sib1  
sdt-RSRP-Threshold  
RSRP threshold used to determine whether SDT procedure can be initiated, as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
sib1  
sdt-DataVolumeThreshold  
Data volume threshold used to determine whether SDT can be initiated, as specified in TS 38.321 [3]. Value byte32 corresponds to 32 bytes, value byte100 corresponds to 100 bytes, and so on.  
<endl>  
  
  
<start>  
sib1  
sdt-LogicalChannelSR-DelayTimer  
The value of logicalChannelSR-DelayTimer applied during SDT for logical channels configured with SDT, as specified in TS 38.321 [3]. Value in number of subframes. Value sf20 corresponds to 20 subframes, sf40 corresponds to 40 subframes, and so on. If this field is not configured, then logicalChannelSR-DelayTimer is not applied for SDT logical channels.  
<endl>  
  
  
<start>  
sib1  
servingCellConfigCommon  
Configuration of the serving cell.  
<endl>  
  
  
<start>  
sib1  
t319a  
Initial value of the timer T319a used for detection of SDT failure. Value ms100 corresponds to 100 milliseconds, value ms200 corresponds to 200 milliseconds and so on.  
<endl>  
  
  
<start>  
sib1  
uac-AccessCategory1-SelectionAssistanceInfo  
Information used to determine whether Access Category 1 applies to the UE, as defined in TS 22.261 [25]. If plmnCommon is chosen, the UAC-AccessCategory1-SelectionAssistanceInfo is applicable to all the PLMNs and SNPNs in plmn-IdentityInfoList and npn-IdentityInfoList. If individualPLMNList is chosen, the 1st entry in the list corresponds to the first network within all of the PLMNs and SNPNs across the plmn-IdentityList and the npn-IdentityInfoList, the 2nd entry in the list corresponds to the second network within all of the PLMNs and SNPNs across the plmn-IdentityList and the npn-IdentityInfoList and so on. If uac-AC1-SelectAssistInfo-r16 is present, the UE shall ignore the uac-AccessCategory1-SelectionAssistanceInfo.  
<endl>  
  
  
<start>  
sib1  
uac-AC1-SelectAssistInfo  
Information used to determine whether Access Category 1 applies to the UE, as defined in TS 22.261 [25]. The 1st entry in the list corresponds to the first network within all of the PLMNs and SNPNs across the plmn-IdentityList and npn-IdentityInfoList, the 2nd entry in the list corresponds to the second network within all of the PLMNs and SNPNs across the plmn-IdentityList and the npn-IdentityInfoList and so on. Value notConfigured indicates that Access Category1 is not configured for the corresponding PLMN/SNPN.  
<endl>  
  
  
<start>  
sib1  
uac-BarringForCommon  
Common access control parameters for each access category. Common values are used for all PLMNs/SNPNs, unless overwritten by the PLMN/SNPN specific configuration provided in uac-BarringPerPLMN-List. The parameters are specified by providing an index to the set of configurations (uac-BarringInfoSetList). UE behaviour upon absence of this field is specified in clause 5.3.14.2.  
<endl>  
  
  
<start>  
sib1  
ue-TimersAndConstants  
Timer and constant values to be used by the UE. The cell operating as PCell always provides this field.  
<endl>  
  
  
<start>  
sib1  
useFullResumeID  
Indicates which resume identifier and Resume request message should be used. UE uses fullI-RNTI and RRCResumeRequest1 if the field is present, or shortI-RNTI and RRCResumeRequest if the field is absent.  
<endl>

<start>  
sidelinkueinformationnr  
sl-RxDRX-ReportList  
Indicates the accepted DRX configuration that is received from the peer UE and reported to the network for NR sidelink unicast communication.  
<endl>  
  
  
<start>  
sidelinkueinformationnr  
sl-RxInterestedFreqList  
Indicates the index of frequency on which the UE is interested to receive NR sidelink communication. The value 1 corresponds to the frequency of first entry in sl-FreqInfoList broadcast in SIB12, the value 2 corresponds to the frequency of second entry in sl-FreqInfoList broadcast in SIB12 and so on. In this release, only value 1 can be included in the interested frequency list.  
<endl>  
  
  
<start>  
sidelinkueinformationnr  
sl-RxInterestedGC-BC-DestList  
Indicates the reported QoS profile and associated destination for which UE is interested in reception to the network for NR sidelink groupcast and broadcast communication, or for NR sidelink discovery or ProSe Direct Link Establishment Request as described in TS 24.554 [72], or for Direct Link Establishment Request (TS 24.587 [57]).  
<endl>  
  
  
<start>  
sidelinkueinformationnr  
sl-SourceIdentityRemoteUE  
This field is used to indicate the Source Layer-2 ID to be used to establish PC5 link with the target L2 U2N Relay UE for path switch.  
<endl>  
  
  
<start>  
sidelinkueinformationnr  
sl-TxResourceReq  
Parameters to request the transmission resources for NR sidelink communication to the network in the Sidelink UE Information report.  
<endl>  
  
  
<start>  
sidelinkueinformationnr  
sl-TxResourceReqList  
List of parameters to request the transmission resources for NR sidelink communication for the associated destination. If sl-TxResourceReqList-v1700 is present, it shall contain the same number of entries, listed in the same order as in sl-TxResourceReqList-r16.  
<endl>  
  
  
<start>  
sidelinkueinformationnr  
ue-Type  
Indicates the UE is acting as U2N Relay UE or U2N Remote UE.  
<endl>

<start>  
sl-txresourcereq  
sl-CapabilityInformationSidelink  
Includes the UECapabilityInformationSidelink message (which can be also included in ueCapabilityInformationSidelink-r16 in UECapabilityEnquirySidelink from peer UE) received from the peer UE.  
<endl>  
  
  
<start>  
sl-txresourcereq  
sl-CastType  
Indicates the cast type for the corresponding destination for which to request the resource.  
<endl>  
  
  
<start>  
sl-txresourcereq  
sl-DestinationIdentity  
Indicates the destination for which the TX resource request and allocation from the network are concerned.  
<endl>  
  
  
<start>  
sl-txresourcereq  
sl-DRX-Indication  
Indicates the sidelink DRX is applied (value on) or not applied (value off) for the associated destination. This field is only valid for NR sidelink groupcast communication.  
<endl>  
  
  
<start>  
sl-txresourcereq  
sl-DRX-InfoFromRxList  
Indicates list of the sidelink DRX configurations as assistance information received from the peer UE for NR sidelink unicast communication.  
<endl>  
  
  
<start>  
sl-txresourcereq  
sl-QoS-InfoList  
Includes the QoS profile of the sidelink QoS flow as specified in TS 23.287 [55].  
<endl>  
  
  
<start>  
sl-txresourcereq  
sl-QoS-FlowIdentity  
This identity uniquely identifies one sidelink QoS flow between the UE and the network in the scope of UE, which is unique for different destination and cast type.  
<endl>  
  
  
<start>  
sl-txresourcereq  
sl-RLC-ModeIndication  
This field indicates the RLC mode and optionally the related QoS profiles for the sidelink radio bearer, which has not been configured by the network and is initiated by another UE in unicast. The RLC mode for one sidelink radio bearer is aligned between UE and NW by the sl-QoS-FlowIdentity.  
<endl>  
  
  
<start>  
sl-txresourcereq  
sl-TxInterestedFreqList  
Each entry of this field indicates the index of frequency on which the UE is interested to transmit NR sidelink communication. The value 1 corresponds to the frequency of first entry in sl-FreqInfoList broadcast in SIB12, the value 2 corresponds to the frequency of second entry in sl-FreqInfoList broadcast in SIB12 and so on. In this release, only value 1 can be included in the interested frequency list. In this release, only one entry can be included in the list.  
<endl>  
  
  
<start>  
sl-txresourcereq  
sl-TypeTxSyncList  
A list of synchronization reference used by the UE. The UE shall include the same number of entries, listed in the same order, as in sl-TxInterestedFreqList, i.e. one for each carrier frequency included in sl-TxInterestedFreqList.  
<endl>

<start>  
sl-failure  
sl-DestinationIdentity  
Indicates the destination for which the SL failure is reporting for unicast.  
<endl>  
  
  
<start>  
sl-failure  
sl-Failure  
Indicates the sidelink cause for the sidelink RLF (value rlf), sidelink AS configuration failure (value configFailure) and the rejection of sidelink DRX configuration (value drxReject-v1710) for the associated destination for unicast.  
<endl>

<start>  
sl-rxdrx-report  
sl-DRX-ConfigFromTx  
Indicates the sidelink DRX configuration received from the peer UE for NR sidelink unicast communication.  
<endl>

<start>  
sl-rxinterestedgc-bc-dest  
sl-RxInterestedQoS-InfoList  
Indicates the QoS profile for which UE reports its interested service to which SL DRX is applied to the network, for NR sidelink groupcast or broadcast reception.  
<endl>

<start>  
sl-txresourcereqdisc  
sl-CastTypeDisc  
Indicates the cast type for the NR sidelink discovery messages. Only value broadcast can be set in this release.  
<endl>  
  
  
<start>  
sl-txresourcereqdisc  
sl-DestinationIdentityDisc  
This field is used to indicate the destination L2 ID for which the TX resource request and allocation from the network are concerned for relay discovery and non-relay discovery.  
<endl>  
  
  
<start>  
sl-txresourcereqdisc  
sl-SourceIdentityRelayUE  
This field is used to indicate the source L2 ID of relay-related discovery transmission by L2 U2N Relay UE.  
<endl>  
  
  
<start>  
sl-txresourcereqdisc  
sl-TxInterestedFreqListDisc  
Each entry of this field indicates the index of frequency on which the UE is interested to transmit NR sidelink discovery. The value 1 corresponds to the frequency of first entry in sl-FreqInfoList broadcast in SIB12, the value 2 corresponds to the frequency of second entry in sl-FreqInfoList broadcast in SIB12 and so on. In this release, only value 1 can be included in the interested frequency list. In this release, only one entry can be included in the list.  
<endl>

<start>  
sl-txresourcereqcommrelayinfo  
sl-RelayDRXConfig  
This field is used to indicate the applied sidelink DRX configuration for the relay related communication.  
<endl>  
  
  
<start>  
sl-txresourcereqcommrelayinfo  
sl-DestinationIdentityL2U2N  
This field is used to indicate the destination L2 ID for which the TX resource request and allocation from the network are concerned for the established PC5 link for relay by L2 U2N Relay UE, or L3 U2N Relay UE, or L3 U2N Remote UE.  
<endl>  
  
  
<start>  
sl-txresourcereqcommrelayinfo  
sl-LocalID-Request  
This field is used to request local UE ID for the corresponding destination by the L2 U2N Relay UE.  
<endl>  
  
  
<start>  
sl-txresourcereqcommrelayinfo  
sl-TxInterestedFreqListL2U2N  
Each entry of this field indicates the index of frequency on which the UE is interested to transmit NR sidelink communication for established PC5 link for relay. The value 1 corresponds to the frequency of first entry in sl-FreqInfoList broadcast in SIB12, the value 2 corresponds to the frequency of second entry in sl-FreqInfoList broadcast in SIB12 and so on. In this release, only value 1 can be included in the interested frequency list. In this release, only one entry can be included in the list.  
<endl>  
  
  
<start>  
sl-txresourcereqcommrelayinfo  
sl-PagingIdentityRemoteUE  
This field is used to indicate the paging UE ID(s) for the corresponding destination(s) by the L2 U2N Relay UE.  
<endl>

<start>  
ueassistanceinformation  
affectedCarrierFreqList  
Indicates a list of NR carrier frequencies that are affected by IDC problem.  
<endl>  
  
  
<start>  
ueassistanceinformation  
affectedCarrierFreqCombList  
Indicates a list of NR carrier frequencie combinations that are affected by IDC problems due to Inter-Modulation Distortion and harmonics from NR when configured with UL CA.  
<endl>  
  
  
<start>  
ueassistanceinformation  
bfd-MeasRelaxationState  
Indicates the relaxation state of BFD measurements. Each bit corresponds to a serving cell of the cell group. A serving cell is mapped to the (servCellIndex+1)-th bit, starting from MSB. A bit that is set to 1 indicates that the UE is performing BFD measurements relaxation on the serving cell mapped on the bit. A bit that is set to 0 indicates that the UE is not performing BFD measurements relaxation on the serving cell mapped on the bit. If a serving cell is not configured to the UE, the corresponding bit is set to 0.  
<endl>  
  
  
<start>  
ueassistanceinformation  
delayBudgetReport  
Indicates the UE-preferred adjustment to connected mode DRX.  
<endl>  
  
  
<start>  
ueassistanceinformation  
interferenceDirection  
Indicates the direction of IDC interference. Value nr indicates that only NR is victim of IDC interference, value other indicates that only another radio is victim of IDC interference and value both indicates that both NR and another radio are victims of IDC interference. The other radio refers to either the ISM radio or GNSS (see TR 36.816 [44]).  
<endl>  
  
  
<start>  
ueassistanceinformation  
minSchedulingOffsetPreference  
Indicates the UE's preferences on minimumSchedulingOffset of cross-slot scheduling for power saving.  
<endl>  
  
  
<start>  
ueassistanceinformation  
minSchedulingOffsetPreferenceExt  
Indicates the UE's preferences on minimumSchedulingOffset of cross-slot scheduling for power saving for SCS 480 kHz and/or 960 kHz.  
<endl>  
  
  
<start>  
ueassistanceinformation  
musim-GapPreferenceList  
Indicates the UE's MUSIM gap preference and related MUSIM gap configuration, as defined in TS 38.133 [14] clause 9.1.10.  
<endl>  
  
  
<start>  
ueassistanceinformation  
musim-PreferredRRC-State  
Indicates the UE's preferred RRC state when leaving RRC\_CONNECTED.  
<endl>  
  
  
<start>  
ueassistanceinformation  
nonSDT-DataIndication  
Informs the network about the arrival of data and/or signaling mapped to radio bearers not configured for SDT while SDT procedure is ongoing.  
<endl>  
  
  
<start>  
ueassistanceinformation  
preferredDRX-InactivityTimer  
Indicates the UE's preferred DRX inactivity timer length for power saving. Value in ms (milliSecond). ms0 corresponds to 0, ms1 corresponds to 1 ms, ms2 corresponds to 2 ms, and so on. If the field is absent from the DRX-Preference IE, it is interpreted as the UE having no preference for the DRX inactivity timer. If secondary DRX group is configured, the preferredDRX-InactivityTimer only applies to the default DRX group.  
<endl>  
  
  
<start>  
ueassistanceinformation  
preferredDRX-LongCycle  
Indicates the UE's preferred long DRX cycle length for power saving. Value in ms. ms10 corresponds to 10ms, ms20 corresponds to 20 ms, ms32 corresponds to 32 ms, and so on. If preferredDRX-ShortCycle is provided, the value of preferredDRX-LongCycle shall be a multiple of the preferredDRX-ShortCycle value. If the field is absent from the DRX-Preference IE, it is interpreted as the UE having no preference for the long DRX cycle.  
<endl>  
  
  
<start>  
ueassistanceinformation  
preferredDRX-ShortCycle  
Indicates the UE's preferred short DRX cycle length for power saving. Value in ms. ms2 corresponds to 2ms, ms3 corresponds to 3 ms, ms4 corresponds to 4 ms, and so on. If the field is absent from the DRX-Preference IE, it is interpreted as the UE having no preference for the short DRX cycle.  
<endl>  
  
  
<start>  
ueassistanceinformation  
preferredDRX-ShortCycleTimer  
Indicates the UE's preferred short DRX cycle timer for power saving. Value in multiples of preferredDRX-ShortCycle. A value of 1 corresponds to preferredDRX-ShortCycle, a value of 2 corresponds to 2 \* preferredDRX-ShortCycle and so on. If the field is absent from the DRX-Preference IE, it is interpreted as the UE having no preference for the short DRX cycle timer. A preference for the short DRX cycle is indicated when a preference for the short DRX cycle timer is indicated.  
<endl>  
  
  
<start>  
ueassistanceinformation  
preferredK0  
Indicates the UE's preferred value of k0 (slot offset between DCI and its scheduled PDSCH - see TS 38.214 [19], clause 5.1.2.1) for cross-slot scheduling for power saving. Value is defined for each subcarrier spacing (numerology) in units of slots. sl1 corresponds to 1 slot, sl2 corresponds to 2 slots, sl4 corresponds to 4 slots, and so on. If a value for a subcarrier spacing is absent, it is interpreted as the UE having no preference on k0 for cross-slot scheduling for that subcarrier spacing. If the field is absent from the MinSchedulingOffsetPreference IE, it is interpreted as the UE having no preference on k0 for cross-slot scheduling.  
<endl>  
  
  
<start>  
ueassistanceinformation  
preferredK2  
Indicates the UE's preferred value of k2 (slot offset between DCI and its scheduled PUSCH - see TS 38.214 [19], clause 6.1.2.1) for cross-slot scheduling for power saving. Value is defined for each subcarrier spacing (numerology) in units of slots. sl1 corresponds to 1 slot, sl2 corresponds to 2 slots, sl4 corresponds to 4 slots, and so on. If a value for a subcarrier spacing is absent, it is interpreted as the UE having no preference on k2 for cross-slot scheduling for that subcarrier spacing. If the field is absent from the MinSchedulingOffsetPreference IE, it is interpreted as the UE having no preference on k2 for cross-slot scheduling.  
<endl>  
  
  
<start>  
ueassistanceinformation  
preferredRRC-State  
Indicates the UE's preferred RRC state. The value idle is indicated if the UE prefers to be released from RRC\_CONNECTED and transition to RRC\_IDLE. The value inactive is indicated if the UE prefers to be released from RRC\_CONNECTED and transition to RRC\_INACTIVE. The value connected is indicated if the UE prefers to revert an earlier indication to leave RRC\_CONNECTED state. The value outOfConnected is indicated if the UE prefers to be released from RRC\_CONNECTED and has no preferred RRC state to transition to. The value connected can only be indicated if the UE is configured with connectedReporting.  
<endl>  
  
  
<start>  
ueassistanceinformation  
propagationDelayDifference  
Indicates the service link propagation delay difference between serving cell and each neighbour cell included in neighCellInfoList, defined as neighbour cell's service link propagation delay minus serving cell's service link propagation delay, in number of ms. First entry in propagationDelayDifference corresponds to first entry in neighCellInfoList, second entry in propagationDelayDifference corresponds to second entry in neighCellInfoList, and so on.  
<endl>  
  
  
<start>  
ueassistanceinformation  
reducedBW-FR1  
Indicates the UE's preference on reduced configuration corresponding to the maximum aggregated bandwidth across all downlink carrier(s) and across all uplink carrier(s) of FR1, to address overheating or power saving. This field is allowed to be reported only when UE is configured with serving cell(s) operating on FR1. The aggregated bandwidth across all downlink carrier(s) of FR1 is the sum of bandwidth of active downlink BWP(s) across all activated downlink carrier(s) of FR1. The aggregated bandwidth across all uplink carrier(s) of FR1 is the sum of bandwidth of active uplink BWP(s) across all activated uplink carrier(s) of FR1. If the field is absent from the MaxBW-Preference IE or the OverheatingAssistance IE, it is interpreted as the UE having no preference on the maximum aggregated bandwidth of FR1.  
When indicated to address overheating, this maximum aggregated bandwidth includes carrier(s) of FR1 of both the NR MCG and the SCG. This maximum aggregated bandwidth only includes carriers of FR1 of the SCG in (NG)EN-DC. Value mhz0 is not used when indicated to address overheating.  
When indicated to address power saving, this maximum aggregated bandwidth includes carrier(s) of FR1 of the cell group that this UE assistance information is associated with. The aggregated bandwidth can only range up to the current active configuration when indicated to address power savings.  
<endl>  
  
  
<start>  
ueassistanceinformation  
reducedBW-FR2  
Indicates the UE's preference on reduced configuration corresponding to the maximum aggregated bandwidth across all downlink carrier(s) and across all uplink carrier(s) of FR2-1, to address overheating or power saving. This field is allowed to be reported only when UE is configured with serving cell(s) operating on FR2-1. The aggregated bandwidth across all downlink carrier(s) of FR2-1 is the sum of bandwidth of active downlink BWP(s) across all activated downlink carrier(s) of FR2-1. The aggregated bandwidth across all uplink carrier(s) of FR2-1 is the sum of bandwidth of active uplink BWP(s) across all activated uplink carrier(s) of FR2-1. If the field is absent from the MaxBW-Preference IE or the OverheatingAssistance IE, it is interpreted as the UE having no preference on the maximum aggregated bandwidth of FR2-1.  
When indicated to address overheating, this maximum aggregated bandwidth includes carrier(s) of FR2-1 of both the NR MCG and the NR SCG. This maximum aggregated bandwidth only includes carriers of FR2-1 of the SCG in (NG)EN-DC.  
When indicated to address power saving, this maximum aggregated bandwidth includes carrier(s) of FR2-1 of the cell group that this UE assistance information is associated with. The aggregated bandwidth can only range up to the current active configuration when indicated to address power savings.  
<endl>  
  
  
<start>  
ueassistanceinformation  
reducedMaxBW-FR2-2  
Indicates the UE's preference on reduced configuration corresponding to the maximum aggregated bandwidth across all downlink carrier(s) and across all uplink carrier(s) of FR2-2, to address overheating or power saving. This field is allowed to be reported only when UE is configured with serving cell(s) operating on FR2-2. The aggregated bandwidth across all downlink carrier(s) of FR2-2 is the sum of bandwidth of active downlink BWP(s) across all activated downlink carrier(s) of FR2-2. The aggregated bandwidth across all uplink carrier(s) of FR2-2 is the sum of bandwidth of active uplink BWP(s) across all activated uplink carrier(s) of FR2-2. If the field is absent from the MaxBW-PreferenceFR2-2 IE or the OverheatingAssistance IE, it is interpreted as the UE having no preference on the maximum aggregated bandwidth of FR2-2.  
When indicated to address overheating, this maximum aggregated bandwidth includes carrier(s) of FR2-2 of both the NR MCG and the NR SCG. This maximum aggregated bandwidth only includes carriers of FR2-2 of the SCG in (NG)EN-DC.  
When indicated to address power saving, this maximum aggregated bandwidth includes carrier(s) of FR2-2 of the cell group that this UE assistance information is associated with. The aggregated bandwidth can only range up to the current active configuration when indicated to address power savings.  
<endl>  
  
  
<start>  
ueassistanceinformation  
reducedCCsDL  
Indicates the UE's preference on reduced configuration corresponding to the maximum number of downlink SCells indicated by the field, to address overheating or power saving.  
When indicated to address overheating, this maximum number includes both SCells of the NR MCG and PSCell/SCells of the SCG. This maximum number only includes PSCell/SCells of the SCG in (NG)EN-DC.  
When indicated to address power saving, this maximum number includes PSCell/SCells of the cell group that this UE assistance information is associated with. The maximum number of downlink SCells can only range up to the current active configuration when indicated to address power savings.  
<endl>  
  
  
<start>  
ueassistanceinformation  
reducedCCsUL  
Indicates the UE's preference on reduced configuration corresponding to the maximum number of uplink SCells indicated by the field, to address overheating or power saving.  
When indicated to address overheating, this maximum number includes both SCells of the NR MCG and PSCell/SCells of the SCG. This maximum number only includes PSCell/SCells of the SCG in (NG)EN-DC.  
When indicated to address power saving, this maximum number includes PSCell/SCells of the cell group that this UE assistance information is associated with. The maximum number of uplink SCells can only range up to the current active configuration when indicated to address power savings.  
<endl>  
  
  
<start>  
ueassistanceinformation  
reducedMIMO-LayersFR1-DL  
Indicates the UE's preference on reduced configuration corresponding to the maximum number of downlink MIMO layers of each serving cell operating on FR1 indicated by the field, to address overheating or power saving. This field is allowed to be reported only when UE is configured with serving cells operating on FR1. The maximum number of downlink MIMO layers can only range up to the maximum number of MIMO layers configured across all activated downlink carrier(s) of FR1 in the cell group when indicated to address power savings.  
<endl>  
  
  
<start>  
ueassistanceinformation  
reducedMIMO-LayersFR1-UL  
Indicates the UE's preference on reduced configuration corresponding to the maximum number of uplink MIMO layers of each serving cell operating on FR1 indicated by the field, to address overheating or power saving. This field is allowed to be reported only when UE is configured with serving cells operating on FR1. The maximum number of uplink MIMO layers can only range up to the maximum number of MIMO layers configured across all activated uplink carrier(s) of FR1 in the cell group when indicated to address power savings.  
<endl>  
  
  
<start>  
ueassistanceinformation  
reducedMIMO-LayersFR2-DL  
Indicates the UE's preference on reduced configuration corresponding to the maximum number of downlink MIMO layers of each serving cell operating on FR2-1 indicated by the field, to address overheating or power saving. This field is allowed to be reported only when UE is configured with serving cells operating on FR2-1. The maximum number of downlink MIMO layers can only range up to the maximum number of MIMO layers configured across all activated downlink carrier(s) of FR2-1 in the cell group when indicated to address power savings.  
<endl>  
  
  
<start>  
ueassistanceinformation  
reducedMIMO-LayersFR2-UL  
Indicates the UE's preference on reduced configuration corresponding to the maximum number of uplink MIMO layers of each serving cell operating on FR2-1 indicated by the field, to address overheating or power saving. This field is allowed to be reported only when UE is configured with serving cells operating on FR2-1. The maximum number of uplink MIMO layers can only range up to the maximum number of MIMO layers configured across all activated uplink carrier(s) of FR2-1 in the cell group when indicated to address power savings.  
<endl>  
  
  
<start>  
ueassistanceinformation  
reducedMIMO-LayersFR2-2-DL  
Indicates the UE's preference on reduced configuration corresponding to the maximum number of downlink MIMO layers of each serving cell operating on FR2-2 indicated by the field, to address overheating or power saving. This field is allowed to be reported only when UE is configured with serving cells operating on FR2-2. The maximum number of downlink MIMO layers can only range up to the maximum number of MIMO layers configured across all activated downlink carrier(s) of FR2-2 in the cell group when indicated to address power savings.  
<endl>  
  
  
<start>  
ueassistanceinformation  
reducedMIMO-LayersFR2-2-UL  
Indicates the UE's preference on reduced configuration corresponding to the maximum number of uplink MIMO layers of each serving cell operating on FR2-2 indicated by the field, to address overheating or power saving. This field is allowed to be reported only when UE is configured with serving cells operating on FR2-2. The maximum number of uplink MIMO layers can only range up to the maximum number of MIMO layers configured across all activated uplink carrier(s) of FR2-2 in the cell group when indicated to address power savings.  
<endl>  
  
  
<start>  
ueassistanceinformation  
referenceTimeInfoPreference  
Indicates whether the UE prefers being provisioned with the timing information specified in the IE ReferenceTimeInfo.  
<endl>  
  
  
<start>  
ueassistanceinformation  
resumeCause  
Provides the resume cause based on the information received from the upper layers.  
<endl>  
  
  
<start>  
ueassistanceinformation  
rlm-MeasRelaxationState  
Indicates the relaxation state of RLM measurements. Value true indicates that the UE is performing relaxation of RLM measurements, and value false indicates that the UE is not performing relaxation of RLM measurements.  
<endl>  
  
  
<start>  
ueassistanceinformation  
rrm-MeasRelaxationFulfilment  
Indicates whether the UE fulfils the relaxed measurement criterion for stationary UE in 5.7.4.4. Value true indicates that the UE fulfils the criterion, and value false indicates that the UE does not fulfil the criterion.  
<endl>  
  
  
<start>  
ueassistanceinformation  
sl-QoS-FlowIdentity  
This identity uniquely identifies one sidelink QoS flow between the UE and the network in the scope of UE, which is unique for different destination and cast type.  
<endl>  
  
  
<start>  
ueassistanceinformation  
sl-UE-AssistanceInformationNR  
Indicates the traffic characteristic of sidelink logical channel(s), specified in the IE SL-TrafficPatternInfo, that are setup for NR sidelink communication.  
<endl>  
  
  
<start>  
ueassistanceinformation  
type1  
Indicates the preferred amount of increment/decrement to the long DRX cycle length with respect to the current configuration. Value in number of milliseconds. Value ms40 corresponds to 40 milliseconds, msMinus40 corresponds to -40 milliseconds and so on.  
<endl>  
  
  
<start>  
ueassistanceinformation  
ul-GapFR2-PatternPreference  
Indicates the UE's preference on FR2 UL gap pattern as defined in TS 38.133 [14].  
<endl>  
  
  
<start>  
ueassistanceinformation  
victimSystemType  
Indicate the list of victim system types to which IDC interference is caused from NR when configured with UL CA. Value gps, glonass, bds, galileo and navIC indicates the type of GNSS. Value wlan indicates WLAN and value bluetooth indicates Bluetooth.  
<endl>

<start>  
sl-trafficpatterninfo  
messageSize  
Indicates the maximum TB size based on the observed traffic pattern. The value refers to the index of TS 38.321 [3], table 6.1.3.1-2.  
<endl>  
  
  
<start>  
sl-trafficpatterninfo  
timingOffset  
This field indicates the estimated timing for a packet arrival in a sidelink logical channel. Specifically, the value indicates the timing offset with respect to subframe#0 of SFN#0 in milliseconds.  
<endl>  
  
  
<start>  
sl-trafficpatterninfo  
trafficPeriodicity  
This field indicates the estimated data arrival periodicity in a sidelink logical channel. Value ms20 corresponds to 20 ms, ms50 corresponds to 50 ms and so on.  
<endl>

<start>  
ueinformationrequest-ies  
coarseLocationRequest  
This field is used to request UE to report coarse location information.  
<endl>  
  
  
<start>  
ueinformationrequest-ies  
connEstFailReportReq  
This field is used to indicate whether the UE shall report information about the connection failure.  
<endl>  
  
  
<start>  
ueinformationrequest-ies  
idleModeMeasurementReq  
This field indicates that the UE shall report the idle/inactive measurement information, if available, to the network in the UEInformationResponse message.  
<endl>  
  
  
<start>  
ueinformationrequest-ies  
logMeasReportReq  
This field is used to indicate whether the UE shall report information about logged measurements.  
<endl>  
  
  
<start>  
ueinformationrequest-ies  
mobilityHistoryReportReq  
This field is used to indicate whether the UE shall report information about mobility history information.  
<endl>  
  
  
<start>  
ueinformationrequest-ies  
ra-ReportReq  
This field is used to indicate whether the UE shall report information about the random access procedure.  
<endl>  
  
  
<start>  
ueinformationrequest-ies  
rlf-ReportReq  
This field is used to indicate whether the UE shall report information about the radio link failure.  
<endl>  
  
  
<start>  
ueinformationrequest-ies  
successHO-ReportReq  
This field is used to indicate whether the UE shall report information about the successful handover report.  
<endl>

<start>  
ueinformationresponse-ies  
coarseLocationInfo  
Parameter type Ellipsoid-Point defined in TS 37.355 [49]. The first/leftmost bit of the first octet contains the most significant bit. The least significant bits of degreesLatitude and degreesLongitude are set to 0 to meet the accuracy requirement corresponds to a granularity of approximately 2 km.  
It is up to UE implementation how many LSBs are set to 0 to meet the accuracy requirement.  
<endl>  
  
  
<start>  
ueinformationresponse-ies  
connEstFailReport  
This field is used to provide connection establishment failure or connection resume failure information.  
<endl>  
  
  
<start>  
ueinformationresponse-ies  
connEstFailReportList  
This field is used to provide the list of connEstFailReport that are stored by the UE for the past up to maxCEFReport-r17.  
<endl>  
  
  
<start>  
ueinformationresponse-ies  
logMeasReport  
This field is used to provide the measurement results stored by the UE associated to logged MDT.  
<endl>  
  
  
<start>  
ueinformationresponse-ies  
measResultIdleEUTRA  
EUTRA measurement results performed during RRC\_INACTIVE or RRC\_IDLE.  
<endl>  
  
  
<start>  
ueinformationresponse-ies  
measResultIdleNR  
NR measurement results performed during RRC\_INACTIVE or RRC\_IDLE.  
<endl>  
  
  
<start>  
ueinformationresponse-ies  
ra-ReportList  
This field is used to provide the list of RA reports that is stored by the UE for the past upto maxRAReport-r16 number of successful random access procedures, or failed or successful completion of on-demand system information request procedure.  
<endl>  
  
  
<start>  
ueinformationresponse-ies  
rlf-Report  
This field is used to indicate the RLF report related contents.  
<endl>  
  
  
<start>  
ueinformationresponse-ies  
successHO-Report  
This field is used to provide the successful handover report if triggered based on the successful handover configuration.  
<endl>

<start>  
logmeasreport  
absoluteTimeStamp  
Indicates the absolute time when the logged measurement configuration logging is provided, as indicated by NR within absoluteTimeInfo.  
<endl>  
  
  
<start>  
logmeasreport  
anyCellSelectionDetected  
This field is used to indicate the detection of any cell selection state, as defined in TS 38.304 [20]. The UE sets this field when performing the logging of measurement results in RRC\_IDLE or RRC\_INACTIVE and there is no suitable cell or no acceptable cell.  
<endl>  
  
  
<start>  
logmeasreport  
inDeviceCoexDetected  
Indicates that measurement logging is suspended due to IDC problem detection.  
<endl>  
  
  
<start>  
logmeasreport  
measResultServingCell  
This field refers to the log measurement results taken in the Serving cell.  
<endl>  
  
  
<start>  
logmeasreport  
numberOfGoodSSB  
Indicates the number of good beams (beams that are above absThreshSS-BlocksConsolidation, if configured by the network) associated to the cells within the R value range (which is configured by network for cell reselection) of the highest ranked cell as part of the beam level measurements. If the UE has no SSB of a neighbour cell whose measurement quantity is above the absThreshSS-BlocksConsolidation or if the network has not configured the absThreshSS-BlocksConsolidation, then the UE does not include numberOfGoodSSB for the corresponding neighbour cell. If the UE has no SSB of the serving cell whose measurement quantity is above the absThreshSS-BlocksConsolidation or if the network has not configured the absThreshSS-BlocksConsolidation, then the UE shall set the numberOfGoodSSB for the serving cell to one.  
<endl>  
  
  
<start>  
logmeasreport  
relativeTimeStamp  
Indicates the time of logging measurement results, measured relative to the absoluteTimeStamp. Value in seconds.  
<endl>  
  
  
<start>  
logmeasreport  
tce-Id  
Parameter Trace Collection Entity Id: See TS 32.422 [52].  
<endl>  
  
  
<start>  
logmeasreport  
traceRecordingSessionRef  
Parameter Trace Recording Session Reference: See TS 32.422 [52].  
<endl>

<start>  
connestfailreport  
measResultFailedCell  
This field refers to the last measurement results taken in the cell, where connection establishment failure or connection resume failure happened.  
<endl>  
  
  
<start>  
connestfailreport  
measResultNeighCells  
This field refers to the neighbour cell measurements when connection establishment failure or connection resume failure happened.  
<endl>  
  
  
<start>  
connestfailreport  
numberOfConnFail  
This field is used to indicate the latest number of consecutive failed RRCSetup or RRCResume procedures in the same cell independent of RRC state transition.  
<endl>  
  
  
<start>  
connestfailreport  
timeSinceFailure  
This field is used to indicate the time that elapsed since the connection (establishment or resume) failure. Value in seconds. The maximum value 172800 means 172800s or longer.  
<endl>

<start>  
ra-informationcommon  
absoluteFrequencyPointA  
This field indicates the absolute frequency position of the reference resource block (Common RB 0).  
<endl>  
  
  
<start>  
ra-informationcommon  
locationAndBandwidth  
Frequency domain location and bandwidth of the bandwidth part associated to the random-access resources used by the UE.  
<endl>  
  
  
<start>  
ra-informationcommon  
perRAInfoList, perRAInfoList-v1660  
This field provides detailed information about each of the random access attempts in the chronological order of the random access attempts. If perRAInfoList-v1660 is present, it shall contain the same number of entries, listed in the same order as in perRAInfoList-r16.  
<endl>  
  
  
<start>  
ra-informationcommon  
subcarrierSpacing  
Subcarrier spacing used in the BWP associated to the random-access resources used by the UE.  
<endl>

<start>  
ra-report  
cellID  
This field indicates the CGI of the cell in which the associated random access procedure was performed.  
<endl>  
  
  
<start>  
ra-report  
contentionDetected  
This field is used to indicate that contention was detected for the transmitted preamble in the given random access attempt or not. This field is not included when the UE performs random access attempt is using contention free random-access resources or when the raPurpose is set to requestForOtherSI or when the RA attempt is a 2-step RA attempt and fallback to 4-step RA did not occur (i.e. fallbackToFourStepRA is not included).  
<endl>  
  
  
<start>  
ra-report  
csi-RS-Index, csi-RS-Index-v1660  
This field is used to indicate the CSI-RS index corresponding to the random access attempt.  
If the random access procedure is for beam failure recovery, the field indicates the NZP-CSI-RS-ResourceId. For CSI-RS index larger than maxNrofCSI-RS-ResourcesRRM-1, the index value is the sum of csi-RS-Index (without suffix) and csi-RS-Index-v1660.  
<endl>  
  
  
<start>  
ra-report  
dlPathlossRSRP  
Measeured RSRP of the DL pathloss reference obtained at the time of RA\_Type selection stage of the RA procedure as captured in TS 38.321 [3].  
<endl>  
  
  
<start>  
ra-report  
dlRSRPAboveThreshold  
In 4 step random access procedure, this field is used to indicate whether the DL beam (SSB) quality associated to the random access attempt was above or below the threshold rsrp-ThresholdSSB in beamFailureRecoveryConfig in UL BWP configuration of UL BWP selected for random access procedure initiated for beam failure recovery; Otherwise, rsrp-ThresholdSSB in rach-ConfigCommon in UL BWP configuration of UL BWP selected for random access procedure.  
In 2 step random access procedure, this field is used to indicate whether the DL beam (SSB) quality associated to the random access attempt was above or below the threshold msgA-RSRP-ThresholdSSB in rach-ConfigCommonTwoStepRA in UL BWP configuration of UL BWP selected for random access procedure.  
<endl>  
  
  
<start>  
ra-report  
fallbackToFourStepRA  
This field indicates if a fallback indication in MsgB is received (according to TS 38.321 [3]) for the 2-step random access attempt.  
<endl>  
  
  
<start>  
ra-report  
intendedSIBs  
This field indicates the SIB(s) the UE wanted to receive as a result of the on demand SI request (when the RA procedure is a used as a SI request) initiated by the UE. That is, it indicates the one(s) of the SIB(s) in the SI message(s) requested to be broadcast that the UE was interested in.  
<endl>  
  
  
<start>  
ra-report  
msg1-SCS-From-prach-ConfigurationIndex  
This field is set by the UE with the corresponding SCS for CBRA as derived from the prach-ConfigurationIndex in RACH-ConfigGeneric when the msg1-SubcarrierSpacing is absent; otherwise, this field is absent.  
<endl>  
  
  
<start>  
ra-report  
msg1-SCS-From-prach-ConfigurationIndexCFRA  
This field is set by the UE with the corresponding SCS for CFRA as derived from the prach-ConfigurationIndex in RACH-ConfigGeneric when the msg1-SubcarrierSpacing is absent; otherwise, this field is absent.  
<endl>  
  
  
<start>  
ra-report  
msgA-PUSCH-PayloadSize  
This field indicates the size of the overall payload available in the UE buffer at the time of initiating the 2 step RA procedure. The value refers to the index of TS 38.321 [3], table 6.1.3.1-1, corresponding to the UE buffer size.  
<endl>  
  
  
<start>  
ra-report  
msgA-RO-FDM  
This field indicates the number of msgA PRACH transmission occasions Frequency-Division Multiplexed in one time instance for the PRACH resources configured for 2-step CBRA..  
<endl>  
  
  
<start>  
ra-report  
msgA-RO-FDMCFRA  
This field indicates the number of msgA PRACH transmission occasions Frequency-Division Multiplexed in one time instance for the PRACH resources configured for 2-step CFRA.  
<endl>  
  
  
<start>  
ra-report  
msgA-RO-FrequencyStart  
This field indicates the lowest resource block of the contention based random-access resources for 2-step CBRA in the random-access procedure. The indication has the form of the offset of the lowest PRACH transmissions occasion with respect to PRB 0 in the frequency domain.  
<endl>  
  
  
<start>  
ra-report  
msgA-RO-FrequencyStartCFRA  
This field indicates the lowest resource block of the contention free random-access resources for the 2-step CFRA in the random-access procedure. The indication has the form of the offset of the lowest PRACH transmissions occasion with respect to PRB 0 in the frequency domain.  
<endl>  
  
  
<start>  
ra-report  
msgA-SCS-From-prach-ConfigurationIndex  
This field is set by the UE with the corresponding SCS as derived from the msgA-PRACH-ConfigurationIndex in RACH-ConfigGenericTwoStepRA (see tables Table 6.3.3.1-1, Table 6.3.3.1-2, Table 6.3.3.2-2 and Table 6.3.3.2-3, TS 38.211 [16]) when the msgA-SubcarrierSpacing is absent and when only 2-step random-access resources are available in the UL BWP used in the random-access procedure; otherwise, this field is absent.  
<endl>  
  
  
<start>  
ra-report  
numberOfPreamblesSentOnCSI-RS  
This field is used to indicate the total number of successive RA preambles that were transmitted on the corresponding CSI-RS.  
<endl>  
  
  
<start>  
ra-report  
numberOfPreamblesSentOnSSB  
This field is used to indicate the total number of successive RA preambles that were transmitted on the corresponding SS/PBCH block.  
<endl>  
  
  
<start>  
ra-report  
onDemandSISuccess  
This field is set to true when the RA report entry is included because of either msg1 based on demand SI request or msg3 based on demand SI request and if the on-demand SI request is successful. Otherwise, the field is absent.  
<endl>  
  
  
<start>  
ra-report  
perRAAttemptInfoList  
This field provides detailed information about a random access attempt.  
<endl>  
  
  
<start>  
ra-report  
perRACSI-RSInfoList  
This field provides detailed information about the successive random access attempts associated to the same CSI-RS.  
<endl>  
  
  
<start>  
ra-report  
perRASSBInfoList  
This field provides detailed information about the successive random access attempts associated to the same SS/PBCH block.  
<endl>  
  
  
<start>  
ra-report  
ra-InformationCommon  
This field is used to provide information on random access attempts. This field is mandatory present.  
<endl>  
  
  
<start>  
ra-report  
raPurpose  
This field is used to indicate the RA scenario for which the RA report entry is triggered. The RA accesses associated to Initial access from RRC\_IDLE, RRC re-establishment procedure, transition from RRC-INACTIVE. The indicator beamFailureRecovery is used in case of successful beam failure recovery related RA procedure in the SpCell [3]. The indicator reconfigurationWithSync is used if the UE executes a reconfiguration with sync. The indicator ulUnSynchronized is used if the random access procedure is initiated in a SpCell by DL or UL data arrival during RRC\_CONNECTED when the timeAlignmentTimer is not running in the PTAG or if the RA procedure is initiated in a serving cell by a PDCCH order [3]. The indicator schedulingRequestFailure is used in case of SR failures [3]. The indicator noPUCCHResourceAvailable is used when the UE has no valid SR PUCCH resources configured [3]. The indicator requestForOtherSI is used for MSG1 based on demand SI request. The indicator msg3RequestForOtherSI is used in case of MSG3 based SI request. The field can also be used for the SCG-related RA-Report when the raPurpose is set to beamFailureRecovery, reconfigurationWithSync, ulUnSynchronized, schedulingRequestFailure and noPUCCHResourceAvailable.  
<endl>  
  
  
<start>  
ra-report  
spCellID  
This field is used to indicate the CGI of the SpCell of the cell group associated to the SCell in which the associated random access procedure was performed. If the UE performs RA procedure on a SCell associated to the MCG, then this field is set to the CGI of the PCell and if the UE performs RA procedure on a SCell associated to the SCG, then this field is set to the CGI of the PSCell. If the CGI of the PSCell is not available at the UE for the RA procedure performed on a SCell associated to the SCG or for the RA procedure on the PSCell, this field is set to the CGI of the PCell. Otherwise, the field is absent.  
<endl>  
  
  
<start>  
ra-report  
ssb-Index  
This field is used to indicate the SS/PBCH index of the SS/PBCH block corresponding to the random access attempt.  
<endl>  
  
  
<start>  
ra-report  
ssbsForSI-Acquisition  
This field indicates the SSB(s) (in the form of SSB index(es)) that the UE used to receive the requested SI message(s). The field is present if the purpose of the random access procedure was to request on-demand SI (i.e. if the raPurpose is set to requestForOtherSI or msg3RequestForOtherSI). Otherwise, the field is absent.  
<endl>

<start>  
rlf-report  
choCandidateCellList  
This field is used to indicate the list of candidate target cells for conditional handover included in condRRCReconfig at the time of connection failure. The field does not include the candidate target cells included in measResulNeighCells.  
<endl>  
  
  
<start>  
rlf-report  
choCellId  
This field is used to indicate the candidate target cell for conditional handover included in condRRCReconfig that the UE selected for CHO based recovery while T311 is running.  
<endl>  
  
  
<start>  
rlf-report  
connectionFailureType  
This field is used to indicate whether the connection failure is due to radio link failure or handover failure.  
<endl>  
  
  
<start>  
rlf-report  
csi-rsRLMConfigBitmap,csi-rsRLMConfigBitmap-v1650  
These fields are used to indicate the CSI-RS indexes configured in the RLM configurations for the active BWP when the UE declares RLF or HOF. The UE first fills in the csi-rsRLMConfigBitmap-r16 to indicate the first 96 CSI-RS indexes and then csi-rsRLMConfigBitmap-v1650 to indicate the latter 96 CSI-RS indexes. The first/leftmost bit in csi-rsRLMConfigBitmap-r16 corresponds to CSI-RS index 0, the second bit corresponds to CSI-RS index 1. The first/leftmost bit in csi-rsRLMConfigBitmap-v1650 corresponds to CSI-RS index 96, the second bit corresponds to CSI-RS index 97. These fields are included only if the RadioLinkMonitoringConfig for the respective BWP is configured.  
<endl>  
  
  
<start>  
rlf-report  
c-RNTI  
This field indicates the C-RNTI used in the PCell upon detecting radio link failure or the C-RNTI used in the source PCell upon handover failure.  
<endl>  
  
  
<start>  
rlf-report  
failedPCellId  
This field is used to indicate the PCell in which RLF is detected or the target PCell of the failed handover. For intra-NR handover nrFailedPCellId is included and for the handover from NR to EUTRA eutraFailedPCellId is included. The UE sets the ARFCN according to the frequency band used for transmission/ reception when the failure occurred.  
<endl>  
  
  
<start>  
rlf-report  
failedPCellId-EUTRA  
This field is used to indicate the PCell in which RLF is detected or the source PCell of the failed handover in an E-UTRA RLF report.  
<endl>  
  
  
<start>  
rlf-report  
lastHO-Type  
This field is used to indicate the type of the last executed handover before the last detected connection failure. The field is set to cho if the last executed handover was initiated by a conditional reconfiguration execution. The field is set to daps if the last executed handover was a DAPS handover.  
<endl>  
  
  
<start>  
rlf-report  
measResultListEUTRA  
This field refers to the last measurement results taken in the neighboring EUTRA Cells, when the radio link failure or handover failure happened.  
<endl>  
  
  
<start>  
rlf-report  
measResultListNR  
This field refers to the last measurement results taken in the neighboring NR Cells, when the radio link failure or handover failure happened.  
<endl>  
  
  
<start>  
rlf-report  
measResultLastServCell  
This field refers to the log measurement results taken in the PCell upon detecting radio link failure or the source PCell upon handover failure.  
<endl>  
  
  
<start>  
rlf-report  
measResult-RLF-Report-EUTRA  
Includes the E-UTRA RLF-Report-r9 IE as specified in TS 36.331 [10].  
<endl>  
  
  
<start>  
rlf-report  
measResult-RLF-Report-EUTRA-v1690  
Includes the E-UTRA RLF-Report-v9e0 IE as specified in TS 36.331 [10].  
<endl>  
  
  
<start>  
rlf-report  
noSuitableCellFound  
This field is set by the UE when the T311 expires.  
<endl>  
  
  
<start>  
rlf-report  
previousPCellId  
This field is used to indicate the source PCell of the last handover (source PCell when the last executed RRCReconfiguration message including reconfigurationWithSync was received). For intra-NR handover nrPreviousCell is included and for the handover from EUTRA to NR eutraPreviousCell is included.  
<endl>  
  
  
<start>  
rlf-report  
ra-InformationCommon  
This field is optionally included when connectionFailureType is set to 'hof' or when connectionFailureType is set to 'rlf' and the rlf-Cause equals to 'randomAccessProblem' or 'beamRecoveryFailure'; otherwise this field is absent.  
<endl>  
  
  
<start>  
rlf-report  
reconnectCellId  
This field is used to indicate the cell in which the UE comes back to connected after connection failure and after failing to perform reestablishment. If the UE comes back to RRC CONNECTED in an NR cell then nrReconnectCellID is included and if the UE comes back to RRC CONNECTED in an LTE cell then eutraReconnectCellID is included  
<endl>  
  
  
<start>  
rlf-report  
reestablishmentCellId  
If the UE was not configured with conditionalReconfiguration at the time of re-establishment attempt, or if the cell selected for the re-establishment attempt is not a candidate target cell for conditional reconfiguration, this field is used to indicate the cell in which the re-establishment attempt was made after connection failure.  
<endl>  
  
  
<start>  
rlf-report  
rlf-Cause  
This field is used to indicate the cause of the last radio link failure that was detected. In case of handover failure information reporting (i.e., the connectionFailureType is set to 'hof'), the UE is allowed to set this field to any value, except for the case in which a radio link failure was detected in the source PCell while performing a DAPS handover..  
<endl>  
  
  
<start>  
rlf-report  
ssbRLMConfigBitmap  
This field is used to indicate the SS/PBCH block indexes configured in the RLM configurations for the active BWP when the UE declares RLF or HOF.The first/leftmost bit corresponds to SSB index 0, the second bit corresponds to SSB index 1. This field is included only if the RadioLinkMonitoringConfig for the respective BWP is configured.  
<endl>  
  
  
<start>  
rlf-report  
timeConnFailure  
This field is used to indicate the time elapsed since the last HO execution until connection failure. Actual value = field value \* 100ms. The maximum value 1023 means 102.3s or longer.  
<endl>  
  
  
<start>  
rlf-report  
timeConnSourceDAPS-Failure  
This field is used to indicate the time that elapsed between the last DAPS handover execution and the radio link failure detected in the source cell while T304 is running. Value in milliseconds. The maximum value 1023 means 1023ms or longer.  
<endl>  
  
  
<start>  
rlf-report  
timeSinceFailure  
This field is used to indicate the time that elapsed since the connection (radio link or handover) failure. Value in seconds. The maximum value 172800 means 172800s or longer. In the case of failure(s) (either at source or at target or at both) associated to DAPS handover, this field indicates the time elapsed since the latest connection (radio link or handover) failure.  
<endl>  
  
  
<start>  
rlf-report  
timeSinceCHO-Reconfig  
In case of handover failure, this field is used to indicate the time elapsed between the initiation of the last conditional reconfiguration execution towards the target cell and the reception of the latest conditional reconfiguration. In case of radio link failure, this field is used to indicate the time elapsed between the radio link failure and the reception of the latest conditional reconfiguration while connected to the source PCell. Actual value = field value \* 100ms. The maximum value 1023 means 102.3s or longer.  
<endl>  
  
  
<start>  
rlf-report  
timeUntilReconnection  
This field is used to indicate the time that elapsed between the connection (radio link or handover) failure and the next time the UE comes to RRC CONNECTED in an NR or EUTRA cell, after failing to perform reestablishment. Value in seconds. The maximum value 172800 means 172800s or longer.  
<endl>

<start>  
successho-report  
c-RNTI  
This field indicates the C-RNTI assigned by the target PCell of the handover for which the successful HO report was generated.  
<endl>  
  
  
<start>  
successho-report  
measResultListNR  
This field refers to the last measurement results taken in the neighboring NR Cells when a successful handover is executed.  
<endl>  
  
  
<start>  
successho-report  
rlf-InSourceDAPS  
This field indicates whether a radio link failure occurred at the source cell while T304 was running.  
<endl>  
  
  
<start>  
successho-report  
shr-Cause  
This field is used to indicate the cause of the successful HO report.  
<endl>  
  
  
<start>  
successho-report  
sourceCellMeas  
This field refers to the last measurement results taken in the source PCell of a handover in which the successful handover triggers the SuccessHO-Report.  
<endl>  
  
  
<start>  
successho-report  
sourcePCellId  
This field is used to indicate the source PCell of a handover in which the successful handover triggers the SuccessHO-Report.  
<endl>  
  
  
<start>  
successho-report  
targetCellId  
This field is used to indicate the target PCell of a handover in which the successful handover triggers the SuccessHO-Report.  
<endl>  
  
  
<start>  
successho-report  
targetCellMeas  
This field refers to the last measurement results taken in the target PCell of a handover in which the successful handover triggers the SuccessHO-Report.  
<endl>  
  
  
<start>  
successho-report  
timeSinceCHO-Reconfig  
This field is used to indicate the time elapsed between the initiation of the last conditional reconfiguration execution towards the target cell and the reception of the latest conditional reconfiguration for this target cell. Actual value = field value \* 100ms. The maximum value 1023 means 102.3s or longer.  
<endl>  
  
  
<start>  
successho-report  
upInterruptionTimeAtHO  
This field is used to indicate the time elapsed between the time of arrival of the last PDCP PDU received from the source cell for any data radio bearer and the time of arrival of the first non-duplicate PDCP PDU received from the target cell for any data radio bearer, and it is measured at the time of arrival of the first non-duplicate PDCP PDU received from the target cell for any data radio bearer. The field is set only in case of DAPS handover.  
Value in milliseconds. The maximum value 1023 means 1023ms or longer.  
<endl>

<start>  
uepositioningassistanceinfo  
nr-TimeStamp  
This field specifies the latest time instance at which the association is valid prior to the reporting.  
<endl>  
  
  
<start>  
uepositioningassistanceinfo  
servCellID  
This field indicates the serving cell information of SRS for positioning resources associated to the UE Tx TEG report.  
<endl>  
  
  
<start>  
uepositioningassistanceinfo  
ue-TxTEG-ID  
Identifies the ID of UE Tx TEG.  
<endl>  
  
  
<start>  
uepositioningassistanceinfo  
ue-TxTEG-TimingErrorMarginValue  
This field specifies the UE Tx TEG timing error margin value of all the UE Tx TEGs within one UEPositioningAssistanceInfo. Value tc0 corresponds to 0 Tc, tc2 corresponds to 2 Tc and so on (see TS 37.355 [49]).  
<endl>

<start>  
uldedicatedmessagesegment  
segmentNumber  
Identifies the sequence number of a segment within the encoded UL DCCH message.  
<endl>  
  
  
<start>  
uldedicatedmessagesegment  
rrc-MessageSegmentContainer  
Includes a segment of the encoded UL DCCH message. The size of the included segment in this container should be small enough that the resulting encoded RRC message PDU is less than or equal to the PDCP SDU size limit.  
<endl>  
  
  
<start>  
uldedicatedmessagesegment  
rrc-MessageSegmentType  
Indicates whether the included UL DCCH message segment is the last segment or not.  
<endl>

<start>  
ulinformationtransferirat  
ul-DCCH-MessageEUTRA  
Includes the UL-DCCH-Message as defined in TS 36.331 [10]. In this version of the specification, the field is only used to transfer the E-UTRA RRC MeasurementReport, E-UTRA RRC SidelinkUEInformation and the E-UTRA RRC UEAssistanceInformation messages.  
<endl>

<start>  
ulinformationtransfermrdc  
ul-DCCH-MessageNR  
Includes the UL-DCCH-Message. In this version of the specification, the field is only used to transfer the NR RRC MeasurementReport, RRCReconfigurationComplete, UEAssistanceInformation, FailureInformation, and IABOtherInformation messages when sent via SRB1 and to transfer the NR MCGFailureInformation message when sent via SRB3.  
<endl>  
  
  
<start>  
ulinformationtransfermrdc  
ul-DCCH-MessageEUTRA  
Includes the UL-DCCH-Message. In this version of the specification, the field is only used to transfer the E-UTRA RRC MeasurementReport message when sent via SRB1 and to transfer the E-UTRA MCGFailureInformation message when sent via SRB3.  
<endl>

<start>  
sib2  
absThreshSS-BlocksConsolidation  
Threshold for consolidation of L1 measurements per RS index. If the field is absent, the UE uses the measurement quantity as specified in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib2  
cellEdgeEvaluation  
Indicates the criteria for a UE to detect that it is not at cell edge, in order to relax measurement requirements for cell reselection (see TS 38.304 [20], clause 5.2.4.9.2).  
<endl>  
  
  
<start>  
sib2  
cellEdgeEvaluationWhileStationary  
Indicates the criteria for a UE to detect that it is not at cell edge while stationary, in order to relax measurement requirements for cell reselection (see TS 38.304 [20], clause 5.2.4.9.4).  
<endl>  
  
  
<start>  
sib2  
cellEquivalentSize  
The number of cell count used for mobility state estimation for this cell as specified in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib2  
cellReselectionInfoCommon  
Cell re-selection information common for intra-frequency, inter-frequency and/ or inter-RAT cell re-selection.  
<endl>  
  
  
<start>  
sib2  
cellReselectionServingFreqInfo  
Information common for non-intra-frequency cell re-selection i.e. cell re-selection to inter-frequency and inter-RAT cells.  
<endl>  
  
  
<start>  
sib2  
combineRelaxedMeasCondition  
When both lowMobilityEvalutation and cellEdgeEvalutation criteria are present in SIB2, this parameter configures the UE to fulfil both criteria in order to relax measurement requirements for cell reselection. If the field is absent, the UE is allowed to relax measurement requirements for cell reselection when either or both of the criteria are met. (See TS 38.304 [20], clause 5.2.4.9.0)  
<endl>  
  
  
<start>  
sib2  
combineRelaxedMeasCondition2  
When both stationaryMobilityEvaluation and cellEdgeEvaluationWhileStationary criteria are present in SIB2, this parameter configures the UE to fulfil both criteria in order to relax measurement requirements for cell reselection. If the field is absent, the UE is allowed to relax measurement requirements for cell reselection when only the stationary criteria is met. (See TS 38.304 [20], clause 5.2.4.9.0)  
<endl>  
  
  
<start>  
sib2  
deriveSSB-IndexFromCell  
This field indicates whether the UE can utilize serving cell timing to derive the index of SS block transmitted by neighbour cell. If this field is set to true, the UE assumes SFN and frame boundary alignment across cells on the serving frequency as specified in TS 38.133 [14].  
<endl>  
  
  
<start>  
sib2  
frequencyBandList  
Indicates the list of frequency bands for which the NR cell reselection parameters apply. The UE behaviour in case the field is absent is described in clause 5.2.2.4.3.  
<endl>  
  
  
<start>  
sib2  
highPriorityMeasRelax  
Indicates whether measurements can be relaxed on high priority frequencies. If the field is absent, the UE shall not relax measurements on high priority frequencies beyond "Thigher\_priority\_search" unless both low mobility and not at cell edge criteria are fulfilled (see TS 38.133 [14], clauses 4.2.2.7, 4.2.2.10 and 4.2.2.11).  
<endl>  
  
  
<start>  
sib2  
intraFreqCellReselectionInfo  
Cell re-selection information common for intra-frequency cells.  
<endl>  
  
  
<start>  
sib2  
lowMobilityEvaluation  
Indicates the criteria for a UE to detect low mobility, in order to relax measurement requirements for cell reselection (see TS 38.304 [20], clause 5.2.4.9.1).  
<endl>  
  
  
<start>  
sib2  
nrofSS-BlocksToAverage  
Number of SS blocks to average for cell measurement derivation. If the field is absent the UE uses the measurement quantity as specified in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib2  
p-Max  
Value in dBm applicable for the intra-frequency neighbouring NR cells. If absent the UE applies the maximum power according to TS 38.101-1 [15] in case of an FR1 cell or TS 38.101-2 [39] in case of an FR2 cell. In this release of the specification, if p-Max is present on a carrier frequency in FR2, the UE shall ignore the field and applies the maximum power according to TS 38.101-2 [39]. This field is ignored by IAB-MT. The IAB-MT applies output power and emissions requirements, as specified in TS 38.174 [63].  
<endl>  
  
  
<start>  
sib2  
q-Hyst  
Parameter "Qhyst" in TS 38.304 [20], Value in dB. Value dB1 corresponds to 1 dB, dB2 corresponds to 2 dB and so on.  
<endl>  
  
  
<start>  
sib2  
q-HystSF  
Parameter "Speed dependent ScalingFactor for Qhyst" in TS 38.304 [20]. The sf-Medium and sf-High concern the additional hysteresis to be applied, in Medium and High Mobility state respectively, to Qhyst as defined in TS 38.304 [20]. In dB. Value dB-6 corresponds to -6dB, dB-4 corresponds to -4dB and so on.  
<endl>  
  
  
<start>  
sib2  
q-QualMin  
Parameter "Qqualmin" in TS 38.304 [20], applicable for intra-frequency neighbour cells. If the field is absent, the UE applies the (default) value of negative infinity for Qqualmin.  
<endl>  
  
  
<start>  
sib2  
q-RxLevMin  
Parameter "Qrxlevmin" in TS 38.304 [20], applicable for intra-frequency neighbour cells.  
<endl>  
  
  
<start>  
sib2  
q-RxLevMinSUL  
Parameter "Qrxlevmin" in TS 38.304 [20], applicable for intra-frequency neighbour cells.  
<endl>  
  
  
<start>  
sib2  
rangeToBestCell  
Parameter "rangeToBestCell" in TS 38.304 [20]. The network configures only non-negative (in dB) values.  
<endl>  
  
  
<start>  
sib2  
relaxedMeasurement  
Configuration to allow relaxation of RRM measurement requirements for cell reselection (see TS 38.304 [20], clause 5.2.4.9). In NTN, this field is only applicable for GSO neighbour cells.  
<endl>  
  
  
<start>  
sib2  
s-IntraSearchP  
Parameter "SIntraSearchP" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib2  
s-IntraSearchQ  
Parameter "SIntraSearchQ" in TS 38.304 [20]. If the field is absent, the UE applies the (default) value of 0 dB for SIntraSearchQ.  
<endl>  
  
  
<start>  
sib2  
s-NonIntraSearchP  
Parameter "SnonIntraSearchP" in TS 38.304 [20]. If this field is absent, the UE applies the (default) value of infinity for SnonIntraSearchP.  
<endl>  
  
  
<start>  
sib2  
s-NonIntraSearchQ  
Parameter "SnonIntraSearchQ" in TS 38.304 [20]. If the field is absent, the UE applies the (default) value of 0 dB for SnonIntraSearchQ.  
<endl>  
  
  
<start>  
sib2  
s-SearchDeltaP  
Parameter "SSearchDeltaP" in TS 38.304 [20]. Value dB3 corresponds to 3 dB, dB6 corresponds to 6 dB and so on.  
<endl>  
  
  
<start>  
sib2  
s-SearchDeltaP-Stationary  
Parameter "SSearchDeltaP-Stationary" in TS 38.304 [20]. Value dB2 corresponds to 2 dB, dB3 corresponds to 3 dB and so on.  
<endl>  
  
  
<start>  
sib2  
s-SearchThresholdP, s-SearchThresholdP2  
Parameters "SSearchThresholdP" and "SSearchThresholdP2" in TS 38.304 [20]. The network configures s-SearchThresholdP and s-SearchThresholdP2 to be less than or equal to s-IntraSearchP and s-NonIntraSearchP.  
<endl>  
  
  
<start>  
sib2  
s-SearchThresholdQ, s-SearchThresholdQ2  
Parameters "SSearchThresholdQ" and "SSearchThresholdQ2" in TS 38.304 [20]. The network configures s-SearchThresholdQ and s-SearchThresholdQ2 to be less than or equal to s-IntraSearchQ and s-NonIntraSearchQ.  
<endl>  
  
  
<start>  
sib2  
smtc  
Measurement timing configuration for intra-frequency measurement. If this field is absent, the UE assumes that SSB periodicity is 5 ms for the intra-frequnecy cells. If the field is broadcast by an NTN cell, the offset (derived from parameter periodicityAndOffset) is based on the assumption that service link propagation delay difference between the serving cell and neighbour cells equals to 0 ms, and UE can adjust the actual offset based on the actual propagation delay difference.  
<endl>  
  
  
<start>  
sib2  
smtc2-LP  
Measurement timing configuration for intra-frequency neighbour cells with a Long Periodicity (LP) indicated by periodicity in smtc2-LP. The timing offset and duration are equal to the offset and duration indicated in smtc in intraFreqCellReselectionInfo. The periodicity in smtc2-LP can only be set to a value strictly larger than the periodicity in smtc in intraFreqCellReselectionInfo (e.g. if smtc indicates sf20 the Long Periodicity can only be set to sf40, sf80 or sf160, if smtc indicates sf160, smtc2-LP cannot be configured). The pci-List, if present, includes the physical cell identities of the intra-frequency neighbour cells with Long Periodicity. If smtc2-LP is absent, the UE assumes that there are no intra-frequency neighbour cells with a Long Periodicity.  
<endl>  
  
  
<start>  
sib2  
smtc4list  
Measurement timing configuration list for NTN deployments, see clause 5.5.2.10. The offset of each SSB-MTC4 in smtc4list is based on the assumption that service link propagation delay difference between the serving cell and neighbour cells equals to 0 ms, and UE can adjust the actual offset based on the actual propagation delay difference. For a UE that supports less SMTCs than what is included in this list, it is up to the UE to select which SMTCs to consider.  
<endl>  
  
  
<start>  
sib2  
ssb-PositionQCL-Common  
Indicates the QCL relation between SS/PBCH blocks for intra-frequency neighbor cells as specified in TS 38.213 [13], clause 4.1.  
<endl>  
  
  
<start>  
sib2  
ssb-ToMeasure  
The set of SS blocks to be measured within the SMTC measurement duration (see TS 38.215 [9]). When the field is absent the UE measures on all SS-blocks.  
<endl>  
  
  
<start>  
sib2  
stationaryMobilityEvaluation  
Indicates the criteria for a UE to detect stationary mobility, in order to relax measurement requirements for cell reselection (see TS 38.304 [20], clause 5.2.4.9.0).  
<endl>  
  
  
<start>  
sib2  
t-ReselectionNR  
Parameter "TreselectionNR" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib2  
t-ReselectionNR-SF  
Parameter "Speed dependent ScalingFactor for TreselectionNR" in TS 38.304 [20]. If the field is absent, the UE behaviour is specified in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib2  
threshServingLowP  
Parameter "ThreshServing, LowP" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib2  
threshServingLowQ  
Parameter "ThreshServing, LowQ" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib2  
t-SearchDeltaP  
Parameter "TSearchDeltaP" in TS 38.304 [20]. Value in seconds. Value s5 means 5 seconds, value s10 means 10 seconds and so on.  
<endl>  
  
  
<start>  
sib2  
t-SearchDeltaP-Stationary  
Parameter "TSearchDeltaP-Stationary" in TS 38.304 [20]. Value in seconds. Value s5 means 5 seconds, value s10 means 10 seconds and so on.  
<endl>

<start>  
sib3  
channelAccessMode2  
If present, this field indicates that intra-frequency neighbor cells apply channel access mode procedures for operation with shared spectrum channel access in accordance with TS 37.213 [48], clause 4.4 for FR2-2. If absent, the intra-frequency neighbor cells do not apply any channel access procedure.  
<endl>  
  
  
<start>  
sib3  
intraFreqAllowedCellList  
List of allow-listed intra-frequency neighbouring cells, see TS 38.304 [20], clause 5.2.4.  
<endl>  
  
  
<start>  
sib3  
intraFreqCAG-CellList  
List of intra-frequency neighbouring CAG cells (as defined in TS 38.304 [20]) per PLMN.  
<endl>  
  
  
<start>  
sib3  
intraFreqExcludedCellList  
List of exclude-listed intra-frequency neighbouring cells.  
<endl>  
  
  
<start>  
sib3  
intraFreqNeighCellList  
List of intra-frequency neighbouring cells with specific cell re-selection parameters. If intraFreqNeighCellList-v1610 is present, it shall contain the same number of entries, listed in the same order as in intraFreqNeighCellList (without suffix).  
<endl>  
  
  
<start>  
sib3  
intraFreqNeighHSDN-CellList  
List of intra-frequency neighbouring HSDN cells as specified in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib3  
q-OffsetCell  
Parameter "Qoffsets,n" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib3  
q-QualMinOffsetCell  
Parameter "Qqualminoffsetcell" in TS 38.304 [20]. Actual value Qqualminoffsetcell = field value [dB].  
<endl>  
  
  
<start>  
sib3  
q-RxLevMinOffsetCell  
Parameter "Qrxlevminoffsetcell" in TS 38.304 [20]. Actual value Qrxlevminoffsetcell = field value \* 2 [dB].  
<endl>  
  
  
<start>  
sib3  
q-RxLevMinOffsetCellSUL  
Parameter "QrxlevminoffsetcellSUL" in TS 38.304 [20]. Actual value QrxlevminoffsetcellSUL = field value \* 2 [dB].  
<endl>  
  
  
<start>  
sib3  
ssb-PositionQCL  
Indicates the QCL relation between SS/PBCH blocks for a specific intra-frequency neighbor cell as specified in TS 38.213 [13], clause 4.1. If provided, the cell specific value overwrites the value signalled by ssb-PositionQCL-Common in SIB2 for the indicated cell.  
<endl>

<start>  
sib4  
absThreshSS-BlocksConsolidation  
Threshold for consolidation of L1 measurements per RS index. If the field is absent, the UE uses the measurement quantity as specified in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib4  
channelAccessMode2  
If present, this field indicates that the neighbor cells on the inter-frequency apply channel access mode procedures for operation with shared spectrum channel access in accordance with TS 37.213 [48], clause 4.4 for FR2-2. If absent, the neighbor cells on the inter-frequency do not apply any channel access procedure.  
<endl>  
  
  
<start>  
sib4  
deriveSSB-IndexFromCell  
This field indicates whether the UE may use the timing of any detected cell on that frequency to derive the SSB index of all neighbour cells on that frequency. If this field is set to true, the UE assumes SFN and frame boundary alignment across cells on the neighbor frequency as specified in TS 38.133 [14].  
<endl>  
  
  
<start>  
sib4  
dl-CarrierFreq  
This field indicates center frequency of the SS block of the neighbour cells, where the frequency corresponds to a GSCN value as specified in TS 38.101-1 [15].  
<endl>  
  
  
<start>  
sib4  
frequencyBandList  
Indicates the list of frequency bands for which the NR cell reselection parameters apply.  
<endl>  
  
  
<start>  
sib4  
highSpeedMeasInterFreq  
If the field is set to true and UE supports high speed inter-frequency IDLE/INACTIVE measurements, the UE shall apply the enhanced inter-frequency RRM requirements on the inter-frequency carrier to support high speed up to 500 km/h in RRC\_IDLE/RRC\_INACTIVE as specified in TS 38.133 [14].  
<endl>  
  
  
<start>  
sib4  
interFreqAllowedCellList  
List of allow-listed inter-frequency neighbouring cells, see TS 38.304 [20], clause 5.2.4.  
<endl>  
  
  
<start>  
sib4  
interFreqCAG-CellList  
List of inter-frequency neighbouring CAG cells (as defined in TS 38.304 [20] per PLMN.  
<endl>  
  
  
<start>  
sib4  
interFreqCarrierFreqList  
List of neighbouring carrier frequencies and frequency specific cell re-selection information. If interFreqCarrierFreqList-v1610, interFreqCarrierFreqList-v1700, interFreqCarrierFreqList-v1720 or interFreqCarrierFreqList-v1730 are present, they shall contain the same number of entries, listed in the same order as in interFreqCarrierFreqList (without suffix).  
<endl>  
  
  
<start>  
sib4  
interFreqExcludedCellList  
List of exclude-listed inter-frequency neighbouring cells.  
<endl>  
  
  
<start>  
sib4  
interFreqNeighCellList  
List of inter-frequency neighbouring cells with specific cell re-selection parameters. If interFreqNeighCellList-v1610 is present, it shall contain the same number of entries, listed in the same order as in interFreqNeighCellList (without suffix).  
<endl>  
  
  
<start>  
sib4  
interFreqNeighHSDN-CellList  
List of inter-frequency neighbouring HSDN cells as specified in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib4  
nrofSS-BlocksToAverage  
Number of SS blocks to average for cell measurement derivation. If the field is absent, the UE uses the measurement quantity as specified in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib4  
p-Max  
Value in dBm applicable for the neighbouring NR cells on this carrier frequency. If absent the UE applies the maximum power according to TS 38.101-1 [15] in case of an FR1 cell or TS 38.101-2 [39] in case of an FR2 cell. In this release of the specification, if p-Max is present on a carrier frequency in FR2, the UE shall ignore the field and applies the maximum power according to TS 38.101-2 [39]. This field is ignored by IAB-MT. The IAB-MT applies output power and emissions requirements, as specified in TS 38.174 [63].  
<endl>  
  
  
<start>  
sib4  
q-OffsetCell  
Parameter "Qoffsets,n" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib4  
q-OffsetFreq  
Parameter "Qoffsetfrequency" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib4  
q-QualMin  
Parameter "Qqualmin" in TS 38.304 [20]. If the field is absent, the UE applies the (default) value of negative infinity for Qqualmin.  
<endl>  
  
  
<start>  
sib4  
q-QualMinOffsetCell  
Parameter "Qqualminoffsetcell" in TS 38.304 [20]. Actual value Qqualminoffsetcell = field value [dB].  
<endl>  
  
  
<start>  
sib4  
q-RxLevMin  
Parameter "Qrxlevmin" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib4  
q-RxLevMinOffsetCell  
Parameter "Qrxlevminoffsetcell" in TS 38.304 [20]. Actual value Qrxlevminoffsetcell = field value \* 2 [dB].  
<endl>  
  
  
<start>  
sib4  
q-RxLevMinOffsetCellSUL  
Parameter "QrxlevminoffsetcellSUL" in TS 38.304 [20]. Actual value QrxlevminoffsetcellSUL = field value \* 2 [dB].  
<endl>  
  
  
<start>  
sib4  
q-RxLevMinSUL  
Parameter "Qrxlevmin" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib4  
redCapAccessAllowed  
Indicates whether RedCap UEs are allowed to access the frequency.  
<endl>  
  
  
<start>  
sib4  
smtc  
Measurement timing configuration for inter-frequency measurement. If this field is absent, the UE assumes that SSB periodicity is 5 ms in this frequency. If the field is broadcast by an NTN cell, the offset (derived from parameter periodicityAndOffset) is based on the assumption that service link propagation delay difference between the serving cell and neighbour cells equals to 0 ms, and UE can adjust the actual offset based on the actual propagation delay difference.  
<endl>  
  
  
<start>  
sib4  
smtc2-LP  
Measurement timing configuration for inter-frequency neighbour cells with a Long Periodicity (LP) indicated by periodicity in smtc2-LP. The timing offset and duration are equal to the offset and duration indicated in smtc in InterFreqCarrierFreqInfo. The periodicity in smtc2-LP can only be set to a value strictly larger than the periodicity in smtc in InterFreqCarrierFreqInfo (e.g. if smtc indicates sf20 the Long Periodicity can only be set to sf40, sf80 or sf160, if smtc indicates sf160, smtc2-LP cannot be configured). The pci-List, if present, includes the physical cell identities of the inter-frequency neighbour cells with Long Periodicity. If smtc2-LP is absent, the UE assumes that there are no inter-frequency neighbour cells with a Long Periodicity.  
<endl>  
  
  
<start>  
sib4  
smtc4list  
Measurement timing configuration list for NTN deployments, see clause 5.5.2.10. The offset of each SSB-MTC4 in smtc4list is based on the assumption that service link propagation delay difference between the serving cell and neighbour cells equals to 0 ms, and UE can adjust the actual offset based on the actual propagation delay difference. For a UE that supports less SMTCs than what is included in this list, it is up to the UE to select which SMTCs to consider.  
<endl>  
  
  
<start>  
sib4  
ssb-PositionQCL  
Indicates the QCL relation between SS/PBCH blocks for a specific neighbor cell as specified in TS 38.213 [13], clause 4.1. If provided, the cell specific value overwrites the common value signalled by ssb-PositionQCL-Common in SIB4 for the indicated cell.  
<endl>  
  
  
<start>  
sib4  
ssb-PositionQCL-Common  
Indicates the QCL relation between SS/PBCH blocks for inter-frequency neighbor cells as specified in TS 38.213 [13], clause 4.1.  
<endl>  
  
  
<start>  
sib4  
ssb-ToMeasure  
The set of SS blocks to be measured within the SMTC measurement duration (see TS 38.215 [9]). When the field is absent the UE measures on all SS-blocks.  
<endl>  
  
  
<start>  
sib4  
ssbSubcarrierSpacing  
Subcarrier spacing of SSB.  
Only the following values are applicable depending on the used frequency:  
FR1: 15 or 30 kHz  
FR2-1: 120 or 240 kHz  
FR2-2: 120, 480, or 960 kHz  
<endl>  
  
  
<start>  
sib4  
threshX-HighP  
Parameter "ThreshX, HighP" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib4  
threshX-HighQ  
Parameter "ThreshX, HighQ" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib4  
threshX-LowP  
Parameter "ThreshX, LowP" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib4  
threshX-LowQ  
Parameter "ThreshX, LowQ" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib4  
t-ReselectionNR  
Parameter "TreselectionNR" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib4  
t-ReselectionNR-SF  
Parameter "Speed dependent ScalingFactor for TreselectionNR" in TS 38.304 [20]. If the field is absent, the UE behaviour is specified in TS 38.304 [20].  
<endl>

<start>  
sib5  
carrierFreqListEUTRA  
List of carrier frequencies of E-UTRA. If the carrierFreqListEUTRA-v1610/ carrierFreqListEUTRA-v1700 is present, it shall contain the same number of entries, listed in the same order as in the carrierFreqListEUTRA (without suffix).  
<endl>  
  
  
<start>  
sib5  
dummy  
This field is not used in the specification. If received it shall be ignored by the UE.  
<endl>  
  
  
<start>  
sib5  
eutra-ExcludedCellList  
List of exclude-listed E-UTRA neighbouring cells.  
<endl>  
  
  
<start>  
sib5  
eutra-FreqNeighHSDN-CellList  
List of neighbouring EUTRA HSDN cells as specified in TS 36.304 [27].  
<endl>  
  
  
<start>  
sib5  
eutra-multiBandInfoList  
Indicates the list of frequency bands in addition to the band represented by carrierFreq for which cell reselection parameters are common, and a list of additionalPmax and additionalSpectrumEmission values, as defined in TS 36.101 [22], table 6.2.4-1, for the frequency bands in eutra-multiBandInfoList  
<endl>  
  
  
<start>  
sib5  
highSpeedEUTRACarrier  
If the field is present, the UE shall apply the enhanced NR-EUTRA inter-RAT measurement requirements to support high speed up to 500 km/h as specified in TS 38.133 [14] to the E-UTRA carrier.  
<endl>  
  
  
<start>  
sib5  
idleModeMeasVoiceFallback  
Indicates whether E-UTRA idle/inactive measurements and reporting for EPS fallback can be used.  
<endl>  
  
  
<start>  
sib5  
p-MaxEUTRA  
The maximum allowed transmission power in dBm on the (uplink) carrier frequency, see TS 36.304 [27].  
<endl>  
  
  
<start>  
sib5  
q-QualMin  
Parameter "Qqualmin" in TS 36.304 [27]. Actual value Qqualmin = field value [dB].  
<endl>  
  
  
<start>  
sib5  
q-QualMinOffsetCell  
Parameter "Qqualminoffsetcell" in TS 36.304 [27]. Actual value Qqualminoffsetcell = field value [dB].  
<endl>  
  
  
<start>  
sib5  
q-RxLevMin  
Parameter "Qrxlevmin" in TS 36.304 [27]. Actual value Qrxlevmin = field value \* 2 [dBm].  
<endl>  
  
  
<start>  
sib5  
q-RxLevMinOffsetCell  
Parameter "Qrxlevminoffsetcell" in TS 36.304 [27]. Actual value Qrxlevminoffsetcell = field value \* 2 [dB].  
<endl>  
  
  
<start>  
sib5  
t-ReselectionEUTRA  
Parameter "TreselectionEUTRA" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib5  
threshX-High  
Parameter "ThreshX, HighP" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib5  
threshX-HighQ  
Parameter "ThreshX, HighQ" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib5  
threshX-Low  
Parameter "ThreshX, LowP" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib5  
threshX-LowQ  
Parameter "ThreshX, LowQ" in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib5  
t-ReselectionEUTRA-SF  
Parameter "Speed dependent ScalingFactor for TreselectionEUTRA" in TS 38.304 [20]. If the field is absent, the UE behaviour is specified in TS 38.304 [20].  
<endl>

<start>  
sib6  
messageIdentifier  
Identifies the source and type of ETWS notification.  
<endl>  
  
  
<start>  
sib6  
serialNumber  
Identifies variations of an ETWS notification.  
<endl>  
  
  
<start>  
sib6  
warningType  
Identifies the warning type of the ETWS primary notification and provides information on emergency user alert and UE popup.  
<endl>

<start>  
sib7  
dataCodingScheme  
Identifies the alphabet/coding and the language applied variations of an ETWS notification.  
<endl>  
  
  
<start>  
sib7  
messageIdentifier  
Identifies the source and type of ETWS notification.  
<endl>  
  
  
<start>  
sib7  
serialNumber  
Identifies variations of an ETWS notification.  
<endl>  
  
  
<start>  
sib7  
warningMessageSegment  
Carries a segment of the Warning Message Contents IE.  
<endl>  
  
  
<start>  
sib7  
warningMessageSegmentNumber  
Segment number of the ETWS warning message segment contained in the SIB. A segment number of zero corresponds to the first segment, A segment number of one corresponds to the second segment, and so on.  
<endl>  
  
  
<start>  
sib7  
warningMessageSegmentType  
Indicates whether the included ETWS warning message segment is the last segment or not.  
<endl>

<start>  
sib8  
dataCodingScheme  
Identifies the alphabet/coding and the language applied variations of a CMAS notification.  
<endl>  
  
  
<start>  
sib8  
messageIdentifier  
Identifies the source and type of CMAS notification.  
<endl>  
  
  
<start>  
sib8  
serialNumber  
Identifies variations of a CMAS notification.  
<endl>  
  
  
<start>  
sib8  
warningAreaCoordinatesSegment  
If present, carries a segment, with one or more octets, of the geographical area where the CMAS warning message is valid as defined in [28]. The first octet of the first warningAreaCoordinatesSegment is equivalent to the first octet of Warning Area Coordinates IE defined in and encoded according to TS 23.041 [29] and so on.  
<endl>  
  
  
<start>  
sib8  
warningMessageSegment  
Carries a segment, with one or more octets, of the Warning Message Contents IE defined in TS 38.413 [42]. The first octet of the Warning Message Contents IE is equivalent to the first octet of the CB data IE defined in and encoded according to TS 23.041 [29], clause 9.4.2.2.5, and so on.  
<endl>  
  
  
<start>  
sib8  
warningMessageSegmentNumber  
Segment number of the CMAS warning message segment contained in the SIB. A segment number of zero corresponds to the first segment, one corresponds to the second segment, and so on. If warning area coordinates are provided for the warning message, then this field applies to both warning message segment and warning area coordinates segment.  
<endl>  
  
  
<start>  
sib8  
warningMessageSegmentType  
Indicates whether the included CMAS warning message segment is the last segment or not. If warning area coordinates are provided for the warning message, then this field applies to both warning message segment and warning area coordinates segment.  
<endl>

<start>  
sib9  
dayLightSavingTime  
Indicates if and how daylight-saving time (DST) is applied to obtain the local time. The semantics are the same as the semantics of the Daylight Saving Time IE in TS 24.501 [23] and TS 24.008 [38]. The first/leftmost bit of the bit string contains the b2 of octet 3 and the second bit of the bit string contains b1 of octet 3 in the value part of the Daylight Saving Time IE in TS 24.008 [38].  
<endl>  
  
  
<start>  
sib9  
leapSeconds  
Number of leap seconds offset between GPS Time and UTC. UTC and GPS time are related i.e. GPS time -leapSeconds = UTC time.  
<endl>  
  
  
<start>  
sib9  
localTimeOffset  
Offset between UTC and local time in units of 15 minutes. Actual value = field value \* 15 minutes. Local time of the day is calculated as UTC time + localTimeOffset.  
<endl>  
  
  
<start>  
sib9  
timeInfoUTC  
Coordinated Universal Time corresponding to the SFN boundary at or immediately after the ending boundary of the SI-window in which SIB9 is transmitted. The field counts the number of UTC seconds in 10 ms units since 00:00:00 on Gregorian calendar date 1 January, 1900 (midnight between Sunday, December 31, 1899 and Monday, January 1, 1900). See NOTE 1. This field is excluded when determining changes in system information, i.e. changes of timeInfoUTC should neither result in system information change notifications nor in a modification of valueTag in SIB1.  
<endl>

<start>  
sib10  
HRNN-List  
The same amount of HRNN (see TS 23.003 [21]) elements as the number of NPNs in SIB 1 are included. The n-th entry of HRNN-List contains the human readable network name of the n-th NPN of SIB1. The hrnn in the corresponding entry in HRNN-List is absent if there is no HRNN associated with the given NPN.  
<endl>

<start>  
sib11  
measIdleConfigSIB  
Indicates measurement configuration to be stored and used by the UE while in RRC\_IDLE or RRC\_INACTIVE.  
<endl>

<start>  
sib12  
segmentContainer  
This field includes a segment of the encoded SIB12-IEs. The size of the included segment in this container should be small enough that the SIB message size is less than or equal to the maximum size of a NR SI, i.e. 2976 bits when SIB12 is broadcast.  
<endl>  
  
  
<start>  
sib12  
segmentNumber  
This field identifies the sequence number of a segment of SIB12-IEs. A segment number of zero corresponds to the first segment, A segment number of one corresponds to the second segment, and so on.  
<endl>  
  
  
<start>  
sib12  
segmentType  
This field indicates whether the included segment is the last segment or not.  
<endl>  
  
  
<start>  
sib12  
sl-CSI-Acquisition  
This field indicates whether CSI reporting is enabled in sidelink unicast. If not set, SL CSI reporting is disabled.  
<endl>  
  
  
<start>  
sib12  
sl-DRX-ConfigCommonGC-BC  
This field indicates the sidelink DRX configuration for groupcast and broadcast communication, as specified in TS 38.321 [3]. This field, if present, also indicates the gNB is capable of sidelink DRX.  
<endl>  
  
  
<start>  
sib12  
sl-EUTRA-AnchorCarrierFreqList  
This field indicates the EUTRA anchor carrier frequency list, which can provide the NR sidelink communication configurations.  
<endl>  
  
  
<start>  
sib12  
sl-FreqInfoList  
This field indicates the NR sidelink communication/discovery configuration on some carrier frequency (ies). In this release, only one entry can be configured in the list.  
<endl>  
  
  
<start>  
sib12  
sl-L2U2N-Relay  
This field indicates the support of NR sidelink Layer-2 relay.  
<endl>  
  
  
<start>  
sib12  
sl-L3U2N-RelayDiscovery  
This field indicates the support of L3 U2N relay AS-layer capability, i.e. NR sidelink relay discovery.  
<endl>  
  
  
<start>  
sib12  
sl-MaxNumConsecutiveDTX  
This field indicates the maximum number of consecutive HARQ DTX before triggering sidelink RLF. Value n1 corresponds to 1, value n2 corresponds to 2, and so on.  
<endl>  
  
  
<start>  
sib12  
sl-MeasConfigCommon  
This field indicates the measurement configurations (e.g. RSRP) for NR sidelink communication.  
<endl>  
  
  
<start>  
sib12  
sl-NonRelayDiscovery  
This field indicates the support of NR sidelink non-relay discovery.  
<endl>  
  
  
<start>  
sib12  
sl-NR-AnchorCarrierFreqList  
This field indicates the NR anchor carrier frequency list, which can provide the NR sidelink communication/discovery configurations.  
<endl>  
  
  
<start>  
sib12  
sl-OffsetDFN  
Indicates the timing offset for the UE to determine DFN timing when GNSS is used for timing reference. Value 1 corresponds to 0.001 milliseconds, value 2 corresponds to 0.002 milliseconds, and so on.  
<endl>  
  
  
<start>  
sib12  
sl-RadioBearerConfigList  
This field indicates one or multiple sidelink radio bearer configurations.  
<endl>  
  
  
<start>  
sib12  
sl-RLC-BearerConfigList  
This field indicates one or multiple sidelink RLC bearer configurations.  
<endl>  
  
  
<start>  
sib12  
sl-SSB-PriorityNR  
This field indicates the priority of NR sidelink SSB transmission and reception.  
<endl>  
  
  
<start>  
sib12  
t400  
Indicates the value for timer T400 as described in clause 7.1. Value ms100 corresponds to 100 ms, value ms200 corresponds to 200 ms and so on.  
<endl>

<start>  
sib13  
dummy  
This field is not used in the specification and the UE ignores the received value.  
<endl>  
  
  
<start>  
sib13  
sl-V2X-ConfigCommon  
This field includes the E-UTRA SystemInformationBlockType21 message as specified in TS 36.331 [10].  
<endl>  
  
  
<start>  
sib13  
tdd-Config  
This field includes the tdd-Config in E-UTRA SystemInformationBlockType1 message as specified in TS 36.331 [10].  
<endl>

<start>  
sib14  
sl-V2X-ConfigCommonExt  
This field includes the E-UTRA SystemInformationBlockType26 message as specified in TS 36.331 [10].  
<endl>

<start>  
sib15  
commonPLMNsWithDisasterCondition  
A list of PLMN(s) for which disaster condition applies and that disaster inbound roaming is accepted, which can be commonly applicable to the PLMNs sharing the cell.  
<endl>  
  
  
<start>  
sib15  
applicableDisasterInfoList  
A list indicating the applicable disaster roaming information for the networks indicated in plmn-IdentityInfoList and npn-IdentityInfoList-r16. The network indicates in this list one entry for each entry of plmn-IdentityInfoList, followed by one entry for each entry of npn-IdentityInfoList-r16, meaning that this list will have as many entries as the number of entries of the combination of plmn-IdentityInfoList and npn-IdentityInfoList-r16. The first entry in this list indicates the disaster roaming information applicable for the network(s) in the first entry of plmn-IdentityInfoList/npn-IdentityInfoList-r16, the second entry in this list indicates the disaster roaming information applicable for the network(s) in the second entry of plmn-IdentityInfoList/npn-IdentityInfoList-r16, and so on. Each entry in this list can either be having the value noDisasterRoaming, disasterRelatedIndication, commonPLMNs, or dedicatedPLMNs. If an entry in this list takes the value noDisasterRoaming, disaster inbound roaming is not allowed in this network(s). If an entry in this list takes the value disasterRelatedIndication, the meaning of this field for this network(s) is as specified for "disaster related indication" in TS 23.122 [74], clause 4.4.3.1.1. If an entry in this list takes the value commonPLMNs, the PLMN(s) with disaster conditions indicated in the field commonPLMNsWithDisasterCondition apply for this network(s). If an entry in this list contains the value dedicatedPLMNs, the listed PLMN(s) are the PLMN(s) with disaster conditions that the network(s) corresponding to this entry accepts disaster inbound roamers from. For SNPNs, the network indicates the value noDisasterRoaming.  
<endl>

<start>  
sib16  
freqPriorityListSlicing  
This field indicates cell reselection priorities for slicing.  
<endl>

<start>  
sib17  
segmentContainer  
This field includes a segment of the encoded SIB17-IEs. The size of the included segment in this container should be small enough that the SIB message size is less than or equal to the maximum size of a NR SI, i.e. 2976 bits when SIB17 is broadcast.  
<endl>  
  
  
<start>  
sib17  
segmentNumber  
This field identifies the sequence number of a segment of SIB17-IEs. A segment number of zero corresponds to the first segment, a segment number of one corresponds to the second segment, and so on.  
<endl>  
  
  
<start>  
sib17  
segmentType  
This field indicates whether the included segment is the last segment or not.  
<endl>  
  
  
<start>  
sib17  
trs-ResourceSetConfig  
RS configuration of TRS occasion(s) for idle/inactive UE(s), in terms of a list of N>=1 NZP TRS resource set(s). The maximum number of TRS resource sets configured by higher layer is 64. If a TRS resource is configured, the L1 based availability indication is always enabled based on that configuration. A UE which acquired SIB17 with a TRS configuration but did not yet receive an associated L1-based availability indication considers the configured TRS as unavailable. If SIB scheduling indicates that SIB17 has changed, the UE considers its configured TRS(s) as unavailable until it receives the associated L1-based availability indication(s).  
<endl>  
  
  
<start>  
sib17  
validityDuration  
The valid time duration for L1 availability indication, time unit is one default paging cycle. When the field is absent, UE assumes a default time duration to be 2 default paging cycles. The field is only valid while the UE has a valid SIB17.  
<endl>

<start>  
trs-resourceset  
firstOFDMSymbolInTimeDomain  
The index of the first OFDM symbol in the PRB used for TRS in a slot. The field indicates the first symbol in a slot for the first TRS resource within the slot, and the symbol for the second TRS resource in the same slot can be derived implicitly with symbol index as firstOFDMSymbolInTimeDomain+4.  
<endl>  
  
  
<start>  
trs-resourceset  
frequencyDomainAllocation  
Indicates the offset of the first RE to RE#0 in a RB in row1.  
<endl>  
  
  
<start>  
trs-resourceset  
indBitID  
The index of the associated bit in TRS availability indication field in DCI. Each TRS resource set is configured with an ID i for the association with (i+1)-th indication bit in TRS availability indication field in DCI.  
<endl>  
  
  
<start>  
trs-resourceset  
nrofRBs  
Number of PRBs across which corresponding TRS resource spans.  
<endl>  
  
  
<start>  
trs-resourceset  
nrofResources  
The number of TRS resources for a TRS resource set.  
<endl>  
  
  
<start>  
trs-resourceset  
periodicityAndOffset  
The periodicity and slot offset (slot) for periodic TRS. It is used to determine the location of the first slot of TRS resource set. The periodicity value slots10 corresponds to 10 slots, value slots20 corresponds to 20 slots, and so on.  
<endl>  
  
  
<start>  
trs-resourceset  
powerControlOffsetSS  
Power offset (dB) of NZP CSI-RS RE to SSS RE.  
<endl>  
  
  
<start>  
trs-resourceset  
scramblingID-Info  
One or more scrambling IDs are configured for a TRS resource set. If a common scrambling ID is configured, it applies to all the TRS resources within the TRS resource set. Otherwise, each TRS resource within the TRS resource set is provided with a scrambling ID. If the number of TRS resources for the TRS resource set is 2, scramblingIDperResourceListWith2-r17 is configured, while scramblingIDperResourceListWith4-r17 is configured for the case that the number of TRS resources for the TRS resource set is 4.  
<endl>  
  
  
<start>  
trs-resourceset  
ssb-Index  
The index of reference SSB with which quasi-collocation information is provided as specified in TS 38.214 [19] clause 5.1.5.  
<endl>  
  
  
<start>  
trs-resourceset  
startingRB  
The PRB index where corresponding TRS resource starts in relation to common resource block #0 (CRB#0) on the common resource block grid.  
<endl>

<start>  
sib18  
gin-ElementList  
The gin-ElementList contains one or more GIN elements. Each GIN element contains either one GIN, which is identified by a PLMN ID and a NID, or multiple GINs that share the same PLMN ID. The total number of GINs indicated does not exceed maxGIN-r17. The GIN index m is defined as d1+d2+…+d(n-1)+i for the GIN included in the n-th entry of the gin-ElementList and the i-th entry of its corresponding GIN-Element, where d(k) is the number of GIN index values used in the k-th gin-ElementList entry.  
<endl>  
  
  
<start>  
sib18  
gins-PerSNPN-List  
Indicates the supported GINs for each SNPN. The network includes the same number of entries as the number of SNPNs in snpn-AccessInfoList in provided in SIB1, and the n-th entry in this list corresponds to the n-th SNPN listed in snpn-AccessInfoList provided in SIB1. The network configures this field only if the cell broadcasts more than one SNPN in SIB1. If this field is absent, as in case of a single SNPN broadcasted in SIB1, the UE shall associate all GINs in gin-ElementList to that SNPN.  
<endl>

<start>  
gins-persnpn  
supportedGINs  
Indicates the GINs which are supported by the given SNPN. The first/leftmost bit corresponds to the GIN with GIN index 1, the second bit corresponds to the GIN with GIN index 2 and so on. A bit set to 1 indicates that the GIN is supported by the SNPN. If the field is not present, then the corresponding SNPN does not support any GINs.  
<endl>

<start>  
sib19  
distanceThresh  
Distance from the serving cell reference location and is used in location-based measurement initiation in RRC\_IDLE and RRC\_INACTIVE, as defined in TS 38.304 [20]. Each step represents 50m.  
<endl>  
  
  
<start>  
sib19  
ntn-Config  
Provides parameters needed for the UE to access NR via NTN access such as Ephemeris data, common TA parameters, k\_offset, validity duration for UL sync information and epoch.  
<endl>  
  
  
<start>  
sib19  
ntn-NeighCellConfigList, ntn-NeighCellConfigListExt  
Provides a list of NTN neighbour cells including their ntn-Config, carrier frequency and PhysCellId. This set includes all elements of ntn-NeighCellConfigList and all elements of ntn-NeighCellConfigListExt. If ntn-Config is absent for an entry in ntn-NeighCellConfigListExt, the ntn-Config provided in the entry at the same position in ntn-NeighCellConfigList applies. Network provides ntn-Config for the first entry of ntn-NeighCellConfigList. If the ntn-Config is absent for any other entry in ntn-NeighCellConfigList, the ntn-Config provided in the previous entry in ntn-NeighCellConfigList applies.  
<endl>  
  
  
<start>  
sib19  
referenceLocation  
Reference location of the serving cell provided via NTN quasi-Earth fixed system and is used in location-based measurement initiation in RRC\_IDLE and RRC\_INACTIVE, as defined in TS 38.304 [20].  
<endl>  
  
  
<start>  
sib19  
t-Service  
Indicates the time information on when a cell provided via NTN quasi-Earth fixed system is going to stop serving the area it is currently covering. The field indicates a time in multiples of 10 ms after 00:00:00 on Gregorian calendar date 1 January, 1900 (midnight between Sunday, December 31, 1899 and Monday, January 1, 1900). The exact stop time is between the time indicated by the value of this field minus 1 and the time indicated by the value of this field.  
<endl>

<start>  
sib20  
cfr-ConfigMCCH-MTCH  
Common frequency resource used for MCCH and MTCH reception. If the field is absent, the CFR for broadcast has the same location and size as CORESET#0 and PDSCH configuration of MCCH is the same as PDSCH configuration provided in initialDownlinkBWP in SIB1.  
<endl>  
  
  
<start>  
sib20  
mcch-WindowDuration  
Indicates, starting from the slot indicated by mcch-WindowStartSlot, the duration in slots during which MCCH may be scheduled. Absence of this field means that MCCH is only scheduled in the slot indicated by mcch-WindowStartSlot. The network always configures mcch-WindowDuration to be shorter or equal to the length of MCCH repetition period.  
<endl>  
  
  
<start>  
sib20  
mcch-ModificationPeriod  
Defines periodically appearing boundaries, i.e. radio frames for which SFN mod mcch-ModificationPeriod = 0. The contents of different transmissions of MCCH information can only be different if there is at least one such boundary in-between them. Value rf2 corresponds to two radio frames, value rf4 corresponds to four radio frames and so on.  
<endl>  
  
  
<start>  
sib20  
mcch-RepetitionPeriodAndOffset  
Defines the length and the offset of the MCCH repetition period. rf1 corresponds to a repetition period length of one radio frame, rf2 corresponds to a repetition period length of two radio frames and so on. The corresponding integer value indicates the offset of the repetition period in the number of radio frames. MCCH is scheduled in the MCCH transmission window starting from each radio frame for which: SFN mod repetition period length = offset of the repetition period.  
<endl>  
  
  
<start>  
sib20  
mcch-WindowStartSlot  
Indicates the slot in which MCCH transmission window starts.  
<endl>

<start>  
sib21  
mbs-FSAI-InterFreqList  
Contains a list of neighboring frequencies including additional bands, if any, that provide MBS services and the corresponding MBS FSAIs.  
<endl>  
  
  
<start>  
sib21  
mbs-FSAI-IntraFreq  
Contains the list of MBS FSAIs for the current frequency. For MBS service continuity, the UE shall use all MBS FSAIs listed in mbs-FSAI-IntraFreq to derive the MBS frequencies of interest.  
<endl>

<start>  
possi-schedulinginfo  
areaScope  
Indicates that a posSIB is area specific. If the field is absent, the posSIB is cell specific.  
<endl>  
  
  
<start>  
possi-schedulinginfo  
encrypted  
The presence of this field indicates that the pos-sib-type is encrypted as specified in TS 37.355 [49].  
<endl>  
  
  
<start>  
possi-schedulinginfo  
gnss-id  
The presence of this field indicates that the positioning SIB type is for a specific GNSS. Indicates a specific GNSS (see also TS 37.355 [49])  
<endl>  
  
  
<start>  
possi-schedulinginfo  
posSI-BroadcastStatus  
Indicates if the SI message is being broadcasted or not. Change of posSI-BroadcastStatus should not result in system information change notifications in Short Message transmitted with P-RNTI over DCI (see clause 6.5). The value of the indication is valid until the end of the BCCH modification period when set to broadcasting.  
If si-SchedulingInfo-v1700 is present, the network ensures that the total number of SI messages with posSI-BroadcastStatus and si-BroadcastStatus set to notBroadcasting in the concatenated list of SI messages configured by posSchedulingInfoList in posSI-SchedulingInfo and SI messages containing type2 SIB configured by schedulingInfoList2 in si-SchedulingInfo-v1700 does not exceed the limit of maxSI-Message when posSI-RequestConfig or posSI-RequestConfigRedCap or posSI-RequestConfigSUL is configured.  
<endl>  
  
  
<start>  
possi-schedulinginfo  
posSI-RequestConfig  
Configuration of Msg1 resources that the UE uses for requesting SI-messages for which posSI-BroadcastStatus is set to notBroadcasting.  
<endl>  
  
  
<start>  
possi-schedulinginfo  
posSI-RequestConfigRedCap  
Configuration of Msg1 resources for initialUplinkBWP-RedCap that the RedCap UE uses for requesting SI-messages for which posSI-BroadcastStatus is set to notBroadcasting.  
<endl>  
  
  
<start>  
possi-schedulinginfo  
posSI-RequestConfigSUL  
Configuration of Msg1 resources that the UE uses for requesting SI-messages for which posSI-BroadcastStatus is set to notBroadcasting.  
<endl>  
  
  
<start>  
possi-schedulinginfo  
posSIB-MappingInfo  
List of the posSIBs mapped to this SystemInformation message.  
<endl>  
  
  
<start>  
possi-schedulinginfo  
posSibType  
The positioning SIB type is defined in TS 37.355 [49].  
<endl>  
  
  
<start>  
possi-schedulinginfo  
posSI-Periodicity  
Periodicity of the SI-message in radio frames, such that rf8 denotes 8 radio frames, rf16 denotes 16 radio frames, and so on. If the offsetToSI-Used is configured, the posSI-Periodicity of rf8 cannot be used.  
<endl>  
  
  
<start>  
possi-schedulinginfo  
offsetToSI-Used  
This field, if present indicates that all the SI messages in posSchedulingInfoList are scheduled with an offset of 8 radio frames compared to SI messages in schedulingInfoList. offsetToSI-Used may be present only if the shortest configured SI message periodicity for SI messages in schedulingInfoList is 80ms. If SI offset is used, this field is present in each of the SI messages in the posSchedulingInfoList.  
<endl>  
  
  
<start>  
possi-schedulinginfo  
sbas-id  
The presence of this field indicates that the positioning SIB type is for a specific SBAS. Indicates a specific SBAS (see also TS 37.355 [49]).  
<endl>

<start>  
sibpos  
assistanceDataSIB-Element  
Parameter AssistanceDataSIBelement defined in TS 37.355 [49]. The first/leftmost bit of the first octet contains the most significant bit.  
<endl>

<start>  
availabilitycombination  
availabilityCombinationId  
This ID is used in the DCI Format 2\_5 payload to dynamically select this AvailabilityCombination, see TS 38.213 [13], clause 14.  
<endl>  
  
  
<start>  
availabilitycombination  
resourceAvailability  
Indicates the resource availability of soft symbols for a set of consecutive slots in the time domain. The meaning of this field is described in TS 38.213 [13], Table 14.3. If included in RB-SetGroup within AvailabilityCombinationRB-Groups-r17, it indicates the availability of soft resources for an RB set group. If included in AvailabilityCombinationRB-Groups-r17 when the rb-SetGroups is not configured, it indicates the availability of soft resources in one or multiple slots for all RB sets of a DU cell.  
<endl>

<start>  
availabilitycombinationspercell  
iab-DU-CellIdentity  
The ID of the IAB-DU cell for which the availabilityCombinations are applicable.  
<endl>  
  
  
<start>  
availabilitycombinationspercell  
positionInDCI-AI  
The (starting) position (bit) of the availabilityCombinationId for the indicated IAB-DU cell (iab-DU-CellIdentity) within the DCI payload. If positionInDCI-AI-RBGroups is not configured, it applies to the availabilityCombinationId included in availabilityCombinations and in availabilityCombinationsRB-Groups. If positionInDCI-AI-RBGroups is configured, it applies to the availabilityCombinationId included in availabilityCombinations.  
<endl>  
  
  
<start>  
availabilitycombinationspercell  
positionInDCI-AI-RBGroups  
The (starting) position (bit) of the availabilityCombinationId associated to the availabilityCombinationsRB-Groups for the indicated IAB-DU cell (iab-DU-CellIdentity) within the DCI payload.  
<endl>

<start>  
availabilitycombinationrb-groups  
rb-SetGroups  
Indicates the RB set groups configured for the availability combination. Each group includes consecutive RB sets.  
<endl>  
  
  
<start>  
availabilitycombinationrb-groups  
rb-Sets  
Indicates the one or more RB set indexes associated to one or more RB sets configured for one RB set group.  
<endl>

<start>  
availabilityindicator  
ai-RNTI  
Used by an IAB-MT for detection of DCI format 2\_5 indicating AvailabilityCombinationId for an IAB-DU's cells.  
<endl>  
  
  
<start>  
availabilityindicator  
availableCombToAddModList  
A list of availabilityCombinations to add for the IAB-DU's cells. (see TS 38.213 [13], clause 14).  
<endl>  
  
  
<start>  
availabilityindicator  
availableCombToReleaseList  
A list of availabilityCombinations to release for the IAB-DU's cells. (see TS 38.213 [13], clause 14).  
<endl>  
  
  
<start>  
availabilityindicator  
dci-PayloadSizeAI  
Total length of the DCI payload scrambled with ai-RNTI (see TS 38.213 [13]).  
<endl>

<start>  
bap-routingid  
bap-Address  
The ID of a destination IAB-node or IAB-donor-DU used in the BAP header.  
<endl>  
  
  
<start>  
bap-routingid  
bap-PathId  
The ID of a path used in the BAP header.  
<endl>

<start>  
beamfailurerecoveryconfig  
beamFailureRecoveryTimer  
Timer for beam failure recovery timer. Upon expiration of the timer the UE does not use CFRA for BFR. Value in ms. Value ms10 corresponds to 10 ms, value ms20 corresponds to 20 ms, and so on.  
<endl>  
  
  
<start>  
beamfailurerecoveryconfig  
candidateBeamRSList, candidateBeamRSListExt-v1610  
Set of reference signals (CSI-RS and/or SSB) identifying the candidate beams for recovery and the associated RA parameters. This set includes all elements of candidateBeamRSList (without suffix) and all elements of candidateBeamRSListExt-v1610. The UE maintains candidateBeamRSList and candidateBeamRSListExt-v1610 separately: Receiving candidateBeamRSListExt-v1610 set to release releases only the entries that were configured by candidateBeamRSListExt-v1610, and receiving candidateBeamRSListExt-v1610 set to setup replaces only the entries that were configured by candidateBeamRSListExt-v1610 with the newly signalled entries. The network configures these reference signals to be within the linked DL BWP (i.e., within the DL BWP with the same bwp-Id) of the UL BWP in which the BeamFailureRecoveryConfig is provided.  
<endl>  
  
  
<start>  
beamfailurerecoveryconfig  
msg1-SubcarrierSpacing  
Subcarrier spacing for contention free beam failure recovery (see TS 38.211 [16], clause 5.3.2).  
Only the following values are applicable depending on the used frequency:  
FR1: 15 or 30 kHz  
FR2-1: 60 or 120 kHz  
FR2-2: 120, 480, or 960 kHz  
<endl>  
  
  
<start>  
beamfailurerecoveryconfig  
rsrp-ThresholdSSB  
L1-RSRP threshold used for determining whether a candidate beam may be used by the UE to attempt contention free random access to recover from beam failure (see TS 38.213 [13], clause 6).  
<endl>  
  
  
<start>  
beamfailurerecoveryconfig  
ra-prioritization  
Parameters which apply for prioritized random access procedure for BFR (see TS 38.321 [3], clause 5.1.1).  
<endl>  
  
  
<start>  
beamfailurerecoveryconfig  
ra-PrioritizationTwoStep  
Parameters which apply for prioritized 2-step random access procedure for BFR (see TS 38.321 [3], clause 5.1.1).  
<endl>  
  
  
<start>  
beamfailurerecoveryconfig  
ra-ssb-OccasionMaskIndex  
Explicitly signalled PRACH Mask Index for RA Resource selection in TS 38.321 [3]. The mask is valid for all SSB resources.  
<endl>  
  
  
<start>  
beamfailurerecoveryconfig  
rach-ConfigBFR  
Configuration of random access parameters for BFR.  
<endl>  
  
  
<start>  
beamfailurerecoveryconfig  
recoverySearchSpaceId  
Search space to use for BFR RAR. The network configures this search space to be within the linked DL BWP (i.e., within the DL BWP with the same bwp-Id) of the UL BWP in which the BeamFailureRecoveryConfig is provided. The CORESET associated with the recovery search space cannot be associated with another search space. Network always configures the UE with a value for this field when contention free random access resources for BFR are configured.  
<endl>  
  
  
<start>  
beamfailurerecoveryconfig  
rootSequenceIndex-BFR  
PRACH root sequence index (see TS 38.211 [16], clause 6.3.3.1) for beam failure recovery.  
<endl>  
  
  
<start>  
beamfailurerecoveryconfig  
spCell-BFR-CBRA  
Indicates that UE is configured to send BFR MAC CE for SpCell BFR as specified in TS38.321 [3].  
<endl>  
  
  
<start>  
beamfailurerecoveryconfig  
ssb-perRACH-Occasion  
Number of SSBs per RACH occasion for CF-BFR, see TS 38.213 [13], clause 8.1.  
<endl>

<start>  
bfr-csirs-resource  
csi-RS  
The ID of a NZP-CSI-RS-Resource configured in the CSI-MeasConfig of this serving cell. This reference signal determines a candidate beam for beam failure recovery (BFR).  
<endl>  
  
  
<start>  
bfr-csirs-resource  
ra-OccasionList  
RA occasions that the UE shall use when performing BFR upon selecting the candidate beam identified by this CSI-RS. The network ensures that the RA occasion indexes provided herein are also configured by prach-ConfigurationIndex and msg1-FDM. Each RACH occasion is sequentially numbered, first, in increasing order of frequency resource indexes for frequency multiplexed PRACH occasions; second, in increasing order of time resource indexes for time multiplexed PRACH occasions within a PRACH slot and Third, in increasing order of indexes for PRACH slots.  
If the field is absent the UE uses the RA occasion associated with the SSB that is QCLed with this CSI-RS.  
<endl>  
  
  
<start>  
bfr-csirs-resource  
ra-PreambleIndex  
The RA preamble index to use in the RA occasions associated with this CSI-RS. If the field is absent, the UE uses the preamble index associated with the SSB that is QCLed with this CSI-RS.  
<endl>

<start>  
bfr-ssb-resource  
ra-PreambleIndex  
The preamble index that the UE shall use when performing BFR upon selecting the candidate beams identified by this SSB.  
<endl>  
  
  
<start>  
bfr-ssb-resource  
ssb  
The ID of an SSB transmitted by this serving cell. It determines a candidate beam for beam failure recovery (BFR).  
<endl>

<start>  
beamfailurerecoveryrsconfig  
candidateBeamRS-List  
A list of reference signals (CSI-RS and/or SSB) identifying the candidate beams for recovery. The network always configures this parameter in every instance of this IE.  
<endl>  
  
  
<start>  
beamfailurerecoveryrsconfig  
candidateBeamRS-List2  
A list of reference signals (CSI-RS and/or SSB) identifying the candidate beams for recovery.  
<endl>  
  
  
<start>  
beamfailurerecoveryrsconfig  
rsrp-ThresholdBFR  
L1-RSRP threshold used for determining whether a candidate beam may be included by the UE in BFR MAC CE (see TS 38.213 [13], clause 6). The network always configures this parameter in every instance of this IE.  
<endl>

<start>  
betaoffsets  
betaOffsetACK-Index1  
Up to 2 bits HARQ-ACK (see TS 38.213 [13], clause 9.3). When the field is absent the UE applies the value 11.  
<endl>  
  
  
<start>  
betaoffsets  
betaOffsetACK-Index2  
Up to 11 bits HARQ-ACK (see TS 38.213 [13], clause 9.3). When the field is absent the UE applies the value 11.  
<endl>  
  
  
<start>  
betaoffsets  
betaOffsetACK-Index3  
Above 11 bits HARQ-ACK (see TS 38.213 [13], clause 9.3). When the field is absent the UE applies the value 11.  
<endl>  
  
  
<start>  
betaoffsets  
betaOffsetCSI-Part1-Index1  
Up to 11 bits of CSI part 1 bits (see TS 38.213 [13], clause 9.3). When the field is absent the UE applies the value 13.  
<endl>  
  
  
<start>  
betaoffsets  
betaOffsetCSI-Part1-Index2  
Above 11 bits of CSI part 1 bits (see TS 38.213 [13], clause 9.3). When the field is absent the UE applies the value 13.  
<endl>  
  
  
<start>  
betaoffsets  
betaOffsetCSI-Part2-Index1  
Up to 11 bits of CSI part 2 bits (see TS 38.213 [13], clause 9.3). When the field is absent the UE applies the value 13.  
<endl>  
  
  
<start>  
betaoffsets  
betaOffsetCSI-Part2-Index2  
Above 11 bits of CSI part 2 bits (see TS 38.213 [13], clause 9.3). When the field is absent the UE applies the value 13.  
<endl>

<start>  
bh-logicalchannelidentity  
bh-LogicalChannelIdentity  
ID used for the MAC logical channel.  
<endl>  
  
  
<start>  
bh-logicalchannelidentity  
bh-LogicalChannelIdentityExt  
ID used for the MAC logical channel.  
<endl>

<start>  
bh-rlc-channelconfig  
bh-LogicalChannelIdentity  
Indicates the logical channel id for BH RLC channel of the IAB-node.  
<endl>  
  
  
<start>  
bh-rlc-channelconfig  
bh-RLC-ChannelID  
Indicates the BH RLC channel in the link between IAB-MT of the IAB-node and IAB-DU of the parent IAB-node or IAB-donor-DU.  
<endl>  
  
  
<start>  
bh-rlc-channelconfig  
reestablishRLC  
Indicates that RLC should be re-established.  
<endl>  
  
  
<start>  
bh-rlc-channelconfig  
rlc-Config  
Determines the RLC mode (UM, AM) and provides corresponding parameters.  
<endl>

<start>  
bsr-config  
logicalChannelSR-DelayTimer  
Value in number of subframes. Value sf20 corresponds to 20 subframes, sf40 corresponds to 40 subframes, and so on.  
<endl>  
  
  
<start>  
bsr-config  
periodicBSR-Timer  
Value in number of subframes. Value sf1 corresponds to 1 subframe, value sf5 corresponds to 5 subframes and so on.  
<endl>  
  
  
<start>  
bsr-config  
retxBSR-Timer  
Value in number of subframes. Value sf10 corresponds to 10 subframes, value sf20 corresponds to 20 subframes and so on.  
<endl>

<start>  
bwp  
cyclicPrefix  
Indicates whether to use the extended cyclic prefix for this bandwidth part. If not set, the UE uses the normal cyclic prefix. Normal CP is supported for all subcarrier spacings and slot formats. Extended CP is supported only for 60 kHz subcarrier spacing. (see TS 38.211 [16], clause 4.2). Except for SUL, the network ensures the same cyclic prefix length is used in active DL BWP and active UL BWP within a serving cell.  
<endl>  
  
  
<start>  
bwp  
locationAndBandwidth  
Frequency domain location and bandwidth of this bandwidth part. The value of the field shall be interpreted as resource indicator value (RIV) as defined TS 38.214 [19] with assumptions as described in TS 38.213 [13], clause 12, i.e. setting =275. The first PRB is a PRB determined by subcarrierSpacing of this BWP and offsetToCarrier (configured in SCS-SpecificCarrier contained within FrequencyInfoDL / FrequencyInfoUL / FrequencyInfoUL-SIB / FrequencyInfoDL-SIB within ServingCellConfigCommon / ServingCellConfigCommonSIB) corresponding to this subcarrier spacing. In case of TDD, a BWP-pair (UL BWP and DL BWP with the same bwp-Id) must have the same center frequency (see TS 38.213 [13], clause 12)  
<endl>  
  
  
<start>  
bwp  
subcarrierSpacing  
Subcarrier spacing to be used in this BWP for all channels and reference signals unless explicitly configured elsewhere. Corresponds to subcarrier spacing according to TS 38.211 [16], table 4.2-1. The value kHz15 corresponds to µ=0, value kHz30 corresponds to µ=1, and so on.  
Only the following values are applicable depending on the used frequency:  
FR1: 15, 30, or 60 kHz  
FR2-1: 60 or 120 kHz  
FR2-2: 120, 480, or 960 kHz  
For the initial DL BWP and operation in licensed spectrum this field has the same value as the field subCarrierSpacingCommon in MIB of the same serving cell. Except for SUL, the network ensures the same subcarrier spacing is used in active DL BWP and active UL BWP within a serving cell. For the initial DL BWP and operation with shared spectrum channel access, the value of this field corresponds to the subcarrier spacing of the SSB associated to the initial DL BWP.  
<endl>

<start>  
bwp-downlink  
bwp-Id  
An identifier for this bandwidth part. Other parts of the RRC configuration use the BWP-Id to associate themselves with a particular bandwidth part.  
The network configures the BWPs with consecutive IDs from 1. The Network does not include the value 0, since value 0 is reserved for the initial BWP.  
<endl>

<start>  
bwp-downlinkcommon  
pdcch-ConfigCommon  
Cell specific parameters for the PDCCH of this BWP. This field is absent for a dormant BWP.  
<endl>  
  
  
<start>  
bwp-downlinkcommon  
pdsch-ConfigCommon  
Cell specific parameters for the PDSCH of this BWP.  
<endl>

<start>  
bwp-downlinkdedicated  
beamFailureRecoverySCellConfig  
Configuration of candidate RS for beam failure recovery on SCells.  
<endl>  
  
  
<start>  
bwp-downlinkdedicated  
beamFailureRecoverySpCellConfig  
Configuration of candidate RS for beam failure recovery on the SpCell. This field can only be configured when beamFailure-r17 is configured in RadioLinkMonitoringConfig.  
<endl>  
  
  
<start>  
bwp-downlinkdedicated  
cfr-ConfigMulticast  
UE specific common frequency resource configuration for MBS multicast for one dedicated BWP. This field can be configured within at most one serving cell.  
<endl>  
  
  
<start>  
bwp-downlinkdedicated  
dl-PPW-PreConfigToAddModList  
Indicates a list of DL-PRS processing window configurations to be added or modified for the dedicated DL BWP.  
<endl>  
  
  
<start>  
bwp-downlinkdedicated  
dl-PPW-PreConfigToReleaseList  
Indicates a list of DL-PRS processing window configurations to be released for the dedicated DL BWP.  
<endl>  
  
  
<start>  
bwp-downlinkdedicated  
harq-FeedbackEnablingforSPSactive  
If enabled, UE reports ACK/NACK for the first SPS PDSCH after activation, regardless of if HARQ feedback is enabled or disabled corresponding to the first SPS PDSCH after activation. Otherwise, UE follows configuration of HARQ feedback enabled/disabled corresponding to the first SPS PDSCH after activation.  
<endl>  
  
  
<start>  
bwp-downlinkdedicated  
nonCellDefiningSSB  
If configured, the RedCap UE operating in this BWP uses this SSB for the purposes for which it would otherwise have used the CD-SSB of the serving cell (e.g. obtaining sync, measurements, RLM). Furthermore, other parts of the BWP configuration that refer to an SSB (e.g. the "SSB" configured in the QCL-Info IE; the "ssb-Index" configured in the RadioLinkMonitoringRS; CFRA-SSB-Resource; PRACH-ResourceDedicatedBFR) refer implicitily to this NCD-SSB.  
The NCD-SSB has the same values for the properties (e.g., ssb-PositionsInBurst, PCI, ssb-periodicity, ssb-PBCH-BlockPower) of the corresponding CD-SSB apart from the values of the properties configured in the NonCellDefiningSSB-r17 IE.  
<endl>  
  
  
<start>  
bwp-downlinkdedicated  
pdcch-Config  
UE specific PDCCH configuration for one BWP.  
<endl>  
  
  
<start>  
bwp-downlinkdedicated  
pdsch-Config  
UE specific PDSCH configuration for one BWP.  
<endl>  
  
  
<start>  
bwp-downlinkdedicated  
preConfGapStatus  
Indicates whether the pre-configured measurement gaps (i.e. the gaps configured with preConfigInd) are activated or deactivated upon the switch to this BWP. If this field is configured, the UE shall apply network-controlled mechanism for activation and deactivation of the pre-configured measurement gaps, otherwise the UE shall apply the autonomous activation/deactivation mechanism, as specified in TS 38.133 [14]. The first/leftmost bit corresponds to the measurement gap with gap ID 1, the second bit corresponds to measurement gap with gap ID 2, and so on. Value 0 indicates that the corresponding pre-configured measurement gap is deactivated while value 1 indicates that the corresponding pre-configured measurement gap is activated. The UE shall ignore the bit if the corresponding measurement gap is not a pre-configured measurement gap.  
<endl>  
  
  
<start>  
bwp-downlinkdedicated  
servingCellMO  
measObjectId of the MeasObjectNR in MeasConfig which is associated to the serving cell. For this MeasObjectNR, the following relationship applies between this MeasObjectNR and nonCellDefiningSSB in BWP-DownlinkDedicated of the associated downlink BWP: if ssbFrequency is configured, its value is the same as the absoluteFrequencySSB in the nonCellDefiningSSB. If the field is present in a downlink BWP and the BWP is activated, the RedCap UE uses this measurement object for serving cell measurements (e.g., including those used in measurement report triggering events), otherwise, the RedCap UE uses the servingCellMO in ServingCellConfig IE.  
<endl>  
  
  
<start>  
bwp-downlinkdedicated  
sps-Config  
UE specific SPS (Semi-Persistent Scheduling) configuration for one BWP. Except for reconfiguration with sync, the NW does not reconfigure sps-Config when there is an active configured downlink assignment (see TS 38.321 [3]). However, the NW may release the sps-Config at any time. Network can only configure SPS in one BWP using either this field or sps-ConfigToAddModList.  
<endl>  
  
  
<start>  
bwp-downlinkdedicated  
sps-ConfigDeactivationStateList  
Indicates a list of the deactivation states in which each state can be mapped to a single or multiple SPS configurations to be deactivated, see clause 10.2 in TS 38.213 [13]. If a state is mapped to multiple SPS configurations, each of these SPS configurations is configured with the same harq-CodebookID.  
<endl>  
  
  
<start>  
bwp-downlinkdedicated  
sps-ConfigToAddModList  
Indicates a list of one or more DL SPS configurations to be added or modified in one BWP. Except for reconfiguration with sync, the NW does not reconfigure a SPS configuration when it is active (see TS 38.321 [3]).  
<endl>  
  
  
<start>  
bwp-downlinkdedicated  
sps-ConfigToReleaseList  
Indicates a list of one or more DL SPS configurations to be released. The NW may release a SPS configuration at any time.  
<endl>  
  
  
<start>  
bwp-downlinkdedicated  
radioLinkMonitoringConfig  
UE specific configuration of radio link monitoring for detecting cell- and beam radio link failure occasions. The maximum number of failure detection resources should be limited up to 8 for both cell and beam radio link failure detection. For SCells, only periodic 1-port CSI-RS can be configured in IE RadioLinkMonitoringConfig.  
<endl>  
  
  
<start>  
bwp-downlinkdedicated  
sl-PDCCH-Config  
Indicates the UE specific PDCCH configurations for receiving the SL grants (via SL-RNTI or SL-CS-RNTI) for NR sidelink communication/discovery.  
<endl>  
  
  
<start>  
bwp-downlinkdedicated  
sl-V2X-PDCCH-Config  
Indicates the UE specific PDCCH configurations for receiving SL grants (i.e. sidelink SPS) for V2X sidelink communication.  
<endl>

<start>  
bwp-uplink  
bwp-Id  
An identifier for this bandwidth part. Other parts of the RRC configuration use the BWP-Id to associate themselves with a particular bandwidth part.  
The network configures the BWPs with consecutive IDs from 1. The Network does not include the value 0, since value 0 is reserved for the initial BWP.  
<endl>

<start>  
bwp-uplinkcommon  
additionalRACH-ConfigList  
List of feature or feature combination-specific RACH configurations, i.e. the RACH configurations configured in addition to the one configured by rach-ConfigCommon and by msgA-ConfigCommon. The network associates all possible preambles of an additional RACH configuration to one or more feature(s) or feature combination(s). The network does not configure this list to have more than 16 entries. If both rach-ConfigCommon and msgA-ConfigCommon are configured for a specific FeatureCombination, the network always provides them in the same additionalRACH-Config.  
<endl>  
  
  
<start>  
bwp-uplinkcommon  
enableRA-PrioritizationForSlicing  
Indicates whether or not the ra-PrioritizationForSlicing/ra-PrioritizationForSlicingTwoStep should override the ra-PrioritizationForAccessIdentity. The field is applicable only when the UE is configured by upper layers with both NSAG and Access Identity 1 or 2. If value TRUE is configured, the UE should only apply the ra-PrioritizationForSlicing/ra-PrioritizationForSlicingTwoStep. If value FALSE is configured, the UE should only apply ra-PrioritizationForAccessIdentity. If the field is absent, whether to use ra-PrioritizationForSlicing/ra-PrioritizationForSlicingTwoStep or ra-PrioritizationForAccessIdentity is up to UE implementation.  
<endl>  
  
  
<start>  
bwp-uplinkcommon  
mcs-Msg3-Repetitions  
Configuration of eight candidate MCS indexes for PUSCH transmission scheduled by RAR UL grant and DCI format 0\_0 with CRC scrambled by TC-RNTI. Only the first 4 configured or default MCS indexes are used for PUSCH transmission scheduled by RAR UL grant. This field is only applicable when the UE selects Random Access resources indicating Msg3 repetition in this BWP. If this field is absent when the set(s) of Random Access resources with MSG3 repetition indication are configured in the BWP-UplinkCommon, the UE shall apply the values {0, 1, 2, 3, 4, 5, 6, 7} (see TS 38.214 [19], clause 6.1.4).  
<endl>  
  
  
<start>  
bwp-uplinkcommon  
msgA-ConfigCommon  
Configuration of the cell specific PRACH and PUSCH resource parameters for transmission of MsgA in 2-step random access type procedure. The NW can configure msgA-ConfigCommon only for UL BWPs if the linked DL BWPs (same bwp-Id as UL-BWP) are the initial DL BWPs or DL BWPs containing the SSB associated to the initial DL BWP or for RedCap UEs DL BWPs associated with nonCellDefiningSSB or the RedCap-specific initial downlink BWP.  
<endl>  
  
  
<start>  
bwp-uplinkcommon  
numberOfMsg3-RepetitionsList  
The number of repetitions for PUSCH transmission scheduled by RAR UL grant and DCI format 0\_0 with CRC scrambled by TC-RNTI. This field is only applicable when the UE selects Random Access resources indicating Msg3 repetition in this BWP. If this field is absent when the set(s) of Random Access resources with MSG3 repetition indication are configured in the BWP-UplinkCommon, the UE shall apply the values {n1, n2, n3, n4} (see TS 38.214 [19], clause 6.1.2.1).  
<endl>  
  
  
<start>  
bwp-uplinkcommon  
pucch-ConfigCommon  
Cell specific parameters for the PUCCH of this BWP.  
<endl>  
  
  
<start>  
bwp-uplinkcommon  
pusch-ConfigCommon  
Cell specific parameters for the PUSCH of this BWP.  
<endl>  
  
  
<start>  
bwp-uplinkcommon  
rach-ConfigCommon  
Configuration of cell specific random access parameters which the UE uses for contention based and contention free random access as well as for contention based beam failure recovery in this BWP. The NW configures SSB-based RA (and hence RACH-ConfigCommon) only for UL BWPs if the linked DL BWPs (same bwp-Id as UL-BWP) are the initial DL BWPs or DL BWPs containing the SSB associated to the initial DL BWP or for RedCap UEs DL BWPs associated with nonCellDefiningSSB or the RedCap-specific initial downlink BWP. The network configures rach-ConfigCommon, whenever it configures contention free random access (for reconfiguration with sync or for beam failure recovery). For RedCap-specific initial uplink BWP, rach-ConfigCommon is always configured when msgA-ConfigCommon is configured in this BWP.  
<endl>  
  
  
<start>  
bwp-uplinkcommon  
rach-ConfigCommonIAB  
Configuration of cell specific random access parameters for the IAB-MT. The IAB specific IAB RACH configuration is used by IAB-MT, if configured.  
<endl>  
  
  
<start>  
bwp-uplinkcommon  
rsrp-ThresholdMsg3  
Threshold used by the UE for determining whether to select resources indicating Msg3 repetition in this BWP, as specified in TS 38.321 [3]. The field is mandatory if both set(s) of Random Access resources with MSG3 repetition indication and set(s) of Random Access resources without MSG3 repetition indication are configured in the BWP. It is absent otherwise.  
<endl>  
  
  
<start>  
bwp-uplinkcommon  
useInterlacePUCCH-PUSCH  
If the field is present, the UE uses uplink frequency domain resource allocation Type 2 for cell-specific PUSCH, e.g., PUSCH scheduled by RAR UL grant (see TS 38.213 [13] clause 8.3 and TS 38.214 [19], clause 6.1.2.2) and uses interlaced PUCCH Format 0 and 1 for cell-specific PUCCH (see TS 38.213 [13], clause 9.2.1).  
<endl>

<start>  
bwp-uplinkdedicated  
beamFailureRecoveryConfig  
Configuration of beam failure recovery. If supplementaryUplink is present, the field is present only in one of the uplink carriers, either UL or SUL.  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
configuredGrantConfig  
A Configured-Grant of type1 or type2. It may be configured for UL or SUL but in case of type1 not for both at a time. Except for reconfiguration with sync, the NW does not reconfigure configuredGrantConfig when there is an active configured uplink grant Type 2 (see TS 38.321 [3]). However, the NW may release the configuredGrantConfig at any time. Network can only configure configured grant in one BWP using either this field or configuredGrantConfigToAddModList.  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
configuredGrantConfigToAddModList  
Indicates a list of one or more configured grant configurations to be added or modified for one BWP. Except for reconfiguration with sync, the NW does not reconfigure a Type 2 configured grant configuration when it is active (see TS 38.321 [3]). The network configures multiple CG configurations for one BWP with either all configurations or no configuration configured with cg-RetransmissionTimer-r16.  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
configuredGrantConfigToReleaseList  
Indicates a list of one or more UL Configured Grant configurations to be released. The NW may release a configured grant configuration at any time.  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
configuredGrantConfigType2DeactivationStateList  
Indicates a list of the deactivation states in which each state can be mapped to a single or multiple Configured Grant type 2 configurations to be deactivated when the corresponding deactivation DCI is received, see clause 7.3.1 in TS 38.212 [17] and clause 10.2 in TS 38.213 [13].  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
cp-ExtensionC2, cp-ExtensionC3  
Configures the cyclic prefix (CP) extension (see TS 38.211 [16], clause 5.3.1). For 15 kHz SCS, {1..28} are valid for both cp-ExtensionC2 and cp-ExtensionC3. For 30 kHz SCS, {1..28} are valid for cp-ExtensionC2 and {2..28} are valid for cp-ExtensionC3. For 60 kHz SCS, {2..28} are valid for cp-ExtensionC2 and {3..28} are valid for cp-ExtensionC3.  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
lbt-FailureRecoveryConfig  
Configures parameters used for detection of consistent uplink LBT failures for operation with shared spectrum channel access, as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
pathlossReferenceRSToAddModList  
A list of Reference Signals (e.g. a CSI-RS config or a SS block) to be used for path loss estimation for PUSCH, PUCCH and SRS for unified TCI state operation. If unifiedTCI-StateType is not configured for the serving cell, no element in this list is configured.  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
pucch-Config  
PUCCH configuration for one BWP of the normal UL or SUL of a serving cell. If the UE is configured with SUL, the network configures PUCCH only on the BWPs of one of the uplinks (normal UL or SUL). The network configures PUCCH-Config at least on non-initial BWP(s) for SpCell and on all BPW(s) for PUCCH SCell. If supported by the UE, the network may configure at most one additional SCell of a cell group with PUCCH-Config (i.e. PUCCH SCell). If PUCCH cell switching is supported by the UE, the network may configure two TDD serving cells with PUCCH-Config within each PUCCH group. For supporting PUCCH cell switching in the PUCCH group with the SpCell, the TDD SpCell and one TDD SCell shall have PUCCH-Config on their normal UL. For supporting PUCCH cell switching in the PUCCH group with only SCells, two TDD SCells shall have PUCCH-Config on their normal UL.  
In (NG)EN-DC and NE-DC, the NW configures at most one serving cell per frequency range with PUCCH. In (NG)EN-DC and NE-DC, if two PUCCH groups are configured, the serving cells of the NR PUCCH group in FR2 use the same numerology. For NR-DC, the maximum number of PUCCH groups in each cell group is one, and only the same numerology is supported for the cell group with carriers only in FR2.  
The NW may configure PUCCH for a BWP when setting up the BWP. The network may also add/remove the pucch-Config in an RRCReconfiguration with reconfigurationWithSync (for SpCell or PUCCH SCell) or with SCell release and add (for PUCCH SCell) to move the PUCCH between the UL and SUL carrier of one serving cell. In other cases, only modifications of a previously configured pucch-Config are allowed.  
If one (S)UL BWP of a serving cell is configured with PUCCH, all other (S)UL BWPs must be configured with PUCCH, too.  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
pucch-ConfigurationList  
PUCCH configurations for two simultaneously constructed HARQ-ACK codebooks (see TS 38.213 [13], clause 9.1). Different PUCCH Resource IDs are configured in different PUCCH-Config within the pucch-ConfigurationList if configured.  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
pucch-ConfigurationListMulticast1  
PUCCH configurations for two simultaneously constructed HARQ-ACK codebooks for MBS multicast (see TS 38.213, clause 9).  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
pucch-ConfigurationListMulticast2  
PUCCH configurations for two simultaneously constructed NACK-only feedback for MBS multicast (see TS 38.213, clause 9).  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
pusch-Config  
PUSCH configuration for one BWP of the normal UL or SUL of a serving cell. If the UE is configured with SUL and if it has a PUSCH-Config for both UL and SUL, an UL/SUL indicator field in DCI indicates which of the two to use. See TS 38.212 [17], clause 7.3.1.  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
pucch-ConfigMulticast1  
PUCCH configuration for the HARQ-ACK codebook for MBS multicast when multicast feedback is not configured with a priority value (see TS 38.213 [13], clause 9). If the field is not configured, pucch-Config applies.  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
pucch-ConfigMulticast2  
PUCCH configuration for the NACK-only feedback for MBS multicast when multicast feedback is not configured with a priority value (see TS 38.213 [13], clause 9). If the field is not configured, pucch-Config applies.  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
sl-PUCCH-Config  
Indicates the UE specific PUCCH configurations used for the HARQ-ACK feedback reporting for NR sidelink communication.  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
srs-Config  
Uplink sounding reference signal configuration.  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
ul-powerControl  
Configures power control parameters for PUCCH, PUSCH and SRS when UE is configured with unifiedTCI-StateType for this serving cell. For each serving cell, ul-powerControl is either configured in all BWP-UplinkDedicated or it is not configured in any BWP-UplinkDedicated. When unifiedTCI-StateRef in the BWP-UplinkDedicated of a serving cell refers to another serving cell, ul-powerControl is either configured in all BWP-UplinkDedicated of these two serving cells or it is not configured in any BWP-UplinkDedicated of these two serving cells.  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
ul-TCI-StateList  
Indicates the applicable UL TCI states for PUCCH, PUSCH and SRS.  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
ul-TCI-ToAddModList  
Indicates a list of UL TCI states.  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
unifiedTCI-StateRef  
Provides the serving cell and UL BWP where UL TCI states applicable to this UL BWP are defined.  
<endl>  
  
  
<start>  
bwp-uplinkdedicated  
useInterlacePUCCH-PUSCH  
If the field is present, the UE uses uplink frequency domain resource allocation Type 2 for PUSCH (see TS 38.213 [13], clause 8.3 and TS 38.214 [19], clause 6.1.2.2) and uses interlaced PUCCH Format 0, 1, 2, and 3 for PUCCH (see TS 38.213 [13], clause 9.2.1).  
<endl>

<start>  
candidatebeamrs  
candidateBeamConfig  
Indicates the resource (i.e. SSB or CSI-RS) defining this beam resource.  
<endl>  
  
  
<start>  
candidatebeamrs  
servingCellId  
If the field is absent, the RS belongs to the serving cell in which BeamFailureRecoveryRSConfig is configured.  
<endl>

<start>  
cellaccessrelatedinfo  
cellReservedForFutureUse  
Indicates whether the cell is reserved, as defined in 38.304 [20] for future use. The field is applicable to all PLMNs and NPNs. This field is ignored by IAB-MT.  
<endl>  
  
  
<start>  
cellaccessrelatedinfo  
cellReservedForOtherUse  
Indicates whether the cell is reserved, as defined in 38.304 [20]. The field is applicable to all PLMNs. This field is ignored by IAB-MT for cell barring determination, but still considered by NPN capable IAB-MT for determination of an NPN-only cell.  
<endl>  
  
  
<start>  
cellaccessrelatedinfo  
npn-IdentityInfoList  
The npn-IdentityInfoList is used to configure a set of NPN-IdentityInfo elements. Each of those elements contains a list of one or more NPN Identities and additional information associated with those NPNs. The total number of PLMNs (identified by a PLMN identity in plmn -IdentityList), PNI-NPNs (identified by a PLMN identity and a CAG-ID), and SNPNs (identified by a PLMN identity and a NID) together in the PLMN-IdentityInfoList and NPN-IdentityInfoList does not exceed 12, except for the NPN-only cells. A PNI-NPN and SNPN can be included only once, and in only one entry of the NPN-IdentityInfoList. In case of NPN-only cells the PLMN-IdentityList contains a single element that does not count to the limit of 12 and the cellIdentity of the first entry of the PLMN-IdentityInfoList is set to the same value as the cellIdentity-r16 of the first entry of the NPN-IdentityInfoList. The NPN index is defined as B+c1+c2+…+c(n-1)+d1+d2+…+d(m-1)+e(i) for the NPN identity included in the n-th entry of NPN-IdentityInfoList and in the m-th entry of npn-Identitylist within that NPN-IdentityInfoList entry, and the i-th entry of its corresponding NPN-Identity, where  
- B is the index used for the last PLMN in the PLMN-IdentittyInfoList; in NPN-only cells B is considered 0;  
- c(j) is the number of NPN index values used in the j-th NPN-IdentityInfoList entry;  
- d(k) is the number of NPN index values used in the k-th npn-IdentityList entry within the n-th NPN-IdentityInfoList entry;  
- e(i) is  
 - i if the n-th entry of NPN-IdentityInfoList entry is for SNPN(s);  
 - 1 if the n-th entry of NPN-IdentityInfoList entry is for PNI-NPN(s).  
<endl>  
  
  
<start>  
cellaccessrelatedinfo  
plmn-IdentityInfoList  
The plmn-IdentityInfoList is used to configure a set of PLMN-IdentityInfo elements. Each of those elements contains a list of one or more PLMN Identities and additional information associated with those PLMNs. A PLMN-identity can be included only once, and in only one entry of the PLMN-IdentityInfoList. The PLMN index is defined as b1+b2+…+b(n-1)+i for the PLMN included at the n-th entry of PLMN-IdentityInfoList and the i-th entry of its corresponding PLMN-IdentityInfo, where b(j) is the number of PLMN-Identity entries in each PLMN-IdentityInfo, respectively.  
<endl>  
  
  
<start>  
cellaccessrelatedinfo  
snpn-AccessInfoList  
This list provides access related information for each SNPN in npn-IdentityInfoList, see TS 23.501 [32]. The n-th entry of the list contains the access related information of the n-th SNPN in npn-IdentityInfoList.  
<endl>

<start>  
snpn-accessinfo  
extCH-Supported  
Indicates whether the SNPN supports access using credentials from a Credentials Holder as specified in TS 23.501 [32].  
<endl>  
  
  
<start>  
snpn-accessinfo  
extCH-WithoutConfigAllowed  
Indicates whether the SNPN allows registration attempts with credentials from a Credentials Holder from UEs that are not explicitly configured to select the SNPN as specified in TS 23.501 [32].  
<endl>  
  
  
<start>  
snpn-accessinfo  
imsEmergencySupportForSNPN  
Indicates whether the SNPN supports IMS emergency bearer services for UEs in limited service mode in the cell. If absent, IMS emergency call is not supported by the SNPN in the cell for UEs in limited service mode.  
<endl>  
  
  
<start>  
snpn-accessinfo  
onboardingEnabled  
Indicates whether the onboarding SNPN allows registration for onboarding in the cell as specified in TS 23.501 [32].  
<endl>

<start>  
cc-state  
dlCarrier  
Indicates DL carrier activation state for this carrier and the related active BWP Index, if activated.  
<endl>  
  
  
<start>  
cc-state  
ulCarrier  
Indicates UL carrier activation state for this carrier and the related active BWP Index, if activated.  
<endl>

<start>  
cellgroupconfig  
bap-Address  
BAP address of the parent node in cell group.  
<endl>  
  
  
<start>  
cellgroupconfig  
bh-RLC-ChannelToAddModList  
Configuration of the backhaul RLC entities and the corresponding MAC Logical Channels to be added and modified.  
<endl>  
  
  
<start>  
cellgroupconfig  
bh-RLC-ChannelToReleaseList  
List of the backhaul RLC entities and the corresponding MAC Logical Channels to be released.  
<endl>  
  
  
<start>  
cellgroupconfig  
f1c-TransferPath  
The F1-C transfer path that an EN-DC IAB-MT should use for transferring F1-C packets to the IAB-donor-CU. If IAB-MT is configured with lte, IAB-MT can only use LTE leg for F1-C transfer. If IAB-MT is configured with nr, IAB-MT can only use NR leg for F1-C transfer. If IAB-MT is configured with both, it is up to IAB-MT to select an LTE leg or a NR leg for F1-C transfer. If the field is not configured, the IAB node uses the NR leg as the default one.  
<endl>  
  
  
<start>  
cellgroupconfig  
f1c-TransferPathNRDC  
The F1-C transfer path that an NR-DC IAB-MT should use for transferring F1-C packets to the IAB-donor-CU. If IAB-MT is configured with mcg, IAB-MT can only use the MCG for F1-C transfer. If IAB-MT is configured with scg, IAB-MT can only use the SCG for F1-C transfer. If IAB-MT is configured with both, it is up to IAB-MT to select the MCG or the SCG for F1-C transfer.  
<endl>  
  
  
<start>  
cellgroupconfig  
mac-CellGroupConfig  
MAC parameters applicable for the entire cell group.  
<endl>  
  
  
<start>  
cellgroupconfig  
rlc-BearerToAddModList  
Configuration of the MAC Logical Channel, the corresponding RLC entities and association with radio bearers.  
<endl>  
  
  
<start>  
cellgroupconfig  
reportUplinkTxDirectCurrent  
Enables reporting of uplink and supplementary uplink Direct Current location information upon BWP configuration and reconfiguration. This field is only present when the BWP configuration is modified or any serving cell is added or removed. This field is absent in the IE CellGroupConfig when provided as part of RRCSetup message. If UE is configured with SUL carrier, UE reports both UL and SUL Direct Current locations.  
<endl>  
  
  
<start>  
cellgroupconfig  
reportUplinkTxDirectCurrentMoreCarrier  
Enables reporting of uplink Direct Current location information when the UE is configured with intra-band CA. This field is absent in the IE CellGroupConfig when provided as part of RRCSetup message. The UE only reports the uplink Direct Current location information that are related to the indicated cc-CombinationList. The network does not include carriers which locate in DL only spectrum described in TS 38.101-2 [39], clause 5.3A.4 and defined by Fsd according to Table 5.3A.4-3 in FR2 in the IntraBandCC-CombinationReqList. I.e. DL-only carrier in FR2 frequency spectrum is not used to calculate the default DC location.  
<endl>  
  
  
<start>  
cellgroupconfig  
reportUplinkTxDirectCurrentTwoCarrier  
Enables reporting of uplink Direct Current location information when the UE is configured with uplink intra-band CA with two carriers. This field is absent in the IE CellGroupConfig when provided as part of RRCSetup message.  
<endl>  
  
  
<start>  
cellgroupconfig  
rlc-BearerToReleaseListExt  
List of the RLC entities and the corresponding MAC Logical Channels to be released for multicast MRBs.  
<endl>  
  
  
<start>  
cellgroupconfig  
rlmInSyncOutOfSyncThreshold  
BLER threshold pair index for IS/OOS indication generation, see TS 38.133 [14], table 8.1.1-1. n1 corresponds to the value 1. When the field is absent, the UE applies the value 0. Whenever this is reconfigured, UE resets N310 and N311, and stops T310, if running. Network does not include this field.  
<endl>  
  
  
<start>  
cellgroupconfig  
sCellSIB20  
This field is used to transfer SIB20 of the SCell in order to allow the UE for MBS broadcast reception on SCell. The network configures this field only for a single SCell at a time.  
<endl>  
  
  
<start>  
cellgroupconfig  
sCellState  
Indicates whether the SCell shall be considered to be in activated state upon SCell configuration. If the field is included for an SCell configured with TRS for fast activation of the SCell, such TRS is not used for the corresponding SCell.  
<endl>  
  
  
<start>  
cellgroupconfig  
sCellToAddModList  
List of secondary serving cells (SCells) to be added or modified.  
<endl>  
  
  
<start>  
cellgroupconfig  
sCellToReleaseList  
List of secondary serving cells (SCells) to be released.  
<endl>  
  
  
<start>  
cellgroupconfig  
secondaryDRX-GroupConfig  
The field is used to indicate whether the SCell belongs to the secondary DRX group. All serving cells in the secondary DRX group shall belong to one Frequency Range and all serving cells in the legacy DRX group shall belong to another Frequency Range.  
<endl>  
  
  
<start>  
cellgroupconfig  
simultaneousSpatial-UpdatedList1, simultaneousSpatial-UpdatedList2  
List of serving cells which can be updated simultaneously for spatial relation with a MAC CE. The simultaneousSpatial-UpdatedList1 and simultaneousSpatial-UpdatedList2 shall not contain same serving cells. Network should not configure serving cells that are configured with a BWP with two different values for the coresetPoolIndex in these lists.  
<endl>  
  
  
<start>  
cellgroupconfig  
simultaneousTCI-UpdateList1, simultaneousTCI-UpdateList2  
List of serving cells which can be updated simultaneously for TCI relation with a MAC CE. The simultaneousTCI-UpdateList1 and simultaneousTCI-UpdateList2 shall not contain same serving cells. Network should not configure serving cells that are configured with a BWP with two different values for the coresetPoolIndex in these lists.  
<endl>  
  
  
<start>  
cellgroupconfig  
simultaneousU-TCI-UpdateList1, simultaneousU-TCI-UpdateList2, simultaneousU-TCI-UpdateList3, simultaneousU-TCI-UpdateList4  
List of serving cells for which the Unified TCI States Activation/Deactivation MAC CE applies simultaneously, as specified in TS 38.321 [3] clause 6.1.3.47. The different lists shall not contain same serving cells. Network only configures in these lists serving cells that are configured with unifiedTCI-StateType.  
<endl>  
  
  
<start>  
cellgroupconfig  
spCellConfig  
Parameters for the SpCell of this cell group (PCell of MCG or PSCell of SCG).  
<endl>  
  
  
<start>  
cellgroupconfig  
uplinkTxSwitchingOption  
Indicates which option is configured for dynamic UL Tx switching for inter-band UL CA or (NG)EN-DC. The field is set to switchedUL if network configures option 1 as specified in TS 38.214 [19], or dualUL if network configures option 2 as specified in TS 38.214 [19]. Network always configures UE with a value for this field in inter-band UL CA case and (NG)EN-DC case where UE supports dynamic UL Tx switching.  
<endl>  
  
  
<start>  
cellgroupconfig  
uplinkTxSwitchingPowerBoosting  
Indicates whether the UE is allowed to enable 3dB boosting on the maximum output power for transmission on carrier2 under the operation state in which 2-port transmission can be supported on carrier2 for inter-band UL CA case with dynamic UL Tx switching as defined in TS 38.101-1 [15]. Network can only configure this field for dynamic UL Tx switching in inter-band UL CA case with power Class 3 as defined in TS 38.101-1 [15].  
<endl>  
  
  
<start>  
cellgroupconfig  
uplinkTxSwitching-2T-Mode  
Indicates 2Tx-2Tx switching mode is configured for inter-band UL CA or SUL, in which the switching gap duration for a triggered uplink switching (as specified in TS 38.214 [19]) is equal to the switching time capability value reported for the switching mode.  
If this field is absent and uplinkTxSwitching is configured, it is interpreted that 1Tx-2Tx UL Tx switching is configured as specified in TS 38.214 [19]. In this case, there is one uplink (or one uplink band in case of intra-band) configured with uplinkTxSwitching, on which the maximum number of antenna ports among all configured P-SRS/A-SRS and activated SP-SRS resources should be 1 and non-codebook based UL MIMO is not configured.  
<endl>  
  
  
<start>  
cellgroupconfig  
uplinkTxSwitching-DualUL-TxState  
Indicates the state of Tx chains if the state of Tx chains after the UL Tx switching is not unique (as specified in TS 38.214 [19]) in case of 2Tx-2Tx switching is configured and uplinkTxSwitchingOption is set to dualUL. Value oneT indicates 1Tx is assumed to be supported on the carriers on each band, value twoT indicates 2Tx is assumed to be supported on that carrier.  
<endl>  
  
  
<start>  
cellgroupconfig  
uu-RelayRLC-ChannelToAddModList  
List of the Uu RLC entities and the corresponding MAC Logical Channels to be added or modified.  
<endl>  
  
  
<start>  
cellgroupconfig  
uu-RelayRLC-ChannelToReleaseList  
List of the Uu RLC entities and the corresponding MAC Logical Channels to be released.  
<endl>

<start>  
deactivatedscg-config  
bfd-and-RLM  
If the field is set to true, the UE shall perform RLM and BFD on the PSCell when the SCG is deactivated and the network ensures that beamFailure-r17 is not configured in the radioLinkMonitoringConfig of the DL BWP of the PSCell in which the UE performs BFD. If set to false, the UE is not required to perform RLM and BFD on the PSCell when the SCG is deactivated.  
<endl>

<start>  
daps-uplinkpowerconfig  
p-DAPS-Source  
The maximum total transmit power to be used by the UE in the source cell group during DAPS handover.  
<endl>  
  
  
<start>  
daps-uplinkpowerconfig  
p-DAPS-Target  
The maximum total transmit power to be used by the UE in the target cell group during DAPS handover.  
<endl>  
  
  
<start>  
daps-uplinkpowerconfig  
uplinkPowerSharingDAPS-Mode  
Indicates the uplink power sharing mode that the UE uses in DAPS handover (see TS 38.213 [13]).  
<endl>

<start>  
goodservingcellevaluation  
offset  
The parameter "X" (dB) for the good serving cell quality criterion in RRC\_CONNECTED, for a cell operating in FR1 and FR2, respectively. If this field is absent, the UE applies the (default) value of 0 dB for "X".  
<endl>

<start>  
iab-resourceconfig  
iab-ResourceConfigID  
This ID is used to indicate the specific resource configuration addressed by the MAC CEs specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
iab-resourceconfig  
periodicitySlotList  
Indicates the periodicity in ms of the list of slot indexes indicated in slotList.  
<endl>  
  
  
<start>  
iab-resourceconfig  
slotList  
Indicates the list of slot indexes to which the information indicated in the specific MAC CE applies to, as specified in TS 38.321 [3]. The values of the entries in the slotList are strictly less than the value of the periodicitySlotList.  
<endl>  
  
  
<start>  
iab-resourceconfig  
slotListSubcarrierSpacing  
Subcarrier spacing used as reference for the slotList configuration.  
Only the following values are applicable depending on the used frequency:  
FR1: 15 or 30 kHz  
FR2-1: 60 or 120 kHz  
FR2-2: 120 or 480 kHz  
<endl>

<start>  
reconfigurationwithsync  
rach-ConfigDedicated  
Random access configuration to be used for the reconfiguration with sync (e.g. handover). The UE performs the RA according to these parameters in the firstActiveUplinkBWP (see UplinkConfig).  
<endl>  
  
  
<start>  
reconfigurationwithsync  
smtc  
The SSB periodicity/offset/duration configuration of target cell for NR PSCell change and NR PCell change. The network sets the periodicityAndOffset to indicate the same periodicity as ssb-periodicityServingCell in spCellConfigCommon or sets to the same periodicity as ssb-Periodicity-r17 in nonCellDefiningSSB-r17 if the first active DL BWP included in this RRC message is configured with nonCellDefiningSSB-r17 for RedCap.  
For case of NR PCell change, the smtc is based on the timing reference of (source) PCell. For case of NR PSCell change, it is based on the timing reference of source PSCell.  
If both this field and targetCellSMTC-SCG are absent, the UE uses the SMTC in the measObjectNR having the same SSB frequency and subcarrier spacing, as configured before the reception of the RRC message. For a RedCap UE, if the first active DL BWP included in this RRC message is configured with nonCellDefiningSSB-r17, this field corresponds to the NCD-SSB indicated by nonCellDefiningSSB-r17, otherwise, this field corresponds to the CD-SSB indicated by absoluteFrequencySSB in frequencyInfoDL.  
<endl>

<start>  
reportuplinktxdirectcurrentmorecarrier  
IntraBandCC-Combination  
Indicates the state of the carriers and BWPs indexes of the carriers in a CC combination, each carrier in this combination corresponds to an entry in servCellIndexList with same order. This IE shall have the same size as servCellIndexList.  
<endl>  
  
  
<start>  
reportuplinktxdirectcurrentmorecarrier  
IntraBandCC-CombinationReqList  
Indicates the list of the requested carriers/BWPs combinations for an intra-band CA component.  
<endl>  
  
  
<start>  
reportuplinktxdirectcurrentmorecarrier  
servCellIndexList  
indicates the list of cell index for an intra-band CA component.  
<endl>

<start>  
scellconfig  
goodServingCellEvaluationBFD  
Indicates the criterion for a UE to detect the good serving cell quality for BFD relaxation in an SCell in RRC\_CONNECTED. This field is always configured when the network enables BFD relaxation for the UE in this SCell. This field is absent if failureDetectionSetN is present for the SCell.  
<endl>  
  
  
<start>  
scellconfig  
preConfGapStatus  
Indicates whether the pre-configured measurement gaps (i.e. the gaps configured with preConfigInd) are activated or deactivated while this SCell is deactivated. If this field is configured, the UE shall apply network-controlled mechanism for activation and deactivation of the pre-configured measurement gaps, otherwise the UE shall apply the autonomous activation/deactivation mechanism, as specified in TS 38.133 [14]. The first/leftmost bit corresponds to the measurement gap with gap ID 1, the second bit corresponds to measurement gap with gap ID 2, and so on. Value 0 indicates that the corresponding pre-configured measurement gap is deactivated while value 1 indicates that the corresponding pre-configured measurement gap is activated. The UE shall ignore the bit if the corresponding measurement gap is not a pre-configured measurement gap.  
<endl>  
  
  
<start>  
scellconfig  
smtc  
The SSB periodicity/offset/duration configuration of target cell for NR SCell addition. The network sets the periodicityAndOffset to indicate the same periodicity as ssb-periodicityServingCell in sCellConfigCommon. The smtc is based on the timing of the SpCell of associated cell group. In case of inter-RAT handover to NR, the timing reference is the NR PCell. In case of intra-NR PCell change (standalone NR) or NR PSCell change (EN-DC), the timing reference is the target SpCell. If the field is absent, the UE uses the SMTC in the measObjectNR having the same SSB frequency and subcarrier spacing, as configured before the reception of the RRC message.  
<endl>

<start>  
spcellconfig  
deactivatedSCG-Config  
Configuration applicable when the SCG is deactivated. The network always configures this field before or when indicating that the SCG is deactivated in an RRCReconfiguration, RRCResume, E-UTRA RRCConnectionReconfiguration or E-UTRA RRCConnectionResume message.  
<endl>  
  
  
<start>  
spcellconfig  
goodServingCellEvaluationBFD  
Indicates the criterion for a UE to detect the good serving cell quality for BFD relaxation in the SpCell in RRC\_CONNECTED. The field is always configured when the network enables BFD relaxation for the UE in this SpCell. This field is absent if failureDetectionSetN is present for the SpCell.  
<endl>  
  
  
<start>  
spcellconfig  
goodServingCellEvaluationRLM  
Indicates the criterion for a UE to detect the good serving cell quality for RLM relaxation in the SpCell in RRC\_CONNECTED. The field is always configured when the network enables RLM relaxation for the UE in this SpCell.  
<endl>  
  
  
<start>  
spcellconfig  
lowMobilityEvaluationConnected  
Indicates the criterion for a UE to detect low mobility in RRC\_CONNECTED in an SpCell. The s-SearchDeltaP-Connected is the parameter "SSearchDeltaP-connected". Value dB3 corresponds to 3 dB, dB6 corresponds to 6 dB and so on. The t-SearchDeltaP-Connected is the parameter "TSearchDeltaP-Connected". Value s5 means 5 seconds, value s10 means 10 seconds and so on. Low mobility criterion is configured in NR PCell for the case of NR SA/ NR CA/ NE-DC/NR-DC, and in the NR PSCell for the case of EN-DC.  
<endl>  
  
  
<start>  
spcellconfig  
reconfigurationWithSync  
Parameters for the synchronous reconfiguration to the target SpCell.  
<endl>  
  
  
<start>  
spcellconfig  
rlf-TimersAndConstants  
Timers and constants for detecting and triggering cell-level radio link failure. For the SCG, rlf-TimersAndConstants can only be set to setup and is always included at SCG addition.  
<endl>  
  
  
<start>  
spcellconfig  
servCellIndex  
Serving cell ID of a PSCell. The PCell of the Master Cell Group uses ID = 0.  
<endl>

<start>  
sl-pathswitchconfig  
targetRelayUE-Identity  
Indicates the L2 source ID of the target L2 U2N Relay UE during path switch.  
<endl>  
  
  
<start>  
sl-pathswitchconfig  
T420  
Indicates the timer value of T420 to be used during path switch.  
<endl>

<start>  
cfr-configmulticast  
locationAndBandwidthMulticast  
Frequency domain location and bandwidth for MBS multicast. The value of the field shall be interpreted as resource indicator value (RIV) as defined TS 38.214 [19] with assumptions as described in TS 38.213 [13], clause 12, i.e. setting N^size\_BWP=275. The first PRB is a PRB determined by subcarrierSpacing of the associated BWP and offsetToCarrier corresponding to this subcarrier spacing. If not configured, the UE applies the value of locationAndBandwidth of the DL BWP in which the cfr-ConfigMulticast is configured.  
<endl>  
  
  
<start>  
cfr-configmulticast  
pdcch-ConfigMulticast  
UE specific group-common PDCCH configuration for MBS multicast for one CFR.  
<endl>  
  
  
<start>  
cfr-configmulticast  
pdsch-ConfigMulticast  
UE specific group-common PDSCH configuration for MBS multicast for one CFR.  
<endl>  
  
  
<start>  
cfr-configmulticast  
sps-ConfigMulticastToAddModList  
Indicates a list of one or more DL SPS configurations for MBS multicast.  
<endl>  
  
  
<start>  
cfr-configmulticast  
sps-ConfigMulticastToReleaseList  
Indicates a list of one or more DL SPS configurations to be released. The NW may release a SPS configuration at any time.  
<endl>

<start>  
cgi-infoeutralogging  
cellIdentity-eutra-epc, cellIdentity-eutra-5GC  
Unambiguously identify a cell within the context of the PLMN. It belongs the first PLMN entry of plmn-IdentityList (when connected to EPC) or of plmn-IdentityList-r15 (when connected to 5GC) in SystemInformationBlockType1.  
<endl>  
  
  
<start>  
cgi-infoeutralogging  
plmn-Identity-eutra-epc, plmn-Identity-eutra-5GC  
Identifies the PLMN of the cell for the reported cellIdentity: the first PLMN entry of plmn-IdentityList (when connected to EPC) or of plmn-IdentityList-r15 (when connected to 5GC) in SystemInformationBlockType1 that contained the reported cellIdentity.  
<endl>  
  
  
<start>  
cgi-infoeutralogging  
trackingAreaCode-eutra-epc, trackingAreaCode-eutra-5gc  
Indicates Tracking Area Code to which the cell indicated by cellIdentity-eutra-epc, cellIdentity-eutra-5GC belongs.  
<endl>

<start>  
cgi-infonr  
noSIB1  
Contains ssb-SubcarrierOffset and pdcch-ConfigSIB1 fields acquired by the UE from MIB of the cell for which report CGI procedure was requested by the network in case SIB1 was not broadcast by the cell.  
<endl>  
  
  
<start>  
cgi-infonr  
cellReservedForOtherUse  
Contains cellReservedForOtherUse field acquired by the UE that supports nr-CGI-Reporting-NPN from SIB1 of the cell for which report CGI procedure was requested by the network.  
<endl>

<start>  
cgi-info-logging  
cellIdentity  
Unambiguously identify a cell within the context of the PLMN. It belongs the first PLMN-IdentityInfo IE of PLMN-IdentityInfoList in SIB1.  
<endl>  
  
  
<start>  
cgi-info-logging  
plmn-Identity  
Identifies the PLMN of the cell for the reported cellIdentity: the first PLMN entry of plmn-IdentityList (in SIB1) in the instance of PLMN-IdentityInfoList that contained the reported cellIdentity.  
<endl>  
  
  
<start>  
cgi-info-logging  
trackingAreaCode  
Indicates Tracking Area Code to which the cell indicated by cellIdentity field belongs.  
<endl>

<start>  
codebookconfig  
codebookMode  
CodebookMode as specified in TS 38.214 [19], clause 5.2.2.2.2.  
<endl>  
  
  
<start>  
codebookconfig  
codebookType  
CodebookType including possibly sub-types and the corresponding parameters for each (see TS 38.214 [19], clause 5.2.2.2).  
<endl>  
  
  
<start>  
codebookconfig  
n1-n2-codebookSubsetRestriction  
Number of antenna ports in first (n1) and second (n2) dimension and codebook subset restriction (see TS 38.214 [19] clause 5.2.2.2.3).  
Number of bits for codebook subset restriction is CEIL(log2(nchoosek(O1\*O2,4)))+8\*n1\*n2 where nchoosek(a,b) = a!/(b!(a-b)!).  
<endl>  
  
  
<start>  
codebookconfig  
n1-n2  
Number of antenna ports in first (n1) and second (n2) dimension and codebook subset restriction (see TS 38.214 [19] clause 5.2.2.2.1).  
<endl>  
  
  
<start>  
codebookconfig  
ng-n1-n2  
Codebook subset restriction for Type I Multi-panel codebook (see TS 38.214 [19], clause 5.2.2.2.2).  
<endl>  
  
  
<start>  
codebookconfig  
numberOfBeams  
Number of beams, L, used for linear combination.  
<endl>  
  
  
<start>  
codebookconfig  
numberOfPMI-SubbandsPerCQI-Subband  
Field indicates how PMI subbands are defined per CQI subband according to TS 38.214 [19], clause 5.2.2.2.5, and 5.2.2.2.7.  
<endl>  
  
  
<start>  
codebookconfig  
paramCombination  
Field describes supported parameter combination (M, , ) as specified in TS 38.214 [19].  
<endl>  
  
  
<start>  
codebookconfig  
phaseAlphabetSize  
The size of the PSK alphabet, QPSK or 8-PSK.  
<endl>  
  
  
<start>  
codebookconfig  
portSelectionSamplingSize  
The size of the port selection codebook (parameter d), see TS 38.214 [19] clause 5.2.2.2.6.  
<endl>  
  
  
<start>  
codebookconfig  
ri-Restriction  
Restriction for RI for TypeI-MultiPanel-RI-Restriction (see TS 38.214 [19], clause 5.2.2.2.2).  
<endl>  
  
  
<start>  
codebookconfig  
subbandAmplitude  
If subband amplitude reporting is activated (true).  
<endl>  
  
  
<start>  
codebookconfig  
twoTX-CodebookSubsetRestriction  
Codebook subset restriction for 2TX codebook (see TS 38.214 [19] clause 5.2.2.2.1).  
<endl>  
  
  
<start>  
codebookconfig  
typeI-SinglePanel-codebookSubsetRestriction-i2  
i2 codebook subset restriction for Type I Single-panel codebook used when reportQuantity is CRI/Ri/i1/CQI (see TS 38.214 [19] clause 5.2.2.2.1).  
<endl>  
  
  
<start>  
codebookconfig  
typeI-SinglePanel-ri-Restriction  
Restriction for RI for TypeI-SinglePanel-RI-Restriction (see TS 38.214 [19], clause 5.2.2.2.1).  
<endl>  
  
  
<start>  
codebookconfig  
typeI-SinglePanel-Group1, typeI-SinglePanel-Group2  
Configures codebooks for CSI calculation when UE is configured with two CMR Groups with CMRGroupingAndPairing in the NZP-CSI-RS-ResourceSet associated with the CSI-ReportConfig. Network configures the same number of ports for both codebooks.  
<endl>  
  
  
<start>  
codebookconfig  
typeI-SinglePanel-ri-RestrictionSDM, typeI-SinglePanel-ri-RestrictionSTRP  
Restriction for RI for N Resource Pairs when two CMR Groups are configured with CMRGroupingAndPairing in the NZP-CSI-RS-ResourceSet associated with the CSI-ReportConfig (see TS 38.214 [19], clause 5.2.1.4.2).  
<endl>  
  
  
<start>  
codebookconfig  
typeII-PortSelectionRI-Restriction  
Restriction for RI for TypeII-PortSelection-RI-Restriction (see TS 38.214 [19], clauses 5.2.2.2.4 and 5.2.2.2.6).  
<endl>  
  
  
<start>  
codebookconfig  
typeII-RI-Restriction  
Restriction for RI for TypeII-RI-Restriction (see TS 38.214 [19], clauses 5.2.2.2.3 and 5.2.2.2.5).  
<endl>  
  
  
<start>  
codebookconfig  
valueOfN  
Field provides the value of parameter N as specified in TS 38.214 [19], clause 5.2.2.2.7. The field is present only when M=2 set by paramCombination, see TS 38.214 [19].  
<endl>

<start>  
commonlocationinfo  
gnss-TOD-msec  
Parameter type gnss-TOD-msec defined in TS 37.355 [49]. The first/leftmost bit of the first octet contains the most significant bit.  
<endl>  
  
  
<start>  
commonlocationinfo  
locationTimeStamp  
Parameter type DisplacementTimeStamp defined in TS 37.355 [49]. The first/leftmost bit of the first octet contains the most significant bit.  
<endl>  
  
  
<start>  
commonlocationinfo  
locationCoordinate  
Parameter type LocationCoordinates defined in TS 37.355 [49]. The first/leftmost bit of the first octet contains the most significant bit.  
<endl>  
  
  
<start>  
commonlocationinfo  
locationError  
Parameter LocationError defined in TS 37.355 [49]. The first/leftmost bit of the first octet contains the most significant bit.  
<endl>  
  
  
<start>  
commonlocationinfo  
locationSource  
Parameter LocationSource defined in TS 37.355 [49]. The first/leftmost bit of the first octet contains the most significant bit.  
<endl>  
  
  
<start>  
commonlocationinfo  
velocityEstimate  
Parameter type Velocity defined in TS 37.355 [49]. The first/leftmost bit of the first octet contains the most significant bit.  
<endl>

<start>  
condreconfigtoaddmod  
condExecutionCond  
The execution condition that needs to be fulfilled in order to trigger the execution of a conditional reconfiguration for CHO, CPA, intra-SN CPC without MN involvement or MN initiated inter-SN CPC. When configuring 2 triggering events (Meas Ids) for a candidate cell, the network ensures that both refer to the same measObject. For CHO, if the network configures condEventD1 or condEventT1 for a candidate cell, the network configures a second triggering event condEventA3, condEventA4 or condEventA5 for the same candidate cell. The network does not configure both condEventD1 and condEventT1 for the same candidate cell. For CHO in terrestrial networks, the network does not indicate a MeasId associated with condEventA4. For CPA and for MN-initiated inter-SN CPC, the network only indicates MeasId(s) associated with condEventA4. For intra-SN CPC, the network only indicates MeasId(s) associated with condEventA3 or condEventA5.  
<endl>  
  
  
<start>  
condreconfigtoaddmod  
condExecutionCondSCG  
Contains execution condition that needs to be fulfilled in order to trigger the execution of a conditional reconfiguration for SN initiated inter-SN CPC. The Meas Ids refer to the measConfig associated with the SCG. When configuring 2 triggering events (Meas Ids) for a candidate cell, network ensures that both refer to the same measObject. For each condReconfigId, the network always configures either condExecutionCond or condExecutionCondSCG (not both). The network only indicates MeasId(s) associated with condEventA3 or condEventA5.  
<endl>  
  
  
<start>  
condreconfigtoaddmod  
condRRCReconfig  
The RRCReconfiguration message to be applied when the condition(s) are fulfilled. The RRCReconfiguration message contained in condRRCReconfig cannot contain the field conditionalReconfiguration or the field daps-Config.  
<endl>

<start>  
conditionalreconfiguration  
attemptCondReconfig  
If present, the UE shall perform conditional reconfiguration if selected cell is a target candidate cell and it is the first cell selection after failure as described in clause 5.3.7.3.  
<endl>  
  
  
<start>  
conditionalreconfiguration  
condReconfigToAddModList  
List of the configuration of candidate SpCells to be added or modified for CHO, CPA or CPC.  
<endl>  
  
  
<start>  
conditionalreconfiguration  
condReconfigToRemoveList  
List of the configuration of candidate SpCells to be removed.  
<endl>

<start>  
configuredgrantconfig  
antennaPort  
Indicates the antenna port(s) to be used for this configuration, and the maximum bitwidth is 5. See TS 38.214 [19], clause 6.1.2, and TS 38.212 [17], clause 7.3.1. The UE ignores this field in case of CG-SDT.  
<endl>  
  
  
<start>  
configuredgrantconfig  
autonomousTx  
If this field is present, the Configured Grant configuration is configured with autonomous transmission, see TS 38.321 [3].  
<endl>  
  
  
<start>  
configuredgrantconfig  
betaOffsetCG-UCI  
Beta offset for CG-UCI in CG-PUSCH, see TS 38.213 [13], clause 9.3  
<endl>  
  
  
<start>  
configuredgrantconfig  
cg-betaOffsetsCrossPri0, cg-betaOffsetsCrossPri1  
Selection between and configuration of dynamic and semi-static beta-offset for multiplexing HARQ-ACK in CG-PUSCH with different priorities.  
The field cg-betaOffsetsCrossPri0 indicates multiplexing LP HARQ-ACK in HP CG-PUSCH. This field is configured only if phy-PriorityIndex-r16 is configured with value p1.  
The field cg-betaOffsetsCrossPri1 indicates multiplexing HP HARQ-ACK in LP CG-PUSCH. This field is configured only if phy-PriorityIndex-r16 is configured with value p0.  
<endl>  
  
  
<start>  
configuredgrantconfig  
cg-COT-SharingList  
Indicates a table for COT sharing combinations (see 37.213 [48], clause 4.1.3). One row of the table can be set to noCOT-Sharing to indicate that there is no channel occupancy sharing. If the cg-RetransmissionTimer-r16 is configured and the UE operates as an initiating device in semi-static channel access mode (see TS 37.213 [48], clause 4.3), then cg-COT-SharingList-r16 is configured.  
<endl>  
  
  
<start>  
configuredgrantconfig  
cg-COT-SharingOffset  
Indicates the offset from the end of the slot where the COT sharing indication in UCI is enabled where the offset in symbols is equal to 14\*n, where n is the signaled value for cg-COT-SharingOffset. Applicable when ul-toDL-COT-SharingED-Threshold-r16 is not configured (see 37.213 [48], clause 4.1.3).  
<endl>  
  
  
<start>  
configuredgrantconfig  
cg-DMRS-Configuration  
DMRS configuration (see TS 38.214 [19], clause 6.1.2.3).  
<endl>  
  
  
<start>  
configuredgrantconfig  
cg-minDFI-Delay  
Indicates the minimum duration (in unit of symbols) from the ending symbol of the PUSCH to the starting symbol of the PDCCH containing the downlink feedback indication (DFI) carrying HARQ-ACK for this PUSCH. The HARQ-ACK received before this minimum duration is not considered as valid for this PUSCH (see TS 38.213 [13], clause 10.5). The following minimum duration values are supported, depending on the configured subcarrier spacing [symbols]:  
15 kHz: 7, m\*14, where m = {1, 2, 3, 4}  
30 kHz: 7, m\*14, where m = {1, 2, 3, 4, 5, 6, 7, 8}  
60 kHz: 7, m\*14, where m = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16}  
120 kHz: 7, m\*14, where m = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32}  
480 kHz: m\*14, where m = {2, 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76, 80, 84, 88, 92, 96, 100, 104, 108, 112, 116, 120, 124, 128}  
960 kHz: m\*14, where m = {4, 8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96, 104, 112, 120, 128, 136, 144, 152, 160, 168, 176, 184, 192, 200, 208, 216, 224, 232, 240, 248, 256}  
<endl>  
  
  
<start>  
configuredgrantconfig  
cg-nrofPUSCH-InSlot  
Indicates the number of consecutive PUSCH configured to CG within a slot where the SLIV indicating the first PUSCH and additional PUSCH appended with the same length (see TS 38.214 [19], clause 6.1.2.3). The network can only configure this field if cg-RetransmissionTimer is configured.  
<endl>  
  
  
<start>  
configuredgrantconfig  
cg-nrofSlots  
Indicates the number of allocated slots in a configured grant periodicity following the time instance of configured grant offset (see TS 38.214 [19], clause 6.1.2.3). cg-nrofSlots-r17 is only applicable for operation with shared spectrum channel access in FR2-2. When cg-nrofSlots-r17 is configured, the UE shall ignore cg-nrofSlots-r16. The network can only configure this field if cg-RetransmissionTimer is configured.  
<endl>  
  
  
<start>  
configuredgrantconfig  
cg-RetransmissionTimer  
Indicates the initial value of the configured retransmission timer (see TS 38.321 [3]) in multiples of periodicity. The value of cg-RetransmissionTimer is always less than or equal to the value of configuredGrantTimer. This field is always configured together with harq-ProcID-Offset. This field is not configured for operation in licensed spectrum or simultaneously with harq-ProcID-Offset2. The network does not configure this field for CG-SDT.  
<endl>  
  
  
<start>  
configuredgrantconfig  
cg-StartingOffsets  
This field is not applicable for a UE which is allowed to operate as an initiating device in semi-static channel access mode, i.e., not applicable for a UE configured with UE FFP parameters (e.g. period, offset) regardless whether the UE would initiate its own COT or would share gNB's COT.  
<endl>  
  
  
<start>  
configuredgrantconfig  
cg-UCI-Multiplexing  
If present, this field indicates that in the case of PUCCH overlapping with CG-PUSCH(s) within a PUCCH group, the CG-UCI and HARQ-ACK are jointly encoded (see TS 38.213 [13], clause 9).  
<endl>  
  
  
<start>  
configuredgrantconfig  
configuredGrantConfigIndex  
Indicates the index of the Configured Grant configurations within the BWP.  
<endl>  
  
  
<start>  
configuredgrantconfig  
configuredGrantConfigIndexMAC  
Indicates the index of the Configured Grant configurations within the MAC entity.  
<endl>  
  
  
<start>  
configuredgrantconfig  
configuredGrantTimer  
Indicates the initial value of the configured grant timer (see TS 38.321 [3]) in multiples of periodicity. When cg-RetransmissonTimer is configured, if HARQ processes are shared among different configured grants on the same BWP, configuredGrantTimer \* periodicity is set to the same value for the configurations that share HARQ processes on this BWP. The value of the extension configuredGrantTimer is 2 times the configured value.  
<endl>  
  
  
<start>  
configuredgrantconfig  
dmrs-SeqInitialization  
The network configures this field if transformPrecoder is disabled or when the value of sdt-NrofDMRS-Sequences is set to 1. Otherwise, the field is absent.  
<endl>  
  
  
<start>  
configuredgrantconfig  
frequencyDomainAllocation  
Indicates the frequency domain resource allocation, see TS 38.214 [19], clause 6.1.2, and TS 38.212 [17], clause 7.3.1).  
<endl>  
  
  
<start>  
configuredgrantconfig  
frequencyHopping  
The value intraSlot enables 'Intra-slot frequency hopping' and the value interSlot enables 'Inter-slot frequency hopping'. If the field is absent, frequency hopping is not configured. The field frequencyHopping applies to configured grant for 'pusch-RepTypeA' (see TS 38.214 [19], clause 6.3.1).  
<endl>  
  
  
<start>  
configuredgrantconfig  
frequencyHoppingOffset  
Frequency hopping offset used when frequency hopping is enabled (see TS 38.214 [19], clause 6.1.2 and clause 6.3).  
<endl>  
  
  
<start>  
configuredgrantconfig  
frequencyHoppingPUSCH-RepTypeB  
Indicates the frequency hopping scheme for Type 1 CG when pusch-RepTypeIndicator is set to 'pusch-RepTypeB' (see TS 38.214 [19], clause 6.1). The value interRepetition enables 'Inter-repetition frequency hopping', and the value interSlot enables 'Inter-slot frequency hopping'. If the field is absent, the frequency hopping is not enabled for Type 1 CG.  
<endl>  
  
  
<start>  
configuredgrantconfig  
harq-ProcID-Offset  
For operation with shared spectrum channel access configured with cg-RetransmissionTimer-r16, this configures the range of HARQ process IDs which can be used for this configured grant where the UE can select a HARQ process ID within [harq-procID-offset, .., (harq-procID-offset + nrofHARQ-Processes – 1)]. harq-ProcID-Offset-v1730 is only applicable for operation with shared spectrum channel access in FR2-2. If the field harq-ProcID-Offset-v1730 is present, the UE shall ignore the harq-ProcID-Offset-r16. The network does not configure this field for CG-SDT.  
<endl>  
  
  
<start>  
configuredgrantconfig  
harq-ProcID-Offset2  
Indicates the offset used in deriving the HARQ process IDs, see TS 38.321 [3], clause 5.4.1. This field is not configured together with cg-RetransmissionTimer-r16. If the field harq-ProcID-Offset2-v1700 is present, the UE shall ignore the harq-ProcID-Offset2-r16.  
<endl>  
  
  
<start>  
configuredgrantconfig  
mappingPattern  
Indicates whether the UE should follow Cyclical mapping pattern or Sequential mapping pattern when two SRS resource sets are configured in srs-ResourceSetToAddModList or srs-ResourceSetToAddModListDCI-0-2 with usage 'codebook' or 'noncodebook' for PUSCH transmission with a Type 1 configured grant and/or a Type 2 configured grant as described in clause 6.1.2.3 of TS 38.214 [19]  
<endl>  
  
  
<start>  
configuredgrantconfig  
mcs-Table  
Indicates the MCS table the UE shall use for PUSCH without transform precoding. If the field is absent the UE applies the value qam64.  
<endl>  
  
  
<start>  
configuredgrantconfig  
mcs-TableTransformPrecoder  
Indicates the MCS table the UE shall use for PUSCH with transform precoding. If the field is absent the UE applies the value qam64.  
<endl>  
  
  
<start>  
configuredgrantconfig  
mcsAndTBS  
The modulation order, target code rate and TB size (see TS 38.214 [19], clause 6.1.2). The NW does not configure the values 28~31 in this version of the specification.  
<endl>  
  
  
<start>  
configuredgrantconfig  
nrofHARQ-Processes  
The number of HARQ processes configured. It applies for both Type 1 and Type 2. See TS 38.321 [3], clause 5.4.1. If the UE is configured with nrofHARQ-Processes-v1700, the UE shall ignore nrofHARQ-Processes (without suffix).  
<endl>  
  
  
<start>  
configuredgrantconfig  
pathlossReferenceIndex  
Indicates the reference signal index used as PUSCH pathloss reference (see TS 38.213 [13], clause 7.1.1). In case of CG-SDT, the UE does not use this field.  
<endl>  
  
  
<start>  
configuredgrantconfig  
pathlossReferenceIndex2  
Indicates the reference signal used as PUSCH pathloss reference for the second SRS resource set. When this field is present, pathlossReferenceIndex indicates the reference signal used as PUSCH pathloss reference for the first SRS resource set  
<endl>  
  
  
<start>  
configuredgrantconfig  
p0-PUSCH-Alpha  
Index of the P0-PUSCH-AlphaSet to be used for this configuration.  
<endl>  
  
  
<start>  
configuredgrantconfig  
p0-PUSCH-Alpha2  
Index of the P0-PUSCH-AlphaSet to be used for second SRS resource set. If this field is present, the p0-PUSCH-Alpha provides index for the P0-PUSCH-AlphaSet to be used for first SRS resource set.  
<endl>  
  
  
<start>  
configuredgrantconfig  
periodicity  
Periodicity for UL transmission without UL grant for type 1 and type 2 (see TS 38.321 [3], clause 5.8.2).  
The following periodicities are supported depending on the configured subcarrier spacing [symbols]:  
15 kHz: 2, 7, n\*14, where n={1, 2, 4, 5, 8, 10, 16, 20, 32, 40, 64, 80, 128, 160, 320, 640}  
30 kHz: 2, 7, n\*14, where n={1, 2, 4, 5, 8, 10, 16, 20, 32, 40, 64, 80, 128, 160, 256, 320, 640, 1280}  
60 kHz with normal CP 2, 7, n\*14, where n={1, 2, 4, 5, 8, 10, 16, 20, 32, 40, 64, 80, 128, 160, 256, 320, 512, 640, 1280, 2560}  
60 kHz with ECP: 2, 6, n\*12, where n={1, 2, 4, 5, 8, 10, 16, 20, 32, 40, 64, 80, 128, 160, 256, 320, 512, 640, 1280, 2560}  
120 kHz: 2, 7, n\*14, where n={1, 2, 4, 5, 8, 10, 16, 20, 32, 40, 64, 80, 128, 160, 256, 320, 512, 640, 1024, 1280, 2560, 5120}  
480 and 960 kHz: n\*14, where n={1, 2, 4, 5, 8, 10, 16, 20, 32, 40, 64, 80, 128, 160, 256, 320, 512, 640, 1024, 1280, 2560, 5120}  
In case of SDT, the network does not configure periodicity values less than 5ms.  
<endl>  
  
  
<start>  
configuredgrantconfig  
periodicityExt  
This field is used to calculate the periodicity for UL transmission without UL grant for type 1 and type 2 (see TS 38.321 [3], clause 5.8.2). If this field is present, the field periodicity is ignored.  
The following periodicites are supported depending on the configured subcarrier spacing [symbols]:  
15 kHz: periodicityExt\*14, where periodicityExt has a value between 1 and 640.  
30 kHz: periodicityExt\*14, where periodicityExt has a value between 1 and 1280.  
60 kHz with normal CP: periodicityExt\*14, where periodicityExt has a value between 1 and 2560.  
60 kHz with ECP: periodicityExt\*12, where periodicityExt has a value between 1 and 2560.  
120 kHz: periodicityExt\*14, where periodicityExt has a value between 1 and 5120.  
480 kHz: periodicityExt\*14, where periodicityExt has a value between 1 and 20480.  
960 kHz: periodicityExt\*14, where periodicityExt has a value between 1 and 40960.  
In case of SDT, the network does not configure periodicity values less than 5ms.  
<endl>  
  
  
<start>  
configuredgrantconfig  
phy-PriorityIndex  
Indicates the PHY priority of CG PUSCH at least for PHY-layer collision handling. Value p0 indicates low priority and value p1 indicates high priority. The network does not configure this for CG-SDT.  
<endl>  
  
  
<start>  
configuredgrantconfig  
powerControlLoopToUse  
Closed control loop to apply (see TS 38.213 [13], clause 7.1.1).  
<endl>  
  
  
<start>  
configuredgrantconfig  
powerControlLoopToUse2  
Closed control loop to apply to second SRS resource set (see TS 38.213 [13], clause 7.1.1). If this field is present, the powerControlLoopToUse applies to the first SRS resource set.  
<endl>  
  
  
<start>  
configuredgrantconfig  
precodingAndNumberOfLayers  
Indicates the precoding and number of layers (see TS 38.212 [17], clause 7.3.1.1.2, and TS 38.214 [19], clause 6.1.2.3). In case of CG-SDT, network sets this field to 1.  
<endl>  
  
  
<start>  
configuredgrantconfig  
precodingAndNumberOfLayers2  
Indicates the precoding and number of layers for the second SRS resource set. When this field is present, precodingAndNumberOfLayers indicated the precoding and number of layers for the first SRS resource set.  
<endl>  
  
  
<start>  
configuredgrantconfig  
pusch-RepTypeIndicator  
Indicates whether UE follows the behavior for PUSCH repetition type A or the behavior for PUSCH repetition type B for each Type 1 configured grant configuration. The value pusch-RepTypeA enables the 'PUSCH repetition type A' and the value pusch-RepTypeB enables the 'PUSCH repetition type B' (see TS 38.214 [19], clause 6.1.2.3). The value pusch-RepTypeB is not configured simultaneously with cg-nrofPUSCH-InSlot-r16 and cg-nrofSlots-r16. The network does not configure this field if cg-RetransmissionTimer-r16 is configured for CG operation with shared spectrum channel access.  
<endl>  
  
  
<start>  
configuredgrantconfig  
rbg-Size  
Selection between configuration 1 and configuration 2 for RBG size for PUSCH. The UE does not apply this field if resourceAllocation is set to resourceAllocationType1. Otherwise, the UE applies the value config1 when the field is absent. Note: rbg-Size is used when the transformPrecoder parameter is disabled.  
<endl>  
  
  
<start>  
configuredgrantconfig  
repK-RV  
The redundancy version (RV) sequence to use. See TS 38.214 [19], clause 6.1.2. The network configures this field if repetitions are used, i.e., if repK is set to n2, n4 or n8. This field is not configured when cg-RetransmissionTimer is configured. Otherwise, the field is absent.  
<endl>  
  
  
<start>  
configuredgrantconfig  
repK  
Number of repetitions K, see TS 38.214 [19]. If the field repK-v1710 is present, the UE shall ignore the repK (without suffix).  
<endl>  
  
  
<start>  
configuredgrantconfig  
resourceAllocation  
Configuration of resource allocation type 0 and resource allocation type 1. For Type 1 UL data transmission without grant, resourceAllocation should be resourceAllocationType0 or resourceAllocationType1.  
<endl>  
  
  
<start>  
configuredgrantconfig  
rrc-ConfiguredUplinkGrant  
Configuration for "configured grant" transmission with fully RRC-configured UL grant (Type1). If this field is absent the UE uses UL grant configured by DCI addressed to CS-RNTI (Type2).  
<endl>  
  
  
<start>  
configuredgrantconfig  
sequenceOffsetForRV  
Configures the RV offset for the starting RV for the first repetition (first actual repetition in PUSCH repetition Type B) towards the second 'SRS resource set' for PUSCH configured in either srs-ResourceSetToAddModList or srs-ResourceSetToAddModListDCI-0-2 with usage 'codebook' or 'noncodebook'.  
<endl>  
  
  
<start>  
configuredgrantconfig  
srs-ResourceIndicator  
Indicates the SRS resource to be used. The network does not configure this for CG-SDT.  
<endl>  
  
  
<start>  
configuredgrantconfig  
srs-ResourceIndicator2  
Indicates the SRS resource to be used for the second SRS resource set. When this field is present, the srs-ResourceIndicator is used for the first SRS resource set.  
<endl>  
  
  
<start>  
configuredgrantconfig  
startingFromRV0  
This field is used to determine the initial transmission occasion of a transport block for a given RV sequence, see TS 38.214 [19], clause 6.1.2.3.1. The network does not configure this field if cg-RetransmissionTimer-r16 is configured for CG operation.  
<endl>  
  
  
<start>  
configuredgrantconfig  
timeDomainAllocation, timeDomainAllocation-v1710  
Indicates a combination of start symbol and length and PUSCH mapping type, see TS 38.214 [19], clause 6.1.2 and TS 38.212 [17], clause 7.3.1.  
If the field timeDomainAllocation-v1710 is present, the UE shall ignore timeDomainAllocation field (without suffix).  
<endl>  
  
  
<start>  
configuredgrantconfig  
timeDomainOffset  
Offset related to the reference SFN indicated by timeReferenceSFN, see TS 38.321 [3], clause 5.8.2. timeDomainOffset-r17 is only applicable to 480 kHz and 960 kHz. If timeDomainOffset-r17 is present, the UE shall ignore timeDomainOffset (without suffix).  
<endl>  
  
  
<start>  
configuredgrantconfig  
timeReferenceSFN  
Indicates SFN used for determination of the offset of a resource in time domain. The UE uses the closest SFN with the indicated number preceding the reception of the configured grant configuration, see TS 38.321 [3], clause 5.8.2. If the field timeReferenceSFN is not present, the reference SFN is 0.  
<endl>  
  
  
<start>  
configuredgrantconfig  
transformPrecoder  
Enables or disables transform precoding for type1 and type2. If the field is absent, the UE enables or disables transform precoding in accordance with the field msg3-transformPrecoder in RACH-ConfigCommon from rach-ConfigCommon included directly within BWP configuration (i.e., not included in additionalRACH-ConfigList), see TS 38.214 [19], clause 6.1.3.  
<endl>  
  
  
<start>  
configuredgrantconfig  
uci-OnPUSCH  
Selection between and configuration of dynamic and semi-static beta-offset. For Type 1 UL data transmission without grant, uci-OnPUSCH should be set to semiStatic. The network does not configure this for CG-SDT.  
<endl>

<start>  
cg-cot-sharing  
channelAccessPriority  
Indicates the Channel Access Priority Class that the gNB can assume when sharing the UE initiated COT (see 37.213 [48], clause 4.1.3).  
<endl>  
  
  
<start>  
cg-cot-sharing  
duration  
Indicates the number of DL transmission slots within UE initiated COT (see 37.213 [48], clause 4.1.3).  
<endl>  
  
  
<start>  
cg-cot-sharing  
offset  
Indicates the number of DL transmission slots from the end of the slot where CG-UCI is detected after which COT sharing can be used (see 37.213 [48], clause 4.1.3).  
<endl>

<start>  
cg-startingoffsets  
cg-StartingFullBW-InsideCOT  
A set of configured grant PUSCH transmission starting offsets which indicates the length of a CP extension of the first symbol that is located before the configured resource when frequency domain resource allocation includes all interlaces in the allocated RB set(s) and the CG PUSCH resource is inside gNB COT (see TS 38.214 [19], clause 6.1.2.3).  
<endl>  
  
  
<start>  
cg-startingoffsets  
cg-StartingFullBW-OutsideCOT  
A set of configured grant PUSCH transmission starting offset indices (see TS 38.211[16], Table 5.3.1-2) which indicates the length of a CP extension of the first symbol that is located before the configured resource when frequency domain resource allocation includes all interlaces in the allocated RB set(s) and the CG PUSCH resource is outside gNB COT (see TS 38.214 [19], clause 6.1.2.3).  
<endl>  
  
  
<start>  
cg-startingoffsets  
cg-StartingPartialBW-InsideCOT  
A set of configured grant PUSCH transmission starting offset index (see TS 38.211[16], Table 5.3.1-2) which indicates the length of a CP extension of the first symbol that is located before the configured resource when frequency domain resource allocation does not include all interlaces in the allocated RB set(s) and the CG PUSCH resource is inside gNB COT (see TS 38.214 [19], clause 6.1.2.3).  
<endl>  
  
  
<start>  
cg-startingoffsets  
cg-StartingPartialBW-OutsideCOT  
A set of configured grant PUSCH transmission starting offset index (see TS 38.211[16], Table 5.3.1-2) which indicates the length of a CP extension of the first symbol that is located before the configured resource when frequency domain resource allocation does not include all interlaces in the allocated RB set(s) and the CG PUSCH resource is outside gNB COT (see TS 38.214 [19], clause 6.1.2.3).  
<endl>

<start>  
cg-sdt-configuration  
cg-SDT-RetransmissionTimer  
Indicates the initial value of the configured grant retransmission timer used for the initial transmission of CG-SDT with CCCH message (see TS 38.321 [3]) in multiples of periodicity.  
<endl>  
  
  
<start>  
cg-sdt-configuration  
sdt-DMRS-Ports  
Indicates the set of DMRS ports for SSB to PUSCH mapping (see TS 38.213 [13]). In case of a RedCap-specific initial downlink BWP that is associated with NCD-SSB, the SSB is the NCD-SSB. Otherwise, the SSB is the CD-SSB.  
<endl>  
  
  
<start>  
cg-sdt-configuration  
sdt-NrofDMRS-Sequences  
Indicates the number of DMRS sequences for SSB to PUSCH mapping (see TS 38.213 [13]). In case of a RedCap-specific initial downlink BWP that is associated with NCD-SSB, the SSB is the NCD-SSB. Otherwise, the SSB is the CD-SSB.  
<endl>  
  
  
<start>  
cg-sdt-configuration  
sdt-SSB-Subset  
Indicates SSB subset for SSB to CG PUSCH mapping within one CG configuration. If this field is absent, UE assumes the SSB set includes all actually transmitted SSBs. In case of a RedCap-specific initial downlink BWP that is associated with NCD-SSB, the SSB is the NCD-SSB. Otherwise, the SSB is the CD-SSB.  
<endl>  
  
  
<start>  
cg-sdt-configuration  
sdt-SSB-PerCG-PUSCH  
The number of SSBs per CG PUSCH (see TS 38.213 [13]). Value one corresponds to 1 SSBs per CG PUSCH, value two corresponds to 2 SSBs per CG PUSCH and so on. In case of a RedCap-specific initial downlink BWP that is associated with NCD-SSB, the SSB is the NCD-SSB. Otherwise, the SSB is the CD-SSB.  
<endl>  
  
  
<start>  
cg-sdt-configuration  
sdt-P0-PUSCH  
Indicates P0 value for PUSCH for CG SDT in steps of 1dB (see TS 38.213 [13]). When this field is configured, the UE ignores the p0-PUSCH-Alpha.  
<endl>  
  
  
<start>  
cg-sdt-configuration  
sdt-Alpha  
Indicates alpha value for PUSCH for CG SDT. alpha0 indicates value 0 is used alpha04 indicates value 4 is used and so on (see TS 38.213 [13]). When this field is configured, the UE ignores the p0-PUSCH-Alpha.  
<endl>

<start>  
connestfailurecontrol  
connEstFailCount  
Number of times that the UE detects T300 expiry on the same cell before applying connEstFailOffset.  
<endl>  
  
  
<start>  
connestfailurecontrol  
connEstFailOffset  
Parameter "Qoffsettemp" in TS 38.304 [20]. If the field is absent, the value of infinity shall be used for "Qoffsettemp".  
<endl>  
  
  
<start>  
connestfailurecontrol  
connEstFailOffsetValidity  
Amount of time that the UE applies connEstFailOffset before removing the offset from evaluation of the cell. Value s30 corresponds to 30 seconds, value s60 corresponds to 60 seconds, and so on.  
<endl>

<start>  
controlresourceset  
cce-REG-MappingType  
Mapping of Control Channel Elements (CCE) to Resource Element Groups (REG) (see TS 38.211 [16], clauses 7.3.2.2 and 7.4.1.3.2).  
<endl>  
  
  
<start>  
controlresourceset  
controlResourceSetId  
Identifies the instance of the ControlResourceSet IE. Value 0 identifies the common CORESET configured in MIB and in ServingCellConfigCommon (controlResourceSetZero) and is hence not used here in the ControlResourceSet IE. Other values identify CORESETs configured by dedicated signalling or in SIB1 or SIB20. The controlResourceSetId is unique among the BWPs of a serving cell.  
If the field controlResourceSetId-v1610 is present, the UE shall ignore the controlResourceSetId field (without suffix).  
<endl>  
  
  
<start>  
controlresourceset  
coresetPoolIndex  
The index of the CORESET pool for this CORESET as specified in TS 38.213 [13] (clauses 9 and 10) and TS 38.214 [19] (clauses 5.1 and 6.1). If the field is absent, the UE applies the value 0.  
<endl>  
  
  
<start>  
controlresourceset  
duration  
Contiguous time duration of the CORESET in number of symbols (see TS 38.211 [16], clause 7.3.2.2).  
<endl>  
  
  
<start>  
controlresourceset  
followUnifiedTCI-State  
When set to enabled, for PDCCH reception on this CORESET, the UE applies the "indicated" DL only TCI or joint TCI as specified in TS 38.214 [19], clause 5.1.5.  
<endl>  
  
  
<start>  
controlresourceset  
frequencyDomainResources  
Frequency domain resources for the CORESET. Each bit corresponds a group of 6 RBs, with grouping starting from the first RB group in the BWP or MBS CFR where the CORESET is configured. When at least one search space is configured with freqMonitorLocation-r16, only the first bits are valid (see TS 38.213 [13], clause 10.1). The first (left-most / most significant) bit corresponds to the first RB group in the BWP or MBS CFR where the CORESET is configured, and so on. A bit that is set to 1 indicates that this RB group belongs to the frequency domain resource of this CORESET. Bits corresponding to a group of RBs not fully contained in the bandwidth part within which the CORESET is configured are set to zero (see TS 38.211 [16], clause 7.3.2.2).  
<endl>  
  
  
<start>  
controlresourceset  
interleaverSize  
Interleaver-size (see TS 38.211 [16], clause 7.3.2.2).  
<endl>  
  
  
<start>  
controlresourceset  
pdcch-DMRS-ScramblingID  
PDCCH DMRS scrambling initialization (see TS 38.211 [16], clause 7.4.1.3.1). When the field is absent the UE applies the value of the physCellId configured for this serving cell.  
<endl>  
  
  
<start>  
controlresourceset  
precoderGranularity  
Precoder granularity in frequency domain (see TS 38.211 [16], clauses 7.3.2.2 and 7.4.1.3.2).  
<endl>  
  
  
<start>  
controlresourceset  
rb-Offset  
Indicates the RB level offset in units of RB from the first RB of the first 6RB group to the first RB of BWP (see 38.213 [13], clause 10.1).  
<endl>  
  
  
<start>  
controlresourceset  
reg-BundleSize  
Resource Element Groups (REGs) can be bundled to create REG bundles. This parameter defines the size of such bundles (see TS 38.211 [16], clause 7.3.2.2).  
<endl>  
  
  
<start>  
controlresourceset  
shiftIndex  
When the field is absent the UE applies the value of the physCellIdconfigured for this serving cell (see TS 38.211 [16], clause 7.3.2.2).  
<endl>  
  
  
<start>  
controlresourceset  
tci-PresentInDCI  
This field indicates if TCI field is present or absent in DCI format 1\_1 and DCI format 4\_2. When the field is absent the UE considers the TCI to be absent/disabled. In case of cross carrier scheduling, the network sets this field to enabled for the ControlResourceSet used for cross carrier scheduling in DCI format 1\_1 in the scheduling cell if enableDefaultBeamForCCS is not configured (see TS 38.214 [19], clause 5.1.5).  
<endl>  
  
  
<start>  
controlresourceset  
tci-PresentDCI-1-2  
Configures the number of bits for "Transmission configuration indicator" in DCI format 1\_2. When the field is absent the UE applies the value of 0 bit for the "Transmission configuration indicator" in DCI format 1\_2 (see TS 38.212 [17], clause 7.3.1 and TS 38.214 [19], clause 5.1.5). In case of cross carrier scheduling, the network configures this field for the ControlResourceSet used for cross carrier scheduling in DCI format 1\_2 in the scheduling cell if enableDefaultBeamForCCS is not configured (see TS 38.214 [19], clause 5.1.5).  
<endl>  
  
  
<start>  
controlresourceset  
tci-StatesPDCCH-ToAddList  
A subset of the TCI states defined in pdsch-Config, either with tci-StatesToAddModList or dl-OrJointTCI-StateList, included in the BWP-DownlinkDedicated corresponding to the serving cell and to the DL BWP to which the ControlResourceSet belong to. They are used for providing QCL relationships between the DL RS(s) in one RS Set (TCI-State) and the PDCCH DMRS ports (see TS 38.213 [13], clause 6.). The network configures at most maxNrofTCI-StatesPDCCH entries. The QCL relationships defined herein do not apply to MBS broadcast.  
<endl>

<start>  
crosscarrierschedulingconfig  
carrierIndicatorSizeDCI-0-2, carrierIndicatorSizeDCI-1-2  
Configures the number of bits for the field of carrier indicator in PDCCH DCI format 0\_2/1\_2. The field carrierIndicatorSizeDCI-0-2 refers to DCI format 0\_2 and the field carrierIndicatorSizeDCI-1-2 refers to DCI format 1\_2, respectively (see TS 38.212 [17], clause 7.3.1 and TS 38.213 [13], clause 10.1).  
<endl>  
  
  
<start>  
crosscarrierschedulingconfig  
ccs-BlindDetectionSplit  
Indicates the share of blind detection candidates and non-overlapping CCEs for PDCCH monitoring on an SpCell and an SCell when cross-carrier scheduling is configured from the SCell for the SpCell (see TS 38.213 [13], clause 10.1.1). The network only configures this field when it sets the field other for an SpCell, i.e., when it configures cross-carrier scheduling of the SpCell by a PDCCH on an Scell.  
<endl>  
  
  
<start>  
crosscarrierschedulingconfig  
cif-Presence  
The field is used to indicate whether carrier indicator field is present (value true) or not (value false) in PDCCH DCI formats, see TS 38.213 [13]. If cif-Presence is set to true, the CIF value indicating a grant or assignment for this cell is 0.  
<endl>  
  
  
<start>  
crosscarrierschedulingconfig  
cif-InSchedulingCell  
The field indicates the CIF value used in the scheduling cell to indicate a grant or assignment applicable for this cell, see TS 38.213 [13]. If configured for an SpCell, the non-fallback DCI formats on the SpCell include same number of CIF bits as the corresponding non-fallback DCI formats on the scheduling cell, and the CIF bits are considered reserved.  
<endl>  
  
  
<start>  
crosscarrierschedulingconfig  
enableDefaultBeamForCCS  
This field indicates whether default beam selection for cross-carrier scheduled PDSCH is enabled, see TS 38.214 [19]. If not present, the default beam selection behaviour is not applied, i.e. Rel-15 behaviour is applied. This field can only be configured in the cross-scheduled SCell or SpCell.  
<endl>  
  
  
<start>  
crosscarrierschedulingconfig  
other  
Parameters for cross-carrier scheduling. If configured for an SpCell, the SpCell can be scheduled by the PDCCH on another SCell as well as by the PDCCH on the SpCell. If configured for an SCell, the SCell is scheduled by a PDDCH on another cell.  
<endl>  
  
  
<start>  
crosscarrierschedulingconfig  
own  
Parameters for self-scheduling, i.e., a serving cell is scheduled by its own PDCCH.  
<endl>  
  
  
<start>  
crosscarrierschedulingconfig  
schedulingCellId  
If configured for an SpCell, this field indicates which SCell, in addition to the SpCell, signals the downlink allocations and uplink grants, if applicable, for the concerned SpCell. If configured for an Scell, this field indicates which cell signals the downlink allocations and uplink grants, if applicable, for the concerned SCell. In case the UE is configured with DC, the scheduling cell is part of the same cell group (i.e. MCG or SCG) as the scheduled cell. In case the UE is configured with two PUCCH groups, the scheduling cell and the scheduled cell are within the same PUCCH group. If drx-ConfigSecondaryGroup is configured in the MAC-CellGroupConfig associated with this serving cell, the scheduling cell and the scheduled cell belong to the same Frequency Range. In addition, the serving cell with an aperiodic CSI trigger and the PUSCH resource scheduled for the report are on the same carrier and serving cell, but the cell for which CSI is reported may belong to the same or a different Frequency Range. The network should not trigger a CSI request for a serving cell in the other Frequency Range when that serving cell is outside Active Time.  
<endl>

<start>  
csi-associatedreportconfiginfo  
ap-CSI-MultiplexingMode  
Indicates if the behavior of transmitting aperiodic CSI on the first PUSCH repetitions corresponding to two SRS resource sets configured in srs-ResourceSetToAddModList or srs-ResourceSetToAddModListDCI-0-2 with usage 'codebook' or 'noncodebook' is enabled or not.  
<endl>  
  
  
<start>  
csi-associatedreportconfiginfo  
csi-IM-ResourcesForInterference  
CSI-IM-ResourceSet for interference measurement. Entry number in csi-IM-ResourceSetList in the CSI-ResourceConfig indicated by csi-IM-ResourcesForInterference in the CSI-ReportConfig indicated by reportConfigId above (value 1 corresponds to the first entry, value 2 to the second entry, and so on). The indicated CSI-IM-ResourceSet should have exactly the same number of resources like the NZP-CSI-RS-ResourceSet indicated in resourceSet within nzp-CSI-RS.  
<endl>  
  
  
<start>  
csi-associatedreportconfiginfo  
csi-SSB-ResourceSet, csi-SSB-ResourceSet2  
CSI-SSB-ResourceSet for channel measurements. Entry number in csi-SSB-ResourceSetList in the CSI-ResourceConfig indicated by resourcesForChannelMeasurement in the CSI-ReportConfig indicated by reportConfigId above (value 1 corresponds to the first entry, value 2 to the second entry, and so on).  
<endl>  
  
  
<start>  
csi-associatedreportconfiginfo  
nzp-CSI-RS-ResourcesForInterference  
NZP-CSI-RS-ResourceSet for interference measurement. Entry number in nzp-CSI-RS-ResourceSetList in the CSI-ResourceConfig indicated by nzp-CSI-RS-ResourcesForInterference in the CSI-ReportConfig indicated by reportConfigId above (value 1 corresponds to the first entry, value 2 to the second entry, and so on).  
<endl>  
  
  
<start>  
csi-associatedreportconfiginfo  
qcl-info, qcl-info2  
List of references to TCI-States for providing the QCL source and QCL type for each NZP-CSI-RS-Resource listed in nzp-CSI-RS-Resources of the NZP-CSI-RS-ResourceSet indicated by resourceSet within nzp-CSI-RS. Each TCI-StateId refers to the TCI-State which has this value for tci-StateId and is defined in tci-StatesToAddModList or in dl-OrJointTCI-StateList in the PDSCH-Config included in the BWP-Downlink corresponding to the serving cell and to the DL BWP to which the resourcesForChannelMeasurement (in the CSI-ReportConfig indicated by reportConfigId above) belong to. First entry in qcl-info corresponds to first entry in nzp-CSI-RS-Resources of that NZP-CSI-RS-ResourceSet, second entry in qcl-info corresponds to second entry in nzp-CSI-RS-Resources, and so on (see TS 38.214 [19], clause 5.2.1.5.1). When this field is absent for aperiodic CSI RS, the UE shall use QCL information included in the "indicated" DL only/Joint TCI state as specified in TS 38.214  
<endl>  
  
  
<start>  
csi-associatedreportconfiginfo  
reportConfigId  
The reportConfigId of one of the CSI-ReportConfigToAddMod configured in CSI-MeasConfig  
<endl>  
  
  
<start>  
csi-associatedreportconfiginfo  
resourcesForChannel2  
Configures reference signals for channel measurement corresponding to the second resource set for L1-RSRP measurement as configured in IE CSI-ResourceConfig when nrofReportedGroups-r17 is configured in IE CSI-ReportConfig. If this is present, network configures csi-SSB-ResourceSetExt instead of csi-SSB-ResourceSet and the UE ignores csi-SSB-ResourceSet in resourcesForChannel, and the resourcesForChannel configures the reference signals for channel measurement corresponding to the first resource set for L1-RSRP measurement (see TS 38.214 [19], clause 5.2.1.4).  
<endl>  
  
  
<start>  
csi-associatedreportconfiginfo  
resourceSet  
NZP-CSI-RS-ResourceSet for channel measurements. Entry number in nzp-CSI-RS-ResourceSetList in the CSI-ResourceConfig indicated by resourcesForChannelMeasurement in the CSI-ReportConfig indicated by reportConfigId above (value 1 corresponds to the first entry, value 2 to the second entry, and so on).  
<endl>

<start>  
csi-frequencyoccupation  
nrofRBs  
Number of PRBs across which this CSI resource spans. Only multiples of 4 are allowed. The smallest configurable number is the minimum of 24 and the width of the associated BWP. If the configured value is larger than the width of the corresponding BWP, the UE shall assume that the actual CSI-RS bandwidth is equal to the width of the BWP.  
<endl>  
  
  
<start>  
csi-frequencyoccupation  
startingRB  
PRB where this CSI resource starts in relation to common resource block #0 (CRB#0) on the common resource block grid. Only multiples of 4 are allowed (0, 4, ...)  
<endl>

<start>  
csi-im-resource  
csi-IM-ResourceElementPattern  
The resource element pattern (Pattern0 (2,2) or Pattern1 (4,1)) with corresponding parameters (see TS 38.214 [19], clause 5.2.2.4)  
<endl>  
  
  
<start>  
csi-im-resource  
freqBand  
Frequency-occupancy of CSI-IM (see TS 38.214 [19], clause 5.2.2.4)  
<endl>  
  
  
<start>  
csi-im-resource  
periodicityAndOffset  
Periodicity and slot offset for periodic/semi-persistent CSI-IM. Network always configures the UE with a value for this field for periodic and semi-persistent CSI-IM-Resources (as indicated in CSI-ResourceConfig). A change of configuration between periodic or semi-persistent and aperiodic for a CSI-IM-Resource is not supported without a release and add.  
<endl>  
  
  
<start>  
csi-im-resource  
subcarrierLocation-p0  
OFDM subcarrier occupancy of the CSI-IM resource for Pattern0 (see TS 38.214 [19], clause 5.2.2.4)  
<endl>  
  
  
<start>  
csi-im-resource  
subcarrierLocation-p1  
OFDM subcarrier occupancy of the CSI-IM resource for Pattern1 (see TS 38.214 [19], clause 5.2.2.4)  
<endl>  
  
  
<start>  
csi-im-resource  
symbolLocation-p0  
OFDM symbol location of the CSI-IM resource for Pattern0 (see TS 38.214 [19], clause 5.2.2.4)  
<endl>  
  
  
<start>  
csi-im-resource  
symbolLocation-p1  
OFDM symbol location of the CSI-IM resource for Pattern1 (see TS 38.214 [19], clause 5.2.2.4)  
<endl>

<start>  
csi-im-resourceset  
csi-IM-Resources  
CSI-IM-Resources associated with this CSI-IM-ResourceSet (see TS 38.214 [19], clause 5.2).  
<endl>

<start>  
csi-measconfig  
aperiodicTriggerStateList  
Contains trigger states for dynamically selecting one or more aperiodic and semi-persistent reporting configurations and/or triggering one or more aperiodic CSI-RS resource sets for channel and/or interference measurement (see TS 38.214 [19], clause 5.2.1).  
<endl>  
  
  
<start>  
csi-measconfig  
csi-IM-ResourceSetToAddModList  
Pool of CSI-IM-ResourceSet which can be referred to from CSI-ResourceConfig or from MAC CEs.  
<endl>  
  
  
<start>  
csi-measconfig  
csi-IM-ResourceToAddModList  
Pool of CSI-IM-Resource which can be referred to from CSI-IM-ResourceSet.  
<endl>  
  
  
<start>  
csi-measconfig  
csi-ReportConfigToAddModList  
Configured CSI report settings as specified in TS 38.214 [19] clause 5.2.1.1.  
<endl>  
  
  
<start>  
csi-measconfig  
csi-ResourceConfigToAddModList  
Configured CSI resource settings as specified in TS 38.214 [19] clause 5.2.1.2.  
<endl>  
  
  
<start>  
csi-measconfig  
csi-SSB-ResourceSetToAddModList  
Pool of CSI-SSB-ResourceSet which can be referred to from CSI-ResourceConfig.  
<endl>  
  
  
<start>  
csi-measconfig  
nzp-CSI-RS-ResourceSetToAddModList  
Pool of NZP-CSI-RS-ResourceSet which can be referred to from CSI-ResourceConfig or from MAC CEs.  
<endl>  
  
  
<start>  
csi-measconfig  
nzp-CSI-RS-ResourceToAddModList  
Pool of NZP-CSI-RS-Resource which can be referred to from NZP-CSI-RS-ResourceSet.  
<endl>  
  
  
<start>  
csi-measconfig  
reportTriggerSize, reportTriggerSizeDCI-0-2  
Size of CSI request field in DCI (bits) (see TS 38.214 [19], clause 5.2.1.5.1). The field reportTriggerSize applies to DCI format 0\_1 and the field reportTriggerSizeDCI-0-2 applies to DCI format 0\_2 (see TS 38.214 [19], clause 5.2.1.5.1).  
<endl>  
  
  
<start>  
csi-measconfig  
scellActivationRS-ConfigToAddModList  
Configured RS for fast SCell activation as specified in TS 38.214 [19] clause x.y.z.  
<endl>

<start>  
csi-reportconfig  
carrier  
Indicates in which serving cell the CSI-ResourceConfig indicated below are to be found. If the field is absent, the resources are on the same serving cell as this report configuration.  
<endl>  
  
  
<start>  
csi-reportconfig  
codebookConfig  
Codebook configuration for Type-1 or Type-2 including codebook subset restriction. Network can only configure one of codebookConfig, codebookConfig-r16 or codebookConfig-r17 to a UE. The network includes codebookConfig-v1730 only if codebookConfig-r17 is configured.  
<endl>  
  
  
<start>  
csi-reportconfig  
cqi-BitsPerSubband  
This field can only be present if cqi-FormatIndicator is set to subbandCQI. If the field is configured with bits4, the UE uses 4-bit sub-band CQI. If the field is not present and cqi-FormatIndicator is set to subbandCQI, the UE uses 2-bit sub-band differential CQI.  
<endl>  
  
  
<start>  
csi-reportconfig  
cqi-FormatIndicator  
Indicates whether the UE shall report a single (wideband) or multiple (subband) CQI (see TS 38.214 [19], clause 5.2.1.4).  
<endl>  
  
  
<start>  
csi-reportconfig  
cqi-Table  
Which CQI table to use for CQI calculation (see TS 38.214 [19], clause 5.2.2.1). For a RedCap UE, CQI table 2 is only supported if the UE indicates support of 256QAM for PDSCH.  
<endl>  
  
  
<start>  
csi-reportconfig  
csi-IM-ResourcesForInterference  
CSI IM resources for interference measurement. csi-ResourceConfigId of a CSI-ResourceConfig included in the configuration of the serving cell indicated with the field "carrier" above. The CSI-ResourceConfig indicated here contains only CSI-IM resources. The bwp-Id in that CSI-ResourceConfig is the same value as the bwp-Id in the CSI-ResourceConfig indicated by resourcesForChannelMeasurement.  
<endl>  
  
  
<start>  
csi-reportconfig  
csi-ReportingBand  
Indicates a contiguous or non-contiguous subset of subbands in the bandwidth part which CSI shall be reported for. Each bit in the bit-string represents one subband. The right-most bit in the bit string represents the lowest subband in the BWP. The choice determines the number of subbands (subbands3 for 3 subbands, subbands4 for 4 subbands, and so on) (see TS 38.214 [19], clause 5.2.1.4). This field is absent if there are less than 24 PRBs (no sub band) and present otherwise (see TS 38.214 [19], clause 5.2.1.4).  
<endl>  
  
  
<start>  
csi-reportconfig  
csi-ReportMode  
Configures the CSI report modes Mode1 or Mode 2 (see TS 38.214 [19], clause 5.2.1.4.2)  
<endl>  
  
  
<start>  
csi-reportconfig  
dummy  
This field is not used in the specification. If received it shall be ignored by the UE.  
<endl>  
  
  
<start>  
csi-reportconfig  
groupBasedBeamReporting  
Turning on/off group beam based reporting (see TS 38.214 [19], clause 5.2.1.4). If groupBasedBeamReporting (without suffix) is set to disabled, groupBasedBeamReporting-v1710 is absent.  
<endl>  
  
  
<start>  
csi-reportconfig  
non-PMI-PortIndication  
Port indication for RI/CQI calculation. For each CSI-RS resource in the linked ResourceConfig for channel measurement, a port indication for each rank R, indicating which R ports to use. Applicable only for non-PMI feedback (see TS 38.214 [19], clause 5.2.1.4.2).  
The first entry in non-PMI-PortIndication corresponds to the NZP-CSI-RS-Resource indicated by the first entry in nzp-CSI-RS-Resources in the NZP-CSI-RS-ResourceSet indicated in the first entry of nzp-CSI-RS-ResourceSetList of the CSI-ResourceConfig whose CSI-ResourceConfigId is indicated in a CSI-MeasId together with the above CSI-ReportConfigId; the second entry in non-PMI-PortIndication corresponds to the NZP-CSI-RS-Resource indicated by the second entry in nzp-CSI-RS-Resources in the NZP-CSI-RS-ResourceSet indicated in the first entry of nzp-CSI-RS-ResourceSetList of the same CSI-ResourceConfig, and so on until the NZP-CSI-RS-Resource indicated by the last entry in nzp-CSI-RS-Resources in the in the NZP-CSI-RS-ResourceSet indicated in the first entry of nzp-CSI-RS-ResourceSetList of the same CSI-ResourceConfig. Then the next entry corresponds to the NZP-CSI-RS-Resource indicated by the first entry in nzp-CSI-RS-Resources in the NZP-CSI-RS-ResourceSet indicated in the second entry of nzp-CSI-RS-ResourceSetList of the same CSI-ResourceConfig and so on.  
<endl>  
  
  
<start>  
csi-reportconfig  
nrofReportedGroups  
Number of reported resource groups per CSI-report. Value n1 means one resource group, n2 means 2 resource groups, and so on. If nrofReportedGroups is configured, the UE ignores groupBasedBeamReporting (without suffix).  
<endl>  
  
  
<start>  
csi-reportconfig  
nrofReportedRS  
The number (N) of measured RS resources to be reported per report setting in a non-group-based report. N <= N\_max, where N\_max is either 2 or 4 depending on UE capability.  
(see TS 38.214 [19], clause 5.2.1.4) When the field is absent the UE applies the value 1.  
<endl>  
  
  
<start>  
csi-reportconfig  
numberOfSingleTRP-CSI-Mode1  
Configures the number of reported X CSIs when csi-ReportMode is set to 'Mode 1' as described in TS 38.214 [19], clause 5.2.1.4.2. The field is present only if csi-ReportMode configures Mode 1.  
<endl>  
  
  
<start>  
csi-reportconfig  
nzp-CSI-RS-ResourcesForInterference  
NZP CSI RS resources for interference measurement. csi-ResourceConfigId of a CSI-ResourceConfig included in the configuration of the serving cell indicated with the field "carrier" above. The CSI-ResourceConfig indicated here contains only NZP-CSI-RS resources. The bwp-Id in that CSI-ResourceConfig is the same value as the bwp-Id in the CSI-ResourceConfig indicated by resourcesForChannelMeasurement.  
<endl>  
  
  
<start>  
csi-reportconfig  
p0alpha  
Index of the p0-alpha set determining the power control for this CSI report transmission (see TS 38.214 [19], clause 6.2.1.2).  
<endl>  
  
  
<start>  
csi-reportconfig  
pdsch-BundleSizeForCSI  
PRB bundling size to assume for CQI calculation when reportQuantity is CRI/RI/i1/CQI. If the field is absent, the UE assumes that no PRB bundling is applied (see TS 38.214 [19], clause 5.2.1.4.2).  
<endl>  
  
  
<start>  
csi-reportconfig  
pmi-FormatIndicator  
Indicates whether the UE shall report a single (wideband) or multiple (subband) PMI. (see TS 38.214 [19], clause 5.2.1.4).  
<endl>  
  
  
<start>  
csi-reportconfig  
pucch-CSI-ResourceList  
Indicates which PUCCH resource to use for reporting on PUCCH.  
<endl>  
  
  
<start>  
csi-reportconfig  
reportConfigType  
Time domain behavior of reporting configuration.  
<endl>  
  
  
<start>  
csi-reportconfig  
reportFreqConfiguration  
Reporting configuration in the frequency domain. (see TS 38.214 [19], clause 5.2.1.4).  
<endl>  
  
  
<start>  
csi-reportconfig  
reportQuantity  
The CSI related quantities to report. see TS 38.214 [19], clause 5.2.1. If the field reportQuantity-r16 or reportQuantity-r17 is present, UE shall ignore reportQuantity (without suffix). Network does not configure reportQuantity-r17 together with reportQuantity-r16.  
<endl>  
  
  
<start>  
csi-reportconfig  
reportSlotConfig  
Periodicity and slot offset (see TS 38.214 [19], clause 5.2.1.4). If the field reportSlotConfig-v1530 is present, the UE shall ignore the value provided in reportSlotConfig (without suffix).  
<endl>  
  
  
<start>  
csi-reportconfig  
reportSlotOffsetList, reportSlotOffsetListDCI-0-1, reportSlotOffsetListDCI-0-2  
Timing offset Y for semi persistent reporting using PUSCH. This field lists the allowed offset values. This list must have the same number of entries as the pusch-TimeDomainAllocationList in PUSCH-Config. A particular value is indicated in DCI. The network indicates in the DCI field of the UL grant, which of the configured report slot offsets the UE shall apply. The DCI value 0 corresponds to the first report slot offset in this list, the DCI value 1 corresponds to the second report slot offset in this list, and so on. The first report is transmitted in slot n+Y, second report in n+Y+P, where P is the configured periodicity.  
Timing offset Y for aperiodic reporting using PUSCH. This field lists the allowed offset values. This list must have the same number of entries as the pusch-TimeDomainAllocationList in PUSCH-Config. A particular value is indicated in DCI. The network indicates in the DCI field of the UL grant, which of the configured report slot offsets the UE shall apply. The DCI value 0 corresponds to the first report slot offset in this list, the DCI value 1 corresponds to the second report slot offset in this list, and so on (see TS 38.214 [19], clause 6.1.2.1).  
The field reportSlotOffsetListDCI-0-1 applies to DCI format 0\_1 and the field reportSlotOffsetListDCI-0-2 applies to DCI format 0\_2 (see TS 38.214 [19], clause 6.1.2.1).  
The fields reportSlotOffsetList-r17, reportSlotOffsetListDCI-0-1-r17 and reportSlotOffsetListDCI-0-2-r17 are only applicable for SCS 480 kHz and 960 kHz and if they are configured, the UE shall ignore the fields reportSlotOffsetList (without suffix), reportSlotOffsetListDCI-0-1 (without suffix) and reportSlotOffsetListDCI-0-2 (without suffix) for SCS 480 kHz and 960 kHz.  
<endl>  
  
  
<start>  
csi-reportconfig  
resourcesForChannelMeasurement  
Resources for channel measurement. csi-ResourceConfigId of a CSI-ResourceConfig included in the configuration of the serving cell indicated with the field "carrier" above. The CSI-ResourceConfig indicated here contains only NZP-CSI-RS resources and/or SSB resources. This CSI-ReportConfig is associated with the DL BWP indicated by bwp-Id in that CSI-ResourceConfig.  
<endl>  
  
  
<start>  
csi-reportconfig  
sharedCMR  
Enables sharing of channel measurement resources between different CSI measurement hypotheses when (1) csi-ReportMode is set to 'Mode1' and numberOfSingleTRP-CSI-Mode1 is set to 1 or 2; or (2) csi-ReportMode is set to 'Mode2' (see TS 38.214 [19], clause 5.2.1.4.2).  
<endl>  
  
  
<start>  
csi-reportconfig  
subbandSize  
Indicates one out of two possible BWP-dependent values for the subband size as indicated in TS 38.214 [19], table 5.2.1.4-2 . If csi-ReportingBand is absent, the UE shall ignore this field.  
<endl>  
  
  
<start>  
csi-reportconfig  
timeRestrictionForChannelMeasurements  
Time domain measurement restriction for the channel (signal) measurements (see TS 38.214 [19], clause 5.2.1.1).  
<endl>  
  
  
<start>  
csi-reportconfig  
timeRestrictionForInterferenceMeasurements  
Time domain measurement restriction for interference measurements (see TS 38.214 [19], clause 5.2.1.1).  
<endl>

<start>  
portindexfor8ranks  
portIndex8  
Port-Index configuration for up to rank 8. If present, the network configures port indexes for at least one of the ranks.  
<endl>  
  
  
<start>  
portindexfor8ranks  
portIndex4  
Port-Index configuration for up to rank 4. If present, the network configures port indexes for at least one of the ranks.  
<endl>  
  
  
<start>  
portindexfor8ranks  
portIndex2  
Port-Index configuration for up to rank 2. If present, the network configures port indexes for at least one of the ranks.  
<endl>  
  
  
<start>  
portindexfor8ranks  
portIndex1  
Port-Index configuration for rank 1.  
<endl>

<start>  
pucch-csi-resource  
pucch-Resource  
PUCCH resource for the associated uplink BWP. Only PUCCH-Resource of format 2, 3 and 4 is supported. The actual PUCCH-Resource is configured in PUCCH-Config and referred to by its ID. When two PUCCH-Config are configured within PUCCH-ConfigurationList, PUCCH-ResourceId in a PUCCH-CSI-Resource refers to a PUCCH-Resource in the PUCCH-Config used for HARQ-ACK with low priority.  
<endl>

<start>  
csi-resourceconfig  
bwp-Id  
The DL BWP which the CSI-RS associated with this CSI-ResourceConfig are located in (see TS 38.214 [19], clause 5.2.1.2.  
<endl>  
  
  
<start>  
csi-resourceconfig  
csi-IM-ResourceSetList  
List of references to CSI-IM resources used for CSI measurement and reporting in a CSI-RS resource set. Contains up to maxNrofCSI-IM-ResourceSetsPerConfig resource sets if resourceType is 'aperiodic' and 1 otherwise (see TS 38.214 [19], clause 5.2.1.2).  
<endl>  
  
  
<start>  
csi-resourceconfig  
csi-ResourceConfigId  
Used in CSI-ReportConfig to refer to an instance of CSI-ResourceConfig.  
<endl>  
  
  
<start>  
csi-resourceconfig  
csi-SSB-ResourceSetList, csi-SSB-ResourceSetListExt  
List of references to SSB resources used for CSI measurement and reporting in a CSI-RS resource set (see TS 38.214 [19], clause 5.2.1.2). The csi-SSB-ResourceSetListExt provides additional references and can only be configured if csi-SSB-ResourceSetList is configured and groupBasedBeamReporting-v1710 is configured in the CSI-ReportConfig that indicates this CSI-ResourceConfig as resourcesForChannelMeasurement. If groupBasedBeamReporting-v1710 is configured in the IE CSI-ReportConfig that indicates this CSI-ResourceConfig as resourceForChannelMeasurement, the network configures 2 resource sets, which may be two NZP CSI-RS resource sets, two CSI SSB resource sets or one NZP CSI-RS resource set and one CSI-SSB resource set (see TS 38.214 [19], clause 5.2.1.2 and 5.2.1.4.2). In this case, in TS 38.212 [17] Table 6.3.1.1.2-8B:  
- if the list has one CSI-SSB resource set, this resource set is indicated by a resource set indicator set to 1, while the resource set indicator of the NZP CSI-RS resource set is 0;  
- if the list has two CSI-SSB resource sets, the first resource set is indicated by a resource set indicator set to 0 and the second resource set by a resource set indicator set to 1.  
<endl>  
  
  
<start>  
csi-resourceconfig  
nzp-CSI-RS-ResourceSetList  
List of references to NZP CSI-RS resources used for beam measurement and reporting in a CSI-RS resource set.  
If resourceType is set to 'aperiodic', the network configures up to maxNrofNZP-CSI-RS-ResourceSetsPerConfig resource sets. If resourceType is is set to 'periodic' or 'semiPersistent' and groupBasedBeamReporting-v1710 is not configured in IE CSI-ReportConfig, the network configures 1 resource set. If resourceType is set to 'periodic' or 'semiPersistent' and groupBasedBeamReporting-v1710 is configured, the network configures 2 resource sets, which may be two NZP CSI-RS resource sets, two CSI SSB resource sets or one NZP CSI-RS resource set and one CSI-SSB resource set (see TS 38.214 [19], clause 5.2.1.2 and 5.2.1.4.2). In this case, in TS 38.212 [17] Table 6.3.1.1.2-8B, the following applies:  
- if the list has one NZP CSI-RS resource set, this resource set is indicated by a resource set indicator set to 0;  
- if the list has two NZP CSI-RS resource sets, the first resource set is indicated by a resource set indicator set to 0 and the second resource set by a resource set indicator set to 1.  
<endl>  
  
  
<start>  
csi-resourceconfig  
resourceType  
Time domain behavior of resource configuration (see TS 38.214 [19], clause 5.2.1.2). It does not apply to resources provided in the csi-SSB-ResourceSetList.  
<endl>

<start>  
csi-rs-cellmobility  
csi-rs-ResourceList-Mobility  
List of CSI-RS resources for mobility. The maximum number of CSI-RS resources that can be configured per measObjectNR depends on the configuration of associatedSSB and the support of increasedNumberofCSIRSPerMO capability (see TS 38.214 [19], clause 5.1.6.1.3).  
<endl>  
  
  
<start>  
csi-rs-cellmobility  
density  
Frequency domain density for the 1-port CSI-RS for L3 mobility. See TS 38.211 [16], clause 7.4.1.  
<endl>  
  
  
<start>  
csi-rs-cellmobility  
nrofPRBs  
Allowed size of the measurement BW in PRBs. See TS 38.211 [16], clause 7.4.1.  
<endl>  
  
  
<start>  
csi-rs-cellmobility  
startPRB  
Starting PRB index of the measurement bandwidth. See TS 38.211 [16], clause 7.4.1.  
<endl>

<start>  
csi-rs-resourceconfigmobility  
csi-RS-CellList-Mobility  
List of cells for CSI-RS based RRM measurements.  
<endl>  
  
  
<start>  
csi-rs-resourceconfigmobility  
refServCellIndex  
Indicates the serving cell providing the timing reference for CSI-RS resources without associatedSSB. The field may be present only if there is at least one CSI-RS resource configured without associatedSSB. If this field is absent, the UE shall use the timing of the PCell for measurements on the CSI-RS resources without associatedSSB. The CSI-RS resources and the serving cell indicated by refServCellIndex for timing reference should be located in the same band.  
<endl>  
  
  
<start>  
csi-rs-resourceconfigmobility  
subcarrierSpacing  
Subcarrier spacing of CSI-RS.  
Only the following values are applicable depending on the used frequency:  
FR1: 15, 30, or 60 kHz  
FR2-1: 60 or 120 kHz  
FR2-2: 120, 480, or 960 kHz  
<endl>

<start>  
csi-rs-resource-mobility  
associatedSSB  
If this field is present, the UE may base the timing of the CSI-RS resource indicated in CSI-RS-Resource-Mobility on the timing of the cell indicated by the cellId in the CSI-RS-CellMobility. In this case, the UE is not required to monitor that CSI-RS resource if the UE cannot detect the SS/PBCH block indicated by this associatedSSB and cellId. If this field is absent, the UE shall base the timing of the CSI-RS resource indicated in CSI-RS-Resource-Mobility on the timing of the serving cell indicated by refServCellIndex. In this case, the UE is required to measure the CSI-RS resource even if SS/PBCH block(s) with cellId in the CSI-RS-CellMobility are not detected.  
CSI-RS resources with and without associatedSSB may be configured in accordance with the rules in TS 38.214 [19], clause 5.1.6.1.3.  
<endl>  
  
  
<start>  
csi-rs-resource-mobility  
csi-RS-Index  
CSI-RS resource index associated to the CSI-RS resource to be measured (and used for reporting).  
<endl>  
  
  
<start>  
csi-rs-resource-mobility  
firstOFDMSymbolInTimeDomain  
Time domain allocation within a physical resource block. The field indicates the first OFDM symbol in the PRB used for CSI-RS, see TS 38.211 [16], clause 7.4.1.5.3.  
<endl>  
  
  
<start>  
csi-rs-resource-mobility  
frequencyDomainAllocation  
Frequency domain allocation within a physical resource block in accordance with TS 38.211 [16], clause 7.4.1.5.3 including table 7.4.1.5.2-1. The number of bits that may be set to one depend on the chosen row in that table.  
<endl>  
  
  
<start>  
csi-rs-resource-mobility  
isQuasiColocated  
Indicates that the CSI-RS resource is quasi co-located with the associated SS/PBCH block, see TS 38.214 [19], clause 5.1.6.1.3.  
<endl>  
  
  
<start>  
csi-rs-resource-mobility  
sequenceGenerationConfig  
Scrambling ID for CSI-RS (see TS 38.211 [16], clause 7.4.1.5.2).  
<endl>  
  
  
<start>  
csi-rs-resource-mobility  
slotConfig  
Indicates the CSI-RS periodicity (in milliseconds) and for each periodicity the offset (in number of slots). When subcarrierSpacing is set to kHz15, the maximum offset values for periodicities ms4/ms5/ms10/ms20/ms40 are 3/4/9/19/39 slots. When subcarrierSpacing is set to kHz30, the maximum offset values for periodicities ms4/ms5/ms10/ms20/ms40 are 7/9/19/39/79 slots. When subcarrierSpacing is set to kHz60, the maximum offset values for periodicities ms4/ms5/ms10/ms20/ms40 are 15/19/39/79/159 slots. When subcarrierSpacing is set kHz120, the maximum offset values for periodicities ms4/ms5/ms10/ms20/ms40 are 31/39/79/159/319 slots. When subcarrierSpacing is set to kHz480, the maximum offset values for periodicities ms4/ms5/ms10/ms20/ms40 are 127/159/319/639/1279 slots. When subcarrierSpacing is set to kHz960, the maximum offset values for periodicities ms4/ms5/ms10/ms20/ms40 are 255/319/639/1279/2559 slots. If slotConfig-r17 is present, UE shall ignore the slotConfig (without suffix).  
<endl>

<start>  
csi-rs-resourcemapping  
cdm-Type  
CDM type (see TS 38.214 [19], clause 5.2.2.3.1).  
<endl>  
  
  
<start>  
csi-rs-resourcemapping  
density  
Density of CSI-RS resource measured in RE/port/PRB (see TS 38.211 [16], clause 7.4.1.5.3).  
Values 0.5 (dot5), 1 (one) and 3 (three) are allowed for X=1, values 0.5 (dot5) and 1 (one) are allowed for X=2, 16, 24 and 32, value 1 (one) is allowed for X=4, 8, 12.  
For density = 1/2, includes 1-bit indication for RB level comb offset indicating whether odd or even RBs are occupied by CSI-RS.  
<endl>  
  
  
<start>  
csi-rs-resourcemapping  
firstOFDMSymbolInTimeDomain2  
Time domain allocation within a physical resource block. See TS 38.211 [16], clause 7.4.1.5.3.  
<endl>  
  
  
<start>  
csi-rs-resourcemapping  
firstOFDMSymbolInTimeDomain  
Time domain allocation within a physical resource block. The field indicates the first OFDM symbol in the PRB used for CSI-RS. See TS 38.211 [16], clause 7.4.1.5.3.  
<endl>  
  
  
<start>  
csi-rs-resourcemapping  
freqBand  
Wideband or partial band CSI-RS, (see TS 38.214 [19], clause 5.2.2.3.1).  
<endl>  
  
  
<start>  
csi-rs-resourcemapping  
frequencyDomainAllocation  
Frequency domain allocation within a physical resource block in accordance with TS 38.211 [16], clause 7.4.1.5.3. The applicable row number in table 7.4.1.5.3-1 is determined by the frequencyDomainAllocation for rows 1, 2 and 4, and for other rows by matching the values in the column Ports, Density and CDMtype in table 7.4.1.5.3-1 with the values of nrofPorts, cdm-Type and density below and, when more than one row has the 3 values matching, by selecting the row where the column (k bar, l bar) in table 7.4.1.5.3-1 has indexes for k ranging from 0 to 2\*n-1 where n is the number of bits set to 1 in frequencyDomainAllocation.  
<endl>  
  
  
<start>  
csi-rs-resourcemapping  
nrofPorts  
Number of ports (see TS 38.214 [19], clause 5.2.2.3.1).  
<endl>

<start>  
csi-semipersistentonpusch-triggerstatelist  
sp-CSI-MultiplexingMode  
Indicates if the behavior of transmitting SP-CSI on the first PUSCH repetitions corresponding to two SRS resource sets configured in srs-ResourceSetToAddModList or srs-ResourceSetToAddModListDCI-0-2 with usage 'codebook' or 'noncodebook' is enabled or not.  
<endl>

<start>  
csi-ssb-resourceset  
servingAdditionalPCIList  
Indicates the physical cell IDs (PCI) of the SSBs in the csi-SSB-ResourceList. If present, the list has the same number of entries as csi-SSB-ResourceList. The first entry of the list indicates the value of the PCI for the first entry of csi-SSB-ResourceList, the second entry of this list indicates the value of the PCI for the second entry of csi-SSB-ResourceList, and so on. For each entry, the following applies:  
- If the value is zero, the PCI is the PCI of the serving cell in which this CSI-SSB-ResourceSet is defined;  
- otherwise, the value is additionalPCIIndex-r17 of an SSB-MTC-AdditionalPCI-r17 configured using the additionalPCI-ToAddModList-r17 in ServingCellConfig, and the PCI is the additionalPCI-r17 in this SSB-MTC-AdditionalPCI-r17.  
<endl>

<start>  
dl-ppw-preconfig  
dl-PPW-ID  
Indicates the pre-configured ID for DL-PRS processing window configuration.  
<endl>  
  
  
<start>  
dl-ppw-preconfig  
dl-PPW-PeriodicityAndStartSlot  
Indicates the periodicity in slots and the offset of the starting slot with respect to SFN #0 slot #0 of the serving cell where the DL-PRS processing window is configured.  
<endl>  
  
  
<start>  
dl-ppw-preconfig  
length  
Indicates the length of DL-PRS processing window in slots. Value 1 indicates length of one slot, value 2 indicates length of two slots and so on.  
<endl>  
  
  
<start>  
dl-ppw-preconfig  
priority  
Indicates the priority between PDCCH/PDSCH/CSI-RS and PRS as specified in TS 38.214 [19].  
<endl>  
  
  
<start>  
dl-ppw-preconfig  
type  
Indicates the DL-PRS processing window type as specified in TS 38.214 [19].  
<endl>

<start>  
dmrs-bundlingpucch-config  
pucch-DMRS-Bundling  
Indicates whether DMRS bundling and time domain window for PUCCH are jointly enabled.  
<endl>  
  
  
<start>  
dmrs-bundlingpucch-config  
pucch-FrequencyHoppingInterval  
Configures the number of consecutive slots for the UE to perform inter-slot frequency hopping with inter-slot bundling for PUCCH. When both inter-frequency hopping and DMRS bundling are enabled for PUCCH repetitions, the UE is expected to be configured with at least one pucch-FrequencyHoppingInterval-r17 and pucch-TimeDomainWindowLength-r17. When DMRS bundling for PUCCH is enabled by pucch-DMRS-Bundling-r17, PUCCH frequency hopping interval is only determined by the configuration of PUCCH hopping interval if PUCCH hopping interval is configured. If the field is absent, the number of consecutive slots for the UE to perform inter-slot PUCCH frequency hopping is indicated by pucch-TimeDomainWindowLength-r17.  
<endl>  
  
  
<start>  
dmrs-bundlingpucch-config  
pucch-TimeDomainWindowLength  
Configures the length of a nominal time domain window in slots for DMRS bundling for PUCCH. The value shall not exceed the maximum duration for DMRS bundling for PUCCH as specified in TS 38.306 [26]. If this field is absent, the UE shall apply the default value that is the minimum value in the unit of consecutive slots of the time duration for the transmission of all PUCCH repetitions and the maximum duration for DMRS bundling for PUCCH as specified in TS 38.306 [26].  
<endl>  
  
  
<start>  
dmrs-bundlingpucch-config  
pucch-WindowRestart  
Indicates whether UE bundles PUCCH DMRS remaining in a nominal time domain window after event(s) triggered by DCI or MAC CE that violate power consistency and phase continuity requirements is enabled (see TS 38.214 [19], clause 6.1.7).  
NOTE: Events, which are triggered by DCI or MAC CE, but do not require UE capability to resume maintaining power consistency and/or phase continuity as specified in clause 6.1.7 of TS 38.214 [19], are excluded.  
<endl>

<start>  
dmrs-bundlingpusch-config  
pusch-DMRS-Bundling  
Indicates whether DMRS bundling and time domain window for PUSCH are jointly enabled.  
<endl>  
  
  
<start>  
dmrs-bundlingpusch-config  
pusch-FrequencyHoppingInterval  
Configures the number of consecutive slots for the UE to perform inter-slot frequency hopping with inter-slot bundling for PUSCH. When both inter-frequency hopping and DMRS bundling are enabled for PUSCH repetitions, the UE is expected to be configured with at least one pusch-FrequencyHoppingInterval-r17 and pusch-TimeDomainWindowLength-r17. This parameter is shared for both DG-PUSCH and CG-PUSCH. When DMRS bundling for PUSCH is enabled by pusch-DMRS-Bundling-r17, PUSCH frequency hopping interval is only determined by the configuration of PUSCH hopping interval if PUSCH hopping interval is configured. If the field is absent, the number of consecutive slots for the UE to perform inter-slot PUSCH frequency hopping is indicated by pusch-TimeDomainWindowLength-r17.  
Note: For unpaired spectrum, the UE is not expected to be configured the value of s6, s8, s12, s14 and s16.  
<endl>  
  
  
<start>  
dmrs-bundlingpusch-config  
pusch-TimeDomainWindowLength  
Configures the length of a nominal time domain window in number of consecutive slots for DMRS bundling for PUSCH. The value shall not exceed the maximum duration for DMRS bundling for PUSCH as specified in TS 38.306 [26]. For PUSCH repetition type A/B, if this field is absent, the UE shall apply the default value that is the minimum value in the unit of consecutive slots of the time duration for the transmission of all PUSCH repetitions and the maximum duration for DMRS bundling for PUSCH as specified in TS 38.306 [26]. For TBoMS, if this field is absent, the UE shall apply the default value that is the minimum value in the unit of consecutive slots of the duration of TBoMS transmission (including repetition of TBoMS) and the maximum duration for DMRS bundling for PUSCH as specified in TS 38.306 [26].  
<endl>  
  
  
<start>  
dmrs-bundlingpusch-config  
pusch-WindowRestart  
Indicates whether UE bundles PUSCH DMRS remaining in a nominal time domain window after event(s) triggered by DCI or MAC CE that violate power consistency and phase continuity requirements is enabled (see TS 38.214 [19], clause 6.1.7).  
NOTE: Events, which are triggered by DCI or MAC CE, but do not require UE capability to resume maintaining power consistency and/or phase continuity as specified in clause 6.1.7 of TS 38.214 [19], are excluded.  
<endl>

<start>  
dmrs-downlinkconfig  
dmrs-AdditionalPosition  
Position for additional DM-RS in DL, see Tables 7.4.1.1.2-3 and 7.4.1.1.2-4 in TS 38.211 [16]. If the field is absent, the UE applies the value pos2. See also clause 7.4.1.1.2 for additional constraints on how the network may set this field depending on the setting of other fields.  
<endl>  
  
  
<start>  
dmrs-downlinkconfig  
dmrs-Downlink  
This field indicates whether low PAPR DMRS is used, as specified in TS38.211 [16], clause 7.4.1.1.1.  
<endl>  
  
  
<start>  
dmrs-downlinkconfig  
dmrs-Type  
Selection of the DMRS type to be used for DL (see TS 38.211 [16], clause 7.4.1.1.1). If the field is absent, the UE uses DMRS type 1.  
<endl>  
  
  
<start>  
dmrs-downlinkconfig  
maxLength  
The maximum number of OFDM symbols for DL front loaded DMRS. len1 corresponds to value 1. len2 corresponds to value 2. If the field is absent, the UE applies value len1. If set to len2, the UE determines the actual number of DM-RS symbols by the associated DCI. (see TS 38.211 [16], clause 7.4.1.1.2).  
<endl>  
  
  
<start>  
dmrs-downlinkconfig  
phaseTrackingRS  
Configures downlink PTRS. If the field is not configured, the UE assumes that downlink PTRS are absent. See TS 38.214 [19] clause 5.1.6.3.  
<endl>  
  
  
<start>  
dmrs-downlinkconfig  
scramblingID0  
DL DMRS scrambling initialization (see TS 38.211 [16], clause 7.4.1.1.1). When the field is absent the UE applies the value physCellId configured for this serving cell.  
<endl>  
  
  
<start>  
dmrs-downlinkconfig  
scramblingID1  
DL DMRS scrambling initialization (see TS 38.211 [16], clause 7.4.1.1.1). When the field is absent the UE applies the value physCellId configured for this serving cell.  
<endl>

<start>  
dmrs-uplinkconfig  
dmrs-AdditionalPosition  
Position for additional DM-RS in UL (see TS 38.211 [16], clause 6.4.1.1.3). If the field is absent, the UE applies the value pos2. See also clause 6.4.1.1.3 for additional constraints on how the network may set this field depending on the setting of other fields.  
<endl>  
  
  
<start>  
dmrs-uplinkconfig  
dmrs-Type  
Selection of the DMRS type to be used for UL (see TS 38.211 [16], clause 6.4.1.1.3) If the field is absent, the UE uses DMRS type 1.  
<endl>  
  
  
<start>  
dmrs-uplinkconfig  
dmrs-Uplink  
This field indicates whether low PAPR DMRS is used, as specified in TS38.211 [16], clause 6.4.1.1.1.1.  
<endl>  
  
  
<start>  
dmrs-uplinkconfig  
dmrs-UplinkTransformPrecoding  
This field indicates whether low PAPR DMRS is used for PUSCH with pi/2 BPSK modulation, as specified in TS38.211 [16], clause 6.4.1.1.1.2. The network configures this field only if tp-pi2BPSK is configured in PUSCH-Config.  
<endl>  
  
  
<start>  
dmrs-uplinkconfig  
maxLength  
The maximum number of OFDM symbols for UL front loaded DMRS. len1 corresponds to value 1. len2 corresponds to value 2. If the field is absent, the UE applies value len1. If set to len2, the UE determines the actual number of DM-RS symbols by the associated DCI. (see TS 38.211 [16], clause 6.4.1.1.3).  
<endl>  
  
  
<start>  
dmrs-uplinkconfig  
nPUSCH-Identity  
Parameter: N\_ID^(PUSCH) for DFT-s-OFDM DMRS. If the value is absent or released, the UE uses the value Physical cell ID (physCellId). See TS 38.211 [16].  
<endl>  
  
  
<start>  
dmrs-uplinkconfig  
phaseTrackingRS  
Configures uplink PTRS (see TS 38.211 [16]).  
<endl>  
  
  
<start>  
dmrs-uplinkconfig  
pi2BPSK-ScramblingID0, pi2BPSK-ScramblingID1  
UL DMRS scrambling initialization for pi/2 BPSK DMRS for PUSCH (see TS 38.211 [16], Clause 6.4.1.1.2). When the field is absent the UE applies the value Physical cell ID (physCellId) of the serving cell.  
<endl>  
  
  
<start>  
dmrs-uplinkconfig  
scramblingID0  
UL DMRS scrambling initialization for CP-OFDM (see TS 38.211 [16], clause 6.4.1.1.1.1). When the field is absent the UE applies the value Physical cell ID (physCellId).  
<endl>  
  
  
<start>  
dmrs-uplinkconfig  
scramblingID1  
UL DMRS scrambling initialization for CP-OFDM. (see TS 38.211 [16], clause 6.4.1.1.1.1). When the field is absent the UE applies the value Physical cell ID (physCellId).  
<endl>  
  
  
<start>  
dmrs-uplinkconfig  
sequenceGroupHopping  
For DMRS transmission with transform precoder the NW may configure group hopping by the cell-specific parameter groupHoppingEnabledTransformPrecoding in PUSCH-ConfigCommon. In this case, the NW may include this UE specific field to disable group hopping for PUSCH transmission except for Msg3, i.e., to override the configuration in PUSCH-ConfigCommon (see TS 38.211 [16]). If the field is absent, the UE uses the same hopping mode as for Msg3.  
<endl>  
  
  
<start>  
dmrs-uplinkconfig  
sequenceHopping  
Determines if sequence hopping is enabled for DMRS transmission with transform precoder for PUSCH transmission other than Msg3 (sequence hopping is always disabled for Msg3). If the field is absent, the UE uses the same hopping mode as for msg3. The network does not configure simultaneous group hopping and sequence hopping. See TS 38.211 [16], clause 6.4.1.1.1.2.  
<endl>  
  
  
<start>  
dmrs-uplinkconfig  
transformPrecodingDisabled  
DMRS related parameters for Cyclic Prefix OFDM.  
<endl>  
  
  
<start>  
dmrs-uplinkconfig  
transformPrecodingEnabled  
DMRS related parameters for DFT-s-OFDM (Transform Precoding).  
<endl>

<start>  
downlinkconfigcommon  
frequencyInfoDL  
Basic parameters of a downlink carrier and transmission thereon.  
<endl>  
  
  
<start>  
downlinkconfigcommon  
initialDownlinkBWP  
The initial downlink BWP configuration for a serving cell. The network configures the locationAndBandwidth so that the initial downlink BWP contains the entire CORESET#0 of this serving cell in the frequency domain.  
<endl>  
  
  
<start>  
downlinkconfigcommon  
initialDownlinkBWP-RedCap  
If present, RedCap UEs use this DL BWP instead of initialDownlinkBWP.  
If absent, RedCap UEs use initialDownlinkBWP provided that it does not exceed the RedCap UE maximum bandwidth (see also clause 5.2.2.4.2).  
<endl>

<start>  
downlinkconfigcommonsib  
bcch-Config  
The modification period related configuration.  
<endl>  
  
  
<start>  
downlinkconfigcommonsib  
frequencyInfoDL-SIB  
Basic parameters of a downlink carrier and transmission thereon.  
<endl>  
  
  
<start>  
downlinkconfigcommonsib  
initialDownlinkBWP  
The initial downlink BWP configuration for a PCell. The network configures the locationAndBandwidth so that the initial downlink BWP contains the entire CORESET#0 of this serving cell in the frequency domain. The UE applies the locationAndBandwidth upon reception of this field (e.g. to determine the frequency position of signals described in relation to this locationAndBandwidth) but it keeps CORESET#0 until after reception of RRCSetup/RRCResume/RRCReestablishment.  
<endl>  
  
  
<start>  
downlinkconfigcommonsib  
initialDownlinkBWP-RedCap  
If present, RedCap UEs use this DL BWP instead of initialDownlinkBWP. If the locationAndBandwidth of this BWP contains the entire CORESET#0, the UE applies the locationAndBandwidth upon reception of this field (e.g. to determine the frequency position of signals described in relation to this locationAndBandwidth) but it keeps CORESET#0 until after reception of RRCSetup/RRCResume/RRCReestablishment. Otherwise, i.e., if the locationAndBandwidth of this BWP does not contain the entire CORESET#0, the UE uses this BWP for receiving DL messages during initial access (Msg2, MsgB, Msg4) and after initial access.  
If absent, RedCap UEs use initialDownlinkBWP provided that it does not exceed the RedCap UE maximum bandwidth (see also clause 5.2.2.4.2).  
<endl>  
  
  
<start>  
downlinkconfigcommonsib  
lastUsedCellOnly  
When present, the field indicates that the UE monitors PEI only if the latest received RRCRelease without noLastCellUpdate is from this cell. A PEI-capable UE stores its last used cell information.  
<endl>  
  
  
<start>  
downlinkconfigcommonsib  
nrofPDCCH-MonitoringOccasionPerSSB-InPO  
The number of PDCCH monitoring occasions corresponding to an SSB within a Paging Occasion, see TS 38.304 [20], clause 7.1.  
<endl>  
  
  
<start>  
downlinkconfigcommonsib  
pcch-Config  
The paging related configuration.  
<endl>  
  
  
<start>  
downlinkconfigcommonsib  
pei-Config  
The PEI related configuration.  
<endl>  
  
  
<start>  
downlinkconfigcommonsib  
subgroupConfig  
The paging subgroup related configuration.  
<endl>

<start>  
bcch-config  
modificationPeriodCoeff  
Actual modification period, expressed in number of radio frames m = modificationPeriodCoeff \* defaultPagingCycle, see clause 5.2.2.2.2. n2 corresponds to value 2, n4 corresponds to value 4, and so on.  
<endl>

<start>  
pcch-config  
defaultPagingCycle  
Default paging cycle, used to derive 'T' in TS 38.304 [20]. Value rf32 corresponds to 32 radio frames, value rf64 corresponds to 64 radio frames and so on.  
<endl>  
  
  
<start>  
pcch-config  
firstPDCCH-MonitoringOccasionOfPO  
Points out the first PDCCH monitoring occasion for paging of each PO of the PF, see TS 38.304 [20].  
<endl>  
  
  
<start>  
pcch-config  
nAndPagingFrameOffset  
Used to derive the number of total paging frames in T (corresponding to parameter N in TS 38.304 [20]) and paging frame offset (corresponding to parameter PF\_offset in TS 38.304 [20]). A value of oneSixteenthT corresponds to T / 16, a value of oneEighthT corresponds to T / 8, and so on.  
If pagingSearchSpace is set to zero and if SS/PBCH block and CORESET multiplexing pattern is 2 or 3 (as specified in TS 38.213 [13]):  
- for ssb-periodicityServingCell of 5 or 10 ms, N can be set to one of {oneT, halfT, quarterT, oneEighthT, oneSixteenthT}  
- for ssb-periodicityServingCell of 20 ms, N can be set to one of {halfT, quarterT, oneEighthT, oneSixteenthT}  
- for ssb-periodicityServingCell of 40 ms, N can be set to one of {quarterT, oneEighthT, oneSixteenthT}  
- for ssb-periodicityServingCell of 80 ms, N can be set to one of {oneEighthT, oneSixteenthT}  
- for ssb-periodicityServingCell of 160 ms, N can be set to oneSixteenthT  
If pagingSearchSpace is set to zero and if SS/PBCH block and CORESET multiplexing pattern is 1 (as specified in TS 38.213 [13]), N can be set to one of {halfT, quarterT, oneEighthT, oneSixteenthT}  
If pagingSearchSpace is not set to zero, N can be configured to one of {oneT, halfT, quarterT, oneEighthT, oneSixteenthT}  
<endl>  
  
  
<start>  
pcch-config  
ns  
Number of paging occasions per paging frame.  
<endl>  
  
  
<start>  
pcch-config  
ranPagingInIdlePO  
Indicates that the network supports to send RAN paging in PO that corresponds to the i\_s as determined by UE in RRC\_IDLE state, see TS38.304 [20].  
<endl>

<start>  
pei-config  
payloadSizeDCI-2-7  
Payload size of PEI DCI, i.e., DCI format 2\_7. The size is no larger than the payload size of paging DCI which has maximum of 41 bits and 43 bits for licensed and unlicensed spectrums, respectively.  
<endl>  
  
  
<start>  
pei-config  
pei-FrameOffset  
Offset, in number of frames from the start of a reference frame for PEI-O to the start of a first paging frame of the paging frames associated with the PEI-O, see TS 38.213 [13], clause 10.4A.  
<endl>  
  
  
<start>  
pei-config  
po-NumPerPEI  
The number of PO(s) associated with one PEI monitoring occasion. It is a factor of the total PO number in a paging cycle, i.e N x Ns, as specified in TS 38.304 [20]. The maximum number of PF associated with one PEI monitoring occasion is 2. The number of PO mapping to one PEI should be multiple of Ns when po-NumPerPEI is larger than Ns.  
<endl>

<start>  
subgroupconfig  
subgroupsNumPerPO  
Total number of subgroups per Paging Occasion (PO) for UE to read subgroups indication from physical-layer signaling. The field represents the sum of CN-assigned and UEID-based subgroups supported by the network. When PEI-Config is configured, there is always at least one subgroup (UEID-based subgroup or CN-assigned subgroup) configured.  
<endl>  
  
  
<start>  
subgroupconfig  
subgroupsNumForUEID  
Number of subgroups per Paging Occasion (PO) for UE to read subgroups indication from physical-layer signaling, for UEID-based subgrouping method. When present, the field is set to an integer smaller than or equal to subgroupsNumPerPO. subgroupsNumPerPO equals to subgroupsNumForUEID when the network does not support CN-assigned subgrouping. The field is absent when the network only supports CN-assigned subgrouping. Both this field and subgroupsNumPerPO are equal to 1 when the network does not support subgrouping.  
<endl>

<start>  
downlinkpreemption  
dci-PayloadSize  
Total length of the DCI payload scrambled with INT-RNTI (see TS 38.213 [13], clause 11.2).  
<endl>  
  
  
<start>  
downlinkpreemption  
int-ConfigurationPerServingCell  
Indicates (per serving cell) the position of the 14 bit INT values inside the DCI payload (see TS 38.213 [13], clause 11.2).  
<endl>  
  
  
<start>  
downlinkpreemption  
int-RNTI  
RNTI used for indication pre-emption in DL (see TS 38.213 [13], clause 10).  
<endl>  
  
  
<start>  
downlinkpreemption  
timeFrequencySet  
Set selection for DL-preemption indication (see TS 38.213 [13], clause 11.2) The set determines how the UE interprets the DL preemption DCI payload.  
<endl>

<start>  
int-configurationperservingcell  
positionInDCI  
Starting position (in number of bit) of the 14 bit INT value applicable for this serving cell (servingCellId) within the DCI payload (see TS 38.213 [13], clause 11.2). Must be multiples of 14 (bit).  
<endl>

<start>  
drx-config  
drx-HARQ-RTT-TimerDL  
Value in number of symbols of the BWP where the transport block was received. drx-HARQ-RTT-TimerDL-r17 is only applicable for SCS 480 kHz and 960 kHz. If configured, the UE shall ignore drx-HARQ-RTT-TimerDL (without suffix) for SCS 480 kHz and 960 kHz.  
<endl>  
  
  
<start>  
drx-config  
drx-HARQ-RTT-TimerUL  
Value in number of symbols of the BWP where the transport block was transmitted. drx-HARQ-RTT-TimerUL-r17 is only applicable for SCS 480 kHz and 960 kHz. If configured, the UE shall ignore drx-HARQ-RTT-TimerUL (without suffix) for SCS 480 kHz and 960 kHz.  
<endl>  
  
  
<start>  
drx-config  
drx-InactivityTimer  
Value in multiple integers of 1 ms. ms0 corresponds to 0, ms1 corresponds to 1 ms, ms2 corresponds to 2 ms, and so on.  
<endl>  
  
  
<start>  
drx-config  
drx-LongCycleStartOffset  
drx-LongCycle in ms and drx-StartOffset in multiples of 1 ms. If drx-ShortCycle is configured, the value of drx-LongCycle shall be a multiple of the drx-ShortCycle value.  
<endl>  
  
  
<start>  
drx-config  
drx-onDurationTimer  
Value in multiples of 1/32 ms (subMilliSeconds) or in ms (milliSecond). For the latter, value ms1 corresponds to 1 ms, value ms2 corresponds to 2 ms, and so on.  
<endl>  
  
  
<start>  
drx-config  
drx-RetransmissionTimerDL  
Value in number of slot lengths of the BWP where the transport block was received. value sl0 corresponds to 0 slots, sl1 corresponds to 1 slot, sl2 corresponds to 2 slots, and so on.  
<endl>  
  
  
<start>  
drx-config  
drx-RetransmissionTimerUL  
Value in number of slot lengths of the BWP where the transport block was transmitted. sl0 corresponds to 0 slots, sl1 corresponds to 1 slot, sl2 corresponds to 2 slots, and so on.  
<endl>  
  
  
<start>  
drx-config  
drx-ShortCycleTimer  
Value in multiples of drx-ShortCycle. A value of 1 corresponds to drx-ShortCycle, a value of 2 corresponds to 2 \* drx-ShortCycle and so on.  
<endl>  
  
  
<start>  
drx-config  
drx-ShortCycle  
Value in ms. ms1 corresponds to 1 ms, ms2 corresponds to 2 ms, and so on.  
<endl>  
  
  
<start>  
drx-config  
drx-SlotOffset  
Value in 1/32 ms. Value 0 corresponds to 0 ms, value 1 corresponds to 1/32 ms, value 2 corresponds to 2/32 ms, and so on.  
<endl>

<start>  
drx-configsecondarygroup  
drx-InactivityTimer  
Value in multiple integers of 1 ms. ms0 corresponds to 0 ms, ms1 corresponds to 1 ms, ms2 corresponds to 2 ms, and so on, as specified in TS 38.321 [3]. The network configures a drx-InactivityTimer value for the second DRX group that is smaller than the drx-InactivityTimer configured for the default DRX group in IE DRX-Config.  
<endl>  
  
  
<start>  
drx-configsecondarygroup  
drx-onDurationTimer  
Value in multiples of 1/32 ms (subMilliSeconds) or in ms (milliSeconds). For the latter, value ms1 corresponds to 1 ms, value ms2 corresponds to 2 ms, and so on, as specified in TS 38.321 [3]. The network configures a drx-onDurationTimer value for the second DRX group that is smaller than the drx-onDurationTimer configured for the default DRX group in IE DRX-Config.  
<endl>

<start>  
drx-configsl  
drx-HARQ-RTT-TimerSL  
Value in number of symbols of the BWP where the PDCCH was transmitted. Value 0 is used in case sl-PUCCH-Config is not configured and the corresponding resource pool is not configured with PSFCH.  
<endl>  
  
  
<start>  
drx-configsl  
drx-RetransmissionTimerSL  
Value in number of slot lengths of the BWP where the PDCCH was transmitted. sl0 corresponds to 0 slots, sl1 corresponds to 1 slot, sl2 corresponds to 2 slots, and so on.  
<endl>

<start>  
ephemerisinfo  
eccentricity  
Satellite orbital parameter: eccentricity e, see NIMA TR 8350.2 [71]. Unit is radian.  
Step of 1.431 \* 10-8. Actual value = field value \* (1.431 \* 10-8).  
<endl>  
  
  
<start>  
ephemerisinfo  
inclination  
Satellite orbital parameter: inclination i, see NIMA TR 8350.2 [71]. Unit is radian.  
Step of 2.341\* 10-8 rad. Actual value = field value \* (2.341\* 10-8).  
<endl>  
  
  
<start>  
ephemerisinfo  
longitude  
Satellite orbital parameter: longitude of ascending node , see NIMA TR 8350.2 [71]. Unit is radian.  
Step of 2.341\* 10-8 rad. Actual value = field value \* (2.341\* 10-8).  
<endl>  
  
  
<start>  
ephemerisinfo  
meanAnomaly  
Satellite orbital parameter: Mean anomaly M at epoch time, see NIMA TR 8350.2 [71]. Unit is radian.  
Step of 2.341\* 10-8 rad. Actual value = field value \* (2.341\* 10-8).  
<endl>  
  
  
<start>  
ephemerisinfo  
periapsis  
Satellite orbital parameter: argument of periapsis , see NIMA TR 8350.2 [71]. Unit is radian.  
Step of 2.341\* 10-8 rad. Actual value = field value \* (2.341\* 10-8).  
<endl>  
  
  
<start>  
ephemerisinfo  
positionX, positionY, positionZ  
X, Y, Z coordinate of satellite position state vector in ECEF. Unit is meter.  
Step of 1.3 m. Actual value = field value \* 1.3.  
<endl>  
  
  
<start>  
ephemerisinfo  
semiMajorAxis  
Satellite orbital parameter: semi major axis , see NIMA TR 8350.2 [71]. Unit is meter.  
Step of 4.249 \* 10-3 m. Actual value = 6500000 + field value \* (4.249 \* 10-3).  
<endl>  
  
  
<start>  
ephemerisinfo  
velocityVX, velocityVY, velocityVZ  
X, Y, Z coordinate of satellite velocity state vector in ECEF. Unit is meter/second.  
Step of 0.06 m/s. Actual value = field value \* 0.06.  
<endl>

<start>  
featurecombination  
redCap  
If present, this field indicates that RedCap is part of this feature combination.  
<endl>  
  
  
<start>  
featurecombination  
smallData  
If present, this field indicates that Small Data is part of this feature combination.  
<endl>  
  
  
<start>  
featurecombination  
nsag  
If present, this field indicates NSAG(s) that are part of this feature combination.  
<endl>  
  
  
<start>  
featurecombination  
msg3-Repetitions  
If present, this field indicates that signalling of msg3 repetition is part of this feature combination. This field is not configured in a set of preambles that is configured with 2-step random-access type.  
<endl>

<start>  
featurecombinationpreambles  
deltaPreamble  
Power offset between msg3 or msgA-PUSCH and RACH preamble transmission. If configured, this parameter overrides msg3-DeltaPreamble or msgA-DeltaPreamble, Actual value = field value \* 2 [dB] (see TS 38.213 [13], clause 7.1). If msgA-DeltaPreamble is configured in separateMsgA-PUSCH-Config-r17, this field is absent.  
<endl>  
  
  
<start>  
featurecombinationpreambles  
featureCombination  
Indicates which combination of features that the preambles indicated by this IE are associated with. The UE ignores a RACH resource defined by this FeatureCombinationPreambles if any feature within the featureCombination is not supported by the UE or if any of the spare fields within the featureCombination is set to true.  
<endl>  
  
  
<start>  
featurecombinationpreambles  
messagePowerOffsetGroupB  
Threshold for preamble selection. Value is in dB. Value minusinfinity corresponds to –infinity. Value dB0 corresponds to 0 dB, dB5 corresponds to 5 dB and so on (see TS 38.321 [3], clause 5.1.2).  
<endl>  
  
  
<start>  
featurecombinationpreambles  
msgA-RSRP-Threshold  
The UE selects 2-step random access type to perform random access based on this threshold (see TS 38.321 [3], clause 5.1.1). This field is only present if both 2-step and 4-step RA type are configured for the concerned feature combination in the BWP. If configured, this parameter overrides msgA-RSRP-Threshold-r16. If absent, the UE applies msgA-RSRP-Threshold-r16, if configured  
<endl>  
  
  
<start>  
featurecombinationpreambles  
numberOfPreamblesPerSSB-ForThisPartition  
It determines how many consecutive preambles are associated to the Feature Combination starting from the starting preamble(s) per SSB.  
<endl>  
  
  
<start>  
featurecombinationpreambles  
numberOfRA-PreamblesGroupA  
It determines how many consecutive preambles per SSB are associated to Group A starting from the starting preamble(s). The remaining preambles associated to the Feature Combination are associated to Group B  
<endl>  
  
  
<start>  
featurecombinationpreambles  
ra-SizeGroupA  
Transport Blocks size threshold in bits below which the UE shall use a contention-based RA preamble of group A. (see TS 38.321 [3], clause 5.1.2). If this feature combination preambles are associated to a RACH-ConfigCommon-twostepRA, this field correspond to ra-MsgA-SizeGroupA, otherwise it corresponds to ra-Msg3SizeGroupA.  
<endl>  
  
  
<start>  
featurecombinationpreambles  
rsrp-ThresholdSSB  
L1-RSRP threshold used for determining whether a candidate beam may be used by the UE. If this parameter is included in FeatureCombinationPreambles which is included in RACH-ConfigCommonTwoStepRA, it corresponds to msgA-RSRP-ThresholdSSB, as defined in TS 38.321 [3]. If this parameter is included in FeatureCombinationPreambles which is included in RACH-ConfigCommon, it it corresponds to rsrp-ThresholdSSB, as defined in TS 38.321 [3].  
<endl>  
  
  
<start>  
featurecombinationpreambles  
separateMsgA-PUSCH-Config  
If present it specifies how the 2-step RACH preambles identified by this FeatureCombinationPreambles are mapped to a PUSCH slot separate from the one defined in MsgA-ConfigCommon-r16. If the field is absent, the UE should apply the corresponding parameter in the RACH-ConfigCommonTwoStepRA of the BWP which includes the FeatureCombinationPreambles IE.  
<endl>  
  
  
<start>  
featurecombinationpreambles  
ssb-SharedRO-MaskIndex  
Mask index (see TS 38.321 [3]).  
Indicates a subset of ROs where preambles are allocated for this feature combination.  
If this field is configured within FeatureCombinationPreambles which is included in RACH-ConfigCommonTwoStepRA:  
- in case of separate ROs are configured for 4-step and 2-step random access, this field indicates a subset of ROs configured within this RACH-ConfigCommonTwoStepRA;  
- in case shared ROs are used for 4-step and 2-step random access, it indicates the subset of ROs configured within RACH-ConfigCommon, which are the subset of ROs configured for 2-step random access.  
This field is configured when there is more than one RO per SSB. If the field is absent, all ROs configured in RACH-ConfigCommon or RACH-ConfigCommonTwoStepRA containing this FeatureCombinationPreambles are shared.  
<endl>  
  
  
<start>  
featurecombinationpreambles  
startPreambleForThisPartition  
It defines the first preamble associated with the Feature Combination. If the UE is provided with a number N of SSB block indexes associated with one PRACH occasion, and N<1, the first preamble in each PRACH occasion is the one having the same index as indicated by this field. If N>=1, N blocks of preambles associated with the Feature Combination are defined, each having start index + startPreambleForThisPartition, where n refers to SSB block index (see TS 38.213 [13], clause 8.1).  
<endl>

<start>  
freqprioritydedicatedslicing  
dl-ExplicitCarrierFreq  
Indicates the downlink carrier frequency to which SliceInfoListDedicated is associated.  
<endl>

<start>  
freqprioritylistslicing  
dl-ImplicitCarrierFreq  
Indicates the downlink carrier frequency to which sliceInfoList is associated with. The frequency is signalled implicitly, value 0 corresponds to the serving frequency, value 1 corresponds to the first frequency indicated by the InterFreqCarrierFreqList in SIB4, and value 2 corresponds to the second frequency indicated by the InterFreqCarrierFreqList in SIB4, and so on.  
<endl>

<start>  
sliceinfo  
sliceAllowedCellListNR  
List of allow-listed cells for slicing. If present, the cells listed in this list support the corresponding nsag-frequency pair, and the cells not listed in this list do not support the corresponding nsag-frequency pair, according to TS 38.304 [20], clause 5.2.4.11.  
<endl>  
  
  
<start>  
sliceinfo  
sliceCellListNR  
Contains either the list of allow-listed or exclude-listed cells for slicing. If absent, it implies all the cells support the corresponding nsag-frequency pair, according to 38.304 [20], clause 5.2.4.11.  
<endl>  
  
  
<start>  
sliceinfo  
sliceExcludedCellListNR  
List of exclude-listed cells for slicing. If present, the cells listed in this list do not support the corresponding nsag-frequency pair, and the cells not listed in this list support the corresponding nsag-frequency pair, according to TS 38.304 [20], clause 5.2.4.11.  
<endl>

<start>  
frequencyinfodl  
absoluteFrequencyPointA  
Absolute frequency position of the reference resource block (Common RB 0). Its lowest subcarrier is also known as Point A (see TS 38.211 [16], clause 4.4.4.2). Note that the lower edge of the actual carrier is not defined by this field but rather in the scs-SpecificCarrierList.  
<endl>  
  
  
<start>  
frequencyinfodl  
absoluteFrequencySSB  
Frequency of the SSB to be used for this serving cell. SSB related parameters (e.g. SSB index) provided for a serving cell refer to this SSB frequency unless mentioned otherwise. The CD-SSB of the PCell is always on the sync raster. Frequencies are considered to be on the sync raster if they are also identifiable with a GSCN value (see TS 38.101-1 [15]). If the field is absent, the SSB related parameters should be absent, e.g. ssb-PositionsInBurst, ssb-periodicityServingCell and subcarrierSpacing in ServingCellConfigCommon IE. If the field is absent, the UE obtains timing reference from the SpCell or an SCell if applicable as described in TS 38.213 [13], clause 4.1. This is only supported in case the SCell for which the UE obtains the timing reference is in the same frequency band as the cell (i.e. the SpCell or the SCell, respectively) from which the UE obtains the timing reference.  
For cells supporting RedCap, this field corresponds to the CD-SSB.  
<endl>  
  
  
<start>  
frequencyinfodl  
frequencyBandList  
List containing only one frequency band to which this carrier(s) belongs. Multiple values are not supported.  
<endl>  
  
  
<start>  
frequencyinfodl  
scs-SpecificCarrierList  
A set of carriers for different subcarrier spacings (numerologies). Defined in relation to Point A. The network configures a scs-SpecificCarrier at least for each numerology (SCS) that is used e.g. in a BWP (see TS 38.211 [16], clause 5.3).  
<endl>

<start>  
frequencyinfodl-sib  
offsetToPointA  
Represents the offset to Point A as defined in TS 38.211 [16], clause 4.4.4.2.  
<endl>  
  
  
<start>  
frequencyinfodl-sib  
frequencyBandList  
List of one or multiple frequency bands to which this carrier(s) belongs.  
<endl>  
  
  
<start>  
frequencyinfodl-sib  
scs-SpecificCarrierList  
A set of carriers for different subcarrier spacings (numerologies). Defined in relation to Point A (see TS 38.211 [16], clause 5.3). The network configures this for all SCSs that are used in DL BWPs in this serving cell.  
<endl>

<start>  
frequencyinfoul  
absoluteFrequencyPointA  
Absolute frequency of the reference resource block (Common RB 0). Its lowest subcarrier is also known as Point A. Note that the lower edge of the actual carrier is not defined by this field but rather in the scs-SpecificCarrierList (see TS 38.211 [16], clause 4.4.4.2).  
<endl>  
  
  
<start>  
frequencyinfoul  
additionalSpectrumEmission  
The additional spectrum emission requirements to be applied by the UE on this uplink. If the field is absent, the UE uses value 0 for the additionalSpectrumEmission (see TS 38.101-1 [15], tables 6.2.3.1-1A, 6.2A.3.1.1-2 and 6.2A.3.1.2-2, and TS 38.101-2 [39], tables 6.2.3.1-2 and 6.2A.3.1-2). Network configures the same value in additionalSpectrumEmission for all uplink carrier(s) of the same band with UL configured, except for additionalSpectrumEmission value corresponding to NS\_55/NS\_57. If NS\_55/NS\_57 (see TS 38.101-1 [15], table 6.2.3.1-1) is applicable for at least one uplink carrier, the network may configure either NS\_55/NS\_57 or NS\_01 for these uplink carriers, and NS\_01 for the remaining uplink carrier(s) of band n77. The additionalSpectrumEmission is applicable for all uplink carriers of the same band with UL configured.  
<endl>  
  
  
<start>  
frequencyinfoul  
frequencyBandList  
List containing only one frequency band to which this carrier(s) belongs. Multiple values are not supported.  
<endl>  
  
  
<start>  
frequencyinfoul  
frequencyShift7p5khz  
Enable the NR UL transmission with a 7.5 kHz shift to the LTE raster. If the field is absent, the frequency shift is disabled.  
<endl>  
  
  
<start>  
frequencyinfoul  
p-Max  
Maximum transmit power allowed in this serving cell. The maximum transmit power that the UE may use on this serving cell may be additionally limited by p-NR-FR1 (configured for the cell group) and by p-UE-FR1 (configured total for all serving cells operating on FR1). If absent, the UE applies the maximum power according to TS 38.101-1 [15] in case of an FR1 cell or TS 38.101-2 [39] in case of an FR2 cell. In this release of the specification, if p-Max is present on a carrier frequency in FR2, the UE shall ignore the field and applies the maximum power according to TS 38.101-2 [39]. Value in dBm. This field is ignored by IAB-MT, the IAB-MT applies output power and emissions requirements, as specified in TS 38.174 [63].  
<endl>  
  
  
<start>  
frequencyinfoul  
scs-SpecificCarrierList  
A set of carriers for different subcarrier spacings (numerologies). Defined in relation to Point A. The network configures a scs-SpecificCarrier at least for each numerology (SCS) that is used e.g. in a BWP (see TS 38.211 [16], clause 5.3).  
<endl>

<start>  
frequencyinfoul-sib  
absoluteFrequencyPointA  
Absolute frequency of the reference resource block (Common RB 0). Its lowest subcarrier is also known as Point A. Note that the lower edge of the actual carrier is not defined by this field but rather in the scs-SpecificCarrierList (see TS 38.211 [16], clause 4.4.4.2).  
<endl>  
  
  
<start>  
frequencyinfoul-sib  
frequencyBandList  
Provides the frequency band indicator and a list of additionalPmax and additionalSpectrumEmission values as defined in TS 38.101-1 [15], table 6.2.3.1-1, and TS 38.101-2 [39], table 6.2.3.1-2. The UE shall apply the first listed band which it supports in the frequencyBandList field.  
<endl>  
  
  
<start>  
frequencyinfoul-sib  
frequencyShift7p5khz  
Enable the NR UL transmission with a 7.5 kHz shift to the LTE raster. If the field is absent, the frequency shift is disabled.  
<endl>  
  
  
<start>  
frequencyinfoul-sib  
p-Max  
Value in dBm applicable for the cell. If absent the UE applies the maximum power according to TS 38.101-1 [15] in case of an FR1 cell or TS 38.101-2 [39] in case of an FR2 cell. In this release of the specification, if p-Max is present on a carrier frequency in FR2, the UE shall ignore the field and applies the maximum power according to TS 38.101-2 [39]. This field is ignored by IAB-MT, the IAB-MT applies output power and emissions requirements, as specified in TS 38.174 [63].  
<endl>  
  
  
<start>  
frequencyinfoul-sib  
scs-SpecificCarrierList  
A set of carriers for different subcarrier spacings (numerologies). Defined in relation to Point A (see TS 38.211 [16], clause 5.3). The network configures this for all SCSs that are used in UL BWPs configured in this serving cell.  
<endl>

<start>  
highspeedconfig  
HighSpeedDemodCA-Scell  
If the field is present and UE supports demodulationEnhancementCA-r17, the UE shall apply the enhanced demodulation processing for HST-SFN joint transmission scheme with velocity up to 500km/h as specified in TS 38.101-4 [59]. This parameter only applies to SCell.  
<endl>  
  
  
<start>  
highspeedconfig  
highSpeedDemodFlag  
If the field is present and UE supports demodulationEnhancement-r16, the UE shall apply the enhanced demodulation processing for HST-SFN joint transmission scheme with velocity up to 500km/h as specified in TS 38.101-4 [59]. This parameter only applies to SpCell.  
<endl>  
  
  
<start>  
highspeedconfig  
highSpeedDeploymentTypeFR2  
If the field is present, and field value is unidirectional, the UE shall assume uni-directional deployment or if field value is birectional the UE shall assume bidirectional deployment for FR2 up to 350km/h as specified in TS 38.133 [14].  
<endl>  
  
  
<start>  
highspeedconfig  
highSpeedLargeOneSteptUL-TimingFR2  
If the field is present, large one step UE autonomous uplink transmit timing adjustment for FR2 up to 350km/h as specified in TS 38.133 [14] is enabled.  
<endl>  
  
  
<start>  
highspeedconfig  
highSpeedMeasCA-Scell  
If the field is present and UE supports measurementEnhancementCA-r17, the UE shall apply the enhanced RRM requirements to the serving frequency of SCell for carrier aggregation to support high speed up to 500 km/h as specified in TS 38.133 [14].  
<endl>  
  
  
<start>  
highspeedconfig  
highSpeedMeasFlag  
If the field is present and UE supports measurementEnhancement-r16, the UE shall apply the enhanced intra-NR and inter-RAT EUTRAN RRM requirements to support high speed up to 500 km/h as specified in TS 38.133 [14].  
If the field is present and UE supports intraNR-MeasurementEnhancement-r16, the UE shall apply enhanced intra-NR RRM requirement to support high speed up to 500 km/h as specified in TS 38.133 [14].  
If the field is present and UE supports interRAT-MeasurementEnhancement-r16, the UE shall apply enhanced inter-RAT EUTRAN RRM requirement to support high speed up to 500 km/h as specified in TS 38.133 [14].  
This parameter only applies to the serving frequency of SpCell.  
<endl>  
  
  
<start>  
highspeedconfig  
highSpeedMeasFlagFR2  
If the field is present, the UE shall apply enhanced intra-NR RRM requirement set one to support high speed up to 350 km/h for FR2 as specified in TS 38.133 [14], if the field value is set1 or RRM requirement set two if the field value is set2.  
<endl>  
  
  
<start>  
highspeedconfig  
highSpeedMeasInterFreq  
If the field is present and UE supports measurementEnhancementInterFreq-r17, the UE shall apply the enhanced RRM requirements for inter-frequency measurement in RRC\_CONNECTED to support high speed up to 500 km/h as specified in TS 38.133 [14].  
<endl>

<start>  
invalidsymbolpattern  
periodicityAndPattern  
A time domain repetition pattern at which the pattern defined by symbols recurs. This slot pattern repeats itself continuously. When the field is not configured, the UE uses the value n1 (see TS 38.214 [19], clause 6.1).  
<endl>  
  
  
<start>  
invalidsymbolpattern  
symbols  
A symbol level bitmap in time domain (see TS 38.214[19], clause 6.1).  
For oneSlot, if ECP is configured, the first 12 bits represent the symbols within the slot and the last two bits within the bitstring are ignored by the UE; Otherwise, the 14 bits represent the symbols within the slot.  
For twoSlots, if ECP is configured, the first 12 bits represent the symbols within the first slot and the next 12 bits represent the symbols in the second slot and the last four bits within the bit string are ignored by the UE; Otherwise, the first 14 bits represent the symbols within the first slot and the next 14 bits represent the symbols in the second slot.  
For the bits representing symbols in a slot, the most significant bit of the bit string represents the first symbol in the slot and the second most significant bit represents the second symbol in the slot and so on.  
This pattern recurs (in time domain) with the configured periodicityAndPattern.  
<endl>

<start>  
lbt-failurerecoveryconfig  
lbt-FailureDetectionTimer  
Timer for consistent uplink LBT failure detection (see TS 38.321 [3]). Value ms10 corresponds to 10 ms, value ms20 corresponds to 20 ms, and so on.  
<endl>  
  
  
<start>  
lbt-failurerecoveryconfig  
lbt-FailureInstanceMaxCount  
This field determines after how many LBT failure indications received from the physical layer the UE triggers uplink LBT failure recovery (see TS 38.321 [3]). Value n4 corresponds to 4, value n8 corresponds to 8, and so on.  
<endl>

<start>  
locationmeasurementinfo  
carrierFreq  
The EARFCN value of the carrier received from upper layers for which the UE needs to perform the inter-RAT RSTD measurements.  
<endl>  
  
  
<start>  
locationmeasurementinfo  
measPRS-Offset  
Indicates the requested gap offset for performing RSTD measurements towards E-UTRA. It is the smallest subframe offset from the beginning of subframe 0 of SFN=0 of the serving cell of the requested gap for measuring PRS positioning occasions in the carrier frequency carrierFreq for which the UE needs to perform the inter-RAT RSTD measurements. The PRS positioning occasion information is received from upper layers. The value of measPRS-Offset is obtained by mapping the starting subframe of the PRS positioning occasion in the measured cell onto the corresponding subframe in the serving cell and is calculated as the serving cell's number of subframes from SFN=0 mod 40.  
The UE shall take into account any additional time required by the UE to start PRS measurements on the other carrier when it does this mapping for determining the measPRS-Offset.  
NOTE: Figure 6.2.2-1 in TS 36.331[10] illustrates the measPRS-Offset field.  
<endl>  
  
  
<start>  
locationmeasurementinfo  
dl-PRS-PointA  
The ARFCN value of the carrier received from upper layers for which the UE needs to perform the NR DL-PRS measurements.  
<endl>  
  
  
<start>  
locationmeasurementinfo  
nr-MeasPRS-RepetitionAndOffset  
Indicates the gap periodicity in ms and offset in number of subframes of the requested measurement gap for performing NR DL-PRS measurements.  
<endl>  
  
  
<start>  
locationmeasurementinfo  
nr-MeasPRS-length  
Indicates measurement gap length in ms of the requested measurement gap for performing NR DL-PRS measurements. The measurement gap length is according to in Table 9.1.2-1 in TS 38.133 [14].  
<endl>

<start>  
logicalchannelconfig  
allowedCG-List  
This restriction applies only when the UL grant is a configured grant. If present, UL MAC SDUs from this logical channel can only be mapped to the indicated configured grant configuration. If the size of the sequence is zero, then UL MAC SDUs from this logical channel cannot be mapped to any configured grant configurations. If the field is not present, UL MAC SDUs from this logical channel can be mapped to any configured grant configurations. If the field configuredGrantType1Allowed is present, only those configured grant type 1 configuration indicated in this sequence are allowed for use by this logical channel; otherwise, this sequence shall not include any configured grant type 1 configuration. Corresponds to "allowedCG-List" as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
logicalchannelconfig  
allowedHARQ-mode  
Indicates the allowed HARQ mode of a HARQ process mapped to this logical channel. If the parameter is absent, there is no restriction for HARQ mode for the mapping. This field applies to SRB1, SRB2 and DRBs.  
<endl>  
  
  
<start>  
logicalchannelconfig  
allowedPHY-PriorityIndex  
This restriction applies only when the UL grant is a dynamic grant. If the field is present and the dynamic grant has a PHY-priority index, UL MAC SDUs from this logical channel can only be mapped to the dynamic grants indicating PHY-priority index equal to the values configured by this field. If the field is present and the dynamic grant does not have a PHY-priority index, UL MAC SDUs from this logical channel can only be mapped to this dynamic grant if the value of the field is p0, see TS 38.213 [13], clause 9. If the field is not present, UL MAC SDUs from this logical channel can be mapped to any dynamic grants. Corresponds to "allowedPHY-PriorityIndex" as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
logicalchannelconfig  
allowedSCS-List  
If present, UL MAC SDUs from this logical channel can only be mapped to the indicated numerology. Otherwise, UL MAC SDUs from this logical channel can be mapped to any configured numerology. Corresponds to 'allowedSCS-List' as specified in TS 38.321 [3].  
Only the following values are applicable depending on the used frequency:  
FR1: 15, 30, or 60 kHz  
FR2-1: 60 or 120 kHz  
FR2-2: 120, 480, or 960 kHz  
<endl>  
  
  
<start>  
logicalchannelconfig  
allowedServingCells  
If present, UL MAC SDUs from this logical channel can only be mapped to the serving cells indicated in this list. Otherwise, UL MAC SDUs from this logical channel can be mapped to any configured serving cell of this cell group. Corresponds to 'allowedServingCells' in TS 38.321 [3].  
<endl>  
  
  
<start>  
logicalchannelconfig  
bitRateMultiplier  
Bit rate multiplier for recommended bit rate MAC CE as specified in TS 38.321 [3]. Value x40 indicates bit rate multiplier 40, value x70 indicates bit rate multiplier 70 and so on.  
<endl>  
  
  
<start>  
logicalchannelconfig  
bitRateQueryProhibitTimer  
The timer is used for bit rate recommendation query in TS 38.321 [3], in seconds. Value s0 means 0 s, s0dot4 means 0.4 s and so on.  
<endl>  
  
  
<start>  
logicalchannelconfig  
bucketSizeDuration  
Value in ms. ms5 corresponds to 5 ms, value ms10 corresponds to 10 ms, and so on.  
<endl>  
  
  
<start>  
logicalchannelconfig  
channelAccessPriority  
Indicates the Channel Access Priority Class (CAPC), as specified in TS 38.300 [2], to be used on uplink transmissions for operation with shared spectrum channel access in FR1. The network configures this field only for SRB2 and DRBs.  
<endl>  
  
  
<start>  
logicalchannelconfig  
configuredGrantType1Allowed  
If present, or if the capability lcp-Restriction as specified in TS 38.306 [26] is not supported, UL MAC SDUs from this logical channel can be transmitted on a configured grant type 1. Otherwise, UL MAC SDUs from this logical channel cannot be transmitted on a configured grant type 1. Corresponds to 'configuredGrantType1Allowed' in TS 38.321 [3].  
<endl>  
  
  
<start>  
logicalchannelconfig  
logicalChannelGroup, logicalChannelGroupIAB-Ext  
ID of the logical channel group, as specified in TS 38.321 [3], which the logical channel belongs to. The logicalChannelGroupIAB-Ext is only applicable to the IAB-MT. When logicalChannelGroupIAB-Ext is configured, logicalChannelGroup shall be ignored.  
<endl>  
  
  
<start>  
logicalchannelconfig  
logicalChannelSR-Mask  
Controls SR triggering when a configured uplink grant of type1 or type2 is configured. true indicates that SR masking is configured for this logical channel as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
logicalchannelconfig  
logicalChannelSR-DelayTimerApplied  
Indicates whether to apply the delay timer for SR transmission for this logical channel. Set to false if logicalChannelSR-DelayTimer is not included in BSR-Config.  
<endl>  
  
  
<start>  
logicalchannelconfig  
maxPUSCH-Duration  
If present, UL MAC SDUs from this logical channel can only be transmitted using uplink grants that result in a PUSCH duration shorter than or equal to the duration indicated by this field. Otherwise, UL MAC SDUs from this logical channel can be transmitted using an uplink grant resulting in any PUSCH duration. Corresponds to "maxPUSCH-Duration" in TS 38.321 [3]. The PUSCH duration is calculated based on the same length of all symbols, and the shortest length applies if the symbol lengths are different.  
<endl>  
  
  
<start>  
logicalchannelconfig  
priority  
Logical channel priority, as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
logicalchannelconfig  
prioritisedBitRate  
Value in kiloBytes/s. Value kBps0 corresponds to 0 kiloBytes/s, value kBps8 corresponds to 8 kiloBytes/s, value kBps16 corresponds to 16 kiloBytes/s, and so on. For SRBs, the value can only be set to infinity.  
<endl>  
  
  
<start>  
logicalchannelconfig  
schedulingRequestId  
If present, it indicates the scheduling request configuration applicable for this logical channel, as specified in TS 38.321 [3].  
<endl>

<start>  
lte-neighcellscrs-assistinfo  
neighCarrierBandwidthDL  
Indicates the channel bandwidth of the neighbour LTE cell in number of PRBs. If the field is absent, the UE applies the value of carrierBandwidthDL indicated in RateMatchPatternLTE-CRS for this serving cell, if configured.  
<endl>  
  
  
<start>  
lte-neighcellscrs-assistinfo  
neighCarrierFreqDL  
Indicates the downlink centre frequency of the neighbour LTE cell. If the field is absent, the UE applies the value of carrierFreqDL indicated in RateMatchPatternLTE-CRS for this serving cell, if configured.  
<endl>  
  
  
<start>  
lte-neighcellscrs-assistinfo  
neighCellId  
Indicates the physical cell ID of the neighbour LTE cell for which the other fields within the same LTE-NeighCellsCRS-AssistInfo apply.  
If the IE LTE-NeighCellsCRS-AssistInfoList contains multiple list entries, either this field or neighV-Shift is included in each instance.  
If the IE LTE-NeighCellsCRS-AssistInfoList contains multiple list entries, the entry with neighV-Shift is only used for neighbour LTE cells for which neighCellId is not provided (i.e. the entry with neighCellId takes precedence over the entry with neighV-Shift, if provided).  
If the IE LTE-NeighCellsCRS-AssistInfoList contains one list entry with neither this field nor neighV-Shift, the information within the entry applies to all neighbour LTE cells.  
<endl>  
  
  
<start>  
lte-neighcellscrs-assistinfo  
neighCRS-muting  
Indicates whether the CRS interference mitigation is enabled in the neighbour LTE cell, as specified in TS 36.133 [40], clause 3.6.1.1.  
<endl>  
  
  
<start>  
lte-neighcellscrs-assistinfo  
neighMBSFN-SubframeConfigList  
Indicates the MBSFN subframe configuration of the neighbour LTE cell. If RateMatchPatternLTE-CRS is configured for this serving cell and the field is absent, the UE applies the value of mbsfn-SubframeConfigList indicated in RateMatchPatternLTE-CRS for this serving cell if configured; otherwise, if the field is absent, the UE assumes MBSFN is not configured in the neighbour LTE cell.  
<endl>  
  
  
<start>  
lte-neighcellscrs-assistinfo  
neighNrofCRS-Ports  
Indicates the CRS antenna ports number of the neighbour LTE cell. If the field is absent, the UE applies the value of nrofCRS-Ports indicated in RateMatchPatternLTE-CRS for this serving cell, if configured. If RateMatchPatternLTE-CRS is not configured for this serving cell and the field is absent, the UE applies the default value n4.  
<endl>  
  
  
<start>  
lte-neighcellscrs-assistinfo  
neighV-Shift  
Indicates the shifting value v-shift of neighbour LTE cells for which the other fields within the same LTE-NeighCellsCRS-AssistInfo apply.  
<endl>

<start>  
mac-cellgroupconfig  
allowCSI-SRS-Tx-MulticastDRX-Active  
Used to control the CSI/SRS transmission during MBS multicast DRX ActiveTime, see TS 38.321 [3].  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
csi-Mask  
If set to true, the UE limits CSI reports to the on-duration period of the DRX cycle, see TS 38.321 [3].  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
dataInactivityTimer  
Releases the RRC connection upon data inactivity as specified in clause 5.3.8.5 and in TS 38.321 [3]. Value s1 corresponds to 1 second, value s2 corresponds to 2 seconds, and so on.  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
drx-Config, drx-ConfigExt  
Used to configure DRX as specified in TS 38.321 [3]. Network only configures drx-ConfigExt when drx-Config is configured.  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
drx-ConfigSecondaryGroup  
Used to configure DRX related parameters for the second DRX group as specified in TS 38.321 [3]. The network does not configure secondary DRX group with DCP simultaneously nor secondary DRX group with a dormant BWP simultaneously.  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
drx-ConfigSL  
Used to configure additional DRX parameters for the UE performing sidelink operation with resource allocation mode 1, as specified in TS 38.321 [3]. Network only configures this field if sl-ScheduledConfig is configured and drx-Config is configured.  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
drx-LastTransmissionUL  
If this field is present, the start of the drx-HARQ-RTT-TimerUL is after the last transmission within a bundle, see TS 38.321 [3].  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
g-RNTI-ConfigToAddModList  
List of G-RNTI configurations to add or modify. Up to 8 G-RNTIs can be configured in total in this release based on the UE capability.  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
g-RNTI-ConfigToReleaseList  
List of G-RNTI configurations to release.  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
g-CS-RNTI-ConfigToAddModList  
List of G-CS-RNTI configurations to add or modify. Up to 8 G-CS-RNTIs can be configured in total in this release based on the UE capability.  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
g-CS-RNTI-ConfigToReleaseList  
List of G-CS-RNTI configurations to release.  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
intraCG-Prioritization  
Used to enable HARQ process ID selection based on LCH-priority for one CG as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
lch-BasedPrioritization  
If this field is present, the corresponding MAC entity of the UE is configured with prioritization between overlapping grants and between scheduling request and overlapping grants based on LCH priority, see TS 38.321 [3]. The network does not configure lch-BasedPrioritization with enhancedSkipUplinkTxDynamic simultaneously nor lch-BasedPrioritization with enhancedSkipUplinkTxConfigured simultaneously.  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
posMG-Request  
Indicates whether UE is configured to send UL MAC CE for Positioning Measurement Gap Activation/Deactivation Request, as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
schedulingRequestID-BFR-SCell  
Indicates the scheduling request configuration applicable for BFR on SCell, as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
schedulingRequestID-BFR  
Indicates the scheduling request configuration (SchedulingRequestConfig) that the UE shall use upon detecting a beam failure on the detection resources configured in failureDetectionSet1 of a serving cell while beam failure is not detected on resources configured in failureDetectionSet2 of the same serving cell.  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
schedulingRequestID-BFR2  
Indicates the scheduling request configuration (SchedulingRequestConfig) that the UE shall use upon detecting a beam failure on the detection resources configured in failureDetectionSet2 of a serving cell while beam failure is not detected on resources configured in failureDetectionSet1 of the same serving cell.  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
schedulingRequestID-LBT-SCell  
Indicates the scheduling request configuration applicable for consistent uplink LBT recovery on SCell, as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
schedulingRequestID-PosMG-Request  
Indicates the scheduling request configuration applicable for Positioning Measurement Gap Activation/Deactivation Request, as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
skipUplinkTxDynamic, enhancedSkipUplinkTxDynamic, enhancedSkipUplinkTxConfigured  
If set to true, the UE skips UL transmissions as described in TS 38.321 [3]. If the UE is configured with enhancedSkipUplinkTxDynamic or enhancedSkipUplinkTxConfigured with value true, REPETITION\_NUMBER (as specified in TS 38.321 [3], clause 5.4.2.1) of the corresponding PUSCH transmission of the uplink grant shall be equal to 1.  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
tag-Config  
The field is used to configure parameters for a time-alignment group. The field is not present if any DAPS bearer is configured.  
<endl>  
  
  
<start>  
mac-cellgroupconfig  
usePreBSR  
If set to true, the MAC entity of the IAB-MT may use the Pre-emptive BSR, see TS 38.321 [3].  
<endl>

<start>  
mbs-rnti-specificconfig  
drx-ConfigPTM  
Used to configure DRX for PTM transmission as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
mbs-rnti-specificconfig  
g-CS-RNTI  
Used to scramble the SPS group-common PDSCH and activation/deactivation of SPS group-common PDSCH for one or more MBS multicast services.  
<endl>  
  
  
<start>  
mbs-rnti-specificconfig  
g-RNTI  
Used to scramble the scheduling and transmission of PTM for one or more MBS multicast services.  
<endl>  
  
  
<start>  
mbs-rnti-specificconfig  
groupCommon-RNTI  
Used to configure g-RNTI or g-CS-RNTI.  
<endl>  
  
  
<start>  
mbs-rnti-specificconfig  
harq-FeedbackEnablerMulticast  
Indicates whether the UE shall provide HARQ feedback for MBS multicast. Value dci-enabler means that whether the UE shall provide HARQ feedback for MBS multicast is indicated by DCI as specified in TS 38.213 [13]. Value enabled means the UE shall always provide HARQ feedback for MBS multicast. When the field is absent, the UE does not provide HARQ feedback for MBS multicast (see TS 38.213 [13], clause 18).  
<endl>  
  
  
<start>  
mbs-rnti-specificconfig  
harq-FeedbackOptionMulticast  
Indicates the feedback mode for MBS multicast dynamically scheduled PDSCH or SPS PDSCH.  
<endl>  
  
  
<start>  
mbs-rnti-specificconfig  
mbs-RNTI-SpecificConfigId  
An identifier of the RNTI specific configuration for MBS multicast.  
<endl>  
  
  
<start>  
mbs-rnti-specificconfig  
pdsch-AggregationFactor  
Number of repetitions for dynamically scheduled MBS multicast data (see TS 38.214 [19], clause 5.1.2.1). When the field is absent and groupCommon-RNTI is set to g-RNTI, the UE applies the value 1.  
<endl>

<start>  
measconfig  
interFrequencyConfig-NoGap-r16  
If the field is set to true, UE is configured to perform SSB based inter-frequency measurement without measurement gaps when the inter-frequency SSB is completely contained in the active DL BWP of the UE, as specified in TS 38.133 [14], clause 9.3. Otherwise, the SSB based inter-frequency measurement is performed within measurement gaps. In NR-DC, the field can only be configured in the measConfig associated with MCG, and when configured, it applies to all the inter-frequency measurements configured by MN and SN.  
<endl>  
  
  
<start>  
measconfig  
measGapConfig  
Used to setup and release measurement gaps in NR.  
<endl>  
  
  
<start>  
measconfig  
measIdToAddModList  
List of measurement identities to add and/or modify.  
<endl>  
  
  
<start>  
measconfig  
measIdToRemoveList  
List of measurement identities to remove.  
<endl>  
  
  
<start>  
measconfig  
measObjectToAddModList  
List of measurement objects to add and/or modify.  
<endl>  
  
  
<start>  
measconfig  
measObjectToRemoveList  
List of measurement objects to remove.  
<endl>  
  
  
<start>  
measconfig  
reportConfigToAddModList  
List of measurement reporting configurations to add and/or modify.  
<endl>  
  
  
<start>  
measconfig  
reportConfigToRemoveList  
List of measurement reporting configurations to remove.  
<endl>  
  
  
<start>  
measconfig  
s-MeasureConfig  
Threshold for NR SpCell RSRP measurement controlling when the UE is required to perform measurements on non-serving cells. Choice of ssb-RSRP corresponds to cell RSRP based on SS/PBCH block and choice of csi-RSRP corresponds to cell RSRP of CSI-RS.  
<endl>  
  
  
<start>  
measconfig  
measGapSharingConfig  
Specifies the measurement gap sharing scheme and controls setup/ release of measurement gap sharing.  
<endl>

<start>  
measgapconfig  
gapAssociationPRS  
Indicates that PRS measurement is associated with this measurement gap. The network only includes this field for one per UE gap. If concurrent gap (i.e. one of the gap combination as defined in Table 9.1.8-1 in TS 38.133 [14]) is configured and no gap is configured with this field, the PRS measurement is associated with the gap configured via gapUE, if available.  
<endl>  
  
  
<start>  
measgapconfig  
gapFR1  
Indicates measurement gap configuration that applies to FR1 only. In (NG)EN-DC, gapFR1 cannot be set up by NR RRC (i.e. only LTE RRC can configure FR1 measurement gap). In NE-DC, gapFR1 can only be set up by NR RRC (i.e. LTE RRC cannot configure FR1 gap). In NR-DC, gapFR1 can only be set up in the measConfig associated with MCG. gapFR1 can not be configured together with gapUE. The applicability of the FR1 measurement gap is according to Table 9.1.2-2 and Table 9.1.2-3 in TS 38.133 [14].  
<endl>  
  
  
<start>  
measgapconfig  
gapFR2  
Indicates measurement gap configuration applies to FR2 only. In (NG)EN-DC or NE-DC, gapFR2 can only be set up by NR RRC (i.e. LTE RRC cannot configure FR2 gap). In NR-DC, gapFR2 can only be set up in the measConfig associated with MCG. gapFR2 cannot be configured together with gapUE. The applicability of the FR2 measurement gap is according to Table 9.1.2-2 and Table 9.1.2-3 in TS 38.133 [14].  
<endl>  
  
  
<start>  
measgapconfig  
gapOffset  
Value gapOffset is the gap offset of the gap pattern with MGRP indicated in the field mgrp. The value range is from 0 to mgrp-1. If ncsgInd-r17 is present, this offset value refers to the starting point of VIL1 (the visible interruption length before the ML).  
<endl>  
  
  
<start>  
measgapconfig  
gapPriority  
Indicates the priority of this measurement gap (see TS 38.133 [14], clause 9.1.8.3). Value 1 indicates highest priority, value 2 indicates second level priority, and so on.  
<endl>  
  
  
<start>  
measgapconfig  
gapSharing  
Indicates the measurement gap sharing scheme that applies to this GapConfig. For applicability of the different gap sharing schemes, see TS 38.133 [14]. Value scheme00 corresponds to scheme "00", value scheme01 corresponds to scheme "01", and so on.  
<endl>  
  
  
<start>  
measgapconfig  
gapToAddModList  
A list of of measurement gap configuration to be added or modified. If more than one measurement gap is configured (i.e. concurrent measurement gap as specified in TS 38.133[14], clause 9.1.8), the maximum number of configured measurement gap is limited by the gap combinations defined in Table 9.1.8-1 in TS 38.133 [14]. The network configures at most one NCSG or pre-configured measurement gap for a given gap type. In this version of the specification, the network configures this field only in NR standalone. This field is used only for a UE that supports pre-configured measurement gap, concurrent measurement gap, or NCSG. In this version of the specification, the network does not configure concurrent measurement gap together with MUSIM gap or preconfigured measurement gap for positioning.  
<endl>  
  
  
<start>  
measgapconfig  
gapToReleaseList  
A list of measurement gap configuration to be released.  
<endl>  
  
  
<start>  
measgapconfig  
gapType  
Indicates the type of this measurement gap. Value perUE indicates that it is a per UE measurement gap, value perFR1 indicates that it is an FR1 measurement gap, and value perFR2 indicates that it is an FR2 measurement gap.  
<endl>  
  
  
<start>  
measgapconfig  
gapUE  
Indicates measurement gap configuration that applies to all frequencies (FR1 and FR2). In (NG)EN-DC, gapUE cannot be set up by NR RRC (i.e. only LTE RRC can configure per UE measurement gap). In NE-DC, gapUE can only be set up by NR RRC (i.e. LTE RRC cannot configure per UE gap). In NR-DC, gapUE can only be set up in the measConfig associated with MCG. If gapUE is configured, then neither gapFR1 nor gapFR2 can be configured. The applicability of the per UE measurement gap is according to Table 9.1.2-2 and Table 9.1.2-3 in TS 38.133 [14].  
<endl>  
  
  
<start>  
measgapconfig  
measGapId  
The ID of this measurement gap configuration.  
<endl>  
  
  
<start>  
measgapconfig  
mgl  
Value mgl is the measurement gap length in ms of the measurement gap. If ncsgInd-r17 is not present, the measurement gap length is according to in Table 9.1.2-1 in TS 38.133 [14]. If ncsgInd-r17 is present, this field indicates the measurement length (ML) in NCSG pattern and is configured according to Table 9.1.9.3-1 in TS 38.133 [14]. Value ms1dot5 corresponds to 1.5 ms, ms3 corresponds to 3 ms and so on. If mgl-r16 is present, UE shall ignore the mgl (without suffix). Value ms1, ms2, and ms5 can only be configured if ncsgInd is present.  
<endl>  
  
  
<start>  
measgapconfig  
mgrp  
If ncsgInd-r17 is not present, the mgrp field indicates the measurement gap repetition period in (ms) of the measurement gap according to Table 9.1.2-1 in TS 38.133 [14]. If ncsgInd-r17 is present, the mgrp field indicates the Visible Interruption Repetition Period (VIRP) of NCSG pattern and is configured according to Table 9.1.9.3-1 in TS 38.133 [14].  
<endl>  
  
  
<start>  
measgapconfig  
mgta  
Value mgta is the measurement gap timing advance in ms. The applicability of the measurement gap timing advance is according to clause 9.1.2 of TS 38.133 [14], or according to clause 9.1.9 of TS 38.133 [14] if ncsgInd is present. Value ms0 corresponds to 0 ms, ms0dot25 corresponds to 0.25 ms, ms0dot5 corresponds to 0.5 ms and ms0dot75 corresponds to 0.75 ms. For FR2, the network only configures 0 ms and 0.25 ms if ncsgInd is not present. If ncsgInd is present, the network only configures 0ms for per-UE NCSG and FR1 NCSG and only configures 0ms or 0.75ms for FR2 NCSG. Value ms0dot75 can only be configured if ncsgInd is present.  
<endl>  
  
  
<start>  
measgapconfig  
ncsgInd  
Indicates that the measurement gap is a NCSG as specified in 38.133 [14].  
<endl>  
  
  
<start>  
measgapconfig  
posMeasGapPreConfigToAddModList  
List of preconfigured measurement gap for positioning to add and/or modify. All the gaps configured are associated with the measurement of PRS for RSTD, UE-RxTx Time Difference, PRS-RSRP and PRS-RSRPP as defined in TS 38.215 [9]. In this version of the specification, the network does not configure preconfigured measurement gap for positioning together with concurrent measurement gap or MUSIM gap.  
<endl>  
  
  
<start>  
measgapconfig  
posMeasGapPreConfigToReleaseList  
List of preconfigured measurement gap for positioning to release.  
<endl>  
  
  
<start>  
measgapconfig  
preConfigInd  
Indicates whether the measurement gap is a pre-configured measurement gap.  
<endl>  
  
  
<start>  
measgapconfig  
refFR2ServCellAsyncCA  
Indicates the FR2 serving cell identifier whose SFN and subframe is used for FR2 gap calculation for this gap pattern with asynchronous CA involving FR2 carrier(s).  
<endl>  
  
  
<start>  
measgapconfig  
refServCellIndicator  
Indicates the serving cell whose SFN and subframe are used for gap calculation for this gap pattern. Value pCell corresponds to the PCell, pSCell corresponds to the PSCell, and mcg-FR2 corresponds to a serving cell on FR2 frequency in MCG.  
<endl>

<start>  
measgapsharingconfig  
gapSharingFR1  
Indicates the measurement gap sharing scheme that applies to the gap set via gapFR1. In (NG)EN-DC, gapSharingFR1 cannot be set up by NR RRC (i.e. only LTE RRC can configure FR1 gap sharing). In NE-DC, gapSharingFR1 can only be set up by NR RRC (i.e. LTE RRC cannot configure FR1 gap sharing). In NR-DC, gapSharingFR1 can only be set up in the measConfig associated with MCG. gapSharingFR1 can not be configured together with gapSharingUE. For the applicability of the different gap sharing schemes, see TS 38.133 [14]. Value scheme00 corresponds to scheme "00", value scheme01 corresponds to scheme "01", and so on.  
<endl>  
  
  
<start>  
measgapsharingconfig  
gapSharingFR2  
Indicates the measurement gap sharing scheme that applies to the gap set via gapFR2. In (NG)EN-DC or NE-DC, gapSharingFR2 can only be set up by NR RRC (i.e. LTE RRC cannot configure FR2 gap sharing). In NR-DC, gapSharingFR2 can only be set up by MCG in the measConfig associated with MCG. gapSharingFR2 cannot be configured together with gapSharingUE. For applicability of the different gap sharing schemes, see TS 38.133 [14]. Value scheme00 corresponds to scheme "00", value scheme01 corresponds to scheme "01", and so on.  
<endl>  
  
  
<start>  
measgapsharingconfig  
gapSharingUE  
Indicates the measurement gap sharing scheme that applies to the gap set via gapUE. In (NG)EN-DC, gapSharingUE cannot be set up by NR RRC (i.e. only LTE RRC can configure per UE gap sharing). In NE-DC, gapSharingUE can only be set up by NR RRC (i.e. LTE RRC cannot configure per UE gap sharing). In NR-DC, gapSharingUE can only be set up in the measConfig associated with MCG. If gapSharingUE is configured, then neither gapSharingFR1 nor gapSharingFR2 can be configured. For the applicability of the different gap sharing schemes, see TS 38.133 [14]. Value scheme00 corresponds to scheme "00", value scheme01 corresponds to scheme "01", and so on.  
<endl>

<start>  
measidleconfig  
absThreshSS-BlocksConsolidation  
Threshold for consolidation of L1 measurements per RS index.  
<endl>  
  
  
<start>  
measidleconfig  
beamMeasConfigIdle  
Indicates the beam level measurement configuration.  
<endl>  
  
  
<start>  
measidleconfig  
carrierFreq  
Indicates the NR carrier frequency to be used for measurements during RRC\_IDLE or RRC\_INACTIVE.  
<endl>  
  
  
<start>  
measidleconfig  
carrierFreqEUTRA  
Indicates the E-UTRA carrier frequency to be used for measurements during RRC\_IDLE or RRC\_INACTIVE.  
<endl>  
  
  
<start>  
measidleconfig  
deriveSSB-IndexFromCell  
This field indicates whether the UE may use the timing of any detected cell on that frequency to derive the SSB index of all neighbour cells on that frequency. If this field is set to true, the UE assumes SFN and frame boundary alignment across cells on the neighbor frequency as specified in TS 38.133 [14].  
<endl>  
  
  
<start>  
measidleconfig  
frequencyBandList  
Indicates the list of frequency bands for which the NR idle/inactive measurement parameters apply. The UE shall select the first listed band which it supports in the frequencyBandList field to represent the NR neighbour carrier frequency.  
<endl>  
  
  
<start>  
measidleconfig  
includeBeamMeasurements  
Indicates whether or not the UE shall include beam measurements in the NR idle/inactive measurement results.  
<endl>  
  
  
<start>  
measidleconfig  
maxNrofRS-IndexesToReport  
Max number of beam indices to include in the idle/inactive measurement result.  
<endl>  
  
  
<start>  
measidleconfig  
measCellListEUTRA  
Indicates the list of E-UTRA cells which the UE is requested to measure and report for idle/inactive measurements.  
<endl>  
  
  
<start>  
measidleconfig  
measCellListNR  
Indicates the list of NR cells which the UE is requested to measure and report for idle/inactive measurements.  
<endl>  
  
  
<start>  
measidleconfig  
measIdleCarrierListEUTRA  
Indicates the E-UTRA carriers to be measured during RRC\_IDLE or RRC\_INACTIVE.  
<endl>  
  
  
<start>  
measidleconfig  
measIdleCarrierListNR  
Indicates the NR carriers to be measured during RRC\_IDLE or RRC\_INACTIVE.  
<endl>  
  
  
<start>  
measidleconfig  
measIdleDuration  
Indicates the duration for performing idle/inactive measurements while in RRC\_IDLE or RRC\_INACTIVE. Value sec10 correspond to 10 seconds, value sec30 to 30 seconds and so on.  
<endl>  
  
  
<start>  
measidleconfig  
nrofSS-BlocksToAverage  
Number of SS blocks to average for cell measurement derivation.  
<endl>  
  
  
<start>  
measidleconfig  
qualityThreshold  
Indicates the quality thresholds for reporting the measured cells for idle/inactive NR measurements.  
<endl>  
  
  
<start>  
measidleconfig  
qualityThresholdEUTRA  
Indicates the quality thresholds for reporting the measured cells for idle/inactive E-UTRA measurements.  
<endl>  
  
  
<start>  
measidleconfig  
reportQuantities  
Indicates which measurement quantities UE is requested to report in the idle/inactive measurement report.  
<endl>  
  
  
<start>  
measidleconfig  
reportQuantitiesEUTRA  
Indicates which E-UTRA measurement quantities the UE is requested to report in the idle/inactive measurement report.  
<endl>  
  
  
<start>  
measidleconfig  
reportQuantityRS-Indexes  
Indicates which measurement information per beam index the UE shall include in the NR idle/inactive measurement results.  
<endl>  
  
  
<start>  
measidleconfig  
smtc  
Indicates the measurement timing configuration for inter-frequency measurement. If this field is absent in VarMeasIdleConfig, the UE assumes that SSB periodicity is 5 ms in this frequency.  
<endl>  
  
  
<start>  
measidleconfig  
ssbSubcarrierSpacing  
Indicates subcarrier spacing of SSB.  
Only the following values are applicable depending on the used frequency:  
FR1: 15 or 30 kHz  
FR2-1: 120 or 240 kHz  
FR2-2: 120, 480, or 960 kHz  
<endl>  
  
  
<start>  
measidleconfig  
ssb-ToMeasure  
The set of SS blocks to be measured within the SMTC measurement duration (see TS 38.215 [9]). When the field is absent in VarMeasIdleConfig, the UE measures on all SS-blocks.  
<endl>  
  
  
<start>  
measidleconfig  
ss-RSSI-Measurement  
Indicates the SSB-based RSSI measurement configuration. If the field is absent in VarMeasIdleConfig, the UE behaviour is defined in TS 38.215 [89], clause 5.1.3.  
<endl>  
  
  
<start>  
measidleconfig  
validityAreaList  
Indicates the list of frequencies and optionally, for each frequency, a list of cells within which the UE is required to perform measurements while in RRC\_IDLE and RRC\_INACTIVE.  
<endl>

<start>  
cli-resourceconfig  
srs-ResourceConfig  
SRS resources to be used for CLI measurements.  
<endl>  
  
  
<start>  
cli-resourceconfig  
rssi-ResourceConfig  
CLI-RSSI resources to be used for CLI measurements.  
<endl>

<start>  
measobjectcli  
cli-ResourceConfig  
SRS and/or CLI-RSSI resource configuration for CLI measurement.  
<endl>

<start>  
srs-resourceconfigcli  
refBWP  
DL BWP id that is used to derive the reference point of the SRS resource (see TS 38.211[16], clause 6.4.1.4.3)  
<endl>  
  
  
<start>  
srs-resourceconfigcli  
refServCellIndex  
The index of the reference serving cell that the refBWP belongs to. If this field is absent, the reference serving cell is PCell.  
<endl>  
  
  
<start>  
srs-resourceconfigcli  
srs-SCS  
Subcarrier spacing for SRS.  
Only the following values are applicable depending on the used frequency:  
FR1: 15, 30, or 60 kHz  
FR2-1: 60 or 120 kHz  
FR2-2: 120, 480, or 960 kHz  
<endl>

<start>  
rssi-resourceconfigcli  
nrofPRBs  
Allowed size of the measurement BW. Only multiples of 4 are allowed. The smallest configurable number is the minimum of 4 and the width of the active DL BWP. If the configured value is larger than the width of the active DL BWP, the UE shall assume that the actual CLI-RSSI resource bandwidth is within the active DL BWP.  
<endl>  
  
  
<start>  
rssi-resourceconfigcli  
nrofSymbols  
Within a slot that is configured for CLI-RSSI measurement (see slotConfiguration), the UE measures the RSSI from startPosition to startPosition + nrofSymbols - 1. The configured CLI-RSSI resource does not exceed the slot boundary of the reference SCS. If the SCS of configured DL BWP(s) is larger than the reference SCS, network configures startPosition and nrofSymbols such that the configured CLI-RSSI resource not to exceed the slot boundary corresponding to the configured BWP SCS. If the reference SCS is larger than SCS of configured DL BWP(s), network ensures startPosition and nrofSymbols are integer multiple of reference SCS divided by configured BWP SCS.  
<endl>  
  
  
<start>  
rssi-resourceconfigcli  
refServCellIndex  
The index of the reference serving cell. Frequency reference point of the RSSI resource is subcarrier 0 of CRB0 of the reference serving cell. If this field is absent, the reference serving cell is PCell.  
<endl>  
  
  
<start>  
rssi-resourceconfigcli  
rssi-PeriodicityAndOffset  
Periodicity and slot offset for this CLI-RSSI resource. All values are in "number of slots". Value sl1 corresponds to a periodicity of 1 slot, value sl2 corresponds to a periodicity of 2 slots, and so on. For each periodicity the corresponding offset is given in number of slots.  
<endl>  
  
  
<start>  
rssi-resourceconfigcli  
rssi-SCS  
Reference subcarrier spacing for CLI-RSSI measurement.  
Only the following values are applicable depending on the used frequency:  
FR1: 15, 30, or 60 kHz  
FR2-1: 60 or 120 kHz  
FR2-2: 120, 480, or 960 kHz  
UE performs CLI-RSSI measurement with the SCS of the active bandwidth part within the configured CLI-RSSI resource in the active BWP regardless of the reference SCS of the measurement resource.  
<endl>  
  
  
<start>  
rssi-resourceconfigcli  
startPosition  
OFDM symbol location of the CLI-RSSI resource within a slot.  
<endl>  
  
  
<start>  
rssi-resourceconfigcli  
startPRB  
Starting PRB index of the measurement bandwidth. For the case where the reference subcarrier spacing is smaller than subcarrier spacing of active DL BWP(s), network configures startPRB and nrofPRBs are as a multiple of active BW SCS divided by reference SCS.  
<endl>

<start>  
eutran-excludedcell  
cellIndexEUTRA  
Entry index in the cell list.  
<endl>  
  
  
<start>  
eutran-excludedcell  
physicalCellIdRange  
Physical cell identity or a range of physical cell identities.  
<endl>

<start>  
eutran-cell  
physicalCellId  
Physical cell identity of a cell in the cell list.  
<endl>  
  
  
<start>  
eutran-cell  
cellIndividualOffset  
Cell individual offset applicable to a specific cell. Value dB-24 corresponds to -24 dB, dB-22 corresponds to -22 dB and so on.  
<endl>

<start>  
measobjecteutra  
allowedMeasBandwidth  
The maximum allowed measurement bandwidth on a carrier frequency as defined by the parameter Transmission Bandwidth Configuration "NRB" TS 36.104 [33].  
<endl>  
  
  
<start>  
measobjecteutra  
associatedMeasGap  
Indicates the associated measurement gap for measuring this EUTRA frequency. If this field is absent, the associated meaurment gap is the gap configured via gapFR1 or gapUE.  
<endl>  
  
  
<start>  
measobjecteutra  
carrierFreq  
Identifies E-UTRA carrier frequency for which this configuration is valid. Network does not configure more than one MeasObjectEUTRA for the same physical frequency, regardless of the E-ARFCN used to indicate this.  
<endl>  
  
  
<start>  
measobjecteutra  
cellsToAddModListEUTRAN  
List of cells to add/ modify in the cell list.  
<endl>  
  
  
<start>  
measobjecteutra  
cellsToRemoveListEUTRAN  
List of cells to remove from the cell list.  
<endl>  
  
  
<start>  
measobjecteutra  
eutra-PresenceAntennaPort1  
When set to true, the UE may assume that at least two cell-specific antenna ports are used in all neighbouring cells.  
<endl>  
  
  
<start>  
measobjecteutra  
eutra-Q-OffsetRange  
Used to indicate a cell, or frequency specific offset to be applied when evaluating triggering conditions for measurement reporting. The value is in dB. Value dB-24 corresponds to -24 dB, value dB-22 corresponds to -22 dB and so on.  
<endl>  
  
  
<start>  
measobjecteutra  
excludedCellsToAddModListEUTRAN  
List of cells to add/ modify in the exclude-list of cells.  
<endl>  
  
  
<start>  
measobjecteutra  
excludedCellsToRemoveListEUTRAN  
List of cells to remove from the exclude-list of cells.  
<endl>  
  
  
<start>  
measobjecteutra  
widebandRSRQ-Meas  
If set to true, the UE shall, when performing RSRQ measurements, use a wider bandwidth in accordance with TS 36.133 [40]. The network may set the field to true if the measurement bandwidth indicated by allowedMeasBandwidth is 50 resource blocks or larger; otherwise the network sets this field to false.  
<endl>

<start>  
cellstoaddmod  
cellIndividualOffset  
Cell individual offsets applicable to a specific cell.  
<endl>  
  
  
<start>  
cellstoaddmod  
physCellId  
Physical cell identity of a cell in the cell list.  
<endl>

<start>  
measobjectnr  
absThreshCSI-RS-Consolidation  
Absolute threshold for the consolidation of measurement results per CSI-RS resource(s) from L1 filter(s). The field is used for the derivation of cell measurement results as described in 5.5.3.3 and the reporting of beam measurement information per CSI-RS resource as described in 5.5.5.2.  
<endl>  
  
  
<start>  
measobjectnr  
absThreshSS-BlocksConsolidation  
Absolute threshold for the consolidation of measurement results per SS/PBCH block(s) from L1 filter(s). The field is used for the derivation of cell measurement results as described in 5.5.3.3 and the reporting of beam measurement information per SS/PBCH block index as described in 5.5.5.2.  
<endl>  
  
  
<start>  
measobjectnr  
allowedCellsToAddModList  
List of cells to add/modify in the allow-list of cells. It applies only to SSB resources.  
<endl>  
  
  
<start>  
measobjectnr  
allowedCellsToRemoveList  
List of cells to remove from the allow-list of cells.  
<endl>  
  
  
<start>  
measobjectnr  
associatedMeasGapSSB  
Indicates the associated measurement gap for SSB measuring identified by ssb-ConfigMobility in this measurement object. When multiple MeasObjectNR with the same SSB frequency are configured, the network configures the same measurement gap ID in this field for each MeasObjectNR. If this field is absent, the associated measurement gap is the gap configured via gapFR1, gapFR2, or gapUE.  
<endl>  
  
  
<start>  
measobjectnr  
associatedMeasGapSSB2  
Indicates the associated additional measurement gap for SSB measuring identified by ssb-ConfigMobility in this measurement object for NTN deployments. When multiple MeasObjectNR with the same SSB frequency are configured, the network configures the same measurement gap ID in this field for each MeasObjectNR. If this field is absent, the associated measurement gap is the gap indicated by associatedMeasGapSSB.  
<endl>  
  
  
<start>  
measobjectnr  
associatedMeasGapCSIRS  
Indicates the associated measurement gap for CSI-RS measuring identified by csi-rs-ResourceConfigMobility in this measurement object. If this field is absent, the associated measurement gap is the gap configured via gapFR1, gapFR2, or gapUE.  
<endl>  
  
  
<start>  
measobjectnr  
associatedMeasGapCSIRS2  
Indicates the associated additional measurement gap for CSI-RS measuring identified by csi-rs-ResourceConfigMobility in this measurement object for NTN deployments. If this field is absent, the associated measurement gap is the gap indicated by associatedMeasGapCSIRS. In this release of the specification, this field is not configured for NTN deployments.  
<endl>  
  
  
<start>  
measobjectnr  
cellsToAddModList  
List of cells to add/modify in the cell list.  
<endl>  
  
  
<start>  
measobjectnr  
cellsToRemoveList  
List of cells to remove from the cell list.  
<endl>  
  
  
<start>  
measobjectnr  
excludedCellsToAddModList  
List of cells to add/modify in the exclude-list of cells. It applies only to SSB resources.  
<endl>  
  
  
<start>  
measobjectnr  
excludedCellsToRemoveList  
List of cells to remove from the exclude-list of cells.  
<endl>  
  
  
<start>  
measobjectnr  
freqBandIndicatorNR  
The frequency band in which the SSB and/or CSI-RS indicated in this MeasObjectNR are located and according to which the UE shall perform the RRM measurements. This field is always provided when the network configures measurements with this MeasObjectNR.  
<endl>  
  
  
<start>  
measobjectnr  
measCyclePSCell  
The parameter is used only when the PSCell is configured on the frequency indicated by the measObjectNR and the SCG is deactivated, see TS 38.133 [14]. The field may also be configured when the PSCell is not configured on that frequency. Value ms160 corresponds to 160 ms, value ms256 corresponds to 256 ms and so on.  
<endl>  
  
  
<start>  
measobjectnr  
measCycleSCell  
The parameter is used only when an SCell is configured on the frequency indicated by the measObjectNR and is in deactivated state, see TS 38.133 [14]. gNB configures the parameter whenever an SCell is configured on the frequency indicated by the measObjectNR, but the field may also be signalled when an SCell is not configured. Value sf160 corresponds to 160 sub-frames, value sf256 corresponds to 256 sub-frames and so on.  
<endl>  
  
  
<start>  
measobjectnr  
nrofCSInrofCSI-RS-ResourcesToAverage  
Indicates the maximum number of measurement results per beam based on CSI-RS resources to be averaged. The same value applies for each detected cell associated with this MeasObjectNR.  
<endl>  
  
  
<start>  
measobjectnr  
nrofSS-BlocksToAverage  
Indicates the maximum number of measurement results per beam based on SS/PBCH blocks to be averaged. The same value applies for each detected cell associated with this MeasObject.  
<endl>  
  
  
<start>  
measobjectnr  
ntn-PolarizationDL  
If present, this parameter indicates polarization information for downlink transmission on service link: including Right hand, Left hand circular polarizations (RHCP, LHCP) and Linear polarization.  
<endl>  
  
  
<start>  
measobjectnr  
ntn-PolarizationUL  
If present, this parameter indicates polarization information for uplink transmission on service link. If not present and ntn-PolarizationDL is present, UE assumes the same polarization for UL and DL.  
<endl>  
  
  
<start>  
measobjectnr  
offsetMO  
Offset values applicable to all measured cells with reference signal(s) indicated in this MeasObjectNR.  
<endl>  
  
  
<start>  
measobjectnr  
quantityConfigIndex  
Indicates the n-th element of quantityConfigNR-List provided in MeasConfig.  
<endl>  
  
  
<start>  
measobjectnr  
referenceSignalConfig  
RS configuration for SS/PBCH block and CSI-RS.  
<endl>  
  
  
<start>  
measobjectnr  
refFreqCSI-RS  
Point A which is used for mapping of CSI-RS to physical resources according to TS 38.211 [16] clause 7.4.1.5.3.  
<endl>  
  
  
<start>  
measobjectnr  
smtc1  
Primary measurement timing configuration. (see clause 5.5.2.10).  
<endl>  
  
  
<start>  
measobjectnr  
smtc2  
Secondary measurement timing configuration for SS corresponding to this MeasObjectNR with PCI listed in pci-List. For these SS, the periodicity is indicated by periodicity in smtc2 and the timing offset is equal to the offset indicated in periodicityAndOffset modulo periodicity. periodicity in smtc2 can only be set to a value strictly shorter than the periodicity indicated by periodicityAndOffset in smtc1 (e.g. if periodicityAndOffset indicates sf10, periodicity can only be set of sf5, if periodicityAndOffset indicates sf5, smtc2 cannot be configured).  
<endl>  
  
  
<start>  
measobjectnr  
smtc3list  
Measurement timing configuration list for SS corresponding to IAB-MT. This is used for the IAB-node's discovery of other IAB-nodes and the IAB-Donor-DUs.  
<endl>  
  
  
<start>  
measobjectnr  
smtc4list  
Measurement timing configuration list for NTN deployments, see clause 5.5.2.10.  
<endl>  
  
  
<start>  
measobjectnr  
ssbFrequency  
Indicates the frequency of the SS associated to this MeasObjectNR. For operation with shared spectrum channel access, this field is a k\*30 kHz shift from the sync raster where k = 0,1,2, and so on if the reportType within the corresponding ReportConfigNR is set to reportCGI (see TS 38.211 [16], clause 7.4.3.1). Frequencies are considered to be on the sync raster if they are also identifiable with a GSCN value (see TS 38.101-1 [15]).  
<endl>  
  
  
<start>  
measobjectnr  
ssb-PositionQCL-Common  
Indicates the QCL relationship between SS/PBCH blocks for all measured cells as specified in TS 38.213 [13], clause 4.1.  
<endl>  
  
  
<start>  
measobjectnr  
ssbSubcarrierSpacing  
Subcarrier spacing of SSB.  
Only the following values are applicable depending on the used frequency:  
FR1: 15 or 30 kHz  
FR2-1: 120 or 240 kHz  
FR2-2: 120, 480, or 960 kHz  
<endl>  
  
  
<start>  
measobjectnr  
t312  
The value of timer T312. Value ms0 represents 0 ms, ms50 represents 50 ms and so on.  
<endl>

<start>  
referencesignalconfig  
csi-rs-ResourceConfigMobility  
CSI-RS resources to be used for CSI-RS based RRM measurements.  
<endl>  
  
  
<start>  
referencesignalconfig  
ssb-ConfigMobility  
SSB configuration for mobility (nominal SSBs, timing configuration).  
<endl>

<start>  
rmtc-config  
measDurationSymbols  
Number of consecutive symbols for which the Physical Layer reports samples of RSSI (see TS 38.215 [9], clause 5.1.21). Value sym1 corresponds to one symbol, sym14or12 corresponds to 14 symbols of the reference numerology for NCP and 12 symbols for ECP, and so on.  
If measDurationSymbols-v1700 is signalled, the UE ignores measDurationSymbols-r16.  
<endl>  
  
  
<start>  
rmtc-config  
ref-BWPId  
Indicates the reference BWP for the TCI state indicated in tci-StateInfo. Network includes this field if tci-StateInfo is present. This field is only applicable for operation with shared spectrum channel access in FR2-2 and network does not configure this if the UE does not have any serving cells in FR2-2.  
<endl>  
  
  
<start>  
rmtc-config  
ref-SCS-CP  
Indicates a reference subcarrier spacing and cyclic prefix to be used for RSSI measurements (see TS 38.215 [9]). Value kHz15 corresponds to 15kHz, kHz30 corresponds to 30 kHz, value kHz60-NCP corresponds to 60 kHz using normal cyclic prefix (NCP), and kHz60-ECP corresponds to 60 kHz using extended cyclic prefix (ECP).  
If ref-SCS-CP-v1700 is signalled, the UE ignores ref-SCS-CP-r16.  
<endl>  
  
  
<start>  
rmtc-config  
ref-ServCellId  
Indicates the FR2-2 reference serving cell index for the TCI state. Network includes this field if tci-StateInfo is present. This field is only applicable for operation with shared spectrum channel access in FR2-2 and network does not configure this if the UE does not have any serving cells in FR2-2.  
<endl>  
  
  
<start>  
rmtc-config  
rmtc-Bandwidth  
Indicates the bandwidth for the RSSI measurement (see TS 38. 215 [9], clause 5.1.21).  
<endl>  
  
  
<start>  
rmtc-config  
rmtc-Frequency  
Indicates the center frequency of the measured bandwidth for a frequency which operates with shared spectrum channel access (see TS 38. 215 [9], clause 5.1.21).  
<endl>  
  
  
<start>  
rmtc-config  
rmtc-Periodicity  
Indicates the RSSI measurement timing configuration (RMTC) periodicity (see TS 38.215 [9], clause 5.1.21).  
<endl>  
  
  
<start>  
rmtc-config  
rmtc-SubframeOffset  
Indicates the RSSI measurement timing configuration (RMTC) subframe offset for this frequency (see TS 38.215 [9], clause 5.1.21). For inter-frequency measurements, this field is optional present and if it is not configured, the UE chooses a random value as rmtc-SubframeOffset for measDurationSymbols which shall be selected to be between 0 and the configured rmtc-Periodicity with equal probability.  
<endl>  
  
  
<start>  
rmtc-config  
tci-StateId  
Indicates the TCI state to be used for RSSI measurements. This field is only applicable for shared spectrum channel access in FR2-2. Network does not configure this if the UE does not have any serving cells in FR2-2 and in such a case, it is up to UE implementation how to determine the spatial domain filter for the inter-frequency RSSI measurement in FR2-2.  
<endl>

<start>  
ssb-configmobility  
cca-CellsToAddModList, cca-CellsToRemoveList  
Lists of cells to be added or removed from the list of neighbor cells that apply channel access mode procedures for operation with shared spectrum channel access in accordance with TS 37.213 [48], clause 4.4 for FR2-2.  
<endl>  
  
  
<start>  
ssb-configmobility  
deriveSSB-IndexFromCell  
If this field is set to true, UE assumes SFN and frame boundary alignment across cells on the same frequency carrier as specified in TS 38.133 [14]. Hence, if the UE is configured with a serving cell for which (absoluteFrequencySSB, subcarrierSpacing) in ServingCellConfigCommon is equal to (ssbFrequency, ssbSubcarrierSpacing) in this MeasObjectNR, this field indicates whether the UE can utilize the timing of this serving cell to derive the index of SS block transmitted by neighbour cell. Otherwise, this field indicates whether the UE may use the timing of any detected cell on that target frequency to derive the SSB index of all neighbour cells on that frequency.  
<endl>  
  
  
<start>  
ssb-configmobility  
deriveSSB-IndexFromCellInter  
If this field is present, UE assumes SFN and frame boundary alignment between the reference serving cell indicated by ServCellIndex and all neighbour cells in this MeasObjectNR as specified in TS 38.133 [14]. This field also indicates that the UE can utilize the timing of the reference serving cell indicated by ServCellIndex to derive the index of SS block transmitted by all inter-frequency neighbour cells on the frequency indicated by the MeasObjectNR. When this field is included, the network should set deriveSSB-IndexFromCell to true.  
<endl>  
  
  
<start>  
ssb-configmobility  
ssb-ToMeasure  
The set of SS blocks to be measured within the SMTC measurement duration. The first/leftmost bit corresponds to SS/PBCH block index 0, the second bit corresponds to SS/PBCH block index 1, and so on. Value 0 in the bitmap indicates that the corresponding SS/PBCH block is not to be measured while value 1 indicates that the corresponding SS/PBCH block is to be measured (see TS 38.215 [9]). When the field is not configured the UE measures on all SS blocks. Regardless of the value of this field, SS/PBCH blocks outside of the applicable smtc are not to be measured. See TS 38.215 [9] clause 5.1.1.  
<endl>

<start>  
ssb-positionqcl-cellstoaddmod  
physCellId  
Physical cell identity of a cell in the cell list.  
<endl>  
  
  
<start>  
ssb-positionqcl-cellstoaddmod  
ssb-PositionQCL  
Indicates the QCL relation between SS/PBCH blocks for a specific cell as specified in TS 38.213 [13], clause 4.1. If provided, the cell specific value overwrites the value signalled by ssb-PositionQCL-Common.  
<endl>

<start>  
measobjectrxtxdiff  
dl-Ref  
configures the DL references signals to measure Rx-Tx time difference. prs-Ref-r17 indicates PRS is chosen, and csi-RS-Ref-r17 indicates that CSI-RS for tracking is chosen.  
Only one PRS resource set is configured by the network. Only one NZP-CSI-RS-ResourceSet can be configured with pdc-Info-r17 set to true and it is used for UE Rx-Tx time difference measurement. Only reference signals from the PCell of the MCG can be configured by the network.  
<endl>

<start>  
measobjectutra-fdd  
carrierFreq  
Identifies UTRA-FDD carrier frequency for which this configuration is valid. NR does not configure more than one measurement object for the same physical frequency regardless of the ARFCN used to indicate this.  
<endl>  
  
  
<start>  
measobjectutra-fdd  
cellIndexUTRA-FDD  
Entry index in the neighbouring cell list.  
<endl>  
  
  
<start>  
measobjectutra-fdd  
cellsToAddModList  
List of UTRA-FDD cells to add/modify in the neighbouring cell list.  
<endl>  
  
  
<start>  
measobjectutra-fdd  
cellsToRemoveList  
List of cells to remove from the neighbouring cell list.  
<endl>  
  
  
<start>  
measobjectutra-fdd  
utra-FDD-Q-OffsetRange  
Used to indicate a frequency specific offset to be applied when evaluating triggering conditions for measurement reporting. The value is in dB.  
<endl>

<start>  
measresultcellsftd-nr  
sfn-OffsetResult  
Indicates the SFN difference between the PCell and the NR cell as an integer value according to TS 38.215 [9].  
<endl>  
  
  
<start>  
measresultcellsftd-nr  
frameBoundaryOffsetResult  
Indicates the frame boundary difference between the PCell and the NR cell as an integer value according to TS 38.215 [9].  
<endl>

<start>  
measresultsftd-eutra  
eutra-PhysCellId  
Identifies the physical cell identity of the E-UTRA cell for which the reporting is being performed.  
<endl>  
  
  
<start>  
measresultsftd-eutra  
sfn-OffsetResult  
Indicates the SFN difference between the PCell and the E-UTRA cell as an integer value according to TS 38.215 [9].  
<endl>  
  
  
<start>  
measresultsftd-eutra  
frameBoundaryOffsetResult  
Indicates the frame boundary difference between the PCell and the E-UTRA cell as an integer value according to TS 38.215 [9].  
<endl>

<start>  
measresulteutra  
eutra-PhysCellId  
Identifies the physical cell identity of the E-UTRA cell for which the reporting is being performed. The UE reports a value in the range 0..503, other values are reserved.  
<endl>

<start>  
measresultnr  
averageDelay  
Indicates average delay for the packets during the reporting period, as specified in TS 38.314 [53]. Value 0 corresponds to 0 millisecond, value 1 corresponds to 0.1 millisecond, value 2 corresponds to 0.2 millisecond, and so on.  
<endl>  
  
  
<start>  
measresultnr  
cellResults  
Cell level measurement results.  
<endl>  
  
  
<start>  
measresultnr  
choCandidate  
This field indicates whether the associated cell is a candidate target cell for conditional handover. This field may be included only in the SuccessHO-Report within UEInformationResponse message.  
<endl>  
  
  
<start>  
measresultnr  
choConfig  
If the associated cell is a candidate target cell for conditional handover, this field indicates the conditional handover execution condition for each measId within condTriggerConfig associated to the cell. This field may be included only in the rlf-report within UEInformationResponse message.  
<endl>  
  
  
<start>  
measresultnr  
drb-Id  
Indicates DRB value for which uplink PDCP delay ratio or value is provided, according to TS 38.314 [53].  
<endl>  
  
  
<start>  
measresultnr  
firstTriggeredEvent  
This field is set to condFirstEvent if the execution condition associated to the first entry of choConfig was fulfilled first in time. This field is set to condSecondEvent if the execution condition associated to the second entry of choConfig was fulfilled first in time. This field may be included only in rlf-report within UEInformationResponse message.  
<endl>  
  
  
<start>  
measresultnr  
locationInfo  
Positioning related information and measurements.  
<endl>  
  
  
<start>  
measresultnr  
physCellId  
The physical cell identity of the NR cell for which the reporting is being performed.  
<endl>  
  
  
<start>  
measresultnr  
resultsSSB-Cell  
Cell level measurement results based on SS/PBCH related measurements.  
<endl>  
  
  
<start>  
measresultnr  
resultsSSB-Indexes  
Beam level measurement results based on SS/PBCH related measurements.  
<endl>  
  
  
<start>  
measresultnr  
resultsCSI-RS-Cell  
Cell level measurement results based on CSI-RS related measurements.  
<endl>  
  
  
<start>  
measresultnr  
resultsCSI-RS-Indexes  
Beam level measurement results based on CSI-RS related measurements.  
<endl>  
  
  
<start>  
measresultnr  
rsIndexResults  
Beam level measurement results.  
<endl>  
  
  
<start>  
measresultnr  
timeBetweenEvents  
Indicates the time elapsed between fulfilling the conditional execution conditions included in choConfig. Value in milliseconds. The maximum value 1023 means 1023ms or longer. This field may be included only in the reports associated to UEInformationResponse message, e.g., rlf-Report.  
<endl>

<start>  
measresultutra-fdd  
physCellId  
The physical cell identity of the UTRA-FDD cell for which the reporting is being performed.  
<endl>  
  
  
<start>  
measresultutra-fdd  
utra-FDD-EcN0  
According to CPICH\_Ec/No in TS 25.133 [46] for FDD.  
<endl>  
  
  
<start>  
measresultutra-fdd  
utra-FDD-RSCP  
According to CPICH\_RSCP in TS 25.133 [46] for FDD.  
<endl>

<start>  
measresults  
coarseLocationInfo  
This field indicates the coarse location information reported by the UE. This field is coded as the Ellipsoid-Point defined in TS 37.355 [49]. The first/leftmost bit of the first octet contains the most significant bit. The least significant bits of degreesLatitude and degreesLongitude are set to 0 to meet the accuracy requirement corresponds to a granularity of approximately 2 km.  
It is up to UE implementation how many LSBs are set to 0 to meet the accuracy requirement  
<endl>  
  
  
<start>  
measresults  
excessDelay  
Indicates the ratio of packets in UL per DRB exceeding the configured delay threshold among the UL PDCP SDUs, according to the UL PDCP Excess Packet Delay per DRB mapping table, as defined in TS 38.314 [53], Table 4.3.1.e-1.  
<endl>  
  
  
<start>  
measresults  
measId  
Identifies the measurement identity for which the reporting is being performed.  
<endl>  
  
  
<start>  
measresults  
measQuantityResults  
The value sinr is not included when it is used for LogMeasReport-r16.  
<endl>  
  
  
<start>  
measresults  
measResultCellListSFTD-NR  
SFTD measurement results between the PCell and the NR neighbour cell(s) in NR standalone.  
<endl>  
  
  
<start>  
measresults  
measResultCLI  
CLI measurement results.  
<endl>  
  
  
<start>  
measresults  
measResultEUTRA  
Measured results of an E-UTRA cell.  
<endl>  
  
  
<start>  
measresults  
measResultForRSSI  
Includes measured RSSI result in dBm (see TS 38.215 [9]) and channelOccupancy which is the percentage of samples when the RSSI was above the configured channelOccupancyThreshold for the associated reportConfig.  
<endl>  
  
  
<start>  
measresults  
measResultListEUTRA  
List of measured results for the maximum number of reported best cells for an E-UTRA measurement identity.  
<endl>  
  
  
<start>  
measresults  
measResultListNR  
List of measured results for the maximum number of reported best cells for an NR measurement identity.  
<endl>  
  
  
<start>  
measresults  
measResultListUTRA-FDD  
List of measured results for the maximum number of reported best cells for a UTRA-FDD measurement identity.  
<endl>  
  
  
<start>  
measresults  
measResultNR  
Measured results of an NR cell.  
<endl>  
  
  
<start>  
measresults  
measResultServFreqListEUTRA-SCG  
Measured results of the E-UTRA SCG serving frequencies: the measurement result of PSCell and each SCell, if any, and of the best neighbouring cell on each E-UTRA SCG serving frequency.  
<endl>  
  
  
<start>  
measresults  
measResultServFreqListNR-SCG  
Measured results of the NR SCG serving frequencies: the measurement result of PSCell and each SCell, if any, and of the best neighbouring cell on each NR SCG serving frequency.  
<endl>  
  
  
<start>  
measresults  
measResultServingMOList  
Measured results of measured cells with reference signals indicated in the serving cell measurement objects including measurement results of SpCell, configured SCell(s) and best neighbouring cell within measured cells with reference signals indicated in on each serving cell measurement object. If the sending of the MeasurementReport message is triggered by a measurement configured by the field sl-ConfigDedicatedForNR received within an E-UTRA RRCConnectionReconfiguration message (i.e. CBR measurements), this field is not applicable and its contents is ignored by the network.  
<endl>  
  
  
<start>  
measresults  
measResultSFTD-EUTRA  
SFTD measurement results between the PCell and the E-UTRA PScell in NE-DC.  
<endl>  
  
  
<start>  
measresults  
measResultSFTD-NR  
SFTD measurement results between the PCell and the NR PScell in NR-DC.  
<endl>  
  
  
<start>  
measresults  
measResultsSL  
CBR measurements results for NR sidelink communication/discovery.  
<endl>  
  
  
<start>  
measresults  
measResultUTRA-FDD  
Measured result of a UTRA-FDD cell.  
<endl>  
  
  
<start>  
measresults  
sl-MeasResultsCandRelay  
Measurement result(s) of candiate L2 U2N relay UE(s).  
<endl>  
  
  
<start>  
measresults  
sl-MeasResultServingRelay  
Measurement result of serving L2 U2N relay UE.  
<endl>

<start>  
measresultidleeutra  
carrierFreqEUTRA  
Indicates the E-UTRA carrier frequency.  
<endl>  
  
  
<start>  
measresultidleeutra  
eutra-PhysCellId  
Indicates the physical cell identity of an E-UTRA cell.  
<endl>  
  
  
<start>  
measresultidleeutra  
measIdleResultEUTRA  
Idle/inactive measurement results for an E-UTRA cell.  
<endl>  
  
  
<start>  
measresultidleeutra  
measResultsPerCarrierListIdleEUTRA  
List of idle/inactive measured results for the maximum number of reported E-UTRA carriers.  
<endl>  
  
  
<start>  
measresultidleeutra  
measResultsPerCellListIdleEUTRA  
List of idle/inactive measured results for the maximum number of reported best cells for a given E-UTRA carrier.  
<endl>

<start>  
measresultidlenr  
carrierFreq  
Indicates the NR carrier frequency.  
<endl>  
  
  
<start>  
measresultidlenr  
measIdleResultNR  
Idle/inactive measurement results for an NR cell (optionally including beam level measurements).  
<endl>  
  
  
<start>  
measresultidlenr  
measResultServingCell  
Measured results of the serving cell (i.e., PCell) from idle/inactive measurements.  
<endl>  
  
  
<start>  
measresultidlenr  
measResultsPerCellListIdleNR  
List of idle/inactive measured results for the maximum number of reported best cells for a given NR carrier.  
<endl>  
  
  
<start>  
measresultidlenr  
resultsSSB-Indexes  
Beam level measurement results (indexes and optionally, beam measurements).  
<endl>

<start>  
measresultrxtxtimediff  
rxTxTimeDiff-ue  
indicates the Rx-Tx Time difference measurement at the UE (see clause 5.1.30, TS 38.215 [9]).  
<endl>

<start>  
measresultssl  
measResultNR-SL  
Include the measured results for NR sidelink communication/discovery.  
<endl>

<start>  
measresultnr-sl  
measResultListCBR-NR  
CBR measurement results for NR sidelink communication/discovery.  
<endl>  
  
  
<start>  
measresultnr-sl  
sl-poolReportIdentity  
The identity of the transmission resource pool which is corresponding to the sl-ResourcePoolID configured in a resource pool for NR sidelink communication/discovery.  
<endl>

<start>  
mobilitystateparameters  
n-CellChangeHigh  
The number of cell changes to enter high mobility state. Corresponds to NCR\_H in TS 38.304 [20].  
<endl>  
  
  
<start>  
mobilitystateparameters  
n-CellChangeMedium  
The number of cell changes to enter medium mobility state. Corresponds to NCR\_M in TS 38.304 [20].  
<endl>  
  
  
<start>  
mobilitystateparameters  
t-Evaluation  
The duration for evaluating criteria to enter mobility states. Corresponds to TCRmax in TS 38.304 [20]. Value in seconds, s30 corresponds to 30 s and so on.  
<endl>  
  
  
<start>  
mobilitystateparameters  
t-HystNormal  
The additional duration for evaluating criteria to enter normal mobility state. Corresponds to TCRmaxHyst in TS 38.304 [20]. Value in seconds, value s30 corresponds to 30 seconds and so on.  
<endl>

<start>  
msga-configcommon  
msgA-PUSCH-Config  
Configuration of cell-specific MsgA PUSCH parameters which the UE uses for contention-based MsgA PUSCH transmission of this BWP. If the field is not configured for the selected UL BWP, the UE shall use the MsgA PUSCH configuration of initial UL BWP.  
<endl>  
  
  
<start>  
msga-configcommon  
rach-ConfigCommonTwoStepRA  
Configuration of cell specific random access parameters which the UE uses for contention based and contention free 2-step random access type procedure as well as for 2-step RA type contention based beam failure recovery in this BWP.  
<endl>

<start>  
msga-pusch-config  
msgA-DataScramblingIndex  
Identifier used to initiate data scrambling (c\_init) for msgA PUSCH. If the field is absent the UE applies the value Physical cell ID (physCellID).  
<endl>  
  
  
<start>  
msga-pusch-config  
msgA-DeltaPreamble  
Power offset of msgA PUSCH relative to the preamble received target power. Actual value = field value \* 2 [dB] (see TS 38.213 [13], clause 7.1).  
<endl>  
  
  
<start>  
msga-pusch-config  
msgA-PUSCH-ResourceGroupA  
MsgA PUSCH resources that the UE shall use when performing MsgA transmission using preambles group A. If field is not configured for the selected UL BWP, the UE shall use the MsgA PUSCH configuration for group A of initial UL BWP or RedCap-specific initial UL BWP (if configured) for RedCap UEs.  
<endl>  
  
  
<start>  
msga-pusch-config  
msgA-PUSCH-ResourceGroupB  
MsgA PUSCH resources that the UE shall use when performing MsgA transmission using preambles group B.  
<endl>  
  
  
<start>  
msga-pusch-config  
msgA-TransformPrecoder  
Enables or disables the transform precoder for MsgA transmission (see clause 6.1.3 of TS 38.214 [19]).  
<endl>

<start>  
msga-pusch-resource  
guardBandMsgA-PUSCH  
PRB-level guard band between FDMed PUSCH occasions (see TS 38.213 [13], clause 8.1A). If interlaced PUSCH is configured, value 0 is applied.  
<endl>  
  
  
<start>  
msga-pusch-resource  
guardPeriodMsgA-PUSCH  
Guard period between PUSCH occasions in the unit of symbols (see TS 38.213 [13], clause 8.1A).  
<endl>  
  
  
<start>  
msga-pusch-resource  
frequencyStartMsgA-PUSCH  
Offset of lowest PUSCH occasion in frequency domain with respect to PRB 0 (see TS 38.213 [13], clause 8.1A).  
<endl>  
  
  
<start>  
msga-pusch-resource  
interlaceIndexFirstPO-MsgA-PUSCH  
Interlace index of the first PUSCH occasion in frequency domain if interlaced PUSCH is configured. For 30kHz SCS only the integers 1, 2, 3, 4, 5 are applicable (see TS 38.213 [13], clause 8.1A).  
<endl>  
  
  
<start>  
msga-pusch-resource  
mappingTypeMsgA-PUSCH  
PUSCH mapping type A or B. If the field is absent, the UE shall use the parameter msgA-PUSCH-TimeDomainAllocation (see TS 38.213 [13], clause 8.1A).  
<endl>  
  
  
<start>  
msga-pusch-resource  
msgA-Alpha  
Dedicated alpha value for MsgA PUSCH. If the field is absent, the UE shall use the value of msg3-Alpha if configured, else UE applies value 1 (see TS 38.213 [13], clause 7.1.1).  
<endl>  
  
  
<start>  
msga-pusch-resource  
msgA-DMRS-Config  
DMRS configuration for msgA PUSCH (see TS 38.213 [13], clause 8.1A and TS 38.214 [19] clause 6.2.2).  
<endl>  
  
  
<start>  
msga-pusch-resource  
msgA-HoppingBits  
Value of hopping bits to indicate which frequency offset to be used for second hop. See Table 8.3-1 in TS 38.213 [13].  
<endl>  
  
  
<start>  
msga-pusch-resource  
msgA-IntraSlotFrequencyHopping  
Intra-slot frequency hopping per PUSCH occasion (see TS 38.213 [13], clause 8.1A).  
<endl>  
  
  
<start>  
msga-pusch-resource  
msgA-MCS  
Indicates the MCS index for msgA PUSCH from the Table 6.1.4.1-1 for DFT-s-OFDM and Table 5.1.3.1-1 for CP-OFDM in TS 38.214 [19].  
<endl>  
  
  
<start>  
msga-pusch-resource  
msgA-PUSCH-TimeDomainAllocation  
Indicates a combination of start symbol and length and PUSCH mapping type from the TDRA table (PUSCH-TimeDomainResourceAllocationList if provided in PUSCH-ConfigCommon, or else the default Table 6.1.2.1.1-2 in 38.214 [19] is used if pusch-TimeDomainAllocationList is not provided in PUSCH-ConfigCommon). The parameter K2 in the table is not used for msgA PUSCH. The network configures one of msgA-PUSCH-TimeDomainAllocation and startSymbolAndLengthMsgA-PO, but not both. If the field is absent, the UE shall use the value of startSymbolAndLenghtMsgA-PO.  
<endl>  
  
  
<start>  
msga-pusch-resource  
msgA-PUSCH-TimeDomainOffset  
A single time offset with respect to the start of each PRACH slot (with at least one valid RO), counted as the number of slots (based on the numerology of active UL BWP). See TS 38.213 [13], clause 8.1A.  
<endl>  
  
  
<start>  
msga-pusch-resource  
nrofDMRS-Sequences  
Number of DMRS sequences for MsgA PUSCH for CP-OFDM. In case of single PUSCH configuration or if the DMRS symbols of multiple configurations are not overlapped, if the DMRS resources configured in one PUSCH occasion is no larger than 8 (for len2) or 4 (for len1), then only DMRS port is configured.  
<endl>  
  
  
<start>  
msga-pusch-resource  
nrofInterlacesPerMsgA-PO  
Number of consecutive interlaces per PUSCH occasion if interlaced PUSCH is configured. For 30kHz SCS only the integers 1, 2, 3, 4, 5 are applicable (see TS 38.213 [13], clause 8.1A).  
<endl>  
  
  
<start>  
msga-pusch-resource  
nrofMsgA-PO-FDM  
The number of msgA PUSCH occasions FDMed in one time instance (see TS 38.213 [13], clause 8.1A).  
<endl>  
  
  
<start>  
msga-pusch-resource  
nrofMsgA-PO-PerSlot  
Number of time domain PUSCH occasions in each slot. PUSCH occasions including guard period are contiguous in time domain within a slot (see TS 38.213 [13], clause 8.1A).  
<endl>  
  
  
<start>  
msga-pusch-resource  
nrofPRBs-PerMsgA-PO  
Number of PRBs per PUSCH occasion (see TS 38.213 [13], clause 8.1A).  
<endl>  
  
  
<start>  
msga-pusch-resource  
nrofSlotsMsgA-PUSCH  
Number of slots (in active UL BWP numerology) containing one or multiple PUSCH occasions, each slot has the same time domain resource allocation (see TS 38.213 [13], clause 8.1A).  
<endl>  
  
  
<start>  
msga-pusch-resource  
startSymbolAndLengthMsgA-PO  
An index giving valid combinations of start symbol, length and mapping type as start and length indicator (SLIV) for the first msgA PUSCH occasion, for RRC\_CONNECTED UEs in non-initial BWP as described in TS 38.214 [19] clause 6.1.2. The network configures the field so that the allocation does not cross the slot boundary. The number of occupied symbols excludes the guard period. If the field is absent, the UE shall use the value in msgA-PUSCH-TimeDomainAllocation (see TS 38.213 [13], clause 8.1A). The network configures one of msgA-PUSCH-TimeDomainAllocation and startSymbolAndLengthMsgA-PO, but not both. If the field is absent, the UE shall use the value of msgA-PUSCH-TimeDomainAllocation.  
<endl>

<start>  
msga-dmrs-config  
msgA-DMRS-AdditionalPosition  
Indicates the position for additional DM-RS. If the field is absent, the UE applies value pos2.  
<endl>  
  
  
<start>  
msga-dmrs-config  
msgA-MaxLength  
indicates single-symbol or double-symbol DMRS. If the field is absent, the UE applies value len1.  
<endl>  
  
  
<start>  
msga-dmrs-config  
msgA-PUSCH-DMRS-CDM-Group  
1-bit indication of indices of CDM group(s). If the field is absent, then both CDM groups are used.  
<endl>  
  
  
<start>  
msga-dmrs-config  
msgA-PUSCH-NrofPorts  
0 indicates 1 port per CDM group, 1 indicates 2 ports per CDM group. If the field is absent then 4 ports per CDM group are used (see TS 38.213 [13], clause 8.1A).  
<endl>  
  
  
<start>  
msga-dmrs-config  
msgA-ScramblingID0  
UL DMRS scrambling initialization for CP-OFDM. If the field is absent the UE applies the value Physical cell ID (physCellID).  
<endl>  
  
  
<start>  
msga-dmrs-config  
msgA-ScramblingID1  
UL DMRS scrambling initialization for CP-OFDM. If the field is absent the UE applies the value Physical cell ID (physCellID).  
<endl>

<start>  
nr-multibandinfo  
freqBandIndicatorNR  
Provides an NR frequency band number as defined in TS 38.101-1 [15] and TS 38.101-2 [39], table 5.2-1.  
<endl>  
  
  
<start>  
nr-multibandinfo  
nr-NS-PmaxList  
Provides a list of additionalPmax and additionalSpectrumEmission values. If the field is absent the UE uses value 0 for the additionalSpectrumEmission (see TS 38.101-1 [15] table 6.2.3.1-1A , and TS 38.101-2 [39], table 6.2.3.1-2). This field is ignored by IAB-MT, the IAB-MT applies output power and emissions requirements, as specified in TS 38.174 [63].  
<endl>

<start>  
musim-gapconfig  
musim-AperiodicGap  
Indicates the MUSIM aperiodic gap as specified in TS 38.133 [14] clause 9.1.10. If UE indicates the musim-Starting-SFN-AndSubframe when requesting aperiodic gap the network can only configure the aperiodic gap with the same start point or no aperiodic gap. If the field musim-Starting-SFN-AndSubframe is absent for aperiodic gap, network can configure any timing as the starting point for aperiodic gap or configure no aperiodic gap.  
<endl>  
  
  
<start>  
musim-gapconfig  
musim-GapInfo  
Indicates the values for musim-GapLength and musim-GapRepetitionAndOffset. When network provides periodic gap, network always signals the musim-GapLength and musim-GapRepetitionAndOffset as indicated by the UE's preferred MUSIM gap configuration.  
<endl>  
  
  
<start>  
musim-gapconfig  
musim-GapToAddModList  
List of MUSIM periodic gap patterns to add or modify.  
<endl>  
  
  
<start>  
musim-gapconfig  
musim-GapToReleaseList  
List of MUSIM periodic gap patterns to release.  
<endl>

<start>  
musim-gapinfo  
musim-GapLength  
Indicates the length of the UE's MUSIM gap as specified in TS 38.133 [14] clause 9.1.10. This field is mandatory present for both periodic gap and aperiodic gap preference indication.  
<endl>  
  
  
<start>  
musim-gapinfo  
musim-GapRepetitionAndOffset  
Indicates the gap repetition period in ms and gap offset in number of subframes for the periodic MUSIM gap as specified in TS 38.133 [14] clause 9.1.10. This field is mandatory present for the periodic MUSIM gap preference indication.  
<endl>  
  
  
<start>  
musim-gapinfo  
musim-Starting-SFN-AndSubframe  
Indicates gap starting position for the aperiodic MUSIM gap. This field is optionally present for the aperiodic MUSIM gap preference indication.  
<endl>  
  
  
<start>  
musim-gapinfo  
starting-SFN  
Indicates gap starting SFN number for the aperiodic MUSIM gap.  
<endl>  
  
  
<start>  
musim-gapinfo  
startingSubframe  
Indicates gap starting subframe number for the aperiodic MUSIM gap.  
<endl>

<start>  
needforgapsconfignr  
requestedTargetBandFilterNR  
Indicates the target NR bands that the UE is requested to report the gap requirement information.  
<endl>

<start>  
needforgapsinfonr  
intraFreq-needForGap  
Indicates the measurement gap requirement information for NR intra-frequency measurement.  
<endl>  
  
  
<start>  
needforgapsinfonr  
interFreq-needForGap  
Indicates the measurement gap requirement information for NR inter-frequency measurement.  
<endl>

<start>  
needforgapsintrafreq  
servCellId  
Indicates the serving cell which contains the target SSB (associated with the initial DL BWP) to be measured.  
<endl>  
  
  
<start>  
needforgapsintrafreq  
gapIndicationIntra  
Indicates whether measurement gap is required for the UE to perform intra-frequency SSB based measurements on the concerned serving cell. Value gap indicates that a measurement gap is needed if any of the UE configured BWPs (except the BWP(s) configured with servingCellMO associated with NCD-SSB) do not contain the frequency domain resources of the SSB associated to the initial DL BWP (CD-SSB). Value no-gap indicates a measurement gap is not needed to measure the SSB associated to the initial DL BWP (CD-SSB) for all configured BWPs (except the BWP(s) configured with servingCellMO associated with NCD-SSB), no matter the SSB is within the configured BWP or not.  
<endl>

<start>  
needforgapsnr  
bandNR  
Indicates the NR target band to be measured.  
<endl>  
  
  
<start>  
needforgapsnr  
gapIndication  
Indicates whether measurement gap is required for the UE to perform SSB based measurements on the concerned NR target band while NR-DC or NE-DC is not configured. The UE determines this information based on the resultant configuration of the RRCReconfiguration or RRCResume message that triggers this response. Value gap indicates that a measurement gap is needed, value no-gap indicates a measurement gap is not needed.  
<endl>

<start>  
needforgapncsg-configeutra  
requestedTargetBandFilterNCSG-EUTRA  
Indicates the target E-UTRA bands that the UE is requested to report the measurement gap and NCSG requirement information.  
<endl>

<start>  
needforgapncsg-confignr  
requestedTargetBandFilterNCSG-NR  
Indicates the target NR bands that the UE is requested to report the measurement gap and NCSG requirement information.  
<endl>

<start>  
needforgapncsg-infoeutra  
needForNCSG-EUTRA  
Indicates the measurement gap and NCSG requirement information for E-UTRA measurement.  
<endl>

<start>  
needforncsg-eutra  
bandEUTRA  
Indicates the E-UTRA target band to be measured.  
<endl>  
  
  
<start>  
needforncsg-eutra  
gapIndication  
Indicates whether measurement gap or NCSG is required for the UE to perform measurements on the concerned E-UTRA target band while NR-DC or NE-DC is not configured. The UE determines this information based on the resultant configuration of the RRCReconfiguration message or RRCResume message that triggers this response. Value gap indicates that a measurement gap is needed, value ncsg indicates that NCSG is needed, value nogap-noncsg indicates neither a measurement gap nor a NCSG is needed.  
<endl>

<start>  
needforgapncsg-infonr  
intraFreq-needForNCSG  
Indicates the measurement gap and NCSG requirement information for NR intra-frequency measurement.  
<endl>  
  
  
<start>  
needforgapncsg-infonr  
interFreq-needForNCSG  
Indicates the measurement gap and NCSG requirement information for NR inter-frequency measurement.  
<endl>

<start>  
needforncsg-intrafreq  
servCellId  
Indicates the serving cell which contains the target SSB (associated with the initial DL BWP) to be measured.  
<endl>  
  
  
<start>  
needforncsg-intrafreq  
gapIndicationIntra  
Indicates whether measurement gap or NCSG is required for the UE to perform intra-frequency SSB based measurements on the concerned serving cell. Value gap indicates that a measurement gap is needed if any of the UE configured BWPs (except the BWP(s) configured with servingCellMO associated with NCD-SSB) do not contain the frequency domain resources of the SSB associated to the initial DL BWP (CD-SSB). Value ncsg indicates that a NCSG is needed if any of the UE configured BWPs do not contain the frequency domain resources of the SSB associated to the initial DL BWP. Value nogap-noncsg indicates that neither a measurement gap nor a NCSG is needed to measure the SSB associated to the initial DL BWP (CD-SSB) for all configured BWPs (except the BWP(s) configured with servingCellMO associated with NCD-SSB), no matter the SSB is within the configured BWP or not.  
<endl>

<start>  
needforncsg-nr  
bandNR  
Indicates the NR target band to be measured.  
<endl>  
  
  
<start>  
needforncsg-nr  
gapIndication  
Indicates whether measurement gap or NCSG is required for the UE to perform SSB based measurements on the concerned NR target band while NR-DC or NE-DC is not configured. The UE determines this information based on the resultant configuration of the RRCReconfiguration or RRCResume message that triggers this response. Value gap indicates that a measurement gap is needed, value ncsg indicates that a NCSG is needed, and value nogap-noncsg indicates neither a measurement gap nor a NCSG is needed.  
<endl>

<start>  
noncelldefiningssb  
absoluteFrequencySSB  
Frequency of the NCD-SSB. The network configures this field so that the SSB is within the bandwidth of the BWP configured in BWP-DownlinkCommon.  
<endl>  
  
  
<start>  
noncelldefiningssb  
ssb-Periodicity  
The periodicity of this NCD-SSB. The network configures only periodicities that are larger than the periodicity of serving cell's CD-SSB. If the field is absent, the UE applies the SSB periodicity of the CD-SSB (ssb-periodicityServingCell configured in ServingCellConfigCommon).  
<endl>  
  
  
<start>  
noncelldefiningssb  
ssb-TimeOffset  
The time offset between CD-SSB of the serving cell and this NCD-SSB. Value ms5 means the first burst of NCD-SSB is transmitted 5ms later than the first burst of CD-SSB transmitted after the first symbol of SFN=0 of the serving cell, value ms10 means the first burst of NCD-SSB is transmitted 10ms later than the first burst of CD-SSB transmitted after the first symbol in SFN=0 of the serving cell, and so on. If the field is absent, RedCap UE considers that the time offset between the first burst of CD-SSB transmitted in the serving cell and the first burst of this NCD-SSB transmitted is zero.  
<endl>

<start>  
npn-identity  
cag-Identity  
A CAG-ID as specified in TS 23.003 [21]. The PLMN ID and a CAG ID in the NPN-Identity identifies a PNI-NPN.  
<endl>  
  
  
<start>  
npn-identity  
cag-IdentityList  
The cag-IdentityList contains one or more CAG IDs. All CAG IDs associated to the same PLMN ID are listed in the same cag-IdentityList entry.  
<endl>  
  
  
<start>  
npn-identity  
manualCAGselectionAllowed  
The manualCAGselectionAllowed indicates that the CAG ID can be selected manually even if it is outside the UE's allowed CAG list.  
<endl>  
  
  
<start>  
npn-identity  
NID  
A NID as specified in TS 23.003 [21]. The PLMN ID and a NID in the NPN-Identity identifies a SNPN.  
<endl>  
  
  
<start>  
npn-identity  
nid-List  
The nid-List contains one or more NID.  
<endl>

<start>  
npn-identityinfolist  
iab-Support  
This field combines both the support of IAB and the cell status for IAB. If the field is present, the cell supports IAB and the cell is also considered as a candidate for cell (re)selection for IAB-nodes; if the field is absent, the cell does not support IAB and/or the cell is barred for IAB-node.  
<endl>  
  
  
<start>  
npn-identityinfolist  
gNB-ID-Length  
Indicates the length of the gNB ID out of the 36-bit long cellIdentity.  
<endl>  
  
  
<start>  
npn-identityinfolist  
NPN-IdentityInfo  
The NPN-IdentityInfo contains one or more NPN identities and additional information associated with those NPNs. Only the same type of NPNs (either SNPNs or PNI-NPNs) can be listed in a NPN-IdentityInfo element.  
<endl>  
  
  
<start>  
npn-identityinfolist  
npn-IdentityList  
The npn-IdentityList contains one or more NPN Identity elements.  
<endl>  
  
  
<start>  
npn-identityinfolist  
trackingAreaCode  
Indicates the Tracking Area Code to which the cell indicated by cellIdentity field belongs.  
<endl>  
  
  
<start>  
npn-identityinfolist  
ranac  
Indicates the RAN Area Code to which the cell indicated by cellIdentity field belongs.  
<endl>  
  
  
<start>  
npn-identityinfolist  
cellReservedForOperatorUse  
Indicates whether the cell is reserved for operator use (for the NPN(s) identified in the npn-IdentityList) as defined in TS 38.304 [20]. This field is ignored by NPN capable IAB-MT.  
<endl>

<start>  
nr-dl-prs-pdc-resourceset  
dl-PRS-ResourceBandwidth  
This field specifies the number of PRBs allocated for all the DL-PRS Resource (allocated DL-PRS bandwidth) in multiples of 4 PRBs in this resource set. All DL-PRS Resources of the DL-PRS-PDC Resource Set have the same bandwidth. Integer value 1 corresponds to 24 PRBs, value 2 corresponds to 28 PRBs, value 3 corresponds to 32 PRBs and so on.  
<endl>  
  
  
<start>  
nr-dl-prs-pdc-resourceset  
dl-PRS-StartPRB  
This field specifies the start PRB index defined as offset with respect to subcarrier 0 in common resource block 0 for the DL-PRS Resource. All DL-PRS Resources of the DL-PRS-PDC Resource Set have the same value of dl-PRS-StartPRB.  
<endl>  
  
  
<start>  
nr-dl-prs-pdc-resourceset  
numSymbols  
This field specifies the number of symbols per DL-PRS Resource within a slot.  
<endl>  
  
  
<start>  
nr-dl-prs-pdc-resourceset  
periodicityAndOffset  
This field specifies the periodicity of DL-PRS allocation in slots and the slot offset with respect to SFN #0 slot #0 in the PCell where the DL-PRS-PDC Resource Set is configured (i.e., slot where the first DL-PRS Resource of DL-PRS-PDC Resource Set occurs).  
<endl>  
  
  
<start>  
nr-dl-prs-pdc-resourceset  
repFactorAndTimeGap  
If this field is absent, the value for repetitionFactor is 1 (i.e., no resource repetition).  
<endl>

<start>  
repfactorandtimegap  
repetitionFactor  
This field specifies how many times each DL-PRS Resource is repeated for a single instance of the DL-PRS Resource Set. It is applied to all resources of the DL-PRS Resource Set. Enumerated values n2, n4, n6, n8, n16, n32 correspond to 2, 4, 6, 8, 16, 32 resource repetitions, respectively.  
<endl>  
  
  
<start>  
repfactorandtimegap  
timeGap  
This field specifies the offset in units of slots between two repeated instances of a DL-PRS Resource corresponding to the same DL-PRS Resource ID within a single instance of the DL-PRS Resource Set. The time duration spanned by one DL-PRS Resource Set containing repeated DL-PRS Resources should not exceed the periodicity configured by periodicityAndOffset.  
<endl>

<start>  
nsag-identityinfo  
trackingAreaCode  
If absent, UE assumes the trackingAreaCode of the serving cell.  
<endl>

<start>  
ntn-config  
EphemerisInfo  
This field provides satellite ephemeris either in format of position and velocity state vector or in format of orbital parameters. This field is excluded when determining changes in system information, i.e. changes to ephemerisInfo should neither result in system information change notifications nor in a modification of valueTag in SIB1.  
<endl>  
  
  
<start>  
ntn-config  
epochTime  
Indicate the epoch time for the NTN assistance information. When explicitly provided through SIB, or through dedicated signaling, the EpochTime is the starting time of a DL sub-frame, indicated by a SFN and a sub-frame number signaled together with the assistance information. For serving cell, the field sfn indicates the current SFN or the next upcoming SFN after the frame where the message indicating the epochTime is received. For neighbour cell, the sfn indicates the SFN nearest to the frame where the message indicating the epochTime is received. The reference point for epoch time of the serving or neighbour NTN payload ephemeris and Common TA parameters is the uplink time synchronization reference point. If this field is absent, the epoch time is the end of SI window where this SIB19 is scheduled. This field is mandatory present when ntn-Config is provided in dedicated configuration. If this field is absent in ntn-Config provided via NTN-NeighCellConfig the UE uses epoch time of the serving cell, otherwise the field is based on the timing of the serving cell, i.e. the SFN and sub-frame number indicated in this field refers to the SFN and sub-frame of the serving cell. In case of handover or conditional handover, this field is based on the timing of the target cell, i.e. the SFN and sub-frame number indicated in this field refers to the SFN and sub-frame of the target cell. For the target cell the UE considers epoch time, indicated by the SFN and sub-frame number in this field, to be the frame nearest to the frame in which the message indicating the epoch time is received. This field is excluded when determining changes in system information, i.e. changes to epochTime should neither result in system information change notifications nor in a modification of valueTag in SIB1.  
<endl>  
  
  
<start>  
ntn-config  
cellSpecificKoffset  
Scheduling offset used for the timing relationships that are modified for NTN (see TS 38.213 [13]). The unit of the field K\_offset is number of slots for a given subcarrier spacing of 15 kHz. If the field is absent UE assumes value 0.  
<endl>  
  
  
<start>  
ntn-config  
kmac  
Scheduling offset provided by network if downlink and uplink frame timing are not aligned at gNB. It is needed for UE action and assumption on downlink configuration indicated by a MAC CE command in PDSCH (see TS 38.213 [13]). If the field is absent UE assumes value 0.  
For the reference subcarrier spacing value for the unit of K\_mac in FR1, a value of 15 kHz is used. The unit of K\_mac is number of slots for a given subcarrier spacing.  
<endl>  
  
  
<start>  
ntn-config  
ntn-PolarizationDL  
If present, this parameter indicates polarization information for downlink transmission on service link: including Right hand, Left hand circular polarizations (RHCP, LHCP) and Linear polarization.  
<endl>  
  
  
<start>  
ntn-config  
ntn-PolarizationUL  
If present, this parameter indicates Polarization information for uplink service link.  
If not present and ntn-PolarizationDL is present, UE assumes the same polarization for UL and DL.  
<endl>  
  
  
<start>  
ntn-config  
ntn-UlSyncValidityDuration  
A validity duration configured by the network for assistance information (i.e. Serving and/or neighbour satellite ephemeris and Common TA parameters) which indicates the maximum time duration (from epochTime) during which the UE can apply assistance information without having acquired new assistance information.  
The unit of ntn-UlSyncValidityDuration is second. Value s5 corresponds to 5 s, value s10 indicate 10 s and so on. This parameter applies to both connected and idle mode UEs. If this field is absent in ntn-Config provided via NTN-NeighCellConfig, the UE uses validity duration from the serving cell assistance information. This field is excluded when determining changes in system information, i.e. changes of ntn-UlSyncValidityDuration should neither result in system information change notifications nor in a modification of valueTag in SIB1. ntn-UlSyncValidityDuration is only updated when at least one of epochTime, ta-Info, ephemerisInfo is updated.  
<endl>  
  
  
<start>  
ntn-config  
ta-Common  
Network-controlled common timing advanced value and it may include any timing offset considered necessary by the network. ta-Common with value of 0 is supported. The granularity of ta-Common is 4.072 × 10^(-3) μs. Values are given in unit of corresponding granularity. This field is excluded when determining changes in system information, i.e. changes of ta-Common should neither result in system information change notifications nor in a modification of valueTag in SIB1.  
<endl>  
  
  
<start>  
ntn-config  
ta-CommonDrift  
Indicate drift rate of the common TA. The granularity of ta-CommonDrift is 0.2 × 10^(-3) μs⁄s. Values are given in unit of corresponding granularity. This field is excluded when determining changes in system information, i.e. changes of ta-CommonDrift should neither result in system information change notifications nor in a modification of valueTag in SIB1.  
<endl>  
  
  
<start>  
ntn-config  
ta-CommonDriftVariant  
Indicate drift rate variation of the common TA. The granularity of ta-CommonDriftVariant is 0.2×10^(-4) μs⁄s^2. Values are given in unit of corresponding granularity. This field is excluded when determining changes in system information, i.e. changes of ta-CommonDriftVariant should neither result in system information change notifications nor in a modification of valueTag in SIB1.  
<endl>  
  
  
<start>  
ntn-config  
ta-Report  
When this field is included in SIB19, it indicates reporting of timing advanced is enabled during Random Access due to RRC connection establishment or RRC connection resume, and during RRC connection reestablishment. When this field is included in ServingCellConfigCommon within dedicated signalling, it indicates TA reporting is enabled during Random Access due to reconfiguration with sync (see TS 38.321 [3], clause 5.4.8).  
<endl>

<start>  
nzp-csi-rs-resource  
periodicityAndOffset  
Periodicity and slot offset sl1 corresponds to a periodicity of 1 slot, sl2 to a periodicity of two slots, and so on. The corresponding offset is also given in number of slots (see TS 38.214 [19], clause 5.2.2.3.1). Network always configures the UE with a value for this field for periodic and semi-persistent NZP-CSI-RS-Resource (as indicated in CSI-ResourceConfig).  
<endl>  
  
  
<start>  
nzp-csi-rs-resource  
powerControlOffset  
Power offset of PDSCH RE to NZP CSI-RS RE. Value in dB (see TS 38.214 [19], clauses 5.2.2.3.1 and 4.1).  
<endl>  
  
  
<start>  
nzp-csi-rs-resource  
powerControlOffsetSS  
Power offset of NZP CSI-RS RE to SSS RE. Value in dB (see TS 38.214 [19], clause 5.2.2.3.1).  
<endl>  
  
  
<start>  
nzp-csi-rs-resource  
qcl-InfoPeriodicCSI-RS  
For a target periodic CSI-RS, contains a reference to one TCI-State in TCI-States for providing the QCL source and QCL type. For periodic CSI-RS, the source can be SSB or another periodic-CSI-RS. Refers to the TCI-State or dl-OrJoint-TCI-State which has this value for tci-StateId and is defined in tci-StatesToAddModList or in dl-OrJointTCI-StateList in the PDSCH-Config included in the BWP-Downlink corresponding to the serving cell and to the DL BWP to which the resource belongs to (see TS 38.214 [19], clause 5.2.2.3.1).  
<endl>  
  
  
<start>  
nzp-csi-rs-resource  
resourceMapping  
OFDM symbol location(s) in a slot and subcarrier occupancy in a PRB of the CSI-RS resource.  
<endl>  
  
  
<start>  
nzp-csi-rs-resource  
scramblingID  
Scrambling ID (see TS 38.214 [19], clause 5.2.2.3.1).  
<endl>

<start>  
nzp-csi-rs-resourceset  
aperiodicTriggeringOffset, aperiodicTriggeringOffset-r16, aperiodicTriggeringOffset-r17  
Offset X between the slot containing the DCI that triggers a set of aperiodic NZP CSI-RS resources and the slot in which the CSI-RS resource set is transmitted. For aperiodicTriggeringOffset, the value 0 corresponds to 0 slots, value 1 corresponds to 1 slot, value 2 corresponds to 2 slots, value 3 corresponds to 3 slots, value 4 corresponds to 4 slots, value 5 corresponds to 16 slots, value 6 corresponds to 24 slots. For aperiodicTriggeringOffset-r16 and aperiodicTriggeringOffset-r17, the value indicates the number of slots. aperiodicTriggeringOffset-r17 is applicable to SCS 480 kHz and 960 kHz, and only the values of integer multiples of 4 are valid, i.e. 0, 4, 8, and so on. The network configures only one of the fields. When neither field is included, the UE applies the value 0.  
<endl>  
  
  
<start>  
nzp-csi-rs-resourceset  
aperiodicTriggeringOffsetL2  
Indicates triggering offset of aperiodic NZP CSI-RS resources used for fast activation of the SCell (see clause 5.2.1.5.3 of TS 38.214 [19]), when the NZP CSI-RS resources are activated by the MAC CE (see clause 5.9 of TS 38.321 [3]). The value indicates the number of slots.  
<endl>  
  
  
<start>  
nzp-csi-rs-resourceset  
cmrGroupingAndPairing  
Configures CMR groups and pairs. The first nrofResourcesGroup1 resources in the NZP-CSI-RS resource set belong to Group 1 and the remaining resources in the NZP-CSI-RS resource set belong to Group 2. nrofResourcesGroup1 is and the number of remaining resources in the NZP-CSI-RS resource set belonging to Group 2 is as specified in TS 38.214 clause 5.2.1.4.1. Maximum total number in Group 1 and Group 2 is 8 (see TS 38.214 [19], clauses 5.2.1.4.1 and 5.2.1.4.2).  
<endl>  
  
  
<start>  
nzp-csi-rs-resourceset  
pair1OfNZP-CSI-RS, pair2OfNZP-CSI-RS  
A pair of NZP CSI-RS resources. In one pair, one resource shall belong to group 1 and the other resource shall belong to group 2 as configured by nrofResourcesGroup1 and nrofResourcesGroup2. (see TS 38.214 [19], clause xx).  
<endl>  
  
  
<start>  
nzp-csi-rs-resourceset  
nzp-CSI-RS-Resources  
NZP-CSI-RS-Resources associated with this NZP-CSI-RS resource set (see TS 38.214 [19], clause 5.2). For CSI, there are at most 8 NZP CSI RS resources per resource set.  
<endl>  
  
  
<start>  
nzp-csi-rs-resourceset  
nzp-CSI-RS-ResourceId1, nzp-CSI-RS-ResourceId2  
The nzp-CSI-RS-ResourceId1-r17 represents the index of the NZP CSI-RS resource in Resource Group 1, and nzp-CSI-RS-ResourceId2-r17 represents the index of the NZP CSI-RS resource in Resource Group 2.  
<endl>  
  
  
<start>  
nzp-csi-rs-resourceset  
pdc-Info  
Indicates that this NZP-CSI-RS-ResourceSet, if configured also with trs-Info, is used for propagation delay compensation. The field can be present only if trs-info is present. The field can be present in only one NZP-CSI-RS-ResourceSet. If network configures this field for an NZP-CSI-RS-ResourceSet, the UE measures the UE Rx-Tx time difference based on resources configured in this resource set.  
<endl>  
  
  
<start>  
nzp-csi-rs-resourceset  
repetition  
Indicates whether repetition is on/off. If the field is set to off or if the field is absent, the UE may not assume that the NZP-CSI-RS resources within the resource set are transmitted with the same downlink spatial domain transmission filter (see TS 38.214 [19], clauses 5.2.2.3.1 and 5.1.6.1.2). It can only be configured for CSI-RS resource sets which are associated with CSI-ReportConfig with report of L1 RSRP, L1 SINR or "no report".  
<endl>  
  
  
<start>  
nzp-csi-rs-resourceset  
trs-Info  
Indicates that the antenna port for all NZP-CSI-RS resources in the CSI-RS resource set is same. If the field is absent or released the UE applies the value false (see TS 38.214 [19], clause 5.2.2.3.1).  
<endl>

<start>  
pathlossreferencers  
additionalPCI  
Indicates the physical cell ID (PCI) of the SSB for the referenceSignal.  
<endl>

<start>  
pci-range  
range  
Indicates the number of physical cell identities in the range (including start). Value n4 corresponds with 4, value n8 corresponds with 8 and so on. The UE shall apply value 1 in case the field is absent, in which case only the physical cell identity value indicated by start applies.  
<endl>  
  
  
<start>  
pci-range  
start  
Indicates the lowest physical cell identity in the range.  
<endl>

<start>  
pci-rangeelement  
pci-Range  
Physical cell identity or a range of physical cell identities.  
<endl>

<start>  
pdcch-config  
controlResourceSetToAddModList, controlResourceSetToAddModListSizeExt  
List of UE specifically configured Control Resource Sets (CORESETs) to be used by the UE. The network restrictions on configuration of CORESETs per DL BWP are specified in TS 38.213 [13], clause 10.1 and TS 38.306 [26]. The UE shall consider entries in controlResourceSetToAddModList and in controlResourceSetToAddModListSizeExt as a single list, i.e. an entry created using controlResourceSetToAddModList can be modified using controlResourceSetToAddModListSizeExt (or deleted using controlResourceSetToReleaseListSizeExt) and vice-versa. In case network reconfigures control resource set with the same ControlResourceSetId as used for commonControlResourceSet or commonControlResourceSetExt configured via PDCCH-ConfigCommon or via SIB20, the configuration from PDCCH-Config always takes precedence and should not be updated by the UE based on servingCellConfigCommon or based on SIB20.  
<endl>  
  
  
<start>  
pdcch-config  
controlResourceSetToReleaseList, controlResourceSetToReleaseListSizeExt  
List of UE specifically configured Control Resource Sets (CORESETs) to be released by the UE. This field only applies to CORESETs configured by controlResourceSetToAddModList or controlResourceSetToAddModListSizeExt and does not release the field commonControlResourceSet configured by PDCCH-ConfigCommon and commonControlResourceSetExt configured by SIB20.  
<endl>  
  
  
<start>  
pdcch-config  
downlinkPreemption  
Configuration of downlink preemption indications to be monitored in this cell (see TS 38.213 [13], clause 11.2).  
<endl>  
  
  
<start>  
pdcch-config  
monitoringCapabilityConfig  
Configures either Rel-15 PDCCH monitoring capability, Rel-16 PDCCH monitoring capability or Rel-17 PDCCH monitoring capability for PDCCH monitoring on a serving cell (see TS 38.213 [13], clause 10.1). Value r15monitoringcapability enables the Rel-15 monitoring capability, and value r16monitoringcapability enables the Rel-16 PDCCH monitoring capability. r17monitoringcapability enables the Rel-17 PDCCH multi-slot monitoring capability. For 480 and 960 kHz SCS, only value r17monitoringcapability is applicable.  
<endl>  
  
  
<start>  
pdcch-config  
pdcch-SkippingDurationList  
Provides one or more values to derive the skipping duration in unit of slots, as specified in TS 38.213 [13], clause 10.4. The DCI which schedules data indicates which of the values is to be applied (see TS 38.213 [13], clause 10.4). For the 15kHz SCS, for each entry, only the first 26 values are valid and correspond to {1, 2, 3, …, 20, 30, 40, 50, 60, 80, 100}. For the 30kHz SCS, for each entry, only the first 46 values are valid and correspond to {1, 2, 3, …, 40, 60, 80, 100, 120, 160, 200}. For the 60kHz SCS, for each entry, only the first 86 values are valid and correspond to {1, 2, 3, …, 80, 120, 160, 200, 240, 320, 400}. For the 120kHz SCS, for each entry, the 166 values correspond to {1, 2, 3, …, 160, 240, 320, 400, 480, 640, 800}. For the 480kHz SCS, for each entry, the 166 values correspond to {4, 8, 12, …, 640, 960, 1280, 1600, 1920, 2560, 3200}. For the 960kHz SCS, for each entry, the 166 values correspond to {8, 16, 24, …, 1280, 1920, 2560, 3200, 3840, 5120, 6400}.  
<endl>  
  
  
<start>  
pdcch-config  
searchSpacesToAddModList, searchSpacesToAddModListExt  
List of UE specifically configured Search Spaces or MBS multicast Search Spaces. The network configures at most 10 Search Spaces per BWP per cell (including UE-specific and common Search Spaces). If the network includes searchSpaceToAddModListExt, it includes the same number of entries, and listed in the same order, as in searchSpacesToAddModList in each of them.  
<endl>  
  
  
<start>  
pdcch-config  
searchSpaceSwitchConfig  
Configuration to control the UE behavior to switch from search space group X back to search space group 0, as specified in clause 10 of TS 38.213 [13]. The network only configures either searchSpaceSwitchConfig-r16 or searchSpaceSwitchConfig-r17 for a UE.  
<endl>  
  
  
<start>  
pdcch-config  
tpc-PUCCH  
Enable and configure reception of group TPC commands for PUCCH.  
<endl>  
  
  
<start>  
pdcch-config  
tpc-PUSCH  
Enable and configure reception of group TPC commands for PUSCH.  
<endl>  
  
  
<start>  
pdcch-config  
tpc-SRS  
Enable and configure reception of group TPC commands for SRS.  
<endl>  
  
  
<start>  
pdcch-config  
uplinkCancellation  
Configuration of uplink cancellation indications to be monitored in this cell (see TS 38.213 [13], clause 11.2A).  
<endl>

<start>  
searchspaceswitchconfig  
cellGroupsForSwitchList  
The list of serving cells which are bundled for the search space group switching purpose (see TS 38.213 [13], clause 10.4). A serving cell can belong to only one CellGroupForSwitch. The network configures the same list for all BWPs of serving cells in the same CellGroupForSwitch.  
<endl>  
  
  
<start>  
searchspaceswitchconfig  
searchSpaceSwitchDelay  
Indicates the value to be applied by a UE for Search Space Set Group switching; corresponds to the P value in TS 38.213 [13], clause 10.4. The network configures the same value for all BWPs of serving cells in the same CellGroupForSwitch. For 120/480/960 kHz SCS, only values 40,41, ... 52 are valid and the actual value = field value \* SCS/120 kHz i.e. field value 40 corresponds to 40 with 120 kHz SCS, 160 with 480 kHz SCS and 320 with 960 kHz SCS, and so on.  
<endl>  
  
  
<start>  
searchspaceswitchconfig  
searchSpaceSwitchTimer  
Timer (in unit of slots) to control the UE behavior to switch from search space group X back to search space group 0, as specified in clause 10 of TS 38.213 [13]. For the 15kHz SCS, only the first 26 values are valid and correspond to {1, 2, 3, …, 20, 30, 40, 50, 60, 80, 100}. For the 30kHz SCS, only the first 46 values are valid and correspond to {1, 2, 3, …, 40, 60, 80, 100, 120, 160, 200}. For the 60kHz SCS, only the first 86 values are valid and correspond to {1, 2, 3, …, 80, 120, 160, 200, 240, 320, 400}. For the 120kHz SCS, the 166 values correspond to {1, 2, 3, …, 160, 240, 320, 400, 480, 640, 800}. For the 480kHz SCS, the 166 values correspond to {4, 8, 12, …, 640, 960, 1280, 1600, 1920, 2560, 3200}. For the 960kHz SCS, the 166 values correspond to {8, 16, 24, …, 1280, 1920, 2560, 3200, 3840, 5120, 6400}.  
<endl>

<start>  
pdcch-configcommon  
commonControlResourceSet  
An additional common control resource set which may be configured and used for any common or UE-specific search space. If the network configures this field, it uses a ControlResourceSetId other than 0 for this ControlResourceSet. The network configures the commonControlResourceSet in SIB1 so that it is contained in the bandwidth of CORESET#0. If the RedCap-specific initial downlink BWP does not contain the entire CORESET#0, the network configures the commonControlResourceSet in the RedCap-specific initial downlink BWP in SIB1 for RedCap such that it does not have to be contained in the bandwidth of CORESET#0.  
<endl>  
  
  
<start>  
pdcch-configcommon  
commonSearchSpaceList, commonSearchSpaceListExt, commonSearchSpaceListExt2  
A list of additional common search spaces. If the network configures this field, it uses the SearchSpaceIds other than 0. If the field is included, it replaces any previous list, i.e. all the entries of the list are replaced and each of the SearchSpace entries is considered to be newly created and the conditions and Need codes for setup of the entry apply. If the network includes commonSearchSpaceListExt/commonSearchSpaceListExt2, it includes the same number of entries, and listed in the same order, as in commonSearchSpaceList.  
<endl>  
  
  
<start>  
pdcch-configcommon  
controlResourceSetZero  
Parameters of the common CORESET#0 which can be used in any common or UE-specific search spaces. The values are interpreted like the corresponding bits in MIB pdcch-ConfigSIB1. Even though this field is only configured in the initial BWP (BWP#0) controlResourceSetZero can be used in search spaces configured in other DL BWP(s) than the initial DL BWP if the conditions defined in TS 38.213 [13], clause 10 are satisfied.  
<endl>  
  
  
<start>  
pdcch-configcommon  
firstPDCCH-MonitoringOccasionOfPEI-O  
Offset, in number of symbols, from the start of the reference frame for PEI-O to the start of the first PDCCH monitoring occasion of PEI-O on this BWP, see TS 38.213 [13], clause 10.4A. For the case po-NumPerPEI is smaller than Ns, UE applies the (floor(i\_s/po-NumPerPEI)+1)-th value out of (N\_s/po-NumPerPEI) configured values in firstPDCCH-MonitoringOccasionOfPEI-O for the symbol-level offset. When po-NumPerPEI is one or multiple of Ns, UE applies the first configured value in firstPDCCH-MonitoringOccasionOfPEI-O for the symbol-level offset.  
<endl>  
  
  
<start>  
pdcch-configcommon  
firstPDCCH-MonitoringOccasionOfPO  
Indicates the first PDCCH monitoring occasion of each PO of the PF on this BWP, see TS 38.304 [20]. The field sCS120KHZquarterT-SCS60KHZoneEighthT-SCS30KHZoneSixteenthT, sCS120KHZoneEighthT-SCS60KHZoneSixteenthT and sCS120KHZoneSixteenthT can be applied for SCS 480kHz, corresponding to sCS480KHZoneT-SCS120KHZquarterT-SCS60KHZoneEighthT-SCS30KHZoneSixteenthT, sCS480KHZhalfT-SCS120KHZoneEighthT-SCS60KHZoneSixteenthT and sCS480KHZquarterT-SCS120KHZoneSixteenthT in IE DownlinkConfigCommonSIB respectively.  
<endl>  
  
  
<start>  
pdcch-configcommon  
followUnifiedTCI-State  
When set to enabled, for PDCCH reception in CORESET #0, the UE applies the "indicated" DL only TCI or joint TCI as specified in TS 38.214 [19], clause 5.1.5.  
<endl>  
  
  
<start>  
pdcch-configcommon  
pagingSearchSpace  
ID of the search space for paging (see TS 38.213 [13], clause 10.1). If the field is absent, the UE does not receive paging in this BWP (see TS 38.213 [13], clause 10). This field is absent for the RedCap-specific initial downlink BWP, if it does not include CD-SSB and the entire CORESET#0. In that case, a RedCap UE in RRC\_IDLE or RRC\_INACTIVE while SDT procedure is not ongoing, shall monitor paging in the initial DL BWP that includes CORESET#0.  
<endl>  
  
  
<start>  
pdcch-configcommon  
pei-ConfigBWP  
Provides the configuration for PEI reception in this BWP. If the field is absent, the UE does not receive PEI in this BWP.  
<endl>  
  
  
<start>  
pdcch-configcommon  
pei-SearchSpace  
ID of dedicated search space for PEI. It can be configured to one of up to 4 common SS sets configured by commonSearchSpaceList with SearchSpaceId > 0. The CCE aggregation levels and maximum number of PDCCH candidates per CCE aggregation level follows Table 10.1-1 of TS38.213 [13]. SearchSpaceId = 0 can be configured for the case of SS/PBCH block and CORESET multiplexing pattern 2 or 3.  
<endl>  
  
  
<start>  
pdcch-configcommon  
ra-SearchSpace  
ID of the Search space for random access procedure (see TS 38.213 [13], clause 10.1). If the field is absent, the UE does not receive RAR in this BWP. This field is mandatory present in the DL BWP(s) if the conditions described in TS 38.321 [3], clause 5.15 are met.  
<endl>  
  
  
<start>  
pdcch-configcommon  
sdt-SearchSpace  
Common search space for CG-SDT and RA-SDT (see TS 38.213 [13]). If an existingSearchSpace is used, the network only signals the search space ID of the ra-SearchSpace.  
<endl>  
  
  
<start>  
pdcch-configcommon  
searchSpaceMCCH  
ID of the search space for MCCH. If the field is absent, the UE does not receive MCCH in this BWP (see TS 38.213 [13], clause 10). This field is absent for the RedCap-specific initial downlink BWP, if it does not include CD-SSB and the entire CORESET#0.  
<endl>  
  
  
<start>  
pdcch-configcommon  
searchSpaceMTCH  
ID of the search space for MTCH of MBS broadcast. If the field is absent, the UE applies searchSpaceMCCH also for MTCH, (see TS 38.213 [13], clause 10). This field is absent for the RedCap-specific initial downlink BWP, if it does not include CD-SSB and the entire CORESET#0.  
<endl>  
  
  
<start>  
pdcch-configcommon  
searchSpaceOtherSystemInformation  
ID of the Search space for other system information, i.e., SIB2 and beyond (see TS 38.213 [13], clause 10.1). If the field is absent, the UE does not receive other system information in this BWP. This field is absent for the RedCap-specific initial DL BWP, if it does not include CD-SSB and the entire CORESET#0. In that case, a RedCap UE in RRC\_IDLE or RRC\_INACTIVE shall monitor PDCCH to receive other system information using searchSpaceOtherSystemInformation in the initial DL BWP that includes CD-SSB and the entire CORESET#0.  
<endl>  
  
  
<start>  
pdcch-configcommon  
searchSpaceSIB1  
ID of the search space for SIB1 message. In the initial DL BWP of the UE′s PCell, the network sets this field to 0. If the field is absent, the UE does not receive SIB1 in this BWP. (see TS 38.213 [13], clause 10). This field is absent for the RedCap-specific initial DL BWP, if it does not include CD-SSB and the entire CORESET#0. In that case, a RedCap UE in RRC\_IDLE or RRC\_INACTIVE shall monitor PDCCH to receive SIB1 using searchSpaceSIB1 in the initial DL BWP that includes CD-SSB and the entire CORESET#0.  
<endl>  
  
  
<start>  
pdcch-configcommon  
searchSpaceZero  
Parameters of the common SearchSpace#0. The values are interpreted like the corresponding bits in MIB pdcch-ConfigSIB1. Even though this field is only configured in the initial BWP (BWP#0), searchSpaceZero can be used in search spaces configured in other DL BWP(s) than the initial DL BWP if the conditions described in TS 38.213 [13], clause 10, are satisfied.  
<endl>

<start>  
pdcch-configsib1  
controlResourceSetZero  
Determines a common ControlResourceSet (CORESET) with ID #0, see TS 38.213 [13], clause 13.  
<endl>  
  
  
<start>  
pdcch-configsib1  
searchSpaceZero  
Determines a common search space with ID #0, see TS 38.213 [13], clause 13.  
<endl>

<start>  
pdcch-servingcellconfig  
availabilityIndicator  
Use to configure monitoring a PDCCH for Availability Indicators (AI).  
<endl>  
  
  
<start>  
pdcch-servingcellconfig  
searchSpaceSwitchTimer  
The value of the timer in slots for monitoring PDCCH in the active DL BWP of the serving cell before moving to the default search space group (see TS 38.213 [13], clause 10.4).  
For 15 kHz SCS, {1..20} are valid.  
For 30 kHz SCS, {1..40} are valid.  
For 60kHz SCS, {1..80} are valid.  
For 120 kHz SCS, {1..160} are valid.  
For 480 kHz SCS, {1..640} are valid.  
For 960 kHz SCS, {1..1280} are valid.  
The network configures the same value for all serving cells in the same CellGroupForSwitch.  
<endl>  
  
  
<start>  
pdcch-servingcellconfig  
slotFormatIndicator  
Configuration of Slot-Format-Indicators to be monitored in the correspondingly configured PDCCHs of this serving cell.  
<endl>

<start>  
pdcp-config  
cipheringDisabled  
If included, ciphering is disabled for this DRB regardless of which ciphering algorithm is configured for the SRB/DRBs. The field may only be included if the UE is connected to 5GC. Otherwise the field is absent. The network configures all DRBs with the same PDU-session ID with same value for this field. The value for this field cannot be changed after the DRB is set up.  
<endl>  
  
  
<start>  
pdcp-config  
discardTimer  
Value in ms of discardTimer specified in TS 38.323 [5]. Value ms10 corresponds to 10 ms, value ms20 corresponds to 20 ms and so on. The value for this field cannot be changed in case of reconfiguration with sync, if the bearer is configured as DAPS bearer.  
<endl>  
  
  
<start>  
pdcp-config  
discardTimerExt  
Value in ms of discardTimer specified in TS 38.323 [5]. Value ms0dot5 corresponds to 0.5 ms, value ms1 corresponds to 1ms and so on. If this field is present, the field discardTimer is ignored and discardTimerExt is used instead.  
<endl>  
  
  
<start>  
pdcp-config  
discardTimerExt2  
Value in ms of discardTimerExt specified in TS 38.323 [5]. Value ms2000 corresponds to 2000 ms. If this field is present, the field discardTimer and discardTimerExt are ignored and discardTimerExt2 is used instead.  
<endl>  
  
  
<start>  
pdcp-config  
drb-ContinueROHC  
Indicates whether the PDCP entity continues or resets the ROHC header compression protocol during PDCP re-establishment, as specified in TS 38.323 [5]. This field is configured only in case of resuming an RRC connection or reconfiguration with sync, where the PDCP termination point is not changed and the fullConfig is not indicated. The network does not include the field if the bearer is configured as DAPS bearer. This field can be configured for both DRB and multicast MRB.  
<endl>  
  
  
<start>  
pdcp-config  
duplicationState  
This field indicates the uplink PDCP duplication state for the associated RLC entities at the time of receiving this IE. If set to true, the PDCP duplication state is activated for the associated RLC entity. The index for the indication is determined by ascending order of logical channel ID of all RLC entities other than the primary RLC entity indicated by primaryPath in the order of MCG and SCG, as in clause 6.1.3.32 of TS 38.321 [3]. If the number of associated RLC entities other than the primary RLC entity is two, UE ignores the value in the largest index of this field. If the field is absent, the PDCP duplication states are deactivated for all associated RLC entities.  
<endl>  
  
  
<start>  
pdcp-config  
ethernetHeaderCompression  
This fields configures Ethernet Header Compression. This field can only be configured for a bi-directional DRB or a bi-directional multicast MRB. The network reconfigures ethernetHeaderCompression only upon reconfiguration involving PDCP re-establishment and with neither drb-ContinueEHC-DL nor drb-ContinueEHC-UL configured. Network only configures this field when uplinkDataCompression is not configured.  
<endl>  
  
  
<start>  
pdcp-config  
headerCompression  
If rohc is configured, the UE shall apply the configured ROHC profile(s) in both uplink and downlink. If uplinkOnlyROHC is configured, the UE shall apply the configured ROHC profile(s) in uplink (there is no header compression in downlink). ROHC can be configured for any bearer type. ROHC and EHC can be both configured simultaneously for a DRB or a multicast MRB. The network reconfigures headerCompression only upon reconfiguration involving PDCP re-establishment or involving PDCP entity reconfiguration to configure DAPS bearer(s), and without any drb-ContinueROHC. Network configures headerCompression to notUsed when outOfOrderDelivery is configured. Network only configures this field when uplinkDataCompression is not configured.  
<endl>  
  
  
<start>  
pdcp-config  
initialRX-DELIV  
Indicates the initial value of RX\_DELIV during PDCP window initialization for multicast MRB as specified in TS 38.323 [5].  
<endl>  
  
  
<start>  
pdcp-config  
integrityProtection  
Indicates whether or not integrity protection is configured for this radio bearer. The network configures all DRBs with the same PDU-session ID with same value for this field. The value for this field cannot be changed after the DRB is set up.  
<endl>  
  
  
<start>  
pdcp-config  
maxCID  
Indicates the value of the MAX\_CID parameter as specified in TS 38.323 [5].  
The total value of MAX\_CIDs across all bearers for the UE should be less than or equal to the value of maxNumberROHC-ContextSessions parameter as indicated by the UE.  
<endl>  
  
  
<start>  
pdcp-config  
moreThanOneRLC  
This field configures UL data transmission when more than one RLC entity is associated with the PDCP entity. This field is not present if the bearer is configured as DAPS bearer.  
<endl>  
  
  
<start>  
pdcp-config  
moreThanTwoRLC-DRB  
This field configures UL data transmission when more than two RLC entities are associated with the PDCP entity for DRBs.  
<endl>  
  
  
<start>  
pdcp-config  
outOfOrderDelivery  
Indicates whether or not outOfOrderDelivery specified in TS 38.323 [5] is configured. This field should be either always present or always absent, after the radio bearer is established.  
<endl>  
  
  
<start>  
pdcp-config  
pdcp-Duplication  
Indicates whether or not uplink duplication status at the time of receiving this IE is configured and activated as specified in TS 38.323 [5]. The presence of this field indicates that duplication is configured. PDCP duplication is not configured for CA packet duplication of LTE RLC bearer. The value of this field, when the field is present, indicates the state of the duplication at the time of receiving this IE. If set to true, duplication is activated. The value of this field is always true, when configured for a SRB. For PDCP entity with more than two associated RLC entities for UL transmission, this field is always present. If the field moreThanTwoRLC-DRB is present, the value of this field is ignored and the state of the duplication is indicated by duplicationState. For PDCP entity with more than two associated RLC entities, only NR RLC bearer is supported.  
<endl>  
  
  
<start>  
pdcp-config  
pdcp-SN-SizeDL  
PDCP sequence number size for downlink, 12 or 18 bits, as specified in TS 38.323 [5]. For SRBs only the value len12bits is applicable. The value for this field cannot be changed in case of reconfiguration with sync, if the bearer is configured as DAPS bearer.  
<endl>  
  
  
<start>  
pdcp-config  
pdcp-SN-SizeUL  
PDCP sequence number size for uplink, 12 or 18 bits, as specified in TS 38.323 [5]. For SRBs only the value len12bits is applicable. The value for this field cannot be changed in case of reconfiguration with sync, if the bearer is configured as DAPS bearer.  
<endl>  
  
  
<start>  
pdcp-config  
primaryPath  
Indicates the cell group ID and LCID of the primary RLC entity as specified in TS 38.323 [5], clause 5.2.1 for UL data transmission when more than one RLC entity is associated with the PDCP entity. In this version of the specification, only cell group ID corresponding to MCG is supported for SRBs, except for the split SRB2 of the IAB-MT, and, when the SCG is deactivated, for DRBs. The NW indicates cellGroup for split bearers using logical channels in different cell groups. The NW always indicates logicalChannel if CA based PDCP duplication is configured in the cell group indicated by cellGroup of this field.  
<endl>  
  
  
<start>  
pdcp-config  
splitSecondaryPath  
Indicates the LCID of the split secondary RLC entity as specified in TS 38.323 [5] for fallback to split bearer operation when UL data transmission with more than two RLC entities is associated with the PDCP entity. This RLC entity belongs to a cell group that is different from the cell group indicated by cellGroup in the field primaryPath.  
<endl>  
  
  
<start>  
pdcp-config  
statusReportRequired  
For AM DRBs, AM MRBs and DAPS UM DRBs, indicates whether the DRB or the multicast MRB is configured to send a PDCP status report in the uplink, as specified in TS 38.323 [5]. For DAPS AM DRBs, it also indicates whether the DRB is configured to send a second PDCP status report in the uplink, as specified in TS 38.323 [5].  
<endl>  
  
  
<start>  
pdcp-config  
survivalTimeStateSupport  
Indicates whether the DRB associated with this PDCP entity has survival time state support. If this field is configured to be true, all associated RLC entities are activated for PDCP duplication upon reception of a retransmission grant addressed to CS-RNTI, as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
pdcp-config  
t-Reordering  
Value in ms of t-Reordering specified in TS 38.323 [5]. Value ms0 corresponds to 0 ms, value ms20 corresponds to 20 ms, value ms40 corresponds to 40 ms, and so on. When the field is absent the UE applies the value infinity. The value for this field cannot be changed in case of reconfiguration with sync, if the bearer is configured as DAPS bearer.  
<endl>  
  
  
<start>  
pdcp-config  
ul-DataSplitThreshold  
Parameter specified in TS 38.323 [5]. Value b0 corresponds to 0 bytes, value b100 corresponds to 100 bytes, value b200 corresponds to 200 bytes, and so on. The network sets this field to infinity for UEs not supporting splitDRB-withUL-Both-MCG-SCG and when the SCG is deactivated. If the field is absent when the split bearer is configured for the radio bearer first time, then the default value infinity is applied.  
<endl>  
  
  
<start>  
pdcp-config  
uplinkDataCompression  
Indicates the UDC configuration that the UE shall apply. Network does not configure uplinkDataCompression for a DRB, if headerCompression or ethernetHeaderCompression is already configured or outOfOrderDelivery or DAPS is configured for the DRB. The maximum number of DRBs where uplinkDataCompression can be applied is two. The network reconfigures uplinkDataCompression only upon reconfiguration involving PDCP re-establishment. If the field is set to drb-ContinueUDC, the PDCP entity continues the uplink data compression protocol during PDCP re-establishment, as specified in TS 38.323 [5]. The field is set to drb-ContinueUDC only in case of resuming an RRC connection or reconfiguration with sync, where the PDCP termination point is not changed and the fullConfig is not indicated.  
<endl>

<start>  
ethernetheadercompression  
drb-ContinueEHC-DL  
Indicates whether the PDCP entity continues or resets the downlink EHC header compression protocol during PDCP re-establishment, as specified in TS 38.323 [5]. The field is configured only in case of resuming an RRC connection or reconfiguration with sync, where the PDCP termination point is not changed and the fullConfig is not indicated.  
<endl>  
  
  
<start>  
ethernetheadercompression  
drb-ContinueEHC-UL  
Indicates whether the PDCP entity continues or resets the uplink EHC header compression protocol during PDCP re-establishment, as specified in TS 38.323 [5]. The field is configured only in case of resuming an RRC connection or reconfiguration with sync, where the PDCP termination point is not changed and the fullConfig is not indicated.  
<endl>  
  
  
<start>  
ethernetheadercompression  
ehc-CID-Length  
Indicates the length of the CID field for EHC packet. The value bits7 indicates the length is 7 bits, and the value bits15 indicates the length is 15 bits. Once the field ethernetHeaderCompression-r16 is configured for a DRB or a multicast MRB, the value of the field ehc-CID-Length for this DRB or multicast MRB is not reconfigured to a different value.  
<endl>  
  
  
<start>  
ethernetheadercompression  
ehc-Common  
Indicates the configurations that apply for both downlink and uplink.  
<endl>  
  
  
<start>  
ethernetheadercompression  
ehc-Downlink  
Indicates the configurations that apply for only downlink. If the field is configured, then Ethernet header compression is configured for downlink. Otherwise, it is not configured for downlink.  
<endl>  
  
  
<start>  
ethernetheadercompression  
ehc-Uplink  
Indicates the configurations that apply for only uplink. If the field is configured, then Ethernet header compression is configured for uplnik. Otherwise, it is not configured for uplink.  
<endl>  
  
  
<start>  
ethernetheadercompression  
maxCID-EHC-UL  
Indicates the value of the MAX\_CID\_EHC\_UL parameter as specified in TS 38.323 [5]. The total value of MAX\_CID\_EHC\_UL across all bearers for the UE should be less than or equal to the value of maxNumberEHC-Contexts parameter as indicated by the UE.  
<endl>

<start>  
uplinkdatacompression  
bufferSize  
This field indicates the buffer size applied for UDC as specified in TS 38.323 [5]. Value kbyte2 means 2048 bytes, kbyte4 means 4096 bytes and so on.  
<endl>  
  
  
<start>  
uplinkdatacompression  
dictionary  
This field indicates which pre-defined dictionary is used for UDC as specified in TS 38.323 [5]. The value sip-SDP means that UE shall prefill the buffer with standard dictionary for SIP and SDP defined in TS 38.323 [5], and the value operator means that UE shall prefill the buffer with operator-defined dictionary.  
<endl>

<start>  
pdsch-config  
antennaPortsFieldPresenceDCI-1-2  
Configure the presence of "Antenna ports" field in DCI format 1\_2. When the field is configured, then the "Antenna ports" field is present in DCI format 1\_2. Otherwise, the field size is set to 0 for DCI format 1\_2 (See TS 38.212 [17], clause 7.3.1.1.3). If neither dmrs-DownlinkForPDSCH-MappingTypeA-DCI-1-2 nor dmrs-DownlinkForPDSCH-MappingTypeB-DCI-1-2 is configured, this field is absent.  
<endl>  
  
  
<start>  
pdsch-config  
aperiodic-ZP-CSI-RS-ResourceSetsToAddModList, aperiodic-ZP-CSI-RS-ResourceSetsToAddModListDCI-1-2  
AddMod/Release lists for configuring aperiodically triggered zero-power CSI-RS resource sets. Each set contains a ZP-CSI-RS-ResourceSetId and the IDs of one or more ZP-CSI-RS-Resources (the actual resources are defined in the zp-CSI-RS-ResourceToAddModList). The network configures the UE with at most 3 aperiodic ZP-CSI-RS-ResourceSets and it uses only the ZP-CSI-RS-ResourceSetId 1 to 3. The network triggers a set by indicating its ZP-CSI-RS-ResourceSetId in the DCI payload. The DCI codepoint '01' triggers the resource set with ZP-CSI-RS-ResourceSetId 1, the DCI codepoint '10' triggers the resource set with ZP-CSI-RS-ResourceSetId 2, and the DCI codepoint '11' triggers the resource set with ZP-CSI-RS-ResourceSetId 3 (see TS 38.214 [19], clause 5.1.4.2). The field aperiodic-ZP-CSI-RS-ResourceSetsToAddModList applies to DCI format 1\_1 and the field aperiodic-ZP-CSI-RS-ResourceSetsToAddModListDCI-1-2 applies to DCI format 1\_2 (see TS 38.214 [19], clause 5.1.4.2 and TS 38.212 [17] clause 7.3.1).  
<endl>  
  
  
<start>  
pdsch-config  
beamAppTime  
Indicates the first slot to apply the unified TCI indicated by DCI as specified in TS 38.214 Clause 5.1.5. The value n1 means 1 symbol, n2 two symbols and so on. The first slot is at least Y symbols indicated by beamAppTime parameter after the last symbol of the acknowledgment of the joint or separate DL/UL beam indication. The same value shall be configured for all serving cells in any one of the simultaneousU-TCI-UpdateListN configured in IE CellGroupConfig based on the smallest SCS of the active BWP.  
<endl>  
  
  
<start>  
pdsch-config  
dataScramblingIdentityPDSCH, dataScramblingIdentityPDSCH2  
Identifier(s) used to initialize data scrambling (c\_init) for PDSCH as specified in TS 38.211 [16], clause 7.3.1.1. The dataScramblingIdentityPDSCH2 is configured if coresetPoolIndex is configured with 1 for at least one CORESET in the same BWP.  
<endl>  
  
  
<start>  
pdsch-config  
dl-OrJointTCI-StateToAddModList  
A list of Transmission Configuration Indicator (TCI) states indicating a transmission configuration which includes QCL-relationships between the DL RSs in one RS set and the PDSCH DMRS ports (see TS 38.214 [19], clause 5.1.5).  
<endl>  
  
  
<start>  
pdsch-config  
dmrs-DownlinkForPDSCH-MappingTypeA, dmrs-DownlinkForPDSCH-MappingTypeA-DCI-1-2  
DMRS configuration for PDSCH transmissions using PDSCH mapping type A (chosen dynamically via PDSCH-TimeDomainResourceAllocation). Only the fields dmrs-Type, dmrs-AdditionalPosition and maxLength may be set differently for mapping type A and B. The field dmrs-DownlinkForPDSCH-MappingTypeA applies to DCI format 1\_1 and the field dmrs-DownlinkForPDSCH-MappingTypeA-DCI-1-2 applies to DCI format 1\_2 (see TS 38.212 [17], clause 7.3.1).  
<endl>  
  
  
<start>  
pdsch-config  
dmrs-DownlinkForPDSCH-MappingTypeB, dmrs-DownlinkForPDSCH-MappingTypeB-DCI-1-2  
DMRS configuration for PDSCH transmissions using PDSCH mapping type B (chosen dynamically via PDSCH-TimeDomainResourceAllocation). Only the fields dmrs-Type, dmrs-AdditionalPosition and maxLength may be set differently for mapping type A and B. The field dmrs-DownlinkForPDSCH-MappingTypeB applies to DCI format 1\_1 and the field dmrs-DownlinkForPDSCH-MappingTypeB-DCI-1-2 applies to DCI format 1\_2 (see TS 38.212 [17], clause 7.3.1).  
<endl>  
  
  
<start>  
pdsch-config  
dmrs-FD-OCC-DisabledForRank1-PDSCH  
If configured, the UE may assume that the set of remaining orthogonal antenna ports, which are within the same code division multiplexing (CDM) group and have different frequency domain orthogonal cover codes (FD-OCC), are not associated with the PDSCH of another UE (see TS 38.214 [19], clause 5.1.6.2). It is applicable for PDSCH SCS of 480 and 960 kHz when rank 1 PDSCH with type-1 or type-2 DMRS is scheduled.  
<endl>  
  
  
<start>  
pdsch-config  
dmrs-SequenceInitializationDCI-1\_2  
Configure whether the field "DMRS Sequence Initialization" is present or not in DCI format 1\_2 If the field is absent, then the UE applies the value of 0 bit for the field "DMRS Sequence Initialization" in DCI format 1\_2. If the field is present, then the UE applies the value of 1 bit as in DCI format 1\_2 (see TS 38.212 [17], clause 7.3.1).  
<endl>  
  
  
<start>  
pdsch-config  
dummy  
This field is not used in the specification. If received it shall be ignored by the UE.  
<endl>  
  
  
<start>  
pdsch-config  
harq-ProcessNumberSizeDCI-1-2  
Configure the number of bits for the field "HARQ process number" in DCI format 1\_2 (see TS 38.212 [17], clause 7.3.1).  
<endl>  
  
  
<start>  
pdsch-config  
maxMIMO-Layers  
Indicates the maximum number of MIMO layers to be used for PDSCH in this DL BWP. If not configured, the UE uses the maxMIMO-Layers configuration in IE PDSCH-ServingCellConfig of the serving cell to which this BWP belongs, when the UE operates in this BWP. The value of maxMIMO-Layers for a DL BWP shall be smaller than or equal to the value of maxMIMO-Layers configured in IE PDSCH-ServingCellConfig of the serving cell to which this BWP belongs.  
For MBS multicast, indicates the maximum number of MIMO layers to be used for group-common PDSCH of MBS multicast in this CFR. If not configured for CFR, the UE applies value 1. The value of maxMIMO-Layers for a CFR shall be smaller than or equal to the value of maxMIMO-Layers configured in PDSCH-ServingCellConfig IE of the serving cell to which this CFR belongs.  
<endl>  
  
  
<start>  
pdsch-config  
maxNrofCodeWordsScheduledByDCI  
Maximum number of code words that a single DCI may schedule. This changes the number of MCS/RV/NDI bits in the DCI message from 1 to 2.  
<endl>  
  
  
<start>  
pdsch-config  
mcs-Table  
Indicates which MCS table the UE shall use for PDSCH for DCI formats 1\_0 and 1\_1 (see TS 38.214 [19], clause 5.1.3.1). If all fields are absent the UE applies the value 64QAM. If the field mcs-Table-r17 is present for DCI format 1\_1, the network does not configure the field mcs-Table (without suffix). For a RedCap UE, the 256QAM MCS table for PDSCH is only supported if the UE indicates support of 256QAM for PDSCH.  
<endl>  
  
  
<start>  
pdsch-config  
mcs-TableDCI-1-2  
Indicates which MCS table the UE shall use for PDSCH for DCI format 1\_2 (see TS 38.214 [19], clause 5.1.3.1). If all fields are absent the UE applies the value 64QAM. If the field mcs-TableDCI-1-2-r17 is present, the network does not configure the field mcs-TableDCI-1-2-r16. For a RedCap UE, the 256QAM MCS table for PDSCH is only supported if the UE indicates support of 256QAM for PDSCH.  
<endl>  
  
  
<start>  
pdsch-config  
minimumSchedulingOffsetK0  
List of minimum K0 values. Minimum K0 parameter denotes minimum applicable value(s) for the TDRA table for PDSCH and for A-CSI RS triggering Offset(s) (see TS 38.214 [19], clause 5.3.1).  
<endl>  
  
  
<start>  
pdsch-config  
numberOfBitsForRV-DCI-1-2  
Configures the number of bits for "Redundancy version" in the DCI format 1\_2 (see TS 38.212 [17], clause 7.3.1 and TS 38.214 [19], clause 5.1.2.1).  
<endl>  
  
  
<start>  
pdsch-config  
pdsch-AggregationFactor  
Number of repetitions for data (see TS 38.214 [19], clause 5.1.2.1). When the field is absent in PDSCH-Config which is not used for MBS CFR, the UE applies the value 1.  
<endl>  
  
  
<start>  
pdsch-config  
pdsch-HARQ-ACK-EnhType3DCI-1-2  
When configured, enhanced Type 3 HARQ-ACK codebook triggering by DCI format 1\_2 is enabled.  
<endl>  
  
  
<start>  
pdsch-config  
pdsch-HARQ-ACK-EnhType3DCI-Field-1-2  
Enables the enhanced Type 3 codebook through a new DCI field to indicate the enhanced Type 3 HARQ-ACK codebook in DCI format 1\_2 if the more than one enhanced Type 3 HARQ-ACK codebook is configured for the primary PUCCH cell group.  
<endl>  
  
  
<start>  
pdsch-config  
pdsch-HARQ-ACK-OneShotFeedbackDCI-1-2  
When configured, DCI format 1\_2 can request the UE to report A/N for all HARQ processes and all component carriers configured in the PUCCH group (see TS 38.212 [17], clause 7.3.1).  
<endl>  
  
  
<start>  
pdsch-config  
pdsch-HARQ-ACK-RetxDCI-1-2  
When configured, DCI format 1\_2 can request the UE to perform a HARQ-ACK re-transmission on a PUCCH resource (see TS 38.213 [13], clause 9.1.5).  
<endl>  
  
  
<start>  
pdsch-config  
pdsch-TimeDomainAllocationList, pdsch-TimeDomainAllocationListDCI-1-2, pdsch-TimeDomainAllocationListForMultiPDSCH  
List of time-domain configurations for timing of DL assignment to DL data.  
The field pdsch-TimeDomainAllocationList (with or without suffix) applies to DCI format 1\_0 and DCI format 1\_1 (see table 5.1.2.1.1-1 in TS 38.214 [19]), and if the field pdsch-TimeDomainAllocationListDCI-1-2 is not configured, to DCI format 1\_2. If the field pdsch-TimeDomainAllocationListDCI-1-2 is configured, it applies to DCI format 1\_2 (see table 5.1.2.1.1-1A in TS 38.214 [19]). The field pdsch-TimeDomainAllocationListForMultiPDSCH applies to DCI format 1\_1.  
The network does not configure the pdsch-TimeDomainAllocationList-r16 simultaneously with the pdsch-TimeDomainAllocationList (without suffix) in the same PDSCH-Config.  
<endl>  
  
  
<start>  
pdsch-config  
prb-BundlingType, prb-BundlingTypeDCI-1-2  
Indicates the PRB bundle type and bundle size(s) (see TS 38.214 [19], clause 5.1.2.3). If dynamic is chosen, the actual bundleSizeSet1 or bundleSizeSet2 to use is indicated via DCI. Constraints on bundleSize(Set) setting depending on vrb-ToPRB-Interleaver and rbg-Size settings are described in TS 38.214 [19], clause 5.1.2.3. If a bundleSize(Set) value is absent, the UE applies the value n2. The field prb-BundlingType applies to DCI format 1\_1, and the field prb-BundlingTypeDCI-1-2 applies to DCI format 1\_2 (see TS 38.212 [17], clause 7.3.1 and TS 38.214 [19], clause 5.1.2.3).  
<endl>  
  
  
<start>  
pdsch-config  
priorityIndicatorDCI-1-1, priorityIndicatorDCI-1-2, priorityIndicatorDCI-4-2  
Configure the presence of "priority indicator" in DCI format 1\_1/1\_2/4\_2. When the field is absent in the IE, then 0 bit for "priority indicator" in DCI format 1\_1/1\_2/4\_2. The field priorityIndicatorDCI-1-1 applies to DCI format 1\_1, the field priorityIndicatorDCI-1-2 applies to DCI format 1\_2 and the field priorityIndicatorDCI-4-2 applies to DCI format 4\_2, respectively (see TS 38.212 [17], clause 7.3.1 and TS 38.213 [13] clause 9).  
<endl>  
  
  
<start>  
pdsch-config  
pucch-sSCellDynDCI-1-2  
When configured, PUCCH cell switching based on dynamic indication in DCI format 1\_2 is enabled (see TS 38.213 [13], clause 9.A).  
<endl>  
  
  
<start>  
pdsch-config  
p-ZP-CSI-RS-ResourceSet  
A set of periodically occurring ZP-CSI-RS-Resources (the actual resources are defined in the zp-CSI-RS-ResourceToAddModList). The network uses the ZP-CSI-RS-ResourceSetId=0 for this set.  
If p-ZP-CSI-RS-ResourceSet is configured in both PDSCH-Config for MBS CFR and PDSCH-Config for the assoicated BWP, it is subject to UE capability whether the p-ZP-CSI-RS-ResourceSet configured in PDSCH-Config for MBS CFR can be different from the p-ZP-CSI-RS-ResourceSet configured in PDSCH-Config for the assoicated BWP.  
<endl>  
  
  
<start>  
pdsch-config  
rateMatchPatternGroup1, rateMatchPatternGroup1DCI-1-2  
The IDs of a first group of RateMatchPatterns defined in PDSCH-Config->rateMatchPatternToAddModList (BWP level) or in ServingCellConfig ->rateMatchPatternToAddModList (cell level). These patterns can be activated dynamically by DCI (see TS 38.214 [19], clause 5.1.4.1). The field rateMatchPatternGroup1 applies to DCI format 1\_1, and the field rateMatchPatternGroup1DCI-1-2 applies to DCI format 1\_2 (see TS 38.214 [19], clause 5.1.4.1).  
<endl>  
  
  
<start>  
pdsch-config  
rateMatchPatternGroup2, rateMatchPatternGroup2DCI-1-2  
The IDs of a second group of RateMatchPatterns defined in PDSCH-Config->rateMatchPatternToAddModList (BWP level) or in ServingCellConfig ->rateMatchPatternToAddModList (cell level). These patterns can be activated dynamically by DCI (see TS 38.214 [19], clause 5.1.4.1). The field rateMatchPatternGroup2 applies to DCI format 1\_1, and the field rateMatchPatternGroup2DCI-1-2 applies to DCI format 1\_2 (see TS 38.214 [19], clause 5.1.4.1).  
<endl>  
  
  
<start>  
pdsch-config  
rateMatchPatternToAddModList  
Resources patterns which the UE should rate match PDSCH around. The UE rate matches around the union of all resources indicated in the rate match patterns (see TS 38.214 [19], clause 5.1.4.1). If a RateMatchPattern with the same RateMatchPatternId is configured in both MBS CFR and its associated BWP, the entire RateMatchPattern configuration, including the set of RBs/REs indicated by the patterns for the rate matching around, shall be the same and they are counted as a single rate match pattern in the total configured rate match patterns as defined in TS 38.214 [19].  
<endl>  
  
  
<start>  
pdsch-config  
rbg-Size  
Selection between config 1 and config 2 for RBG size for PDSCH. The UE ignores this field if resourceAllocation is set to resourceAllocationType1 (see TS 38.214 [19], clause 5.1.2.2.1).  
<endl>  
  
  
<start>  
pdsch-config  
referenceOfSLIVDCI-1-2  
Enable using the starting symbol of the PDCCH monitoring occasion in which the DL assignment is detected as the reference of the SLIV for DCI format 1\_2. When the RRC parameter enables the utilization of the new reference, the new reference is applied for TDRA entries with K0=0. For other entries (if any) in the same TDRA table, the reference is slot boundary as in Rel-15. PDSCH mapping type A is not supported with the new reference. The new reference of SLIV is not configured for a serving cell configured to be scheduled by cross-carrier scheduling on a scheduling cell with different numerology (see TS 38.212 [17] clause 7.3.1 and TS 38.214 [19] clause 5.1.2.1).  
<endl>  
  
  
<start>  
pdsch-config  
repetitionSchemeConfig  
Configure the UE with repetition schemes. The network does not configure repetitionSchemeConfig-r16 and repetitionSchemeConfig-v1630 simultaneously to setup in the same PDSCH-Config.  
<endl>  
  
  
<start>  
pdsch-config  
resourceAllocation, resourceAllocationDCI-1-2  
Configuration of resource allocation type 0 and resource allocation type 1 for non-fallback DCI (see TS 38.214 [19], clause 5.1.2.2). The field resourceAllocation applies to DCI format 1\_1, and the field resourceAllocationDCI-1-2 applies to DCI format 1\_2 (see TS 38.214 [19], clause 5.1.2.2).  
<endl>  
  
  
<start>  
pdsch-config  
resourceAllocationType1GranularityDCI-1-2  
Configure the scheduling granularity applicable for both the starting point and length indication for resource allocation type 1 in DCI format 1\_2. If this field is absent, the granularity is 1 PRB (see TS 38.214 [19], clause 5.1.2.2.2).  
<endl>  
  
  
<start>  
pdsch-config  
sizeDCI-4-2  
Indicates the size of DCI format 4-2 (see TS 38.213 [13], clause 10.1).  
<endl>  
  
  
<start>  
pdsch-config  
sp-ZP-CSI-RS-ResourceSetsToAddModList  
AddMod/Release lists for configuring semi-persistent zero-power CSI-RS resource sets. Each set contains a ZP-CSI-RS-ResourceSetId and the IDs of one or more ZP-CSI-RS-Resources (the actual resources are defined in the zp-CSI-RS-ResourceToAddModList) (see TS 38.214 [19], clause 5.1.4.2).  
<endl>  
  
  
<start>  
pdsch-config  
tci-StatesToAddModList  
A list of Transmission Configuration Indicator (TCI) states indicating a transmission configuration which includes QCL-relationships between the DL RSs in one RS set and the PDSCH DMRS ports (see TS 38.214 [19], clause 5.1.5). If unifiedTCI-StateType is configured for the serving cell, no element in this list is configured.  
<endl>  
  
  
<start>  
pdsch-config  
unifiedTCI-StateRef  
Provides the serving cell and BWP where the configuration for dl-OrJointTCI-StateToAddModList-r17 are defined. When this field is present, dl-OrJointTCI-StateToAddModList and dl-OrJointTCI-StateToReleaseList are not present.  
<endl>  
  
  
<start>  
pdsch-config  
vrb-ToPRB-Interleaver, vrb-ToPRB-InterleaverDCI-1-2  
Interleaving unit configurable between 2 and 4 PRBs (see TS 38.211 [16], clause 7.3.1.6). When the field is absent, the UE performs non-interleaved VRB-to-PRB mapping.  
<endl>  
  
  
<start>  
pdsch-config  
xOverheadMulticast  
Accounts for an overhead from CSI-RS, CORESET etc. If the field is absent, the UE applies value xOh0 (see TS 38.214 [19]).  
<endl>  
  
  
<start>  
pdsch-config  
zp-CSI-RS-ResourceToAddModList  
A list of Zero-Power (ZP) CSI-RS resources used for PDSCH rate-matching. Each resource in this list may be referred to from only one type of resource set, i.e., aperiodic, semi-persistent or periodic (see TS 38.214 [19]).  
<endl>

<start>  
pdsch-configcommon  
pdsch-TimeDomainAllocationList  
List of time-domain configurations for timing of DL assignment to DL data (see table 5.1.2.1.1-1 in TS 38.214 [19]).  
<endl>

<start>  
pdsch-codeblockgrouptransmission  
codeBlockGroupFlushIndicator  
Indicates whether CBGFI for CBG based (re)transmission in DL is enabled (true). (see TS 38.212 [17], clause 7.3.1.2.2).  
<endl>  
  
  
<start>  
pdsch-codeblockgrouptransmission  
maxCodeBlockGroupsPerTransportBlock  
Maximum number of code-block-groups (CBGs) per TB. In case of multiple CW, the maximum CBG is 4 (see TS 38.213 [13], clause 9.1.1).  
<endl>

<start>  
pdsch-servingcellconfig  
codeBlockGroupTransmission  
Enables and configures code-block-group (CBG) based transmission (see TS 38.213 [13], clause 9.1.1). Network does not configure for a UE both spatial bundling of HARQ ACKs and codeBlockGroupTransmission within the same cell group.  
The network does not configure this field if  
 - the SCS is 480 or 960 kHz  
 - Type-1 HARQ-ACK codebook is configured and pdsch-TimeDomainAllocationListForMultiPDSCH-r17 for this serving cell contains pdsch-AllocationList with multiple entries (multiple PDSCH)  
 - Type-2 HARQ-ACK codebook is configured and pdsch-TimeDomainAllocationListForMultiPDSCH-r17 for any cell in the same PUCCH cell group associated with this serving cell contains pdsch-AllocationList with multiple entries (multiple PDSCH)  
<endl>  
  
  
<start>  
pdsch-servingcellconfig  
downlinkHARQ-FeedbackDisabled  
Used to disable the DL HARQ feedback, sent in the uplink, per HARQ process ID. The first/leftmost bit corresponds to HARQ process ID 0, the next bit to HARQ process ID 1 and so on. Bits corresponding to HARQ process IDs that are not configured shall be ignored. The bit(s) set to one identify HARQ processes with disabled DL HARQ feedback and the bit(s) set to zero identify HARQ processes with enabled DL HARQ feedback.  
<endl>  
  
  
<start>  
pdsch-servingcellconfig  
maxMIMO-Layers  
Indicates the maximum number of MIMO layers to be used for PDSCH in all BWPs of this serving cell. (see TS 38.212 [17], clause 5.4.2.1).  
<endl>  
  
  
<start>  
pdsch-servingcellconfig  
nrofHARQ-ProcessesForPDSCH  
The number of HARQ processes to be used on the PDSCH of a serving cell. Value n2 corresponds to 2 HARQ processes, value n4 to 4 HARQ processes, and so on. If both nrofHARQ-ProcessesForPDSCH and nrofHARQ-ProcessesForPDSCH-v1700 are absent, the UE uses 8 HARQ processes (see TS 38.214 [19], clause 5.1).  
<endl>  
  
  
<start>  
pdsch-servingcellconfig  
pdsch-CodeBlockGroupTransmissionList  
A list of configurations for up to two simultaneously constructed HARQ-ACK codebooks (see TS 38.213 [13], clause 9.3).  
<endl>  
  
  
<start>  
pdsch-servingcellconfig  
processingType2Enabled  
Enables configuration of advanced processing time capability 2 for PDSCH (see 38.214 [19], clause 5.3).  
<endl>  
  
  
<start>  
pdsch-servingcellconfig  
pucch-Cell  
The ID of the serving cell (of the same cell group) to use for PUCCH. If the field is absent, the UE sends the HARQ feedback on the PUCCH of the SpCell of this cell group, or on this serving cell if it is a PUCCH SCell.  
<endl>  
  
  
<start>  
pdsch-servingcellconfig  
xOverhead  
Accounts for overhead from CSI-RS, CORESET, etc. If the field is absent, the UE applies value xOh0 (see TS 38.214 [19], clause 5.1.3.2).  
<endl>

<start>  
pdsch-timedomainresourceallocation  
k0  
Slot offset between DCI and its scheduled PDSCH (see TS 38.214 [19], clause 5.1.2.1). k0-v1710 is only applicable for PDSCH SCS of 480 kHz and 960 kHz. When the field is absent the UE applies the value 0.  
<endl>  
  
  
<start>  
pdsch-timedomainresourceallocation  
mappingType  
PDSCH mapping type (see TS 38.214 [19], clause 5.3).  
<endl>  
  
  
<start>  
pdsch-timedomainresourceallocation  
repetitionNumber  
Indicates the number of PDSCH transmission occasions for slot-based repetition scheme in IE RepetitionSchemeConfig. The parameter is used as specified in 38.214 [19].  
<endl>  
  
  
<start>  
pdsch-timedomainresourceallocation  
startSymbolAndLength  
An index giving valid combinations of start symbol and length (jointly encoded) as start and length indicator (SLIV). The network configures the field so that the allocation does not cross the slot boundary (see TS 38.214 [19], clause 5.1.2.1).  
<endl>

<start>  
multipdsch-timedomainresourceallocation  
pdsch-TDRA-List  
One or multiple PDSCHs which can be in consecutive or non-consecutive slots (see TS 38.214 [19], clause 5.1.2.1).  
<endl>

<start>  
phr-config  
dummy  
This field is not used in this version of the specification and the UE ignores the received value.  
<endl>  
  
  
<start>  
phr-config  
mpe-ProhibitTimer  
Value in number of subframes for MPE reporting, as specified in TS 38.321 [3]. Value sf10 corresponds to 10 subframes, and so on.  
<endl>  
  
  
<start>  
phr-config  
mpe-Reporting-FR2  
Indicates whether the UE shall report MPE P-MPR in the PHR MAC control element, as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
phr-config  
mpe-Threshold  
Value of the P-MPR threshold in dB for reporting MPE P-MPR when FR2 is configured, as specified in TS 38.321 [3]. The same value applies for each serving cell (although the associated functionality is performed independently for each cell).  
<endl>  
  
  
<start>  
phr-config  
multiplePHR  
Indicates if power headroom shall be reported using the Single Entry PHR MAC control element or Multiple Entry PHR MAC control element defined in TS 38.321 [3]. True means to use Multiple Entry PHR MAC control element and False means to use the Single Entry PHR MAC control element defined in TS 38.321 [3]. The network configures this field to true for MR-DC and UL CA for NR, and to false in all other cases.  
<endl>  
  
  
<start>  
phr-config  
numberOfN  
Number of reported P-MPR values in a PHR MAC CE.  
<endl>  
  
  
<start>  
phr-config  
phr-ModeOtherCG  
Indicates the mode (i.e. real or virtual) used for the PHR of the activated cells that are part of the other Cell Group (i.e. MCG or SCG), when DC is configured. If the UE is configured with only one cell group (no DC), it ignores the field.  
<endl>  
  
  
<start>  
phr-config  
phr-PeriodicTimer  
Value in number of subframes for PHR reporting as specified in TS 38.321 [3]. Value sf10 corresponds to 10 subframes, value sf20 corresponds to 20 subframes, and so on.  
<endl>  
  
  
<start>  
phr-config  
phr-ProhibitTimer  
Value in number of subframes for PHR reporting as specified in TS 38.321 [3]. Value sf0 corresponds to 0 subframe, value sf10 corresponds to 10 subframes, value sf20 corresponds to 20 subframes, and so on.  
<endl>  
  
  
<start>  
phr-config  
phr-Tx-PowerFactorChange  
Value in dB for PHR reporting as specified in TS 38.321 [3]. Value dB1 corresponds to 1 dB, dB3 corresponds to 3 dB and so on. The same value applies for each serving cell (although the associated functionality is performed independently for each cell).  
<endl>  
  
  
<start>  
phr-config  
phr-Type2OtherCell  
If set to true, the UE shall report a PHR type 2 for the SpCell of the other MAC entity. See TS 38.321 [3], clause 5.4.6. Network sets this field to false if the UE is not configured with an E-UTRA MAC entity.  
<endl>  
  
  
<start>  
phr-config  
twoPHRMode  
Indicates if the power headroom shall be reported as two PHRs (each PHR associated with a SRS resource set) is enabled or not.  
<endl>

<start>  
physicalcellgroupconfig  
ackNackFeedbackMode  
Indicates which among the joint and separate ACK/NACK feedback modes to use within a slot as specified in TS 38.213 [13] (clause 9).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
bdFactorR  
Parameter for determining and distributing the maximum numbers of BD/CCE for mPDCCH based mPDSCH transmission as specified in TS 38.213 [13] Clause 10.1.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
cs-RNTI  
RNTI value for downlink SPS (see SPS-Config) and uplink configured grant (see ConfiguredGrantConfig).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
downlinkAssignmentIndexDCI-0-2  
Indicates if "Downlink assignment index" is present or absent in DCI format 0\_2. If the field "downlinkAssignmentIndexDCI-0-2" is absent, then 0 bit for "Downlink assignment index" in DCI format 0\_2. If the field "downlinkAssignmentIndexDCI-0-2" is present, then the bitwidth of "Downlink assignment index" in DCI format 0\_2 is defined in the same was as that in DCI format 0\_1 (see TS 38.212 [17], clause 7.3.1 and TS 38.213 [13], clause 9.1).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
downlinkAssignmentIndexDCI-1-2  
Configures the number of bits for "Downlink assignment index" in DCI format 1\_2. If the field is absent, then 0 bit is applied for "Downlink assignment index" in DCI format 1\_2. Note that 1 bit and 2 bits are applied if only one serving cell is configured in the DL and pdsch-HARQ-ACK-Codebook is set to dynamic. 4 bits is applied if more than one serving cell are configured in the DL and pdsch-HARQ-ACK-Codebook is set to dynamic (see TS 38.212 [17], clause 7.3.1 and TS 38.213 [13], clause 9.1).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
harq-ACK-SpatialBundlingPUCCH  
Enables spatial bundling of HARQ ACKs. It is configured per cell group (i.e. for all the cells within the cell group) for PUCCH reporting of HARQ-ACK. It is only applicable when more than 4 layers are possible to schedule. When the field is absent, the spatial bundling of PUCCH HARQ ACKs for the primary PUCCH group is disabled (see TS 38.213 [13], clause 9.1.2.1). If the field harq-ACK SpatialBundlingPUCCH-secondaryPUCCHgroup is present, harq-ACK-SpatialBundlingPUCCH is only applied to primary PUCCH group. Network does not configure for a UE both spatial bundling of HARQ ACKs and codeBlockGroupTransmission within the same cell group.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
harq-ACK-SpatialBundlingPUCCH-secondaryPUCCHgroup  
Indicates whether spatial bundling of PUCCH HARQ ACKs for the secondary PUCCH group is enabled or disabled. The field is only applicable when more than 4 layers are possible to schedule (see TS 38.213 [13], clause 9.1.2.1). When the field is absent, the use of spatial bundling of PUCCH HARQ ACKs for the secondary PUCCH group is indicated by harq-ACK-SpatialBundlingPUCCH. See TS 38.213 [13], clause 9.1.2.1. Network does not configure for a UE both spatial bundling of HARQ ACKs and codeBlockGroupTransmission within the same cell group.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
harq-ACK-SpatialBundlingPUSCH  
Enables spatial bundling of HARQ ACKs. It is configured per cell group (i.e. for all the cells within the cell group) for PUSCH reporting of HARQ-ACK. It is only applicable when more than 4 layers are possible to schedule. When the field is absent, the spatial bundling of PUSCH HARQ ACKs for the primary PUCCH group is disabled (see TS 38.213 [13], clauses 9.1.2.2 and 9.1.3.2). If the field harq-ACK SpatialBundlingPUSCH-secondaryPUCCHgroup is present, harq-ACK-SpatialBundlingPUSCH is only applied to primary PUCCH group. Network does not configure for a UE both spatial bundling of HARQ ACKs and codeBlockGroupTransmission within the same cell group.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
harq-ACK-SpatialBundlingPUSCH-secondaryPUCCHgroup  
Indicates whether spatial bundling of PUSCH HARQ ACKs for the secondary PUCCH group is enabled or disabled. The field is only applicable when more than 4 layers are possible to schedule (see TS 38.213 [13], clauses 9.1.2.2 and 9.1.3.2). When the field is absent, the use of spatial bundling of PUSCH HARQ ACKs for the secondary PUCCH group is indicated by harq-ACK-SpatialBundlingPUSCH. See TS 38.213 [13], clauses 9.1.2.2 and 9.1.3.2. Network does not configure for a UE both spatial bundling of HARQ ACKs and codeBlockGroupTransmission within the same cell group.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
intraBandNC-PRACH-simulTx  
Enables parallel PRACH and SRS/PUCCH/PUSCH transmissions across CCs in intra-band non-contiguous CA (see TS 38.213 [13], clause 8.1 and TS 38.214 [19], clause 6.2.1). This field is absent in the IE CellGroupConfig when provided as part of RRCSetup message.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
mcs-C-RNTI  
RNTI to indicate use of qam64LowSE for grant-based transmissions. When the mcs-C-RNTI is configured, RNTI scrambling of DCI CRC is used to choose the corresponding MCS table.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
nfi-TotalDAI-Included  
Indicates whether the NFI and total DAI fields of the non-scheduled PDSCH group is included in the non-fallback DL grant DCI (see TS 38.212 [17], clause 7.3.1). The network configures this only when enhanced dynamic codebook is configured (pdsch-HARQ-ACK-Codebook is set to enhancedDynamic).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
nrdc-PCmode-FR1  
Indicates the uplink power sharing mode that the UE uses in NR-DC in frequency range 1 (FR1) (see TS 38.213 [13], clause 7.6).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
nrdc-PCmode-FR2  
Indicates the uplink power sharing mode that the UE uses in NR-DC in frequency range 2 (FR2) (see TS 38.213 [13], clause 7.6).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
pdcch-BlindDetection, pdcch-BlindDetection2, pdcch-BlindDetection3  
Indicates the reference number of cells for PDCCH blind detection for the CG. Network configures the field for each CG when the UE is in NR DC and sets the value in accordance with the constraints specified in TS 38.213 [13]. The network configures pdcch-BlindDetection only if the UE is in NR-DC. The network configures pdcch-BlindDetection2 only if the UE is in NR-DC with at least one downlink cell using Rel-16 PDCCH monitoring capability. The network configures pdcch-BlindDetection3 only if the UE is in NR-DC with at least one downlink cell using Rel-15 PDCCH monitoring capability.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
pdcch-BlindDetectionCA-CombIndicator  
Configure one combination of pdcch-BlindDetectionCA1 (for R15) and pdcch-BlindDetectionCA2 (for R16) for UE to use for scaling PDCCH monitoring capability if the number of serving cells configured to a UE is larger than the reported capability, and if UE reports more than one combination of pdcch-BlindDetectionCA1 and pdcch-BlindDetectionCA2 as UE capability. The combination of pdcch-BlindDetectionCA1 and pdcch-BlindDetectionCA2 configured by pdcch-BlindDetectionCA-CombIndicator is from the more than one combination of pdcch-BlindDetectionCA1 and pdcch-BlindDetectionCA2 reported by UE (see TS 38.213 [13], clause 10).  
pdcch-BlindDetectionCA-CombIndicator-r17 is used to configure one combination of pdcch-BlindDetectionCA1 (for R15), pdcch-BlindDetectionCA2 (for R16) and pdcch-BlindDetectionCA3 (for R17) for UE to use for scaling PDCCH monitoring capability if the number of serving cells configured to a UE is larger than the reported capability, and if UE reports more than one combination of pdcch-BlindDetectionCA1, pdcch-BlindDetectionCA2 and pdcch-BlindDetectionCA3 as UE capability. The combination of pdcch-BlindDetectionCA1, pdcch-BlindDetectionCA2 and pdcch-BlindDetectionCA3 configured by pdcch-BlindDetectionCA-CombIndicator-r17 is from the more than one combination of pdcch-BlindDetectionCA1, pdcch-BlindDetectionCA2 and pdcch-BlindDetectionCA3 reported by UE (see TS 38.213 [13], clause 10).  
pdcch-BlindDetectionCA-CombIndicator-r16 and pdcch-BlindDetectionCA-CombIndicator-r17 are not configured simultaneously.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
p-NR-FR1  
The maximum total transmit power to be used by the UE in this NR cell group across all serving cells in frequency range 1 (FR1). The maximum transmit power that the UE may use may be additionally limited by p-Max (configured in FrequencyInfoUL) and by p-UE-FR1 (configured total for all serving cells operating on FR1).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
p-NR-FR2  
The maximum total transmit power to be used by the UE in this NR cell group across all serving cells in frequency range 2 (FR2). The maximum transmit power that the UE may use may be additionally limited by p-Max (configured in FrequencyInfoUL) and by p-UE-FR2 (configured total for all serving cells operating on FR2). This field is only used in NR-DC. A UE does not expect to be configured with this parameter in this release of the specification.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
prioLowDG-HighCG  
Enable PHY prioritization for the case where low-priority dynamic grant-PUSCH collides with high-priority configured grant-PUSCH on a BWP of a serving cell (see TS 38.213 [13], clause 9), when the UE has generated transport blocks for both DG-PUSCH and CG-PUSCH as described in TS 38.321 [3].  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
prioHighDG-LowCG  
Enable PHY prioritization for the case where high-priority dynamic grant PUSCH collides with low-priority configured grant PUSCH on a BWP of a serving cell (see TS 38.213 [13], clause 9), when the UE has generated transport blocks for both DG-PUSCH and CG-PUSCH as described in TS 38.321 [3].  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
ps-RNTI  
RNTI value for scrambling CRC of DCI format 2-6 used for power saving (see TS 38.213 [13], clause 10.1).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
ps-Offset  
The start of the search-time of DCI format 2-6 with CRC scrambled by PS-RNTI relative to the start of the drx-onDurationTimer of Long DRX (see TS 38.213 [13], clause 10.3). Value in multiples of 0.125ms (milliseconds). 1 corresponds to 0.125 ms, 2 corresponds to 0.25 ms, 3 corresponds to 0.375 ms and so on.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
ps-WakeUp  
Indicates the UE to wake-up if DCI format 2-6 is not detected outside active time (see TS 38.321 [3], clause 5.7). If the field is absent, the UE does not wake-up if DCI format 2-6 is not detected outside active time.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
ps-PositionDCI-2-6  
Starting position of UE wakeup and SCell dormancy indication in DCI format 2-6 (see TS 38.213 [13], clause 10.3).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
ps-TransmitPeriodicL1-RSRP  
Indicates the UE to transmit periodic L1-RSRP report(s) when the drx-onDurationTimer does not start (see TS 38.321 [3], clause 5.7). If the field is absent, the UE does not transmit periodic L1-RSRP report(s) when the drx-onDurationTimer does not start.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
ps-TransmitOtherPeriodicCSI  
Indicates the UE to transmit periodic CSI report(s) other than L1-RSRP reports when the drx-onDurationTimer does not start (see TS 38.321 [3], clause 5.7). If the field is absent, the UE does not transmit periodic CSI report(s) other than L1-RSRP reports when the drx-onDurationTimer does not start.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
p-UE-FR1  
The maximum total transmit power to be used by the UE across all serving cells in frequency range 1 (FR1) across all cell groups. The maximum transmit power that the UE may use may be additionally limited by p-Max (configured in FrequencyInfoUL) and by p-NR-FR1 (configured for the cell group).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
p-UE-FR2  
The maximum total transmit power to be used by the UE across all serving cells in frequency range 2 (FR2) across all cell groups. The maximum transmit power that the UE may use may be additionally limited by p-Max (configured in FrequencyInfoUL) and by p-NR-FR2 (configured for the cell group). A UE does not expect to be configured with this parameter in this release of the specification.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
pdsch-HARQ-ACK-Codebook  
The PDSCH HARQ-ACK codebook is either semi-static or dynamic. This is applicable to both CA and non-CA operation (see TS 38.213 [13], clauses 9.1.2 and 9.1.3). If pdsch-HARQ-ACK-Codebook-r16 is signalled, UE shall ignore the pdsch-HARQ-ACK-Codebook (without suffix). For the HARQ-ACK for sidelink, if pdsch-HARQ-ACK-Codebook-r16 is signalled, the UE uses pdsch-HARQ-ACK-Codebook (without suffix) and ignores pdsch-HARQ-ACK-Codebook-r16. If the field pdsch-HARQ-ACK-Codebook-secondaryPUCCHgroup is present, pdsch-HARQ-ACK-Codebook is applied to primary PUCCH group. Otherwise, this field is applied to the cell group (i.e. for all the cells within the cell group). For the HARQ-ACK for sidelink, if the field pdsch-HARQ-ACK-Codebook-secondaryPUCCHgroup is present, pdsch-HARQ-ACK-Codebook is applied to primary and secondary PUCCH group and the UE ignores pdsch-HARQ-ACK-Codebook-secondaryPUCCHgroup.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
pdsch-HARQ-ACK-CodebookList  
A list of configurations for one or two HARQ-ACK codebooks. Each configuration in the list is defined in the same way as pdsch-HARQ-ACK-Codebook (see TS 38.212 [17], clause 7.3.1.2.2 and TS 38.213 [13], clauses 7.2.1, 9.1.2, 9.1.3 and 9.2.1). If this field is present, the field pdsch-HARQ-ACK-Codebook is ignored. If this field is present, the value of this field is applied for primary PUCCH group and for secondary PUCCH group (if configured). For the HARQ-ACK for sidelink, the UE uses pdsch-HARQ-ACK-Codebook and ignores pdsch-HARQ-ACK-CodebookList if this field is present.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
pdsch-HARQ-ACK-Codebook-secondaryPUCCHgroup  
The PDSCH HARQ-ACK codebook is either semi-static or dynamic. This is applicable to CA operation (see TS 38.213 [13], clauses 9.1.2 and 9.1.3). It is configured for secondary PUCCH group.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
pdsch-HARQ-ACK-EnhType3DCI-Field, pdsch-HARQ-ACK-EnhType3DCI-FieldSecondaryPUCCHgroup  
Indicates the enhanced Type 3 codebook through a new DCI field to indicate the enhanced Type 3 HARQ-ACK codebook in the primary PUCCH group if the more than one enhanced Type 3 HARQ-ACK codebook is configured for the primary PUCCH group, or in the secondary PUCCH group if the more than one enhanced Type 3 HARQ-ACK code is configured for the secondary PUCCH group, respectively.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
pdsch-HARQ-ACK-EnhType3ToAddModList, pdsch-HARQ-ACK-EnhType3SecondaryToAddModList  
Configure the list of enhanced Type 3 HARQ-ACK codebooks for the primary PUCCH group and the secondary PUCCH group, respectively. When configured, DCI format 1\_1 can request the UE to report A/N for one of the configured enhanced Type 3 HARQ-ACK codebooks in the corresponding PUCCH group (see TS 38.213 [13], clause 9.1.4). The network can configure pdsch-HARQ-ACK-EnhType3SecondaryToAddModList only if secondary PUCCH group is configured.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
pdsch-HARQ-ACK-OneShotFeedback  
When configured, the DCI format 1\_1 can request the UE to report A/N for all HARQ processes and all CCs configured in the PUCCH group (see TS 38.212 [17], clause 7.3.1).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
pdsch-HARQ-ACK-OneShotFeedbackCBG  
When configured, the DCI format 1\_1 can request the UE to include CBG level A/N for each CC with CBG level transmission configured. When not configured, the UE will report TB level A/N even if CBG level transmission is configured for a CC. The network configures this only when pdsch-HARQ-ACK-OneShotFeedback is configured.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
pdsch-HARQ-ACK-OneShotFeedbackNDI  
When configured, the DCI format 1\_1 can request the UE to include NDI for each A/N reported. The network configures this only when pdsch-HARQ-ACK-OneShotFeedback is configured.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
pdsch-HARQ-ACK-Retx, pdsch-HARQ-ACK-RetxSecondaryPUCCHgroup  
When configured, the DCI format 1\_1 can request the UE to perform a HARQ-ACK re-transmission on a PUCCH resource in the primary PUCCH group and the secondary PUCCH group, respectively (see TS 38.213 [13], clause 9.1.5).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
pucch-sSCell, pucch-sSCellSecondaryPUCCHgroup  
indictates the alternative PUCCH cells for PUCCH cell switching in the primary and the secondary PUCCH group, respectively. For the primary PUCCH group, it is configured for cells on top of SpCell. For the secondary PUCCH group, it is configured for cell on top of the PUCCH SCell.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
pucch-sSCellDyn, pucch-sSCellDynsecondaryPUCCHgroup  
When configured, PUCCH cell switching based on dynamic indication in DCI format 1\_1 is enabled (see TS 38.213 [13], clause 9.A, clause 9.1.5), respectively for the primary PUCCH group and the secondary PUCCH group.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
pucch-sSCellPattern, pucch-sSCellPatternSecondaryPUCCHgroup  
When configured, the UE applies the semi-static PUCCH cell switching (see TS 38.213 [13], clause 9.A) using the time domain pattern of applicable PUCCH cells indicated by this field, respectively for the primary PUCCH group and the secondary PUCCH group.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
simultaneousPUCCH-PUSCH, simultaneousPUCCH-PUSCH-SecondaryPUCCHgroup  
Enables simultaneous PUCCH and PUSCH transmissions with different priorities for the primary PUCCH group and the secondary PUCCH group, respectively.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
simultaneousSR-PUSCH-diffPUCCH-Groups  
Enables simultaneous SR and PUSCH transmissions in different PUCCH groups (see TS 38.321 [3], clause 5.4.1, clause 5.4.4).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
sizeDCI-2-6  
Size of DCI format 2-6 (see TS 38.213 [13], clause 10.3).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
sp-CSI-RNTI  
RNTI for Semi-Persistent CSI reporting on PUSCH (see CSI-ReportConfig) (see TS 38.214 [19], clause 5.2.1.5.2). Network always configures the UE with a value for this field when at least one CSI-ReportConfig with reportConfigType set to semiPersistentOnPUSCH is configured.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
tpc-PUCCH-RNTI  
RNTI used for PUCCH TPC commands on DCI (see TS 38.213 [13], clause 10.1).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
tpc-PUSCH-RNTI  
RNTI used for PUSCH TPC commands on DCI (see TS 38.213 [13], clause 10.1).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
tpc-SRS-RNTI  
RNTI used for SRS TPC commands on DCI (see TS 38.213 [13], clause 10.1).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
twoQCLTypeDforPDCCHRepetition  
Indicates whether a UE is expected UE to identify and monitor two QCL-TypeD properties for multiple overlapping CORESETs in the case of PDCCH repetition.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
uci-MuxWithDiffPrio, uci-MuxWithDiffPrio-secondaryPUCCHgroup  
When configured, enables multiplexing a high-priority (HP) HARQ-ACK UCI and a low-priority (LP) HARQ-ACK UCI into a PUCCH or PUSCH for the primary PUCCH group and the secondary PUCCH group, respectively.  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
ul-TotalDAI-Included  
Indicates whether the total DAI fields of the additional PDSCH group is included in the non-fallback UL grant DCI (see TS 38.212 [17], clause 7.3.1). The network configures this only when enhanced dynamic codebook is configured (pdsch-HARQ-ACK-Codebook is set to enhancedDynamic).  
<endl>  
  
  
<start>  
physicalcellgroupconfig  
xScale  
The UE is allowed to drop NR only if the power scaling applied to NR results in a difference between scaled and unscaled NR UL of more than xScale dB (see TS 38.213 [13]). If the value is not configured for dynamic power sharing, the UE assumes default value of 6 dB.  
<endl>

<start>  
multicastconfig  
pdsch-HARQ-ACK-CodebookListMulticast  
A list of configurations for one or two HARQ-ACK codebooks for MBS multicast. Each configuration in the list is defined in the same way as pdsch-HARQ-ACK-Codebook (see TS 38.212 [17], clause 7.3.1.2.2 and TS 38.213 [13], clauses 7.2.1, 9.1.2, 9.1.3 and 9.2.1). If this field is present, the field pdsch-HARQ-ACK-Codebook is ignored. If this field is present, the value of this field is applied for primary PUCCH group and for secondary PUCCH group (if configured).  
<endl>  
  
  
<start>  
multicastconfig  
type1CodebookGenerationMode  
Indicates the mode of Type-1 HARQ-ACK codebook generation, as specified in TS 38.213 [13]. Mode 1 is based on the k1 values that are in the intersection of K1 set for unicast and K1 set for multicast. Mode 2 is based on the k1 values that are in the union of K1 set for unicast and K1 set for multicast.  
<endl>

<start>  
pdsch-harq-ack-enhtype3  
pdsch-HARQ-ACK-EnhType3CBG  
When configured, the DCI format 1\_1 or DCI format 1\_2 can request the UE to include CBG level A/N for each CC with CBG level transmission configured of the enhanced Type 3 HARQ-ACK codebook. When not configured, the UE will report TB level A/N even if CBG level transmission is configured for a CC.  
<endl>  
  
  
<start>  
pdsch-harq-ack-enhtype3  
pdsch-HARQ-ACK-EnhType3NDI  
When configured, the DCI format 1\_1 or DCI format 1\_2 can request the UE to include NDI for each A/N reported of the enhanced Type 3 HARQ-ACK codebook.  
<endl>  
  
  
<start>  
pdsch-harq-ack-enhtype3  
perCC  
Configures enhanced Type 3 HARQ-ACK codebook using per CC configuration.  
<endl>  
  
  
<start>  
pdsch-harq-ack-enhtype3  
perHARQ  
Configures enhanced Type 3 HARQ-ACK codebook using per HARQ process and CC configuration.  
<endl>

<start>  
plmn-identity  
mcc  
The first element contains the first MCC digit, the second element the second MCC digit and so on. If the field is absent, it takes the same value as the mcc of the immediately preceding IE PLMN-Identity. See TS 23.003 [21].  
<endl>  
  
  
<start>  
plmn-identity  
mnc  
The first element contains the first MNC digit, the second element the second MNC digit and so on. See TS 23.003 [21].  
<endl>

<start>  
plmn-identityinfo  
cellReservedForOperatorUse  
Indicates whether the cell is reserved for operator use (per PLMN), as defined in TS 38.304 [20]. This field is ignored by IAB-MT.  
<endl>  
  
  
<start>  
plmn-identityinfo  
gNB-ID-Length  
Indicates the length of the gNB ID out of the 36-bit long cellIdentity.  
<endl>  
  
  
<start>  
plmn-identityinfo  
iab-Support  
This field combines both the support of IAB and the cell status for IAB. If the field is present, the cell supports IAB and the cell is also considered as a candidate for cell (re)selection for IAB-node; if the field is absent, the cell does not support IAB and/or the cell is barred for IAB-node.  
<endl>  
  
  
<start>  
plmn-identityinfo  
trackingAreaCode  
Indicates Tracking Area Code to which the cell indicated by cellIdentity field belongs. The absence of the field indicates that the cell only supports PSCell/SCell functionality (per PLMN) or is an NTN cell.  
<endl>  
  
  
<start>  
plmn-identityinfo  
trackingAreaList  
List of Tracking Areas to which the cell indicated by cellIdentity field belongs. If this field is present, network does not configure trackingAreaCode. Total number of different TACs across different PLMN-IdentityInfos shall not exceed maxTAC. This field is only present in an NTN cell.  
<endl>

<start>  
ptrs-downlinkconfig  
epre-Ratio  
EPRE ratio between PTRS and PDSCH. Value 0 corresponds to the codepoint "00" in table 4.1-2. Value 1 corresponds to codepoint "01", and so on. If the field is not provided, the UE applies value 0 (see TS 38.214 [19], clause 4.1).  
<endl>  
  
  
<start>  
ptrs-downlinkconfig  
frequencyDensity  
Presence and frequency density of DL PT-RS as a function of Scheduled BW. If the field is absent, the UE uses K\_PT-RS = 2 (see TS 38.214 [19], clause 5.1.6.3, table 5.1.6.3-2).  
<endl>  
  
  
<start>  
ptrs-downlinkconfig  
maxNrofPorts  
The maximum number of DL PTRS ports specified in TS 38.214 [19] (clause 5.1.6.3). 2 PT-RS ports can only be configured for a DL BWP that is configured, as specified in TS 38.214 [19] clause 5.1, with a mode where a single PDSCH has association between the DM-RS ports and the TCI states as defined in TS 38.214 [19] clause 5.1.6.2.  
<endl>  
  
  
<start>  
ptrs-downlinkconfig  
resourceElementOffset  
Indicates the subcarrier offset for DL PTRS. If the field is absent, the UE applies the value offset00 (see TS 38.211 [16], clause 7.4.1.2.2).  
<endl>  
  
  
<start>  
ptrs-downlinkconfig  
timeDensity  
Presence and time density of DL PT-RS as a function of MCS. The value 29 is only applicable for MCS Table 5.1.3.1-1 (TS 38.214 [19]). If the field is absent, the UE uses L\_PT-RS = 1 (see TS 38.214 [19], clause 5.1.6.3, table 5.1.6.3-1).  
<endl>

<start>  
ptrs-uplinkconfig  
frequencyDensity  
Presence and frequency density of UL PT-RS for CP-OFDM waveform as a function of scheduled BW If the field is absent, the UE uses K\_PT-RS = 2 (see TS 38.214 [19], clause 6.1).  
<endl>  
  
  
<start>  
ptrs-uplinkconfig  
maxNrofPorts  
The maximum number of UL PTRS ports for CP-OFDM (see TS 38.214 [19], clause 6.2.3.1).  
<endl>  
  
  
<start>  
ptrs-uplinkconfig  
ptrs-Power  
UL PTRS power boosting factor per PTRS port (see TS 38.214 [19], clause 6.1, table 6.2.3.1.3).  
<endl>  
  
  
<start>  
ptrs-uplinkconfig  
resourceElementOffset  
Indicates the subcarrier offset for UL PTRS for CP-OFDM. If the field is absent, the UE applies the value offset00 (see TS 38.211 [16], clause 6.4.1.2.2).  
<endl>  
  
  
<start>  
ptrs-uplinkconfig  
sampleDensity  
Sample density of PT-RS for DFT-s-OFDM, pre-DFT, indicating a set of thresholds T={NRBn, n=0,1,2,3,4}, that indicates dependency between presence of PT-RS and scheduled BW and the values of X and K the UE should use depending on the scheduled BW, see TS 38.214 [19], clause 6.1, table 6.2.3.2-1.  
<endl>  
  
  
<start>  
ptrs-uplinkconfig  
timeDensity  
Presence and time density of UL PT-RS for CP-OFDM waveform as a function of MCS If the field is absent, the UE uses L\_PT-RS = 1 (see TS 38.214 [19], clause 6.1).  
<endl>  
  
  
<start>  
ptrs-uplinkconfig  
timeDensityTransformPrecoding  
Time density (OFDM symbol level) of PT-RS for DFT-s-OFDM. If the field is absent, the UE applies value d1 (see TS 38.214 [19], clause 6.1).  
<endl>  
  
  
<start>  
ptrs-uplinkconfig  
transformPrecoderDisabled  
Configuration of UL PTRS without transform precoder (with CP-OFDM).  
<endl>  
  
  
<start>  
ptrs-uplinkconfig  
transformPrecoderEnabled  
Configuration of UL PTRS with transform precoder (DFT-S-OFDM).  
<endl>

<start>  
pucch-config  
dl-DataToUL-ACK, dl-DataToUL-ACK-DCI-1-2  
List of timing for given PDSCH to the DL ACK (see TS 38.213 [13], clause 9.1.2). The field dl-DataToUL-ACK applies to DCI format 1\_1 and the field dl-DataToUL-ACK-DCI-1-2 applies to DCI format 1\_2 (see TS 38.212 [17], clause 7.3.1 and TS 38.213 [13], clause 9.2.3). The dl-DataToUL-ACK-v1700 is applicable for NTN and dl-DataToUL-ACK-r17 is applicable for up to 71 GHz. If dl-DataToUL-ACK-r16 or dl-DataToUL-ACK-r17 or dl-DataToUL-ACK-v1700 is signalled, UE shall ignore the dl-DataToUL-ACK (without suffix). The value -1 corresponds to "inapplicable value" for the case where the A/N feedback timing is not explicitly included at the time of scheduling PDSCH. The fields dl-DataToUL-ACK-r17 and dl-DataToUL-ACK-DCI-1-2-r17 are only applicable for SCS of 480 kHz or 960 kHz.  
<endl>  
  
  
<start>  
pucch-config  
dl-DataToUL-ACK-MulticastDCI-Format4-1  
List of timing for given group-common PDSCH to the DL ACK (see TS 38.213 [13], clause 9.1.2). The field dl-DataToUL-ACK-MulticastDciFormat4-1 applies to DCI format 4\_1 for MBS multicast (see TS 38.212 [17], clause 7.3.1 and TS 38.213 [13], clause 9.2.3).  
<endl>  
  
  
<start>  
pucch-config  
dmrs-BundlingPUCCH-Config  
Configuration of the parameters for DMRS bundling for PUCCH (see TS 38.214 [19], clause 6.1.7). DMRS bundling for PUCCH is not supported for PUCCH format 0/2. In this release, this is not applicable to FR2-2.  
<endl>  
  
  
<start>  
pucch-config  
dmrs-UplinkTransformPrecodingPUCCH  
This field is used for PUCCH formats 3 and 4 according to TS 38.211, Clause 6.4.1.3.3.1.  
<endl>  
  
  
<start>  
pucch-config  
format0  
Parameters that are common for all PUCCH resources of format 0.  
<endl>  
  
  
<start>  
pucch-config  
format1  
Parameters that are common for all PUCCH resources of format 1.  
<endl>  
  
  
<start>  
pucch-config  
format2  
Parameters that are common for all PUCCH resources of format 2.  
<endl>  
  
  
<start>  
pucch-config  
format3  
Parameters that are common for all PUCCH resources of format 3.  
<endl>  
  
  
<start>  
pucch-config  
format4  
Parameters that are common for all PUCCH resources of format 4.  
<endl>  
  
  
<start>  
pucch-config  
mappingPattern  
Indicates whether the UE should follow Cyclical mapping pattern or Sequential mapping pattern for when a PUCCH resource used for repetitions of a PUCCH transmission includes first and second spatial settings for FR2, or first and second sets of power control parameters for FR1 (see TS 38.213 [13], clause 9.2.6).  
<endl>  
  
  
<start>  
pucch-config  
numberOfBitsForPUCCH-ResourceIndicatorDCI-1-2  
Configuration of the number of bits for "PUCCH resource indicator" in DCI format 1\_2 (see TS 38.212 [17], clause 7.3.1 and TS 38.213 [13], clause 9.2.3).  
<endl>  
  
  
<start>  
pucch-config  
powerControlSetInfoToAddModList  
Configures power control sets for repetition of a PUCCH transmission in FR1. This field is not configured if ul-powerControl is configured in the BWP-UplinkDedicated in which the PUCCH-Config is included.  
<endl>  
  
  
<start>  
pucch-config  
pucch-PowerControl  
Configures power control parameters PUCCH transmission. This field is not configured if unifiedTCI-StateType is configured for the serving cell.  
<endl>  
  
  
<start>  
pucch-config  
resourceGroupToAddModList, resourceGroupToReleaseList  
Lists for adding and releasing groups of PUCCH resources that can be updated simultaneously for spatial relations with a MAC CE.  
<endl>  
  
  
<start>  
pucch-config  
resourceSetToAddModList, resourceSetToReleaseList  
Lists for adding and releasing PUCCH resource sets (see TS 38.213 [13], clause 9.2).  
<endl>  
  
  
<start>  
pucch-config  
resourceToAddModList, resourceToAddModListExt, resourceToReleaseList  
Lists for adding and releasing PUCCH resources applicable for the UL BWP and serving cell in which the PUCCH-Config is defined. The resources defined herein are referred to from other parts of the configuration to determine which resource the UE shall use for which report. If the network includes of resourceToAddModListExt, it includes the same number of entries, and listed in the same order, as in resourceToAddModList.  
<endl>  
  
  
<start>  
pucch-config  
secondTPCFieldDCI-1-1, secondTPCFieldDCI-1-2  
A second TPC field can be configured via RRC for DCI-1-1 and DCI-1-2. Each TPC field is for each closed-loop index value respectively (i.e., 1st /2nd TPC fields correspond to "closedLoopIndex" value = 0 and 1.  
<endl>  
  
  
<start>  
pucch-config  
spatialRelationInfoToAddModList, spatialRelationInfoToAddModListSizeExt , spatialRelationInfoToAddModListExt  
Configuration of the spatial relation between a reference RS and PUCCH. Reference RS can be SSB/CSI-RS/SRS. If the list has more than one element, MAC-CE selects a single element (see TS 38.321 [3], clause 5.18.8 and TS 38.213 [13], clause 9.2.2). The UE shall consider entries in spatialRelationInfoToAddModList and in spatialRelationInfoToAddModListSizeExt as a single list, i.e. an entry created using spatialRelationInfoToAddModList can be modified using spatialRelationInfoToAddModListSizeExt (or deleted using spatialRelationInfoToReleaseListSizeExt) and vice-versa. If the network includes spatialRelationInfoToAddModListExt, it includes the same number of entries, and listed in the same order, as in the concatenation of spatialRelationInfoToAddModList and of spatialRelationInfoToAddModListSizeExt. If unifiedTCI-StateType is configured for the serving cell, no element in this list is configured.  
<endl>  
  
  
<start>  
pucch-config  
spatialRelationInfoToReleaseList, spatialRelationInfoToReleaseListSizeExt, spatialRelationInfoToReleaseListExt  
Lists of spatial relation configurations between a reference RS and PUCCH to be released by the UE.  
<endl>  
  
  
<start>  
pucch-config  
sps-PUCCH-AN-List  
Indicates a list of PUCCH resources for DL SPS HARQ ACK. The field maxPayloadSize is absent for the first and the last SPS-PUCCH-AN in the list. If configured, this overrides n1PUCCH-AN in SPS-config.  
<endl>  
  
  
<start>  
pucch-config  
sps-PUCCH-AN-ListMulticast  
The field is used to configure the list of PUCCH resources per HARQ ACK codebook for MBS multicast.  
<endl>  
  
  
<start>  
pucch-config  
subslotLengthForPUCCH  
Indicates the sub-slot length for sub-slot based PUCCH feedback in number of symbols (see TS 38.213 [13], clause 9). Value n2 corresponds to 2 symbols, value n6 corresponds to 6 symbols, value n7 corresponds to 7 symbols. For normal CP, the value is either n2 or n7. For extended CP, the value is either n2 or n6.  
<endl>  
  
  
<start>  
pucch-config  
ul-AccessConfigListDCI-1-1, ul-AccessConfigListDCI-1-2  
List of the combinations of cyclic prefix extension and UL channel access type (see TS 38.212 [17], clause 7.3.1) applicable, respectively, to DCI format 1\_1 and DCI format 1\_2. The fields ul-AccessConfigListDCI-1-1-r16 and ul-AccessConfigListDCI-1-2-r17 are only applicable for FR1 (see TS 38.212 [17], Table 7.3.1.2.2-6). The field ul-AccessConfigListDCI-1-1-r17 indicates a list which only contains UL channel access types and is only applicable for FR2-2 (see TS 38.212 [17], Table 7.3.1.2.2-6A).  
<endl>

<start>  
pucch-format3  
nrofPRBs  
The supported values are 1,2,3,4,5,6,8,9,10,12,15 and 16. The UE shall ignore this field when format-v1610 is configured.  
<endl>

<start>  
pucch-formatconfig, pucch-formatconfigext  
additionalDMRS  
If the field is present, the UE enables 2 DMRS symbols per hop of a PUCCH Format 3 or 4 if both hops are more than X symbols when FH is enabled (X=4). And it enables 4 DMRS symbols for a PUCCH Format 3 or 4 with more than 2X+1 symbols when FH is disabled (X=4). The field is not applicable for format 0, 1 and 2. See TS 38.213 [13], clause 9.2.2.  
<endl>  
  
  
<start>  
pucch-formatconfig, pucch-formatconfigext  
interslotFrequencyHopping  
If the field is present, the UE enables inter-slot frequency hopping when PUCCH Format 0, 1, 3 or 4 is repeated over multiple slots. For long PUCCH over multiple slots, the intra and inter slot frequency hopping cannot be enabled at the same time for a UE. The field is not applicable for format 2. See TS 38.213 [13], clause 9.2.6.  
<endl>  
  
  
<start>  
pucch-formatconfig, pucch-formatconfigext  
maxCodeRate  
Max coding rate to determine how to feedback UCI on PUCCH for format 2, 3 or 4. The field is not applicable for format 0 and 1. See TS 38.213 [13], clause 9.2.5.  
<endl>  
  
  
<start>  
pucch-formatconfig, pucch-formatconfigext  
maxCodeRateLP  
Max coding rate to determine how to feedback UCI on PUCCH for format 2, 3 or 4. The field is not applicable for format 0 and 1. This field configures additional max code rate in the second entry of PUCCH-ConfigurationList-r16 for multiplexing low-priority (LP) HARQ-ACK and high-priority (HP) UCI in a PUCCH as described Clause 9.2.5.3 of TS 38.213 [13]. The field is absent for the first entry of PUCCH-ConfigurationList-r16.  
<endl>  
  
  
<start>  
pucch-formatconfig, pucch-formatconfigext  
nrofSlots  
Number of slots with the same PUCCH. When the field is absent the UE applies the value n1. The field is not applicable for format 2. See TS 38.213 [13], clause 9.2.6.  
<endl>  
  
  
<start>  
pucch-formatconfig, pucch-formatconfigext  
pi2BPSK  
If the field is present, the UE uses pi/2 BPSK for UCI symbols instead of QPSK for PUCCH. The field is not applicable for format 0, 1 and 2. See TS 38.213 [13], clause 9.2.5.  
<endl>  
  
  
<start>  
pucch-formatconfig, pucch-formatconfigext  
rb-SetIndex  
Indicates the RB set where PUCCH resource is allocated.  
<endl>  
  
  
<start>  
pucch-formatconfig, pucch-formatconfigext  
simultaneousHARQ-ACK-CSI  
If the field is present, the UE uses simultaneous transmission of CSI and HARQ-ACK feedback with or without SR with PUCCH Format 2, 3 or 4. See TS 38.213 [13], clause 9.2.5. When the field is absent the UE applies the value off. The field is not applicable for format 0 and 1.  
<endl>

<start>  
pucch-resource, pucch-resourceext  
format  
Selection of the PUCCH format (format 0 – 4) and format-specific parameters, see TS 38.213 [13], clause 9.2. format0 and format1 are only allowed for a resource in a first PUCCH resource set. format2, format3 and format4 are only allowed for a resource in non-first PUCCH resource set. The network can only configure format-v1610 when format is set to format2 or format3. The network only configures format-v1700 when format is set to format0, format1 or format4.  
<endl>  
  
  
<start>  
pucch-resource, pucch-resourceext  
interlace0  
This is the only interlace of interlaced PUCCH Format 0 and 1 and the first interlace for interlaced PUCCH Format 2 and 3.  
<endl>  
  
  
<start>  
pucch-resource, pucch-resourceext  
interlace1  
A second interlace, in addition to interlace 0, as specified in TS 38.213 [13], clause 9.2.1. For 15kHz SCS, values {0..9} are applicable; for 30kHz SCS, values {0..4} are applicable. For 15kHz SCS, the values of interlace1 shall satisfy interlace1=mod(interlace0+X,10) where X=1, -1, or 5.  
<endl>  
  
  
<start>  
pucch-resource, pucch-resourceext  
intraSlotFrequencyHopping  
Enabling intra-slot frequency hopping, applicable for all types of PUCCH formats. For long PUCCH over multiple slots, the intra and inter slot frequency hopping cannot be enabled at the same time for a UE. See TS 38.213 [13], clause 9.2.1.  
<endl>  
  
  
<start>  
pucch-resource, pucch-resourceext  
nrofPRBs  
Indicates the number of PRBs used per PUCCH resource for the PUCCH format, see TS 38.213 [13], clause 9.2.1. This field is applicable for PUCCH format0, format1, and format4 in FR2-2. The supported values for format4 are 1,2,3,4,5,6,8,9,10,12,15 and 16.  
<endl>  
  
  
<start>  
pucch-resource, pucch-resourceext  
occ-Index  
Indicates the orthogonal cover code index (see TS 38.213 [13], clause 9.2.1). This field is applicable when useInterlacePUCCH-PUSCH-16 is configured.  
<endl>  
  
  
<start>  
pucch-resource, pucch-resourceext  
occ-Length  
Indicates the orthogonal cover code length (see TS 38.213 [13], clause 9.2.1). This field is applicable when useInterlacePUCCH-PUSCH-16 is configured.  
<endl>  
  
  
<start>  
pucch-resource, pucch-resourceext  
pucch-RepetitionNrofSlots  
Configuration of PUCCH repetition factor per PUCCH resource with associated scheduling DCI corresponding to Rel-17 dynamic PUCCH repetition. For a PUCCH resource, if both the field pucch-RepetitionNrofSlots and the field nrofSlots are present, the field nrofSlots is ignored and apply the value of pucch-RepetitionNrofSlots corresponding to Rel-17 dynamic PUCCH repetition. If this field is absent in a PUCCH resource with associated scheduling DCI, the UE applies the value of field nrofSlots.  
<endl>  
  
  
<start>  
pucch-resource, pucch-resourceext  
pucch-ResourceId  
Identifier of the PUCCH resource.  
<endl>  
  
  
<start>  
pucch-resource, pucch-resourceext  
secondHopPRB  
Index of first PRB after frequency hopping of PUCCH. This value is applicable for intra-slot frequency hopping (see TS 38.213 [13], clause 9.2.1) or inter-slot frequency hopping (see TS 38.213 [13], clause 9.2.6).  
<endl>

<start>  
pucch-resourceset  
maxPayloadSize  
Maximum number of UCI information bits that the UE may transmit using this PUCCH resource set (see TS 38.213 [13], clause 9.2.1). In a PUCCH occurrence, the UE chooses the first of its PUCCH-ResourceSet which supports the number of bits that the UE wants to transmit. The field is absent in the first set (Set0) and in the last configured set since the UE derives the maximum number of UCI information bits as specified in TS 38.213 [13], clause 9.2.1. This field can take integer values that are multiples of 4.  
<endl>  
  
  
<start>  
pucch-resourceset  
resourceList  
PUCCH resources of format0 and format1 are only allowed in the first PUCCH resource set, i.e., in a PUCCH-ResourceSet with pucch-ResourceSetId = 0. This set may contain between 1 and 32 resources. PUCCH resources of format2, format3 and format4 are only allowed in a PUCCH-ResourceSet with pucch-ResourceSetId > 0. If present, these sets contain between 1 and 8 resources each. The UE chooses a PUCCH-Resource from this list as specified in TS 38.213 [13], clause 9.2.3. Note that this list contains only a list of resource IDs. The actual resources are configured in PUCCH-Config.  
<endl>

<start>  
pucch-configcommon  
additionalPRBOffset  
When intra-slot PUCCH frequency hopping within RedCap-specific initial UL BWP is disabled, each common PUCCH resource is mapped to a single PRB on one side of the UL BWP. This parameter determines an additional PRB offset in the PRB mapping for the PUCCH resource. If the field is not configured, the UE shall assume an additional PRB offset of zero.  
<endl>  
  
  
<start>  
pucch-configcommon  
hoppingId  
Cell-specific scrambling ID for group hopping and sequence hopping if enabled, see TS 38.211 [16], clause 6.3.2.2.  
<endl>  
  
  
<start>  
pucch-configcommon  
intra-SlotFH-r17  
In case a separate initial UL BWP is configured for RedCap UEs, the presence of this parameter indicates whether intra-slot PUCCH frequency hopping within the separate initial UL BWP in the common PUCCH resource is enabled for RedCap UEs. If this field is absent, intra-slot PUCCH frequency hopping within RedCap-specific initial UL BWP is enabled. If this field is present, intra-slot PUCCH frequency hopping within RedCap-specific initial UL BWP is disabled and each PUCCH resource is mapped to a single PRB on one side of the UL BWP and this parameter determines whether the PRB index in the PRB mapping is counted in increasing order from the lower edge or in decreasing order from the upper edge of the UL BWP.  
<endl>  
  
  
<start>  
pucch-configcommon  
nrofPRBs  
Indicates the number of PRBs used per PUCCH resource for PUCCH format 0 and format 1 in FR2-2, see TS 38.213 [13], clause 9.2.1.  
<endl>  
  
  
<start>  
pucch-configcommon  
p0-nominal  
Power control parameter P0 for PUCCH transmissions. Value in dBm. Only even values (step size 2) allowed (see TS 38.213 [13], clause 7.2).  
<endl>  
  
  
<start>  
pucch-configcommon  
pucch-GroupHopping  
Configuration of group- and sequence hopping for all the PUCCH formats 0, 1, 3 and 4. Value neither implies neither group or sequence hopping is enabled. Value enable enables group hopping and disables sequence hopping. Value disable disables group hopping and enables sequence hopping (see TS 38.211 [16], clause 6.3.2.2).  
<endl>  
  
  
<start>  
pucch-configcommon  
pucch-ResourceCommon  
An entry into a 16-row table where each row configures a set of cell-specific PUCCH resources/parameters. The UE uses those PUCCH resources until it is provided with a dedicated PUCCH-Config (e.g. during initial access) on the initial uplink BWP. Once the network provides a dedicated PUCCH-Config for that bandwidth part the UE applies that one instead of the one provided in this field (see TS 38.213 [13], clause 9.2).  
<endl>  
  
  
<start>  
pucch-configcommon  
pucch-ResourceCommonRedCap  
An entry into a 16-row table where each row configures a set of cell-specific PUCCH resources/parameters for RedCap UEs. The UE uses those PUCCH resources until it is provided with a dedicated PUCCH-Config (e.g. during initial access) on the initial uplink BWP. Once the network provides a dedicated PUCCH-Config for that bandwidth part the UE applies that one instead of the one provided in this field (see TS 38.213 [13], clause 9.2).  
<endl>

<start>  
p0-pucch  
p0-PUCCH-Value  
P0 value for PUCCH with 1dB step size.  
<endl>

<start>  
pucch-powercontrol  
deltaF-PUCCH-f0  
deltaF for PUCCH format 0 with 1dB step size (see TS 38.213 [13], clause 7.2).  
<endl>  
  
  
<start>  
pucch-powercontrol  
deltaF-PUCCH-f1  
deltaF for PUCCH format 1 with 1dB step size (see TS 38.213 [13], clause 7.2).  
<endl>  
  
  
<start>  
pucch-powercontrol  
deltaF-PUCCH-f2  
deltaF for PUCCH format 2 with 1dB step size (see TS 38.213 [13], clause 7.2).  
<endl>  
  
  
<start>  
pucch-powercontrol  
deltaF-PUCCH-f3  
deltaF for PUCCH format 3 with 1dB step size (see TS 38.213 [13], clause 7.2).  
<endl>  
  
  
<start>  
pucch-powercontrol  
deltaF-PUCCH-f4  
deltaF for PUCCH format 4 with 1dB step size (see TS 38.213 [13], clause 7.2).  
<endl>  
  
  
<start>  
pucch-powercontrol  
p0-Set  
A set with dedicated P0 values for PUCCH, i.e., {P01, P02,... } (see TS 38.213 [13], clause 7.2).  
<endl>  
  
  
<start>  
pucch-powercontrol  
pathlossReferenceRSs, pathlossReferenceRSs-v1610  
A set of Reference Signals (e.g. a CSI-RS config or a SS block) to be used for PUCCH pathloss estimation. Up to maxNrofPUCCH-PathlossReference-RSs may be configured. If the field is not configured, the UE uses the SSB as reference signal (see TS 38.213 [13], clause 7.2). The set includes Reference Signals indicated in pathlossReferenceRSs (without suffix) and in pathlossReferenceRSs-v1610. The UE maintains pathlossReferenceRSs and pathlossReferenceRSs-v1610 separately: Receiving pathlossReferenceRSs-v1610 set to release releases only the entries that were configured by pathlossReferenceRSs-v1610, and receiving pathlossReferenceRSs-v1610 set to setup replaces only the entries that were configured by pathlossReferenceRSs-v1610 with the newly signalled entries.  
<endl>  
  
  
<start>  
pucch-powercontrol  
twoPUCCH-PC-AdjustmentStates  
Number of PUCCH power control adjustment states maintained by the UE (i.e., g(i)). If the field is present (n2) the UE maintains two power control states (i.e., g(i,0) and g(i,1)). If the field is absent, it maintains one power control state (i.e., g(i,0)) (see TS 38.213 [13], clause 7.2).  
<endl>

<start>  
pucch-spatialrelationinfo  
pucch-PathLossReferenceRS-Id  
When pucch-PathLossReferenceRS-Id-v1610 is configured, the UE shall ignore pucch-PathLossReferenceRS-Id (without suffix).  
<endl>  
  
  
<start>  
pucch-spatialrelationinfo  
pucch-SpatialRelationInfoId  
When pucch-SpatialRelationInfoId-v1610 is configured, the UE shall ignore pucch-SpatialRelationInfoId (without suffix). If pucch-SpatialRelationInfoId-v1610 is absent, the UE shall use the pucch-SpatialRelationInfoId (without suffix).  
<endl>  
  
  
<start>  
pucch-spatialrelationinfo  
servingCellId  
If the field is absent, the UE applies the ServCellId of the serving cell in which this PUCCH-SpatialRelationInfo is configured  
<endl>

<start>  
pucch-tpc-commandconfig  
tpc-IndexPCell  
An index determining the position of the first bit of TPC command (applicable to the SpCell) inside the DCI format 2-2 payload.  
<endl>  
  
  
<start>  
pucch-tpc-commandconfig  
tpc-IndexPUCCH-SCell  
An index determining the position of the first bit of TPC command (applicable to the PUCCH SCell) inside the DCI format 2-2 payload.  
<endl>  
  
  
<start>  
pucch-tpc-commandconfig  
tpc-IndexPUCCH-sSCell, tpc-IndexPUCCH-sSCellSecondaryPUCCHgroup  
An index determining the position of the first bit of TPC command (applicable to the alternative PUCCH cell for PUCCH cell switching) inside the DCI format 2-2 payload, for the primary PUCCH group and the secondary PUCCH group respectively.  
<endl>

<start>  
pusch-config  
antennaPortsFieldPresenceDCI-0-2  
Configure the presence of "Antenna ports" field in DCI format 0\_2. When the field is configured, then the "Antenna ports" field is present in DCI format 0\_2. Otherwise, the field size is set to 0 for DCI format 0\_2 (See TS 38.212 [17], clause 7.3.1.1.3). If neither dmrs-UplinkForPUSCH-MappingTypeA-DCI-0-2 nor dmrs-UplinkForPUSCH-MappingTypeB-DCI-0-2 is configured, this field is absent.  
<endl>  
  
  
<start>  
pusch-config  
availableSlotCounting  
Indicate whether PUSCH repetitions counted on the basis of available slots is enabled. If the field is absent, PUSCH repetitions counted on the basis of available slots is disabled.  
<endl>  
  
  
<start>  
pusch-config  
betaOffsetsCrossPri0, betaOffsetsCrossPri1, betaOffsetsCrossPri0DCI-0-2, betaOffsetsCrossPri1DCI-0-2  
Selection between and configuration of dynamic and semi-static beta-offset for multiplexing HARQ-ACK on dynamically scheduled PUSCH with different priorities, see TS 38.213 [13], clause 9.3.  
The field betaOffsetsCrossPrio0 indicates multiplexing low priority (LP) HARQ-ACK on dynamically scheduled high priority (HP) PUSCH.  
The field betaOffsetsCrossPrio1 indicates multiplexing HP HARQ-ACK on dynamically scheduled LP PUSCH.  
The field betaOffsetsCrossPrio0DCI-0-2 indicates multiplexing LP HARQ-ACK on dynamically scheduled HP PUSCH by DCI format 0\_2.  
The field betaOffsetsCrossPrio1DCI-0-2 indicates multiplexing HP HARQ-ACK on dynamically scheduled LP PUSCH by DCI format 0\_2.  
<endl>  
  
  
<start>  
pusch-config  
codebookSubset, codebookSubsetDCI-0-2  
Subset of PMIs addressed by TPMI, where PMIs are those supported by UEs with maximum coherence capabilities (see TS 38.214 [19], clause 6.1.1.1). The field codebookSubset applies to DCI format 0\_1 and the field codebookSubsetDCI-0-2 applies to DCI format 0\_2 (see TS 38.214 [19], clause 6.1.1.1).  
<endl>  
  
  
<start>  
pusch-config  
dataScramblingIdentityPUSCH  
Identifier used to initialise data scrambling (c\_init) for PUSCH. If the field is absent, the UE applies the physical cell ID. (see TS 38.211 [16], clause 6.3.1.1).  
<endl>  
  
  
<start>  
pusch-config  
dmrs-BundlingPUSCH-Config  
Configure the parameters for DMRS bundling for PUSCH (see TS 38.214 [19], clause 6.1.7). In this release, this is not applicable to FR2-2.  
<endl>  
  
  
<start>  
pusch-config  
dmrs-SequenceInitializationDCI-0-2  
Configure whether the field "DMRS Sequence Initialization" is present or not in DCI format 0\_2. If the field is absent, then 0 bit for the field "DMRS Sequence Initialization" in DCI format 0\_2. If the field is present, then the number of bits is determined in the same way as DCI format 0\_1 (see TS 38.212 [17], clause 7.3.1).  
<endl>  
  
  
<start>  
pusch-config  
dmrs-UplinkForPUSCH-MappingTypeA, dmrs-UplinkForPUSCH-MappingTypeA-DCI-0-2  
DMRS configuration for PUSCH transmissions using PUSCH mapping type A (chosen dynamically via PUSCH-TimeDomainResourceAllocation). Only the fields dmrs-Type, dmrs-AdditionalPosition and maxLength may be set differently for mapping type A and B. The field dmrs-UplinkForPUSCH-MappingTypeA applies to DCI format 0\_1 and the field dmrs-UplinkForPUSCH-MappingTypeA-DCI-0-2 applies to DCI format 0\_2 (see TS 38.212 [17], clause 7.3.1).  
<endl>  
  
  
<start>  
pusch-config  
dmrs-UplinkForPUSCH-MappingTypeB, dmrs-UplinkForPUSCH-MappingTypeB-DCI-0-2  
DMRS configuration for PUSCH transmissions using PUSCH mapping type B (chosen dynamically via PUSCH-TimeDomainResourceAllocation). Only the fields dmrs-Type, dmrs-AdditionalPosition and maxLength may be set differently for mapping type A and B. The field dmrs-UplinkForPUSCH-MappingTypeB applies to DCI format 0\_1 and the field dmrs-UplinkForPUSCH-MappingTypeB-DCI-0-2 applies to DCI format 0\_2 (see TS 38.212 [17], clause 7.3.1).  
<endl>  
  
  
<start>  
pusch-config  
frequencyHopping  
The value intraSlot enables 'Intra-slot frequency hopping' and the value interSlot enables 'Inter-slot frequency hopping'. If the field is absent, frequency hopping is not configured for 'pusch-RepTypeA' (see TS 38.214 [19], clause 6.3). The field frequencyHopping applies to DCI format 0\_0 and 0\_1 for 'pusch-RepTypeA'.  
<endl>  
  
  
<start>  
pusch-config  
frequencyHoppingDCI-0-1  
Indicates the frequency hopping scheme for DCI format 0\_1 when pusch-RepTypeIndicatorDCI-0-1 is set to 'pusch-RepTypeB', The value interRepetition enables 'Inter-repetition frequency hopping', and the value interSlot enables 'Inter-slot frequency hopping'. If the field is absent, frequency hopping is not configured for DCI format 0\_1 for 'pusch-RepTypeB' (see TS 38.214 [19], clause 6.1).  
<endl>  
  
  
<start>  
pusch-config  
frequencyHoppingDCI-0-2  
Indicate the frequency hopping scheme for DCI format 0\_2. The value intraSlot enables 'intra-slot frequency hopping', and the value interRepetition enables 'Inter-repetition frequency hopping', and the value interSlot enables 'Inter-slot frequency hopping'. When pusch-RepTypeIndicatorDCI-0-2 is not set to 'pusch-RepTypeB', the frequency hopping scheme can be chosen between 'intra-slot frequency hopping and 'inter-slot frequency hopping' if enabled. When pusch-RepTypeIndicatorDCI-0-2 is set to 'pusch-RepTypeB', the frequency hopping scheme can be chosen between 'inter-repetition frequency hopping' and 'inter-slot frequency hopping' if enabled. If the field is absent, frequency hopping is not configured for DCI format 0\_2 (see TS 38.214 [19], clause 6.3).  
<endl>  
  
  
<start>  
pusch-config  
frequencyHoppingOffsetLists, frequencyHoppingOffsetListsDCI-0-2  
Set of frequency hopping offsets used when frequency hopping is enabled for granted transmission (not msg3) and type 2 configured grant activation (see TS 38.214 [19], clause 6.3). The field frequencyHoppingOffsetLists applies to DCI format 0\_0 and DCI format 0\_1 and the field frequencyHoppingOffsetListsDCI-0-2 applies to DCI format 0\_2 (see TS 38.214 [19], clause 6.3).  
<endl>  
  
  
<start>  
pusch-config  
harq-ProcessNumberSizeDCI-0-2  
Configure the number of bits for the field "HARQ process number" in DCI format 0\_2 (see TS 38.212 [17], clause 7.3.1).  
<endl>  
  
  
<start>  
pusch-config  
invalidSymbolPattern  
Indicates one pattern for invalid symbols for PUSCH transmission repetition type B applicable to both DCI format 0\_1 and 0\_2. If InvalidSymbolPattern is not configured, semi-static flexible symbols are used for PUSCH. Segmentation occurs only around semi-static DL symbols (see TS 38.214 [19] clause 6.1).  
<endl>  
  
  
<start>  
pusch-config  
invalidSymbolPatternIndicatorDCI-0-1, invalidSymbolPatternIndicatorDCI-0-2  
Indicates the presence of an additional bit in the DCI format 0\_1/0\_2. If invalidSymbolPattern is absent, then both invalidSymbolPatternIndicatorDCI-0-1 and invalidSymbolPatternIndicatorDCI-0-2 are absent. The field invalidSymbolPatternIndicatorDCI-0-1 applies to the DCI format 0\_1 and the field invalidSymbolPatternIndicatorDCI-0-2 applies to DCI format 0\_2 (see TS 38.214 [19] clause 6.1). If the field is absent, the UE behaviour is specified in TS 38.214 [19], clause 6.1.2.1.  
<endl>  
  
  
<start>  
pusch-config  
mappingPattern  
Indicates whether the UE should follow Cyclical mapping pattern or Sequential mapping pattern for when two SRS resource sets are configured in srs-ResourceSetToAddModList or srs-ResourceSetToAddModListDCI-0-2 with usage 'codebook' or 'noncodebook' for PUSCH transmission and the PUSCH transmission occasions are associated with both SRS resource sets.  
<endl>  
  
  
<start>  
pusch-config  
maxRank, maxRankDCI-0-2  
Subset of PMIs addressed by TRIs from 1 to ULmaxRank (see TS 38.214 [19], clause 6.1.1.1). The field maxRank applies to DCI format 0\_1 and the field maxRankDCI-0-2 applies to DCI format 0\_2 (see TS 38.214 [19], clause 6.1.1.1).  
<endl>  
  
  
<start>  
pusch-config  
mcs-Table, mcs-TableFormat0-2  
Indicates which MCS table the UE shall use for PUSCH without transform precoder (see TS 38.214 [19], clause 6.1.4.1). If the field is absent the UE applies the value 64QAM. The field mcs-Table applies to DCI format 0\_0 and DCI format 0\_1 and the field mcs-TableDCI-0-2 applies to DCI format 0\_2 (see TS 38.214 [19], clause 6.1.4.1).  
<endl>  
  
  
<start>  
pusch-config  
mcs-TableTransformPrecoder, mcs-TableTransformPrecoderDCI-0-2  
Indicates which MCS table the UE shall use for PUSCH with transform precoding (see TS 38.214 [19], clause 6.1.4.1) If the field is absent the UE applies the value 64QAM. The field mcs-TableTransformPrecoder applies to DCI format 0\_0 and DCI format 0\_1 and the field mcs-TableTransformPrecoderDCI-0-2 applies to DCI format 0\_2 (see TS 38.214 [19], clause 6.1.4.1).  
<endl>  
  
  
<start>  
pusch-config  
minimumSchedulingOffsetK2  
List of minimum K2 values. Minimum K2 parameter denotes minimum applicable value(s) for the Time domain resource assignment table for PUSCH (see TS 38.214 [19], clause 6.1.2.1).  
<endl>  
  
  
<start>  
pusch-config  
mpe-ResourcePoolToAddModList  
List of SSB/CSI-RS resources for P-MPR reporting. Each resource is configured with serving cell index where the resource is configured for the UE. The additionalPCI is configured only if the resource is SSB. For each resource, if neither cell nor additionalPCI is present, the SSB/CSI-RS resource is from the serving cell where the PUSCH-Config is configured.  
<endl>  
  
  
<start>  
pusch-config  
numberOfBitsRV-DCI-0-2  
Configures the number of bits for "Redundancy version" in the DCI format 0\_2 (see TS 38.212 [17], clause 7.3.1 and TS 38.214 [19], clause 6.1.2.1).  
<endl>  
  
  
<start>  
pusch-config  
numberOfInvalidSymbolsForDL-UL-Switching  
Indicates the number of symbols after the last semi-static DL symbol that are invalid symbols for PUSCH repetition Type B. If it is absent, no symbol is explicitly defined for DL-to-UL switching (see TS 38.214 [19], clause 6.1).  
<endl>  
  
  
<start>  
pusch-config  
priorityIndicatorDCI-0-1, priorityIndicatorDCI-0-2  
Configures the presence of "priority indicator" in DCI format 0\_1/0\_2. When the field is absent in the IE, then the UE shall apply 0 bit for "Priority indicator" in DCI format 0\_1/0\_2. The field priorityIndicatorDCI-0-1 applies to DCI format 0\_1 and the field priorityIndicatorDCI-0-2 applies to DCI format 0\_2 (see TS 38.212 [17] clause 7.3.1 and TS 38.213 [13] clause 9).  
<endl>  
  
  
<start>  
pusch-config  
pusch-AggregationFactor  
Number of repetitions for data (see TS 38.214 [19], clause 6.1.2.1). If the field is absent the UE applies the value 1.  
<endl>  
  
  
<start>  
pusch-config  
pusch-PowerControl  
Configures power control parameters PUSCH transmission. This field is not configured if unifiedTCI-StateType is configured for the serving cell.  
<endl>  
  
  
<start>  
pusch-config  
pusch-RepTypeIndicatorDCI-0-1, pusch-RepTypeIndicatorDCI-0-2  
Indicates whether UE follows the behavior for "PUSCH repetition type A" or the behavior for "PUSCH repetition type B" for the PUSCH scheduled by DCI format 0\_1/0\_2 and for Type 2 CG associated with the activating DCI format 0\_1/0\_2.The value pusch-RepTypeA enables the 'PUSCH repetition type A' and the value pusch-RepTypeB enables the 'PUSCH repetition type B'. The field pusch-RepTypeIndicatorDCI-0-1 applies to DCI format 0\_1 and the field pusch-RepTypeIndicatorDCI-0-2 applies to DCI format 0\_2 (see TS 38.214 [19], clause 6.1.2.1).  
<endl>  
  
  
<start>  
pusch-config  
pusch-TimeDomainAllocationList  
List of time domain allocations for timing of UL assignment to UL data (see TS 38.214 [19], table 6.1.2.1.1-1). The field pusch-TimeDomainAllocationList applies to DCI formats 0\_0 or DCI format 0\_1 when the field pusch-TimeDomainAllocationListDCI-0-1 is not configured (see TS 38.214 [19], table 6.1.2.1.1-1 and table 6.1.2.1.1-1A). The network does not configure the pusch-TimeDomainAllocationList (without suffix) simultaneously with the pusch-TimeDomainAllocationListDCI-0-2-r16 or pusch-TimeDomainAllocationListDCI-0-1-r16 or pusch-TimeDomainAllocationListForMultiPUSCH-r16.  
<endl>  
  
  
<start>  
pusch-config  
pusch-TimeDomainAllocationListDCI-0-1  
Configuration of the time domain resource allocation (TDRA) table for DCI format 0\_1 (see TS 38.214 [19], clause 6.1, table 6.1.2.1.1-1A).  
<endl>  
  
  
<start>  
pusch-config  
pusch-TimeDomainAllocationListDCI-0-2  
Configuration of the time domain resource allocation (TDRA) table for DCI format 0\_2 (see TS 38.214 [19], clause 6.1.2, table 6.1.2.1.1-1B).  
<endl>  
  
  
<start>  
pusch-config  
pusch-TimeDomainAllocationListForMultiPUSCH  
Configuration of the time domain resource allocation (TDRA) table for multiple PUSCH (see TS 38.214 [19], clause 6.1.2). The network configures at most 16 rows in this TDRA table in PUSCH-TimeDomainResourceAllocationList-r16 configured by this field. This field is not configured simultaneously with pusch-AggregationFactor. The network does not configure the pusch-TimeDomainAllocationListForMultiPUSCH-r16 simultaneously with the pusch-TimeDomainAllocationListDCI-0-1-r16.  
<endl>  
  
  
<start>  
pusch-config  
rbg-Size  
Selection between configuration 1 and configuration 2 for RBG size for PUSCH. The UE does not apply this field if resourceAllocation is set to resourceAllocationType1. Otherwise, the UE applies the value config1 when the field is absent (see TS 38.214 [19], clause 6.1.2.2.1).  
<endl>  
  
  
<start>  
pusch-config  
resourceAllocation, resourceAllocationDCI-0-2  
Configuration of resource allocation type 0 and resource allocation type 1 for non-fallback DCI (see TS 38.214 [19], clause 6.1.2). The field resourceAllocation applies to DCI format 0\_1 and the field resourceAllocationDCI-0-2 applies to DCI format 0\_2 (see TS 38.214 [19], clause 6.1.2).  
<endl>  
  
  
<start>  
pusch-config  
resourceAllocationType1GranularityDCI-0-2  
Configures the scheduling granularity applicable for both the starting point and length indication for resource allocation type 1 in DCI format 0\_2. If this field is absent, the granularity is 1 PRB (see TS 38.214 [19], clause 6.1.2.2.2).  
<endl>  
  
  
<start>  
pusch-config  
secondTPCFieldDCI-0-1, secondTPCFieldDCI-0-2  
A second TPC field can be configured via RRC for DCI-0-1 and DCI-0-2. Each TPC field is for each closed-loop index value respectively (i.e., 1st /2nd TPC fields correspond to "closedLoopIndex" value = 0 and 1,  
<endl>  
  
  
<start>  
pusch-config  
sequenceOffsetForRV  
Configures the RV offset for the starting RV for the first repetition (first actual repetition in PUSCH repetition Type B) towards the second 'SRS resource set' for PUSCH configured in either srs-ResourceSetToAddModList or srs-ResourceSetToAddModListDCI-0-2 with usage 'codebook' or 'noncodebook'.  
<endl>  
  
  
<start>  
pusch-config  
tp-pi2BPSK  
Enables pi/2-BPSK modulation with transform precoding if the field is present and disables it otherwise.  
<endl>  
  
  
<start>  
pusch-config  
transformPrecoder  
The UE specific selection of transformer precoder for PUSCH (see TS 38.214 [19], clause 6.1.3). When the field is absent the UE applies the value of the field msg3-transformPrecoder from rach-ConfigCommon included directly within BWP configuration (i.e., not included in additionalRACH-ConfigList).  
<endl>  
  
  
<start>  
pusch-config  
txConfig  
Whether UE uses codebook based or non-codebook based transmission (see TS 38.214 [19], clause 6.1.1). If the field is absent, the UE transmits PUSCH on one antenna port, see TS 38.214 [19], clause 6.1.1.  
<endl>  
  
  
<start>  
pusch-config  
uci-OnPUSCH-ListDCI-0-1, uci-OnPUSCH-ListDCI-0-2  
Configuration for up to 2 HARQ-ACK codebooks specific to DCI format 0\_1/0\_2. The field uci-OnPUSCH-ListDCI-0-1 applies to DCI format 0\_1 and the field uci-OnPUSCH-ListDCI-0-2 applies to DCI format 0\_2 (see TS 38.212 [17], clause 7.3.1 and TS 38.213 [13] clause 9.3).  
<endl>  
  
  
<start>  
pusch-config  
ul-AccessConfigListDCI-0-1, ul-AccessConfigListDCI-0-2  
List of the combinations of cyclic prefix extension, channel access priority class (CAPC), and UL channel access type (see TS 38.212 [17], clause 7.3.1) applicable for DCI format 0\_1 and DCI format 0\_2, respectively. The fields ul-AccessConfigListDCI-0-1-r16 and ul-AccessConfigListDCI-0-2-r17 are only applicable for FR1 (see TS 38.212 [17], Table 7.3.1.1.2-35). The field ul-AccessConfigListDCI-0-1-r17 only contains a list of UL channel access types and is only applicable for FR2-2 (see TS 38.212 [17], Table 7.3.1.1.2-35A).  
<endl>  
  
  
<start>  
pusch-config  
ul-FullPowerTransmission  
Configures the UE with UL full power transmission mode as specified in TS 38.213 [13]. This field is not configured if ul-powerControl is configured in the BWP-UplinkDedicated in which the PUCCH-Config is included.  
<endl>

<start>  
uci-onpusch  
betaOffsets  
Selection between and configuration of dynamic and semi-static beta-offset for DCI formats other than DCI format 0\_2. If the field is not configured, the UE applies the value 'semiStatic' (see TS 38.213 [13], clause 9.3).  
<endl>  
  
  
<start>  
uci-onpusch  
scaling  
Indicates a scaling factor to limit the number of resource elements assigned to UCI on PUSCH for DCI formats other than DCI format 0\_2. Value f0p5 corresponds to 0.5, value f0p65 corresponds to 0.65, and so on. The value configured herein is applicable for PUSCH with configured grant (see TS 38.212 [17], clause 6.3).  
<endl>

<start>  
uci-onpusch-dci-0-2  
betaOffsetsDCI-0-2  
Configuration of beta-offset for DCI format 0\_2. If semiStaticDCI-0-2 is chosen, the UE shall apply the value of 0 bit for the field of beta offset indicator in DCI format 0\_2. If dynamicDCI-0-2 is chosen, the UE shall apply the value of 1 bit or 2 bits for the field of beta offset indicator in DCI format 0\_2 (see TS 38.212 [17], clause 7.3.1 and TS 38.213 [13] clause 9.3).  
<endl>  
  
  
<start>  
uci-onpusch-dci-0-2  
dynamicDCI-0-2  
Indicates the UE applies the value 'dynamic' for DCI format 0\_2 (see TS 38.212 [17], clause 7.3.1 and TS 38.213 [13], clause 9.3).  
<endl>  
  
  
<start>  
uci-onpusch-dci-0-2  
semiStaticDCI-0-2  
Indicates the UE applies the value 'semiStatic' for DCI format 0\_2. (see TS 38.212 [17], clause 7.3.1 and see TS 38.213 [13], clause 9.3).  
<endl>  
  
  
<start>  
uci-onpusch-dci-0-2  
scalingDCI-0-2  
Indicates a scaling factor to limit the number of resource elements assigned to UCI on PUSCH for DCI format 0\_2. Value f0p5 corresponds to 0.5, value f0p65 corresponds to 0.65, and so on (see TS 38.212 [17], clause 6.3).  
<endl>

<start>  
pusch-configcommon  
groupHoppingEnabledTransformPrecoding  
For DMRS transmission with transform precoder, the NW may configure group hopping by this cell-specific parameter, see TS 38.211 [16], clause 6.4.1.1.1.2.  
<endl>  
  
  
<start>  
pusch-configcommon  
msg3-DeltaPreamble  
Power offset between msg3 and RACH preamble transmission. Actual value = field value \* 2 [dB] (see TS 38.213 [13], clause 7.1)  
<endl>  
  
  
<start>  
pusch-configcommon  
p0-NominalWithGrant  
P0 value for PUSCH with grant (except msg3). Value in dBm. Only even values (step size 2) allowed (see TS 38.213 [13], clause 7.1) This field is cell specific  
<endl>  
  
  
<start>  
pusch-configcommon  
pusch-TimeDomainAllocationList  
List of time domain allocations for timing of UL assignment to UL data (see TS 38.214 [19], table 6.1.2.1.1-1).  
<endl>

<start>  
p0-pusch-alphaset  
alpha  
alpha value for PUSCH with grant (except msg3) (see TS 38.213 [13], clause 7.1). When the field is absent the UE applies the value 1.  
<endl>  
  
  
<start>  
p0-pusch-alphaset  
p0  
P0 value for PUSCH with grant (except msg3) in steps of 1dB (see TS 38.213 [13], clause 7.1). When the field is absent the UE applies the value 0.  
<endl>

<start>  
p0-pusch-set  
p0-List  
Configuration of {p0-PUSCH, p0-PUSCH} sets for PUSCH. If SRI is present in the DCI, then one p0-PUSCH can be configured in P0-PUSCH-Set. If SRI is not present in the DCI, and both olpc-ParameterSetDCI-0-1 and olpc-ParameterSetDCI-0-2 are configured to be 1 bit, then one p0-PUSCH can be configured in P0-PUSCH-Set. If SRI is not present in the DCI, and if any of olpc-ParameterSetDCI-0-1 and olpc-ParameterSetDCI-0-2 is configured to be 2 bits, then two p0-PUSCH values can be configured in P0-PUSCH-Set (see TS 38.213 [13] clause 7 and TS 38.212 [17] clause 7.3.1).  
<endl>  
  
  
<start>  
p0-pusch-set  
p0-PUSCH-SetId  
Configure the index of a p0-PUSCH-Set (see TS 38.213 [13] clause 7 and TS 38.212 [17] clause 7.3.1).  
<endl>

<start>  
pusch-powercontrol  
deltaMCS  
Indicates whether to apply delta MCS. When the field is absent, the UE applies Ks = 0 in delta\_TFC formula for PUSCH (see TS 38.213 [13], clause 7.1).  
<endl>  
  
  
<start>  
pusch-powercontrol  
dummy  
This field is not used in the specification. If received it shall be ignored by the UE.  
<endl>  
  
  
<start>  
pusch-powercontrol  
msg3-Alpha  
Dedicated alpha value for msg3 PUSCH (see TS 38.213 [13], clause 7.1). When the field is absent the UE applies the value 1.  
<endl>  
  
  
<start>  
pusch-powercontrol  
olpc-ParameterSetDCI-0-1, olpc-ParameterSetDCI-0-2  
Configures the number of bits for Open-loop power control parameter set indication for DCI format 0\_1/0\_2 in case SRI is not configured in the DCI. 2 bits is applicable only if SRI is not present in the DCI format 0\_1. The field olpc-ParameterSetDCI-0-1 applies to DCI format 0\_1 and the field olpc-ParameterSetDCI-0-2 applies to DCI format 0\_2 (see TS 38.212 [17], clause 7.3.1 and TS 38.213 [13], clause 11).  
<endl>  
  
  
<start>  
pusch-powercontrol  
p0-AlphaSets  
Configuration {p0-pusch, alpha} sets for PUSCH (except msg3 and msgA PUSCH), i.e., { {p0,alpha,index1}, {p0,alpha,index2},...} (see TS 38.213 [13], clause 7.1). When no set is configured, the UE uses the P0-nominal for msg3/msgA PUSCH, P0-UE is set to 0 and alpha is set according to either msg3-Alpha or msgA-Alpha (see TS 38.213 [13], clause 7.1).  
<endl>  
  
  
<start>  
pusch-powercontrol  
p0-NominalWithoutGrant  
P0 value for UL grant-free/SPS based PUSCH. Value in dBm. Only even values (step size 2) allowed (see TS 38.213 [13], clause 7.1).  
<endl>  
  
  
<start>  
pusch-powercontrol  
p0-PUSCH-SetList  
Configure one additional P0-PUSCH-Set per SRI. If present, the one bit or 2 bits in the DCI is used to dynamically indicate among the P0 value from the existing P0-PUSCH-AlphaSet and the P0 value(s) from the P0-PUSCH-Set (See TS 38.212 [17], clause 7.3.1 and TS 38.213 [13], clause 17).  
<endl>  
  
  
<start>  
pusch-powercontrol  
p0-PUSCH-SetList2  
For indicating per-TRP OLPC set in DCI format 0\_1/0\_2 with the legacy field, a second p0-PUSCH-SetList-r16 is used. When this field is present the p0-PUSCH-SetList corresponds to the first SRS resource set (see TS 38.213).  
<endl>  
  
  
<start>  
pusch-powercontrol  
pathlossReferenceRSToAddModList, pathlossReferenceRSToAddModListSizeExt  
A set of Reference Signals (e.g. a CSI-RS config or a SS block) to be used for PUSCH path loss estimation. The set consists of Reference Signals configured using pathLossReferenceRSToAddModList and Reference Signals configured using pathlossReferenceRSToAddModListSizeExt. Up to maxNrofPUSCH-PathlossReferenceRSs may be configured (see TS 38.213 [13], clause 7.1).  
<endl>  
  
  
<start>  
pusch-powercontrol  
pathlossReferenceRSToReleaseList, pathlossReferenceRSToReleaseListSizeExt  
Lists of reference signals for PUSCH path loss estimation to be released by the UE.  
<endl>  
  
  
<start>  
pusch-powercontrol  
sri-PUSCH-MappingToAddModList  
A list of SRI-PUSCH-PowerControl elements among which one is selected by the SRI field in DCI (see TS 38.213 [13], clause 7.1).  
<endl>  
  
  
<start>  
pusch-powercontrol  
sri-PUSCH-MappingToAddModList2  
A list of SRI-PUSCH-PowerControl elements for second SRS-resource set, among which one is selected by the SRI field in DCI (see TS 38.213 [13], clause 7.1). When this field is present the sri-PUSCH-MappingToAddModList corresponds to the first SRS resource set for PUSCH.  
<endl>  
  
  
<start>  
pusch-powercontrol  
tpc-Accumulation  
If enabled, UE applies TPC commands via accumulation. If not enabled, UE applies the TPC command without accumulation. If the field is absent, TPC accumulation is enabled (see TS 38.213 [13], clause 7.1).  
<endl>  
  
  
<start>  
pusch-powercontrol  
twoPUSCH-PC-AdjustmentStates  
Number of PUSCH power control adjustment states maintained by the UE (i.e., fc(i)). If the field is present (n2) the UE maintains two power control states (i.e., fc(i,0) and fc(i,1)). If the field is absent, it maintains one power control state (i.e., fc(i,0)) (see TS 38.213 [13], clause 7.1).  
<endl>

<start>  
sri-pusch-powercontrol  
sri-P0-PUSCH-AlphaSetId  
The ID of a P0-PUSCH-AlphaSet as configured in p0-AlphaSets in PUSCH-PowerControl.  
<endl>  
  
  
<start>  
sri-pusch-powercontrol  
sri-PUSCH-ClosedLoopIndex  
The index of the closed power control loop associated with this SRI-PUSCH-PowerControl.  
<endl>  
  
  
<start>  
sri-pusch-powercontrol  
sri-PUSCH-PathlossReferenceRS-Id  
The ID of PUSCH-PathlossReferenceRS as configured in the pathlossReferenceRSToAddModList in PUSCH-PowerControl.  
<endl>  
  
  
<start>  
sri-pusch-powercontrol  
sri-PUSCH-PowerControlId  
The ID of this SRI-PUSCH-PowerControl configuration. It is used as the codepoint (payload) in the SRI DCI field.  
<endl>

<start>  
pusch-codeblockgrouptransmission  
maxCodeBlockGroupsPerTransportBlock  
Maximum number of code-block-groups (CBGs) per TB (see TS 38.213 [13], clause 9.1).  
<endl>

<start>  
pusch-servingcellconfig  
codeBlockGroupTransmission  
Enables and configures code-block-group (CBG) based transmission (see TS 38.214 [19], clause 5.1.5).  
The network does not configure this field if the SCS is 480 or 960 kHz.  
<endl>  
  
  
<start>  
pusch-servingcellconfig  
maxMIMO-Layers  
Indicates the maximum MIMO layer to be used for PUSCH in all BWPs of the corresponding UL of this serving cell (see TS 38.212 [17], clause 5.4.2.1). If present, the network sets maxRank to the same value. The field maxMIMO-Layers refers to DCI format 0\_1.  
<endl>  
  
  
<start>  
pusch-servingcellconfig  
nrofHARQ-ProcessesForPUSCH  
The number of HARQ processes to be used on the PUSCH of a serving cell. Value n32 corresponds to 32 HARQ processes. If the field is absent, the UE uses 16 HARQ processes (see TS 38.214 [19], clause 6.1).  
<endl>  
  
  
<start>  
pusch-servingcellconfig  
processingType2Enabled  
Enables configuration of advanced processing time capability 2 for PUSCH (see 38.214 [19], clause 6.4).  
<endl>  
  
  
<start>  
pusch-servingcellconfig  
rateMatching  
Enables LBRM (Limited buffer rate-matching). When the field is absent the UE applies FBRM (Full buffer rate-matchingLBRM) (see TS 38.212 [17], clause 5.4.2).  
<endl>  
  
  
<start>  
pusch-servingcellconfig  
xOverhead  
If the field is absent, the UE applies the value 'xoh0' (see TS 38.214 [19], clause 5.1.3.2).  
<endl>  
  
  
<start>  
pusch-servingcellconfig  
maxMIMO-LayersDCI-0-2  
Indicates the maximum MIMO layer to be used for PUSCH for DCI format 0\_2 in all BWPs of the corresponding UL of this serving cell (see TS 38.212 [17], clause 5.4.2.1). If present, the network sets maxRankDCI-0-2 to the same value.  
<endl>  
  
  
<start>  
pusch-servingcellconfig  
uplinkHARQ-mode  
Used to set the HARQ mode per HARQ process ID, see TS 38.321 [3]. The first/leftmost bit corresponds to HARQ process ID 0, the next bit to HARQ process ID 1 and so on. Bits corresponding to HARQ process IDs that are not configured shall be ignored. A bit set to one identifies a HARQ process with HARQmodeA and a bit set to zero identifies a HARQ process with HARQ modeB. This field applies for SRBs and DRBs.  
<endl>

<start>  
pusch-timedomainresourceallocationlist  
extendedK2  
Corresponds to L1 parameter 'K2' (see TS 38.214 [19], clause 6.1.2.1) configurable per PUSCH allocation. Only values {0..32} are applicable for PUSCH SCS of 120 kHz.  
When the field is absent for the first PUSCH if multiple PUSCH are configured per PDCCH, or when the field is absent and only one PUSCH is configured per PDCCH, the UE applies the value 1 when PUSCH SCS is 15/30 kHz; the value 2 when PUSCH SCS is 60 kHz, the value 3 when PUSCH SCS is 120 kHz, the value 11 when PUSCH SCS is 480 kHz, and the value 21 when PUSCH SCS is 960 kHz.  
<endl>  
  
  
<start>  
pusch-timedomainresourceallocationlist  
k2  
Corresponds to L1 parameter 'K2' (see TS 38.214 [19], clause 6.1.2.1). When the field is absent the UE applies the value 1 when PUSCH SCS is 15/30 kHz; the value 2 when PUSCH SCS is 60 kHz, and the value 3 when PUSCH SCS is 120 kHz. k2 is absent/ignored if extendedK2 is present.  
<endl>  
  
  
<start>  
pusch-timedomainresourceallocationlist  
length  
Indicates the length allocated for PUSCH for DCI format 0\_1/0\_2 (see TS 38.214 [19], clause 6.1.2.1).  
<endl>  
  
  
<start>  
pusch-timedomainresourceallocationlist  
mappingType  
Mapping type (see TS 38.214 [19], clause 6.1.2.1).  
<endl>  
  
  
<start>  
pusch-timedomainresourceallocationlist  
numberOfRepetitions  
Number of repetitions for DCI format 0\_1/0\_2 (see TS 38.214 [19], clause 6.1.2.1). When numberOfSlotsTBoMS-r17 is set to 2, 4 or 8 (i.e. TB processing over multi-slot (TBoMS) PUSCH is enabled), it indicates the number of repetitions of a single TBoMS.  
<endl>  
  
  
<start>  
pusch-timedomainresourceallocationlist  
numberOfRepetitionsExt  
Number of repetitions for DCI format 0\_1/0\_2 if pusch-RepTypeIndicatorDCI-0-1/pusch-RepTypeIndicatorDCI-0-2 is not set to pusch-RepTypeB (see TS 38.214 [19], clause 6.1.2.1). If this field is present, the field numberOfRepeitions-r16 is ignored for PUSCH repetition Type A.  
<endl>  
  
  
<start>  
pusch-timedomainresourceallocationlist  
numberOfSlotsTBoMS  
Number of slots allocated for TB processing over multi-slot PUSCH for DCI format 0\_1/0\_2. If a number of repetitions K is configured by numberOfRepetitions or numberOfRepetitionsExt, the network configures numberOfSlotsTBoMS (N) and K such that N\*K ≤ 32 (see TS 38.214 [19], clause 6.1.2.1).  
<endl>  
  
  
<start>  
pusch-timedomainresourceallocationlist  
puschAllocationList  
The field puschAllocationList-r16 indicates one or multiple PUSCH continuous in time domain which share a common k2 (see TS 38.214 [19], clause 6.1.2.1). The field pusch-AllocationList-r17 configures one or multiple PUSCH that may be in consecutive or non-consecutive slots (see TS 38.214 [19], clause 6.1.2.1). The puschAllocationList-r16 only has one element in pusch-TimeDomainAllocationListDCI-0-1-r16 and in pusch-TimeDomainAllocationListDCI-0-2-r16.  
<endl>  
  
  
<start>  
pusch-timedomainresourceallocationlist  
startSymbol  
Indicates the index of start symbol for PUSCH for DCI format 0\_1/0\_2 (see TS 38.214 [19], clause 6.1.2.1).  
<endl>  
  
  
<start>  
pusch-timedomainresourceallocationlist  
startSymbolAndLength  
An index giving valid combinations of start symbol and length (jointly encoded) as start and length indicator (SLIV). The network configures the field so that the allocation does not cross the slot boundary. (see TS 38.214 [19], clause 6.1.2.1).  
<endl>

<start>  
pusch-tpc-commandconfig  
targetCell  
The serving cell to which the acquired power control commands are applicable. If the value is absent, the UE applies the TPC commands to the serving cell on which the command has been received.  
<endl>  
  
  
<start>  
pusch-tpc-commandconfig  
tpc-Index  
An index determining the position of the first bit of TPC command inside the DCI format 2-2 payload.  
<endl>  
  
  
<start>  
pusch-tpc-commandconfig  
tpc-IndexSUL  
An index determining the position of the first bit of TPC command inside the DCI format 2-2 payload.  
<endl>

<start>  
quantityconfignr  
quantityConfigCell  
Specifies L3 filter configurations for cell measurement results for the configurable RS Types (e.g. SS/PBCH block and CSI-RS) and the configurable measurement quantities (e.g. RSRP, RSRQ and SINR).  
<endl>  
  
  
<start>  
quantityconfignr  
quantityConfigRS-Index  
Specifies L3 filter configurations for measurement results per RS index for the configurable RS Types (e.g. SS/PBCH block and CSI-RS) and the configurable measurement quantities (e.g. RSRP, RSRQ and SINR).  
<endl>

<start>  
quantityconfigrs  
csi-RS-FilterConfig  
CSI-RS based L3 filter configurations:  
Specifies L3 filter configurations for CSI-RSRP, CSI-RSRQ and CSI-SINR measurement results from the L1 filter(s), as defined in TS 38.215 [9].  
<endl>  
  
  
<start>  
quantityconfigrs  
ssb-FilterConfig  
SS Block based L3 filter configurations:  
Specifies L3 filter configurations for SS-RSRP, SS-RSRQ and SS-SINR measurement results from the L1 filter(s), as defined in TS 38.215 [9].  
<endl>

<start>  
quantityconfigutra-fdd  
filterCoefficientRSCP  
Specifies L3 filter coefficient for FDD UTRAN CPICH\_RSCP measuement results from L1 filter.  
<endl>  
  
  
<start>  
quantityconfigutra-fdd  
filterCoefficientEcN0  
Specifies L3 filter coefficient for FDD UTRAN CPICH\_EcN0 measuement results from L1 filter.  
<endl>

<start>  
rach-configcommon  
featureCombinationPreamblesList  
Specifies a series of preamble partitions each associated to a combination of features and 4-step RA. The network does not configure this list to have more than 16 entries.  
<endl>  
  
  
<start>  
rach-configcommon  
messagePowerOffsetGroupB  
Threshold for preamble selection. Value is in dB. Value minusinfinity corresponds to –infinity. Value dB0 corresponds to 0 dB, dB5 corresponds to 5 dB and so on. (see TS 38.321 [3], clause 5.1.2)  
<endl>  
  
  
<start>  
rach-configcommon  
msg1-SubcarrierSpacing  
Subcarrier spacing of PRACH (see TS 38.211 [16], clause 5.3.2).  
Only the following values are applicable depending on the used frequency:  
FR1: 15 or 30 kHz  
FR2-1: 60 or 120 kHz  
FR2-2: 120, 480, or 960 kHz  
If absent, the UE applies the SCS as derived from the prach-ConfigurationIndex in RACH-ConfigGeneric (see tables Table 6.3.3.1-1, Table 6.3.3.1-2, Table 6.3.3.2-2 and Table 6.3.3.2-3, TS 38.211 [16]). The value also applies to contention free random access (RACH-ConfigDedicated), to SI-request and to contention-based beam failure recovery (CB-BFR). But it does not apply for contention free beam failure recovery (CF-BFR) (see BeamFailureRecoveryConfig).  
<endl>  
  
  
<start>  
rach-configcommon  
msg3-transformPrecoder  
Enables the transform precoder for Msg3 transmission according to clause 6.1.3 of TS 38.214 [19]. If the field is absent, the UE disables the transformer precoder (see TS 38.213 [13], clause 8.3).  
<endl>  
  
  
<start>  
rach-configcommon  
numberOfRA-PreamblesGroupA  
The number of CB preambles per SSB in group A. This determines implicitly the number of CB preambles per SSB available in group B. (see TS 38.321 [3], clause 5.1.1). The setting should be consistent with the setting of ssb-perRACH-OccasionAndCB-PreamblesPerSSB.  
<endl>  
  
  
<start>  
rach-configcommon  
prach-RootSequenceIndex  
PRACH root sequence index (see TS 38.211 [16], clause 6.3.3.1). The value range depends on whether L=839 or L=139 or L=571 or L=1151. The length of the root sequence corresponding with the index indicated in this IE should be consistent with the one indicated in prach-ConfigurationIndex in the RACH-ConfigDedicated (if configured). If prach-RootSequenceIndex-r16 is signalled, UE shall ignore the prach-RootSequenceIndex (without suffix).  
For FR2-2, only the following values are applicable depending on the used subcarrier spacing:  
120 kHz: L=139, L=571, and L=1151  
480 kHz: L=139, and L=571  
960 kHz: L=139  
<endl>  
  
  
<start>  
rach-configcommon  
ra-ContentionResolutionTimer  
The initial value for the contention resolution timer (see TS 38.321 [3], clause 5.1.5). Value sf8 corresponds to 8 subframes, value sf16 corresponds to 16 subframes, and so on.  
<endl>  
  
  
<start>  
rach-configcommon  
ra-Msg3SizeGroupA  
Transport Blocks size threshold in bits below which the UE shall use a contention-based RA preamble of group A. (see TS 38.321 [3], clause 5.1.2).  
<endl>  
  
  
<start>  
rach-configcommon  
ra-Prioritization  
Parameters which apply for prioritized random access procedure on any UL BWP of SpCell for specific Access Identities (see TS 38.321 [3], clause 5.1.1a).  
<endl>  
  
  
<start>  
rach-configcommon  
ra-PrioritizationForAI  
Indicates whether the field ra-Prioritization-r16 applies for Access Identities. The first/leftmost bit corresponds to Access Identity 1, the next bit corresponds to Access Identity 2. Value 1 indicates that the field ra-Prioritization-r16 applies otherwise the field does not apply (see TS 23.501 [32]).  
<endl>  
  
  
<start>  
rach-configcommon  
ra-PrioritizationForSlicing  
Parameters which apply to configure prioritized CBRA 4-step random access type for slicing.  
<endl>  
  
  
<start>  
rach-configcommon  
rach-ConfigGeneric  
RACH parameters for both regular random access and beam failure recovery.  
<endl>  
  
  
<start>  
rach-configcommon  
restrictedSetConfig  
Configuration of an unrestricted set or one of two types of restricted sets, see TS 38.211 [16], clause 6.3.3.1.  
<endl>  
  
  
<start>  
rach-configcommon  
rsrp-ThresholdSSB  
UE may select the SS block and corresponding PRACH resource for path-loss estimation and (re)transmission based on SS blocks that satisfy the threshold (see TS 38.213 [13]).  
<endl>  
  
  
<start>  
rach-configcommon  
rsrp-ThresholdSSB-SUL  
The UE selects SUL carrier to perform random access based on this threshold (see TS 38.321 [3], clause 5.1.1). The value applies to all the BWPs and all RACH configurations.  
<endl>  
  
  
<start>  
rach-configcommon  
ssb-perRACH-OccasionAndCB-PreamblesPerSSB  
The meaning of this field is twofold: the CHOICE conveys the information about the number of SSBs per RACH occasion. Value oneEighth corresponds to one SSB associated with 8 RACH occasions, value oneFourth corresponds to one SSB associated with 4 RACH occasions, and so on. The ENUMERATED part indicates the number of Contention Based preambles per SSB. Value n4 corresponds to 4 Contention Based preambles per SSB, value n8 corresponds to 8 Contention Based preambles per SSB, and so on. The total number of CB preambles in a RACH occasion is given by CB-preambles-per-SSB \* max(1, SSB-per-rach-occasion). See TS 38.213 [13].  
<endl>  
  
  
<start>  
rach-configcommon  
totalNumberOfRA-Preambles  
Total number of preambles used for contention based and contention free 4-step or 2-step random access in the RACH resources defined in RACH-ConfigCommon, excluding preambles used for other purposes (e.g. for SI request). If the field is absent, all 64 preambles are available for RA. The setting should be consistent with the setting of ssb-perRACH-OccasionAndCB-PreamblesPerSSB, i.e. it should be a multiple of the number of SSBs per RACH occasion.  
<endl>

<start>  
rach-configcommontwostepra  
featureCombinationPreamblesList  
Specifies a series of preamble partitions each associated to a combination of features and 2-step RA. The network does not configure this list to have more than 16 entries.  
<endl>  
  
  
<start>  
rach-configcommontwostepra  
groupB-ConfiguredTwoStepRA  
Preamble grouping for 2-step random access type. If the field is absent then there is only one preamble group configured and only one msgA PUSCH configuration.  
<endl>  
  
  
<start>  
rach-configcommontwostepra  
msgA-CB-PreamblesPerSSB-PerSharedRO  
Number of contention-based preambles used for 2-step RA type from the non-CBRA 4-step type preambles associated with each SSB for RO shared with 4-step type RA. The number of preambles for 2-step RA type shall not exceed the number of preambles per SSB minus the number of contention-based preambles per SSB for 4-step type RA. The possible value range for this parameter needs to be aligned with value range for the configured SSBs per RACH occasion in ssb-perRACH-OccasionAndCB-PreamblesPerSSB in RACH-ConfigCommon. The field is only applicable for the case of shared ROs with 4-step type random access.  
<endl>  
  
  
<start>  
rach-configcommontwostepra  
msgA-PRACH-RootSequenceIndex  
PRACH root sequence index. If the field is not configured in RACH-ConfigCommonTwoStepRA which is configured directly within a BWP (i.e., not within AdditionalRACH-Config), the UE applies the value in field prach-RootSequenceIndex in RACH-ConfigCommon in the configured BWP. If the field is absent in RACH-ConfigCommonTwoStepRA in AdditionalRACH-Config, the UE applies the corresponding value of prach-RootSequenceIndex in RACH-ConfigCommon in the same AdditionalRACH-Config. When both 2-step and 4-step type random access is configured, this field is only configured for the case of separate ROs between 2-step and 4-step type random access.  
For FR2-2, only the following values are applicable depending on the used subcarrier spacing:  
120 kHz: L=139, L=571, and L=1151  
480 kHz: L=139, and L=571  
960 kHz: L=139  
<endl>  
  
  
<start>  
rach-configcommontwostepra  
msgA-RestrictedSetConfig  
Configuration of an unrestricted set or one of two types of restricted sets for 2-step random access type preamble. If the field is not configured in RACH-ConfigCommonTwoStepRA which is configured directly within a BWP (i.e. not within AdditionalRACH-Config), the UE applies the value in field restrictedSetConfig in RACH-ConfigCommon in the configured BWP. If the field is absent in RACH-ConfigCommonTwoStepRA in AdditionalRACH-Config, the UE applies the value of restrictedSetConfig in RACH-ConfigCommon in the same AdditionalRACH-Config. When both 2-step and 4-step type random access is configured, this field is only configured for the case of separate ROs between 2-step and 4-step type random access.  
<endl>  
  
  
<start>  
rach-configcommontwostepra  
msgA-RSRP-Threshold  
The UE selects 2-step random access type to perform random access based on this threshold (see TS 38.321 [3], clause 5.1.1). This field is only present if both 2-step and 4-step RA type are configured for the BWP.  
<endl>  
  
  
<start>  
rach-configcommontwostepra  
msgA-RSRP-ThresholdSSB  
UE may select the SS block and corresponding PRACH resource for path-loss estimation and (re)transmission based on SS blocks that satisfy the threshold (see TS 38.213 [13]).  
<endl>  
  
  
<start>  
rach-configcommontwostepra  
msgA-SSB-PerRACH-OccasionAndCB-PreamblesPerSSB  
The meaning of this field is twofold: the CHOICE conveys the information about the number of SSBs per RACH occasion. Value oneEight corresponds to one SSB associated with 8 RACH occasions, value oneFourth corresponds to one SSB associated with 4 RACH occasions, and so on. The ENUMERATED part indicates the number of Contention Based preambles per SSB. Value n4 corresponds to 4 Contention Based preambles per SSB, value n8 corresponds to 8 Contention Based preambles per SSB, and so on. The total number of CB preambles in a RACH occasion is given by CB-preambles-per-SSB \* max(1, SSB-per-rach-occasion). If the field is not configured in RACH-ConfigCommonTwoStepRA which is configured directly within a BWP (i.e. not within AdditionalRACH-Config) and both 2-step and 4-step are configured for the BWP, the UE applies the value in the field ssb-perRACH-OccasionAndCB-PreamblesPerSSB in RACH-ConfigCommon. If the field is not configured in AdditionalRACH-Config and both 2-step and 4-step are configured in AdditionalRACH-Config, the UE applies the value in the field ssb-perRACH-OccasionAndCB-PreamblesPerSSB in RACH-ConfigCommon in the same AdditionalRACH-Config. The field is not present when RACH occasions are shared between 2-step and 4-step type random access in the BWP.  
<endl>  
  
  
<start>  
rach-configcommontwostepra  
msgA-SSB-SharedRO-MaskIndex  
Indicates the subset of 4-step type ROs shared with 2-step random access type for each SSB. This field is configured when there is more than one RO per SSB. If the field is absent, and 4-step and 2-step has shared ROs, then all ROs are shared.  
<endl>  
  
  
<start>  
rach-configcommontwostepra  
msgA-SubcarrierSpacing  
Subcarrier spacing of PRACH (see TS 38.211 [16], clause 5.3.2).  
Only the following values are applicable depending on the used frequency:  
FR1: 15 or 30 kHz  
FR2-1: 60 or 120 kHz  
FR2-2: 120, 480, or 960 kHz.  
If the field is absent, the UE applies the SCS as derived from the msgA-PRACH-ConfigurationIndex in RACH-ConfigGenericTwoStepRA (see tables Table 6.3.3.1-1, Table 6.3.3.1-2, Table 6.3.3.2-2 and Table 6.3.3.2-3, TS 38.211 [16]) in case of 2-step only BWP, otherwise the UE applies the same SCS as Msg1 derived from RACH-ConfigCommon. The value also applies to contention free 2-step random access type (RACH-ConfigDedicated).  
<endl>  
  
  
<start>  
rach-configcommontwostepra  
msgA-TotalNumberOfRA-Preambles  
Indicates the total number of preambles used for contention-based and contention-free 2-step random access type when ROs for 2-step are not shared with 4-step. If the field is absent, and 2-step and 4-step does not have shared ROs, all 64 preambles are available for 2-step random access type.  
<endl>  
  
  
<start>  
rach-configcommontwostepra  
msgA-TransMax  
Max number of MsgA preamble transmissions performed before switching to 4-step random access (see TS 38.321 [3], clauses 5.1.1). This field is only applicable when 2-step and 4-step RA type are configured and switching to 4-step type RA is supported. If the field is absent, switching from 2-step RA type to 4-step RA type is not allowed.  
<endl>  
  
  
<start>  
rach-configcommontwostepra  
ra-ContentionResolutionTimer  
The initial value for the contention resolution timer for fallback RAR in case no 4-step random access type is configured (see TS 38.321 [3], clause 5.1.5). Value sf8 corresponds to 8 subframes, value sf16 corresponds to 16 subframes, and so on. If both 2-step and 4-step random access type resources are configured on the BWP, then this field is absent. If the field is absent in RACH-ConfigCommonTwoStepRA in AdditionalRACH-Config, the UE shall apply the corresponding value in RACH-ConfigCommon in the same AdditionalRACH-Config.  
<endl>  
  
  
<start>  
rach-configcommontwostepra  
ra-Prioritization  
Parameters which apply for prioritized random access procedure on any UL BWP of SpCell for specific Access Identities (see TS 38.321 [3], clause 5.1.1a).  
<endl>  
  
  
<start>  
rach-configcommontwostepra  
ra-PrioritizationForAI  
Indicates whether the field ra-Prioritization-r16 applies for Access Identities. The first/leftmost bit corresponds to Access Identity 1, the next bit corresponds to Access Identity 2. Value 1 for an Access Identity indicates that the field ra-Prioritization-r16 applies, otherwise the field does not apply.  
<endl>  
  
  
<start>  
rach-configcommontwostepra  
ra-PrioritizationForSlicingTwoStep  
Parameters which apply to configure prioritized CBRA 2-step random access type for slicing.  
<endl>  
  
  
<start>  
rach-configcommontwostepra  
rach-ConfigGenericTwoStepRA  
2-step random access type parameters for both regular random access and beam failure recovery.  
<endl>

<start>  
groupb-configuredtwostepra  
messagePowerOffsetGroupB  
Threshold for preamble selection. Value is in dB. Value minusinfinity corresponds to –infinity. Value dB0 corresponds to 0 dB, dB5 corresponds to 5 dB and so on. (see TS 38.321 [3], clause 5.1.1).  
<endl>  
  
  
<start>  
groupb-configuredtwostepra  
numberOfRA-PreamblesGroupA  
The number of CB preambles per SSB in group A for idle/inactive or connected mode. The setting of the number of preambles for each group should be consistent with msgA-SSB-PerRACH-OccasionAndCB-PreamblesPerSSB or msgA-CB-PreamblesPerSSB-PerSharedRO if configured.  
<endl>  
  
  
<start>  
groupb-configuredtwostepra  
ra-MsgA-SizeGroupA  
Transport block size threshold in bits below which the UE shall use a contention-based RA preamble of group A. (see TS 38.321 [3], clause 5.1.1).  
<endl>

<start>  
cfra-csirs-resource  
csi-RS  
The ID of a CSI-RS resource defined in the measurement object associated with this serving cell.  
<endl>  
  
  
<start>  
cfra-csirs-resource  
ra-OccasionList  
RA occasions that the UE shall use when performing CF-RA upon selecting the candidate beam identified by this CSI-RS. The network ensures that the RA occasion indexes provided herein are also configured by prach-ConfigurationIndex and msg1-FDM. Each RACH occasion is sequentially numbered, first, in increasing order of frequency resource indexes for frequency multiplexed PRACH occasions; second, in increasing order of time resource indexes for time multiplexed PRACH occasions within a PRACH slot and Third, in increasing order of indexes for PRACH slots.  
<endl>  
  
  
<start>  
cfra-csirs-resource  
ra-PreambleIndex  
The RA preamble index to use in the RA occasions associated with this CSI-RS.  
<endl>

<start>  
cfra  
occasions  
RA occasions for contention free random access. If the field is absent, the UE uses the RA occasions configured in RACH-ConfigCommon in the first active UL BWP.  
<endl>  
  
  
<start>  
cfra  
ra-ssb-OccasionMaskIndex  
Explicitly signalled PRACH Mask Index for RA Resource selection in TS 38.321 [3]. The mask is valid for all SSB resources signalled in ssb-ResourceList.  
<endl>  
  
  
<start>  
cfra  
rach-ConfigGeneric  
Configuration of contention free random access occasions for CFRA. The UE shall ignore preambleReceivedTargetPower, preambleTransMax, powerRampingStep, ra-ResponseWindow signaled within this field and use the corresponding values provided in RACH-ConfigCommon.  
<endl>  
  
  
<start>  
cfra  
ssb-perRACH-Occasion  
Number of SSBs per RACH occasion.  
<endl>  
  
  
<start>  
cfra  
totalNumberOfRA-Preambles  
Total number of preambles used for contention free random access in the RACH resources defined in CFRA, excluding preambles used for other purposes (e.g. for SI request). If the field is absent but the field occasions is present, the UE may assume all the 64 preambles are for RA. The setting should be consistent with the setting of ssb-perRACH-Occasion, if present, i.e. it should be a multiple of the number of SSBs per RACH occasion.  
<endl>

<start>  
cfra-ssb-resource  
msgA-PUSCH-Resource-Index  
Identifies the index of the PUSCH resource used for MSGA CFRA. The PUSCH resource index indicates a valid PUSCH occasion (as specified in TS 38.213 [13], clause 8.1A) and the associated DMRS resources corresponding to a PRACH slot. The PUSCH resource indexes are sequentially numbered and are mapped to valid PUSCH occasions corresponding to a PRACH slot which are ordered, first, in increasing order of frequency resource indexes for frequency multiplexed PUSCH occasions; second, in increasing order of DMRS resource indexes within a PUSCH occasion, where a DMRS resource index is determined first in an ascending order of a DMRS port index and then in an ascending order of a DMRS sequence index, third in increasing order of time resource indexes for time multiplexed PUSCH occasions within a PUSCH slot and fourth, in increasing order of indexes for PUSCH slots. For the case of contention free 2-step random access type, if this field is absent, the UE shall use the value 0.  
<endl>  
  
  
<start>  
cfra-ssb-resource  
ra-PreambleIndex  
The preamble index that the UE shall use when performing CF-RA upon selecting the candidate beams identified by this SSB.  
<endl>  
  
  
<start>  
cfra-ssb-resource  
ssb  
The ID of an SSB transmitted by this serving cell.  
<endl>

<start>  
cfra-twostep  
msgA-CFRA-PUSCH  
PUSCH resource configuration(s) for msgA CFRA.  
<endl>  
  
  
<start>  
cfra-twostep  
msgA-TransMax  
Max number of MsgA preamble transmissions performed before switching to 4-step type random access (see TS 38.321 [3], clauses 5.1.1). This field is only applicable when 2-step and 4-step RA type are configured and switching to 4-step type RA is supported. If the field is absent in cfra-TwoStep, switching from 2-step RA type to 4-step RA type is not allowed.  
<endl>  
  
  
<start>  
cfra-twostep  
occasionsTwoStepRA  
RA occasions for contention free random access. If the field is absent, the UE uses the RA occasions configured in RACH-ConfigCommonTwoStepRA in the first active UL BWP.  
<endl>  
  
  
<start>  
cfra-twostep  
ra-SSB-OccasionMaskIndex  
Explicitly signalled PRACH Mask Index for RA Resource selection in TS 38.321 [3]. The mask is valid for all SSB resources signalled in ssb-ResourceList.  
<endl>  
  
  
<start>  
cfra-twostep  
rach-ConfigGenericTwoStepRA  
Configuration of contention free random access occasions for CFRA 2-step random access type.  
<endl>  
  
  
<start>  
cfra-twostep  
ssb-PerRACH-OccasionTwoStep  
Number of SSBs per RACH occasion for 2-step random access type.  
<endl>

<start>  
rach-configdedicated  
cfra  
Parameters for contention free random access to a given target cell. If this field and cfra-TwoStep are absent, the UE performs contention based random access.  
<endl>  
  
  
<start>  
rach-configdedicated  
cfra-TwoStep  
Parameters for contention free 2-step random access type to a given target cell. Network ensures that cfra and cfra-TwoStep are not configured at the same time. If this field and cfra are absent, the UE performs contention based random access. This field may only be present if msgA-ConfigCommon is configured on the BWP.  
<endl>  
  
  
<start>  
rach-configdedicated  
ra-prioritization  
Parameters which apply for prioritized random access procedure to a given target cell (see TS 38.321 [3], clause 5.1.1).  
<endl>  
  
  
<start>  
rach-configdedicated  
ra-PrioritizationTwoStep  
Parameters which apply for prioritized 2-step random access type procedure to a given target cell (see TS 38.321 [3], clause 5.1.1).  
<endl>

<start>  
rach-configgeneric  
msg1-FDM  
The number of PRACH transmission occasions FDMed in one time instance. (see TS 38.211 [16], clause 6.3.3.2).  
<endl>  
  
  
<start>  
rach-configgeneric  
msg1-FrequencyStart  
Offset of lowest PRACH transmission occasion in frequency domain with respective to PRB 0. The value is configured so that the corresponding RACH resource is entirely within the bandwidth of the UL BWP. (see TS 38.211 [16], clause 6.3.3.2).  
<endl>  
  
  
<start>  
rach-configgeneric  
powerRampingStep  
Power ramping steps for PRACH (see TS 38.321 [3],5.1.3).  
<endl>  
  
  
<start>  
rach-configgeneric  
prach-ConfigurationFrameOffset-IAB  
Frame offset for ROs defined in the baseline configuration indicated by prach-ConfigurationIndex and is used only by the IAB-MT. (see TS 38.211 [16], clause 6.3.3.2).  
<endl>  
  
  
<start>  
rach-configgeneric  
prach-ConfigurationIndex  
PRACH configuration index. For prach-ConfigurationIndex configured under beamFailureRecoveryConfig, the prach-ConfigurationIndex can only correspond to the short preamble format, (see TS 38.211 [16], clause 6.3.3.2). If the field prach-ConfigurationIndex-v1610 is present, the UE shall ignore the value provided in prach-ConfigurationIndex (without suffix).  
<endl>  
  
  
<start>  
rach-configgeneric  
prach-ConfigurationPeriodScaling-IAB  
Scaling factor to extend the periodicity of the baseline configuration indicated by prach-ConfigurationIndex and is used only by the IAB-MT. Value scf1 corresponds to scaling factor of 1 and so on. (see TS 38.211 [16], clause 6.3.3.2).  
<endl>  
  
  
<start>  
rach-configgeneric  
prach-ConfigurationSOffset-IAB  
Subframe/Slot offset for ROs defined in the baseline configuration indicated by prach-ConfigurationIndex and is used only by the IAB-MT. (see TS 38.211 [16], clause 6.3.3.2).  
<endl>  
  
  
<start>  
rach-configgeneric  
preambleReceivedTargetPower  
The target power level at the network receiver side (see TS 38.213 [13], clause 7.4, TS 38.321 [3], clauses 5.1.2, 5.1.3). Only multiples of 2 dBm may be chosen (e.g. -202, -200, -198, ...).  
<endl>  
  
  
<start>  
rach-configgeneric  
preambleTransMax  
Max number of RA preamble transmission performed before declaring a failure (see TS 38.321 [3], clauses 5.1.4, 5.1.5).  
<endl>  
  
  
<start>  
rach-configgeneric  
ra-ResponseWindow  
Msg2 (RAR) window length in number of slots. The network configures a value lower than or equal to 10 ms when Msg2 is transmitted in licensed spectrum and a value lower than or equal to 40 ms when Msg2 is transmitted with shared spectrum channel access (see TS 38.321 [3], clause 5.1.4). UE ignores the field if included in SCellConfig. If ra-ResponseWindow-v1610 or ra-ResponseWindow-v1700 is signalled, UE shall ignore the ra-ResponseWindow (without suffix). The field ra-ResponseWindow-v1700 is applicable to SCS 480 kHz and SCS 960 kHz.  
<endl>  
  
  
<start>  
rach-configgeneric  
zeroCorrelationZoneConfig  
N-CS configuration, see Table 6.3.3.1-5 in TS 38.211 [16].  
<endl>

<start>  
rach-configgenerictwostepra  
msgA-PreamblePowerRampingStep  
Power ramping steps for msgA PRACH. If the field is absent in RACH-ConfigCommonTwoStepRA in AdditionalRACH-Config, the UE shall apply the corresponding value in RACH-ConfigCommon in the same AdditionalRACH-Config. If the field is absent in other cases, UE shall use the value of powerRampingStep in RACH-ConfigGeneric in the configured BWP (see TS 38.321 [3], 5.1.3). This field may only be present if no 4-step type RA is configured in the BWP or in the case of separate ROs with 4-step type RA. The field is absent if RACH-ConfigGenericTwoStepRA is included in CFRA-TwoStep in RACH-ConfigDedicated and then the UE uses the value of msgA-PreamblePowerRampingStep in RACH-ConfigGenericTwoStepRA configured for CBRA.  
<endl>  
  
  
<start>  
rach-configgenerictwostepra  
msgA-PreambleReceivedTargetPower  
The target power level at the network receiver side (see TS 38.213 [13], clause 7.1.1 and TS 38.321 [3], clause 5.1.1). Only multiples of 2 dBm may be chosen (e.g -202, -200, -198, …). If the field is absent, UE shall use the value of preambleReceivedTargetPower in RACH-ConfigGeneric in the configured BWP. This field may only be present if no 4-step type RA is configured in the BWP. The field is absent if RACH-ConfigGenericTwoStepRA is included in CFRA-TwoStep in RACH-ConfigDedicated and then the UE uses the value of msgA-PreambleReceivedTargetPower in RACH-ConfigGenericTwoStepRA configured for CBRA.  
<endl>  
  
  
<start>  
rach-configgenerictwostepra  
msgA-PRACH-ConfigurationIndex  
Cell-specific PRACH configuration index for 2-step RA type. If the field is absent in RACH-ConfigCommonTwoStepRA which is configured directly within a BWP (i.e. not within AdditionalRACH-Config), the UE shall use the value of corresponding 4-step random access parameter in the configured BWP. If the field is absent in RACH-ConfigCommonTwoStepRA in AdditionalRACH-Config, the UE shall apply the corresponding value in RACH-ConfigCommon in the same AdditionalRACH-Config. If the value is in the range of 256 to 262, the field prach-ConfigurationIndex-v1610 should be considered configured (see TS 38.211 [16], clause 6.3.3.2). This field may only be present if no 4-step type RA is configured in the BWP or in the case of separate ROs with 4-step type RA.  
<endl>  
  
  
<start>  
rach-configgenerictwostepra  
msgA-RO-FDM  
The number of msgA PRACH transmission occasions Frequency-Division Multiplexed in one time instance. If the field is absent in RACH-ConfigCommonTwoStepRA which is configured directly within a BWP (i.e. not within AdditionalRACH-Config), UE shall use value of msg1-FDM in RACH-ConfigGeneric in the configured BWP. If the field is absent in RACH-ConfigCommonTwoStepRA in AdditionalRACH-Config, the UE shall apply the value of msg1-FDM in RACH-ConfigCommon in the same AdditionalRACH-Config (see TS 38.211 [16], clause 6.3.3.2). This field may only be present if no 4-step type RA is configured in the BWP or in the case of separate ROs with 4-step type RA.  
<endl>  
  
  
<start>  
rach-configgenerictwostepra  
msgA-RO-FrequencyStart  
Offset of lowest PRACH transmissions occasion in frequency domain with respect to PRB 0. If the field is absent in RACH-ConfigCommonTwoStepRA which is configured directly within a BWP (i.e. not within AdditionalRACH-Config), UE shall use value of msg1-FrequencyStart in RACH-ConfigGeneric in the configured BWP. If the field is absent in RACH-ConfigCommonTwoStepRA in AdditionalRACH-Config, the UE shall apply the value of msg1-FrequencyStart in RACH-ConfigCommon in the same AdditionalRACH-Config (see TS 38.211 [16], clauses 5.3.2 and 6.3.3.2). This field may only be present if no 4-step type RA is configured in the BWP or in the case of separate ROs with 4-step type RA.  
<endl>  
  
  
<start>  
rach-configgenerictwostepra  
msgA-ZeroCorrelationZoneConfig  
N-CS configuration for msgA preamble, see Table 6.3.3.1-5 in TS 38.211 [16]. If the field is absent in RACH-ConfigCommonTwoStepRA in AdditionalRACH-Config, the UE shall apply the corresponding value in RACH-ConfigCommon in the same AdditionalRACH-Config. If the field is absent in other cases, UE shall use value zeroCorrelationZoneConfig in RACH-ConfigGeneric in the configured BWP. This field may only be present if no 4-step type RA is configured in the BWP or in the case of separate ROs with 4-step type RA.  
<endl>  
  
  
<start>  
rach-configgenerictwostepra  
msgB-ResponseWindow  
MsgB monitoring window length in number of slots. The network configures a value lower than or equal to 40ms (see TS 38.321 [3], clause 5.1.1). The network does not configure msgB-ResponseWindow-r16 simultaneously with msgB-ResponseWindow-v1700, and if both fields are absent, the UE uses the value of msgB-ResponseWindow in RACH-ConfigGenericTwoStepRA configured for CBRA.  
<endl>  
  
  
<start>  
rach-configgenerictwostepra  
preambleTransMax  
Max number of RA preamble transmission performed before declaring a failure (see TS 38.321 [3], clauses 5.1.4, 5.1.5). If the field is absent in RACH-ConfigCommonTwoStepRA in AdditionalRACH-Config, the UE shall apply the corresponding value in RACH-ConfigCommon in the same AdditionalRACH-Config. If the field is absent in other cases, UE shall use the value of preambleTransMax in RACH-ConfigGeneric in the configured BWP. The field is absent if RACH-ConfigGenericTwoStepRA is included in CFRA-TwoStep in RACH-ConfigDedicated and then the UE uses the value of preambleTransMax in RACH-ConfigGenericTwoStepRA configured for CBRA.  
<endl>

<start>  
ra-prioritization  
powerRampingStepHighPrioritiy  
Power ramping step applied for prioritized random access procedure.  
<endl>  
  
  
<start>  
ra-prioritization  
scalingFactorBI  
Scaling factor for the backoff indicator (BI) for the prioritized random access procedure. (see TS 38.321 [3], clause 5.1.4). Value zero corresponds to 0, value dot25 corresponds to 0.25 and so on.  
<endl>

<start>  
drb-toaddmod and mrb-toaddmod  
cnAssociation  
Indicates if the bearer is associated with the eps-bearerIdentity (when connected to EPC) or sdap-Config (when connected to 5GC).  
<endl>  
  
  
<start>  
drb-toaddmod and mrb-toaddmod  
daps-Config  
Indicates that the bearer is configured as DAPS bearer.  
<endl>  
  
  
<start>  
drb-toaddmod and mrb-toaddmod  
drb-Identity  
In case of DC, the DRB identity is unique within the scope of the UE, i.e. an MCG DRB cannot use the same value as a split DRB. For a split DRB the same identity is used for the MCG and SCG parts of the configuration.  
<endl>  
  
  
<start>  
drb-toaddmod and mrb-toaddmod  
eps-BearerIdentity  
The EPS bearer ID determines the EPS bearer.  
<endl>  
  
  
<start>  
drb-toaddmod and mrb-toaddmod  
mbs-SessionId  
Indicates which multicast MBS session the bearer is associated with.  
<endl>  
  
  
<start>  
drb-toaddmod and mrb-toaddmod  
mrb-Identity  
Identification of the multicast MRB.  
<endl>  
  
  
<start>  
drb-toaddmod and mrb-toaddmod  
mrb-IdentityNew  
New identity of the multicast MRB when mrb-Identity needs to be changed, e.g. as a result of a handover.  
<endl>  
  
  
<start>  
drb-toaddmod and mrb-toaddmod  
reestablishPDCP  
Indicates that PDCP should be re-established. Network sets this to true whenever the security key used for this radio bearer changes. Key change could for example be due to termination point change for the bearer, reconfiguration with sync, resuming an RRC connection, or the first reconfiguration after reestablishment. It is also applicable for LTE procedures when NR PDCP is configured. Network doesn't include this field for DRB if the bearer is configured as DAPS bearer.  
<endl>  
  
  
<start>  
drb-toaddmod and mrb-toaddmod  
recoverPDCP  
Indicates that PDCP should perform recovery according to TS 38.323 [5]. Network doesn't include this field if the bearer is configured as DAPS bearer.  
<endl>  
  
  
<start>  
drb-toaddmod and mrb-toaddmod  
sdap-Config  
The SDAP configuration determines how to map QoS flows to DRBs when NR or E-UTRA connects to the 5GC and presence/absence of UL/DL SDAP headers.  
<endl>

<start>  
radiobearerconfig  
securityConfig  
Indicates the security algorithm and key to use for the signalling and data radio bearers configured with the list in this IE RadioBearerConfig. When the field is not included after AS security has been activated, the UE shall continue to use the currently configured keyToUse and security algorithm for the radio bearers reconfigured with the lists in this IE RadioBearerConfig. The field is not included when configuring SRB1 before AS security is activated.  
<endl>  
  
  
<start>  
radiobearerconfig  
srb3-ToRelease  
Release SRB3. SRB3 release can only be done over SRB1 and only at SCG release and reconfiguration with sync.  
<endl>

<start>  
securityconfig  
keyToUse  
Indicates if the bearers configured with the list in this IE RadioBearerConfig are using the master key or the secondary key for deriving ciphering and/or integrity protection keys. For MR-DC, network should not configure SRB1 and SRB2 with secondary key and SRB3 with the master key. When the field is not included, the UE shall continue to use the currently configured keyToUse for the radio bearers reconfigured with the lists in this IE RadioBearerConfig.  
<endl>  
  
  
<start>  
securityconfig  
securityAlgorithmConfig  
Indicates the security algorithm for the signalling and data radio bearers configured with the list in this IE RadioBearerConfig. When the field is not included, the UE shall continue to use the currently configured security algorithm for the radio bearers reconfigured with the lists in this IE RadioBearerConfig.  
<endl>

<start>  
srb-toaddmod  
discardOnPDCP  
Indicates that PDCP should discard stored SDU and PDU according to TS 38.323 [5].  
<endl>  
  
  
<start>  
srb-toaddmod  
reestablishPDCP  
Indicates that PDCP should be re-established. Network sets this to true whenever the security key used for this radio bearer changes. Key change could for example be due to reconfiguration with sync, for SRB2 when resuming an RRC connection, or at the first reconfiguration after RRC connection reestablishment in NR. For SRB1, when resuming an RRC connection, or at the first reconfiguration after RRC connection reestablishment in NR, the network does not set this field to true. For LTE SRBs using NR PDCP, it could be for handover, RRC connection reestablishment or resume. Network doesn't include this field if any DAPS bearer is configured.  
<endl>  
  
  
<start>  
srb-toaddmod  
srb-Identity, srb-Identity-v1700  
Value 1 is applicable for SRB1 only. Value 2 is applicable for SRB2 only. Value 3 is applicable for SRB3 only. Value 4 is applicable for SRB4 only. If srb-Identity-v1700 is received for an SRB, the UE shall ignore srb-Identity (i.e. without suffix) for this SRB.  
<endl>

<start>  
radiolinkmonitoringconfig  
additionalPCI  
Indicates the physical cell IDs (PCI) of the SSBs in the failureDetectionSet2. If candidateBeamRS-List2 is configured in IE BeamFailureRecoveryRSConfig the field indicates the physical cell IDs (PCI) of the SSBs in the candidateBeamRS-List2.  
<endl>  
  
  
<start>  
radiolinkmonitoringconfig  
beamFailureDetectionTimer  
Timer for beam failure detection (see TS 38.321 [3], clause 5.17). See also the BeamFailureRecoveryConfig IE. Value in number of "Qout,LR reporting periods of Beam Failure Detection" Reference Signal (see TS 38.213 [13], clause 6). Value pbfd1 corresponds to 1 Qout,LR reporting period of Beam Failure Detection Reference Signal, value pbfd2 corresponds to 2 Qout,LR reporting periods of Beam Failure Detection Reference Signal and so on.  
<endl>  
  
  
<start>  
radiolinkmonitoringconfig  
beamFailureInstanceMaxCount  
This field determines after how many beam failure events the UE triggers beam failure recovery (see TS 38.321 [3], clause 5.17). Value n1 corresponds to 1 beam failure instance, value n2 corresponds to 2 beam failure instances and so on.  
<endl>  
  
  
<start>  
radiolinkmonitoringconfig  
failureDetectionResourcesToAddModList  
A list of reference signals for detecting beam failure and/or cell level radio link failure (RLF). The limits of the reference signals that the network can configure are specified in TS 38.213 [13], table 5-1. The network configures at most two detectionResources per BWP for the purpose beamFailure or both. If no RSs are provided for the purpose of beam failure detection, the UE performs beam monitoring based on the activated TCI-State for PDCCH as described in TS 38.213 [13], clause 6. If no RSs are provided in this list for the purpose of RLF detection, the UE performs Cell-RLM based on the activated TCI-State of PDCCH as described in TS 38.213 [13], clause 5. The network ensures that the UE has a suitable set of reference signals for performing cell-RLM. If failureDetectionSet1-r17 and failureDetectionSet2-r17 are present, the purpose of RadioLinkMonitoringRS in failureDetectionResourcesToAddModList only can be set to rlf.  
<endl>  
  
  
<start>  
radiolinkmonitoringconfig  
failureDetectionSet1, failureDetectionSet2  
Configures parameters for beamfailure detection towards beam failure detection resources configured in the set. If additional PCIs are configured using additionalPCI-ToAddModList for the serving cell, each RS in one set can be associated only with one PCI. Network always configures the failureDetectionSet1 and failureDetectionSet2 together. failureDetectionSetN is present if and only if candidateBeamRS-List2-r17 is configured. When a failureDetectionSetN is present, after the reconfiguration, the UE shall consider all the reference signals for this failure detection set as activated if at most maxBFD-RS-resourcesPerSetPerBWP-r17 reference signals are configured for each failure detection set, otherwise the UE shall consider all the reference signals in this failure detection set as deactivated. If bfdResourcesToAddModList-r17 in failureDetectionSetN is not present, the UE determines the RS(es) in each failureDetectionSetN as described in TS 38.213 [13], clause 6.  
<endl>

<start>  
radiolinkmonitoringrs  
detectionResource  
A reference signal that the UE shall use for radio link monitoring or beam failure detection (depending on the indicated purpose). Only periodic 1-port CSI-RS can be configured on SCell for beam failure detection purpose.  
<endl>  
  
  
<start>  
radiolinkmonitoringrs  
purpose  
Determines whether the UE shall monitor the associated reference signal for the purpose of cell- and/or beam failure detection. For SCell, network only configures the value to beamFailure.  
<endl>

<start>  
ratematchpattern  
bitmaps  
Indicates rate matching pattern by a pair of bitmaps resourceBlocks and symbolsInResourceBlock to define the rate match pattern within one or two slots, and a third bitmap periodicityAndPattern to define the repetition pattern with which the pattern defined by the above bitmap pair occurs.  
<endl>  
  
  
<start>  
ratematchpattern  
controlResourceSet  
This ControlResourceSet is used as a PDSCH rate matching pattern, i.e., PDSCH reception rate matches around it. In frequency domain, the resource is determined by the frequency domain resource of the CORESET with the corresponding CORESET ID. Time domain resource is determined by the parameters of the associated search space of the CORESET.  
If the field controlResourceSetId-r16 is present, UE shall ignore the controlResourceSetId (without suffix).  
<endl>  
  
  
<start>  
ratematchpattern  
periodicityAndPattern  
A time domain repetition pattern at which the pattern defined by symbolsInResourceBlock and resourceBlocks recurs. This slot pattern repeats itself continuously. Absence of this field indicates the value n1 (see TS 38.214 [19], clause 5.1.4.1).  
<endl>  
  
  
<start>  
ratematchpattern  
resourceBlocks  
A resource block level bitmap in the frequency domain. A bit in the bitmap set to 1 indicates that the UE shall apply rate matching in the corresponding resource block in accordance with the symbolsInResourceBlock bitmap. If used as cell-level rate matching pattern, the bitmap identifies "common resource blocks (CRB)". If used for MBS broadcast CFR, the bitmap identifies "physical resource blocks" inside the MBS broadcast CFR. If used as BWP-level rate matching pattern, the bitmap identifies "physical resource blocks" inside the BWP or MBS multicast CFR. The first/ leftmost bit corresponds to resource block 0, and so on (see TS 38.214 [19], clause 5.1.4.1).  
<endl>  
  
  
<start>  
ratematchpattern  
subcarrierSpacing  
The SubcarrierSpacing for this resource pattern. If the field is absent, the UE applies the SCS of the associated BWP. The value kHz15 corresponds to µ=0, the value kHz30 corresponds to µ=1, and so on.  
Only the following values are applicable depending on the used frequency (see TS 38.214 [19], clause 5.1.4.1):  
FR1: 15, 30 or 60 kHz  
FR2-1: 60 or 120 kHz  
FR2-2: 120, 480, or 960 kHz  
<endl>  
  
  
<start>  
ratematchpattern  
symbolsInResourceBlock  
A symbol level bitmap in time domain. It indicates with a bit set to true that the UE shall rate match around the corresponding symbol. This pattern recurs (in time domain) with the configured periodicityAndPattern (see TS 38.214 [19], clause 5.1.4.1).  
For oneSlot, if ECP is configured, the first 12 bits represent the symbols within the slot and the last two bits within the bitstring are ignored by the UE; Otherwise, the 14 bits represent the symbols within the slot.  
For twoSlots, if ECP is configured, the first 12 bits represent the symbols within the first slot and the next 12 bits represent the symbols in the second slot and the last four bits within the bit string are ignored by the UE; Otherwise, the first 14 bits represent the symbols within the first slot and the next 14 bits represent the symbols in the second slot.  
For the bits representing symbols in a slot, the most significant bit of the bit string represents the first symbol in the slot and the second most significant bit represents the second symbol in the slot and so on.  
<endl>

<start>  
ratematchpatternlte-crs  
carrierBandwidthDL  
BW of the LTE carrier in number of PRBs (see TS 38.214 [19], clause 5.1.4.2).  
<endl>  
  
  
<start>  
ratematchpatternlte-crs  
carrierFreqDL  
Center of the LTE carrier (see TS 38.214 [19], clause 5.1.4.2).  
<endl>  
  
  
<start>  
ratematchpatternlte-crs  
mbsfn-SubframeConfigList  
LTE MBSFN subframe configuration (see TS 38.214 [19], clause 5.1.4.2).  
<endl>  
  
  
<start>  
ratematchpatternlte-crs  
nrofCRS-Ports  
Number of LTE CRS antenna port to rate-match around (see TS 38.214 [19], clause 5.1.4.2).  
<endl>  
  
  
<start>  
ratematchpatternlte-crs  
v-Shift  
Shifting value v-shift in LTE to rate match around LTE CRS (see TS 38.214 [19], clause 5.1.4.2).  
<endl>

<start>  
referencetimeinfo  
referenceSFN  
This field indicates the reference SFN corresponding to the reference time information. If referenceTimeInfo field is received in DLInformationTransfer message, this field indicates the SFN of PCell.  
<endl>  
  
  
<start>  
referencetimeinfo  
time  
This field indicates time reference with 10ns granularity. If included in DLInformationTransfer and if UE-side TA PDC is de-activated, the indicated time may not be referenced at the network, i.e., gNB may pre-compensate for RF propagation delay. If included in DLInformationTransfer and if UE is requested to transmit UE Rx-Tx time difference measurement, the indicated time may not be referenced at the network, i.e., gNB may pre-compensate for RF propagation delay. Otherwise, the indicated time is referenced at the network, i.e., without compensating for RF propagation delay.  
The indicated time in 10ns unit from the origin is refDays\*86400\*1000\*100000 + refSeconds\*1000\*100000 + refMilliSeconds\*100000 + refTenNanoSeconds. The refDays field specifies the sequential number of days (with day count starting at 0) from the origin of the time field.  
If the referenceTimeInfo field is received in DLInformationTransfer message, the time field indicates the time at the ending boundary of the system frame indicated by referenceSFN. The UE considers this frame (indicated by referenceSFN) to be the frame which is nearest to the frame where the message is received (which can be either in the past or in the future).  
If the referenceTimeInfo field is received in SIB9, the time field indicates the time at the SFN boundary at or immediately after the ending boundary of the SI-window in which SIB9 is transmitted.  
If referenceTimeInfo field is received in SIB9, this field is excluded when determining changes in system information, i.e. changes of time should neither result in system information change notifications nor in a modification of valueTag in SIB1.  
<endl>  
  
  
<start>  
referencetimeinfo  
timeInfoType  
If timeInfoType is not included, the time indicates the GPS time and the origin of the time field is 00:00:00 on Gregorian calendar date 6 January, 1980 (start of GPS time). If timeInfoType is set to localClock, the origin of the time is unspecified.  
<endl>  
  
  
<start>  
referencetimeinfo  
uncertainty  
This field indicates the uncertainty of the reference time information provided by the time field. The uncertainty is 25ns multiplied by this field. If this field is absent, the uncertainty is unspecified.  
<endl>

<start>  
repetitionschemeconfig  
fdm-TDM  
Configures UE with a repetition scheme among fdmSchemeA, fdmSchemeB and tdmSchemeA as specified in clause 5.1 of TS 38.214 [19]. The network does not set this field to release. Upon reception of this field in RepetitionSchemeConfig-r16, the UE shall release slotBased if previously configured in the same instance of RepetitionSchemeConfig-r16.  
<endl>  
  
  
<start>  
repetitionschemeconfig  
sequenceOffsetForRV  
For slot-based repetition scheme, selected RV sequence is applied to transmission occasions associated to the first TCI state. The RV sequence associated to the second TCI state is determined by a RV offset from that selected RV sequence.  
<endl>  
  
  
<start>  
repetitionschemeconfig  
slotBased  
Configures UE with slot-based repetition scheme. Network always configures this field when the parameter repetitionNumber is present in IE PDSCH-TimeDomainResourceAllocationList. The network does not set this field to release. Upon reception of this field in RepetitionSchemeConfig-r16, the UE shall release fdm-TDM if previously configured in the same instance of RepetitionSchemeConfig-r16.  
<endl>  
  
  
<start>  
repetitionschemeconfig  
startingSymbolOffsetK  
The starting symbol of the second transmission occasion has K symbol offset relative to the last symbol of the first transmission occasion. When UE is configured with tdmSchemeA, the parameter startingSymbolOffsetK is present, otherwise absent.  
<endl>  
  
  
<start>  
repetitionschemeconfig  
tciMapping  
Enables TCI state mapping method to PDSCH transmission occasions.  
<endl>

<start>  
reportconfiginterrat  
reportType  
Type of the configured measurement report. In (NG)EN-DC, and NR-DC, network does not configure report of type ReportCGI-EUTRA for SCG.  
<endl>

<start>  
reportcgi-eutra  
useAutonomousGaps  
Indicates whether or not the UE is allowed to use autonomous gaps in acquiring system information from the E-UTRAN neighbour cell. When the field is included, the UE applies the corresponding value for T321.  
<endl>

<start>  
eventtriggerconfiginterrat  
b2-Threshold1  
NR threshold to be used in inter RAT measurement report triggering condition for event B2.  
<endl>  
  
  
<start>  
eventtriggerconfiginterrat  
bN-ThresholdEUTRA  
E-UTRA threshold value associated with the selected trigger quantity (RSRP, RSRQ, SINR) to be used in inter RAT measurement report triggering condition for event number bN. In the same eventB2, the network configures the same CHOICE name (rsrp, rsrq or sinr) for the MeasTriggerQuantity of the b2-Threshold1 and for the MeasTriggerQuantityEUTRA of the b2-Threshold2EUTRA.  
<endl>  
  
  
<start>  
eventtriggerconfiginterrat  
eventId  
Choice of inter RAT event triggered reporting criteria.  
<endl>  
  
  
<start>  
eventtriggerconfiginterrat  
maxReportCells  
Max number of non-serving cells/candidate L2 U2N Relay UEs to include in the measurement report.  
<endl>  
  
  
<start>  
eventtriggerconfiginterrat  
reportAmount  
Number of measurement reports applicable for eventTriggered as well as for periodical report types  
<endl>  
  
  
<start>  
eventtriggerconfiginterrat  
reportOnLeave  
Indicates whether or not the UE shall initiate the measurement reporting procedure when the leaving condition is met for a cell in cellsTriggeredList, as specified in 5.5.4.1.  
<endl>  
  
  
<start>  
eventtriggerconfiginterrat  
reportQuantity, reportQuantityUTRA-FDD  
The cell measurement quantities to be included in the measurement report. If the field eventB1-UTRA-FDD or eventB2-UTRA-FDD is present, the UE shall ignore the value(s) provided in reportQuantity.  
<endl>  
  
  
<start>  
eventtriggerconfiginterrat  
reportQuantityRelay  
The L2 U2N Relay UE measurement quantity to be included in measuremet report.  
<endl>  
  
  
<start>  
eventtriggerconfiginterrat  
timeToTrigger  
Time during which specific criteria for the event needs to be met in order to trigger a measurement report.  
<endl>  
  
  
<start>  
eventtriggerconfiginterrat  
bN-ThresholdUTRA-FDD  
UTRA-FDD threshold value associated with the selected trigger quantity (RSCP, EcN0) to be used in inter RAT measurement report triggering condition for event number bN.  
utra-FDD-RSCP corresponds to CPICH\_RSCP in TS 25.133 [46] for FDD. utra-FDD-EcN0 corresponds to CPICH\_Ec/No in TS 25.133 [46] for FDD.  
For utra-FDD-RSCP: The actual value is field value – 115 dBm.  
For utra-FDD-EcN0: The actual value is (field value – 49)/2 dB.  
<endl>  
  
  
<start>  
eventtriggerconfiginterrat  
y1-Threshold1  
NR threshold to be used in measurement report triggering condition for event Y1.  
<endl>  
  
  
<start>  
eventtriggerconfiginterrat  
yN-Threshold2-Relay  
L2 U2N Relay threshold value associated with the selected trigger quantity (i.e. RSRP) to be used in measurement report triggering condition for event number YN.  
<endl>

<start>  
periodicalreportconfiginterrat  
maxReportCells  
Max number of non-serving cells/candidate L2 U2N Relay UEs to include in the measurement report.  
<endl>  
  
  
<start>  
periodicalreportconfiginterrat  
reportAmount  
Number of measurement reports applicable for eventTriggered as well as for periodical report types  
<endl>  
  
  
<start>  
periodicalreportconfiginterrat  
reportQuantity, reportQuantityUTRA-FDD  
The cell measurement quantities to be included in the measurement report. If the field reportQuantityUTRA-FDD is present, the UE shall ignore the value(s) provided in reportQuantity.  
<endl>

<start>  
condtriggerconfig  
a3-Offset  
Offset value(s) to be used in NR conditional reconfiguration triggering condition for cond event a3. The actual value is field value \* 0.5 dB.  
<endl>  
  
  
<start>  
condtriggerconfig  
a4-Threshold  
Threshold value associated to the selected trigger quantity (e.g. RSRP, RSRQ, SINR) per RS Type (e.g. SS/PBCH block, CSI-RS) to be used in NR conditional reconfiguration triggering condition for cond event a4.  
<endl>  
  
  
<start>  
condtriggerconfig  
a5-Threshold1/ a5-Threshold2  
Threshold value associated to the selected trigger quantity (e.g. RSRP, RSRQ, SINR) per RS Type (e.g. SS/PBCH block, CSI-RS) to be used in NR conditional reconfiguration triggering condition for cond event a5. In the same condeventA5, the network configures the same quantity for the MeasTriggerQuantity of the a5-Threshold1 and for the MeasTriggerQuantity of the a5-Threshold2.  
<endl>  
  
  
<start>  
condtriggerconfig  
condEventId  
Choice of NR conditional reconfiguration event triggered criteria.  
<endl>  
  
  
<start>  
condtriggerconfig  
distanceThreshFromReference1, distanceThreshFromReference2  
Distance from a reference location configured with referenceLocation1 or referenceLocation2. Each step represents 50m.  
<endl>  
  
  
<start>  
condtriggerconfig  
duration  
This field is used for defining the leaving condition T1-2 for conditional HO event condEventT1. Each step represents 100ms.  
<endl>  
  
  
<start>  
condtriggerconfig  
referenceLocation1, referenceLocation2  
Reference locations used for condEventD1. The referenceLocation1 is associated to serving cell and referenceLocation2 is associated to candidate target cell.  
<endl>  
  
  
<start>  
condtriggerconfig  
t1-Threshold  
The field counts the number of UTC seconds in 10 ms units since 00:00:00 on Gregorian calendar date 1 January, 1900 (midnight between Sunday, December 31, 1899 and Monday, January 1, 1900).  
<endl>  
  
  
<start>  
condtriggerconfig  
timeToTrigger  
Time during which specific criteria for the event needs to be met in order to execute the conditional reconfiguration evaluation.  
<endl>

<start>  
reportconfignr  
reportType  
Type of the configured measurement report. In MR-DC, network does not configure report of type reportCGI using SRB3. The condTriggerConfig is used for CHO, CPA or CPC configuration.  
<endl>

<start>  
reportcgi  
useAutonomousGaps  
Indicates whether or not the UE is allowed to use autonomous gaps in acquiring system information from the NR neighbour cell. When the field is included, the UE applies the corresponding value for T321.  
<endl>

<start>  
eventtriggerconfig  
a3-Offset/a6-Offset  
Offset value(s) to be used in NR measurement report triggering condition for event a3/a6. The actual value is field value \* 0.5 dB.  
<endl>  
  
  
<start>  
eventtriggerconfig  
aN-ThresholdM  
Threshold value associated to the selected trigger quantity (e.g. RSRP, RSRQ, SINR) per RS Type (e.g. SS/PBCH block, CSI-RS) to be used in NR measurement report triggering condition for event number aN. If multiple thresholds are defined for event number aN, the thresholds are differentiated by M. The network configures aN-Threshold1 only for events A1, A2, A4, A5 and a5-Threshold2 only for event A5. In the same eventA5, the network configures the same quantity for the MeasTriggerQuantity of the a5-Threshold1 and for the MeasTriggerQuantity of the a5-Threshold2.  
<endl>  
  
  
<start>  
eventtriggerconfig  
channelOccupancyThreshold  
RSSI threshold which is used for channel occupancy evaluation.  
<endl>  
  
  
<start>  
eventtriggerconfig  
coarseLocationRequest  
This field is used to request UE to report coarse location information.  
<endl>  
  
  
<start>  
eventtriggerconfig  
distanceThreshFromReference1, distanceThreshFromReference2  
Threshold value associated to the distance from a reference location configured with referenceLocation1 or referenceLocation2. Each step represents 50m.  
<endl>  
  
  
<start>  
eventtriggerconfig  
eventId  
Choice of NR event triggered reporting criteria.  
<endl>  
  
  
<start>  
eventtriggerconfig  
maxNrofRS-IndexesToReport  
Max number of RS indexes to include in the measurement report for A1-A6 events.  
<endl>  
  
  
<start>  
eventtriggerconfig  
maxReportCells  
Max number of non-serving cells to include in the measurement report.  
<endl>  
  
  
<start>  
eventtriggerconfig  
referenceLocation1, referenceLocation2  
Reference locations used for eventD1. The referenceLocation1 is associated to serving cell and referenceLocation2 is associated to neighbour cell.  
<endl>  
  
  
<start>  
eventtriggerconfig  
reportAddNeighMeas  
Indicates that the UE shall include the best neighbour cells per serving frequency.  
<endl>  
  
  
<start>  
eventtriggerconfig  
reportAmount  
Number of measurement reports applicable for eventTriggered as well as for periodical report types.  
<endl>  
  
  
<start>  
eventtriggerconfig  
reportOnLeave  
Indicates whether or not the UE shall initiate the measurement reporting procedure when the leaving condition is met for a cell in cellsTriggeredList, as specified in 5.5.4.1.  
Indicates whether or not the UE shall initiate the measurement reporting procedure when the leaving condition is met if configured in eventD1, as specified in 5.5.4.1.  
<endl>  
  
  
<start>  
eventtriggerconfig  
reportQuantityCell  
The cell measurement quantities to be included in the measurement report.  
<endl>  
  
  
<start>  
eventtriggerconfig  
reportQuantityRS-Indexes  
Indicates which measurement information per RS index the UE shall include in the measurement report.  
<endl>  
  
  
<start>  
eventtriggerconfig  
timeToTrigger  
Time during which specific criteria for the event needs to be met in order to trigger a measurement report.  
<endl>  
  
  
<start>  
eventtriggerconfig  
useAllowedCellList  
Indicates whether only the cells included in the allow-list of the associated measObject are applicable as specified in 5.5.4.1.  
<endl>  
  
  
<start>  
eventtriggerconfig  
useT312  
If value TRUE is configured, the UE shall use the timer T312 with the value t312 as specified in the corresponding measObjectNR. If value FALSE is configured, the timer T312 is considered as disabled. Network configures value TRUE only if reportType is set to eventTriggered.  
<endl>  
  
  
<start>  
eventtriggerconfig  
xN-ThresholdM  
Threshold value associated to the selected trigger quantity (e.g. RSRP, RSRQ, SINR) per RS Type (e.g. SS/PBCH block, CSI-RS) to be used in NR measurement report triggering condition for event xN. If multiple thresholds are defined for event number xN, the thresholds are differentiated by M. x1-Threshold1 and x2-Threshold indicates the threshold value for the serving L2 U2N Relay UE, x1-Threshold2 indicates the threshold value for the NR Cells.  
<endl>

<start>  
cli-eventtriggerconfig  
i1-Threshold  
Threshold value associated to the selected trigger quantity (e.g. SRS-RSRP, CLI-RSSI) to be used in CLI measurement report triggering condition for event i1.  
<endl>  
  
  
<start>  
cli-eventtriggerconfig  
eventId  
Choice of CLI event triggered reporting criteria.  
<endl>  
  
  
<start>  
cli-eventtriggerconfig  
maxReportCLI  
Max number of CLI measurement resource to include in the measurement report.  
<endl>  
  
  
<start>  
cli-eventtriggerconfig  
reportAmount  
Number of measurement reports.  
<endl>  
  
  
<start>  
cli-eventtriggerconfig  
reportOnLeave  
Indicates whether or not the UE shall initiate the measurement reporting procedure when the leaving condition is met for a CLI measurement resource in srsTriggeredList or rssiTriggeredList, as specified in 5.5.4.1.  
<endl>  
  
  
<start>  
cli-eventtriggerconfig  
timeToTrigger  
Time during which specific criteria for the event needs to be met in order to trigger a measurement report.  
<endl>

<start>  
cli-periodicalreportconfig  
maxReportCLI  
Max number of CLI measurement resource to include in the measurement report.  
<endl>  
  
  
<start>  
cli-periodicalreportconfig  
reportAmount  
Number of measurement reports.  
<endl>  
  
  
<start>  
cli-periodicalreportconfig  
reportQuantityCLI  
The CLI measurement quantities to be included in the measurement report.  
<endl>

<start>  
periodicalreportconfig  
coarseLocationRequest  
This field is used to request UE to report coarse location information.  
<endl>  
  
  
<start>  
periodicalreportconfig  
maxNrofRS-IndexesToReport  
Max number of RS indexes to include in the measurement report.  
<endl>  
  
  
<start>  
periodicalreportconfig  
maxReportCells  
Max number of non-serving cells to include in the measurement report.  
<endl>  
  
  
<start>  
periodicalreportconfig  
reportAddNeighMeas  
Indicates that the UE shall include the best neighbour cells per serving frequency.  
<endl>  
  
  
<start>  
periodicalreportconfig  
reportAmount  
Number of measurement reports applicable for eventTriggered as well as for periodical report types  
<endl>  
  
  
<start>  
periodicalreportconfig  
reportQuantityCell  
The cell measurement quantities to be included in the measurement report.  
<endl>  
  
  
<start>  
periodicalreportconfig  
reportQuantityRS-Indexes  
Indicates which measurement information per RS index the UE shall include in the measurement report.  
<endl>  
  
  
<start>  
periodicalreportconfig  
ul-DelayValueConfig  
If the field is present, the UE shall perform the actual UL PDCP Packet Average Delay measurement per DRB as specified in TS 38.314 [53] and the UE shall ignore the fields reportQuantityCell and maxReportCells. The applicable values for the corresponding reportInterval are (one of the) {ms120, ms240, ms480, ms640, ms1024, ms2048, ms5120, ms10240, ms20480, ms40960, min1,min6, min12, min30}. The reportInterval indicates the periodicity for performing and reporting of UL PDCP Packet Average Delay per DRB measurement as specified in TS 38.314 [53].  
<endl>  
  
  
<start>  
periodicalreportconfig  
ul-ExcessDelayConfig  
If the field is present, the UE shall perform the actual UL PDCP Excess Packet Delay per DRB measurement as specified in TS 38.314 [53] and the UE shall ignore the fields reportQuantityCell and maxReportCells. The applicable values for the corresponding reportInterval are (one of the) {ms120, ms240, ms480, ms640, ms1024, ms2048, ms5120, ms10240, ms20480, ms40960, min1,min6, min12, min30}. The reportInterval indicates the periodicity for performing and reporting of UL PDCP Excess Packet Delay per DRB measurement as specified in TS 38.314 [53].  
<endl>  
  
  
<start>  
periodicalreportconfig  
useAllowedCellList  
Indicates whether only the cells included in the allow-list of the associated measObject are applicable as specified in 5.5.4.1.  
<endl>

<start>  
reportsftd-nr  
cellForWhichToReportSFTD  
Indicates the target NR neighbour cells for SFTD measurement between PCell and NR neighbour cells.  
<endl>  
  
  
<start>  
reportsftd-nr  
drx-SFTD-NeighMeas  
Indicates that the UE shall use available idle periods (i.e. DRX off periods) for the SFTD measurement in NR standalone. The network only includes drx-SFTD-NeighMeas field when reprtSFTD-NeighMeas is set to true.  
<endl>  
  
  
<start>  
reportsftd-nr  
reportSFTD-Meas  
Indicates whether UE is required to perform SFTD measurement between PCell and NR PSCell in NR-DC.  
<endl>  
  
  
<start>  
reportsftd-nr  
reportSFTD-NeighMeas  
Indicates whether UE is required to perform SFTD measurement between PCell and NR neighbour cells in NR standalone. The network does not include this field if reportSFTD-Meas is set to true.  
<endl>  
  
  
<start>  
reportsftd-nr  
reportRSRP  
Indicates whether UE is required to include RSRP result of NR PSCell or NR neighbour cells in SFTD measurement result, derived based on SSB. If it is set to true, the network should ensure that ssb-ConfigMobility is included in the measurement object for NR PSCell or NR neighbour cells.  
<endl>

<start>  
rxtxperiodical  
reportAmount  
This field indicates the number of UE Rx-Tx time difference measurement reports. If configured to r1, the network does not configure rxTxReportInterval and only one measurement is reported. If configured to infinity, UE periodically reports measurements according to the periodicity configured by rxTxReportInterval.  
<endl>  
  
  
<start>  
rxtxperiodical  
rxTxReportInterval  
This field indicates the measurement reporting periodicity of UE Rx-Tx time difference.  
<endl>

<start>  
other  
MeasTriggerQuantity  
SINR is applicable only for CONNECTED mode events.  
<endl>

<start>  
reportconfignr-sl  
reportType  
Type of the configured CBR measurement report for NR sidelink communication.  
<endl>

<start>  
eventtriggerconfignr-sl  
cN-Threshold  
Threshold used for events C1 and C2 specified in clauses 5.5.4.11 and 5.5.4.12, respectively.  
<endl>  
  
  
<start>  
eventtriggerconfignr-sl  
eventId  
Choice of NR event triggered reporting criteria.  
<endl>  
  
  
<start>  
eventtriggerconfignr-sl  
reportAmoun  
Number of measurement reports applicable for eventTriggered as well as for periodical report types.  
<endl>  
  
  
<start>  
eventtriggerconfignr-sl  
reportQuantity  
The sidelink measurement quantities to be included in the measurement report. In this release, this is set as the CBR measurement result.  
<endl>  
  
  
<start>  
eventtriggerconfignr-sl  
timeToTrigger  
Time during which specific criteria for the event needs to be met in order to trigger a measurement report.  
<endl>

<start>  
periodicalreportconfignr-sl  
reportAmount  
Number of measurement reports applicable for eventTriggered as well as for periodical report types.  
<endl>  
  
  
<start>  
periodicalreportconfignr-sl  
reportQuantity  
The sidelink measurement quantities to be included in the measurement report. In this release, this is set as the CBR measurement result.  
<endl>

<start>  
rlc-bearerconfig  
isPTM-Entity  
If configured, indicates that the RLC entity is used for PTM reception. When the field is absent the RLC entity is used for PTP transmission/reception.  
<endl>  
  
  
<start>  
rlc-bearerconfig  
logicalChannelIdentity  
ID used commonly for the MAC logical channel and for the RLC bearer. Value 4 is not configured for DRBs if SRB4 is configured.  
<endl>  
  
  
<start>  
rlc-bearerconfig  
logicalChannelIdentityExt  
Extended logical channel ID used commonly for the MAC logical channel and for the RLC bearer for PTM reception. If this field is configured, the UE shall ignore logicalChannelIdentity.  
<endl>  
  
  
<start>  
rlc-bearerconfig  
reestablishRLC  
Indicates that RLC should be re-established. Network sets this to true at least whenever the security key used for the radio bearer associated with this RLC entity changes. For SRB2, multicast MRBs and DRBs, unless full configuration is used, it is also set to true during the resumption of the RRC connection or the first reconfiguration after reestablishment. For SRB1, when resuming an RRC connection, or at the first reconfiguration after RRC connection reestablishment, the network does not set this field to true.  
<endl>  
  
  
<start>  
rlc-bearerconfig  
rlc-Config  
Determines the RLC mode (UM, AM) and provides corresponding parameters. RLC mode reconfiguration can only be performed by DRB/multicast MRB release/addition or full configuration. The network may configure rlc-Config-v1610 only when rlc-Config (without suffix) is set to am.  
<endl>  
  
  
<start>  
rlc-bearerconfig  
servedMBS-RadioBearer  
Associates the RLC Bearer with a multicast MRB. The UE shall deliver DL RLC SDUs received via the RLC entity of this RLC bearer to the PDCP entity of the servedMBS-RadioBearer.  
<endl>  
  
  
<start>  
rlc-bearerconfig  
servedRadioBearer, servedRadioBearerSRB4  
Associates the RLC Bearer with an SRB or a DRB. The UE shall deliver DL RLC SDUs received via the RLC entity of this RLC bearer to the PDCP entity of the servedRadioBearer. Furthermore, the UE shall advertise and deliver uplink PDCP PDUs of the uplink PDCP entity of the servedRadioBearer to the uplink RLC entity of this RLC bearer unless the uplink scheduling restrictions (moreThanOneRLC in PDCP-Config and the restrictions in LogicalChannelConfig) forbid it to do so.  
<endl>

<start>  
rlc-config  
maxRetxThreshold  
Parameter for RLC AM in TS 38.322 [4]. Value t1 corresponds to 1 retransmission, value t2 corresponds to 2 retransmissions and so on.  
<endl>  
  
  
<start>  
rlc-config  
pollByte  
Parameter for RLC AM in TS 38.322 [4]. Value kB25 corresponds to 25 kBytes, value kB50 corresponds to 50 kBytes and so on. infinity corresponds to an infinite amount of kBytes.  
<endl>  
  
  
<start>  
rlc-config  
pollPDU  
Parameter for RLC AM in TS 38.322 [4]. Value p4 corresponds to 4 PDUs, value p8 corresponds to 8 PDUs and so on. infinity corresponds to an infinite number of PDUs.  
<endl>  
  
  
<start>  
rlc-config  
sn-FieldLength  
Indicates the RLC SN field size, see TS 38.322 [4], in bits. Value size6 means 6 bits, value size12 means 12 bits, value size18 means 18 bits. The value of sn-FieldLength of an RLC entity for the DRB/multicast MRB shall be changed only using reconfiguration with sync. The network configures only value size12 in SN-FieldLengthAM for SRB.  
<endl>  
  
  
<start>  
rlc-config  
t-PollRetransmit  
Timer for RLC AM in TS 38.322 [4], in milliseconds. Value ms5 means 5 ms, value ms10 means 10 ms and so on.  
<endl>  
  
  
<start>  
rlc-config  
t-Reassembly, t-ReassemblyExt  
Timer for reassembly in TS 38.322 [4], in milliseconds. Value ms0 means 0 ms, value ms5 means 5 ms and so on. If t-ReassemblyExt-r17 is configured, the UE shall ignore t-Reassembly (without suffix).  
<endl>  
  
  
<start>  
rlc-config  
t-StatusProhibit  
Timer for status reporting in TS 38.322 [4], in milliseconds. Value ms0 means 0 ms, value ms5 means 5 ms and so on. If t-StatusProhibit-v1610 is present, the UE shall ignore t-StatusProhibit (without suffix).  
<endl>

<start>  
rlf-timersandconstants  
n3xy  
Constants are described in clause 7.3. Value n1 corresponds to 1, value n2 corresponds to 2 and so on.  
<endl>  
  
  
<start>  
rlf-timersandconstants  
t3xy  
Timers are described in clause 7.1. Value ms0 corresponds to 0 ms, value ms50 corresponds to 50 ms and so on.  
<endl>

<start>  
rxtxtimediff  
result-k5  
This field indicates the Rx-Tx time difference measurement, see TS 38.215 [9], clause 10.1.25.3.1 of TS 38.133 [14] for UE Rx-Tx time difference and clause 13.2.1 of TS 38.133 [14] for gNB Rx-Tx time difference.  
<endl>

<start>  
scellactivationrs-config  
gapBetweenBursts  
When this field is present, there are two bursts and it indicates the gap between the two bursts in number of slots. When this field is absent, there is a single burst.  
<endl>  
  
  
<start>  
scellactivationrs-config  
qcl-Info  
Reference to TCI-State for providing the QCL source and QCL type for each NZP-CSI-RS-Resource listed in nzp-CSI-RS-Resources of the NZP-CSI-RS-ResourceSet indicated by resourceSet (see TS 38.214 [19], clause 5.1.6.1.1.1). TCI-StateId refers to the TCI-State which has this value for tci-StateId and is defined in tci-StatesToAddModList in the PDSCH-Config included in the BWP-Downlink of this serving cell indicated by firstActiveDownlinkBWP-Id in the ServingCellConfig in which this IE is included.  
<endl>  
  
  
<start>  
scellactivationrs-config  
resourceSet  
nzp-CSI-ResourceSetId of the NZP-CSI-RS-ResourceSet of this serving cell used as resource configuration for one or two bursts for SCell activation. This NZP-CSI-RS-ResourceSet consists of four NZP CSI-RS resources in two consecutive slots with two NZP CSI-RS resources in each slot (see TS 38.214 [19], clause 5.1.6.1.1.1). The CSI-RS associated with this NZP-CSI-RS-ResourceSet are located in the BWP addressed by firstActiveDownlinkBWP-Id.  
<endl>

<start>  
schedulingrequestconfig  
schedulingRequestToAddModList, schedulingRequestToAddModListExt  
List of Scheduling Request configurations to add or modify. If schedulingRequestToAddModListExt is configured, it contains the same number of entries, and in the same order, as schedulingRequestToAddModList.  
<endl>  
  
  
<start>  
schedulingrequestconfig  
schedulingRequestToReleaseList  
List of Scheduling Request configurations to release.  
<endl>

<start>  
schedulingrequesttoaddmod  
schedulingRequestId  
Used to modify a SR configuration and to indicate, in LogicalChannelConfig, the SR configuration to which a logical channel is mapped and to indicate, in SchedulingRequestresourceConfig, the SR configuration for which a scheduling request resource is used.  
<endl>  
  
  
<start>  
schedulingrequesttoaddmod  
sr-ProhibitTimer  
Timer for SR transmission on PUCCH in TS 38.321 [3]. Value is in ms. Value ms1 corresponds to 1ms, value ms2 corresponds to 2ms, and so on. If sr-ProhibitTimer-v1700 is configured, UE shall ignore sr-ProhibitTimer (without suffix). If both sr-ProhibitTimer (without suffix) and sr-ProhibitTimer-v1700 are absent, the UE applies the value 0.  
<endl>  
  
  
<start>  
schedulingrequesttoaddmod  
sr-TransMax  
Maximum number of SR transmissions as described in TS 38.321 [3]. Value n4 corresponds to 4, value n8 corresponds to 8, and so on.  
<endl>

<start>  
schedulingrequestresourceconfig  
periodicityAndOffset  
SR periodicity and offset in number of symbols or slots (see TS 38.213 [13], clause 9.2.4) The following periodicities may be configured depending on the chosen subcarrier spacing:  
SCS = 15 kHz: 2sym, 7sym, 1sl, 2sl, 4sl, 5sl, 8sl, 10sl, 16sl, 20sl, 40sl, 80sl  
SCS = 30 kHz: 2sym, 7sym, 1sl, 2sl, 4sl, 8sl, 10sl, 16sl, 20sl, 40sl, 80sl, 160sl  
SCS = 60 kHz: 2sym, 7sym/6sym, 1sl, 2sl, 4sl, 8sl, 16sl, 20sl, 40sl, 80sl, 160sl, 320sl  
SCS = 120 kHz: 2sym, 7sym, 1sl, 2sl, 4sl, 8sl, 16sl, 40sl, 80sl, 160sl, 320sl, 640sl  
SCS = 480 kHz: 1sl, 2sl, 4sl, 8sl, 16sl, 40sl, 80sl, 160sl, 320sl, 640sl, 1280sl, 2560sl  
SCS = 960 kHz: 1sl, 2sl, 4sl, 8sl, 16sl, 40sl, 80sl, 160sl, 320sl, 640sl, 1280sl, 2560sl, 5120sl  
  
sym6or7 corresponds to 6 symbols if extended cyclic prefix and a SCS of 60 kHz are configured, otherwise it corresponds to 7 symbols.  
For periodicities 2sym, 7sym and sl1 the UE assumes an offset of 0 slots.  
If periodicityAndOffset-r17 is present, any previously configured periodicityAndOffset (without suffix) is released, and vice versa.  
<endl>  
  
  
<start>  
schedulingrequestresourceconfig  
phy-PriorityIndex  
Indicates whether this scheduling request resource is high or low priority in PHY prioritization/multiplexing handling (see TS 38.213 [13], clause 9.2.4). Value p0 indicates low priority and value p1 indicates high priority.  
<endl>  
  
  
<start>  
schedulingrequestresourceconfig  
resource  
ID of the PUCCH resource in which the UE shall send the scheduling request. The actual PUCCH-Resource is configured in PUCCH-Config of the same UL BWP and serving cell as this SchedulingRequestResourceConfig. The network configures a PUCCH-Resource of PUCCH-format0 or PUCCH-format1 (other formats not supported) (see TS 38.213 [13], clause 9.2.4)  
<endl>  
  
  
<start>  
schedulingrequestresourceconfig  
schedulingRequestID  
The ID of the SchedulingRequestConfig that uses this scheduling request resource.  
<endl>

<start>  
scs-specificcarrier  
carrierBandwidth  
Width of this carrier in number of PRBs (using the subcarrierSpacing defined for this carrier) (see TS 38.211 [16], clause 4.4.2).  
<endl>  
  
  
<start>  
scs-specificcarrier  
offsetToCarrier  
Offset in frequency domain between Point A (lowest subcarrier of common RB 0) and the lowest usable subcarrier on this carrier in number of PRBs (using the subcarrierSpacing defined for this carrier). The maximum value corresponds to 275\*8-1. See TS 38.211 [16], clause 4.4.2.  
<endl>  
  
  
<start>  
scs-specificcarrier  
txDirectCurrentLocation  
Indicates the downlink Tx Direct Current location for the carrier. A value in the range 0..3299 indicates the subcarrier index within the carrier. The values in the value range 3301..4095 are reserved and ignored by the UE. If this field is absent for downlink within ServingCellConfigCommon and ServingCellConfigCommonSIB, the UE assumes the default value of 3300 (i.e. "Outside the carrier"). (see TS 38.211 [16], clause 4.4.2). Network does not configure this field via ServingCellConfig or for uplink carriers.  
<endl>  
  
  
<start>  
scs-specificcarrier  
subcarrierSpacing  
Subcarrier spacing of this carrier. It is used to convert the offsetToCarrier into an actual frequency.  
Only the following values are applicable depending on the used frequency:  
FR1: 15 or 30 kHz  
FR2-1: 60 or 120 kHz  
FR2-2: 120, 480, or 960 kHz  
<endl>

<start>  
sdap-config  
defaultDRB  
Indicates whether or not this is the default DRB for this PDU session. Among all configured instances of SDAP-Config with the same value of pdu-Session, this field shall be set to true in at most one instance of SDAP-Config and to false in all other instances.  
<endl>  
  
  
<start>  
sdap-config  
mappedQoS-FlowsToAdd  
Indicates the list of QFIs of UL QoS flows of the PDU session to be additionally mapped to this DRB. A QFI value can be included at most once in all configured instances of SDAP-Config with the same value of pdu-Session. For QoS flow remapping, the QFI value of the remapped QoS flow is only included in mappedQoS-FlowsToAdd in sdap-Config corresponding to the new DRB and not included in mappedQoS-FlowsToRelease in sdap-Config corresponding to the old DRB.  
<endl>  
  
  
<start>  
sdap-config  
mappedQoS-FlowsToRelease  
Indicates the list of QFIs of QoS flows of the PDU session to be released from existing QoS flow to DRB mapping of this DRB.  
<endl>  
  
  
<start>  
sdap-config  
pdu-Session  
Identity of the PDU session whose QoS flows are mapped to the DRB.  
<endl>  
  
  
<start>  
sdap-config  
sdap-HeaderUL  
Indicates whether or not a SDAP header is present for UL data on this DRB. The field cannot be changed after a DRB is established. The network sets this field to present if the field defaultDRB is set to true.  
<endl>  
  
  
<start>  
sdap-config  
sdap-HeaderDL  
Indicates whether or not a SDAP header is present for DL data on this DRB. The field cannot be changed after a DRB is established.  
<endl>

<start>  
searchspace  
common  
Configures this search space as common search space (CSS) and DCI formats to monitor.  
<endl>  
  
  
<start>  
searchspace  
controlResourceSetId  
The CORESET applicable for this SearchSpace. Value 0 identifies the common CORESET#0 configured in MIB and in ServingCellConfigCommon. Values 1..maxNrofControlResourceSets-1 identify CORESETs configured in System Information or by dedicated signalling. The CORESETs with non-zero controlResourceSetId are configured in the same BWP as this SearchSpace except commonControlResourceSetExt which is configured by SIB20. If the field controlResourceSetId-r16 is present, UE shall ignore the controlResourceSetId (without suffix).  
<endl>  
  
  
<start>  
searchspace  
dummy1, dummy2  
This field is not used in the specification. If received it shall be ignored by the UE.  
<endl>  
  
  
<start>  
searchspace  
dci-Format0-0-AndFormat1-0  
If configured, the UE monitors the DCI formats 0\_0 and 1\_0 according to TS 38.213 [13], clause 10.1.  
<endl>  
  
  
<start>  
searchspace  
dci-Format2-0  
If configured, UE monitors the DCI format 2\_0 according to TS 38.213 [13], clause 10.1, 11.1.1.  
<endl>  
  
  
<start>  
searchspace  
dci-Format2-1  
If configured, UE monitors the DCI format 2\_1 according to TS 38.213 [13], clause 10.1, 11.2.  
<endl>  
  
  
<start>  
searchspace  
dci-Format2-2  
If configured, UE monitors the DCI format 2\_2 according to TS 38.213 [13], clause 10.1, 11.3.  
<endl>  
  
  
<start>  
searchspace  
dci-Format2-3  
If configured, UE monitors the DCI format 2\_3 according to TS 38.213 [13], clause 10.1, 11.4  
<endl>  
  
  
<start>  
searchspace  
dci-Format2-4  
If configured, UE monitors the DCI format 2\_4 according to TS 38.213 [13], clause 11.2A.  
<endl>  
  
  
<start>  
searchspace  
dci-Format2-5  
If configured, IAB-MT monitors the DCI format 2\_5 according to TS 38.213 [13], clause 14.  
<endl>  
  
  
<start>  
searchspace  
dci-Format2-6  
If configured, UE monitors the DCI format 2\_6 according to TS 38.213 [13], clause 10.1, 10.3. DCI format 2\_6 can only be configured on the SpCell.  
<endl>  
  
  
<start>  
searchspace  
dci-Format2-7  
If configured, UE monitors the DCI format 2\_7 according to TS 38.213 [13], clause 10.1, 10.4A.  
<endl>  
  
  
<start>  
searchspace  
dci-Format4-0  
If configured, the UE monitors the DCI format 4\_0 with CRC scrambled by MCCH-RNTI/G-RNTI according to TS 38.213 [13], clause [10.1].  
<endl>  
  
  
<start>  
searchspace  
dci-Format4-1-AndFormat4-2  
If configured, the UE monitors the DCI format 4\_1 and 4\_2 with CRC scrambled by G-RNTI/G-CS-RNTI according to TS 38.213 [13], clause [11.1].  
<endl>  
  
  
<start>  
searchspace  
dci-Format4-1  
If configured, the UE monitors the DCI format 4\_1 with CRC scrambled by G-RNTI/G-CS-RNTI according to TS 38.213 [13], clause [10.1].  
<endl>  
  
  
<start>  
searchspace  
dci-Format4-2  
If configured, the UE monitors the DCI format 4\_2 with CRC scrambled by G-RNTI/G-CS-RNTI according to TS 38.213 [13], clause [10.1].  
<endl>  
  
  
<start>  
searchspace  
dci-Formats  
Indicates whether the UE monitors in this USS for DCI formats 0-0 and 1-0 or for formats 0-1 and 1-1.  
<endl>  
  
  
<start>  
searchspace  
dci-FormatsExt  
If this field is present, the field dci-Formats is ignored and dci-FormatsExt is used instead to indicate whether the UE monitors in this USS for DCI format 0\_2 and 1\_2 or formats 0\_1 and 1\_1 and 0\_2 and 1\_2 (see TS 38.212 [17], clause 7.3.1 and TS 38.213 [13], clause 10.1). This field is not configured for operation with shared spectrum channel access in this release.  
<endl>  
  
  
<start>  
searchspace  
dci-Formats-MT  
Indicates whether the IAB-MT monitors the DCI formats 2-5 according to TS 38.213 [13], clause 14.  
<endl>  
  
  
<start>  
searchspace  
dci-FormatsSL  
Indicates whether the UE monitors in this USS for DCI formats 0-0 and 1-0 or for formats 0-1 and 1-1 or for format 3-0 or for format 3-1 or for formats 3-0 and 3-1. If this field is present, the field dci-Formats is ignored and dci-FormatsSL is used.  
<endl>  
  
  
<start>  
searchspace  
duration  
Number of consecutive slots that a SearchSpace lasts in every occasion, i.e., upon every period as given in the periodicityAndOffset. If the field is absent, the UE applies the value 1 slot, except for DCI format 2\_0. The UE ignores this field for DCI format 2\_0. The maximum valid duration is periodicity-1 (periodicity as given in the monitoringSlotPeriodicityAndOffset).  
For SCS 480 kHz and SCS 960 kHz, duration-r17 is used, and the configured duration is restricted to be an integer multiple of L slots and smaller than periodicity, where L is the configured length of the bitmap monitoringSlotsWithinSlotGroup-r17. If duration-r17 is absent, the UE assumes the duration in slots is equal to L. The maximum valid duration is periodicity-L.  
  
For IAB-MT, duration indicates number of consecutive slots that a SearchSpace lasts in every occasion, i.e., upon every period as given in the periodicityAndOffset. If the field is absent, the IAB-MT applies the value 1 slot, except for DCI format 2\_0 and DCI format 2\_5. The IAB-MT ignores this field for DCI format 2\_0 and DCI format 2\_5. The maximum valid duration is periodicity-1 (periodicity as given in the monitoringSlotPeriodicityAndOffset).  
<endl>  
  
  
<start>  
searchspace  
freqMonitorLocations  
Defines an association of the search space to multiple monitoring locations in the frequency domain and indicates whether the pattern configured in the associated CORESET is replicated to a specific RB set, see TS 38.213, clause 10.1. Each bit in the bitmap corresponds to one RB set, and the leftmost (most significant) bit corresponds to RB set 0 in the BWP. A bit set to 1 indicates that a frequency domain resource allocation replicated from the pattern configured in the associated CORESET is mapped to the RB set.  
<endl>  
  
  
<start>  
searchspace  
monitoringSlotPeriodicityAndOffset  
Slots for PDCCH Monitoring configured as periodicity and offset.  
For SCS 15, 30, 60, and 120 kHz and if the UE is configured to monitor:  
- DCI format 2\_1, only the values 'sl1', 'sl2' or 'sl4' are applicable.  
- DCI format 2\_0, only the values ′sl1′, ′sl2′, ′sl4′, ′sl5′, ′sl8′, ′sl10′, ′sl16′, and ′sl20′ are applicable (see TS 38.213 [13], clause 10).  
- DCI format 2\_4, only the values 'sl1', 'sl2', 'sl4', 'sl5', 'sl8' and 'sl10' are applicable.  
For SCS 480 kHz and if the UE is configured to monitor:  
- DCI format 2\_0, only the values 'sl4', 'sl8', 'sl16', 'sl20', 'sl32', 'sl40', 'sl64', and 'sl80' are applicable.  
- DCI format 2\_1, only the values ′sl4′, ′sl8′, and ′sl16′ are applicable.  
- DCI format 2\_4, only the values 'sl4', 'sl8', 'sl16', 'sl20', 'sl32', 'sl40' are applicable.  
For SCS 960 kHz and if the UE is configured to monitor:  
- DCI format 2\_0, only the values 'sl8', 'sl16', 'sl32', 'sl40', 'sl64', 'sl80', 'sl128', and 'sl160' are applicable.  
- DCI format 2\_1, only the values ′sl8′, ′sl16′, and 'sl32' are applicable.  
- DCI format 2\_4, only the values 'sl8', 'sl16', 'sl32', 'sl40', 'sl64', 'sl80' are applicable.  
  
For SCS 480 kHz and SCS 960 kHz, and the configured periodicity and offset are restricted to be an integer multiple of L slots, where L is the configured length of the bitmap provided by monitoringSlotsWithinSlotGroup-r17, i.e. for a given periodicity, the offset has a range of {0, L, 2\*L, …, L\*FLOOR(1/L\*(periodicity-1))}.  
  
For IAB-MT, If the IAB-MT is configured to monitor DCI format 2\_1, only the values 'sl1', 'sl2' or 'sl4' are applicable. If the IAB-MT is configured to monitor DCI format 2\_0 or DCI format 2\_5, only the values ′sl1′, ′sl2′, ′sl4′, ′sl5′, ′sl8′, ′sl10′, ′sl16′, and ′sl20′ are applicable (see TS 38.213, clause 10).  
If monitoringSlotPeriodicityAndOffset-r17 is present, any previously configured monitoringSlotPeriodicityAndOffset is released, and if monitoringSlotPeriodicityAndOffset is present, any previously configured monitoringSlotPeriodicityAndOffset-r17 is released.  
<endl>  
  
  
<start>  
searchspace  
monitoringSlotsWithinSlotGroup  
Indicates which slot(s) within a slot group are configured for multi-slot PDCCH monitoring. The first (leftmost, most significant) bit represents the first slot in the slot group, the second bit represents the second slot in the slot group, and so on. A bit set to '1' indicates that the corresponding slot is configured for multi-slot PDCCH monitoring (see TS 38.213 [13], clause 10). The number of slots for multi-slot PDCCH monitoring is configured according to clause 10 in TS 38.213 [13].  
<endl>  
  
  
<start>  
searchspace  
monitoringSymbolsWithinSlot  
The first symbol(s) for PDCCH monitoring in the slots configured for (multi-slot) PDCCH monitoring (see monitoringSlotPeriodicityAndOffset and duration). The most significant (left) bit represents the first OFDM in a slot, and the second most significant (left) bit represents the second OFDM symbol in a slot and so on. The bit(s) set to one identify the first OFDM symbol(s) of the control resource set within a slot. If the cyclic prefix of the BWP is set to extended CP, the last two bits within the bit string shall be ignored by the UE or IAB-MT.  
For DCI format 2\_0, the first one symbol applies if the duration of CORESET (in the IE ControlResourceSet) identified by controlResourceSetId indicates 3 symbols, the first two symbols apply if the duration of CORESET identified by controlResourceSetId indicates 2 symbols, and the first three symbols apply if the duration of CORESET identified by controlResourceSetId indicates 1 symbol.  
See TS 38.213 [13], clause 10.  
For IAB-MT: For DCI format 2\_0 or DCI format 2\_5, the first one symbol applies if the duration of CORESET (in the IE ControlResourceSet) identified by controlResourceSetId indicates 3 symbols, the first two symbols apply if the duration of CORESET identified by controlResourceSetId indicates 2 symbols, and the first three symbols apply if the duration of CORESET identified by controlResourceSetId indicates 1 symbol.  
See TS 38.213 [13], clause 10.  
<endl>  
  
  
<start>  
searchspace  
nrofCandidates-CI  
The number of PDCCH candidates specifically for format 2-4 for the configured aggregation level. If an aggregation level is absent, the UE does not search for any candidates with that aggregation level. The network configures only one aggregationLevel and the corresponding number of candidates (see TS 38.213 [13], clause 10.1).  
<endl>  
  
  
<start>  
searchspace  
nrofCandidates-PEI  
The number of PDCCH candidates specifically for format 2-7 for the configured aggregation level.  
<endl>  
  
  
<start>  
searchspace  
nrofCandidates-SFI  
The number of PDCCH candidates specifically for format 2-0 for the configured aggregation level. If an aggregation level is absent, the UE does not search for any candidates with that aggregation level. The network configures only one aggregationLevel and the corresponding number of candidates (see TS 38.213 [13], clause 11.1.1). For a search space configured with freqMonitorLocations-r16, only value ′n1′ is valid.  
<endl>  
  
  
<start>  
searchspace  
nrofCandidates  
Number of PDCCH candidates per aggregation level. The number of candidates and aggregation levels configured here applies to all formats unless a particular value is specified or a format-specific value is provided (see inside searchSpaceType). If configured in the SearchSpace of a cross carrier scheduled cell, this field determines the number of candidates and aggregation levels to be used on the linked scheduling cell (see TS 38.213 [13], clause 10).  
<endl>  
  
  
<start>  
searchspace  
searchSpaceGroupIdList-r16, searchSpaceGroupIdList-r17  
List of search space group IDs which the search space is associated with. The network configures at most 2 search space groups per BWP where the group ID is either 0 or 1 if searchSpaceGroupIdList-r16 is included. The network configures at most 3 search space groups per BWP where the group ID is either 0, 1 or 2 if searchSpaceGroupIdList-r17 is included. And if searchSpaceGroupIdList-r17 is included, searchSpaceGroupIdList-r16 is ignored.  
<endl>  
  
  
<start>  
searchspace  
searchSpaceId  
Identity of the search space. SearchSpaceId = 0 identifies the searchSpaceZero configured via PBCH (MIB) or ServingCellConfigCommon and may hence not be used in the SearchSpace IE. The searchSpaceId is unique among the BWPs of a Serving Cell. In case of cross carrier scheduling, search spaces with the same searchSpaceId in scheduled cell and scheduling cell are linked to each other. The UE applies the search space for the scheduled cell only if the DL BWPs in which the linked search spaces are configured in scheduling cell and scheduled cell are both active.  
For an IAB-MT, the search space defines how/where to search for PDCCH candidates for an IAB-MT where each search space is associated with one ControlResearchSet and for a scheduled cell in the case of cross carrier scheduling, except for nrofCandidates, all the optional fields are absent.  
<endl>  
  
  
<start>  
searchspace  
SearchSpaceLinkingId  
This parameter is used to link two search spaces of same type in the same BWP. If two search spaces have the same SearchSpaceLinkingId UE assumes these search spaces are linked to PDCCH repetition REF. When PDCCH repetition is monitored in two linked search space (SS) sets, the UE does not expect a third monitored SS set to be linked with any of the two linked SS sets. The two linked SS sets have the same SS set type (USS/CSS). The two linked SS sets have the same DCI formats to monitor. For intra-slot PDCCH repetition: The two SS sets should have the same periodicity and offset (monitoringSlotPeriodicityAndOffset), and the same duration. For linking monitoring occasions across the two SS sets that exist in the same slot: The two SS sets have the same number of monitoring occasions within a slot and n-th monitoring occasion of one SS set is linked to n-th monitoring occasion of the other SS set. The following SS sets cannot be linked with another SS set for PDCCH repetition: SS set 0, searchSpaceSIB1, searchSpaceOtherSystemInformation, pagingSearchSpace, ra-SearchSpace, searchSpaceMCCH, searchSpaceMTCH, peiSearchSpace, and sdt-SearchSpace. SS set configured by recoverySearchSpaceId cannot be linked to another SS set for PDCCH repetition. When a scheduled serving cell is configured to be cross-carrier scheduled by a scheduling serving cell, two PDCCH candidates (with the same AL and candidate index associated with the scheduled serving cell) are linked only if the corresponding two SS sets in the scheduling serving cell are linked and two SS sets in the scheduled serving cell with the same SS set IDs are also linked.  
This parameter is not applicable to search space configured with dci-FormatsSL for monitoring format 3-0 or format 3-1 or for monitoring formats 3-0 and format 3-1.  
<endl>  
  
  
<start>  
searchspace  
searchSpaceType  
Indicates whether this is a common search space (present) or a UE specific search space as well as DCI formats to monitor for.  
<endl>  
  
  
<start>  
searchspace  
ue-Specific  
Configures this search space as UE specific search space (USS). The UE monitors the DCI format with CRC scrambled by C-RNTI, CS-RNTI (if configured), and SP-CSI-RNTI (if configured)  
<endl>

<start>  
securityalgorithmconfig  
cipheringAlgorithm  
Indicates the ciphering algorithm to be used for SRBs and DRBs, as specified in TS 33.501 [11]. The algorithms nea0-nea3 are identical to the LTE algorithms eea0-3. The algorithms configured for all bearers using master key shall be the same, and the algorithms configured for all bearers using secondary key, if any, shall be the same. If UE is connected to E-UTRA/EPC, this field indicates the ciphering algorithm to be used for RBs configured with NR PDCP, as specified in TS 33.501 [11].  
<endl>  
  
  
<start>  
securityalgorithmconfig  
integrityProtAlgorithm  
Indicates the integrity protection algorithm to be used for SRBs and DRBs, as specified in TS 33.501 [11]. The algorithms nia0-nia3 are identical to the E-UTRA algorithms eia0-3. The algorithms configured for all bearers using master key shall be the same and the algorithms configured for all bearers using secondary key, if any, shall be the same. The network does not configure nia0 except for unauthenticated emergency sessions for unauthenticated UEs in LSM (limited service mode).  
If UE is connected to E-UTRA/EPC, this field indicates the integrity protection algorithm to be used for SRBs configured with NR PDCP as specified in TS 33.501 [11], and DRBs configured with integrity protection as specified in TS 33.401 [30]. The network does not configure nia0 for SRB3.  
<endl>

<start>  
semistaticchannelaccessconfig  
period  
Indicates the periodicity of the semi-static channel access mode (see TS 37.213 [48], clause 4.3). Value ms1 corresponds to 1 ms, value ms2 corresponds to 2 ms, value ms2dot5 corresponds to 2.5 ms, and so on.  
<endl>

<start>  
semistaticchannelaccessconfigue  
periodUE  
Indicates the period of a channel occupancy that the UE can initiate as described in TS 37.213 [48], clause 4.3. Value ms1 corresponds to 1 ms, value ms2 corresponds to 2 ms, value ms2dot5 corresponds to 2.5 ms, and so on.  
<endl>  
  
  
<start>  
semistaticchannelaccessconfigue  
offsetUE  
Indicates the number of symbols from the beginning of the even indexed radio frame to the start of the first period within that radio frame that the UE can initiate a channel occupancy (see TS 37.213 [48], clause 4.3), based on the smallest SCS among the configured SCSs in the serving cell. The offset duration indicated by this field is less than the period duration indicated by periodUE. The maximum value is 139, 279 and 559 for 15, 30 and 60 kHz subcarrier spacing, respectively.  
<endl>

<start>  
sensor-locationinfo  
sensor-MeasurementInformation  
This field provides barometric pressure measurements as Sensor-MeasurementInformation defined in TS 37.355 [49]. The first/leftmost bit of the first octet contains the most significant bit.  
<endl>  
  
  
<start>  
sensor-locationinfo  
sensor-MotionInformation  
This field provides motion sensor measurements as Sensor-MotionInformation defined in TS 37.355 [49]. The first/leftmost bit of the first octet contains the most significant bit.  
<endl>

<start>  
channelaccessconfig  
absenceOfAnyOtherTechnology  
Presence of this field indicates absence on a long term basis (e.g. by level of regulation) of any other technology sharing the carrier; absence of this field indicates the potential presence of any other technology sharing the carrier, as specified in TS 37.213 [48] clauses 4.2.1 and 4.2.3.  
<endl>  
  
  
<start>  
channelaccessconfig  
energyDetectionConfig  
Indicates whether to use the maxEnergyDetectionThreshold or the energyDetectionThresholdOffset (see TS 37.213 [48], clause 4.2.3).  
<endl>  
  
  
<start>  
channelaccessconfig  
energyDetectionThresholdOffset  
Indicates the offset to the default maximum energy detection threshold value. Unit in dB. Value -13 corresponds to -13dB, value -12 corresponds to -12dB, and so on (i.e. in steps of 1dB) as specified in TS 37.213 [48], clause 4.2.3.  
<endl>  
  
  
<start>  
channelaccessconfig  
maxEnergyDetectionThreshold  
Indicates the absolute maximum energy detection threshold value. Unit in dBm. Value -85 corresponds to -85 dBm, value -84 corresponds to -84 dBm, and so on (i.e. in steps of 1dBm) as specified in TS 37.213 [48], clause 4.2.3.  
<endl>  
  
  
<start>  
channelaccessconfig  
ul-toDL-COT-SharingED-Threshold  
Maximum energy detection threshold that the UE should use to share channel occupancy with gNB for DL transmission as specified in TS 37.213 [48], clause 4.1.3 for downlink channel access and clause 4.2.3 for uplink channel access. This field is not applicable in semi-static channel access mode.  
<endl>

<start>  
servingcellconfig  
additionalPCI-ToAddModList  
List of information for the additional SSB with different PCI than the serving cell PCI. The additional SSBs with different PCIs are not used for serving cell quality derivation.  
<endl>  
  
  
<start>  
servingcellconfig  
bwp-InactivityTimer  
The duration in ms after which the UE falls back to the default Bandwidth Part (see TS 38.321 [3], clause 5.15). When the network releases the timer configuration, the UE stops the timer without switching to the default BWP.  
<endl>  
  
  
<start>  
servingcellconfig  
ca-SlotOffset  
Slot offset between the primary cell (PCell/PSCell) and the SCell in unaligned frame boundary with slot alignment and partial SFN alignment inter-band CA. Based on this field, the UE determines the time offset of the SCell as specified in clause 4.5 of TS 38.211 [16]. The granularity of this field is determined by the reference SCS for the slot offset (i.e. the maximum of PCell/PSCell lowest SCS among all the configured SCSs in DL/UL SCS-SpecificCarrierList in ServingCellConfigCommon or ServingCellConfigCommonSIB and this serving cell's lowest SCS among all the configured SCSs in DL/UL SCS-SpecificCarrierList in ServingCellConfigCommon or ServingCellConfigCommonSIB).  
The Network configures at most single non-zero offset duration in ms (independent on SCS) among CCs in the unaligned CA configuration. If the field is absent, the UE applies the value of 0. The slot offset value can only be changed with SCell release and add.  
<endl>  
  
  
<start>  
servingcellconfig  
cbg-TxDiffTBsProcessingType1, cbg-TxDiffTBsProcessingType2  
Indicates whether processing types 1 and 2 based CBG based operation is enabled according to Rel-16 UE capabilities.  
<endl>  
  
  
<start>  
servingcellconfig  
channelAccessConfig  
List of parameters used for access procedures of operation with shared spectrum channel access (see TS 37.213 [48).  
<endl>  
  
  
<start>  
servingcellconfig  
channelAccessMode2  
If present, this field indicates that the UE shall apply channel access procedures for operation with shared spectrum channel access in accordance with TS 37.213 [48], clause 4.4 for FR2-2. If absent, the UE does not apply these channel access procedures. The network always configures this field if channel access procedures are required for the serving cell within this region by regulations.  
Overwrites the corresponding field in ServingCellConfigCommon or ServingCellConfigCommonSIB for this serving cell.  
<endl>  
  
  
<start>  
servingcellconfig  
crossCarrierSchedulingConfig  
Indicates whether this serving cell is cross-carrier scheduled by another serving cell or whether it cross-carrier schedules another serving cell. If the field other is configured for an SpCell (i.e., the SpCell is cross-carrier scheduled by another serving cell), the SpCell can be additionally scheduled by the PDCCH on the SpCell.  
<endl>  
  
  
<start>  
servingcellconfig  
crs-RateMatch-PerCORESETPoolIndex  
Indicates how UE performs rate matching when both lte-CRS-PatternList1-r16 and lte-CRS-PatternList2-r16 are configured as specified in TS 38.214 [19], clause 5.1.4.2.  
<endl>  
  
  
<start>  
servingcellconfig  
csi-RS-ValidationWithDCI  
Indicates how the UE performs periodic and semi-persistent CSI-RS reception in a slot. The presence of this field indicates that the UE uses DCI detection to validate whether to receive CSI-RS (see TS 38.213 [13], clause 11.1).  
<endl>  
  
  
<start>  
servingcellconfig  
defaultDownlinkBWP-Id  
The initial bandwidth part is referred to by BWP-Id = 0. ID of the downlink bandwidth part to be used upon expiry of the BWP inactivity timer. This field is UE specific. When the field is absent the UE uses the initial BWP as default BWP. (see TS 38.213 [13], clause 12 and TS 38.321 [3], clause 5.15).  
<endl>  
  
  
<start>  
servingcellconfig  
directionalCollisionHandling  
Indicates that this serving cell is using directional collision handling between a reference and other cell(s) for half-duplex operation in TDD CA with same SCS as specified in TS 38.213 [13], clause 11.1. The half-duplex operation only applies within the same frequency range and cell group.  
  
The network only configures this field for TDD serving cells that are using the same SCS.  
<endl>  
  
  
<start>  
servingcellconfig  
directionalCollisionHandling-DC  
For the IAB-MT, it indicates that this serving cell is using directional collision handling between a reference and other cell(s) for half-duplex operation in TDD NR-DC with same SCS within same cell group or cross different cell groups.  
<endl>  
  
  
<start>  
servingcellconfig  
dormantBWP-Config  
The dormant BWP configuration for an SCell. This field can be configured only for a (non-PUCCH) SCell.  
<endl>  
  
  
<start>  
servingcellconfig  
downlinkBWP-ToAddModList  
List of additional downlink bandwidth parts to be added or modified. (see TS 38.213 [13], clause 12).  
<endl>  
  
  
<start>  
servingcellconfig  
downlinkBWP-ToReleaseList  
List of additional downlink bandwidth parts to be released. (see TS 38.213 [13], clause 12).  
<endl>  
  
  
<start>  
servingcellconfig  
downlinkChannelBW-PerSCS-List  
A set of UE specific channel bandwidth and location configurations for different subcarrier spacings (numerologies). Defined in relation to Point A. The UE uses the configuration provided in this field only for the purpose of channel bandwidth and location determination. If absent, UE uses the configuration indicated in scs-SpecificCarrierList in DownlinkConfigCommon / DownlinkConfigCommonSIB. Network only configures channel bandwidth that corresponds to the channel bandwidth values defined in TS 38.101-1 [15] and TS 38.101-2 [39].  
<endl>  
  
  
<start>  
servingcellconfig  
dummy1, dummy 2  
This field is not used in the specification. If received it shall be ignored by the UE.  
<endl>  
  
  
<start>  
servingcellconfig  
enableBeamSwitchTiming  
Indicates the aperiodic CSI-RS triggering with beam switching triggering behaviour as defined in clause 5.2.1.5.1 of TS 38.214 [19].  
<endl>  
  
  
<start>  
servingcellconfig  
enableDefaultTCI-StatePerCoresetPoolIndex  
Presence of this field indicates the UE shall follow the release 16 behavior of default TCI state per CORESETPoolindex when the UE is configured by higher layer parameter PDCCH-Config that contains two different values of CORESETPoolIndex in ControlResourceSet is enabled.  
<endl>  
  
  
<start>  
servingcellconfig  
enableTwoDefaultTCI-States  
Presence of this field indicates the UE shall follow the release 16 behavior of two default TCI states for PDSCH when at least one TCI codepoint is mapped to two TCI states is enabled  
<endl>  
  
  
<start>  
servingcellconfig  
fdmed-ReceptionMulticast  
Indicates the Type-1 HARQ codebook generation as specified in TS 38.213 [13], clause 9.1.2.1.  
<endl>  
  
  
<start>  
servingcellconfig  
firstActiveDownlinkBWP-Id  
If configured for an SpCell, this field contains the ID of the DL BWP to be activated or to be used for RLM, BFD and measurements if included in an RRCReconfiguration message contained in an NR or E-UTRA RRC message indicating that the SCG is deactivated, upon performing the RRC (re-)configuration. If the field is absent, the RRC (re-)configuration does not impose a BWP switch. If the field is absent for the PSCell at SCG deactivation, the UE considers the previously activated DL BWP as the BWP to be used for RLM, BFD and measurements. If the field is absent for the PSCell at SCG activation, the DL BWP to be activated is the DL BWP previously to be used for RLM, BFD and measurements.  
If configured for an SCell, this field contains the ID of the downlink bandwidth part to be used upon activation of an SCell. The initial bandwidth part is referred to by BWP-Id = 0.  
Upon reconfiguration with reconfigurationWithSync, the network sets the firstActiveDownlinkBWP-Id and firstActiveUplinkBWP-Id to the same value.  
<endl>  
  
  
<start>  
servingcellconfig  
initialDownlinkBWP  
The dedicated (UE-specific) configuration for the initial downlink bandwidth-part (i.e., DL BWP#0). If any of the optional IEs are configured within this IE, the UE considers the BWP#0 to be an RRC configured BWP (from UE capability viewpoint). Otherwise, the UE does not consider the BWP#0 as an RRC configured BWP (from UE capability viewpoint). Network always configures the UE with a value for this field if no other BWPs are configured. NOTE1  
<endl>  
  
  
<start>  
servingcellconfig  
intraCellGuardBandsDL-List, intraCellGuardBandsUL-List  
List of intra-cell guard bands in a serving cell for operation with shared spectrum channel access in FR1. If not configured, the guard bands are defined according to 38.101-1 [15], see TS 38.214 [19], clause 7. For operation in licensed spectrum, this field is absent, and no UE action is required.  
<endl>  
  
  
<start>  
servingcellconfig  
lte-CRS-PatternList1  
A list of LTE CRS patterns around which the UE shall do rate matching for PDSCH. The LTE CRS patterns in this list shall be non-overlapping in frequency. The network does not configure this field and lte-CRS-ToMatchAround simultaneously.  
<endl>  
  
  
<start>  
servingcellconfig  
lte-CRS-PatternList2  
A list of LTE CRS patterns around which the UE shall do rate matching for PDSCH scheduled with a DCI detected on a CORESET with CORESETPoolIndex configured with 1. This list is configured only if CORESETPoolIndex configured with 1. The first LTE CRS pattern in this list shall be fully overlapping in frequency with the first LTE CRS pattern in lte-CRS-PatternList1, The second LTE CRS pattern in this list shall be fully overlapping in frequency with the second LTE CRS pattern in lte-CRS-PatternList1, and so on. Network configures this field only if the field lte-CRS-ToMatchAround is not configured and there is at least one ControlResourceSet in one DL BWP of this serving cell with coresetPoolIndex set to 1.  
<endl>  
  
  
<start>  
servingcellconfig  
lte-CRS-ToMatchAround  
Parameters to determine an LTE CRS pattern that the UE shall rate match around.  
<endl>  
  
  
<start>  
servingcellconfig  
lte-NeighCellsCRS-AssistInfoList  
A list of LTE neighbour cells configuration information which is used to assist the UE to perform CRS interference mitigation (CRS-IM) in scenarios with overlapping spectrum for LTE and NR (see TS 38.101-4 [59]). If the field is included, it replaces any previous list, i.e. all the entries of the list are replaced and each of the LTE-NeighCellsCRS-AssistInfo entries is considered to be newly created and the conditions and Need codes for setup of the entry apply.  
<endl>  
  
  
<start>  
servingcellconfig  
lte-NeighCellsCRS-Assumptions  
If the field is not configured, the following default network configuration assumptions are valid for all LTE neighbour cells for the purpose of CRS interference mitigation (CRS-IM) in scenarios with overlapping spectrum for LTE and NR (see TS 38.101-4 [59]).  
- The CRS port number is the same as the one indicated in RateMatchPatternLTE-CRS if configured for the serving cell.  
- The CRS port number is 4 if RateMatchPatternLTE-CRS is not configured for the serving cell.  
- The channel bandwidth and centre frequency are the same as the ones indicated in RateMatchPatternLTE-CRS if configured for the serving cell.  
- The MBSFN configuration is the same as the one indicated in RateMatchPatternLTE-CRS if configured for the serving cell. If RateMatchPatternLTE-CRS is not configured for the serving cell, MBSFN subframe is not configured.  
- Network-based CRS interference mitigation (i.e., CRS muting), as in crs-IntfMitigConfig specified in TS 36.331 [10], is not enabled.  
If the field is configured (i.e. false) and LTE-NeighCellsCRS-AssistInfoList is configured, the configuration provided in LTE-NeighCellsCRS-AssistInfoList overrides the default network configuration assumptions.  
If the field is configured (i.e. false) and LTE-NeighCellsCRS-AssistInfoList is not configured, it is up to the UE implementation whether to apply CRS-IM operation.  
<endl>  
  
  
<start>  
servingcellconfig  
nr-dl-PRS-PDC-Info  
Configures the DL PRS for propagation delay compensation. When configured, the UE measures the UE Rx-Tx time difference based on the reference signals configured in this field.  
<endl>  
  
  
<start>  
servingcellconfig  
nrofHARQ-BundlingGroups  
Indicates the number of HARQ bundling groups for type2 HARQ-ACK codebook.  
<endl>  
  
  
<start>  
servingcellconfig  
pathlossReferenceLinking  
Indicates whether UE shall apply as pathloss reference either the downlink of SpCell (PCell for MCG or PSCell for SCG) or of SCell that corresponds with this uplink (see TS 38.213 [13], clause 7).  
<endl>  
  
  
<start>  
servingcellconfig  
pdsch-ServingCellConfig  
PDSCH related parameters that are not BWP-specific.  
<endl>  
  
  
<start>  
servingcellconfig  
rateMatchPatternToAddModList  
Resources patterns which the UE should rate match PDSCH around. The UE rate matches around the union of all resources indicated in the rate match patterns. Rate match patterns defined here on cell level apply only to PDSCH of the same numerology. See TS 38.214 [19], clause 5.1.4.1. If a RateMatchPattern with the same RateMatchPatternId is configured in both ServingCellConfig/ServingCellConfigCommon and in SIB20/MCCH, the entire RateMatchPattern configuration shall be the same, including the set of RBs/REs indicated by the patterns for the rate matching around, and they are counted as a single rate match pattern in the total configured rate match patterns as defined in TS 38.214 [19].  
<endl>  
  
  
<start>  
servingcellconfig  
sCellDeactivationTimer  
SCell deactivation timer in TS 38.321 [3]. If the field is absent, the UE applies the value infinity.  
<endl>  
  
  
<start>  
servingcellconfig  
sfnSchemePDCCH  
This parameter is used to configure SFN scheme for PDCCH: sfnSchemeA or sfnSchemeB as specified (see TS 38.214 [19], clause 5.1). If network includes both sfnSchemePDCCH and sfnSchemePDSCH, same value shall be configured.  
<endl>  
  
  
<start>  
servingcellconfig  
sfnSchemePDSCH  
This parameter is used to configure SFN scheme for PDSCH: sfnSchemeA or sfnSchemeB as specified (see TS 38.214 [19], clause 5.1). If network includes both sfnSchemePDCCH and sfnSchemePDSCH, same value shall be configured.  
<endl>  
  
  
<start>  
servingcellconfig  
semiStaticChannelAccessConfigUE  
When this field is configured and when channelAccessMode-r16 (see IE ServingCellConfigCommon and IE ServingCellConfigCommonSIB) is configured to semiStatic, the UE operates in semi-static channel access mode and can initiate a channel occupancy periodically (see TS 37.213 [48], Clause 4.3).  
The period can be configured independently from period configured in SemiStaticChannelAccessConfig-r16 if the UE indicates the corresponding capability. Otherwise, the periodicity configured by periodUE-r17 is an integer multiple of or an integter factor of the periodicity indicated by period in SemiStaticChannelAccessConfig-r16.  
<endl>  
  
  
<start>  
servingcellconfig  
servingCellMO  
measObjectId of the MeasObjectNR in MeasConfig which is associated to the serving cell. For this MeasObjectNR, the following relationship applies between this MeasObjectNR and frequencyInfoDL in ServingCellConfigCommon of the serving cell: if ssbFrequency is configured, its value is the same as the absoluteFrequencySSB and if csi-rs-ResourceConfigMobility is configured, the value of its subcarrierSpacing is present in one entry of the scs-SpecificCarrierList, csi-RS-CellListMobility includes an entry corresponding to the serving cell (with cellId equal to physCellId in ServingCellConfigCommon) and the frequency range indicated by the csi-rs-MeasurementBW of the entry in csi-RS-CellListMobility is included in the frequency range indicated by in the entry of the scs-SpecificCarrierList.  
<endl>  
  
  
<start>  
servingcellconfig  
supplementaryUplink  
Network may configure this field only when supplementaryUplinkConfig is configured in ServingCellConfigCommon or supplementaryUplink is configured in ServingCellConfigCommonSIB.  
<endl>  
  
  
<start>  
servingcellconfig  
supplementaryUplinkRelease  
If this field is included, the UE shall release the uplink configuration configured by supplementaryUplink. The network only includes either supplementaryUplinkRelease or supplementaryUplink at a time.  
<endl>  
  
  
<start>  
servingcellconfig  
tag-Id  
Timing Advance Group ID, as specified in TS 38.321 [3], which this cell belongs to.  
<endl>  
  
  
<start>  
servingcellconfig  
tci-ActivatedConfig  
If configured for an SCell, or if configured for the PSCell when the SCG is being activated upon the reception of the containing message, the UE shall consider the TCI states provided in this field as the activated TCI states for PDCCH/PDSCH reception on this serving cell.  
If configured for the PSCell when the SCG is indicated as deactivated in the containing message:  
- the UE shall consider the TCI states provided in this field as the TCI states to be activated for PDCCH/PDSCH reception upon a later SCG activation in which tci-ActivatedConfig is absent  
- if bfd-and-RLM is configured and no RS is configured in RadioLinkMonitoringConfig for RLM, respectively for BFD, the UE shall use the TCI states provided in this field for PDCCH as RS for RLM, respectively for BFD.  
When this field is absent for the PSCell and the SCG is being deactivated:  
- the UE shall consider the previously activated TCI states as the TCI states to be activated for PDCCH/PDSCH reception upon a later SCG activation in which tci-ActivatedConfig is absent  
- if bfd-and-RLM is configured and no RS is configured in RadioLinkMonitoringConfig for RLM, respectively for BFD, the UE shall use the previously activated TCI states for PDCCH as RS for RLM, respectively for BFD.  
<endl>  
  
  
<start>  
servingcellconfig  
tdd-UL-DL-ConfigurationDedicated-IAB-MT  
Resource configuration per IAB-MT D/U/F overrides all symbols (with a limitation that effectively only flexible symbols can be overwritten in Rel-16) per slot over the number of slots as provided by TDD-UL-DL ConfigurationCommon.  
<endl>  
  
  
<start>  
servingcellconfig  
unifiedTCI-StateType  
Indicates the unified TCI state type the UE is configured for this serving cell. The value separate means this serving cell is configured with dl-OrJointTCI-StateList for DL TCI state and ul-TCI-ToAddModList for UL TCI state. The value joint means this serving cell is configured with dl-OrJointTCI-StateList for joint TCI state for UL and DL operation. The network does not configure the field in a serving cell that is configured with more than one value for the coresetPoolIndex.  
<endl>  
  
  
<start>  
servingcellconfig  
uplinkConfig  
Network may configure this field only when uplinkConfigCommon is configured in ServingCellConfigCommon or ServingCellConfigCommonSIB. Addition or release of this field can only be done upon SCell addition or release (respectively).  
<endl>  
  
  
<start>  
servingcellconfig  
uplink-PowerControlToAddModList  
Configures UL power control parameters for PUSCH, PUCCH and SRS when field unifiedTCI-StateType is configured for this serving cell.  
<endl>

<start>  
uplinkconfig  
carrierSwitching  
Includes parameters for configuration of carrier based SRS switching (see TS 38.214 [19], clause 6.2.1.3.  
<endl>  
  
  
<start>  
uplinkconfig  
enableDefaultBeamPL-ForPUSCH0-0, enableDefaultBeamPL-ForPUCCH, enableDefaultBeamPL-ForSRS  
When the parameter is present, UE derives the spatial relation and the corresponding pathloss reference Rs as specified in 38.213, clauses 7.1.1, 7.2.1, 7.3.1 and 9.2.2. The network only configures these parameters for FR2.  
<endl>  
  
  
<start>  
uplinkconfig  
enablePL-RS-UpdateForPUSCH-SRS  
When this parameter is present, the Rel-16 feature of MAC CE based pathloss RS updates for PUSCH/SRS is enabled. Network only configures this parameter when the UE is configured with sri-PUSCH-PowerControl. If this field is not configured, network configures at most 4 pathloss RS resources for PUSCH/PUCCH/SRS transmissions per BWP, not including pathloss RS resources for SRS transmissions for positioning. (See TS 38.213 [13], clause 7).  
<endl>  
  
  
<start>  
uplinkconfig  
firstActiveUplinkBWP-Id  
If configured for an SpCell, this field contains the ID of the UL BWP to be activated upon performing the RRC (re-)configuration. If the field is absent, the RRC (re-)configuration does not impose a BWP switch.  
If configured for an SCell, this field contains the ID of the uplink bandwidth part to be used upon activation of an SCell. The initial bandwidth part is referred to by BandiwdthPartId = 0.  
<endl>  
  
  
<start>  
uplinkconfig  
initialUplinkBWP  
The dedicated (UE-specific) configuration for the initial uplink bandwidth-part (i.e. UL BWP#0). If any of the optional IEs are configured within this IE as part of the IE uplinkConfig, the UE considers the BWP#0 to be an RRC configured BWP (from UE capability viewpoint). Otherwise, the UE does not consider the BWP#0 as an RRC configured BWP (from UE capability viewpoint). Network always configures the UE with a value for this field if no other BWPs are configured. NOTE1  
<endl>  
  
  
<start>  
uplinkconfig  
moreThanOneNackOnlyMode  
Indicates the mode of NACK-only feedback in the PUCCH transmission, as specified in TS 38.213 [13], clause 18. If multicast CFR is not configured, this field is not included. Otherwise, if the field is absent, UE uses mode 1 for multicast CFR.  
<endl>  
  
  
<start>  
uplinkconfig  
mpr-PowerBoost-FR2  
Indicates whether UE is allowed to boost uplink transmission power by suspending in-band emission (IBE) requirements as specified in TS 38.101-2 [39]. Network only configures this field for FR2 serving cells.  
<endl>  
  
  
<start>  
uplinkconfig  
powerBoostPi2BPSK  
If this field is set to true, the UE determines the maximum output power for PUCCH/PUSCH transmissions that use pi/2 BPSK modulation according to TS 38.101-1 [15], clause 6.2.4.  
<endl>  
  
  
<start>  
uplinkconfig  
pusch-ServingCellConfig  
PUSCH related parameters that are not BWP-specific.  
<endl>  
  
  
<start>  
uplinkconfig  
uplinkBWP-ToAddModList  
The additional bandwidth parts for uplink to be added or modified. In case of TDD uplink- and downlink BWP with the same bandwidthPartId are considered as a BWP pair and must have the same center frequency.  
<endl>  
  
  
<start>  
uplinkconfig  
uplinkBWP-ToReleaseList  
The additional bandwidth parts for uplink to be released.  
<endl>  
  
  
<start>  
uplinkconfig  
uplinkChannelBW-PerSCS-List  
A set of UE specific channel bandwidth and location configurations for different subcarrier spacings (numerologies). Defined in relation to Point A. The UE uses the configuration provided in this field only for the purpose of channel bandwidth and location determination. If absent, UE uses the configuration indicated in scs-SpecificCarrierList in UplinkConfigCommon / UplinkConfigCommonSIB. Network only configures channel bandwidth that corresponds to the channel bandwidth values defined in TS 38.101-1 [15] and TS 38.101-2 [39].  
<endl>  
  
  
<start>  
uplinkconfig  
uplinkTxSwitchingPeriodLocation  
Indicates whether the location of UL Tx switching period is configured in this uplink carrier in case of inter-band UL CA, SUL, or (NG)EN-DC, as specified in TS 38.101-1 [15] and TS 38.101-3 [34].  
In case of (NG)EN-DC, network always configures this field to TRUE for NR carrier (i.e. with (NG)EN-DC, the UL switching period always occurs on the NR carrier).  
In case of inter-band UL CA or SUL, for dynamic uplink Tx switching between 2 bands with 2 uplink carriers or 3 uplink carriers as defined in TS 38.101-1 [15], network configures this field to TRUE for the uplink carrier(s) on one band and configures this field to FALSE for the uplink carrier(s) on the other band. This field is set to the same value for the carriers on the same band.  
<endl>  
  
  
<start>  
uplinkconfig  
uplinkTxSwitchingCarrier  
Indicates that the configured carrier is carrier1 or carrier2 for dynamic uplink Tx switching, as defined in TS 38.101-1 [15] and TS 38.101-3 [34]. In case of (NG)EN-DC, network always configures the NR carrier as carrier 2.  
In case of inter-band UL CA or SUL, for dynamic uplink Tx switching between 2 bands with 2 uplink carriers or 3 uplink carriers as defined in TS 38.101-1 [15], network configures the uplink carrier(s) on one band as carrier1 and the uplink carrier(s) on the other band as carrier2. This field is set to the same value for the carriers on the same band.  
<endl>

<start>  
dormantbwp-config  
dormancyGroupWithinActiveTime  
This field contains the ID of an SCell group for Dormancy within active time, to which this SCell belongs. The use of the Dormancy within active time SCell groups is specified in TS 38.213 [13].  
<endl>  
  
  
<start>  
dormantbwp-config  
dormancyGroupOutsideActiveTime  
This field contains the ID of an SCell group for Dormancy outside active time, to which this SCell belongs. The use of the Dormancy outside active time SCell groups is specified in TS 38.213 [13].  
<endl>  
  
  
<start>  
dormantbwp-config  
dormantBWP-Id  
This field contains the ID of the downlink bandwidth part to be used as dormant BWP. If this field is configured, its value is different from defaultDownlinkBWP-Id, and at least one of the withinActiveTimeConfig and outsideActiveTimeConfig should be configured.  
<endl>  
  
  
<start>  
dormantbwp-config  
firstOutsideActiveTimeBWP-Id  
This field contains the ID of the downlink bandwidth part to be activated when receiving a DCI indication for SCell dormancy outside active time.  
<endl>  
  
  
<start>  
dormantbwp-config  
firstWithinActiveTimeBWP-Id  
This field contains the ID of the downlink bandwidth part to be activated when receiving a DCI indication for SCell dormancy within active time.  
<endl>  
  
  
<start>  
dormantbwp-config  
outsideActiveTimeConfig  
This field contains the configuration to be used for SCell dormancy outside active time, as specified in TS 38.213 [13]. The field can only be configured when the cell group the SCell belongs to is configured with dcp-Config.  
<endl>  
  
  
<start>  
dormantbwp-config  
withinActiveTimeConfig  
This field contains the configuration to be used for SCell dormancy within active time, as specified in TS 38.213 [13].  
<endl>

<start>  
guardband  
startCRB  
Indicates the starting RB of the guard band.  
<endl>  
  
  
<start>  
guardband  
nrofCRB  
Indicates the length of the guard band in RBs. When set to 0, zero-size guard band is used.  
<endl>

<start>  
servingcellconfigcommon  
channelAccessMode  
If present, this field indicates which channel access procedures to apply for operation with shared spectrum channel access as defined in TS 37.213 [48]. If the field is configured as "semiStatic", the UE shall apply the channel access procedures for semi-static channel occupancy as described in clause 4.3 in TS 37.213. If the field is configured as "dynamic", the UE shall apply the channel access procedures as defined in TS 37.213, clause 4.1 and 4.2.  
<endl>  
  
  
<start>  
servingcellconfigcommon  
channelAccessMode2  
If present, the UE shall apply channel access procedures for operation with shared spectrum channel access in accordance with TS 37.213 [48], clause 4.4 for FR2-2. If absent, the UE shall not apply any channel access procedure. The network always configures this field if channel access procedures are required for the serving cell within this region by regulations.  
<endl>  
  
  
<start>  
servingcellconfigcommon  
dmrs-TypeA-Position  
Position of (first) DM-RS for downlink (see TS 38.211 [16], clause 7.4.1.1.1) and uplink (TS 38.211 [16], clause 6.4.1.1.3).  
<endl>  
  
  
<start>  
servingcellconfigcommon  
downlinkConfigCommon  
The common downlink configuration of the serving cell, including the frequency information configuration and the initial downlink BWP common configuration. The parameters provided herein should match the parameters configured by MIB and SIB1 (if provided) of the serving cell, with the exception of controlResourceSetZero and searchSpaceZero which can be configured in ServingCellConfigCommon even if MIB indicates that they are absent.  
<endl>  
  
  
<start>  
servingcellconfigcommon  
discoveryBurstWindowLength  
Indicates the window length of the discovery burst in ms (see TS 37.213 [48]). The field discoveryBurstWindowLength-r17 is applicable to SCS 480 kHz and SCS 960 kHz.  
<endl>  
  
  
<start>  
servingcellconfigcommon  
featurePriorities  
Indicates priorities for features, such as RedCap, Slicing, SDT and MSG3-Repetitions for Coverage Enhancements. These priorities are used to determine which FeatureCombinationPreambles the UE shall use when a feature maps to more than one FeatureCombinationPreambles, as specified in TS 38.321 [3]. A lower value means a higher priority. The network does not signal the same priority for more than one feature. The network signals a priority for all feature that map to at least one FeatureCombinationPreambles.  
<endl>  
  
  
<start>  
servingcellconfigcommon  
longBitmap  
Bitmap when maximum number of SS/PBCH blocks per half frame equals to 64 as defined in TS 38.213 [13], clause 4.1.  
<endl>  
  
  
<start>  
servingcellconfigcommon  
lte-CRS-ToMatchAround  
Parameters to determine an LTE CRS pattern that the UE shall rate match around.  
<endl>  
  
  
<start>  
servingcellconfigcommon  
mediumBitmap  
Bitmap when maximum number of SS/PBCH blocks per half frame equals to 8 as defined in TS 38.213 [13], clause 4.1.  
<endl>  
  
  
<start>  
servingcellconfigcommon  
n-TimingAdvanceOffset  
The N\_TA-Offset to be applied for all uplink transmissions on this serving cell. If the field is absent, the UE applies the value defined for the duplex mode and frequency range of this serving cell. See TS 38.133 [14], table 7.1.2-2.  
<endl>  
  
  
<start>  
servingcellconfigcommon  
ra-ChannelAccess  
If present, this field indicates that the UE shall apply channel access procedures before msg1/msgA transmission for operation with shared spectrum channel access in accordance with TS 37.213 [48], clause 4.4.5 for FR2-2.  
<endl>  
  
  
<start>  
servingcellconfigcommon  
rateMatchPatternToAddModList  
Resources patterns which the UE should rate match PDSCH around. The UE rate matches around the union of all resources indicated in the rate match patterns. Rate match patterns defined here on cell level apply only to PDSCH of the same numerology (see TS 38.214 [19], clause 5.1.4.1). If a RateMatchPattern with the same RateMatchPatternId is configured in both ServingCellConfig/ServingCellConfigCommon and in SIB20/MCCH, the entire RateMatchPattern configuration, including the set of RBs/REs indicated by the patterns for the rate matching around, shall be the same and they are counted as a single rate match pattern in the total configured rate match patterns as defined in TS 38.214 [19].  
<endl>  
  
  
<start>  
servingcellconfigcommon  
shortBitmap  
Bitmap when maximum number of SS/PBCH blocks per half frame equals to 4 as defined in TS 38.213 [13], clause 4.1.  
<endl>  
  
  
<start>  
servingcellconfigcommon  
ss-PBCH-BlockPower  
Average EPRE of the resources elements that carry secondary synchronization signals in dBm that the NW used for SSB transmission, see TS 38.213 [13], clause 7.  
<endl>  
  
  
<start>  
servingcellconfigcommon  
ssb-periodicityServingCell  
The SSB periodicity in ms for the rate matching purpose. If the field is absent, the UE applies the value ms5. (see TS 38.213 [13], clause 4.1)  
<endl>  
  
  
<start>  
servingcellconfigcommon  
ssb-PositionQCL  
Indicates the QCL relation between SSB positions for this serving cell as specified in TS 38.213 [13], clause 4.1.  
<endl>  
  
  
<start>  
servingcellconfigcommon  
ssb-PositionsInBurst  
For operation in licensed spectrum, indicates the time domain positions of the transmitted SS-blocks in a half frame with SS/PBCH blocks as defined in TS 38.213 [13], clause 4.1. The first/leftmost bit corresponds to SS/PBCH block index 0, the second bit corresponds to SS/PBCH block index 1, and so on. Value 0 in the bitmap indicates that the corresponding SS/PBCH block is not transmitted while value 1 indicates that the corresponding SS/PBCH block is transmitted. The network configures the same pattern in this field as in the corresponding field in ServingCellConfigCommonSIB.  
For operation with shared spectrum channel access, the UE assumes that one or more SS/PBCH blocks indicated by ssb-PositionsInBurst may be transmitted within the discovery burst transmission window and have candidate SS/PBCH blocks indexes corresponding to SS/PBCH block indexes provided by ssb-PositionsInBurst (see TS 38.213 [13], clause 4.1). If the k-th bit of ssb-PositionsInBurst is set to 1, the UE assumes that one or more SS/PBCH blocks within the discovery burst transmission window with candidate SS/PBCH block indexes corresponding to SS/PBCH block index equal to k – 1 may be transmitted; if the kt-th bit is set to 0, the UE assumes that the corresponding SS/PBCH block(s) are not transmitted. The k-th bit is set to 0, where k > ssb-PositionQCL and the number of actually transmitted SS/PBCH blocks is not larger than the number of 1's in the bitmap. The network configures the same pattern in this field as in the corresponding field in ServingCellConfigCommonSIB. For operation with shared spectrum channel access in FR1, only mediumBitmap is used, and for FR2-2, longBitmap is used.  
<endl>  
  
  
<start>  
servingcellconfigcommon  
ssbSubcarrierSpacing  
Subcarrier spacing of SSB.  
Only the following values are applicable depending on the used frequency:  
FR1: 15 or 30 kHz  
FR2-1: 120 or 240 kHz  
FR2-2: 120, 480, or 960 kHz  
<endl>  
  
  
<start>  
servingcellconfigcommon  
supplementaryUplinkConfig  
The network configures this field only if uplinkConfigCommon is configured. If this field is absent, the UE shall release the supplementaryUplinkConfig and the supplementaryUplink configured in ServingCellConfig of this serving cell, if configured.  
<endl>  
  
  
<start>  
servingcellconfigcommon  
tdd-UL-DL-ConfigurationCommon  
A cell-specific TDD UL/DL configuration, see TS 38.213 [13], clause 11.1.  
<endl>

<start>  
servingcellconfigcommonsib  
channelAccessMode  
If present, this field indicates which channel access procedures to apply for operation with shared spectrum channel access as defined in TS 37.213 [48]. If the field is configured as "semiStatic", the UE shall apply the channel access procedures for semi-static channel occupancy as described in clause 4.3 in TS 37.213. If the field is configured as "dynamic", the UE shall apply the channel access procedures as defined in TS 37.213, clause 4.1 and 4.2.  
<endl>  
  
  
<start>  
servingcellconfigcommonsib  
channelAccessMode2  
If present, this field indicates that the UE shall apply channel access procedures for operation with shared spectrum channel access in accordance with TS 37.213 [48], clause 4.4 for FR2-2. If absent, the UE shall not apply any channel access procedure. The network always configures this field if channel access procedures are required for the serving cell within this region by regulations.  
<endl>  
  
  
<start>  
servingcellconfigcommonsib  
discoveryBurstWindowLength  
Indicates the window length of the discovery burst in ms (see TS 37.213 [48]). The field discoveryBurstWindowLength-v1700 is applicable to SCS 480 kHz and SCS 960 kHz.  
<endl>  
  
  
<start>  
servingcellconfigcommonsib  
enhancedMeasurementLEO  
If the field is present and UE supports the enhanced cell reselection requirements for NTN LEO in RRC\_IDLE/RRC\_INACTIVE, the UE shall apply the enhanced cell reselection requirements for NTN LEO as specified in TS 38.133 [14], clauses 4.2C.2.3 and 4.2C.2.4.  
<endl>  
  
  
<start>  
servingcellconfigcommonsib  
groupPresence  
This field is present when maximum number of SS/PBCH blocks per half frame equals to 64 as defined in TS 38.213 [13], clause 4.1. The first/leftmost bit corresponds to the SS/PBCH index 0-7, the second bit corresponds to SS/PBCH block 8-15, and so on. Value 0 in the bitmap indicates that the SSBs according to inOneGroup are absent. Value 1 indicates that the SS/PBCH blocks are transmitted in accordance with inOneGroup.  
<endl>  
  
  
<start>  
servingcellconfigcommonsib  
inOneGroup  
When maximum number of SS/PBCH blocks per half frame equals to 4 as defined in TS 38.213 [13], clause 4.1, only the 4 leftmost bits are valid; the UE ignores the 4 rightmost bits. When maximum number of SS/PBCH blocks per half frame equals to 8 as defined in TS 38.213 [13], clause 4.1, all 8 bits are valid. The first/ leftmost bit corresponds to SS/PBCH block index 0, the second bit corresponds to SS/PBCH block index 1, and so on. When maximum number of SS/PBCH blocks per half frame equals to 64 as defined in TS 38.213 [13], clause 4.1, all 8 bit are valid; The first/ leftmost bit corresponds to the first SS/PBCH block index in the group (i.e., to SSB index 0, 8, and so on); the second bit corresponds to the second SS/PBCH block index in the group (i.e., to SSB index 1, 9, and so on), and so on. Value 0 in the bitmap indicates that the corresponding SS/PBCH block is not transmitted while value 1 indicates that the corresponding SS/PBCH block is transmitted.  
<endl>  
  
  
<start>  
servingcellconfigcommonsib  
n-TimingAdvanceOffset  
The N\_TA-Offset to be applied for random access on this serving cell. If the field is absent, the UE applies the value defined for the duplex mode and frequency range of this serving cell. See TS 38.133 [14], table 7.1.2-2.  
<endl>  
  
  
<start>  
servingcellconfigcommonsib  
ra-ChannelAccess  
If present, this field indicates that the UE shall apply channel access procedures before msg1/msgA transmission for operation with shared spectrum channel access in accordance with TS 37.213 [48], clause 4.4.5 for FR2-2.  
<endl>  
  
  
<start>  
servingcellconfigcommonsib  
ssb-PositionsInBurst  
Time domain positions of the transmitted SS-blocks in an SS-burst as defined in TS 38.213 [13], clause 4.1.  
For operation with shared spectrum channel access in FR1, only inOneGroup is used and the UE interprets this field same as mediumBitmap in ServingCellConfigCommon. The UE assumes that a bit in inOneGroup at position k > is 0, where is obtained from MIB as specified in TS 38.213 [13], clause 4.1. For operation with shared spectrum channel access in FR2-2, the m-th bit in groupPresence is set to 0 for m > /8, where is obtained from MIB as specified in TS 38.213 [13], clause 4.1.  
<endl>  
  
  
<start>  
servingcellconfigcommonsib  
ss-PBCH-BlockPower  
Average EPRE of the resources elements that carry secondary synchronization signals in dBm that the NW used for SSB transmission, see TS 38.213 [13], clause 7.  
<endl>

<start>  
si-requestconfig  
rach-OccasionsSI  
Configuration of dedicated RACH Occasions for SI. If the field is absent, the UE uses the corresponding parameters configured in rach-ConfigCommon of the initial uplink BWP.  
<endl>  
  
  
<start>  
si-requestconfig  
si-RequestPeriod  
Periodicity of the SI-Request configuration in number of association periods.  
<endl>  
  
  
<start>  
si-requestconfig  
si-RequestResources  
If there is only one entry in the list, the configuration is used for all SI messages for which si-BroadcastStatus or posSI-BroadcastStatus is set to notBroadcasting. Otherwise:  
- If si-SchedulingInfo-v1700 is not present and the SI-RequestConfig is used for on-demand SI request in SI-SchedulingInfo or PosSI-SchedulingInfo, the 1st entry in the list corresponds to the first SI message in schedulingInfoList or posSchedulingInfoList for which si-BroadcastStatus or posSI-BroadcastStatus is set to notBroadcasting, 2nd entry in the list corresponds to the second SI message in schedulingInfoList or posSchedulingInfoList for which si-BroadcastStatus or posSI-BroadcastStatus is set to notBroadcasting and so on.  
- If si-SchedulingInfo-v1700 is present and SI-RequestConfig is configured in SI-SchedulingInfo for on-demand SI request, the UE generates a list of concatenated SI messages by appending the SI messages containing type1 SIB configured by schedulingInfoList2 in si-SchedulingInfo-v1700 to the SI messages configured by schedulingInfoList in si-SchedulingInfo. The 1st entry in the list corresponds to the first SI message for which si-BroadcastStatus is set to notBroadcasting, 2nd entry in the list corresponds to the second SI message for which si-BroadcastStatus is set to notBroadcasting and so on.  
- If si-SchedulingInfo-v1700 is present and SI-RequestConfig is configured in PosSI-SchedulingInfo for on-demand SI request, the UE generates a list of concatenated SI messages by appending the SI messages containing type2 SIB configured by schedulingInfoList2 in si-SchedulingInfo-v1700 to the SI messages configured by posSchedulingInfoList in posSI-SchedulingInfo. The 1st entry in the list corresponds to the first SI message for which posSI-BroadcastStatus or si-BroadcastStatus is set to notBroadcasting, 2nd entry in the list corresponds to the second SI message for which posSI-BroadcastStatus or si-BroadcastStatus is set to notBroadcasting and so on.  
Change of si-RequestResources should not result in system information change notification.  
<endl>

<start>  
si-requestresources  
ra-AssociationPeriodIndex  
Index of the association period in the si-RequestPeriod in which the UE can send the SI request for SI message(s) corresponding to this SI-RequestResources, using the preambles indicated by ra-PreambleStartIndex and rach occasions indicated by ra-ssb-OccasionMaskIndex.  
<endl>  
  
  
<start>  
si-requestresources  
ra-PreambleStartIndex  
If N SSBs are associated with a RACH occasion, where N > = 1, for the i-th SSB (i=0, …, N-1) the preamble with preamble index = ra-PreambleStartIndex + i is used for SI request; For N < 1, the preamble with preamble index = ra-PreambleStartIndex is used for SI request.  
<endl>

<start>  
schedulinginfo  
areaScope  
Indicates that a SIB is area specific. If the field is absent, the SIB is cell specific.  
<endl>  
  
  
<start>  
schedulinginfo  
si-BroadcastStatus  
Indicates if the SI message is being broadcasted or not. Change of si-BroadcastStatus should not result in system information change notifications in Short Message transmitted with P-RNTI over DCI (see clause 6.5). The value of the indication is valid until the end of the BCCH modification period when set to broadcasting. When SIB19 is scheduled, the si-BroadcastStatus for the mapped SIB19 is set to broadcasting.  
If si-SchedulingInfo-v1700 is present, the network ensures that the total number of SI messages with si-BroadcastStatus set to notBroadcasting in the list of concatenated SI messages configured by schedulingInfoList in si-SchedulingInfo and SI messages containing type1 SIB configured by schedulingInfoList2 in si-SchedulingInfo-v1700 does not exceed the limit of maxSI-Message when si-RequestConfig, si-RequestConfigRedCap or si-RequestConfigSUL is configured.  
<endl>  
  
  
<start>  
schedulinginfo  
si-Periodicity  
Periodicity of the SI-message in radio frames. Value rf8 corresponds to 8 radio frames, value rf16 corresponds to 16 radio frames, and so on.  
<endl>

<start>  
si-schedulinginfo  
dummy  
This field is not used in this specification. If received, it is ignored by the UE.  
<endl>  
  
  
<start>  
si-schedulinginfo  
si-RequestConfig  
Configuration of Msg1 resources that the UE uses for requesting SI-messages for which si-BroadcastStatus is set to notBroadcasting.  
<endl>  
  
  
<start>  
si-schedulinginfo  
si-RequestConfigRedCap  
Configuration of Msg1 resources for initialUplinkBWP-RedCap that the RedCap UE uses for requesting SI-messages for which si-BroadcastStatus is set to notBroadcasting.  
<endl>  
  
  
<start>  
si-schedulinginfo  
si-RequestConfigSUL  
Configuration of Msg1 resources that the UE uses for requesting SI-messages for which si-BroadcastStatus is set to notBroadcasting.  
<endl>  
  
  
<start>  
si-schedulinginfo  
si-WindowLength  
The length of the SI scheduling window. Value s5 corresponds to 5 slots, value s10 corresponds to 10 slots and so on. The network always configures si-WindowLength to be shorter than or equal to the si-Periodicity. The values s2560-v1710 and s5120-v1710 are only applicable for SCS 480 kHz.  
<endl>  
  
  
<start>  
si-schedulinginfo  
systemInformationAreaID  
Indicates the system information area that the cell belongs to, if any. Any SIB with areaScope within the SI is considered to belong to this systemInformationAreaID. The systemInformationAreaID is unique within a PLMN/SNPN.  
<endl>

<start>  
schedulinginfo2  
encrypted  
The presence of this field indicates that the pos-sib-type is encrypted as specified in TS 37.355 [49].  
<endl>  
  
  
<start>  
schedulinginfo2  
gnss-id  
The presence of this field indicates that the positioning SIB type is for a specific GNSS. Indicates a specific GNSS (see also TS 37.355 [49])  
<endl>  
  
  
<start>  
schedulinginfo2  
posSibType  
The posSIBs as defined in TS 37.355 [49] mapped to SI for scheduling using schedulingInfoList2.  
<endl>  
  
  
<start>  
schedulinginfo2  
sbas-id  
The presence of this field indicates that the positioning SIB type is for a specific SBAS. Indicates a specific SBAS (see also TS 37.355 [49]).  
<endl>  
  
  
<start>  
schedulinginfo2  
si-WindowPosition  
This field indicates the SI window position of the associated SI-message. The network provides si-WindowPosition in an ascending order, i.e. si-WindowPosition in the subsequent entry in schedulingInfoList2 has always value higher than in the previous entry of schedulingInfoList2. The network configures this field in a way that ensures that SI messages scheduled by schedulingInfoList and/or posSchedulingInfoList do not overlap with SI messages scheduled by schedulingInfoList2.  
<endl>  
  
  
<start>  
schedulinginfo2  
sib-MappingInfo  
Indicates which SIBs or posSIBs are contained in the SI message.  
<endl>  
  
  
<start>  
schedulinginfo2  
sibType  
The type of SIB(s) mapped to SI for scheduling using schedulingInfoList2. Value type1 indicates SIBs and value type2 indicates posSIBs.  
<endl>

<start>  
slotformatcombination  
slotFormatCombinationId  
This ID is used in the DCI payload to dynamically select this SlotFormatCombination (see TS 38.213 [13], clause 11.1.1).  
<endl>  
  
  
<start>  
slotformatcombination  
slotFormats  
Slot formats that occur in consecutive slots in time domain order as listed here (see TS 38.213 [13], clause 11.1.1 and TS 38.213 [13], clause 14 for IAB-MT).  
<endl>

<start>  
slotformatcombinationspercell  
enableConfiguredUL  
If configured, the UE is allowed to transmit uplink signals/channels (SRS, PUCCH, CG-PUSCH) in the set of symbols of the slot when the UE does not detect a DCI format 2\_0 providing a slot format for the set of symbols (see TS 38.213 [13], 11.1.1). This field is applicable only if cg-RetransmissionTimer-r16 is configured.  
<endl>  
  
  
<start>  
slotformatcombinationspercell  
positionInDCI  
The (starting) position (bit) of the slotFormatCombinationId (SFI-Index) for this serving cell (servingCellId) within the DCI payload (see TS 38.213 [13], clause 11.1.1).  
<endl>  
  
  
<start>  
slotformatcombinationspercell  
servingCellId  
The ID of the serving cell for which the slotFormatCombinations are applicable.  
<endl>  
  
  
<start>  
slotformatcombinationspercell  
slotFormatCombinations  
A list with SlotFormatCombinations. Each SlotFormatCombination comprises of one or more SlotFormats (see TS 38.211 [16], clause 4.3.2). The total number of slotFormats in the slotFormatCombinations list does not exceed 512.  
<endl>  
  
  
<start>  
slotformatcombinationspercell  
subcarrierSpacing2  
Reference subcarrier spacing for a Slot Format Combination on an FDD or SUL cell (see TS 38.213 [13], clause 11.1.1). For FDD, subcarrierSpacing (SFI-scs) is the reference SCS for DL BWP and subcarrierSpacing2 (SFI-scs2) is the reference SCS for UL BWP. For SUL, subcarrierSpacing (SFI-scs) is the reference SCS for non-SUL carrier and subcarrierSpacing2 (SFI-scs2) is the reference SCS for SUL carrier. The network configures a value that is smaller than or equal to any SCS of configured BWPs of the serving cell that the command applies to. And the network configures a value that is smaller than or equal to the SCS of the serving cell which the UE monitors for SFI indications.  
<endl>  
  
  
<start>  
slotformatcombinationspercell  
subcarrierSpacing  
Reference subcarrier spacing for this Slot Format Combination. The network configures a value that is smaller than or equal to any SCS of configured BWPs of the serving cell that the command applies to. And the network configures a value that is smaller than or equal to the SCS of the serving cell which the UE monitors for SFI indications (see TS 38.213 [13], clause 11.1.1).  
<endl>

<start>  
slotformatindicator  
availableRB-SetsToAddModList  
A list of AvailableRB-SetsPerCell objects (see TS 38.213 [13], clause 11.1.1).  
<endl>  
  
  
<start>  
slotformatindicator  
co-DurationsPerCellToAddModList  
A list of CO-DurationsPerCell objects. If not configured, the UE uses the slot format indicator (SFI), if available, to determine the channel occupancy duration (see TS 38.213 [13], clause 11.1.1).  
<endl>  
  
  
<start>  
slotformatindicator  
co-DurationsPerCellToReleaseList  
A list of CO-DurationsPerCell objects to be released. An entry created using co-DurationsPerCellToAddModList-r16 or co-DurationsPerCellToAddModList-r17 can be deleted using co-DurationsPerCellToReleaseList.  
<endl>  
  
  
<start>  
slotformatindicator  
dci-PayloadSize  
Total length of the DCI payload scrambled with SFI-RNTI (see TS 38.213 [13], clause 11.1.1).  
<endl>  
  
  
<start>  
slotformatindicator  
sfi-RNTI  
RNTI used for SFI on the given cell (see TS 38.213 [13], clause 11.1.1).  
<endl>  
  
  
<start>  
slotformatindicator  
slotFormatCombToAddModList  
A list of SlotFormatCombinations for the UE's serving cells (see TS 38.213 [13], clause 11.1.1).  
<endl>  
  
  
<start>  
slotformatindicator  
switchTriggerToAddModList, switchTriggerToAddModListSizeExt  
A list of SearchSpaceSwitchTrigger objects. Each SearchSpaceSwitchTrigger object provides position in DCI of the bit field indicating search space switching flag for a serving cell or, if cellGroupsForSwitchList is configured, group of serving cells (see TS 38.213 [13], clause 10.4). If cellGroupsForSwitchList is configured, only one of the cells belonging to the same cell group is added/modified, and the configuration applies to all cells belonging to the cellGroupsForSwitchList (see TS 38.213 [13], clause 10.4). The network configures more than 4 SearchSpaceSwitchTrigger objects only if cellGroupsForSwitchList is not configured. The UE shall consider entries in switchTriggerToAddModList and in switchTriggerToAddModListSizeExt as a single list, i.e. an entry created using switchTriggerToAddModList can be modifed using switchTriggerToAddModListSizeExt and vice-versa.  
<endl>  
  
  
<start>  
slotformatindicator  
switchTriggerToReleaseModList, switchTriggerToReleaseListSizeExt  
A list of SearchSpaceSwitchTriggers to be released. If cellGroupsForSwitchList is configured, the SearchSpaceSwitchTrigger is released for all serving cells belonging to the same CellGroupForSwitch. The UE shall consider entries in switchTriggerToReleaseList and in switchTriggerToReleaseListSizeExt as a single list, i.e. an entry created using switchTriggerToAddModList or switchTriggerToAddModListSizeExt can be deleted using switchTriggerToReleaseList or switchTriggerToReleaseListSizeExt.  
<endl>

<start>  
availablerb-setspercell  
positionInDCI  
The (starting) position of the bits within DCI payload indicating the availability of the RB sets of a serving cell (see TS 38.213 [13], clause 11.1.1).  
<endl>  
  
  
<start>  
availablerb-setspercell  
servingCelIId  
The ID of the serving cell for which the configuration is applicable.  
<endl>

<start>  
co-durationspercell  
co-DurationList  
A list of Channel Occupancy duration in symbols.  
The maximum duration that can be configured for the following SCS:  
- 15 kHz: 280.  
- 30 kHz: 560.  
- 60 kHz: 1120.  
- 120 kHz: 560.  
- 480 kHz: 2240.  
- 960 kHz: 4480.  
<endl>  
  
  
<start>  
co-durationspercell  
positionInDCI  
Position in DCI of the bit field indicating Channel Occupancy duration for UE's serving cells (see TS 38.213 [13], clause 11.1.1).  
<endl>  
  
  
<start>  
co-durationspercell  
servingCelIId  
The ID of the serving cell for which the configuration is applicable.  
<endl>  
  
  
<start>  
co-durationspercell  
subcarrierSpacing  
Reference subcarrier spacing for the list of Channel Occupancy durations (see TS 38.213 [13], clause 11.1.1).  
<endl>

<start>  
searchspaceswitchtrigger  
positionInDCI  
The position of the bit within DCI payload containing a search space switching flag (see TS 38.213 [13], clause 11.1.1).  
<endl>  
  
  
<start>  
searchspaceswitchtrigger  
servingCellId  
The ID of the serving cell for which the configuration is applicable or the group of serving cells as indicated by CellGroupsForSwitch-r16 containing this servingCellId.  
<endl>

<start>  
s-nssai  
sst  
Indicates the S-NSSAI consisting of Slice/Service Type, see TS 23.003 [21].  
<endl>  
  
  
<start>  
s-nssai  
sst-SD  
Indicates the S-NSSAI consisting of Slice/Service Type and Slice Differentiator, see TS 23.003 [21].  
<endl>

<start>  
speedstatescalefactors  
sf-High  
The concerned mobility control related parameter is multiplied with this factor if the UE is in High Mobility state as defined in TS 38.304 [20]. Value oDot25 corresponds to 0.25, value oDot5 corresponds to 0.5, oDot75 corresponds to 0.75 and so on.  
<endl>  
  
  
<start>  
speedstatescalefactors  
sf-Medium  
The concerned mobility control related parameter is multiplied with this factor if the UE is in Medium Mobility state as defined in TS 38.304 [20]. Value oDot25 corresponds to 0.25, value oDot5 corresponds to 0.5, value oDot75 corresponds to 0.75, and so on.  
<endl>

<start>  
sps-config  
harq-CodebookID  
Indicates the HARQ-ACK codebook index for the corresponding HARQ-ACK codebook for SPS PDSCH and ACK for SPS PDSCH release.  
<endl>  
  
  
<start>  
sps-config  
harq-ProcID-Offset  
Indicates the offset used in deriving the HARQ process IDs, see TS 38.321 [3], clause 5.3.1.  
<endl>  
  
  
<start>  
sps-config  
mcs-Table  
Indicates the MCS table the UE shall use for DL SPS (see TS 38.214 [19],clause 5.1.3.1. If present, the UE shall use the MCS table of low-SE 64QAM table indicated in Table 5.1.3.1-3 of TS 38.214 [19]. If this field is absent and field mcs-table in PDSCH-Config is set to 'qam256' and the activating DCI is of format 1\_1, the UE applies the 256QAM table indicated in Table 5.1.3.1-2 of TS 38.214 [19]. If this field is absent and the field mcs-Table-r17 in PDSCH-Config is set to 'qam1024' and the activating DCI is format 1\_1, the UE applies the 1024QAM table indicated in Table 5.1.3.1-4 of TS 38.214 [19]. Otherwise, the UE applies the non-low-SE 64QAM table indicated in Table 5.1.3.1-1 of TS 38.214 [19].  
<endl>  
  
  
<start>  
sps-config  
n1PUCCH-AN  
HARQ resource for PUCCH for DL SPS. The network configures the resource either as format0 or format1. The actual PUCCH-Resource is configured in PUCCH-Config and referred to by its ID. See TS 38.213 [13], clause 9.2.3.  
<endl>  
  
  
<start>  
sps-config  
n1PUCCH-AN-PUCCHsSCell  
HARQ resource for PUCCH on PUCCH switching SCell (sSCell) for DL SPS. The network configures the resource either as format 0 or format 1. The actual PUCCH-Resource is configured in PUCCH-Config of the PUCCH sSCell and referred to by its ID. See TS 38.213 [13], clause 9.2.3.  
<endl>  
  
  
<start>  
sps-config  
nrofHARQ-Processes  
Number of configured HARQ processes for SPS DL (see TS 38.321 [3], clause 5.8.1). If UE is configured with nrofHARQ-Processes-v1710 UE shall ignore nrofHARQ-Processes (without suffix).  
<endl>  
  
  
<start>  
sps-config  
pdsch-AggregationFactor  
Number of repetitions for SPS PDSCH (see TS 38.214 [19], clause 5.1.2.1). When the field is absent, the UE applies PDSCH aggregation factor of PDSCH-Config.  
<endl>  
  
  
<start>  
sps-config  
periodicity  
Periodicity for DL SPS (see TS 38.214 [19] and TS 38.321 [3], clause 5.8.1).  
<endl>  
  
  
<start>  
sps-config  
periodicityExt  
This field is used to calculate the periodicity for DL SPS (see TS 38.214 [19] and see TS 38.321 [3], clause 5.8.1). If this field is present, the field periodicity is ignored.  
The following periodicities are supported depending on the configured subcarrier spacing [ms]:  
15 kHz: periodicityExt, where periodicityExt has a value between 1 and 640.  
30 kHz: 0.5 x periodicityExt, where periodicityExt has a value between 1 and 1280.  
60 kHz with normal CP. 0.25 x periodicityExt, where periodicityExt has a value between 1 and 2560.  
60 kHz with ECP: 0.25 x periodicityExt, where periodicityExt has a value between 1 and 2560.  
120 kHz: 0.125 x periodicityExt, where periodicityExt has a value between 1 and 5120.  
480 kHz: 0.03125 x periodicityExt, where periodicityExt has a value between 1 and 20480.  
960 kHz: 0.015625 x periodicityExt, where periodicityExt has a value between 1 and 40960.  
periodicityExt-r17 is only applicable for SCS 480 kHz and 960 kHz.  
<endl>  
  
  
<start>  
sps-config  
sps-ConfigIndex  
Indicates the index of one of multiple SPS configurations.  
<endl>  
  
  
<start>  
sps-config  
sps-HARQ-Deferral  
Indicates the maximum number of slots or subslots the transmission of DL SPS HARQ-ACK in a slot or subslot can be deferred (see TS 38.213 [13], clause 9.2.5.4).  
<endl>

<start>  
sps-pucch-an  
maxPayloadSize  
Indicates the maximum payload size for the corresponding PUCCH resource ID.  
<endl>  
  
  
<start>  
sps-pucch-an  
sps-PUCCH-AN-ResourceID  
Indicates the PUCCH resource ID  
<endl>

<start>  
srs-cc-setindex  
cc-IndexInOneCC-Set  
Indicates the CC index in one CC set for Type A (see TS 38.212 [17], TS 38.213 [13], clause 7.3.1, 11.4). The network always includes this field when the srs-TPC-PDCCH-Group is set to typeA.  
<endl>  
  
  
<start>  
srs-cc-setindex  
cc-SetIndex  
Indicates the CC set index for Type A associated (see TS 38.212 [17], TS 38.213 [13], clause 7.3.1, 11.4). The network always includes this field when the srs-TPC-PDCCH-Group is set to typeA. The network does not configure this field to 3 in this release of specification.  
<endl>

<start>  
srs-carrierswitching  
monitoringCells  
A set of serving cells for monitoring PDCCH conveying SRS DCI format with CRC scrambled by TPC-SRS-RNTI (see TS 38.212 [17], TS 38.213 [13], clause 7.3.1, 11.3).  
<endl>  
  
  
<start>  
srs-carrierswitching  
srs-SwitchFromServCellIndex  
Indicates the serving cell whose UL transmission may be interrupted during SRS transmission on a PUSCH-less SCell. During SRS transmission on a PUSCH-less SCell, the UE may temporarily suspend the UL transmission on a serving cell with PUSCH in the same CG to allow the PUSCH-less SCell to transmit SRS. (see TS 38.214 [19], clause 6.2.1.3).  
<endl>  
  
  
<start>  
srs-carrierswitching  
srs-TPC-PDCCH-Group  
Network configures the UE with either typeA-SRS-TPC-PDCCH-Group or typeB-SRS-TPC-PDCCH-Group, if any.  
<endl>  
  
  
<start>  
srs-carrierswitching  
typeA  
Type A trigger configuration for SRS transmission on a PUSCH-less SCell (see TS 38.213 [13], clause 11.4). In this release, the network configures at most one entry (the first entry) of typeA, and the first entry corresponds to the serving cell in which the SRS-CarrierSwitching field is configured. SRS carrier switching to SUL carrier is not supported in this version of the specification.  
<endl>  
  
  
<start>  
srs-carrierswitching  
typeB  
Type B trigger configuration for SRS transmission on a PUSCH-less SCell (see TS 38.213 [13], clause 11.4).  
<endl>

<start>  
srs-tpc-pdcch-config  
srs-CC-SetIndexlist  
A list of pairs of [cc-SetIndex; cc-IndexInOneCC-Set] (see TS 38.212 [17], TS 38.213 [13], clause 7.3.1, 11.4). The network does not configure this field for typeB.  
<endl>

<start>  
srs-config  
tpc-Accumulation  
If the field is absent, UE applies TPC commands via accumulation. If disabled, UE applies the TPC command without accumulation (this applies to SRS when a separate closed loop is configured for SRS) (see TS 38.213 [13], clause 7.3).  
<endl>

<start>  
srs-resource, srs-posresource  
cyclicShift-n2  
Cyclic shift configuration (see TS 38.214 [19], clause 6.2.1).  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
cyclicShift-n4  
Cyclic shift configuration (see TS 38.214 [19], clause 6.2.1).  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
cyclicShift-n8  
Cyclic shift configuration (see TS 38.214 [19], clause 6.2.1).  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
enableStartRBHopping  
When this RRC parameter is configured, start RB location hopping is enabled for partial frequency sounding in different SRS frequency hopping periods for periodic/semi-persistent/aperiodic SRS as described in Clause 6.4.1.4 in TS 38.211.  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
freqHopping  
Includes parameters capturing SRS frequency hopping (see TS 38.214 [19], clause 6.2.1). For CLI SRS-RSRP measurement, the network always configures this field such that b-hop > b-SRS.  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
groupOrSequenceHopping  
Parameter(s) for configuring group or sequence hopping (see TS 38.211 [16], clause 6.4.1.4.2). For CLI SRS-RSRP measurement, the network always configures this parameter to 'neither'.  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
nrofSRS-Ports  
Number of ports. For CLI SRS-RSRP measurement, the network always configures this parameter to 'port1'.  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
periodicityAndOffset-p, periodicityAndOffset-p-Ext  
Periodicity and slot offset for this SRS resource. All values are in "number of slots". Value sl1 corresponds to a periodicity of 1 slot, value sl2 corresponds to a periodicity of 2 slots, and so on. For each periodicity the corresponding offset is given in number of slots. For periodicity sl1 the offset is 0 slots (see TS 38.214 [19], clause 6.2.1). For CLI SRS-RSRP measurement, sl1280 and sl2560 cannot be configured. For SRS-PosResource, values sl20480, sl40960 and sl81920 cannot be configured for SCS=15kHz, values sl40960 and sl81920 cannot be configured for SCS=30kHz, and value sl81920 cannot be configured for SCS=60kHz.  
When periodicityAndOffset-p-Ext is present, periodicityAndOffset-p shall be ignored by the UE.  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
periodicityAndOffset-sp, periodicityAndOffset-sp-Ext  
Periodicity and slot offset for this SRS resource. All values are in "number of slots". Value sl1 corresponds to a periodicity of 1 slot, value sl2 corresponds to a periodicity of 2 slots, and so on. For each periodicity the corresponding offset is given in number of slots. For periodicity sl1 the offset is 0 slots (see TS 38.214 [19], clause 6.2.1). For SRS-PosResource, values sl20480, sl40960 and sl81920 cannot be configured for SCS=15kHz, values sl40960 and sl81920 cannot be configured for SCS=30kHz, and value sl81920 cannot be configured for SCS=60kHz.  
When periodicityAndOffset-sp-Ext is present, periodicityAndOffset-sp shall be ignored by the UE.  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
ptrs-PortIndex  
The PTRS port index for this SRS resource for non-codebook based UL MIMO. This is only applicable when the corresponding PTRS-UplinkConfig is set to CP-OFDM. The ptrs-PortIndex configured here must be smaller than the maxNrofPorts configured in the PTRS-UplinkConfig (see TS 38.214 [19], clause 6.2.3.1). This parameter is not applicable to CLI SRS-RSRP measurement.  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
resourceMapping  
OFDM symbol location of the SRS resource within a slot including nrofSymbols (number of OFDM symbols), startPosition (value 0 refers to the last symbol, value 1 refers to the second last symbol, and so on) and repetitionFactor (see TS 38.214 [19], clause 6.2.1 and TS 38.211 [16], clause 6.4.1.4). The configured SRS resource does not exceed the slot boundary. If resourceMapping-r16 is signalled, UE shall ignore the resourceMapping (without suffix). If resourceMapping-r17 is signalled, resourceMapping-r16 is not signalled and the UE shall ignore the resourceMapping (without suffix) and only the values of nrofSymbols which are integer multiples of the configured repetitionFactor can be configured. The network can only signal repetitionFactor-v1730 if resourceMapping-r17 is signalled. When repetitionFactor-v1730 is signalled, the UE shall ignore repetitionFactor-r17. For CLI SRS-RSRP measurement, the network always configures nrofSymbols and repetitionFactor to 'n1'.  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
resourceType  
Periodicity and offset for semi-persistent and periodic SRS resource, or slot offset for aperiodic SRS resource for positioning (see TS 38.214 [19], clause 6.2.1). For CLI SRS-RSRP measurement, only 'periodic' is applicable for resourceType.  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
sequenceId  
Sequence ID used to initialize pseudo random group and sequence hopping (see TS 38.214 [19], clause 6.2.1).  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
spatialRelationInfo  
Configuration of the spatial relation between a reference RS and the target SRS. Reference RS can be SSB/CSI-RS/SRS (see TS 38.214 [19], clause 6.2.1). This parameter is not applicable to CLI SRS-RSRP measurement. This field is not configured if unifiedTCI-StateType is configured for the serving cell.  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
spatialRelationInfo-PDC  
Configuration of the spatial relation between a reference RS and the target SRS. Reference RS can be SSB/CSI-RS/SRS/DL-PRS-PDC (see TS 38.214 [19], clause 6.2.1). The field is present in case of resourceType=periodic and usagePDC-r17=true in the SRS-ResourceSet, otherwise the field is absent.  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
spatialRelationInfoPos  
Configuration of the spatial relation between a reference RS and the target SRS. Reference RS can be SSB/CSI-RS/SRS/DL-PRS (see TS 38.214 [19], clause 6.2.1).  
If the IE srs-ResourceId-Ext is present, the IE srs-ResourceId in spatialRelationInfoPos represents the index from 0 to 63. Otherwise the IE srs-ResourceId in spatialRelationInfoPos represents the index from 0 to 31.  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
srs-RequestDCI-0-2  
Indicate the number of bits for "SRS request"in DCI format 0\_2. When the field is absent, then the value of 0 bit for "SRS request" in DCI format 0\_2 is applied. If the parameter srs-RequestDCI-0-2 is configured to value 1, 1 bit is used to indicate one of the first two rows of Table 7.3.1.1.2-24 in TS 38.212 [17] for triggered aperiodic SRS resource set. If the value 2 is configured, 2 bits are used to indicate one of the rows of Table 7.3.1.1.2-24 in TS 38.212 [17]. When UE is configured with supplementaryUplink, an extra bit (the first bit of the SRS request field) is used for the non-SUL/SUL indication.  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
srs-RequestDCI-1-2  
Indicate the number of bits for "SRS request" in DCI format 1\_2. When the field is absent, then the value of 0 bit for "SRS request" in DCI format 1\_2 is applied. When the UE is configured with supplementaryUplink, an extra bit (the first bit of the SRS request field) is used for the non-SUL/SUL indication (see TS 38.214 [19], clause 6.1.1.2).  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
srs-ResourceSetToAddModListDCI-0-2  
List of SRS resource set to be added or modified for DCI format 0\_2 (see TS 38.212 [17], clause 7.3.1).  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
srs-ResourceSetToReleaseListDCI-0-2  
List of SRS resource set to be released for DCI format 0\_2 (see TS 38.212 [17], clause 7.3.1).  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
srs-TCI-State  
Configuration of either a UL TCI state or a joint TCI state for the SRS resource. In case of UL TCI-State, refers to the TCI state defined in ul-TCI-StateList in the BWP-UplinkDedicated where the SRS-Config is configured. In case of joint TCI state, refers to a TCI state defined in dl-OrJointTCI-StateList in pdsch-Config of the BWP-DownlinkDedicated and serving cell indicated by cellAndBWP. This field is absent when the SRS resource is in an SRS-ResourceSet configured with followUnifiedTCI-StateSRS-r17 or when the field unifiedTCI-StateType is not configured to the serving cell which the SRS resource is located in.  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
startRBIndexAndFreqScalingFactor  
Configures the UE with the startRBIndex and freqScalingFactor for partial frequency sounding as described in Clause 6.4.1.4 in TS 38.211. The startRBIndexForFScaling2 gives the startRBIndex when freqScalingFactor is 2 and the startRBIndexForFScaling4 gives the startRBIndex when FreqScalingFactor is 4  
<endl>  
  
  
<start>  
srs-resource, srs-posresource  
transmissionComb, transmissionComb-n8  
Comb value (2 or 4 or 8) and comb offset (0..combValue-1) (see TS 38.214 [19], clause 6.2.1).  
<endl>

<start>  
srs-resourceset, srs-posresourceset  
alpha  
alpha value for SRS power control (see TS 38.213 [13], clause 7.3). When the field is absent the UE applies the value 1.  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
aperiodicSRS-ResourceTriggerList  
An additional list of DCI "code points" upon which the UE shall transmit SRS according to this SRS resource set configuration (see TS 38.214 [19], clause 6). When the field is not included during a reconfiguration of SRS-ResourceSet of resourceType set to aperiodic, UE maintains this value based on the Need M; that is, this list is not considered as an extension of aperiodicSRS-ResourceTrigger for purpose of applying the general rule for extended list in clause 6.1.3.  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
aperiodicSRS-ResourceTrigger  
The DCI "code point" upon which the UE shall transmit SRS according to this SRS resource set configuration (see TS 38.214 [19], clause 6).  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
associatedCSI-RS  
ID of CSI-RS resource associated with this SRS resource set in non-codebook based operation (see TS 38.214 [19], clause 6.1.1.2).  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
availableSlotOffset  
Indicates the number of available slots from slot n+k to the slot where the aperiodic SRS resource set is transmitted, where slot n is the slot with the triggering DCI, and k is the legacy triggering offset (slotOffset, not based on availabel slot) as described in clause 6.2.1 of TS 38.214.  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
csi-RS  
ID of CSI-RS resource associated with this SRS resource set. (see TS 38.214 [19], clause 6.1.1.2).  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
dl-PRS  
This field indicates a PRS configuration.  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
followUnifiedTCI-StateSRS  
When set to enabled, for SRS resource Set, the UE applies the "indicated" UL only TCI or joint TCI as specified in TS 38.214 [19], clause 5.1.5. This parameter may be configured for aperiodic SRS for BM or SRS of any time-domain behavior for codebook, non-codebook, and antenna switching.  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
p0  
P0 value for SRS power control. The value is in dBm. Only even values (step size 2) are allowed (see TS 38.213 [13], clause 7.3).  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
pathlossReferenceRS  
A reference signal (e.g. a CSI-RS config or a SS block) to be used for SRS path loss estimation (see TS 38.213 [13], clause 7.3).  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
pathlossReferenceRS-Pos  
A reference signal (e.g. a SS block or a DL-PRS config) to be used for SRS path loss estimation (see TS 38.213 [13], clause 7.3).  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
pathlossReferenceRSList  
Multiple candidate pathloss reference RS(s) for SRS power control, where one candidate RS can be mapped to SRS Resource Set via MAC CE (clause 6.1.3.27 in TS 38.321 [3]). The network can only configure this field if pathlossReferenceRS is not configured in the same SRS-ResourceSet.  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
resourceType  
Time domain behavior of SRS resource configuration, see TS 38.214 [19], clause 6.2.1. The network configures SRS resources in the same resource set with the same time domain behavior on periodic, aperiodic and semi-persistent SRS. The aperiodic SRS is not applicable for the UE in RRC\_INACTIVE.  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
slotOffset  
An offset in number of slots between the triggering DCI and the actual transmission of this SRS-ResourceSet. If the field is absent the UE applies no offset (value 0).  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
srs-PowerControlAdjustmentStates  
Indicates whether hsrs,c(i) = fc(i,1) or hsrs,c(i) = fc(i,2) (if twoPUSCH-PC-AdjustmentStates are configured) or separate close loop is configured for SRS. This parameter is applicable only for Uls on which UE also transmits PUSCH. If absent or release, the UE applies the value sameAs-Fci1 (see TS 38.213 [13], clause 7.3).  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
srs-ResourceIdList, srs-PosResourceIdList  
The IDs of the SRS-Resources/SRS-PosResource used in this SRS-ResourceSet/SRS-PosResourceSet. If this SRS-ResourceSet is configured with usage set to codebook, the srs-ResourceIdList contains at most 2 entries. If this SRS-ResourceSet is configured with usage set to nonCodebook, the srs-ResourceIdList contains at most 4 entries.  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
srs-ResourceSetId, srs-PosResourceSetId  
The ID of this resource set. It is unique in the context of the BWP in which the parent SRS-Config is defined.  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
ssb-IndexServing  
Indicates SSB index belonging to a serving cell where the SRS is configured.  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
ssb-NCell  
This field indicates a SSB configuration from neighboring cell.  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
usage  
Indicates if the SRS resource set is used for beam management, codebook based or non-codebook based transmission or antenna switching. See TS 38.214 [19], clause 6.2.1. Reconfiguration between codebook based and non-codebook based transmission is not supported.  
<endl>  
  
  
<start>  
srs-resourceset, srs-posresourceset  
usagePDC  
If configured, it indicates that this SRS resource set is used for propagation delay compensation. The field can be present in only one SRS-ResourceSet.  
<endl>

<start>  
srs-spatialrelationinfopos  
csi-RS-IndexServing  
Indicates CSI-RS index belonging to a serving cell.  
<endl>  
  
  
<start>  
srs-spatialrelationinfopos  
dl-PRS  
This field indicates a PRS configuration.  
<endl>  
  
  
<start>  
srs-spatialrelationinfopos  
resourceSelection  
Indicates whether the configured SRS spatial relation resource is a SRS-Resource or SRS-PosResource.  
<endl>  
  
  
<start>  
srs-spatialrelationinfopos  
servingCellId  
The serving Cell ID of the source SSB, CSI-RS, or SRS for the spatial relation of the target SRS resource. If this field is absent the SSB, the CSI-RS, or the SRS is from the same serving cell where the SRS is configured.  
<endl>  
  
  
<start>  
srs-spatialrelationinfopos  
ssb-IndexServing  
Indicates SSB index belonging to a serving cell.  
<endl>  
  
  
<start>  
srs-spatialrelationinfopos  
ssb-Ncell  
This field indicates a SSB configuration from neighboring cell.  
<endl>

<start>  
ssb-infoncell  
physicalCellId  
This field specifies the physical cell ID of the neighbour cell for which SSB configuration is provided.  
<endl>  
  
  
<start>  
ssb-infoncell  
ssb-IndexNcell  
This field specifies the index of the SSB for a neighbour cell. See TS 38.213 [13]. If this field is absent, the UE determines the ssb-IndexNcell of the physicalCellId  
based on its SSB measurement from the cell.  
<endl>  
  
  
<start>  
ssb-infoncell  
ssb-Configuration  
This field specifies the full configuration of the SSB. If this field is absent, the UE obtains the configuration for the SSB from nr-SSB-Config received as part of DL-PRS assistance data in LPP, see TS 37.355 [49], by looking up the corresponding SSB configuration using the field physicalCellId.  
<endl>

<start>  
dl-prs-info  
dl-PRS-ID  
This field specifies the UE specific TRP ID (see TS 37.355 [49]) for which PRS configuration is provided.  
<endl>  
  
  
<start>  
dl-prs-info  
dl-PRS-ResourceSetId  
This field specifies the PRS-ResourceSet ID of a PRS resourceSet.  
<endl>  
  
  
<start>  
dl-prs-info  
dl-PRS-ResourceId  
This field specifies the PRS-Resource ID of a PRS resource. If this field is absent, the UE determines the dl-PRS-ResourceID based on its PRS measurement from the TRP (see TS 37.355 [49]) and DL-PRS Resource Set.  
<endl>

<start>  
ssb-configuration  
halfFrameIndex  
Indicates whether SSB is in the first half or the second half of the frame. Value zero indicates the first half and value 1 indicates the second half.  
<endl>  
  
  
<start>  
ssb-configuration  
integerSubframeOffset  
Indicates the subframe boundary offset of the cell in which SSB is transmited.  
<endl>  
  
  
<start>  
ssb-configuration  
sfn0-Offset  
Indiactes the time offset of the SFN0 slot 0 for the cell with respect to SFN0 slot 0 of serving cell.  
<endl>  
  
  
<start>  
ssb-configuration  
sfn-Offset  
Specifies the SFN offset between the cell in which SSB is transmited and serving cell. The offset corresponds to the number of full radio frames counted from the beginning of a radio frame #0 of serving cell to the beginning of the closest subsequent radio frame #0 of the cell in which SSB is transmitted.  
<endl>  
  
  
<start>  
ssb-configuration  
sfn-SSB-Offset  
Indicates the SFN offset of the transmitted SSB relative to the start of the SSB period. Value 0 indicates that the SSB is transmitted in the first system frame, value 1 indicates that SSB is transmitted in the second system frame and so on. The network configures this field according to the field ssb-Periodicity such that the indicated system frame does not exceed the configured SSB periodicity.  
<endl>  
  
  
<start>  
ssb-configuration  
ssb-Freq  
Indicates the frequency of the SSB.  
<endl>  
  
  
<start>  
ssb-configuration  
ss-PBCH-BlockPower  
Average EPRE of the resources elements that carry secondary synchronization signals in dBm that the NW used for SSB transmission, see TS 38.213 [13], clause 7.  
<endl>  
  
  
<start>  
ssb-configuration  
ssb-Periodicity  
Indicates the periodicity of the SSB. If the field is absent, the UE applies the value ms5. (see TS 38.213 [13], clause 4.1)  
<endl>  
  
  
<start>  
ssb-configuration  
ssbSubcarrierSpacing  
Subcarrier spacing of SSB.  
Only the following values are applicable depending on the used frequency:  
FR1: 15 or 30 kHz  
FR2-1: 120 or 240 kHz  
FR2-2: 120, 480, or 960 kHz  
<endl>

<start>  
srs-tpc-commandconfig  
fieldTypeFormat2-3  
The type of a field within the group DCI with SRS request fields (optional), which indicates how many bits in the field are for SRS request (0 or 2).  
Note that for Type A, there is a common SRS request field for all SCells in the set, but each SCell has its own TPC command bits. See TS 38.212 [17] clause 7.3.1 and , TS 38.213 [13], clause 11.3.  
<endl>  
  
  
<start>  
srs-tpc-commandconfig  
startingBitOfFormat2-3  
The starting bit position of a block within the group DCI with SRS request fields (optional) and TPC commands. The value 1 of the field corresponds to the first/left most bit of format2-3. The value 2 of the field corresponds to the second bit format2-3, and so on (see TS 38.212 [17], clause 7.3.1 and TS 38.213 [13], clause 11.3).  
<endl>  
  
  
<start>  
srs-tpc-commandconfig  
startingBitOfFormat2-3SUL  
The starting bit position of a block within the group DCI with SRS request fields (optional) and TPC commands for SUL carrier (see TS 38.212 [17], clause 7.3.1 and TS 38.213 [13], clause 11.3).  
<endl>

<start>  
ssb-mtc  
duration  
Duration of the measurement window in which to receive SS/PBCH blocks. It is given in number of subframes (see TS 38.213 [13], clause 4.1).  
<endl>  
  
  
<start>  
ssb-mtc  
periodicityAndOffset  
Periodicity and offset of the measurement window in which to receive SS/PBCH blocks, see 5.5.2.10. Periodicity and offset are given in number of subframes.  
<endl>

<start>  
ssb-mtc2  
pci-List  
PCIs that follow this SMTC.  
<endl>

<start>  
ssb-mtc3  
duration  
Duration of the measurement window in which to receive SS/PBCH blocks. It is given in number of subframes (see TS 38.213 [13], clause 4.1).  
<endl>  
  
  
<start>  
ssb-mtc3  
pci-List  
PCIs that follow this SMTC, used for IAB-node discovery.  
<endl>  
  
  
<start>  
ssb-mtc3  
periodicityAndOffset  
Periodicity and offset of the measurement window in which to receive SS/PBCH blocks, see 5.5.2.10. Periodicity and offset are given in number of subframes.  
<endl>  
  
  
<start>  
ssb-mtc3  
ssb-ToMeasure  
The set of SS blocks to be measured within the SMTC measurement duration. The first/leftmost bit corresponds to SS block index 0, the second bit corresponds to SS block index 1, and so on. Value 0 in the bitmap indicates that the corresponding SS block is not to be measured while value 1 indicates that the corresponding SS block is to be measured (see TS 38.215 [9]). When the field is not configured the IAB-MT measures on all SS blocks. Regardless of the value of this field, SS blocks outside of the applicable smtc are not to be measured. See TS 38.215 [9] clause 5.1.1.  
<endl>

<start>  
ssb-mtc4  
pci-List  
PCIs that follow this SMTC.  
<endl>  
  
  
<start>  
ssb-mtc4  
offset  
Offset of the measurement window in which to receive SS/PBCH blocks, see 5.5.2.10. Offset is given in number of subframes.  
<endl>

<start>  
ssb-mtc-additionalpci  
additionalPCI  
PCI of the additional SSB different from serving cell PCI.  
<endl>  
  
  
<start>  
ssb-mtc-additionalpci  
periodicity  
Periodicity of the SS/PBCH blocks, see 5.5.2.10. Periodicity is given in number of subframes.  
<endl>  
  
  
<start>  
ssb-mtc-additionalpci  
ssb-PositionsInBurst  
Indicates the time domain positions of the transmitted SS-blocks in a half frame with SS/PBCH blocks as defined in TS 38.213 [13], clause 4.1. The first/leftmost bit corresponds to SS/PBCH block index 0, the second bit corresponds to SS/PBCH block index 1, and so on. Value 0 in the bitmap indicates that the corresponding SS/PBCH block is not transmitted while value 1 indicates that the corresponding SS/PBCH block is transmitted.  
<endl>  
  
  
<start>  
ssb-mtc-additionalpci  
ss-PBCH-BlockPower  
Average EPRE of the resources elements that carry secondary synchronization signals in dBm that the NW used for SSB transmission, see TS 38.213 [13], clause 7.  
<endl>

<start>  
ssb-tomeasure  
longBitmap  
Bitmap when maximum number of SS/PBCH blocks per half frame equals to 64 as defined in TS 38.213 [13], clause 4.1. For operation with shared spectrum channel access in FR2-2, if the k-th bit is set to 1, the UE assumes that one or more SS/PBCH blocks within the SMTC measurement duration with candidate SS/PBCH block indexes corresponding to SS/PBCH block index equal to (k– 1) may be transmitted; if the k-th bit is set to 0, the UE assumes that the corresponding SS/PBCH block(s) are not transmitted.  
<endl>  
  
  
<start>  
ssb-tomeasure  
mediumBitmap  
Bitmap when maximum number of SS/PBCH blocks per half frame equals to 8 as defined in TS 38.213 [13], clause 4.1. For operation with shared spectrum channel access, if the k-th bit is set to 1, the UE assumes that one or more SS/PBCH blocks within the SMTC measurement duration with candidate SS/PBCH block indexes corresponding to SS/PBCH block index equal to k – 1 may be transmitted; if the kt-th bit is set to 0, the UE assumes that the corresponding SS/PBCH block(s) are not transmitted. The k-th bit is set to 0, where k > ssb-PositionQCL-Common and the number of actually transmitted SS/PBCH blocks is not larger than the number of 1's in the bitmap. If ssb-PositionQCL is configured with a value smaller than ssb-PositionQCL-Common, only the leftmost K bits (K = ssb-PositionQCL) are applicable for the corresponding cell.  
<endl>  
  
  
<start>  
ssb-tomeasure  
shortBitmap  
Bitmap when maximum number of SS/PBCH blocks per half frame equals to 4 as defined in TS 38.213 [13], clause 4.1.  
<endl>

<start>  
ss-rssi-measurement  
endSymbol  
Within a slot that is configured for RSSI measurements (see measurementSlots) the UE measures the RSSI from symbol 0 to symbol endSymbol. This field identifies the entry in Table 5.1.3-1 in TS 38.215 [9], which determines the actual end symbol.  
<endl>  
  
  
<start>  
ss-rssi-measurement  
measurementSlots  
Indicates the slots in which the UE can perform RSSI measurements. The length of the BIT STRING is equal to the number of slots in the configured SMTC window (determined by the duration and by the subcarrierSpacing). The first (left-most / most significant) bit in the bitmap corresponds to the first slot in the SMTC window, the second bit in the bitmap corresponds to the second slot in the SMTC window, and so on. The UE measures in slots for which the corresponding bit in the bitmap is set to 1. In case this field is configured for a SCell with ca-SlotOffset-r16, the bits in the bitmap corresponds to the slots that are fully contained in the SMTC window.  
<endl>

<start>  
tag  
tag-Id  
Indicates the TAG of the SpCell or an SCell, see TS 38.321 [3]. Uniquely identifies the TAG within the scope of a Cell Group (i.e. MCG or SCG).  
<endl>  
  
  
<start>  
tag  
timeAlignmentTimer  
The timeAlignmentTimer for TAG with ID tag-Id, as specified in TS 38.321 [3].  
<endl>

<start>  
tar-config  
offsetThresholdTA  
Offset for TA reporting as specified in TS 38.321 [3]. Network only configures this parameter for MCG.  
<endl>  
  
  
<start>  
tar-config  
timingAdvanceSR  
Used to configure whether a Timing Advance report may trigger a Scheduling Request as specified in TS 38.321 [3].  
<endl>

<start>  
tci-activatedconfig  
pdcch-TCI  
Indicates the TCI state for PDCCH for each configured CORESET of the DL BWP to be activated at SCell activation, to be activated for the PSCell at SCG activation and/or to be used for BFD, RLM and measurements while the SCG is deactivated. The list includes exactly as many entries as CORESETs configured in this BWP, ordered by increasing values of ControlResourceSet-Id, i.e. the first entry indicates the TCI state for the configured CORESET with the lowest ControlResourceset-Id value, the second value indicates the TCI states for the configured CORESET with the second lowest ControlResourceset-Id value, and so on.  
<endl>  
  
  
<start>  
tci-activatedconfig  
pdsch-TCI  
Indicates TCI states for PDSCH reception at SCell addition/activation or of the PSCell at SCG activation. This field indicates activated TCI state(s) for this BWP ordered by increasing values of TCI-StateId, i.e. the first bit indicates the activation state of the TCI state with the lowest TCI-StateId value, the second value indicates the activation status of the TCI state with the second lowest TCI-State-Id value, and so on. A bit set to 0 indicates that the corresponding TCI state is deactivated, a bit set to 1 indicates that the TCI state is activated.  
<endl>

<start>  
qcl-info  
bwp-Id  
The DL BWP which the RS is located in. If the field is absent, the RS is located in the DL BWP in which the TCI-State is applied by the UE.  
<endl>  
  
  
<start>  
qcl-info  
cell  
The UE's serving cell in which the referenceSignal is configured. If the field is absent, it applies to the serving cell in which the TCI-State is applied by the UE. The RS can be located on a serving cell other than the serving cell for which the TCI-State is applied by the UE only if the qcl-Type is configured as typeC or typeD. If the referenceSignal is set to csi-rs and unifiedTCI-StateType is configured, either both cell and bwp-Id are present or both cell and bwp-Id are absent. See TS 38.214 [19] clause 5.1.5.  
<endl>  
  
  
<start>  
qcl-info  
referenceSignal  
Reference signal with which quasi-collocation information is provided as specified in TS 38.214 [19] clause 5.1.5.  
<endl>  
  
  
<start>  
qcl-info  
qcl-Type  
QCL type as specified in TS 38.214 [19] clause 5.1.5.  
<endl>

<start>  
tci-state  
additionalPCI  
Indicates the physical cell IDs (PCI) of the SSBs when referenceSignal is configured as SSB for both QCL-Type1 and QCL-Type2. In case the cell is present, the additionalPCI refers to a PCI value configured in the list configured using additionalPCI-ToAddModList in the serving cell indicated by the field cell. Otherwise, it refers to a PCI value configured in a list additionalPCI-ToAddModList configured in the serving cell where the TCI-State is applied by the UE. When this field is present the cell for qcl-Type1 and qcl-Type2 is configured with same value, if present.  
<endl>  
  
  
<start>  
tci-state  
pathlossReferenceRS-Id  
The ID of the reference signal (e.g. a CSI-RS or an SS block) used for PUSCH, PUCCH and SRS path loss estimation. This field refers to an element in the list configured using pathlossReferenceRSToAddModList in the serving cell and UL BWP where the TCI State is applied by the UE.  
<endl>  
  
  
<start>  
tci-state  
qcl-Type1, qcl-Type2  
QCL information for the TCI state as specified in TS 38.214 [19] clause 5.1.5.  
<endl>  
  
  
<start>  
tci-state  
tci-StateId  
ID number of the TCI state.  
<endl>  
  
  
<start>  
tci-state  
ul-PowerControl  
Configures power control parameters for PUCCH, PUSCH and SRS for this TCI state. The field is present here only if ul-powerControl is not configured in any BWP-Uplink-Dedicated of this serving cell. This field refers to an element in the list configured using uplink-PowerControlToAddModList in the serving cell where the dl-OrJointTCI-StateToAddModList is configured.  
<endl>

<start>  
tci-ul-state  
additionalPCI  
Indicates the physical cell IDs (PCI) of the SSBs when referenceSignal is configured as SSB. In case the servingCellId is present, the additionalPCI refers to a PCI value configured in the list configured using additionalPCI-ToAddModList in the serving cell indicated by the field servingCellId. Otherwise, it refers to a PCI value configured in the list configured using additionalPCI-ToAddModList in the serving cell where the ul-TCI-StateList is applied by the UE.  
<endl>  
  
  
<start>  
tci-ul-state  
bwp-Id  
The DL BWP which the CSI-RS is located in or UL BWP where the SRS is located in.  
<endl>  
  
  
<start>  
tci-ul-state  
servingCellId  
The UE's serving cell in which the referenceSignal is configured. If the field is absent, it applies to the serving cell in which the TCI-UL-State is applied by the UE.  
<endl>  
  
  
<start>  
tci-ul-state  
pathlossReferenceRS-Id  
The ID of the reference Signal (e.g. a CSI-RS or a SS block) used for PUSCH, PUCCH and SRS path loss estimation. This field refers to an element in the list configured using pathlossReferenceRSToAddModList in the serving cell and UL BWP where the UL TCI State is applied by the UE.  
<endl>  
  
  
<start>  
tci-ul-state  
ul-powerControl  
Configures power control parameters for PUCCH, PUSCH and SRS for this TCI state. The field is present here only if ul-powerControl is not configured in any BWP-Uplink-Dedicated of this serving cell. This field refers to an element in the list configured using uplink-PowerControlToAddModList in the serving cell where the ul-TCI-ToAddModList is configured.  
<endl>

<start>  
tdd-ul-dl-configcommon  
referenceSubcarrierSpacing  
Reference SCS used to determine the time domain boundaries in the UL-DL pattern which must be common across all subcarrier specific carriers, i.e., independent of the actual subcarrier spacing using for data transmission.  
Only the following values are applicable depending on the used frequency:  
FR1: 15, 30, or 60 kHz  
FR2-1: 60 or 120 kHz  
FR2-2: 120, 480, or 960 kHz  
  
The network configures a not larger than any SCS of configured BWPs for the serving cell. The network or SL-PreconfigGeneral configures a not larger than the SCS of (pre-)configured SL BWP.See TS 38.213 [13], clause 11.1.  
<endl>

<start>  
tdd-ul-dl-pattern  
dl-UL-TransmissionPeriodicity  
Periodicity of the DL-UL pattern, see TS 38.213 [13], clause 11.1. If the dl-UL-TransmissionPeriodicity-v1530 is signalled, UE shall ignore the dl-UL-TransmissionPeriodicity (without suffix).  
<endl>  
  
  
<start>  
tdd-ul-dl-pattern  
nrofDownlinkSlots  
Number of consecutive full DL slots at the beginning of each DL-UL pattern, see TS 38.213 [13], clause 11.1. In this release, the maximum value for this field is 320.  
<endl>  
  
  
<start>  
tdd-ul-dl-pattern  
nrofDownlinkSymbols  
Number of consecutive DL symbols in the beginning of the slot following the last full DL slot (as derived from nrofDownlinkSlots). The value 0 indicates that there is no partial-downlink slot. (see TS 38.213 [13], clause 11.1).  
<endl>  
  
  
<start>  
tdd-ul-dl-pattern  
nrofUplinkSlots  
Number of consecutive full UL slots at the end of each DL-UL pattern, see TS 38.213 [13], clause 11.1. In this release, the maximum value for this field is 320.  
<endl>  
  
  
<start>  
tdd-ul-dl-pattern  
nrofUplinkSymbols  
Number of consecutive UL symbols in the end of the slot preceding the first full UL slot (as derived from nrofUplinkSlots). The value 0 indicates that there is no partial-uplink slot. (see TS 38.213 [13], clause 11.1).  
<endl>

<start>  
tdd-ul-dl-configdedicated  
slotSpecificConfigurationsToAddModList  
The slotSpecificConfigurationToAddModList allows overriding UL/DL allocations provided in tdd-UL-DL-configurationCommon, see TS 38.213 [13], clause 11.1.  
<endl>

<start>  
tdd-ul-dl-configdedicated-iab-mt  
slotSpecificConfigurationsToAddModList-IAB-MT  
The slotSpecificConfigurationToAddModList-IAB-MT allows overriding UL/DL allocations provided in tdd-UL-DL-configurationCommon with a limitation that effectively only flexible symbols can be overwritten in Rel-16.  
<endl>  
  
  
<start>  
tdd-ul-dl-configdedicated-iab-mt  
slotSpecificConfigurationsToReleaseList-IAB-MT  
The slotSpecificConfigurationsToReleaseList-IAB-MT allows release of a set of slot configuration previously add with slotSpecificConfigurationToAddModList-IAB-MT.  
<endl>

<start>  
tdd-ul-dl-slotconfig  
nrofDownlinkSymbols  
Number of consecutive DL symbols in the beginning of the slot identified by slotIndex. If the field is absent the UE assumes that there are no leading DL symbols. (see TS 38.213 [13], clause 11.1).  
<endl>  
  
  
<start>  
tdd-ul-dl-slotconfig  
nrofUplinkSymbols  
Number of consecutive UL symbols in the end of the slot identified by slotIndex. If the field is absent the UE assumes that there are no trailing UL symbols. (see TS 38.213 [13], clause 11.1).  
<endl>  
  
  
<start>  
tdd-ul-dl-slotconfig  
slotIndex  
Identifies a slot within a slot configuration period given in tdd-UL-DL-configurationCommon, see TS 38.213 [13], clause 11.1.  
<endl>  
  
  
<start>  
tdd-ul-dl-slotconfig  
symbols  
The direction (downlink or uplink) for the symbols in this slot. Value allDownlink indicates that all symbols in this slot are used for downlink; value allUplink indicates that all symbols in this slot are used for uplink; value explicit indicates explicitly how many symbols in the beginning and end of this slot are allocated to downlink and uplink, respectively.  
<endl>

<start>  
tdd-ul-dl-slotconfig-iab-mt  
symbols-IAB-MT  
The symbols-IAB-MT is used to configure an IAB-MT with the SlotConfig applicable for one serving cell. Value allDownlink indicates that all symbols in this slot are used for downlink; value allUplink indicates that all symbols in this slot are used for uplink; value explicit indicates explicitly how many symbols in the beginning and end of this slot are allocated to downlink and uplink, respectively; value explicit-IAB-MT indicates explicitly how many symbols in the beginning and end of this slot are allocated to uplink and downlink, respectively.  
<endl>

<start>  
uac-barringinfosetlist  
uac-BarringInfoSetList  
List of access control parameter sets. Each access category can be configured with access parameters corresponding to a particular set by uac-barringInfoSetIndex. Association of an access category with an index that has no corresponding entry in the uac-BarringInfoSetList is valid configuration and indicates no barring.  
<endl>  
  
  
<start>  
uac-barringinfosetlist  
uac-BarringForAccessIdentity  
Indicates whether access attempt is allowed for each Access Identity. The leftmost bit, bit 0 in the bit string corresponds to Access Identity 1, bit 1 in the bit string corresponds to Access Identity 2, bit 2 in the bit string corresponds to Access Identity 11, bit 3 in the bit string corresponds to Access Identity 12, bit 4 in the bit string corresponds to Access Identity 13, bit 5 in the bit string corresponds to Access Identity 14, and bit 6 in the bit string corresponds to Access Identity 15. Value 0 means that access attempt is allowed for the corresponding access identity.  
<endl>  
  
  
<start>  
uac-barringinfosetlist  
uac-BarringFactor  
Represents the probability that access attempt would be allowed during access barring check.  
<endl>  
  
  
<start>  
uac-barringinfosetlist  
uac-BarringFactorForAI3  
Barring factor applicable for Access Identity 3. Represents the probability that access attempt would be allowed during access barring check. If absent, the UE considers the access attempt as allowed.  
<endl>  
  
  
<start>  
uac-barringinfosetlist  
uac-BarringTime  
The average time in seconds before a new access attempt is to be performed after an access attempt was barred at access barring check for the same access category, see 5.3.14.5.  
<endl>

<start>  
uac-barringpercatlist  
accessCategory  
The Access Category according to TS 22.261 [25].  
<endl>

<start>  
uac-barringperplmn-list  
uac-ACBarringListType  
Access control parameters for each access category valid only for a specific PLMN or SNPN. UE behaviour upon absence of this field is specified in clause 5.3.14.2.  
<endl>  
  
  
<start>  
uac-barringperplmn-list  
plmn-IdentityIndex  
Index of the PLMN or SNPN across the plmn-IdentityInfoList and npn-IdentityInfoList fields included in SIB1.  
<endl>

<start>  
ue-timersandconstantsremoteue  
t300-RemoteUE  
Indicates the timer value of T300 used by L2 U2N Remote UE. If the field is absent, the timer value indicated in t300 applies to L2 U2N Remote UE.  
<endl>  
  
  
<start>  
ue-timersandconstantsremoteue  
t301-RemoteUE  
Indicates the timer value of T301 used by L2 U2N Remote UE. If the field is absent, the timer value indicated in t301 applies to L2 U2N Remote UE.  
<endl>  
  
  
<start>  
ue-timersandconstantsremoteue  
t319-RemoteUE  
Indicates the timer value of T319 used by L2 U2N Remote UE. If the field is absent, the timer value indicated in t319 applies to L2 U2N Remote UE.  
<endl>

<start>  
ul-delayvalueconfig  
delay-DRBlist  
Indicates the DRB IDs used by UE to provide results of UL PDCP Packet Delay value per DRB measurement as specified in TS 38.314 [53].  
<endl>

<start>  
ul-excessdelayconfig  
drb-IdentityList  
Indicates the DRB IDs used by UE to provide results of UL PDCP Excess Packet Delay per DRB measurement as specified in TS 38.314 [53].  
<endl>  
  
  
<start>  
ul-excessdelayconfig  
delayThreshold  
Indicates the delay threshold for the DRB IDs indicated in DRB-IdentityList. Value ms0dot25 corresponds to 0.25ms, ms0dot5 corresponds to 0.5ms, ms1 corresponds to 1ms and so on.  
<endl>

<start>  
ul-gapfr2-config  
gapOffset  
Value gapOffset is the gap offset of the FR2 UL gap pattern with UGRP indicated in the field ugrp. The value range is from 0 to ugrp-1.  
<endl>  
  
  
<start>  
ul-gapfr2-config  
refFR2-ServCellAsyncCA  
Indicates the FR2 serving cell identifier whose SFN and subframe is used for FR2 UL gap calculation for this gap pattern with asynchronous CA involving FR2 carrier(s).  
<endl>  
  
  
<start>  
ul-gapfr2-config  
ugl  
Value ugl is the gap length in ms of the FR2 UL gap. The FR2 UL gap length is according to Table 9.1.11-1 in TS 38.133 [14]. Value ms0dot125 corresponds to 0.125 ms, ms0dot25 corresponds to 0.25 ms and so on.  
<endl>  
  
  
<start>  
ul-gapfr2-config  
ugrp  
Value ugrp is the gap repetition period in (ms) of the FR2 UL gap. The FR2 UL gap repetition period is according to Table 9.1.11-1 in TS 38.133 [14].  
<endl>

<start>  
uplinkcancellation  
ci-ConfigurationPerServingCell  
Indicates (per serving cell) the position of the ci-PaylaodSize bit CI values inside the DCI payload (see TS 38.213 [13], clause 11.2A).  
<endl>  
  
  
<start>  
uplinkcancellation  
ci-RNTI  
RNTI used for indication cancellation in UL (see TS 38.212 [17] clause 7.3.1 and TS 38.213 [13], clause 11.2A).  
<endl>  
  
  
<start>  
uplinkcancellation  
dci-PayloadSizeForCI  
Total length of the DCI payload scrambled with CI-RNTI (see TS 38.213 [13], clause 11.2A).  
<endl>

<start>  
ci-configurationperservingcell  
ci-PayloadSize  
Configures the field size for each UL cancelation indicator of this serving cell (servingCellId) (see TS 38.213 [13], clause 11.2A).  
<endl>  
  
  
<start>  
ci-configurationperservingcell  
deltaOffset  
Configures the additional offset from the end of a PDCCH reception where the UE detects the DCI format 2\_4 and the first symbol of the T\_"CI" symbols, in the unit of OFDM symbols (see TS 38.213 [13], clause 11.2A).  
<endl>  
  
  
<start>  
ci-configurationperservingcell  
frequencyRegionForCI  
Configures the reference frequency region where a detected UL CI is applicable (see TS 38.213 [13], clause 11.2A). It is defined in the same way as locationAndBandwidth.  
<endl>  
  
  
<start>  
ci-configurationperservingcell  
positionInDCI  
Starting position (in number of bit) of the ci-PayloadSize bit CI value applicable for this serving cell (servingCellId) within the DCI payload (see TS 38.213 [13], clause 11.2A).  
<endl>  
  
  
<start>  
ci-configurationperservingcell  
positionInDCI-ForSUL  
Starting position (in number of bit) of the ci-PayloadSize bit CI value applicable for SUL of this serving cell (servingCellId) within the DCI payload (see TS 38.213 [13], clause 11.2A).  
<endl>  
  
  
<start>  
ci-configurationperservingcell  
timeDurationForCI  
Configures the duration of the reference time region in symbols where a detected UL CI is applicable of this serving cell (servingCellId) (see TS 38.213 [13], clause 11.2A). If the field is absent, i.e., the configured UL CI monitoring periodicity indicated by monitoringSlotPeriodicityAndOffset for DCI format 2\_4 is larger than 1 slot or 1 slot with only one monitoring occasion, the UE applies the value of the configured UL CI monitoring periodicity,  
<endl>  
  
  
<start>  
ci-configurationperservingcell  
timeFrequencyRegion  
Configures the reference time and frequency region where a detected UL CI is applicable of this serving cell (servingCellId) (see TS 38.213 [13], clause 11.2A).  
<endl>  
  
  
<start>  
ci-configurationperservingcell  
timeGranularityForCI  
Configures the number of partitions within the time region of this serving cell (servingCellId) (see TS 38.213 [13], clause 11.2A).  
<endl>  
  
  
<start>  
ci-configurationperservingcell  
uplinkCancellationPriority  
Configures uplink cancellation behavior if both UL CI and intra-UE priority indicator are configured for a given UE. If the field is present, then UL CI is only applicable to the UL transmissions indicated/configured as low priority level. If the field is absent, UL CI is applicable to UL transmission irrespective of its priority level (see TS 38.213 [13], clause 11.2A).  
<endl>

<start>  
uplinkconfigcommon  
frequencyInfoUL  
Absolute uplink frequency configuration and subcarrier specific virtual carriers.  
<endl>  
  
  
<start>  
uplinkconfigcommon  
initialUplinkBWP  
The initial uplink BWP configuration for a serving cell (see TS 38.213 [13], clause 12).  
<endl>  
  
  
<start>  
uplinkconfigcommon  
initialUplinkBWP-RedCap  
If present, RedCap UEs use this UL BWP instead of initialUplinkBWP.  
If absent, RedCap UEs use initialUplinkBWP provided that it does not exceed the RedCap UE maximum bandwidth (see also clause 5.2.2.4.2).  
<endl>

<start>  
uplinkconfigcommonsib  
frequencyInfoUL  
Absolute uplink frequency configuration and subcarrier specific virtual carriers.  
<endl>  
  
  
<start>  
uplinkconfigcommonsib  
InitialUplinkBWP  
The initial uplink BWP configuration for a PCell (see TS 38.213 [13], clause 12).  
<endl>  
  
  
<start>  
uplinkconfigcommonsib  
initialUplinkBWP-RedCap  
If present, RedCap UEs use this UL BWP instead of initialUplinkBWP.  
If absent, RedCap UEs use initialUplinkBWP provided that it does not exceed the RedCap UE maximum bandwidth (see also clause 5.2.2.4.2).  
<endl>

<start>  
uplink-powercontrol  
p0AlphaSetforPUSCH, p0AlphaSetforPUCCH, p0AlphaSetforSRS  
Configures power control parameters for PUSCH, PUCCH and SRS (see TS 38.213 [13], clause 7.2). When the field alpha is absent in p0AlphaSetforPUSCH, the UE applies the value 1 for PUSCH power control. When the field alpha is absent in p0AlphaSetforSRS, the UE applies the value 1 for SRS power control. In p0AlphaSetForPUCCH, the field alpha is absent (not used).  
<endl>

<start>  
uu-relayrlc-channelconfig  
uu-LogicalChannelIdentity  
Indicates the logical channel id for Uu Relay RLC channel of the L2 U2N Relay UE.  
<endl>  
  
  
<start>  
uu-relayrlc-channelconfig  
uu-RelayRLC-ChannelID  
Indicates the Uu Relay RLC channel in the link between L2 U2N Relay UE and network.  
<endl>  
  
  
<start>  
uu-relayrlc-channelconfig  
reestablishRLC  
Indicates that RLC should be re-established.  
<endl>  
  
  
<start>  
uu-relayrlc-channelconfig  
rlc-Config  
Determines the RLC mode (UM, AM) and provides corresponding parameters.  
<endl>

<start>  
uplinktxdirectcurrentbwp  
bwp-Id  
The BWP-Id of the corresponding uplink BWP.  
<endl>  
  
  
<start>  
uplinktxdirectcurrentbwp  
shift7dot5kHz  
Indicates whether there is 7.5 kHz shift or not. 7.5 kHz shift is applied if the field is set to true. Otherwise 7.5 kHz shift is not applied.  
<endl>  
  
  
<start>  
uplinktxdirectcurrentbwp  
txDirectCurrentLocation  
The uplink Tx Direct Current location for the carrier. Only values in the value range of this field between 0 and 3299, which indicate the subcarrier index within the carrier corresponding to the numerology of the corresponding uplink BWP and value 3300, which indicates "Outside the carrier" and value 3301, which indicates "Undetermined position within the carrier" are used in this version of the specification.  
<endl>

<start>  
uplinktxdirectcurrentcell  
servCellIndex  
The serving cell ID of the serving cell corresponding to the uplinkDirectCurrentBWP.  
<endl>  
  
  
<start>  
uplinktxdirectcurrentcell  
uplinkDirectCurrentBWP  
The Tx Direct Current locations for all the uplink BWPs configured at the corresponding serving cell.  
<endl>  
  
  
<start>  
uplinktxdirectcurrentcell  
uplinkDirectCurrentBWP-SUL  
The Tx Direct Current locations for all the supplementary uplink BWPs configured at the corresponding serving cell.  
<endl>

<start>  
uplinktxdirectcurrentmorecarrierlist and cc-group  
CC-Group  
The contiguous carriers sharing the same PA in an intra-band UL CA configuration. The UE shall report only one DC location for an intra-band CC combination with one active uplink carrier in case DefaultDC-Location is set to activeCarrier or activeBWP.  
<endl>  
  
  
<start>  
uplinktxdirectcurrentmorecarrierlist and cc-group  
defaultDC-Location  
Indicates the default DC location derivation option. The default Tx Direct Current is located at the mathematical center of the UE bandwidth, i.e. between the lower edge of the lowest subcarrier of the lowest frequency component and the upper edge of the highest subcarrier of the highest frequency component, rounded to the subcarrier grid of the lowest SCS defined for the component carrier on which the default Direct Current is located. The lowest and highest frequency components used for derivation of mathematical center are indicated by FrequencyComponent in the associated CC-Group, where the lowest frequency component and the highest frequency component may be the same. If the mathematical center of the UE bandwidth lands on frequencies where there is no subcarrier grid defined, the subcarrier grid of the lowest SCS of the nearest lower frequency component carrier shall be extended to cover the frequency of the mathematical default Direct Current location.  
<endl>  
  
  
<start>  
uplinktxdirectcurrentmorecarrierlist and cc-group  
offsetToDefault  
Indicates the DC location offset to the default DC location derived from defaultDC-Location. The lowest SCS in the CC group is used as the offset granularity. Value 0 respresents no offset.  
offsetValue is used in case DefaultDC-Location is set to configuredCarrier or configuredBWP. offsetlist is used in case DefaultDC-Location is set to activeCarrier or activeBWP. Each entity in this list corresponds to the entry in carriers combination in IntraBandCC-CombinationReqList of the intra-band CA component. For each CC group, the UE shall include the same number of entries, and listed in the same order as in CC-CombinationList. If DefaultDC-Location is set the activeCarrier, same offsetValue is signalled for all requested carriers combinations with same active carriers states(regardless of the active BWP index).  
<endl>  
  
  
<start>  
uplinktxdirectcurrentmorecarrierlist and cc-group  
servCellIndexHigher  
Indicates the serving cell index of the highest edge of the CC-Group. If asbsent, there is only one carrier in this group indicated by servCellIndexLower.  
<endl>  
  
  
<start>  
uplinktxdirectcurrentmorecarrierlist and cc-group  
servCellIndexLower  
Indicates the serving cell index of the lowest edge of the CC-Group.  
<endl>  
  
  
<start>  
uplinktxdirectcurrentmorecarrierlist and cc-group  
shift7dot5kHz  
Indicates whether there is 7.5 kHz shift or not. 7.5 kHz shift is applied if the field is set to true, otherwise 7.5 kHz shift is not applied.  
<endl>

<start>  
defaultdc-location  
dl  
Indicates that the default DC location is derived based on the DL frequencies of the frequency component.  
<endl>  
  
  
<start>  
defaultdc-location  
ul  
Indicates that the default DC location is derived based on the UL frequencies of the frequency component.  
<endl>  
  
  
<start>  
defaultdc-location  
ulAndDL  
Indicates that the default DC location is derived based on the edge most frequencies among any DL and UL frequency components.  
<endl>

<start>  
uplinktxdirectcurrenttwocarrierinfo  
referenceCarrierIndex  
The serving cell ID of the carrier which is to be used as the reference for interpreting the Tx Direction Current location as reported using txDirectCurrentLocation-r16. The numerology of the uplink BWP ID reported with bwp-Id-r16 for this serving cell is the numerology used for interpreting the reported subcarrier location.  
<endl>  
  
  
<start>  
uplinktxdirectcurrenttwocarrierinfo  
shift7dot5kHz  
Indicates whether there is 7.5 kHz shift or not. 7.5 kHz shift is applied if the field is set to true. Otherwise 7.5 kHz shift is not applied.  
<endl>  
  
  
<start>  
uplinktxdirectcurrenttwocarrierinfo  
txDirectCurrentLocation  
The uplink Tx Direct Current location for the two carrier uplink CA with the serving cells reported using carrierOneInfo-r16 and carrierTwoInfo-r16. Values in the range of this field between 0 and 3299 indicate the subcarrier index of the uplink Tx Direct Current location with the subcarrier taken from the serving cell with ID referenceCarrierIndex and the numerology of the corresponding uplink BWP reported for this serving cell. Value 3300 indicates "Outside the carrier" and value 3301 indicates "Undetermined position within the carrier".  
<endl>

<start>  
uplinktxdirectcurrentcarrierinfo  
bwp-Id  
The BWP ID of the serving cell which is part of the two carrier uplink carrier aggregation. The UE shall not report this field if the serving cell is reported as deactivated using deactivatedCarrier-r16.  
<endl>  
  
  
<start>  
uplinktxdirectcurrentcarrierinfo  
deactivatedCarrier  
For the reported uplink Tx Direct Current location(s) corresponding to singlePA-TxDirectCurrent-r16, indicates whether the carrier is deactivated or not for this serving cell. If the carrier refers to the PCell, the UE shall not set this field to deactivated.  
<endl>  
  
  
<start>  
uplinktxdirectcurrentcarrierinfo  
servCellIndex  
The serving cell ID of the serving cell which is part of the two carrier uplink carrier aggregation.  
<endl>

<start>  
uplinktxdirectcurrenttwocarrier  
carrierOneInfo  
The serving cell ID and BWP ID of the first carrier of the uplink carrier aggregation for which the uplink Tx Direct Current location(s) are being reported.  
<endl>  
  
  
<start>  
uplinktxdirectcurrenttwocarrier  
carrierTwoInfo  
The serving cell ID and BWP ID of the second carrier of the uplink carrier aggregation for which the uplink Tx Direct Current location(s) are being reported.  
<endl>  
  
  
<start>  
uplinktxdirectcurrenttwocarrier  
singlePA-TxDirectCurrent  
The uplink Tx Direct Current location for the UE which support single PA for this uplink carrier aggregation. For the UEs which support dual PA for this uplink carrier aggregation, this field is for reporting the uplink Tx Direct Current location of the first PA.  
<endl>  
  
  
<start>  
uplinktxdirectcurrenttwocarrier  
secondPA-TxDirectCurrent  
The uplink Tx Direct Current location used by the UE with the second PA for the UEs which support dual PA for this uplink carrier aggregation. This field shall be absent for the UplinkTxDirectCurrentTwoCarrier entity where deactivatedCarrier of carrierOneInfo or carrierTwoInfo is set to deactivated.  
<endl>

<start>  
zp-csi-rs-resource  
periodicityAndOffset  
Periodicity and slot offset for periodic/semi-persistent ZP-CSI-RS (see TS 38.214 [19], clause 5.1.4.2). Network always configures the UE with a value for this field for periodic and semi-persistent ZP-CSI-RS resource (as indicated in PDSCH-Config).  
<endl>  
  
  
<start>  
zp-csi-rs-resource  
resourceMapping  
OFDM symbol and subcarrier occupancy of the ZP-CSI-RS resource within a slot.  
<endl>  
  
  
<start>  
zp-csi-rs-resource  
zp-CSI-RS-ResourceId  
ZP CSI-RS resource configuration ID (see TS 38.214 [19], clause 5.1.4.2).  
<endl>

<start>  
zp-csi-rs-resourceset  
zp-CSI-RS-ResourceIdList  
The list of ZP-CSI-RS-ResourceId identifying the ZP-CSI-RS-Resource elements belonging to this set.  
<endl>

<start>  
bandcombination  
BandCombinationList-UplinkTxSwitch-r16, BandCombinationList-UplinkTxSwitch-v1630, BandCombinationList-UplinkTxSwitch-v1640, BandCombinationList-UplinkTxSwitch-v1650, BandCombinationList-UplinkTxSwitch-v1690, BandCombinationList-UplinkTxSwitch-v16a0, BandCombinationList-UplinkTxSwitch-v1700, BandCombinationList-UplinkTxSwitch-v1720, BandCombinationList-UplinkTxSwitch-v1730  
The UE shall include the same number of entries, and listed in the same order, as in BandCombinationList-UplinkTxSwitch-r16.  
For the field of supportedBandCombinationList-UplinkTxSwitch-v1700, if the UE does not support 2Tx-2Tx switching for a given band combination, the field of supportedBandPairListNR-v1700 in the corresponding entry is absent. ca-ParametersNRDC  
If the field is included for a band combination in the NR capability container, the field indicates support of NR-DC. Otherwise, the field is absent.  
<endl>  
  
  
<start>  
bandcombination  
featureSetCombinationDAPS  
If this field is present for a band combination, it reports the feature set combination supported for the band combination when any DAPS bearer is configured. ne-DC-BC  
If the field is included for a band combination in the MR-DC capability container, the field indicates support of NE-DC. Otherwise, the field is absent.  
<endl>  
  
  
<start>  
bandcombination  
supportedBandPairListNR-r16, supportedBandPairListNR-v1700  
Indicates a list of band pair supporting UL Tx switching as defined in TS 38.101-1 [15] for a given band combination.  
A UE supporting 2Tx-2Tx switching should include both of supportedBandPairListNR-r16 and supportedBandPairListNR-v1700. And the UE shall include the same number of entries listed in the same order as in supportedBandPairListNR-r16.  
If the UE does not support 2Tx-2Tx switching for a given band pair, the field of uplinkTxSwitchingPeriod2T2T in the corresponding entry is absent. srs-SwitchingTimesListNR  
Indicates, for a particular pair of NR bands, the RF retuning time when switching between a NR carrier corresponding to this band entry and another (PUSCH-less) NR carrier corresponding to the band entry in the order indicated below:  
- For the first NR band, the UE shall include the same number of entries for NR bands as in bandList, i.e. first entry corresponds to first NR band in bandList and so on,  
- For the second NR band, the UE shall include one entry less, i.e. first entry corresponds to the second NR band in bandList and so on  
- And so on  
<endl>  
  
  
<start>  
bandcombination  
srs-SwitchingTimesListEUTRA  
Indicates, for a particular pair of E-UTRA bands, the RF retuning time when switching between an E-UTRA carrier corresponding to this band entry and another (PUSCH-less) E-UTRA carrier corresponding to the band entry in the order indicated below:  
- For the first E-UTRA band, the UE shall include the same number of entries for E-UTRA bands as in bandList, i.e. first entry corresponds to first E-UTRA band in bandList and so on,  
- For the second E-UTRA band, the UE shall include one entry less, i.e. first entry corresponds to the second E-UTRA band in bandList and so on  
 - And so on srs-TxSwitch  
Indicates supported SRS antenna switch capability for the associated band. If the UE indicates support of SRS-SwitchingTimeNR, the UE is allowed to set this field for a band with associated FeatureSetUplinkId set to 0 for SRS carrier switching.  
<endl>  
  
  
<start>  
bandcombination  
srs-TxSwitch  
Indicates supported SRS antenna switch capability for the associated band. If the UE indicates support of SRS-SwitchingTimeNR, the UE is allowed to set this field for a band with associated FeatureSetUplinkId set to 0 for SRS carrier switching. uplinkTxSwitchingBandParametersList-v1700  
Indicates a list of per band per band combination capabilities for UL Tx switching.  
<endl>  
  
  
<start>  
bandcombination  
uplinkTxSwitchingBandParametersList-v1700  
Indicates a list of per band per band combination capabilities for UL Tx switching.  
<endl>  
  
  
<start>  
bandcombination  
  
<endl>  
  
  
<start>  
bandcombination  
  
<endl>  
  
  
<start>  
bandcombination  
  
<endl>  
  
  
<start>  
bandcombination  
  
<endl>

<start>  
bandparameterssidelinkeutra-nr  
bandParametersSidelinkEUTRA1, bandParametersSidelinkEUTRA2  
This field includes the V2X-BandParameters-r14 and V2X-BandParameters-v1530 IE as specified in 36.331 [10]. It is used for reporting the per-band capability for V2X sidelink communication.  
<endl>

<start>  
ca-parametersnrdc  
ca-ParametersNR-forDC (with and without suffix)  
If this field is present for a band combination, it reports the UE capabilities when NR-DC is configured with the band combination. If a version of this field (i.e., with or without suffix) is absent for a band combination, the corresponding ca-ParametersNR field version in BandCombination is applicable to the UE configured with NR-DC for the band combination. If a version of this field (i.e., with or without suffix) is present for a band combination but does not contain any parameters, the UE does not support the corresponding field version when configured with NR-DC for the band combination.  
<endl>  
  
  
<start>  
ca-parametersnrdc  
featureSetCombinationDC  
If this field is present for a band combination, it reports the feature set combination supported for the band combination when NR-DC is configured. If this field is absent for a band combination, the featureSetCombination in BandCombination (without suffix) is applicable to the UE configured with NR-DC for the band combination.  
<endl>

<start>  
codebookparameters  
supportedCSI-RS-ResourceListAlt  
This field indicates the alternative list of SupportedCSI-RS-Resource supported for each codebook type. The supported CSI-RS resource is indicated by an integer value which pinpoints SupportedCSI-RS-Resource defined in CodebookVariantsList. The value 0 corresponds to the first entry of CodebookVariantsList. The value 1 corresponds to the second entry of CodebookVariantsList, and so on. For each codebook type, the field shall be included in both codebookParametersPerBC (but optional for single CC) and codebookParametersPerBand.  
<endl>

<start>  
featuresetdownlink  
featureSetListPerDownlinkCC  
Indicates which features the UE supports on the individual DL carriers of the feature set (and hence of a band entry that refer to the feature set). The UE shall hence include at least as many FeatureSetDownlinkPerCC-Id in this list as the number of carriers it supports according to the ca-BandwidthClassDL, except if indicating additional functionality by reducing the number of FeatureSetDownlinkPerCC-Id in the feature set (see NOTE 1 in FeatureSetCombination IE description). The order of the elements in this list is not relevant, i.e., the network may configure any of the carriers in accordance with any of the FeatureSetDownlinkPerCC-Id in this list.  
<endl>  
  
  
<start>  
featuresetdownlink  
supportedSRS-Resources  
Indicates supported SRS resources for SRS carrier switching to the band associated with this FeatureSetDownlink. The UE is only allowed to set this field for a band with associated FeatureSetUplinkId set to 0.  
<endl>

<start>  
featuresetuplink  
featureSetListPerUplinkCC  
Indicates which features the UE supports on the individual UL carriers of the feature set (and hence of a band entry that refers to the feature set). The UE shall hence include at least as many FeatureSetUplinkPerCC-Id in this list as the number of carriers it supports according to the ca-BandwidthClassUL, except if indicating additional functionality by reducing the number of FeatureSetUplinkPerCC-Id in the feature set (see NOTE 1 in FeatureSetCombination IE description). The order of the elements in this list is not relevant, i.e., the network may configure any of the carriers in accordance with any of the FeatureSetUplinkPerCC-Id in this list.  
<endl>

<start>  
mimo-parametersperband  
codebookParametersPerBand  
For a given frequency band, this field this field indicates the alternative list of SupportedCSI-RS-Resource supported for each codebook type. The supported CSI-RS resources indicated by this field are referred by codebookParametersperBC in CA-ParametersNR to indicate the supported CSI-RS resource per band combination.  
<endl>  
  
  
<start>  
mimo-parametersperband  
csi-RS-IM-ReceptionForFeedback/ csi-RS-ProcFrameworkForSRS/ csi-ReportFramework  
CSI related capabilities which the UE supports on each of the carriers operated on this band. If the network configures the UE with serving cells on both FR1 and FR2 bands these values may be further limited by the corresponding fields in fr1-fr2-Add-UE-NR-Capabilities.  
<endl>  
  
  
<start>  
mimo-parametersperband  
supportNewDMRS-Port  
Presence of this field set to supported1, supported2 or supported3 indicates that the UE supports the new DMRS port entry {0,2,3}.  
<endl>

<start>  
ntn-parameters  
fdd-Add-UE-NR-CapabilitiesNTN  
NTN related capabilities which the UE supports in NTN differently than in TN. If absent, fdd-Add-UE-NR-Capabilities applies to NTN.  
<endl>  
  
  
<start>  
ntn-parameters  
fr1-Add-UE-NR-CapabilitiesNTN  
NTN related capabilities which the UE supports in NTN differently than in TN. If absent, fr1-Add-UE-NR-Capabilities applies to NTN.  
<endl>  
  
  
<start>  
ntn-parameters  
mac-ParametersNTN  
NTN related capabilities which the UE supports in NTN differently than in TN. If absent, mac-Parameters applies to NTN.  
<endl>  
  
  
<start>  
ntn-parameters  
measAndMobParametersNTN  
NTN related capabilities which the UE supports in NTN differently than in TN. If absent, measAndMobParameters applies to NTN.  
<endl>  
  
  
<start>  
ntn-parameters  
phy-ParametersNTN  
NTN related capabilities which the UE supports in NTN differently than in TN. If absent, phy-Parameters applies to NTN.  
<endl>  
  
  
<start>  
ntn-parameters  
son-ParametersNTN  
NTN related capabilities which the UE supports in NTN differently than in TN. If absent, son-Parameters-r16 applies to NTN.  
<endl>  
  
  
<start>  
ntn-parameters  
ue-BasedPerfMeas-ParametersNTN  
NTN related capabilities which the UE supports in NTN differently than in TN. If absent, ue-BasedPerfMeas-Parameters-r16 applies to NTN.  
<endl>

<start>  
phy-parametersfrx-diff  
csi-RS-IM-ReceptionForFeedback/ csi-RS-ProcFrameworkForSRS/ csi-ReportFramework  
These fields are optionally present in fr1-fr2-Add-UE-NR-Capabilities in UE-NR-Capability. They shall not be set in any other instance of the IE Phy-ParametersFRX-Diff. If the network configures the UE with serving cells on both FR1 and FR2 bands, these parameters, if present, limit the corresponding parameters in MIMO-ParametersPerBand.  
<endl>

<start>  
phy-parametersmrdc  
naics-Capability-List  
Indicates that UE in MR-DC supports NAICS as defined in TS 36.331 [10].  
<endl>

<start>  
rf-parameters  
appliedFreqBandListFilter  
In this field the UE mirrors the FreqBandList that the NW provided in the capability enquiry, if any. The UE filtered the band combinations in the supportedBandCombinationList in accordance with this appliedFreqBandListFilter. The UE does not include this field if the UE capability is requested by E-UTRAN and the network request includes the field eutra-nr-only [10].  
<endl>  
  
  
<start>  
rf-parameters  
supportedBandCombinationList  
A list of band combinations that the UE supports for NR (and NR-DC, if requested). The FeatureSetCombinationId:s in this list refer to the FeatureSetCombination entries in the featureSetCombinations list in the UE-NR-Capability IE. The UE does not include this field if the UE capability is requested by E-UTRAN and the network request includes the field eutra-nr-only [10].  
<endl>  
  
  
<start>  
rf-parameters  
supportedBandCombinationListSidelinkEUTRA-NR  
A list of band combinations that the UE supports for NR sidelink communication only, for joint NR sidelink communication and V2X sidelink communication, or for V2X sidelink communication only. The UE does not include this field if the UE capability is requested by E-UTRAN (see TS 36.331[10]) and the network request includes the field eutra-nr-only.  
<endl>  
  
  
<start>  
rf-parameters  
supportedBandCombinationListSL-NonRelayDiscovery  
A list of band combinations that the UE supports for NR sidelink non-relay discovery. The encoding is defined in PC5 BandCombinationListSidelinkNR-r16.  
<endl>  
  
  
<start>  
rf-parameters  
supportedBandCombinationListSL-RelayDiscovery  
A list of band combinations that the UE supports for NR sidelink relay discovery. The encoding is defined in PC5 BandCombinationListSidelinkNR-r16.  
<endl>  
  
  
<start>  
rf-parameters  
supportedBandCombinationList-UplinkTxSwitch  
A list of band combinations that the UE supports dynamic uplink Tx switching for NR UL CA and SUL. The FeatureSetCombinationId:s in this list refer to the FeatureSetCombination entries in the featureSetCombinations list in the UE-NR-Capability IE. The UE does not include this field if the UE capability is requested by E-UTRAN and the network request includes the field eutra-nr-only [10].  
<endl>  
  
  
<start>  
rf-parameters  
supportedBandListNR  
A list of NR bands supported by the UE. If supportedBandListNR-v16c0 is included, the UE shall include the same number of entries, and listed in the same order, as in supportedBandListNR (without suffix).  
<endl>

<start>  
rf-parametersmrdc  
appliedFreqBandListFilter  
In this field the UE mirrors the FreqBandList that the NW provided in the capability enquiry, if any. The UE filtered the band combinations in the supportedBandCombinationList in accordance with this appliedFreqBandListFilter.  
<endl>  
  
  
<start>  
rf-parametersmrdc  
supportedBandCombinationList  
A list of band combinations that the UE supports for (NG)EN-DC, or both (NG)EN-DC and NE-DC. The FeatureSetCombinationId:s in this list refer to the FeatureSetCombination entries in the featureSetCombinations list in the UE-MRDC-Capability IE.  
<endl>  
  
  
<start>  
rf-parametersmrdc  
supportedBandCombinationListNEDC-Only, supportedBandCombinationListNEDC-Only-v1610  
A list of band combinations that the UE supports only for NE-DC. The FeatureSetCombinationId:s in this list refer to the FeatureSetCombination entries in the featureSetCombinations list in the UE-MRDC-Capability IE.  
<endl>  
  
  
<start>  
rf-parametersmrdc  
supportedBandCombinationList-UplinkTxSwitch  
A list of band combinations that the UE supports dynamic UL Tx switching for (NG)EN-DC. The FeatureSetCombinationId:s in this list refer to the FeatureSetCombination entries in the featureSetCombinations list in the UE-MRDC-Capability IE.  
<endl>

<start>  
sidelinkparameterseutra  
sl-ParametersEUTRA1, sl-ParametersEUTRA2, sl-ParametersEUTRA3  
This field includes IE of SL-Parameters-v1430 (where v2x-eNB-Scheduled-r14 and V2X-SupportedBandCombination-r14 shall not be included), SL-Parameters-v1530 (where V2X-SupportedBandCombination-r1530 shall not be included) and SL-Parameters-v1540 respectively defined in 36.331 [10]. It is used for reporting the per-UE capability for V2X sidelink communication.  
<endl>

<start>  
srs-allposresourcesrrc-inactive  
dummy1, dummy2  
The fields are not used in the specification and the network ignores the received values.  
<endl>

<start>  
ue-capabilityrat-containerlist  
ue-CapabilityRAT-Container  
Container for the UE capabilities of the indicated RAT. The encoding is defined in the specification of each RAT:  
For rat-Type set to nr: the encoding of UE capabilities is defined in UE-NR-Capability.  
For rat-Type set to eutra-nr: the encoding of UE capabilities is defined in UE-MRDC-Capability.  
For rat-Type set to eutra: the encoding of UE capabilities is defined in UE-EUTRA-Capability specified in TS 36.331 [10].  
For rat-Type set to utra-fdd: the octet string contains the INTER RAT HANDOVER INFO message defined in TS 25.331 [45].  
<endl>

<start>  
ue-capabilityrat-request  
capabilityRequestFilter  
Information by which the network requests the UE to filter the UE capabilities.  
For rat-Type set to nr or eutra-nr: the encoding of the capabilityRequestFilter is defined in UE-CapabilityRequestFilterNR.  
For rat-Type set to eutra: the encoding of the capabilityRequestFilter is defined by UECapabilityEnquiry message defined in TS36.331 [10], in which RAT-Type in UE-CapabilityRequest includes only 'eutra'.  
<endl>  
  
  
<start>  
ue-capabilityrat-request  
rat-Type  
The RAT type for which the NW requests UE capabilities.  
<endl>

<start>  
ue-capabilityrequestfiltercommon  
codebookTypeRequest  
Only if this field is present, the UE includes SupportedCSI-RS-Resource supported for the codebook type(s) requested within this field (i.e. type I single/multi-panel, type II and type II port selection) into codebookVariantsList, codebookParametersPerBand and codebookParametersPerBC. If this field is present and none of the codebook types is requested within this field (i.e. empty field), the UE includes SupportedCSI-RS-Resource supported for all codebook types into codebookVariantsList, codebookParametersPerBand and codebookParametersPerBC.  
<endl>  
  
  
<start>  
ue-capabilityrequestfiltercommon  
fallbackGroupFiveRequest  
Only if this field is present, the UE supporting FR2 CA bandwidth class from fallback group 5 shall include band combinations with FR2 CA bandwidth class from fallback group 5, and shall omit band combinations with FR2 CA bandwidth class from fallback group 2 or 3 (see TS 38.101-2 [39]) with same or lower capabilities.  
<endl>  
  
  
<start>  
ue-capabilityrequestfiltercommon  
includeNE-DC  
Only if this field is present, the UE supporting NE-DC shall indicate support for NE-DC in band combinations and include feature set combinations which are applicable to NE-DC. Band combinations supporting both NE-DC and (NG)EN-DC shall be included in supportedBandCombinationList, band combinations supporting only NE-DC shall be included in supportedBandCombinationListNEDC-Only.  
<endl>  
  
  
<start>  
ue-capabilityrequestfiltercommon  
includeNR-DC  
Only if this field is present, the UE supporting NR-DC shall indicate support for NR-DC in band combinations and include feature set combinations which are applicable to NR-DC.  
<endl>  
  
  
<start>  
ue-capabilityrequestfiltercommon  
mode  
The mode of NR-DC operation that the NW is interested in for this cell grouping. The value sync means that the UE only indicates NR-DC support for band combinations for which it supports synchronous NR-DC with the requested cell grouping. The value async means that the UE only indicates NR-DC support for band combinations for which it supports asynchronous NR-DC with the requested cell grouping.  
<endl>  
  
  
<start>  
ue-capabilityrequestfiltercommon  
omitEN-DC  
Only if this field is present, the UE shall omit band combinations and feature set combinations which are only applicable to (NG)EN-DC.  
<endl>  
  
  
<start>  
ue-capabilityrequestfiltercommon  
requestedCellGrouping  
The NR-DC cell groupings that the NW is interested in, i.e., the bands that it might use in an MCG and the bands that it might use in an SCG. Only if this field is present, the UE indicates NR-DC support for band combinations for which it supports the requested cell grouping, i.e., in which it supports at least one of the mcg bands on MCG and at least one of the scg bands on the SCG. In its supportedBandCombinationList, the UE indicates which of its NR-DC band combinations supports which of the requested cell groupings. The first element in this list is referred to by ID#0, the second by ID#1 and so on. If this field is absent, the UE only includes band combinations for which it supports NR-DC with only FR1 bands in MCG and only FR2 bands in SCG.  
Example 1: requestedCellGrouping is set to mcg=[n1, n7, n41, n66] and scg=[n78, n261]. This assumes that the NW would always use CA among n1, n7, n41 and n66 (depending on which are deployed on a given site) whereas with n78 and/or n261 the NW may need to use DC. With this filter a UE may report a band combination n1A-n7A-n78A for NR-DC only if it supports that serving cells for n1 and n7 are in the MCG and a serving cell for n78 is in the SCG. The UE may also report a band combination n41C-n261M for NR-DC provided that it supports a serving cell for n41 in the MCG and a serving cell for n261 in the SCG.  
Example 2: One requestedCellGrouping is set to mcg=[n1, n7, n41, n66] and scg=[n78, n261] and another requestedCellGrouping is set to mcg=[n1, n7, n66] and scg=[ n41, n78, n261]. This assumes that the NW uses sometimes CA among n1, n7, n41 and n66 (as in example 1) and sometimes CA among n1, n7 and n66 but DC towards one or several of n41, n78, n261. If a UE supports n1A-n41A-n78A only if n41A and n78A are in the same cell group, this UE may only indicate cell grouping ID#1 (not #0) in its BC.  
<endl>  
  
  
<start>  
ue-capabilityrequestfiltercommon  
uplinkTxSwitchRequest  
Only if this field is present, the UE supporting dynamic UL Tx switching shall indicate support for UL Tx switching in band combinations which are applicable to inter-band UL CA, SUL and (NG)EN-DC.  
<endl>

<start>  
ue-mrdc-capability  
featureSetCombinations  
A list of FeatureSetCombination:s for supportedBandCombinationList and supportedBandCombinationListNEDC-Only in UE-MRDC-Capability. The FeatureSetDownlink:s and FeatureSetUplink:s referred to from these FeatureSetCombination:s are defined in the featureSets list in UE-NR-Capability.  
<endl>

<start>  
ue-nr-capability  
featureSetCombinations  
A list of FeatureSetCombination:s for supportedBandCombinationList in UE-NR-Capability. The FeatureSetDownlink:s and FeatureSetUplink:s referred to from these FeatureSetCombination:s are defined in the featureSets list in UE-NR-Capability.  
<endl>

<start>  
ue-nr-capability-v1540  
fr1-fr2-Add-UE-NR-Capabilities  
This instance of UE-NR-CapabilityAddFRX-Mode does not include any other fields than csi-RS-IM-ReceptionForFeedback/ csi-RS-ProcFrameworkForSRS/ csi-ReportFramework.  
<endl>

<start>  
applayermeasconfig  
measConfigAppLayerContainer  
The field contains configuration of application layer measurements, see Annex L (normative) in TS 26.247 [68], clause 16.5 in TS 26.114 [69] and TS 26.118 [70].  
<endl>  
  
  
<start>  
applayermeasconfig  
pauseReporting  
The field indicates whether the transmission of measReportAppLayerContainer is paused or not. Value true indicates the transmission of measReportAppLayerContainer is paused; value false indicates the transmission of measReportAppLayerContainer is not paused.  
<endl>  
  
  
<start>  
applayermeasconfig  
ran-VisibleParameters  
The field indicates whether RAN visible application layer measurements shall be reported or not.  
<endl>  
  
  
<start>  
applayermeasconfig  
rrc-SegAllowed  
This field indicates that RRC segmentation of MeasurementReportAppLayer is allowed. It may be present only if the UE supports RRC segmentation of the MeasurementReportAppLayer message in UL.  
<endl>  
  
  
<start>  
applayermeasconfig  
serviceType  
Indicates the type of application layer measurement. Value streaming indicates Quality of Experience Measurement Collection for streaming services (see TS 26.247 [68]), value mtsi indicates Quality of Experience Measurement Collection for MTSI (see TS 26.114 [69]). value vr indicates Quality of Experience Measurement Collection for VR service (see TS 26.118 [70]). The network always configures serviceType when application layer measurements are initially configured and at fullConfig.  
<endl>  
  
  
<start>  
applayermeasconfig  
transmissionOfSessionStartStop  
The field indicates whether the UE shall transmit indications when sessions in the application layer start and stop. The UE transmits a session start indication upon configuration of this field if a session already has started in the application layer.  
<endl>

<start>  
ran-visibleparameters  
numberOfBufferLevelEntries  
The field contains the maximum number of buffer level entries that can be reported for RAN visible application layer measurements. This field is also used by application layer to calculate the interval of RAN visible buffer level measurement, which is equal to the periodicity of RAN visible application layer measurements reporting divided by numberOfBufferLevelEntries.  
<endl>  
  
  
<start>  
ran-visibleparameters  
ran-VisiblePeriodicity  
The field indicates the periodicity of RAN visible application layer measurements reporting. Value ms120 indicates 120 ms, value ms240 indicates 240 ms and so on. If this field is absent, the periodicity of RAN visible application layer reporting is the same as the reporting periodicity indicated in measConfigAppLayerContainer.  
<endl>  
  
  
<start>  
ran-visibleparameters  
reportPlayoutDelayForMediaStartup  
The field indicates whether the UE shall report Playout Delay for Media Startup for RAN visible application layer measurements.  
<endl>

<start>  
areaconfiguration  
InterFreqTargetInfo  
If configured, it indicates the neighbouring frequency and cells for which UE is requested to perform measurement logging. It can include sync raster or non-sync raster frequencies.  
<endl>

<start>  
bt-namelist  
bt-Name  
If configured, the UE only performs Bluetooth measurements according to the names identified. For each name, it refers to LOCAL NAME defined in Bluetooth specification [51].  
<endl>

<start>  
eutra-mbsfn-subframeconfig  
radioframeAllocationOffset  
Field as defined in MBSFN-SubframeConfig in TS 36.331 [10].  
<endl>  
  
  
<start>  
eutra-mbsfn-subframeconfig  
radioframeAllocationPeriod  
Field as defined in MBSFN-SubframeConfig in TS 36.331 [10], where SFN refers to the SFN of the NR serving cell.  
<endl>  
  
  
<start>  
eutra-mbsfn-subframeconfig  
subframeAllocation1  
Field as defined in MBSFN-SubframeConfig in TS 36.331 [10], where the UE assumes the duplex mode (FDD or TDD) of the NR cell for which the E-UTRA-MBSFN-SubframeConfig is provided.  
<endl>  
  
  
<start>  
eutra-mbsfn-subframeconfig  
subframeAllocation2  
Field as defined in MBSFN-SubframeConfig-v1430 in TS 36.331 [10], where the UE assumes the duplex mode (FDD or TDD) of the NR cell for which the E-UTRA-MBSFN-SubframeConfig is provided.  
<endl>

<start>  
iab-ip-address  
iPv4-Address  
This field is used to provide the allocated IPv4 address.  
<endl>  
  
  
<start>  
iab-ip-address  
iPv6-Address  
This field is used to provide the allocated IPv6 address.  
<endl>  
  
  
<start>  
iab-ip-address  
iPv6-Prefix  
This field is used to provide the allocated IPv6 prefix.  
<endl>

<start>  
logmeasresultlistbt  
bt-Addr  
This field indicates the Bluetooth public address of the Bluetooth beacon as defined in TS 37.355 [49].  
<endl>  
  
  
<start>  
logmeasresultlistbt  
rssi-BT  
This field provides the beacon received signal strength indicator (RSSI) in dBm as defined in TS 37.355 [49].  
<endl>

<start>  
logmeasresultlistwlan  
Bssid  
Basic Service Set Identifier (BSSID) defined in IEEE 802.11-2012 [50].  
<endl>  
  
  
<start>  
logmeasresultlistwlan  
Hessid  
Homogenous Extended Service Set Identifier (HESSID) defined in IEEE 802.11-2012 [50].  
<endl>  
  
  
<start>  
logmeasresultlistwlan  
rssiWLAN  
Measured WLAN RSSI result in dBm. The IE WLAN-RSSI-Range specifies the value range used in WLAN RSSI measurements and thresholds. Integer value for WLAN RSSI measurements is according to mapping table in TS 36.133 [40]. Value 0 corresponds to –infinity, value 1 to -100dBm, value 2 to -99dBm, and so on (i.e. in steps of 1dBm) until value 140, which corresponds to 39dBm, while value 141 corresponds to +infinity.  
<endl>  
  
  
<start>  
logmeasresultlistwlan  
rtt-WLAN  
This field provides the measured roundtrip time between the target device and WLAN AP and optionally the accuracy expressed as the standard deviation of the delay. Units for each of these are 1000ns, 100ns, 10ns, 1ns, and 0.1ns as defined in TS 37.355 [49].  
<endl>  
  
  
<start>  
logmeasresultlistwlan  
rttValue  
This field specifies the Round Trip Time (RTT) measurement between the target device and WLAN AP in units given by the field rttUnits as defined in TS 37.355 [49].  
<endl>  
  
  
<start>  
logmeasresultlistwlan  
rttUnits  
This field specifies the Units for the fields rttValue and rttAccuracy. The available Units are 1000ns, 100ns, 10ns, 1ns, and 0.1ns as defined in TS 37.355 [49].  
<endl>  
  
  
<start>  
logmeasresultlistwlan  
rttAccuracy  
This field provides the estimated accuracy of the provided rttValue expressed as the standard deviation in units given by the field rttUnits as defined in TS 37.355 [49].  
<endl>  
  
  
<start>  
logmeasresultlistwlan  
Ssid  
Service Set Identifier (SSID) defined in IEEE 802.11-2012 [50].  
<endl>  
  
  
<start>  
logmeasresultlistwlan  
Wlan-Identifiers  
Indicates the WLAN parameters used for identification of the WLAN for which the measurement results are applicable.  
<endl>

<start>  
otherconfig  
bfd-RelaxationReportingConfig  
Configuration for the UE to report the relaxation state of BFD measurements.  
<endl>  
  
  
<start>  
otherconfig  
candidateServingFreqListNR  
Indicates for each candidate NR serving cells, the center frequency around which UE is requested to report IDC issues.  
<endl>  
  
  
<start>  
otherconfig  
connectedReporting  
Indicates that the UE can report a preference to remain in RRC\_CONNECTED state following a report to leave RRC\_CONNECTED state. If absent, the UE cannot report a preference to stay in RRC\_CONNECTED state.  
<endl>  
  
  
<start>  
otherconfig  
delayBudgetReportingProhibitTimer  
Prohibit timer for delay budget reporting. Value in seconds. Value s0 means prohibit timer is set to 0 seconds, value s0dot4 means prohibit timer is set to 0.4 seconds, and so on.  
<endl>  
  
  
<start>  
otherconfig  
drx-PreferenceConfig  
Configuration for the UE to report assistance information to inform the gNB about the UE's DRX preferences for power saving.  
<endl>  
  
  
<start>  
otherconfig  
drx-PreferenceProhibitTimer  
Prohibit timer for DRX preferences assistance information reporting. Value in seconds. Value s0 means prohibit timer is set to 0 seconds, value s0dot5 means prohibit timer is set to 0.5 seconds, value s1 means prohibit timer is set to 1 second and so on.  
<endl>  
  
  
<start>  
otherconfig  
idc-AssistanceConfig  
Configuration for the UE to report assistance information to inform the gNB about UE detected IDC problem.  
<endl>  
  
  
<start>  
otherconfig  
maxBW-PreferenceConfig  
Configuration for the UE to report assistance information to inform the gNB about the UE's preferred bandwidth for power saving.  
<endl>  
  
  
<start>  
otherconfig  
maxBW-PreferenceProhibitTimer  
Prohibit timer for preferred bandwidth assistance information reporting. Value in seconds. Value s0 means prohibit timer is set to 0 seconds, value s0dot5 means prohibit timer is set to 0.5 seconds, value s1 means prohibit timer is set to 1 second and so on.  
<endl>  
  
  
<start>  
otherconfig  
maxCC-PreferenceConfig  
Configuration for the UE to report assistance information to inform the gNB about the UE's preferred number of carriers for power saving.  
<endl>  
  
  
<start>  
otherconfig  
maxBW-PreferenceConfigFR2-2  
Configuration for the UE to report assistance information to inform the gNB about the UE's preferred bandwidth for power saving for FR2-2.  
<endl>  
  
  
<start>  
otherconfig  
maxCC-PreferenceProhibitTimer  
Prohibit timer for preferred number of carriers assistance information reporting. Value in seconds. Value s0 means prohibit timer is set to 0 seconds, value s0dot5 means prohibit timer is set to 0.5 seconds, value s1 means prohibit timer is set to 1 second and so on.  
<endl>  
  
  
<start>  
otherconfig  
maxMIMO-LayerPreferenceConfig  
Configuration for the UE to report assistance information to inform the gNB about the UE's preferred number of MIMO layers for power saving.  
<endl>  
  
  
<start>  
otherconfig  
maxMIMO-LayerPreferenceConfigFR2-2  
Configuration for the UE to report assistance information to inform the gNB about the UE's preferred number of MIMO layers for power saving for FR2-2.  
<endl>  
  
  
<start>  
otherconfig  
maxMIMO-LayerPreferenceProhibitTimer  
Prohibit timer for preferred number of number of MIMO layers assistance information reporting. Value in seconds. Value s0 means prohibit timer is set to 0 seconds, value s0dot5 means prohibit timer is set to 0.5 seconds, value s1 means prohibit timer is set to 1 second and so on.  
<endl>  
  
  
<start>  
otherconfig  
minSchedulingOffsetPreferenceConfig  
Configuration for the UE to report assistance information to inform the gNB about the UE's preferred minimumSchedulingOffset value for cross-slot scheduling for power saving.  
<endl>  
  
  
<start>  
otherconfig  
minSchedulingOffsetPreferenceConfigExt  
Configuration for the UE to report assistance information to inform the gNB about the UE's preferred minimumSchedulingOffset value for cross-slot scheduling for power saving for SCS 480 kHz and/or 960 kHz.  
<endl>  
  
  
<start>  
otherconfig  
minSchedulingOffsetPreferenceProhibitTimer  
Prohibit timer for preferred minimumSchedulingOffset assistance information reporting. Value in seconds. Value s0 means prohibit timer is set to 0 seconds, value s0dot5 means prohibit timer is set to 0.5 seconds, value s1 means prohibit timer is set to 1 second and so on.  
<endl>  
  
  
<start>  
otherconfig  
musim-GapAssistanceConfig  
Configuration for the UE to report assistance information for gap preference.  
<endl>  
  
  
<start>  
otherconfig  
musim-GapProhibitTimer  
Prohibit timer for MUSIM assistance information reporting for gap preference.  
<endl>  
  
  
<start>  
otherconfig  
musim-LeaveAssistanceConfig  
Configuration for the UE to report assistance information for leaving RRC\_CONNECTED for MUSIM purpose.  
<endl>  
  
  
<start>  
otherconfig  
musim-LeaveWithoutResponseTimer  
Indicates the timer for the UE to enter RRC\_IDLE for MUSIM purpose as defined in clause 5.3.8.6.  
<endl>  
  
  
<start>  
otherconfig  
obtainCommonLocation  
Requests the UE to attempt to have detailed location information available using GNSS. NR configures the field if includeCommonLocationInfo is configured for one or more measurements.  
<endl>  
  
  
<start>  
otherconfig  
overheatingAssistanceConfig  
Configuration for the UE to report assistance information to inform the gNB about UE detected internal overheating.  
<endl>  
  
  
<start>  
otherconfig  
overheatingIndicationProhibitTimer  
Prohibit timer for overheating assistance information reporting. Value in seconds. Value s0 means prohibit timer is set to 0 seconds, value s0dot5 means prohibit timer is set to 0.5 seconds, value s1 means prohibit timer is set to 1 second and so on.  
<endl>  
  
  
<start>  
otherconfig  
propDelayDiffReportConfig  
Configuration for the UE to report service link propagation delay difference between serving cell and neighbour cell(s).  
<endl>  
  
  
<start>  
otherconfig  
referenceTimePreferenceReporting  
If present, the field indicates the UE is configured to provide reference time assistance information.  
<endl>  
  
  
<start>  
otherconfig  
releasePreferenceConfig  
Configuration for the UE to report assistance information to inform the gNB about the UE's preference to leave RRC\_CONNECTED state.  
<endl>  
  
  
<start>  
otherconfig  
rlm-RelaxationReportingConfig  
Configuration for the UE to report the relaxation state of RLM measurements.  
<endl>  
  
  
<start>  
otherconfig  
releasePreferenceProhibitTimer  
Prohibit timer for release preference assistance information reporting. Value in seconds. Value s0 means prohibit timer is set to 0 seconds, value s0dot5 means prohibit timer is set to 0.5 seconds, value s1 means prohibit timer is set to 1 second and so on. Value infinity means that once a UE has reported a release preference, the UE cannot report a release preference again during the RRC connection.  
<endl>  
  
  
<start>  
otherconfig  
s-SearchDeltaP-Stationary  
Parameter "SSearchDeltaP-StationaryConnected" in 5.7.4.4. Value dB2 corresponds to 2 dB, dB3 corresponds to 3 dB and so on.  
<endl>  
  
  
<start>  
otherconfig  
scg-DeactivationPreferenceConfig  
Configuration of the UE to indicate its preference for SCG deactivation.  
<endl>  
  
  
<start>  
otherconfig  
scg -StatePreferenceProhibitTimer  
Prohibit timer for UE indication of its preference for SCG deactivation. Value in seconds. Value s0 means prohibit timer is set to 0 seconds, value s1 means prohibit timer is set to 1 second and so on.  
<endl>  
  
  
<start>  
otherconfig  
sensorNameList  
Configuration for the UE to report measurements from specific sensors.  
<endl>  
  
  
<start>  
otherconfig  
sl-AssistanceConfigNR  
Indicate whether UE is configured to provide configured grant assistance information for NR sidelink communication.  
<endl>  
  
  
<start>  
otherconfig  
sourceDAPS-FailureReporting  
This field indicates whether the UE shall generate the SHR upon successfully completing the DAPS handover to the target cell and if a radio link failure was experienced in the source PCell while executing the DAPS handover. This field is set in the otherConfig configured by the source cell of the DAPS handover.  
<endl>  
  
  
<start>  
otherconfig  
successHO-Config  
Configuration for the UE to report the successful handover information to the network.  
<endl>  
  
  
<start>  
otherconfig  
t-SearchDeltaP-Stationary  
Parameter "TSearchDeltaP-StationaryConnected" in 5.7.4.4. Value in seconds. Value s5 means 5 seconds, value s10 means 10 seconds and so on.  
<endl>  
  
  
<start>  
otherconfig  
thresholdPercentageT304  
This field indicates the threshold for the ratio in percentage between the elapsed T304 timer and the configured value of the T304 timer. Value p40 corresponds to 40%, value p60 corresponds to 60% and so on. This field is set in the otherConfig configured by the target cell of the handover.  
<endl>  
  
  
<start>  
otherconfig  
thresholdPercentageT310  
This field indicates the threshold for the ratio in percentage between the elapsed T310 timer and the configured value of the T310 timer. Value p40 corresponds to 40%, value p60 corresponds to 60% and so on. This field is set in the otherConfig configured by the source cell of the handover.  
<endl>  
  
  
<start>  
otherconfig  
thresholdPercentageT312  
This field indicates the threshold for the ratio in percentage between the elapsed T312 timer and the configured value(s) of the T312 timer. Value p20 corresponds to 20%, value p40 corresponds to 40% and so on. This field is set in the otherConfig configured by the source cell of the handover.  
<endl>  
  
  
<start>  
otherconfig  
threshPropDelayDiff  
Threshold for service link propagation delay difference report as specified in 5.7.4.2.  
<endl>  
  
  
<start>  
otherconfig  
ul-GapFR2-PreferenceConfig  
Indicates whether UE is configured to request for FR2 UL gap activation/deactivation and preferred FR2 UL gap pattern.  
<endl>

<start>  
neighbourcellinfo  
epochTime  
Indicates the epoch time used along with the ephemerisInfo to derive the propagation delay difference for the associated neighbour cell. The UE considers epoch time, indicated by the SFN and sub-frame number in this field, to be the frame nearest to the frame in which the message indicating the epoch time is received. This field is used based on the timing of the serving cell, i.e. the SFN and sub-frame number indicated in this field refers to the SFN and sub-frame of the serving cell.  
<endl>

<start>  
sensor-namelist  
measUncomBarPre  
If configured, the UE reports the uncompensated Barometeric pressure measurement as defined in TS 37.355 [49].  
<endl>  
  
  
<start>  
sensor-namelist  
measUeSpeed  
If configured, the UE reports the UE speed measurement as defined in TS 37.355 [49].  
<endl>  
  
  
<start>  
sensor-namelist  
measUeOrientation  
If configured, the UE reports the UE orientation information as defined in TS 37.355 [49].  
<endl>

<start>  
visitedcellinfolist  
timeSpent  
This field indicates the duration of stay in the cell or in any cell selection state and/or camped on any cell state in NR or E-UTRA approximated to the closest second. If included in VisitedPSCellInfo, it indicates the duration of stay in the PSCell or without any PSCell. If the duration of stay exceeds 4095s, the UE shall set it to 4095s.  
<endl>  
  
  
<start>  
visitedcellinfolist  
visitedCellId  
This field indicates the visited cell id including NR and E-UTRA cells.  
<endl>

<start>  
wlan-namelist  
WLAN-Name  
If configured, the UE only performs WLAN measurements according to the names identified. For each name, it refers to Service Set Identifier (SSID) defined in IEEE 802.11-2012 [50].  
<endl>

<start>  
sl-bwp-config  
sl-BWP-DiscPoolConfig  
This field indicates the NR sidelink discovery dedicated resource pool configurations on the configured sidelink BWP. The total number of Rx/Tx resource pools configured for communication and discovery does not exceed the maximum number of Rx/Tx resource pool for NR sidelink communication (i.e. maxNrofRXPool-r16/maxNrofTXPool-r16).  
<endl>  
  
  
<start>  
sl-bwp-config  
sl-BWP-Generic  
This field indicates the generic parameters on the configured sidelink BWP.  
<endl>  
  
  
<start>  
sl-bwp-config  
sl-BWP-PoolConfig  
This field indicates the resource pool configurations on the configured sidelink BWP.  
<endl>  
  
  
<start>  
sl-bwp-config  
sl-BWP-Id  
An identifier for this sidelink bandwidth part.  
<endl>  
  
  
<start>  
sl-bwp-config  
sl-BWP-PoolConfigPS  
This field indicates the resource pool configurations for power saving on the configured sidelink BWP. This field does not include sl-TxPoolExceptional.  
<endl>

<start>  
sl-bwp-generic  
sl-LengthSymbols  
This field indicates the number of symbols used for sidelink in a slot without SL-SSB. A single value can be (pre)configured per sidelink bandwidth part.  
<endl>  
  
  
<start>  
sl-bwp-generic  
sl-StartSymbol  
This field indicates the starting symbol used for sidelink in a slot without SL-SSB. A single value can be (pre)configured per sidelink bandwidth part.  
<endl>  
  
  
<start>  
sl-bwp-generic  
sl-TxDirectCurrentLocation  
The sidelink Tx/Rx Direct Current location for the carrier. Only values in the value range of this field between 0 and 3299, which indicate the subcarrier index within the carrier corresponding to the numerology of the corresponding sidelink BWP and value 3300, which indicates "Outside the carrier" and value 3301, which indicates "Undetermined position within the carrier" are used in this version of the specification.  
<endl>

<start>  
sl-bwp-configcommon  
sl-BWP-DiscPoolConfigCommon  
This field indicates the NR sidelink discovery dedicated resource pool configurations on the configured sidelink BWP. The total number of Rx/Tx resource pools configured for communication and discovery does not exceed the maximum number of Rx/Tx resource pool for NR sidelink communication (i.e. maxNrofRXPool-r16/maxNrofTXPool-r16).  
<endl>  
  
  
<start>  
sl-bwp-configcommon  
sl-BWP-Generic  
This field indicates the generic parameters on the configured sidelink BWP.  
<endl>  
  
  
<start>  
sl-bwp-configcommon  
sl-BWP-PoolConfigCommon  
This field indicates the resource pool configurations on the configured sidelink BWP.  
<endl>  
  
  
<start>  
sl-bwp-configcommon  
sl-BWP-PoolConfigCommonPS  
This field indicates the resource pool configurations for power saving on the configured sidelink BWP. This field does not include sl-TxPoolExceptional.  
<endl>

<start>  
sl-bwp-discpoolconfig  
sl-DiscTxPoolScheduling  
Indicates the resources by which the UE is allowed to transmit NR sidelink discover based on network scheduling on the configured BWP. For the PSFCH related configuration, if configured, will be used for PSFCH transmission/reception.  
When this field is configured together with sl-TxPoolScheduling, the resource pool index (which is used in DCI Format 3\_0 in TS 38.212 [17], clause 7.3.1.4.1) is defined as 0, 1, …, x-1 for the resource pools included in the sl-TxPoolScheduling, and x, x+1, …, x+y-1 for the resource pools included in sl-DiscTxPoolScheduling, where x is the number of the resource pools in sl-TxPoolScheduling, and y is the number of resource pools in sl-DiscTxPoolScheduling.  
<endl>

<start>  
sl-bwp-poolconfig  
sl-RxPool  
Indicates the receiving resource pool on the configured BWP. For the PSFCH related configuration, if configured, will be used for PSFCH transmission/reception. If the field is included, it replaces any previous list, i.e. all the entries of the list are replaced and each of the SL-ResourcePool entries is considered to be newly created.  
<endl>  
  
  
<start>  
sl-bwp-poolconfig  
sl-TxPoolExceptional  
Indicates the resources by which the UE is allowed to perform NR sidelink transmission in exceptional conditions on the configured BWP. For the PSFCH related configuration, if configured, will be used for PSFCH transmission/reception.  
<endl>  
  
  
<start>  
sl-bwp-poolconfig  
sl-TxPoolScheduling  
Indicates the resources by which the UE is allowed to transmit NR sidelink communication based on network scheduling on the configured BWP. For the PSFCH related configuration, if configured, will be used for PSFCH transmission/reception.  
<endl>  
  
  
<start>  
sl-bwp-poolconfig  
sl-TxPoolSelectedNormal  
Indicates the resources by which the UE is allowed to transmit NR sidelink communication by UE autonomous resource selection on the configured BWP. For the PSFCH related configuration, if configured, will be used for PSFCH transmission/reception.  
<endl>

<start>  
sl-bwp-poolconfigcommon  
sl-TxPoolExceptional  
Indicates the resources by which the UE is allowed to perform NR sidelink transmission in exceptional conditions on the configured BWP. For the PSFCH related configuration, if configured, will be used for PSFCH transmission/reception. This field is not present when SL-BWP-PoolConfigCommon is included in SidelinkPreconfigNR.  
<endl>

<start>  
sl-cbr-prioritytxconfiglist  
sl-CBR-ConfigIndex  
Indicates the CBR ranges to be used by an index to the entry of the CBR range configuration in sl-CBR-RangeConfigList.  
<endl>  
  
  
<start>  
sl-cbr-prioritytxconfiglist  
sl-DefaultTxConfigIndex  
Indicates the PSSCH transmission parameters to be used by the UEs which do not have available CBR measurement results, by means of an index to the corresponding entry in sl-Tx-ConfigIndexList. Value 0 indicates the first entry in sl-Tx-ConfigIndexList. The field is ignored if the UE has available CBR measurement results.  
<endl>  
  
  
<start>  
sl-cbr-prioritytxconfiglist  
sl-MCS-RangeList  
Indicates the minimum MCS value and maximum MCS value for the associated MCS table(s). UE shall ignore the minimum MCS value and maximum MCS value used for table of 64QAM indicated in SL-CBR-PriorityTxConfigList-r16 if SL-CBR-PriorityTxConfigList-v1650 is present.  
<endl>  
  
  
<start>  
sl-cbr-prioritytxconfiglist  
sl-PriorityThreshold  
Indicates the upper bound of priority range which is associated with the configurations in sl-CBR-ConfigIndex and in sl-Tx-ConfigIndexList. The upper bounds of the priority ranges are configured in ascending order for consecutive entries of SL-PriorityTxConfigIndex in SL-CBR-PriorityTxConfigList. For the first entry of SL-PriorityTxConfigIndex, the lower bound of the priority range is 1.  
<endl>  
  
  
<start>  
sl-cbr-prioritytxconfiglist  
SL-CBR-PriorityTxConfigList-v1650  
If included, it includes the same number of entries, and listed in the same order, as in SL-CBR-PriorityTxConfigList-r16.  
<endl>

<start>  
sl-cbr-commontxconfiglist  
sl-CBR-RangeConfigList  
Indicates the list of CBR ranges. Each entry of the list indicates in SL-CBR-LevelsConfig the upper bound of the CBR range for the respective entry. The upper bounds of the CBR ranges are configured in ascending order for consecutive entries of sl-CBR-RangeConfigList. For the first entry of sl-CBR-RangeConfigList the lower bound of the CBR range is 0. Value 0 corresponds to 0, value 1 to 0.01, value 2 to 0.02, and so on.  
<endl>  
  
  
<start>  
sl-cbr-commontxconfiglist  
sl-CR-Limit  
Indicates the maximum limit on the occupancy ratio. Value 0 corresponds to 0, value 1 to 0.0001, value 2 to 0.0002, and so on (i.e. in steps of 0.0001) until value 10000, which corresponds to 1.  
<endl>  
  
  
<start>  
sl-cbr-commontxconfiglist  
sl-CBR-PSSCH-TxConfigList  
Indicates the list of available PSSCH transmission parameters (such as MCS, sub-channel number, retransmission number and CR limit) configurations.  
<endl>  
  
  
<start>  
sl-cbr-commontxconfiglist  
sl-TxParameters  
Indicates PSSCH transmission parameters.  
<endl>

<start>  
sl-configdedicatednr  
sl-MeasConfigInfoToAddModList  
This field indicates the RSRP measurement configurations for unicast destinations to add and/or modify.  
<endl>  
  
  
<start>  
sl-configdedicatednr  
sl-MeasConfigInfoToReleaseList  
This field indicates the RSRP measurement configurations for unicast destinations to remove.  
<endl>  
  
  
<start>  
sl-configdedicatednr  
sl-PHY-MAC-RLC-Config  
This field indicates the lower layer sidelink radio bearer configurations.  
<endl>  
  
  
<start>  
sl-configdedicatednr  
sl-RadioBearerToAddModList  
This field indicates one or multiple sidelink radio bearer configurations to add and/or modify. This field is not configured to the PC5 connection used for L2 U2N relay operation.  
<endl>  
  
  
<start>  
sl-configdedicatednr  
sl-RadioBearerToReleaseList  
This field indicates one or multiple sidelink radio bearer configurations to remove. This field is not configured to the PC5 connection used for L2 U2N relay operation.  
<endl>

<start>  
sl-phy-mac-rlc-config  
networkControlledSyncTx  
This field indicates whether the UE shall transmit synchronisation information (i.e. become synchronisation source). Value on indicates the UE to transmit synchronisation information while value off indicates the UE to not transmit such information.  
<endl>  
  
  
<start>  
sl-phy-mac-rlc-config  
sl-DRX-Config  
This field indicates the sidelink DRX configuration(s) for unicast, groupcast and/or broadcast communication, as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
sl-phy-mac-rlc-config  
sl-MaxNumConsecutiveDTX  
This field indicates the maximum number of consecutive HARQ DTX before triggering sidelink RLF. Value n1 corresponds to 1, value n2 corresponds to 2, and so on.  
<endl>  
  
  
<start>  
sl-phy-mac-rlc-config  
sl-FreqInfoToAddModList  
This field indicates the NR sidelink communication configuration on some carrier frequency (ies) to add and/or modify. In this release, only one entry can be configured in the list.  
<endl>  
  
  
<start>  
sl-phy-mac-rlc-config  
sl-FreqInfoToReleaseList  
This field indicates the NR sidelink communication configuration on some carrier frequency (ies) to remove. In this release, only one entry can be configured in the list.  
<endl>  
  
  
<start>  
sl-phy-mac-rlc-config  
sl-RLC-BearerToAddModList  
This field indicates one or multiple sidelink RLC bearer configurations to add and/or modify.  
<endl>  
  
  
<start>  
sl-phy-mac-rlc-config  
sl-RLC-BearerToReleaseList  
This field indicates one or multiple sidelink RLC bearer configurations to remove.  
<endl>  
  
  
<start>  
sl-phy-mac-rlc-config  
sl-RLC-ChannelToAddModList  
This field indicates one or multiple PC5 Relay RLC Channel configurations to add and/or modify. Each PC5 Relay RLC channel configuration provided by network to L2 U2N Relay UE is uniquely associated with one L2 U2N Remote UE.  
<endl>  
  
  
<start>  
sl-phy-mac-rlc-config  
sl-RLC-ChannelToReleaseList  
This field indicates one or multiple PC5 Relay RLC Channel configurations to remove.  
<endl>  
  
  
<start>  
sl-phy-mac-rlc-config  
sl-ScheduledConfig  
Indicates the configuration for UE to transmit NR sidelink communication based on network scheduling. This field is not configured simultaneously with sl-UE-SelectedConfig. This field is not configured to a L2 U2N Remote UE.  
<endl>  
  
  
<start>  
sl-phy-mac-rlc-config  
sl-UE-SelectedConfig  
Indicates the configuration used for UE autonomous resource selection. This field is not configured simultaneously with sl-ScheduledConfig.  
<endl>  
  
  
<start>  
sl-phy-mac-rlc-config  
sl-CSI-Acquisition  
Indicates whether CSI reporting is enabled in sidelink unicast. If the field is absent, sidelink CSI reporting is disabled.  
<endl>  
  
  
<start>  
sl-phy-mac-rlc-config  
sl-CSI-SchedulingRequestId  
If present, it indicates the scheduling request configuration applicable for Sidelink CSI Reporting MAC CE and Sidelink DRX Command MAC CE, as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
sl-phy-mac-rlc-config  
sl-SSB-PriorityNR  
This field indicates the priority of NR sidelink SSB transmission and reception.  
<endl>

<start>  
sl-configuredgrantconfig  
sl-ConfigIndexCG  
This field indicates the ID to identify configured grant for sidelink.  
<endl>  
  
  
<start>  
sl-configuredgrantconfig  
sl-CG-MaxTransNumList  
This field indicates the maximum number of times that a TB can be transmitted using the resources provided by the configured grant. sl-Priority corresponds to the logical channel priority.  
<endl>  
  
  
<start>  
sl-configuredgrantconfig  
sl-FreqResourceCG-Type1  
Indicates the frequency resource location of sidelink configured grant type 1. An index giving valid combinations of one or two starting sub-channel and length (jointly encoded) as resource indicator value (RIV), as defined in TS 38.214 [19].  
<endl>  
  
  
<start>  
sl-configuredgrantconfig  
sl-HARQ-ProcID-Offset  
Indicates the offset used in deriving the HARQ process ID for SL configured grant type 1 or SL configured type 2, see TS 38.321 [3], clause 5.8.3.  
<endl>  
  
  
<start>  
sl-configuredgrantconfig  
sl-N1PUCCH-AN  
This field indicates the HARQ resource for PUCCH for sidelink configured grant type 1. The actual PUCCH-Resource is configured in sl-PUCCH-Config and referred to by its ID.  
<endl>  
  
  
<start>  
sl-configuredgrantconfig  
sl-N1PUCCH-AN-Type2  
This field indicates the HARQ resource for PUCCH for PSCCH/PSSCH transmissions without a corresponding PDCCH on sidelink configured grant type 2. The actual PUCCH-Resource is configured in sl-PUCCH-Config and referred to by its ID.  
<endl>  
  
  
<start>  
sl-configuredgrantconfig  
sl-NrOfHARQ-Processes  
This field indicates the number of HARQ processes configured for a specific configured grant. It applies for both Type 1 and Type 2.  
<endl>  
  
  
<start>  
sl-configuredgrantconfig  
sl-PeriodCG  
This field indicates the period of sidelink configured grant in the unit of ms.  
<endl>  
  
  
<start>  
sl-configuredgrantconfig  
sl-PSFCH-ToPUCCH-CG-Type1  
This field, for configured grant type 1, indicates slot offset between the PSFCH associated with the last PSSCH resource of each period and the PUCCH occasion used for reporting sidelink HARQ.  
<endl>  
  
  
<start>  
sl-configuredgrantconfig  
sl-ResourcePoolID  
Indicates the resource pool in which the configured sidelink grant Type 1 is applied.  
<endl>  
  
  
<start>  
sl-configuredgrantconfig  
sl-StartSubchannelCG-Type1  
This field indicates the starting sub-channel of sidelink configured grant Type 1. An index giving valid sub-channel index.  
<endl>  
  
  
<start>  
sl-configuredgrantconfig  
sl-TimeOffsetCG-Type1  
This field indicates the slot offset with respect to logical slot defined by sl-TimeReferenceSFN-Type1, as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
sl-configuredgrantconfig  
sl-TimeReferenceSFN-Type1  
Indicates SFN used for determination of the offset of a resource in time domain. If it is present, the UE uses the 1st logical slot of associated resource pool after the starting time of the closest SFN with the indicated number preceding the reception of the sidelink configured grant configuration Type 1 as reference logical slot, see TS 38.321 [3], clause 5.8.3. If it is not present, the reference SFN is 0.  
<endl>  
  
  
<start>  
sl-configuredgrantconfig  
sl-TimeResourceCG-Type1  
This field indicates the time resource location of sidelink configured grant Type 1. An index giving valid combinations of up to two slot positions (jointly encoded) as time resource indicator value (TRIV), as defined in TS 38.212 [17].  
<endl>

<start>  
sl-drx-config  
sl-DRX-ConfigGC-BC  
This field indicates the sidelink DRX configurations for groupcast and broadcast communication, as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
sl-drx-config  
sl-DRX-ConfigUC-ToReleaseList  
This field indicates the sidelink DRX configurations for corresponding unicast destinations to remove.  
<endl>  
  
  
<start>  
sl-drx-config  
sl-DRX-ConfigUC-ToAddModList  
This field indicates the sidelink DRX configurations for corresponding unicast destinations to add and/or modify.  
<endl>

<start>  
sl-drx-configgc-bc  
sl-DefaultDRX-GC-BC  
Indicates the default sidelink DRX configuration for groupcast and broadcast communications, which is used for QoS profile(s) that cannot be mapped into DRX configuration(s) configured for dedicated QoS profile(s). This field can be applied for the broadcast based or unicast based communication of Direct Link Establishment Request as described in TS 24.587 [57] and discovery message as described in TS 24.554 [72].  
<endl>  
  
  
<start>  
sl-drx-configgc-bc  
sl-DRX-GC-BC-PerQoS-List  
List of one or multiple sidelink DRX configurations for groupcast and broadcast communication, which are mapped from QoS profile(s).  
<endl>  
  
  
<start>  
sl-drx-configgc-bc  
sl-DRX-GC-BC-Cycle  
Value in ms, ms10 corresponds to 10ms, ms20 corresponds to 20 ms, ms32 corresponds to 32 ms, and so on.  
<endl>  
  
  
<start>  
sl-drx-configgc-bc  
sl-DRX-GC-BC-MappedQoS-FlowsList  
List of QoS profiles of the NR sidelink communication, which are mapped to a sidelink DRX configuration.  
<endl>  
  
  
<start>  
sl-drx-configgc-bc  
sl-DRX-GC-BC-OnDurationTimer  
Value in multiples of 1/32 ms (subMilliSeconds) or in ms (milliSecond). For the latter, value ms1 corresponds to 1 ms, value ms2 corresponds to 2 ms, and so on.  
<endl>  
  
  
<start>  
sl-drx-configgc-bc  
sl-DRX-GC-HARQ-RTT-Timer1, sl-DRX-GC-HARQ-RTT-Timer2  
Value in number of slot lengths of the BWP where the transport block was received. Value sl0 corresponds to 0 slots, sl1 corresponds to 1 slot, sl2 corresponds to 2 slots, and so on. sl-DRX-GC-HARQ-RTT-Timer1 is used for HARQ feedback enabled sidelink retransmission if SCI does not indicate retransmission resource(s). sl-DRX-GC-HARQ-RTT-Timer2 is used for HARQ feedback disabled sidelink retransmission in resource pool configured with PSFCH if SCI does not indicate retransmission resource(s).  
<endl>  
  
  
<start>  
sl-drx-configgc-bc  
sl-DRX-GC-Generic  
Indicates a sidelink DRX configuration for groupcast communication, which is applicable to any QoS profile or any Destination Layer-2 ID.  
<endl>  
  
  
<start>  
sl-drx-configgc-bc  
sl-DRX-GC-InactivityTimer  
Value in multiple integers of 1 ms, ms0 corresponds to 0, ms1 corresponds to 1 ms, ms2 corresponds to 2 ms, and so on. This field is only valid for groupcast communication.  
<endl>  
  
  
<start>  
sl-drx-configgc-bc  
sl-DRX-GC-RetransmissionTimer  
Value in number of slot lengths of the BWP where the transport block was received. Value sl0 corresponds to 0 slots, sl1 corresponds to 1 slot, sl2 corresponds to 2 slots, and so on.  
<endl>

<start>  
sl-drx-configuc  
sl-drx-CycleStartOffset  
Sidelink drx-Cycle in ms and sidelink drx-StartOffset in multiples of 1 ms.  
<endl>  
  
  
<start>  
sl-drx-configuc  
sl-drx-HARQ-RTT-Timer1, sl-drx-HARQ-RTT-Timer2  
Value in number of slot lengths of the BWP where the transport block was received. Value sl0 corresponds to 0 slots, sl1 corresponds to 1 slot, sl2 corresponds to 2 slots, and so on. sl-drx-HARQ-RTT-Timer1 is used for HARQ feedback enabled sidelink retransmission if SCI does not indicate retransmission resource(s). sl-drx-HARQ-RTT-Timer2 is used for HARQ feedback disabled sidelink retransmission in resource pool configured with PSFCH if SCI does not indicate retransmission resource(s).  
<endl>  
  
  
<start>  
sl-drx-configuc  
sl-drx-InactivityTimer  
Value in number of slot lengths of the BWP where the transport block was received, sl0 corresponds to 0, sl1 corresponds to 1 slot, sl2 corresponds to 2 slots, and so on.  
<endl>  
  
  
<start>  
sl-drx-configuc  
sl-drx-onDurationTimer  
Value in multiples of 1/32 ms (subMilliSeconds) or in ms (milliSecond). For the latter, value ms1 corresponds to 1 ms, value ms2 corresponds to 2 ms, and so on.  
<endl>  
  
  
<start>  
sl-drx-configuc  
sl-drx-RetransmissionTimer  
Value in number of slot lengths of the BWP where the transport block was received. Value sl0 corresponds to 0 slots, sl1 corresponds to 1 slot, sl2 corresponds to 2 slots, and so on.  
<endl>  
  
  
<start>  
sl-drx-configuc  
sl-drx-SlotOffset  
Value in 1/32 ms. Value 0 corresponds to 0 ms, value 1 corresponds to 1/32 ms, value 2 corresponds to 2/32 ms, and so on.  
<endl>

<start>  
sl-freqconfig  
frequencyShift7p5khzSL  
Enable the NR SL transmission with a 7.5 kHz shift to the LTE raster. If the field is absent, the frequency shift is disabled.  
<endl>  
  
  
<start>  
sl-freqconfig  
sl-AbsoluteFrequencyPointA  
Absolute frequency of the reference resource block (Common RB 0). Its lowest subcarrier is also known as Point A.  
<endl>  
  
  
<start>  
sl-freqconfig  
sl-AbsoluteFrequencySSB  
Indicates the frequency location of sidelink SSB. The transmission bandwidth for sidelink SSB is within the bandwidth of this sidelink BWP.  
<endl>  
  
  
<start>  
sl-freqconfig  
sl-BWP-ToAddModList  
This field indicates the list of sidelink BWP(s) on which the NR sidelink communication configuration is to be added or reconfigured. In this release, only one BWP is allowed to be configured for NR sidelink communication.  
<endl>  
  
  
<start>  
sl-freqconfig  
sl-BWP-ToReleaseList  
This field indicates the list of sidelink BWP(s) on which the NR sidelink communication configuration is to be released.  
<endl>  
  
  
<start>  
sl-freqconfig  
sl-Freq-Id  
This field indicates the identity of the dedicated configuration information on the carrier frequency for NR sidelink communication.  
<endl>  
  
  
<start>  
sl-freqconfig  
sl-SCS-SpecificCarrierList  
A set of UE specific channel bandwidth and location configurations for different subcarrier spacings (numerologies). Defined in relation to Point A. The UE uses the configuration provided in this field only for the purpose of channel bandwidth and location determination. In this release, only one SCS-SpecificCarrier is allowed to be configured for NR sidelink communication.  
<endl>  
  
  
<start>  
sl-freqconfig  
sl-SyncPriority  
This field indicates synchronization priority order, as specified in clause 5.8.6.  
<endl>  
  
  
<start>  
sl-freqconfig  
valueN  
Indicate the NR SL transmission with a valueN \*5kHz shift to the LTE raster. (see TS 38.101-1 [15], clause 5.4E.2).  
<endl>

<start>  
sl-freqconfigcommon  
frequencyShift7p5khzSL  
Enable the NR SL transmission with a 7.5 kHz shift to the LTE raster. If the field is absent, the frequency shift is disabled.  
<endl>  
  
  
<start>  
sl-freqconfigcommon  
sl-AbsoluteFrequencyPointA  
Absolute frequency of the reference resource block (Common RB 0). Its lowest subcarrier is also known as Point A.  
<endl>  
  
  
<start>  
sl-freqconfigcommon  
sl-AbsoluteFrequencySSB  
Indicates the frequency location of sidelink SSB. The transmission bandwidth for sidelink SSB is within the bandwidth of this sidelink BWP.  
<endl>  
  
  
<start>  
sl-freqconfigcommon  
sl-BWP-List  
This field indicates the list of sidelink BWP(s) on which the NR sidelink communication configuration. In this release, only one BWP is allowed to be configured for NR sidelink communication.  
<endl>  
  
  
<start>  
sl-freqconfigcommon  
sl-NbAsSync  
This field indicates whether the network can be selected as synchronization reference directly/indirectly only, if sl-SyncPriority is set to gnss. If this field is set to TRUE, the network is enabled to be selected as synchronization reference directly/indirectly. The field is only present in SidelinkPreconfigNR. Otherwise it is absent.  
<endl>  
  
  
<start>  
sl-freqconfigcommon  
sl-SyncPriority  
This field indicates synchronization priority order, as specified in clause 5.8.6..  
<endl>  
  
  
<start>  
sl-freqconfigcommon  
sl-SyncConfigList  
This field indicates the configuration by which the UE is allowed to receive and transmit synchronisation information for NR sidelink communication. Network configures sl-SyncConfig including txParameters when configuring UEs to transmit synchronisation information. If this field is configured in SL-PreconfigurationNR-r16, only one entry is configured in sl-SyncConfigList.  
<endl>  
  
  
<start>  
sl-freqconfigcommon  
valueN  
Indicate the NR SL transmission with a valueN \*5kHz shift to the LTE raster (see TS 38.101-1 [15], clause 5.4E.2).  
<endl>

<start>  
sl-interue-coordinationscheme1  
sl-Condition1-A-2  
Indicates disabling the use of condition of excluding from preferred resource set resource(s) in slot(s) where UE-A, when it is intended receiver of UE-B, does not expect to perform SL reception from UE-B due to half duplex operation.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme1  
sl-ContainerCoordInfo  
Indicates whether a SCI format 2-C can be used as the container of inter-UE coordination information transmission from UE-A to UE-B in Scheme 1 in addition to using MAC CE.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme1  
sl-ContainerRequest  
Indicates whether a SCI format 2-C can be used as the container of an explicit request for inter-UE coordination information transmission from UE-B to UE-A in Scheme 1 in addition to using MAC CE.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme1  
sl-DetermineResourceType  
Indicates how to determine the resource set type to be provided by inter-UE coordination information transmission. Value "uea" means the resource set type is determined by UE-A's implementation. Value "ueb" means the resource set type is determined by UE-B's request.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme1  
sl-IUC-Condition  
Indicates whether inter-UE coordination information triggered by a condition is enabled or not other than explicit request reception.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme1  
sl-IUC-Explicit  
Indicates whether inter-UE coordination information triggered by an explicit request is enabled or not.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme1  
sl-MaxSlotOffsetTRIV  
Indicates the maximum value of logical slot offset with respect to a reference slot that is used for representing the first resource location of each TRIV to indicate the set of resources in Scheme 1 as specified in TS 38.214 [19].  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme1  
sl-NumSubCH-PreferredResousrceSet  
Indicates the number of sub-channels used for determining the preferred resource set in Scheme 1 when the inter-UE coordination information transmission is triggered by a condition other than explicit request reception.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme1  
sl-PriorityCoordInfoCondition  
Parameter used to determine the priority values for the purpose defined in TS 38.213 [13] and TS 38.214 [19] including, the priority value for sensing and candidate resource (re-)selection for transmitting the TB carrying the IUC MAC CE and the priority value in the SCI Format 1-A corresponding to the TB carrying the IUC MAC CE, triggered by a condition other than explicit request reception in Scheme 1. The priority value of IUC MAC CE used in LCP procedure (see TS 38.321 [3]) is fixed as "1".  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme1  
sl-PriorityCoordInfoExplicit  
Parameter used to determine the priority values for the purpose defined in TS 38.213 [13] and TS 38.214 [19] including, the priority value for sensing and candidate resource (re-)selection for transmitting the TB carrying the IUC MAC CE and the priority value in the SCI Format 1-A corresponding to the TB carrying the IUC MAC CE, triggered by an explicit request in Scheme 1. The priority value of IUC MAC CE used in LCP procedure (see TS 38.321 [3]) is fixed as "1".  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme1  
sl-PriorityPreferredResourceSet  
Indicates the priority value used for determining the preferred resource set in Scheme 1 when the inter-UE coordination information transmission is triggered by a condition other than explicit request reception.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme1  
sl-PriorityRequest  
Parameter used to determine the priority values for the purpose defined in TS 38.213 [13] and TS 38.214 [19] including, the priority value for sensing and candidate resource (re-)selection for transmitting the TB carrying the IUC request MAC CE and the priority value in the SCI Format 1-A corresponding to the TB carrying the IUC request MAC CE, in an explicit request for inter-UE coordination information in Scheme 1. The priority value of IUC request MAC CE used in LCP procedure (see TS 38.321 [3]) is fixed as "1".  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme1  
sl-ReservedPeriodPreferredResourceSet  
Indicates the resource reservation interval used for determining the preferred resource set in Scheme 1 when the inter-UE coordination information transmission is triggered by a condition, by means of an index to the corresponding entry of sl-ResourceReservePeriodList-r16.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme1  
sl-TriggerConditionCoordInfo  
Indicates the additional alternative trigger condition of inter-UE coordination information triggered by a condition rather than request reception in Scheme-1 from UE-A to UE-B. Value 0 means inter-UE coordination information is triggered by UE-A's implementation. Value 1 means inter-UE coordination information can be triggered only when UE-A has data to be transmitted together with the inter-UE coordination information to UE-B.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme1  
sl-TriggerConditionRequest  
Indicates the trigger condition of an explicit request from UE-B to UE-A. Value 0 means the explicit request is triggered by UE-B's implementation. Value 1 means the explicit request can be triggered only when UE-B has data to be transmitted to UE-A.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme1  
sl-ThresholdRSRP-Condition1-B-1-Option1List  
Indicates the RSRP threshold used to determine reserved resource(s) of other UE(s) whose RSRP measurement is larger than it as the set of resource(s) non-preferred for UE-B's transmission for Condition 1-B-1 of Scheme 1, as specified in TS 38.214 [19]. Value 0 corresponds to minus infinity dBm, value 1 corresponds to -128dBm, value 2 corresponds to -126dBm, value n corresponds to (-128 + (n-1)\*2) dBm and so on, value 66 corresponds to infinity dBm.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme1  
sl-ThresholdRSRP-Condition1-B-1-Option2List  
Indicates the RSRP threshold used to determine reserved resource(s) of other UE(s) whose RSRP measurement is smaller than it as the set of resource(s) non-preferred for UE-B's transmission for Condition 1-B-1 of Scheme 1, as specified in TS 38.214 [19]. Value 0 corresponds to minus infinity dBm, value 1 corresponds to -128dBm, value 2 corresponds to -126dBm, value n corresponds to (-128 + (n-1)\*2) dBm and so on, value 66 corresponds to infinity dBm.  
<endl>

<start>  
sl-interue-coordinationscheme2  
sl-DeltaRSRP-Thresh  
Indicates the RSRP threshold delta value corresponding to deltaRSRPThresh specified in clause 16.3.0 of TS 38.213 [13] and used to determine reserved resource(s) of other UE(s). Value in dB. Only even values (step size 2) allowed.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme2  
sl-IndicationUE-B  
Indicates whether to enable or disable the usage of 1 LSB of reserved bits of a SCI format 1-A to indicate of whether UE scheduling a conflict TB can be UE-B or not.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme2  
sl-IUC-Scheme2  
Indicates whether inter-UE coordination Scheme 2 is enabled or not.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme2  
sl-OptionForCondition2-A-1  
Indicates the RSRP threshold used to consider additional criteria for condition 2-A-1. Value 0 corresponds to using the RSRP threshold according to the priorities included in the SCI, UE uses thresholds sl-Thres-RSRP-List, in its resource pool configuration sl-UE-SelectedConfigRP, corresponding to ThresPSSCH-RSRP-List specified in clause 16.3.0 of TS 38.213 [13]. Value 1 corresponds to using a (pre)configured RSRP threshold delta value sl-DeltaRSRP-Thresh, corresponding to deltaRSRPThresh specified in clause 16.3.0 of TS 38.213 [13].  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme2  
sl-PSFCH-Occasion  
Indicates the reference slot from which a PSFCH occasion for inter-UE coordination information transmission is derived. Value 0 corresponds to the slot where UE-B's SCI is transmitted and value 1 corresponds to the slot where expected/potential resource conflict occurs on PSSCH resource indicated by UE-B's SCI.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme2  
sl-RB-SetPSFCH  
Indicates the set of PRBs that are actually used for inter-UE coordination information transmission and reception in Scheme 2. The leftmost bit of the bitmap refers to the lowest RB index in the resource pool, and so on.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme2  
sl-SlotLevelResourceExclusion  
Indicates that physical layer of UE-B reports resources in a slot including the next reserved resource indicated by the corresponding UE-B's SCI to higher layer.  
<endl>  
  
  
<start>  
sl-interue-coordinationscheme2  
sl-TypeUE-A  
Indicates that a non-destination UE of a TB transmitted by UE-B can be UE-A which sends inter-UE coordination information to UE-B, when UE-A is a destination UE of another TB conflicting with the TB transmitted by UE-B.  
<endl>

<start>  
sl-logicalchannelconfig  
sl-AllowedCG-List  
This restriction applies only when the SL grant is a configured grant. If present, SL MAC SDUs from this logical channel can only be mapped to the indicated configured grant configuration. If the size of the sequence is zero, then SL MAC SDUs from this logical channel cannot be mapped to any configured grant configurations. If the field is not present, SL MAC SDUs from this logical channel can be mapped to any configured grant configurations. If the field sl-ConfiguredGrantType1Allowed is present, only those sidelink configured grant type 1 configurations indicated in this sequence are allowed for use by this sidelink logical channel; otherwise, this sequence shall not include any sidelink configured grant type 1 configuration. Corresponds to "sl-AllowedCG-List" as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
sl-logicalchannelconfig  
sl-AllowedSCS-List  
If present, indicate the numerology of UL-SCH resources that this sidelink logical channel is mapped to, when checking the SR trigger condition. Corresponds to ' sl-AllowedSCS-List' in TS 38.321 [3].  
<endl>  
  
  
<start>  
sl-logicalchannelconfig  
sl-BucketSizeDuration  
Value in ms. ms5 corresponds to 5 ms, value ms10 corresponds to 10 ms, and so on.  
<endl>  
  
  
<start>  
sl-logicalchannelconfig  
sl-ConfiguredGrantType1Allowed  
If present and set to true, or if the capability lcp-RestrictionSidelink as specified in TS 38.306 [26] is not indicated, SL MAC SDUs from this sidelink logical channel can be transmitted on a sidelink configured grant type 1. Otherwise, SL MAC SDUs from this logical channel cannot be transmitted on a sidelink configured grant type 1. Corresponds to 'sl-configuredGrantType1Allowed' in TS 38.321 [3].  
<endl>  
  
  
<start>  
sl-logicalchannelconfig  
sl-HARQ-FeedbackEnabled  
Network always includes this field. It indicates the HARQ feedback enabled/disabled restriction in LCP for this sidelink logical channel. If set to enabled, the sidelink logical channel will be multiplexed only with a logical channel which enabling the HARQ feedback. If set to disabled, the sidelink logical channel cannot be multiplexed with a logical channel which enabling the HARQ feedback. Corresponds to 'sl-HARQ-FeedbackEnabled' in TS 38.321 [3]. If this field of at least one sidelink logical channel for the UE is set to enabled, sl-PSFCH-Config should be mandatory present in configuration SL-ResourcePool of at least one of the sidelink resource pools.  
<endl>  
  
  
<start>  
sl-logicalchannelconfig  
sl-LogicalChannelGroup  
ID of the sidelink logical channel group, as specified in TS 38.321 [3], which the sidelink logical channel belongs to.  
<endl>  
  
  
<start>  
sl-logicalchannelconfig  
sl-LogicalChannelSR-DelayTimerApplied  
Indicates whether to apply the delay timer for SR transmission for this sidelink logical channel. Set to false if logicalChannelSR-DelayTimer is not included in sl-BSR-Config.  
<endl>  
  
  
<start>  
sl-logicalchannelconfig  
sl-MaxPUSCH-Duration  
If present, indicate the maximum PUSCH duration of UL-SCH resources that this sidelink logical channel is mapped to, when checking the SR trigger condition. Corresponds to "sl-MaxPUSCH-Duration" in TS 38.321 [3].  
<endl>  
  
  
<start>  
sl-logicalchannelconfig  
sl-PrioritisedBitRate  
Value in kiloBytes/s. Value kBps0 corresponds to 0 kiloBytes/s, value kBps8 corresponds to 8 kiloBytes/s, value kBps16 corresponds to 16 kiloBytes/s, and so on.  
<endl>  
  
  
<start>  
sl-logicalchannelconfig  
sl-Priority  
Sidelink logical channel priority, as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
sl-logicalchannelconfig  
sl-SchedulingRequestId  
If present, it indicates the scheduling request configuration applicable for this sidelink logical channel, as specified in TS 38.321 [3].  
<endl>

<start>  
sl-l2relayue-config  
sl-RemoteUE-ToAddModList  
List of L2 U2N Remote UEs to be added and modified to the L2 U2N Relay UE.  
<endl>  
  
  
<start>  
sl-l2relayue-config  
sl-RemoteUE-ToReleaseList  
List of L2 U2N Remote UEs to be released by the L2 U2N Relay UE.  
<endl>

<start>  
sl-l2remoteue-config  
sl-SRAP-ConfigRemote  
Indicates SRAP configuration used for L2 U2N Remote UE.  
<endl>  
  
  
<start>  
sl-l2remoteue-config  
sl-UEIdentityRemote  
Indicates the C-RNTI to the L2 U2N Remote UE.  
<endl>

<start>  
sl-measconfigcommon  
sl-MeasIdListCommon  
List of sidelink measurement identities  
<endl>  
  
  
<start>  
sl-measconfigcommon  
sl-MeasObjectListCommon  
List of sidelink measurement objects.  
<endl>  
  
  
<start>  
sl-measconfigcommon  
sl-QuantityConfigCommon  
Indicates the layer 3 filtering coefficient for sidelink measurement.  
<endl>  
  
  
<start>  
sl-measconfigcommon  
sl-ReportConfigListCommon  
List of sidelink measurement reporting configurations.  
<endl>

<start>  
sl-measconfiginfo  
sl-MeasIdToAddModList  
List of sidelink measurement identities to add and/or modify.  
<endl>  
  
  
<start>  
sl-measconfiginfo  
sl-MeasIdToRemoveList  
List of sidelink measurement identities to remove.  
<endl>  
  
  
<start>  
sl-measconfiginfo  
sl-MeasObjectToAddModList  
List of sidelink measurement objects to add and/or modify.  
<endl>  
  
  
<start>  
sl-measconfiginfo  
sl-MeasObjectToRemoveList  
List of sidelink measurement objects to remove.  
<endl>  
  
  
<start>  
sl-measconfiginfo  
sl-QuantityConfig  
Indicates the layer 3 filtering coefficient for sidelink measurement.  
<endl>  
  
  
<start>  
sl-measconfiginfo  
sl-ReportConfigToAddModList  
List of sidelink measurement reporting configurations to add and/or modify.  
<endl>  
  
  
<start>  
sl-measconfiginfo  
sl-ReportConfigToRemoveList  
List of sidelink measurement reporting configurations to remove.  
<endl>

<start>  
sl-measobjectlist  
sl-MeasObjectId  
It is used to identify a sidelink measurement object configuration.  
<endl>  
  
  
<start>  
sl-measobjectlist  
sl-MeasObject  
It specifies information applicable for sidelink DMRS measurement.  
<endl>

<start>  
sl-pbps-cps-config  
sl-Additional-PBPS-Occasion  
Indicates that UE additionally monitors periodic sensing occasions that correspond to a set of values. (see TS 38.214 [19], clause 8.1.4).  
<endl>  
  
  
<start>  
sl-pbps-cps-config  
sl-AllowedResourceSelectionConfig  
Indicates the allowed resource selection mechanism(s), i.e. full sensing only, partial sensing only, random resource selection only, or any combination(s) thereof. (see TS 38.214 [19], clause 8.1.4). Only c1, c4 , c5 or c7 can be configured for a Rel-16 resource pool. If this field is not configured for a resource pool included in sl-TxPoolSelectedNormal, only full sensing is allowed in the corresponding resource pool.  
c1: only full sensing allowed  
c2: only partial sensing allowed  
c3: only random selection allowed  
c4: full sensing+random selection allowed  
c5: full sensing+ partial sensing allowed  
c6: partial sensing + random selection allowed  
c7: full sensing+ partial sensing + random selection allowed.  
<endl>  
  
  
<start>  
sl-pbps-cps-config  
sl-CPS-WindowAperiodic  
Parameter that indicates the minimum size of contiguous partial sensing window in logical slot units for a resource (re)selection procedure and re-evaluation/pre-emption checking triggered by aperiodic transmission. (see TS 38.214 [19], clause 8.1.4). If not configured, the size of contiguous partial sensing window in logical slot units is 31.  
<endl>  
  
  
<start>  
sl-pbps-cps-config  
sl-CPS-WindowPeriodic  
Indicates the size of contiguous partial sensing window in logical slot units when UE performs periodic-based and contiguous partial sensing for a resource (re)selection procedure triggered by periodic transmission. If not configured, the size of contiguous partial sensing window in logical slot units is 31.  
<endl>  
  
  
<start>  
sl-pbps-cps-config  
sl-DefaultCBR-PartialSensing  
Indicates default value of SL CBR measurement for a UE that is configured to perform partial sensing by its higher layer (including when SL DRX is configured) if the number of SL RSSI measurement slots over CBR measurement window is below sl-MinNumRssiMeasurementSlots, (see TS 38.214 [19], clause 8.1.6). Value 0 corresponds to 0, value 1 to 0.01, value 2 to 0.02, and so on.  
<endl>  
  
  
<start>  
sl-pbps-cps-config  
sl-DefaultCBR-RandomSelection  
Indicates default value of CBR measurement for a UE that performs random resource selection if no SL CBR measurement result over SL CBR measurement window, (see TS 38.214 [19], clause 8.1.6). Value 0 corresponds to 0, value 1 to 0.01, value 2 to 0.02, and so on.  
<endl>  
  
  
<start>  
sl-pbps-cps-config  
sl-MinNumCandidateSlotsAperiodic  
Indicates the minimum number of Y' slots that are included in the possible candidate resources corresponding to periodic-based partial sensing and/or contiguous partial sensing for resource (re)selection triggered by aperiodic transmission. (see TS 38.214 [19], clause 8.1.4).  
<endl>  
  
  
<start>  
sl-pbps-cps-config  
sl-MinNumCandidateSlotsPeriodic  
Indicates the minimum number of Y slots that are included in the possible candidate resources corresponding to periodic-based partial sensing for resource (re)selection triggered by periodic transmission. (see TS 38.214 [19], clause 8.1.4).  
<endl>  
  
  
<start>  
sl-pbps-cps-config  
sl-MinNumRssiMeasurementSlots  
Indicates a threshold for a minimum number of SL RSSI measurement slots over CBR measurement window for which the SL RSSI is measured for a UE that is configured to perform partial sensing by its higher layer (including when SL DRX is configured). (see TS 38.214 [19], clause 8.1.6).  
<endl>  
  
  
<start>  
sl-pbps-cps-config  
sl-PartialSensingInactiveTime  
Indicates whether or not UE is required to perform SL reception of PSCCH and RSRP measurement for partial sensing on slots in SL DRX inactive time when partial sensing is configured by its higher layer. (see TS 38.214 [19], clause 8.1.4).  
<endl>  
  
  
<start>  
sl-pbps-cps-config  
sl-PBPS-OccasionReservePeriodList  
Indicates the subset of periodicity values from sl-ResourceReservePeriodList used to determine periodic sensing occasions in periodic-based partial sensing, by means of an index to the corresponding entry in sl-ResourceReservePeriodList-r16. If not configured, all periodicity values from sl-ResourceReservePeriodList are used to determine periodic sensing occasions in periodic-based partial sensing (see TS 38.214 [19], clause 8.1.4).  
<endl>

<start>  
sl-pdcp-config  
sl-DiscardTimer  
Value in ms of discardTimer specified in TS 38.323 [5]. Value ms50 corresponds to 50 ms, value ms100 corresponds to 100 ms and so on.  
<endl>  
  
  
<start>  
sl-pdcp-config  
sl-OutOfOrderDelivery  
Indicates whether or not outOfOrderDelivery specified in TS 38.323 [5] is configured. This field should be either always present or always absent, after the radio bearer is established.  
<endl>  
  
  
<start>  
sl-pdcp-config  
sl-PDCP-SN-Size  
PDCP sequence number size for unicast NR sidelink communication, 12 or 18 bits, as specified in TS 38.323 [5]. For groupcast and broadcast NR sidelink communication, only 12 bits is applicable, as specified in 9.1.1.5.  
<endl>

<start>  
sl-psbch-config  
dl-Alpha-PSBCH  
Indicates alpha value for DL pathloss based power control for PSBCH. When the field is not configured the UE applies the value 1.  
<endl>  
  
  
<start>  
sl-psbch-config  
dl-P0-PSBCH  
Indicates P0 value for DL pathloss based power control for PSBCH. If not configured, DL pathloss based power control is disabled for PSBCH. When dl-P0-PSBCH-r17 is configured, the UE ignores dl-P0-PSBCH-r16.  
A Remote UE which is out of coverage, considers downlink pathloss based power control is disabled for PSBCH when dl-P0-PSBCH is configured.  
<endl>

<start>  
sl-pssch-txconfiglist  
sl-MaxTxTransNumPSSCH  
Indicates the maximum transmission number (including new transmission and retransmission) for PSSCH.  
<endl>  
  
  
<start>  
sl-pssch-txconfiglist  
sl-MaxTxPower  
This field indicates the maximum transmission power for transmission on PSSCH and PSCCH.  
<endl>  
  
  
<start>  
sl-pssch-txconfiglist  
sl-MinMCS-PSSCH, sl-MaxMCS-PSSCH  
This field indicates the minimum and maximum MCS values used for transmissions on PSSCH. The UE shall ignore the minimum and maximum MCS values used for the associated MCS table(s) in sl-ParametersAboveThres-r16 and sl-ParametersBelowThres-r16 if sl-ParametersAboveThres-v1650 and sl-ParametersBelowThres-v1650 are present, respectively.  
<endl>  
  
  
<start>  
sl-pssch-txconfiglist  
sl-MinSubChannelNumPSSCH, sl-MaxSubChannelNumPSSCH  
This field indicates the minimum and maximum number of sub-channels which may be used for transmissions on PSSCH.  
<endl>  
  
  
<start>  
sl-pssch-txconfiglist  
sl-TypeTxSync  
This field indicates the synchronization reference type. For configurations by the eNB/gNB, only gnbEnb can be configured; and for pre-configuration or when this field is absent, the configuration is applicable for all synchronization reference types.  
<endl>  
  
  
<start>  
sl-pssch-txconfiglist  
sl-ThresUE-Speed  
This field indicates a UE absolute speed threshold.  
<endl>

<start>  
sl-qos-profile  
sl-GFBR  
Indicate the guaranteed bit rate for a GBR QoS flow. The unit is: Kbit/s  
<endl>  
  
  
<start>  
sl-qos-profile  
sl-MFBR  
Indicate the maximum bit rate for a GBR QoS flow. The unit is: Kbit/s  
<endl>  
  
  
<start>  
sl-qos-profile  
sl-PQI  
This field indicates either the PQI for standardized PQI or non-standardized QoS parameters.  
<endl>  
  
  
<start>  
sl-qos-profile  
sl-Range  
This field indicates the range parameter of the Qos flow, as defined in clause 5.4.1.1.1, TS 23.287 [55]. It is present only for groupcast. The unit is meter.  
<endl>

<start>  
sl-pqi  
sl-AveragingWindow  
Indicates the Averaging Window for a QoS flow, and applies to GBR QoS flows only. Unit: ms. The default value of the IE is 2000ms.  
<endl>  
  
  
<start>  
sl-pqi  
sl-MaxDataBurstVolume  
Indicates the Maximum Data Burst Volume for a QoS flow, and applies to delay critical GBR QoS flows only. Unit: byte.  
<endl>  
  
  
<start>  
sl-pqi  
sl-PacketDelayBudget  
Indicates the Packet Delay Budget for a QoS flow. Upper bound value for the delay that a packet may experience expressed in unit of 0.5ms.  
<endl>  
  
  
<start>  
sl-pqi  
sl-PacketErrorRate  
Indicates the Packet Error Rate for a QoS flow. The packet error rate is expressed as Scalar x 10-k where k is the Exponent.  
<endl>  
  
  
<start>  
sl-pqi  
sl-PriorityLevel  
Indicates the Priority Level for a QoS flow. Values ordered in decreasing order of priority, i.e. with 1 as the highest priority and 8 as the lowest priority.  
<endl>  
  
  
<start>  
sl-pqi  
sl-StandardizedPQI  
Indicate the PQI for standardized PQI.  
<endl>

<start>  
sl-quantityconfig  
sl-FilterCoefficientDMRS  
DMRS based L3 filter configuration:  
Specifies L3 filter configuration for sidelink RSRP measurement result from the L1 fiter(s), as defined in TS 38.215 [9].  
<endl>

<start>  
sl-radiobearerconfig  
sl-PDCP-Config  
This field indicates the PDCP parameters for the sidelink DRB.  
<endl>  
  
  
<start>  
sl-radiobearerconfig  
sl-SDAP-Config  
This field indicates how to map sidelink QoS flows to sidelink DRB.  
<endl>  
  
  
<start>  
sl-radiobearerconfig  
slrb-Uu-ConfigIndex  
This field indicates the index of sidelink DRB configuration.  
<endl>  
  
  
<start>  
sl-radiobearerconfig  
sl-TransRange  
This field indicates the transmission range of the sidelink DRB. The unit is meter.  
<endl>

<start>  
sl-relayue-config  
threshHighRelay  
Indicates the upper threshold of Uu RSRP for a UE that is in network coverage to evaluate AS layer conditions for U2N relay UE operation.  
<endl>  
  
  
<start>  
sl-relayue-config  
threshLowRelay  
Indicates the lower threshold of Uu RSRP for a UE that is in network coverage to evaluate AS layer conditions for U2N relay UE operation.  
<endl>

<start>  
sl-remoteue-config  
sl-ReselectionConfig  
Includes the parameters used by the U2N remote UE when selecting/ reselecting a U2N relay UE.  
<endl>  
  
  
<start>  
sl-remoteue-config  
thresHighRemote  
Indicates the threshold of Uu RSRP for a UE that is in network coverage to evaluate AS layer conditions for U2N remote UE operation.  
<endl>

<start>  
sl-reselectionconfig  
sl-FilterCoefficientRSRP  
Specifies L3 filter coefficient for SL communication/ discovery RSRP measurement results from L1 filter.  
<endl>  
  
  
<start>  
sl-reselectionconfig  
sl-RSRP-Thresh  
Indicates the threshold of SL communication/ discovery RSRP for a U2N remote UE to perform relay UE selection/ reselection.  
<endl>

<start>  
sl-reportconfig  
sl-ReportType  
Type of the configured sidelink measurement report.  
<endl>

<start>  
sl-eventtriggerconfig  
sl-ReportAmount  
Number of sidelink measurement reports applicable for sl-EventTriggered report type. sl-ReportInterval  
Indicates the interval between periodical reports (i.e., when sl-ReportAmount exceeds 1) for sl-EventTriggered report type.  
<endl>  
  
  
<start>  
sl-eventtriggerconfig  
sl-ReportOnLeave  
indicates whether or not the UE shall initiate the sidelink measurement reporting procedure when the leaving condition is met for a frequency in sl-FrequencyTriggeredList, as specified in 5.8.10.4.1. sl-ReportQuantity  
The sidelink measurement quantities to be included in the sidelink measurement report.  
<endl>  
  
  
<start>  
sl-eventtriggerconfig  
sl-TimeToTrigger  
Time during which specific criteria for the event needs to be met in order to trigger a sidelink measurement report. sN-Threshold  
Threshold used for events S1 and S2 specified in clauses 5.8.10.4.2 and 5.8.10.4.3, respectively.  
<endl>  
  
  
<start>  
sl-eventtriggerconfig  
sN-Threshold  
Threshold used for events S1 and S2 specified in clauses 5.8.10.4.2 and 5.8.10.4.3, respectively.  
<endl>  
  
  
<start>  
sl-eventtriggerconfig  
  
<endl>  
  
  
<start>  
sl-eventtriggerconfig  
  
<endl>  
  
  
<start>  
sl-eventtriggerconfig  
  
<endl>

<start>  
sl-periodicalreportconfig  
sl-ReportAmount  
Number of sidelink measurement reports applicable for sl-Periodical report type.  
<endl>  
  
  
<start>  
sl-periodicalreportconfig  
sl-ReportInterval  
Indicates the interval between periodical reports (i.e., when sl-ReportAmount exceeds 1) for sl-Periodical report type.  
<endl>  
  
  
<start>  
sl-periodicalreportconfig  
sl-ReportQuantity  
The sidelink measurement quantities to be included in the sidelink measurement report.  
<endl>

<start>  
sl-zoneconfigmcr  
sl-TransRange  
Indicates the communication range requirement for the corresponding sl-ZoneConfigMCR-Index.  
<endl>  
  
  
<start>  
sl-zoneconfigmcr  
sl-ZoneConfig  
Indicates the zone configuration for the corresponding sl-ZoneConfigMCR-Index.  
<endl>  
  
  
<start>  
sl-zoneconfigmcr  
sl-ZoneConfigMCR-Index  
Indicates the codepoint of the communication range requirement field in SCI.  
<endl>

<start>  
sl-resourcepool  
dummy  
This field is not used in the specification. If received it shall be ignored by the UE.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-Additional-MCS-Table  
Indicates the MCS table(s) additionally used in the resource pool. 64QAM table is (pre-)configured as default. Zero, one or two can be additionally (pre-)configured using the 256QAM and/or low-SE MCS tables. If two MCS tables are indicated, 256QAM MCS table is the 1st table and qam64lowSE MCS table is the 2nd table as specified in TS 38.214 [19], clause 8.1.3.1.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-FilterCoefficient  
This field indicates the filtering coefficient for long-term measurement and reference signal power derivation used for sidelink open-loop power control.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-InterUE-CoordinationConfig  
Indicates the configured sidelink inter-UE coordination parameters.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-NumSubchannel  
Indicates the number of subchannels in the corresponding resource pool, which consists of contiguous PRBs only.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-PBPS-CPS-Config  
Indicates the allowed resource allocation schemes of full sensing only, partial sensing only, random resource selection only, or any combination(s), and the related configuration for power saving resource allocation schemes. This field is absent for sl-TxPoolExceptional.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-PreemptionEnable  
Indicates whether pre-emption is disabled or enabled in a resource pool. If the field is present and the value is pl1, pl2, and so on (but not enabled), it means that pre-emption is enabled and a priority level p\_preemption is configured. If the field is present and the value is enabled, the pre-emption is enabled (but p\_preemption is not configured) and pre-emption is applicable to all levels.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-PriorityThreshold-UL-URLLC  
Indicates the threshold used to determine whether NR sidelink transmission is prioritized over uplink transmission of priority index 1 as specified in TS 38.213[13], clause 16.2.4.3, or whether PUCCH transmission carrying SL HARQ is prioritized over PUCCH transmission carrying UCI of priority index 1 if they overlap in time as specified in TS 38.213 [13], clause 9.2.5.0.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-PriorityThreshold  
Indicates the threshold used to determine whether NR sidelink transmission is prioritized over uplink transmission of priority index 0 as specified in TS 38.213[13], clause 16.2.4.3, or whether PUCCH transmission carrying SL HARQ is prioritized over PUCCH transmission carrying UCI of priority index 0 if they overlap in time as specified in TS 38.213 [13], clause 9.2.5.0.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-RB-Number  
Indicates the number of PRBs in the corresponding resource pool, which consists of contiguous PRBs only. The remaining RB cannot be used (See TS 38.214[19], clause 8).  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-StartRB-Subchannel  
Indicates the lowest RB index of the subchannel with the lowest index in the resource pool with respect to the lowest RB index of a SL BWP.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-SubchannelSize  
Indicates the minimum granularity in frequency domain for the sensing for PSSCH resource selection in the unit of PRB.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-SyncAllowed  
Indicates the allowed synchronization reference(s) which is (are) allowed to use the configured resource pool.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-SyncConfigIndex  
Indicates the synchronisation configuration that is associated with a reception pool, by means of an index to the corresponding entry SL-SyncConfigList of in SIB12 for NR sidelink communication.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-TDD-Configuration  
Indicates the TDD configuration associated with the reception pool of the cell indicated by sl-SyncConfigIndex.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-ThreshS-RSSI-CBR  
Indicates the S-RSSI threshold for determining the contribution of a sub-channel to the CBR measurement. Value 0 corresponds to -112 dBm, value 1 to -110 dBm, value n to (-112 + n\*2) dBm, and so on.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-TimeResource  
Indicates the bitmap of the resource pool, which is defined by repeating the bitmap with a periodicity during a SFN or DFN cycle.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-TimeWindowSizeCBR  
Indicates the time window size for CBR measurement.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-TimeWindowSizeCR  
Indicates the time window size for CR evaluation.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-TxPercentageList  
Indicates the portion of candidate single-slot PSSCH resources over the total resources. Value p20 corresponds to 20%, and so on.  
<endl>  
  
  
<start>  
sl-resourcepool  
sl-X-Overhead  
Accounts for overhead from CSI-RS, PT-RS. If the field is absent, the UE applies value n0 (see TS 38.214 [19], clause 5.1.3.2).  
<endl>

<start>  
sl-syncallowed  
gnbEnb-Sync  
If configured, the (pre-) configured resources can be used if the UE is directly or indirectly synchronized to eNB or gNB (i.e., synchronized to a reference UE which is directly synchronized to eNB or gNB).  
<endl>  
  
  
<start>  
sl-syncallowed  
gnss-Sync  
If configured, the (pre-) configured resources can be used if the UE is directly or indirectly synchronized to GNSS (i.e., synchronized to a reference UE which is directly synchronized to GNSS).  
<endl>  
  
  
<start>  
sl-syncallowed  
ue-Sync  
If configured, the (pre-) configured resources can be used if the UE is synchronized to a reference UE which is not synchronized to eNB, gNB and GNSS directly or indirectly.  
<endl>

<start>  
sl-pscch-config  
sl-FreqResourcePSCCH  
Indicates the number of PRBs for PSCCH in a resource pool where it is not greater than the number PRBs of the subchannel.  
<endl>  
  
  
<start>  
sl-pscch-config  
sl-DMRS-ScrambleID  
Indicates the initialization value for PSCCH DMRS scrambling.  
<endl>  
  
  
<start>  
sl-pscch-config  
sl-NumReservedBits  
Indicates the number of reserved bits in first stage SCI.  
<endl>  
  
  
<start>  
sl-pscch-config  
sl-TimeResourcePSCCH  
Indicates the number of symbols of PSCCH in a resource pool.  
<endl>

<start>  
sl-pssch-config  
sl-BetaOffsets2ndSCI  
Indicates candidates of beta-offset values to determine the number of coded modulation symbols for second stage SCI. The value indicates the index of Table 9.3-2 of TS 38.213 [13].  
<endl>  
  
  
<start>  
sl-pssch-config  
sl-PSSCH-DMRS-TimePatternList  
Indicates the set of PSSCH DMRS time domain patterns in terms of PSSCH DMRS symbols in a slot that can be used in the resource pool.  
<endl>  
  
  
<start>  
sl-pssch-config  
sl-Scaling  
Indicates a scaling factor to limit the number of resource elements assigned to the second stage SCI on PSSCH. Value f0p5 corresponds to 0.5, value f0p65 corresponds to 0.65, and so on.  
<endl>

<start>  
sl-psfch-config  
sl-MinTimeGapPSFCH  
The minimum time gap between PSFCH and the associated PSSCH in the unit of slots.  
<endl>  
  
  
<start>  
sl-psfch-config  
sl-NumMuxCS-Pair  
Indicates the number of cyclic shift pairs used for a PSFCH transmission that can be multiplexed in a PRB.  
<endl>  
  
  
<start>  
sl-psfch-config  
sl-PSFCH-CandidateResourceType  
Indicates the number of PSFCH resources available for multiplexing HARQ-ACK information in a PSFCH transmission (see TS 38.213 [13], clause 16.3).  
<endl>  
  
  
<start>  
sl-psfch-config  
sl-PSFCH-HopID  
Scrambling ID for sequence hopping of the PSFCH used in the resource pool.  
<endl>  
  
  
<start>  
sl-psfch-config  
sl-PSFCH-Period  
Indicates the period of PSFCH resource in the unit of slots within this resource pool. If set to sl0, no resource for PSFCH, and HARQ feedback for all transmissions in the resource pool is disabled.  
<endl>  
  
  
<start>  
sl-psfch-config  
sl-PSFCH-RB-Set  
Indicates the set of PRBs that are actually used for PSFCH transmission and reception. The leftmost bit of the bitmap refers to the lowest RB index in the resource pool, and so on. Value 0 in the bitmap indicates that the corresponding PRB is not used for PSFCH transmission and reception while value 1 indicates that the corresponding PRB is used for PSFCH transmission and reception (see TS 38.213 [13]).  
<endl>

<start>  
sl-ptrs-config  
sl-PTRS-FreqDensity  
Presence and frequency density of SL PT-RS as a function of scheduled BW. If the field is not configured, the UE uses K\_PT-RS = 2  
<endl>  
  
  
<start>  
sl-ptrs-config  
sl-PTRS-TimeDensity  
Presence and time density of SL PT-RS as a function of MCS. If the field is not configured, the UE uses L\_PT-RS = 1  
<endl>  
  
  
<start>  
sl-ptrs-config  
sl-PTRS-RE-Offset  
Indicates the subcarrier offset for SL PT-RS . If the field is not configured, the UE applies the value offset00 (see TS 38.211 [16], clause 8.4.1.2.2).  
<endl>

<start>  
sl-ue-selectedconfigrp  
sl-CBR-PriorityTxConfigList  
Indicates the mapping between PSSCH transmission parameter (such as MCS, PRB number, retransmission number, CR limit) sets by using the indexes of the configurations in sl-CBR-PSSCH-TxConfigList, CBR ranges by using the indexes to the entry of the CBR range configurations in sl-CBR-RangeConfigList, and priority ranges. It also indicates the default PSSCH transmission parameters to be used when CBR measurement results are not available, and MCS range for the MCS tables used in the resource pool. The field sl-CBR-PriorityTxConfigList-v1650 is present only when sl-CBR-PriorityTxConfigList-r16 is configured.  
<endl>  
  
  
<start>  
sl-ue-selectedconfigrp  
sl-MaxNumPerReserve  
Indicates the maximum number of reserved PSCCH/PSSCH resources that can be indicated by an SCI.  
<endl>  
  
  
<start>  
sl-ue-selectedconfigrp  
sl-MultiReserveResource  
Indicates if it is allowed to reserve a sidelink resource for an initial transmission of a TB by an SCI associated with a different TB, based on sensing and resource selection procedure.  
<endl>  
  
  
<start>  
sl-ue-selectedconfigrp  
sl-ResourceReservePeriodList  
Set of possible resource reservation period allowed in the resource pool in the unit of ms. Up to 16 values can be configured per resource pool. The value ms0 is always configured.  
<endl>  
  
  
<start>  
sl-ue-selectedconfigrp  
sl-RS-ForSensing  
Indicates whether DMRS of PSCCH or PSSCH is used for L1 RSRP measurement in the sensing operation.  
<endl>  
  
  
<start>  
sl-ue-selectedconfigrp  
sl-SensingWindow  
Parameter that indicates the start of the sensing window.  
<endl>  
  
  
<start>  
sl-ue-selectedconfigrp  
sl-SelectionWindowList  
Parameter that determines the end of the selection window in the resource selection for a TB with respect to priority indicated in SCI. Value n1 corresponds to 1\*2µ, value n5 corresponds to 5\*2µ, and so on, where µ = 0,1,2,3 refers to SCS 15,30,60,120 kHz respectively.  
<endl>  
  
  
<start>  
sl-ue-selectedconfigrp  
sl-Thres-RSRP-List  
Indicates a list of 64 thresholds, and the threshold should be selected based on the priority in the decoded SCI and the priority in the SCI to be transmitted. A resource is excluded if it is indicated or reserved by a decoded SCI and PSSCH/PSCCH RSRP in the associated data resource is above a threshold.  
<endl>

<start>  
sl-powercontrol  
sl-MaxTransPower  
Indicates the maximum value of the UE's sidelink transmission power on this resource pool. The unit is dBm.  
<endl>  
  
  
<start>  
sl-powercontrol  
sl-Alpha-PSSCH-PSCCH  
Indicates alpha value for sidelink pathloss based power control for PSCCH/PSSCH when sl-P0-PSSCH-PSCCH is configured. When the field is absent the UE applies the value 1.  
<endl>  
  
  
<start>  
sl-powercontrol  
sl-P0-PSSCH-PSCCH  
Indicates P0 value for sidelink pathloss based power control for PSCCH/PSSCH. If not configured, sidelink pathloss based power control is disabled for PSCCH/PSSCH. When sl-P0-PSSCH-PSCCH-r17 is configured, the UE ignores sl-P0-PSSCH-PSCCH-r16.  
<endl>  
  
  
<start>  
sl-powercontrol  
dl-Alpha-PSSCH-PSCCH  
Indicates alpha value for downlink pathloss based power control for PSCCH/PSSCH when dl-P0-PSSCH-PSCCH is configured. When the field is absent the UE applies the value 1.  
<endl>  
  
  
<start>  
sl-powercontrol  
dl-P0-PSSCH-PSCCH  
Indicates P0 value for downlink pathloss based power control for PSCCH/PSSCH. If not configured, downlink pathloss based power control is disabled for PSCCH/PSSCH. When dl-P0-PSSCH-PSCCH-r17 is configured, the UE ignores dl-P0-PSSCH-PSCCH-r16.  
A Remote UE which is out of coverage, considers downlink pathloss based power control is disabled for PSCCH/PSSCH when dl-P0-PSSCH-PSCCH is configured.  
<endl>  
  
  
<start>  
sl-powercontrol  
dl-Alpha-PSFCH  
Indicates alpha value for downlink pathloss based power control for PSFCH when dl-P0-PSFCH is configured. When the field is absent the UE applies the value 1.  
<endl>  
  
  
<start>  
sl-powercontrol  
dl-P0-PSFCH  
Indicates P0 value for downlink pathloss based power control for PSFCH. If not configured, downlink pathloss based power control is disabled for PSFCH. When dl-P0-PSFCH-r17 is configured, the UE ignores dl-P0-PSFCH-r16.  
A Remote UE which is out of coverage, considers downlink pathloss based power control is disabled for PSFCH when dl-P0-PSFCH is configured.  
<endl>

<start>  
sl-minmaxmcs-config  
sl-MaxMCS-PSSCH  
Indicates the maximum MCS value when using the associated MCS table. If no MCS is configured, UE autonomously selects MCS from the full range of values.  
<endl>  
  
  
<start>  
sl-minmaxmcs-config  
sl-MinMCS-PSSCH  
Indicates the minimum MCS value when using the associated MCS table. If no MCS is configured, UE autonomously selects MCS from the full range of values.  
<endl>

<start>  
sl-rlc-bearerconfig  
sl-MAC-LogicalChannelConfig  
The field is used to configure MAC SL logical channel parameters.  
<endl>  
  
  
<start>  
sl-rlc-bearerconfig  
sl-RLC-BearerConfigIndex  
The index of the RLC bearer configuration.  
<endl>  
  
  
<start>  
sl-rlc-bearerconfig  
sl-RLC-Config  
Determines the RLC mode (UM, AM) and provides corresponding parameters.  
<endl>  
  
  
<start>  
sl-rlc-bearerconfig  
sl-ServedRadioBearer  
Associates the sidelink RLC Bearer with a sidelink DRB. It indicates the index of SL radio bearer configuration, which is corresponding to the RLC bearer configuration.  
<endl>

<start>  
sl-rlc-channelconfig  
sl-MAC-LogicalChannelConfig  
The field is used to configure MAC SL logical channel parameters.  
<endl>  
  
  
<start>  
sl-rlc-channelconfig  
sl-RLC-ChannelID  
Indicates the PC5 Relay RLC channel in the link between L2 U2N Relay UE and L2 U2N Remote UE.  
<endl>  
  
  
<start>  
sl-rlc-channelconfig  
sl-RLC-Config  
Determines the RLC mode (UM, AM) and provides corresponding parameters.  
<endl>  
  
  
<start>  
sl-rlc-channelconfig  
sl-PacketDelayBudget  
Indicates the Packet Delay Budget for a PC5 Relay RLC channel. Upper bound value for the delay that a packet may experience expressed in unit of 0.5ms.  
<endl>

<start>  
sl-rlc-config  
sl-MaxRetxThreshold  
Parameter value of maxRetxThreshold for RLC AM for NR sidelink communications, see TS 38.322 [4]. Value t1 corresponds to 1 retransmission, value t2 corresponds to 2 retransmissions and so on.  
<endl>  
  
  
<start>  
sl-rlc-config  
sl-PollByte  
Parameter value of pollByte for RLC AM for NR sidelink communications, see TS 38.322 [4]. Value kB25 corresponds to 25 kBytes, value kB50 corresponds to 50 kBytes and so on. infinity corresponds to an infinite amount of kBytes.  
<endl>  
  
  
<start>  
sl-rlc-config  
sl-PollPDU  
Parameter value of pollPDU for RLC AM for NR sidelink communications, seeTS 38.322 [4]. Value p4 corresponds to 4 PDUs, value p8 corresponds to 8 PDUs and so on. infinity corresponds to an infinite number of PDUs.  
<endl>  
  
  
<start>  
sl-rlc-config  
sl-SN-FieldLength  
This field indicates the RLC SN field size for NR sidelink communication, see TS 38.322 [4]. For groupcast and broadcast, only value size6 (6 bits) is configured for the field sl-SN-FieldLengthUM.  
<endl>  
  
  
<start>  
sl-rlc-config  
sl-T-PollRetransmit  
Timer value of t-PollRetransmit for RLC AM for NR sidelink communications, see TS 38.322 [4], in milliseconds. Value ms5 means 5 ms, value ms10 means 10 ms and so on.  
<endl>

<start>  
sl-scheduledconfig  
sl-CS-RNTI  
Indicate the RNTI used to scramble CRC of DCI format 3\_0, see TS 38.321 [3].  
<endl>  
  
  
<start>  
sl-scheduledconfig  
sl-DCI-ToSL-Trans  
Indicate the time gap between DCI reception and the first sidelink transmission scheduled by the DCI (see TS 38.214 [19], clause 8.1.2.1). Value 1 included in this field corresponds to 1 slot, value 2 corresponds to 2 slots and so on, based on the numerology of sidelink BWP.  
<endl>  
  
  
<start>  
sl-scheduledconfig  
sl-PSFCH-ToPUCCH  
For dynamic grant and configured grant type 2, this field configures the values (in number of slot lengths) of the PSFCH to PUCCH gap. The field PSFCH-to-HARQ\_feedback timing indicator in DCI format 3\_0 selects one of the configured values of the PSFCH to PUCCH gap.  
<endl>  
  
  
<start>  
sl-scheduledconfig  
sl-RNTI  
Indicate the C-RNTI used for monitoring the network scheduling to transmit NR sidelink communication (i.e. the mode 1).  
<endl>

<start>  
mac-mainconfigsl  
sl-BSR-Config  
This field is to configure the sidelink buffer status report.  
<endl>  
  
  
<start>  
mac-mainconfigsl  
sl-PrioritizationThres  
Indicates the SL priority threshold, which is used to determine whether SL TX is prioritized over UL TX, as specified in TS 38.321 [3]. Network does not configure the sl-PrioritizationThres and the ul-PrioritizationThres to the UE separately.  
<endl>  
  
  
<start>  
mac-mainconfigsl  
ul-PrioritizationThres  
Indicates the UL priority threshold, which is used to determine whether SL TX is prioritized over UL TX, as specified in TS 38.321 [3]. Network does not configure the sl-PrioritizationThres and the ul-PrioritizationThres to the UE separately.  
<endl>

<start>  
sl-sdap-config  
sl-DefaultRB  
Indicates whether or not this is the default sidelink DRB for this NR sidelink communication transmission destination. Among all configured instances of SL-SDAP-Config for this destination, this field shall be set to true in at most one instance of SL-SDAP-Config and to false in all other instances.  
<endl>  
  
  
<start>  
sl-sdap-config  
sl-MappedQoS-Flows  
Indicates QoS flows to be mapped to the sidelink DRB. If the field is included in dedicated signalling, it is set to sl-MappedQoS-FlowsListDedicated; otherwise, it is set to sl-MappedQoS-FlowsList.  
<endl>  
  
  
<start>  
sl-sdap-config  
sl-MappedQoS-FlowsList  
Indicates the list of QoS profiles of the NR sidelink communication transmission destination mapped to this sidelink DRB.  
<endl>  
  
  
<start>  
sl-sdap-config  
sl-MappedQoS-FlowsToAddList  
Indicates the list of SL QoS flows ID of the NR sidelink communication transmission destination to be additionally mapped to this sidelink DRB.  
<endl>  
  
  
<start>  
sl-sdap-config  
sl-MappedQoS-FlowsToReleaseList  
Indicates the list of SL QoS flows ID of the NR sidelink communication transmission destination to be released from existing QoS flow to SLRB mapping of this sidelink DRB.  
<endl>  
  
  
<start>  
sl-sdap-config  
sl-SDAP-Header  
Indicates whether or not a SDAP header is present on this sidelink DRB. The field cannot be changed after a sidelink DRB is established. This field is set to present if the field sl-DefaultRB is set to true.  
<endl>

<start>  
sl-servingcellinfo  
sl-CarrierFreqNR  
Indicates the DL frequency of the cell indicated by sl-PhysCellId.  
<endl>  
  
  
<start>  
sl-servingcellinfo  
sl-PhysCellId  
Indicates the PCI of the PCell.  
<endl>

<start>  
sl-srap-config  
sl-LocalIdentity  
Indicates the local UE ID of the L2 U2N Remote UE used in SRAP as specified in TS 38.351 [66].  
<endl>  
  
  
<start>  
sl-srap-config  
sl-MappingToAddModList  
Indicates the list of mappings between the bearer identity of the L2 U2N Remote UE and the egress RLC channel as specified in TS 38.351 [66] to be added or modified.  
<endl>  
  
  
<start>  
sl-srap-config  
sl-MappingToReleaseList  
Indicates the list of mappings between the bearer identity of the L2 U2N Remote UE and the egress RLC channel as specified in TS 38.351 [66] to be released.  
<endl>  
  
  
<start>  
sl-srap-config  
sl-RemoteUE-RB-Identity  
Identity of the end-to-end Uu bearer identity of the L2 U2N Remote UE. The value 3 for the field srb-identity-r17 (i.e., for configuring SRB3) is not supported in this version of the specification.  
<endl>  
  
  
<start>  
sl-srap-config  
sl-EgressRLC-ChannelUu  
Indicates the egress RLC channel on Uu Hop for uplink transmissions at the L2 U2N Relay UE.  
<endl>  
  
  
<start>  
sl-srap-config  
sl-EgressRLC-ChannelPC5  
Indicates the egress RLC channel on PC5 Hop for downlink transmissions at the L2 U2N Relay UE and for uplink transmissions at the L2 U2N Remote UE.  
<endl>

<start>  
sl-syncconfig  
gnss-Sync  
If configured, the synchronization configuration is used for SLSS transmission/reception when the UE is synchronized to GNSS. If not configured, the synchronization configuration is used for SLSS transmission/reception when the UE is synchronized to eNB/gNB.  
<endl>  
  
  
<start>  
sl-syncconfig  
sl-SyncRefMinHyst  
Hysteresis when evaluating a SyncRef UE using absolute comparison.  
<endl>  
  
  
<start>  
sl-syncconfig  
sl-SyncRefDiffHyst  
Hysteresis when evaluating a SyncRef UE using relative comparison.  
<endl>  
  
  
<start>  
sl-syncconfig  
sl-NumSSB-WithinPeriod  
Indicates the number of sidelink SSB transmissions within one sidelink SSB period. The applicable values are related to the subcarrier spacing and frequency as follows:  
FR1, SCS = 15 kHz: 1  
FR1, SCS = 30 kHz: 1, 2  
FR1, SCS = 60 kHz: 1, 2, 4  
FR2, SCS = 60 kHz: 1, 2, 4, 8, 16, 32  
FR2, SCS = 120 kHz: 1, 2, 4, 8, 16, 32, 64  
<endl>  
  
  
<start>  
sl-syncconfig  
sl-TimeOffsetSSB  
Indicates the slot offset from the start of sidelink SSB period to the first sidelink SSB.  
<endl>  
  
  
<start>  
sl-syncconfig  
sl-TimeInterval  
Indicates the slot interval between neighboring sidelink SSBs. This value is applicable when there are more than one sidelink SSBs within one sidelink SSB period.  
<endl>  
  
  
<start>  
sl-syncconfig  
sl-SSID  
Indicates the ID of sidelink synchronization signal associated with different synchronization priorities.  
<endl>  
  
  
<start>  
sl-syncconfig  
syncInfoReserved  
Reserved for future use.  
<endl>  
  
  
<start>  
sl-syncconfig  
syncTxThreshIC, syncTxThreshOoC  
Indicates the thresholds used while in coverage and out of coverage, respectively. Value 0 corresponds to -infinity, value 1 to -115 dBm, value 2 to -110 dBm, and so on (i.e. in steps of 5 dBm) until value 12, which corresponds to -60 dBm, while value 13 corresponds to +infinity.  
<endl>

<start>  
sl-ue-selectedconfig  
sl-PrioritizationThres  
Indicates the SL priority threshold, which is used to determine whether SL TX is prioritized over UL TX, as specified in TS 38.321 [3]. Network does not configure the sl-PrioritizationThres and the ul-PrioritizationThres to the UE separately.  
<endl>  
  
  
<start>  
sl-ue-selectedconfig  
sl-ProbResourceKeep  
Indicates the probability with which the UE keeps the current resource when the resource reselection counter reaches zero for sensing based UE autonomous resource selection (see TS 38.321 [3]).  
<endl>  
  
  
<start>  
sl-ue-selectedconfig  
sl-PSSCH-TxConfigList  
Indicates PSSCH TX parameters such as MCS, sub-channel number, retransmission number, associated to different UE absolute speeds and different synchronization reference types for UE autonomous resource selection.  
<endl>  
  
  
<start>  
sl-ue-selectedconfig  
sl-ReselectAfter  
Indicates the number of consecutive skipped transmissions before triggering resource reselection for sidelink communication (see TS 38.321 [3]).  
<endl>  
  
  
<start>  
sl-ue-selectedconfig  
ul-PrioritizationThres  
Indicates the UL priority threshold, which is used to determine whether SL TX is prioritized over UL TX, as specified in TS 38.321 [3]. Network does not configure the sl-PrioritizationThres and the ul-PrioritizationThres to the UE separately.  
<endl>

<start>  
sl-zoneconfig  
sl-ZoneLength  
Indicates the length of each geographic zone.  
<endl>

<start>  
cfr-configmcch-mtch  
commonControlResourceSetExt  
An additional common control resource set which may be configured and used for searchSpaceMCCH/searchSpaceMTCH or UE-specific search space in the BWP where searchSpaceMCCH is configured. It is contained in the bandwidth of the CFR for broadcast.  
<endl>  
  
  
<start>  
cfr-configmcch-mtch  
locationAndBandwidthBroadcast  
Indicates starting PRB and the number of PRBs of CFR used for MCCH and MTCH reception.  
Value sameAsSib1ConfiguredLocationAndBW means the CFR for broadcast has the same location and size as the locationAndBandwidth for initial BWP configured in SIB1.  
Value locationAndBandwidth is used to configure CFR with bandwidth that is larger than and fully contains the bandwidth for the initial DL BWP and CORESET#0 configured in SIB1.  
If the field is absent, the CFR for broadcast has the same location and size as CORESET#0.  
<endl>  
  
  
<start>  
cfr-configmcch-mtch  
pdsch-ConfigMCCH  
Indicates PDSCH parameters used for MCCH transmission. If the field is absent, PDSCH parameters used for MCCH are the same as those of PDSCH configuration provided in initialDownlinkBWP in SIB1.  
<endl>

<start>  
drx-config-ptm  
drx-HARQ-RTT-Timer-DL-PTM  
Value in number of symbols of the CFR where the transport block was received.  
<endl>  
  
  
<start>  
drx-config-ptm  
drx-InactivityTimerPTM  
Value in multiple integers of 1 ms. ms0 corresponds to 0, ms1 corresponds to 1 ms, ms2 corresponds to 2 ms, and so on.  
<endl>  
  
  
<start>  
drx-config-ptm  
drx-LongCycleStartOffsetPTM  
drx-LongCycle-PTM in ms and drx-StartOffset-PTM in multiples of 1 ms.  
<endl>  
  
  
<start>  
drx-config-ptm  
drx-onDurationTimerPTM  
Value in multiples of 1/32 ms (subMilliSeconds) or in ms (milliSecond). For the latter, value ms1 corresponds to 1 ms, value ms2 corresponds to 2 ms, and so on.  
<endl>  
  
  
<start>  
drx-config-ptm  
drx-RetransmissionTimer-DL-PTM  
Value in number of slot lengths of the CFR where the transport block was received. value sl0 corresponds to 0 slots, sl1 corresponds to 1 slot, sl2 corresponds to 2 slots, and so on.  
<endl>  
  
  
<start>  
drx-config-ptm  
drx-SlotOffsetPTM  
Value in 1/32 ms. Value 0 corresponds to 0 ms, value 1 corresponds to 1/32 ms, value 2 corresponds to 2/32 ms, and so on.  
<endl>

<start>  
mbs-neighbourcelllist  
carrierFreq  
Indicates the frequency of the neighbour cell indicated by physCellId. Absence of the IE means that the neighbour cell is on the same frequency as the current cell.  
<endl>

<start>  
mbs-sessioninfolist  
g-RNTI  
G-RNTI used to scramble the scheduling and transmission of MTCH.  
<endl>  
  
  
<start>  
mbs-sessioninfolist  
headerCompression  
If rohc is configured, the UE shall apply the configured ROHC profile(s) in downlink.  
<endl>  
  
  
<start>  
mbs-sessioninfolist  
mbs-SessionId  
Indicates an identifier of the MBS session provided by the MTCH.  
<endl>  
  
  
<start>  
mbs-sessioninfolist  
mrb-listBroadcast  
A list of broadcast MRBs to which the associated broadcast MBS session is mapped to.  
<endl>  
  
  
<start>  
mbs-sessioninfolist  
mtch-neighbourCell  
Indicates neighbour cells which provide this service on MTCH. The first bit is set to 1 if the service is provided on MTCH in the first cell in mbs-NeighbourCellList, otherwise it is set to 0. The second bit is set to 1 if the service is provided on MTCH in the second cell in mbs-NeighbourCellList, and so on. If the service is not available in any neighbouring cell and mbs-NeighbourCellList is signalled, the network sets all bits in this field to 0. If this field is absent, the related service may or may not be available in any neighbouring cell, i.e. the UE cannot determine the presence or absence of an MBS service in neighbouring cells based on the absence of this field.  
<endl>  
  
  
<start>  
mbs-sessioninfolist  
mtch-schedulingInfo  
Indicates the index of DRX configuration entry in drx-ConfigPTM-List that is used for scheduling the MTCH. The value 0 corresponds to the first entry in drx-ConfigPTM-List, the value 1 corresponds to the second entry in drx-ConfigPTM-List and so on. In case mtch-schedulingInfo is absent for a G-RNTI (i.e. no PTM DRX), the UE shall monitor for PDCCH scrambled with G-RNTI in any slot according to the search space configured for MTCH [see TS 38.213 [13], clause 10.1].  
<endl>  
  
  
<start>  
mbs-sessioninfolist  
mtch-SSB-MappingWindowIndex  
Indicates the index of MTCH-SSB-MappingWindowCycleOffset configuration entry in MTCH-SSB-MappingWindowList. The value 0 corresponds to the first entry in MTCH-SSB-MappingWindowList, the value 1 corresponds to the second entry in MTCH-SSB-MappingWindowList and so on. This field is set to the same value for all MBS sessions mapped to the same G-RNTI.  
<endl>  
  
  
<start>  
mbs-sessioninfolist  
pdcp-SN-SizeDL  
Indicates that PDCP sequence number size of 12 bits is used, as specified in TS 38.323 [5]. When the field is absent the UE applies the value as specified in 9.1.1.7.  
<endl>  
  
  
<start>  
mbs-sessioninfolist  
pdschConfigIndex  
Indicates the index of PDSCH configuration entry in pdschConfigList for MTCH. Value 0 corresponds to the first entry in pdschConfigList, the value 1 corresponds to the second entry in pdschConfigList and so on. When the field is absent the UE applies the first entry in pdschConfigList for MTCH.  
<endl>  
  
  
<start>  
mbs-sessioninfolist  
sn-FieldLength  
Indicates that the RLC SN field size of 6 bits is used, see TS 38.322 [4]. When the field is absent the UE applies the value as specified in 9.1.1.7.  
<endl>  
  
  
<start>  
mbs-sessioninfolist  
t-Reassembly  
Timer for reassembly in TS 38.322 [4], in milliseconds. Value ms0 means 0 ms, value ms5 means 5 ms and so on. When the field is absent the UE applies the value in specified in 9.1.1.7.  
<endl>  
  
  
<start>  
mbs-sessioninfolist  
t-Reordering  
Value in ms of t-Reordering specified in TS 38.323 [5]. Value ms1 corresponds to 1 ms, value ms10 corresponds to 10 ms, and so on. When the field is absent the UE applies the value as specified in 9.1.1.7.  
<endl>

<start>  
mtch-ssb-mappingwindowlist  
MTCH-SSB-MappingWindowCycleOffset  
Indicates the cycle and offset for MTCH PDCCH ocassions to SSB mapping. Values in unit of ms. ms10 corresponds to cycle of 10 ms with corresponding offset between 0 and 9 ms, value ms20 corresponds to cycle of 20 ms with corresponding offset between 0 and 19 ms, and so on. The mapping window starts at a subframe in a SFN where [(SFN number × 10) + subframe number] modulo (cycle) = offset.  
PDCCH monitoring occasions for MTCH in a mapping window which are not overlapping with UL symbols (determined according to tdd-UL-DL-ConfigurationCommon) are sequentially numbered starting from 1 in the maping window. The [x×N+K]th PDCCH monitoring occasion for MTCH in this mapping window corresponds to the Kth transmitted SSB, where x = 0, 1, ...X-1, K = 1, 2, …N, N is the number of actual transmitted SSBs determined according to ssb-PositionsInBurst in SIB1 and X is equal to CEIL(number of PDCCH monitoring occasions in MTCH to SSB mapping transmission window/N). The actual transmitted SSBs are sequentially numbered from one in ascending order of their SSB indexes.  
<endl>

<start>  
pdsch-configbroadcast  
lte-CRS-ToMatchAround  
Parameters to determine an LTE CRS pattern that the UE shall rate match around.  
<endl>  
  
  
<start>  
pdsch-configbroadcast  
pdschConfigList  
List of PDSCH parameters which can be configured per G-RNTI. Only one entity is allowed to be configured if included in SIB20.  
<endl>  
  
  
<start>  
pdsch-configbroadcast  
pdsch-TimeDomainAllocationList  
List of time-domain configurations for timing of DL assignment to DL data.  
The field pdsch-TimeDomainAllocationList applies to DCI format 4\_0 (see table 5.1.2.1.1-1 in TS 38.214 [19]). When the field is absent, the UE follows PDSCH time domain resource allocation determination rule as specified in TS 38.214 [19], clause 5.1.2.1.1.  
<endl>  
  
  
<start>  
pdsch-configbroadcast  
rateMatchPatternToAddModList  
Resources patterns which the UE should rate match PDSCH around. The UE rate matches around the union of all resources indicated in the rate match patterns (see TS 38.214 [19], clause 5.1.4.1).  
<endl>  
  
  
<start>  
pdsch-configbroadcast  
mcs-Table  
Indicates which MCS table the UE shall use for PDSCH. If the field is absent the UE applies the value 64QAM. The field mcs-Table applies to DCI format 4\_0 with CRC scrambled by MCCH-RNTI/G-RNTI (see TS 38.214 [19], clause 5.1.3.1).  
<endl>  
  
  
<start>  
pdsch-configbroadcast  
xOverhead  
Accounts for an overhead from CSI-RS, CORESET, etc. If the field is absent, the UE applies value xOh0 (see TS 38.214 [19], clause 5.1.3.2).  
<endl>

<start>  
pdsch-configptm  
dataScramblingIdentityPDSCH  
Identifier(s) used to initialize data scrambling (c\_init) for PDSCH as specified in TS 38.211 [16], clause 7.3.1.1. When the field is absent the UE applies the value physCellId configured for this serving cell.  
<endl>  
  
  
<start>  
pdsch-configptm  
dmrs-ScramblingID0  
DL DMRS scrambling initialization (see TS 38.211 [16], clause 7.4.1.1.1). When the field is absent the UE applies the value physCellId configured for this serving cell.  
<endl>  
  
  
<start>  
pdsch-configptm  
pdsch-AggregationFactor  
Number of repetitions for dynamic scheduling of MBS broadcast data for MTCH PDSCH (see TS 38.214 [19], clause 5.1.2.1). When the field is absent the UE applies the value 1.  
<endl>

<start>  
tmgi  
plmn-Index  
PLMN index or NPN index according to the plmn-IdentityInfoList and npn-IdentityInfoList fields included in SIB1. If this field is included in the MRB-ToAddMod-r17, the UE translates the plmn-Index into the PLMN Identity or SNPN Identity based on the configuration in SIB1 (which is the SIB1 of the target cell in case of handover).  
<endl>  
  
  
<start>  
tmgi  
serviceId  
Uniquely identifies the identity of an MBS service within a PLMN. The field contains octet 3- 5 of the IE Temporary Mobile Group Identity (TMGI) as defined in TS 24.008 [38]. The first octet contains the third octet of the TMGI, the second octet contains the fourth octet of the TMGI and so on.  
<endl>

<start>  
masterinformationblocksidelink  
directFrameNumber  
Indicates the frame number in which S-SSB transmitted.  
<endl>  
  
  
<start>  
masterinformationblocksidelink  
inCoverage  
Value true indicates that the UE transmitting the MasterInformationBlockSidelink is in network coverage, or UE selects GNSS timing as the synchronization reference source.  
<endl>  
  
  
<start>  
masterinformationblocksidelink  
slotIndex  
Indicates the slot index in which S-SSB transmitted.  
<endl>

<start>  
measurementreportsidelink  
sl-MeasId  
Identifies the sidelink measurement identity for which the reporting is being performed.  
<endl>  
  
  
<start>  
measurementreportsidelink  
sl-MeasResult  
Measured RSRP results of a unicast destination.  
<endl>

<start>  
remoteueinformationsidelink-ies  
sl-RequestedSIB-List  
Contains a list of requested SIBs.  
<endl>  
  
  
<start>  
remoteueinformationsidelink-ies  
SL-SIB-ReqInfo  
Indicates the requested SIB type. Values sibNotReq11, sibNotReq10, …, sibNotReq1 shall be ignored by L2 U2N relay UE (i.e., no SIB requested).  
<endl>  
  
  
<start>  
remoteueinformationsidelink-ies  
sl-PagingInfo-RemoteUE  
Indicates the paging information used by L2 U2N Relay UE to perform the connected L2 U2N Remote UE's paging monitoring.  
<endl>  
  
  
<start>  
remoteueinformationsidelink-ies  
sl-PagingIdentityRemoteUE  
Indicates the L2 U2N Remote UE's paging UE ID.  
<endl>  
  
  
<start>  
remoteueinformationsidelink-ies  
sl-PagingCycleRemoteUE  
Indicates the L2 U2N Remote UE's UE specific DRX cycle as the minimum value of the one provided by upper layers (if configured) and the one provided by RRC layer (if configured). Value rf32 corresponds to 32 radio frames, value rf64 corresponds to 64 radio frames and so on.  
<endl>

<start>  
rrcreconfigurationsidelink  
sl-CSI-RS-FreqAllocation  
Indicates the frequency domain position for sidelink CSI-RS.  
<endl>  
  
  
<start>  
rrcreconfigurationsidelink  
sl-CSI-RS-FirstSymbol  
Indicates the position of first symbol of sidelink CSI-RS.  
<endl>  
  
  
<start>  
rrcreconfigurationsidelink  
sl-DRX-ConfigUC-PC5  
Indicates the NR sidelink DRX configuration for unicast communication, as specified in TS 38.321 [3]  
<endl>  
  
  
<start>  
rrcreconfigurationsidelink  
sl-LatencyBoundCSI-Report  
Indicates the latency bound of SL CSI report from the associated SL CSI triggering in terms of number of slots.  
<endl>  
  
  
<start>  
rrcreconfigurationsidelink  
sl-LatencyBoundIUC-Report  
Indicates the latency bound of SL Inter-UE coordination report from the associated SL Inter-UE coordination explicit request triggering in terms of number of slots.  
<endl>  
  
  
<start>  
rrcreconfigurationsidelink  
sl-LogicalChannelIdentity  
Indicates the identity of the sidelink logical channel.  
<endl>  
  
  
<start>  
rrcreconfigurationsidelink  
sl-MappedQoS-FlowsToAddList  
Indicate the QoS flows to be mapped to the configured sidelink DRB. Each entry is indicated by the SL-PQFI, which is used between UEs, as defined in TS 23.287 [55].  
<endl>  
  
  
<start>  
rrcreconfigurationsidelink  
sl-MappedQoS-FlowsToReleaseList  
Indicate the QoS flows to be released from the configured sidelink DRB. Each entry is indicated by the SL-PQFI, which is used between UEs, as defined in TS 23.287 [55].  
<endl>  
  
  
<start>  
rrcreconfigurationsidelink  
sl-MeasConfig  
Indicates the sidelink measurement configuration for the unicast destination.  
<endl>  
  
  
<start>  
rrcreconfigurationsidelink  
sl-OutOfOrderDelivery  
Indicates whether or not outOfOrderDelivery specified in TS 38.323 [5] is configured. This field should be either always present or always absent, after the sidelink radio bearer is established.  
<endl>  
  
  
<start>  
rrcreconfigurationsidelink  
sl-PDCP-SN-Size  
Indicates the PDCP SN size of the configured sidelink DRB.  
<endl>  
  
  
<start>  
rrcreconfigurationsidelink  
sl-Resetconfig  
Indicates that the full configuration should be applicable for the RRCReconfigurationSidelink message.  
<endl>  
  
  
<start>  
rrcreconfigurationsidelink  
sl-SDAP-Header  
Indicates whether or not a SDAP header is present on this sidelink DRB.  
<endl>

<start>  
rrcreconfigurationcompletesidelink  
dummy  
This field is not used in the specification. The UE shall not include this field. If received it shall be ignored by the peer UE.  
<endl>  
  
  
<start>  
rrcreconfigurationcompletesidelink  
sl-DRX-ConfigReject  
Indicates the rejection of sidelink DRX configuration received from the peer UE for the corresponding NR sidelink unicast communication.  
<endl>

<start>  
ueassistanceinformationsidelink  
sl-PreferredDRX-ConfigList  
Indicates a list of the reference sidelink DRX configurations provided by a UE to a peer UE for determining the sidelink DRX configuration.  
<endl>

<start>  
uecapabilityenquirysidelink-ies  
frequencyBandListFilterSidelink  
This field is used to indicate frequency bands for which the peer UE is requested to provide supported bands and band combinations for NR sidelink communications. The UE always provides this field.  
<endl>  
  
  
<start>  
uecapabilityenquirysidelink-ies  
ue-CapabilityInformationSidelink  
This field indicates the UECapabilityInformationSidelink message to provide the UE sidelink capability, which can be optionally sent together with UECapabilityEnquirySidelink.  
<endl>

<start>  
uumessagetransfersidelink-ies  
sl-PagingDelivery  
This field is used to transfer PagingRecord relevant to the L2 U2N Remote UE in RRC\_IDLE or RRC\_INACTIVE.  
<endl>  
  
  
<start>  
uumessagetransfersidelink-ies  
sl-SIB1-Delivery  
This field is used to transfer SIB1 to the L2 U2N Remote UE in RRC\_IDLE or RRC\_INACTIVE.  
<endl>  
  
  
<start>  
uumessagetransfersidelink-ies  
sl-SystemInformationDelivery  
This field is used to transfer SIBs to the L2 U2N Remote UE in RRC\_IDLE or RRC\_INACTIVE.  
<endl>

<start>  
varresumemac-input  
targetCellIdentity  
An input variable used to calculate the resumeMAC-I. Set to the cellIdentity of the first PLMN-Identity included in the PLMN-IdentityInfoList broadcasted in SIB1 of the target cell i.e. the cell the UE is trying to resume.  
<endl>  
  
  
<start>  
varresumemac-input  
source-c-RNTI  
Set to C-RNTI that the UE had in the PCell it was connected to prior to suspension of the RRC connection.  
<endl>  
  
  
<start>  
varresumemac-input  
sourcePhysCellId  
Set to the physical cell identity of the PCell the UE was connected to prior to suspension of the RRC connection.  
<endl>

<start>  
varshortmac-input  
targetCellIdentity  
An input variable used to calculate the shortMAC-I. Set to the cellIdentity of the first PLMN-Identity in the PLMN-IdentityInfoList broadcasted in SIB1 of the target cell i.e. the cell the UE is trying to reestablish the connection.  
<endl>  
  
  
<start>  
varshortmac-input  
source-c-RNTI  
Set to C-RNTI that the UE had in the PCell it was connected to prior to the reestablishment.  
<endl>  
  
  
<start>  
varshortmac-input  
sourcePhysCellId  
Set to the physical cell identity of the PCell the UE was connected to prior to the reestablishment.  
<endl>

<start>  
sl-preconfigurationnr  
sl-DRX-PreConfig-GC-BC  
This field indicates the sidelink DRX configuration for groupcast and broadcast communication, as specified in TS 38.321 [3].  
<endl>  
  
  
<start>  
sl-preconfigurationnr  
sl-OffsetDFN  
Indicates the timing offset for the UE to determine DFN timing when GNSS is used for timing reference. Value 1 corresponds to 0.001 milliseconds, value 2 corresponds to 0.002 milliseconds, and so on. If the field is absent, no offset is applied.  
<endl>  
  
  
<start>  
sl-preconfigurationnr  
sl-PreconfigDiscConfig  
This field indicates the configuration for discovery message transmission used by NR sidelink U2N Remote UE.  
<endl>  
  
  
<start>  
sl-preconfigurationnr  
sl-PreconfigEUTRA-AnchorCarrierFreqList  
This field indicates the EUTRA anchor carrier frequency list, which can provide the NR sidelink communication configuration.  
<endl>  
  
  
<start>  
sl-preconfigurationnr  
sl-PreconfigFreqInfoList  
This field indicates the NR sidelink communication and/ or NR sidelink discovery configuration some carrier frequency(ies). In this release, only one SL-FreqConfig can be configured in the list.  
<endl>  
  
  
<start>  
sl-preconfigurationnr  
sl-PreconfigNR-AnchorCarrierFreqList  
This field indicates the NR anchor carrier frequency list, which can provide the NR sidelink communication configuration.  
<endl>  
  
  
<start>  
sl-preconfigurationnr  
sl-RadioBearerPreConfigList  
This field indicates one or multiple sidelink radio bearer configurations.  
<endl>  
  
  
<start>  
sl-preconfigurationnr  
sl-RLC-BearerPreConfigList  
This field indicates one or multiple sidelink RLC bearer configurations.  
<endl>  
  
  
<start>  
sl-preconfigurationnr  
sl-RoHC-Profiles  
This field indicates the supported RoHC profiles for NR sidelink communications.  
<endl>  
  
  
<start>  
sl-preconfigurationnr  
sl-SSB-PriorityNR  
This field indicates the priority of NR sidelink SSB transmission and reception.  
<endl>  
  
  
<start>  
sl-preconfigurationnr  
sl-TxProfileList  
List of one or multiple Tx profiles, indicating the compatibility of supporting SL DRX as specified in TS 38.321 [3]. It is up to the UE implementation whether/how to apply this field.  
<endl>

<start>  
cg-candidatelist  
cg-CandidateToAddModList  
Contains information regarding candidate target cells to be added or modified for Conditional PSCell Addition (CPA) or Conditional PSCell Change (CPC) from the candidate target secondary node to the master node.  
<endl>  
  
  
<start>  
cg-candidatelist  
cg-CandidateToReleaseList  
Contains information regarding candidate target cells for CPA or CPC to be removed from the candidate target secondary node to the master node. This list is not used in CPA or CPC preparation.  
<endl>

<start>  
cg-candidateinfo  
cg-CandidateInfoId  
SSB frequency and Physical Cell Identity of the candidate target cell.  
<endl>  
  
  
<start>  
cg-candidateinfo  
candidateCG-Config  
CG-Config message corresponding to the cell indicated by cg-CandidateInfoId.  
<endl>

<start>  
handovercommand  
handoverCommandMessage  
Contains the RRCReconfiguration message used to perform handover within NR or handover to NR, as generated (entirely) by the target gNB.  
<endl>

<start>  
handoverpreparationinformation  
as-Context  
Local RAN context required by the target gNB or DU.  
<endl>  
  
  
<start>  
handoverpreparationinformation  
rrm-Config  
Local RAN context used mainly for RRM purposes.  
<endl>  
  
  
<start>  
handoverpreparationinformation  
sourceConfig  
The radio resource configuration as used in the source cell.  
<endl>  
  
  
<start>  
handoverpreparationinformation  
ue-CapabilityRAT-List  
The UE radio access related capabilities concerning RATs supported by the UE. A gNB that retrieves MRDC related capability containers ensures that the set of included MRDC containers is consistent w.r.t. the feature set related information.  
<endl>  
  
  
<start>  
handoverpreparationinformation  
ue-InactiveTime  
Duration while UE has not received or transmitted any user data. Thus the timer is still running in case e.g., UE measures the neighbour cells for the HO purpose. Value s1 corresponds to 1 second, s2 corresponds to 2 seconds and so on. Value min1 corresponds to 1 minute, value min1s20 corresponds to 1 minute and 20 seconds, value min1s40 corresponds to 1 minute and 40 seconds and so on. Value hr1 corresponds to 1 hour, hr1min30 corresponds to 1 hour and 30 minutes and so on.  
<endl>

<start>  
as-config  
rrcReconfiguration  
Contains the RRCReconfiguration configuration as generated entirely by the MN. If the TMGI-r17 is included in the MRB-ToAddMod-r17 in the RadioBearerConfig, the plmn-Index is replaced by the PLMN ID, if needed.  
<endl>  
  
  
<start>  
as-config  
sdt-Config  
Contains the IE SDT-Config as generated entirely by the last serving gNB. This field is only used during the SDT procedure with UE context relocation as defined in TS 38.300 [2], clause 18.2.  
<endl>  
  
  
<start>  
as-config  
sourceRB-SN-Config  
Contains the IE RadioBearerConfig as generated entirely by the SN. This field is only used when the UE is configured with SN terminated RB(s).  
<endl>  
  
  
<start>  
as-config  
sourceSCG-Configured  
Value true indicates that the UE is configured with NR or EUTRA SCG in source configuration. The field is only used in NR-DC and NE-DC and is included only if the fields sourceSCG-NR-Config and sourceSCG-EUTRA-Config are absent.  
<endl>  
  
  
<start>  
as-config  
sourceSCG-EUTRA-Config  
Contains the current dedicated SCG configuration in RRCConnectionReconfiguration message as specified in TS 36.331 [10] and generated entirely by the SN. In this version of the specification, the E-UTRA RRCConnectionReconfiguration message can only include the field scg-Configuration . This field is only used in NE-DC.  
<endl>  
  
  
<start>  
as-config  
sourceSCG-NR-Config  
Contains the current dedicated SCG configuration in RRCReconfiguration message as generated entirely by the SN. In this version of the specification, the RRCReconfiguration message can only include fields secondaryCellGroup and measConfig. This field is only used in NR-DC.  
<endl>

<start>  
as-context  
configRestrictInfoDAPS  
Includes fields for which source cell explicitly indicates the restriction to be observed by target cell during DAPS handover.  
<endl>  
  
  
<start>  
as-context  
mbsInterestIndication  
Includes the information last reported by the UE in the NR MBSInterestIndication message, where the plmn-Index (if included by the UE in tmgi) is replaced by the PLMN ID, if needed.  
<endl>  
  
  
<start>  
as-context  
needForGapsInfoNR  
Includes measurement gap requirement information of the UE for NR target bands.  
<endl>  
  
  
<start>  
as-context  
selectedBandCombinationSN  
Indicates the band combination selected by SN in (NG)EN-DC, NE-DC, and NR-DC.  
<endl>  
  
  
<start>  
as-context  
sidelinkUEInformationEUTRA  
This field includes SidelinkUEInformation IE as specified in TS 36.331 [10].  
<endl>  
  
  
<start>  
as-context  
sidelinkUEInformationNR  
This field includes SidelinkUEInformationNR IE.  
<endl>  
  
  
<start>  
as-context  
ueAssistanceInformation  
Includes for each UE assistance feature the information last reported by the UE, if any.  
<endl>  
  
  
<start>  
as-context  
ueAssistanceInformationSCG  
Includes for each UE assistance feature associated with the SCG, the information last reported by the UE in the NR UEAssistanceInformation message for the SCG, if any.  
<endl>

<start>  
configrestrictinfodaps  
sourceFeatureSetPerUplinkCC/sourceFeatureSetPerDownlinkCC  
Indicates an index referring to the position of the FeatureSetUplinkPerCC/FeatureSetDownlinkPerCC selected by source in the featureSetsUplinkPerCC/featureSetsDownlinkPerCC.  
<endl>

<start>  
rrm-config  
candidateCellInfoList  
A list of the best cells on each frequency for which measurement information was available  
<endl>  
  
  
<start>  
rrm-config  
candidateCellInfoListSN-EUTRA  
A list of EUTRA cells including serving cells and best neighbour cells on each serving frequency, for which measurement results were available. This field is only used in NE-DC.  
<endl>

<start>  
cg-config  
candidateCellInfoListCPC  
Contains information regarding candidate target cells for Conditional PSCell Change (CPC) that the source secondary gNB suggests the target secondary gNB to consider configuring for CPC.  
<endl>  
  
  
<start>  
cg-config  
candidateCellInfoListSN  
Contains information regarding cells that the source secondary node suggests the target secondary gNB to consider configuring.  
<endl>  
  
  
<start>  
cg-config  
candidateCellInfoListSN-EUTRA  
Includes the MeasResultList3EUTRA as specified in TS 36.331 [10]. Contains information regarding cells that the source secondary node suggests the target secondary eNB to consider configuring. This field is only used in NE-DC.  
<endl>  
  
  
<start>  
cg-config  
candidateServingFreqListNR, candidateServingFreqListEUTRA  
Indicates frequencies of candidate serving cells for In-Device Co-existence Indication (see TS 36.331 [10]).  
<endl>  
  
  
<start>  
cg-config  
configRestrictModReq  
Used by SN to request changes to SCG configuration restrictions previously set by MN to ensure UE capabilities are respected. E.g. can be used to request configuring an NR band combination whose use MN has previously forbidden. SN only includes this field in SN-initiated procedures.  
<endl>  
  
  
<start>  
cg-config  
drx-ConfigSCG  
This field contains the complete DRX configuration of the SCG. This field is only used in NR-DC.  
<endl>  
  
  
<start>  
cg-config  
drx-InfoSCG  
This field contains the DRX long and short cycle configuration of the SCG. This field is used in (NG)EN-DC and NE-DC.  
<endl>  
  
  
<start>  
cg-config  
drx-InfoSCG2  
This field contains the drx-onDurationTimer configuration of the SCG. This field is only used in (NG)EN-DC.  
<endl>  
  
  
<start>  
cg-config  
fr-InfoListSCG  
Contains information of FR information of serving cells that include PScell and SCells configured in SCG.  
<endl>  
  
  
<start>  
cg-config  
fr1-Carriers-SCG, fr2-Carriers-SCG  
Indicates the number of FR1 or FR2 serving cells configured in SCG.  
<endl>  
  
  
<start>  
cg-config  
measuredFrequenciesSN  
Used by SN to indicate a list of frequencies measured by the UE.  
<endl>  
  
  
<start>  
cg-config  
needForGaps  
In NE-DC, indicates whether the SN requests gNB to configure measurements gaps.  
<endl>  
  
  
<start>  
cg-config  
ph-InfoSCG  
Power headroom information in SCG that is needed in the reception of PHR MAC CE of MCG  
<endl>  
  
  
<start>  
cg-config  
ph-SupplementaryUplink  
Power headroom information for supplementary uplink. In the case of (NG)EN-DC and NR-DC, this field is only present when two UL carriers are configured for a serving cell and one UL carrier reports type1 PH while the other reports type 3 PH.  
<endl>  
  
  
<start>  
cg-config  
ph-Type1or3  
Type of power headroom for a certain serving cell in SCG (PSCell and activated SCells). Value type1 refers to type 1 power headroom, value type3 refers to type 3 power headroom. (See TS 38.321 [3]).  
<endl>  
  
  
<start>  
cg-config  
ph-Uplink  
Power headroom information for uplink.  
<endl>  
  
  
<start>  
cg-config  
pSCellFrequency, pSCellFrequencyEUTRA  
Indicates the frequency of PSCell in NR (i.e., pSCellFrequency) or E-UTRA (i.e., pSCellFrequencyEUTRA). In this version of the specification, pSCellFrequency is not used in NE-DC whereas pSCellFrequencyEUTRA is only used in NE-DC. pSCellFrequency indicates the absoluteFrequencySSB.  
<endl>  
  
  
<start>  
cg-config  
reportCGI-RequestNR, reportCGI-RequestEUTRA  
Used by SN to indicate to MN about configuring reportCGI procedure. The request may optionally contain information about the cell for which SN intends to configure reportCGI procedure. In this version of the specification, the reportCGI-RequestNR is used in (NG)EN-DC and NR-DC whereas reportCGI-RequestEUTRA is used only for NE-DC.  
<endl>  
  
  
<start>  
cg-config  
requestedBC-MRDC  
Used to request configuring a band combination and corresponding feature sets which are forbidden to use by MN (i.e. outside of the allowedBC-ListMRDC) to allow re-negotiation of the UE capabilities for SCG configuration.  
<endl>  
  
  
<start>  
cg-config  
requestedMaxInterFreqMeasIdSCG  
Used to request the maximum number of allowed measurement identities to configure for inter-frequency measurement. This field is only used in NR-DC.  
<endl>  
  
  
<start>  
cg-config  
requestedMaxIntraFreqMeasIdSCG  
Used to request the maximum number of allowed measurement identities to configure for intra-frequency measurement on each serving frequency.  
<endl>  
  
  
<start>  
cg-config  
requestedPDCCH-BlindDetectionSCG  
Requested value of the reference number of cells for PDCCH blind detection allowed to be configured for the SCG.  
<endl>  
  
  
<start>  
cg-config  
requestedP-MaxEUTRA  
Requested value for the maximum power for the serving cells the UE can use in E-UTRA SCG. This field is only used in NE-DC.  
<endl>  
  
  
<start>  
cg-config  
requestedP-MaxFR1  
Requested value for the maximum power for the serving cells on frequency range 1 (FR1) in this secondary cell group (see TS 38.104 [12]) the UE can use in NR SCG.  
<endl>  
  
  
<start>  
cg-config  
requestedP-MaxFR2  
Requested value for the maximum power for the serving cells on frequency range 2 (FR2) in this secondary cell group the UE can use in NR SCG. This field is only used in NR-DC.  
<endl>  
  
  
<start>  
cg-config  
requestedToffset  
Requests the new value for the time offset restriction used by the SN for scheduling SCG transmissions (i.e. see TS 38.213 [13]). This field is used in NR-DC only when the fields nrdc-PC-mode-FR1-r16 or nrdc-PC-mode-FR2-r16 are set to dynamic. Value ms0dot5 corresponds to 0.5 ms, value ms0dot75 corresponds to 0.75 ms, value ms1 corresponds to 1ms and so on.  
<endl>  
  
  
<start>  
cg-config  
scellFrequenciesSN-EUTRA, scellFrequenciesSN-NR  
Indicates the frequency of all SCells with SSB configured in SCG. The field scellFrequenciesSN-EUTRA is used in NE-DC; the field scellFrequenciesSN-NR is used in (NG)EN-DC and NR-DC. In (NG)EN-DC, the field is optionally provided to the MN. scellFrequenciesSN-NR indicates absoluteFrequencySSB.  
<endl>  
  
  
<start>  
cg-config  
scg-CellGroupConfig  
Contains the RRCReconfiguration message (containing only secondaryCellGroup and/or measConfig and/or otherConfig and/or conditionalReconfiguration and/or bap-Config and/or iab-IP-AddressConfigurationList):  
- to be sent to the UE, used upon SCG establishment or modification (only when the SCG is not released by the SN), as generated (entirely) by the (target) SgNB. In this case, the SN sets the RRCReconfiguration message in accordance with clause 6 e.g. regarding the "Need" or "Cond" statements.  
 or  
- including the current SCG configuration of the UE, when provided in response to a query from MN, or in SN triggered SN change in order to enable delta signaling by the target SN. In this case, the SN sets the RRCReconfiguration message in accordance with clause 11.2.3.  
The field is absent if neither SCG (re)configuration nor SCG configuration query nor SN triggered SN change is performed, e.g. at inter-node capability/configuration coordination which does not result in SCG (re)configuration towards the UE. The field is also absent upon an SCG release triggered by the SN. This field is not applicable in NE-DC.  
<endl>  
  
  
<start>  
cg-config  
scg-CellGroupConfigEUTRA  
Includes the E-UTRA RRCConnectionReconfiguration message as specified in TS 36.331 [10]. In this version of the specification, the E-UTRA RRC message can only include the field scg-Configuration:  
- to be sent to the UE, used to (re-)configure the SCG configuration upon SCG establishment or modification (only when the SCG is not released by the SN), as generated (entirely) by the (target) SeNB. In this case, the SN sets the scg-Configuration within the EUTRA RRCConnectionReconfiguration message in accordance with clause 6 in TS 36.331 [10] e.g. regarding the "Need" or "Cond" statements.  
or  
- including the current SCG configuration of the UE, when provided in response to a query from MN, or in SN triggered SN change in order to enable delta signalling by the target SN.  
The field is absent if neither SCG (re)configuration nor SCG configuration query nor SN triggered SN change is performed, e.g. at inter-node capability/configuration coordination which does not result in SCG (re)configuration towards the UE. The field is also absent upon an SCG release triggered by the SN. This field is only used in NE-DC.  
<endl>  
  
  
<start>  
cg-config  
scg-RB-Config  
Contains the IE RadioBearerConfig:  
- to be sent to the UE, used to (re-)configure the SCG RB configuration upon SCG establishment or modification, as generated (entirely) by the (target) SgNB or SeNB. In this case, the SN sets the RadioBearerConfig in accordance with clause 6, e.g. regarding the "Need" or "Cond" statements.  
 or  
- including the current SCG RB configuration of the UE, when provided in response to a query from MN or in SN triggered SN change or in SN triggered SN release or bearer type change between SN terminated bearer to MN terminated bearer in order to enable delta signaling by the MN or target SN. In this case, the SN sets the RadioBearerConfig in accordance with clause 11.2.3.  
The field is absent if neither SCG (re)configuration nor SCG configuration query nor SN triggered SN change nor SN triggered SN release is performed, e.g. at inter-node capability/configuration coordination which does not result in SCG RB (re)configuration.  
<endl>  
  
  
<start>  
cg-config  
selectedBandCombination  
Indicates the band combination selected by SN in (NG)EN-DC, NE-DC, and NR-DC. The SN should inform the MN with this field whenever the band combination and/or feature set it selected for the SCG changes (i.e. even if the new selection concerns a band combination and/or feature set that is allowed by the allowedBC-ListMRDC)  
<endl>  
  
  
<start>  
cg-config  
selectedToffset  
Indicates the value used by the SN for scheduling SCG transmissions (i.e. see TS 38.213 [13]). This field is used in NR-DC only when the fields nrdc-PC-mode-FR1-r16 or nrdc-PC-mode-FR2-r16 are set to dynamic. The SN can only indicate a value that is less than or equal to maxToffset received from MN. This field is used in NR-DC only when MN has included the field maxToffset in CG-ConfigInfo. Value ms0dot5 corresponds to 0.5 ms, value ms0dot75 corresponds to 0.75 ms, value ms1 corresponds to 1ms and so on.  
<endl>  
  
  
<start>  
cg-config  
servCellInfoListSCG-EUTRA  
Indicates the carrier frequency and the transmission bandwidth of the serving cell(s) in the SCG in intra-band NE-DC. The field is needed when MN and SN operate serving cells in the same band for either contiguous or non-contiguous intra-band band combination or LTE NR inter-band band combinations where the frequency range of the E-UTRA band is a subset of the frequency range of the NR band (as specified in Table 5.5B.4.1-1 of TS 38.101-3 [34]) in NE-DC.  
<endl>  
  
  
<start>  
cg-config  
servCellInfoListSCG-NR  
Indicates the frequency band indicator, carrier center frequency, UE specific channel bandwidth and SCS of the serving cell(s) in the SCG in intra-band (NG)EN-DC. The field is needed when MN and SN operate serving cells in the same band for either contiguous or non-contiguous intra-band band combination or LTE NR inter-band band combinations where the frequency range of the E-UTRA band is a subset of the frequency range of the NR band (as specified in Table 5.5B.4.1-1 of TS 38.101-3 [34]) in (NG)EN-DC.  
<endl>  
  
  
<start>  
cg-config  
twoPHRModeSCG  
Indicates if the power headroom for SCG shall be reported as two PHRs (each PHR associated with a SRS resource set) is enabled or not.  
<endl>  
  
  
<start>  
cg-config  
twoSRS-PUSCH-Repetition  
Indicates whether the indicated serving cell is configured for PUSCH repetition corresponding to two SRS resource sets configured in either srs-ResourceSetToAddModList or srs-ResourceSetToAddModListDCI-0-2 with usage 'codebook' or 'noncodebook'.  
<endl>  
  
  
<start>  
cg-config  
transmissionBandwidth-EUTRA  
Indicates the transmission bandwidth on an E-UTRA carrier frequency as defined by the parameter Transmission Bandwidth Configuration "NRB" TS 36.104 [33]. The values rb6, rb15, rb25, rb50, rb75, rb100 indicate 6, 15, 25, 50, 75 and 100 resource blocks respectively.  
<endl>  
  
  
<start>  
cg-config  
ueAssistanceInformationSCG  
Includes for each UE assistance feature associated with the SCG, the information last reported by the UE in the NR UEAssistanceInformation message for the SCG, if any.  
<endl>

<start>  
bandcombinationinfosn  
bandCombinationIndex  
In case of NR-DC, this field indicates the position of a band combination in the supportedBandCombinationList. In case of NE-DC, this field indicates the position of a band combination in the supportedBandCombinationList and/or supportedBandCombinationListNEDC-Only. In case of (NG)EN-DC, this field indicates the position of a band combination in the supportedBandCombinationList and/or supportedBandCombinationList-UplinkTxSwitch. Band combination entries in supportedBandCombinationList are referred by an index which corresponds to the position of a band combination in the supportedBandCombinationList. Band combination entries in supportedBandCombinationListNEDC-Only are referred by an index which corresponds to the position of a band combination in the supportedBandCombinationListNEDC-Only increased by the number of entries in supportedBandCombinationList. Band combination entries in supportedBandCombinationList-UplinkTxSwitch are referred by an index which corresponds to the position of a band combination in the supportedBandCombinationList-UplinkTxSwitch increased by the number of entries in supportedBandCombinationList.  
<endl>  
  
  
<start>  
bandcombinationinfosn  
requestedFeatureSets  
The position in the FeatureSetCombination which identifies one FeatureSetUplink/Downlink for each band entry in the associated band combination  
<endl>

<start>  
cg-configinfo  
alignedDRX-Indication  
This field is signalled upon MN triggered CGI reporting by the UE that requires aligned DRX configurations between the MCG and the SCG (i.e. same DRX cycle and on-duration configured by MN completely contains on-duration configured by SN).  
<endl>  
  
  
<start>  
cg-configinfo  
allowedBC-ListMRDC  
A list of indices referring to band combinations in MR-DC capabilities from which SN is allowed to select the SCG band combination. Each entry refers to:  
- a band combination numbered according to supportedBandCombinationList and supportedBandCombinationList-UplinkTxSwitch in the UE-MRDC-Capability (in case of (NG)EN-DC), or according to supportedBandCombinationList and supportedBandCombinationListNEDC-Only in the UE-MRDC-Capability (in case of NE-DC), or according to supportedBandCombinationList in the UE-NR-Capability (in case of NR-DC),  
- and the Feature Sets allowed for each band entry. All MR-DC band combinations indicated by this field comprise the MCG band combination, which is a superset of the MCG band(s) selected by MN.  
<endl>  
  
  
<start>  
cg-configinfo  
allowedReducedConfigForOverheating  
Indicates the reduced configuration that the SCG is allowed to configure.  
reducedMaxCCs in allowedReducedConfigForOverheating indicates the maximum number of downlink/uplink PSCell/SCells that the SCG is allowed to configure. This field is used in (NG)EN-DC and NR-DC.  
reducedMaxBW-FR1 and reducedMaxBW-FR2 in allowedReducedConfigForOverheating indicates the maximum aggregated bandwidth across all downlink/uplink carriers of FR1 and FR2-1, respectively that the SCG is allowed to configure. reducedMaxBW-FR2-2 in allowedReducedConfigForOverheating-r17 indicates the maximum aggregated bandwidth across all downlink/uplink carriers of FR2-2 that the SCG is allowed to configure. This field is only used in NR-DC.  
reducedMaxMIMO-LayersFR1 and reducedMaxMIMO-LayersFR2 in allowedReducedConfigForOverheating indicates the maximum number of downlink/uplink MIMO layers of each serving cell operating on FR1 and FR2-1, respectively that the SCG is allowed to configure. reducedMaxMIMO-LayersFR2-2 in allowedReducedConfigForOverheating-r17 indicates the maximum number of downlink/uplink MIMO layers of each serving cell operating on FR2-2 that the SCG is allowed to configure. This field is only used in NR-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
candidateCellInfoListMN, candidateCellInfoListSN  
Contains information regarding cells that the master node or the source node suggests the target gNB or DU to consider configuring. In case of MN initiated CPA or CPC, the field candidateCellInfoListMN contains information regarding cells that the MN suggests the candidate target secondary node to consider configuring for MN initiated CPA or CPC.  
For (NG)EN-DC, including CSI-RS measurement results in candidateCellInfoListMN is not supported in this version of the specification. For NR-DC, including SSB and/or CSI-RS measurement results in candidateCellInfoListMN is supported.  
<endl>  
  
  
<start>  
cg-configinfo  
candidateCellInfoListMN-EUTRA, candidateCellInfoListSN-EUTRA  
Includes the MeasResultList3EUTRA as specified in TS 36.331 [10]. Contains information regarding cells that the master node or the source node suggests the target secondary eNB to consider configuring. These fields are only used in NE-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
candidateCellListCPC  
Contains information regarding cells that the source secondary node suggests the candidate target secondary node to consider configuring for SN initiated Conditional PSCell Change (CPC).  
<endl>  
  
  
<start>  
cg-configinfo  
configRestrictInfo  
Includes fields for which SgNB is explicitly indicated to observe a configuration restriction.  
<endl>  
  
  
<start>  
cg-configinfo  
drx-ConfigMCG  
This field contains the complete DRX configuration of the MCG. This field is only used in NR-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
drx-InfoMCG  
This field contains the DRX long and short cycle configuration of the MCG. This field is used in (NG)EN-DC and NE-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
drx-InfoMCG2  
This field contains the drx-onDurationTimer configuration of the MCG. This field is only used in (NG)EN-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
dummy, dummy1  
These fields are not used in the specification and SN ignores the received value(s).  
<endl>  
  
  
<start>  
cg-configinfo  
fr-InfoListMCG  
Contains information of FR information of serving cells that include PCell and SCell(s) configured in MCG.  
<endl>  
  
  
<start>  
cg-configinfo  
fr1-Carriers-MCG, fr2-Carriers-MCG  
Indicates the number of FR1 or FR2 serving cells configured in MCG.  
<endl>  
  
  
<start>  
cg-configinfo  
interFreqNoGap  
Indicates that the field interFrequencyConfig-NoGap-r16 has been included within the MeasConfig IE generated by the MN.  
<endl>  
  
  
<start>  
cg-configinfo  
lowMobilityEvaluationConnectedInPCell  
Indicates if low mobility criterion has been configured in NR PCell.  
<endl>  
  
  
<start>  
cg-configinfo  
maxInterFreqMeasIdentitiesSCG  
Indicates the maximum number of allowed measurement identities that the SCG is allowed to configure for inter-frequency measurement. The maximum value for this field is 10. If the field is absent, the SCG is allowed to configure inter-frequency measurements up to the maximum value. This field is only used in NR-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
maxIntraFreqMeasIdentitiesSCG  
Indicates the maximum number of allowed measurement identities that the SCG is allowed to configure for intra-frequency measurement on each serving frequency. The maximum value for this field is 9 (in case of (NG)EN-DC or NR-DC) or 10 (in case of NE-DC). If the field is absent, the SCG is allowed to configure intra-frequency measurements up to the maximum value on each serving frequency.  
<endl>  
  
  
<start>  
cg-configinfo  
maxMeasCLI-ResourceSCG  
Indicates the maximum number of CLI RSSI resources that the SCG is allowed to configure.  
<endl>  
  
  
<start>  
cg-configinfo  
maxMeasFreqsSCG  
Indicates the maximum number of NR inter-frequency carriers the SN is allowed to configure with PSCell for measurements.  
<endl>  
  
  
<start>  
cg-configinfo  
maxMeasSRS-ResourceSCG  
Indicates the maximum number of SRS resources that the SCG is allowed to configure for CLI measurement.  
<endl>  
  
  
<start>  
cg-configinfo  
maxNumberCPCCandidates  
Indicates the maximum numbers of conditional reconfigurations the SN is allowed to configure for SN initiated CPC. Value 0 indicates that the SN is not allowed to configure SN initiated CPC. If the field is absent, the SN is allowed to configure up to maxNrofCondCells-r16 conditional reconfigurations for SN-initiated CPC.  
<endl>  
  
  
<start>  
cg-configinfo  
maxNumberROHC-ContextSessionsSN  
Indicates the maximum number of ROHC context sessions allowed to SN terminated bearer, excluding context sessions that leave all headers uncompressed.  
<endl>  
  
  
<start>  
cg-configinfo  
maxNumberEHC-ContextsSN  
Indicates the maximum number of EHC contexts allowed to the SN terminated bearer. The field indicates the number of contexts in addition to CID = "all zeros", as specified in TS 38.323 [5].  
<endl>  
  
  
<start>  
cg-configinfo  
maxNumberUDC-DRB  
Indicates the maximum number of UDC DRBs allowed to SN terminated bearer. This field is used in NGEN-DC, NR-DC and NE-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
maxToffset  
Indicates the maximum Toffset value the SN is allowed to use for scheduling SCG transmissions (see TS 38.213 [13]). This field is used in NR-DC only when the fields nrdc-PC-mode-FR1-r16 or nrdc-PC-mode-FR2-r16 are set to dynamic. Value ms0dot5 corresponds to 0.5 ms, value ms0dot75 corresponds to 0.75 ms, value ms1 corresponds to 1 ms and so on.  
<endl>  
  
  
<start>  
cg-configinfo  
measuredFrequenciesMN  
Used by MN to indicate a list of frequencies measured by the UE.  
<endl>  
  
  
<start>  
cg-configinfo  
measGapConfig  
Indicates the FR1 and perUE measurement gap configuration configured by MN.  
<endl>  
  
  
<start>  
cg-configinfo  
measGapConfigFR2  
Indicates the FR2 measurement gap configuration configured by MN.  
<endl>  
  
  
<start>  
cg-configinfo  
mcg-RB-Config  
Contains all of the fields in the IE RadioBearerConfig used in MN, used by the SN to support delta configuration to UE (i.e. when MN does not use full configuration option), for bearer type change between MN terminated bearer with NR PDCP to SN terminated bearer. It is also used to indicate the PDCP duplication related information for MN terminated split bearer (whether duplication is configured and if so, whether it is initially activated) in SN Addition/Modification procedure. Otherwise, this field is absent.  
<endl>  
  
  
<start>  
cg-configinfo  
measResultReportCGI, measResultReportCGI-EUTRA  
Used by MN to provide SN with CGI-Info for the cell as per SN′s request. In this version of the specification, the measResultReportCGI is used for (NG)EN-DC and NR-DC and the measResultReportCGI-EUTRA is used only for NE-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
measResultSCG-EUTRA  
This field includes the MeasResultSCG-FailureMRDC IE as specified in TS 36.331 [10]. This field is only used in NE-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
measResultSFTD-EUTRA  
SFTD measurement results between the PCell and the E-UTRA PScell in NE-DC. This field is only used in NE-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
mrdc-AssistanceInfo  
Contains the IDC assistance information for MR-DC reported by the UE (see TS 36.331 [10]).  
<endl>  
  
  
<start>  
cg-configinfo  
nrdc-PC-mode-FR1  
Indicates the uplink power sharing mode that the UE uses in NR-DC FR1 (see TS 38.213 [13], clause 7.6).  
<endl>  
  
  
<start>  
cg-configinfo  
nrdc-PC-mode-FR2  
Indicates the uplink power sharing mode that the UE uses in NR-DC FR2 (see TS 38.213 [13], clause 7.6).  
<endl>  
  
  
<start>  
cg-configinfo  
overheatingAssistanceSCG  
Contains the UE's preference on reduced configuration for NR SCG to address overheating. This field is only used in (NG)EN-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
overheatingAssistanceSCG-FR2-2  
Contains the UE's preference on reduced configuration for NR SCG on FR2-2 to address overheating. This field is only used in (NG)EN-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
p-maxEUTRA  
Indicates the maximum total transmit power to be used by the UE in the E-UTRA cell group (see TS 36.104 [33]). This field is used in (NG)EN-DC and NE-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
p-maxNR-FR1  
For (NG)EN-DC and NE-DC, the field indicates the maximum total transmit power to be used by the UE in the NR cell group across all serving cells in frequency range 1 (FR1) (see TS 38.104 [12]). For NR-DC, it indicates the maximum total transmit power to be used by the UE in the NR cell group across all serving cells in frequency range 1 (FR1) (see TS 38.104 [12]) the UE can use in NR SCG.  
<endl>  
  
  
<start>  
cg-configinfo  
p-maxUE-FR1  
Indicates the maximum total transmit power to be used by the UE across all serving cells in frequency range 1 (FR1).  
<endl>  
  
  
<start>  
cg-configinfo  
p-maxNR-FR1-MCG  
Indicates the maximum total transmit power to be used by the UE in the NR cell group across all serving cells in frequency range 1 (FR1) (see TS 38.104 [12]) the UE can use in NR MCG. This field is only used in NR-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
p-maxNR-FR2-SCG  
Indicates the maximum total transmit power to be used by the UE in the NR cell group across all serving cells in frequency range 2 (FR2) (see TS 38.104 [12]) the UE can use in NR SCG.  
<endl>  
  
  
<start>  
cg-configinfo  
p-maxUE-FR2  
Indicates the maximum total transmit power to be used by the UE across all serving cells in frequency range 2 (FR2).  
<endl>  
  
  
<start>  
cg-configinfo  
p-maxNR-FR2-MCG  
Indicates the maximum total transmit power to be used by the UE in the NR cell group across all serving cells in frequency range 2 (FR2) (see TS 38.104 [12]) the UE can use in NR MCG.  
<endl>  
  
  
<start>  
cg-configinfo  
pdcch-BlindDetectionSCG  
Indicates the maximum value of the reference number of cells for PDCCH blind detection allowed to be configured for the SCG.  
<endl>  
  
  
<start>  
cg-configinfo  
ph-InfoMCG  
Power headroom information in MCG that is needed in the reception of PHR MAC CE in SCG.  
<endl>  
  
  
<start>  
cg-configinfo  
ph-SupplementaryUplink  
Power headroom information for supplementary uplink. For UE in (NG)EN-DC, this field is absent.  
<endl>  
  
  
<start>  
cg-configinfo  
ph-Type1or3  
Type of power headroom for a serving cell in MCG (PCell and activated SCells). type1 refers to type 1 power headroom, type3 refers to type 3 power headroom. (See TS 38.321 [3]).  
<endl>  
  
  
<start>  
cg-configinfo  
ph-Uplink  
Power headroom information for uplink.  
<endl>  
  
  
<start>  
cg-configinfo  
powerCoordination-FR1  
Indicates the maximum power that the UE can use in FR1.  
<endl>  
  
  
<start>  
cg-configinfo  
powerCoordination-FR2  
Indicates the maximum power that the UE can use in frequency range 2 (FR2). This field is only used in NR-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
scgFailureInfo  
Contains SCG failure type and measurement results. In case the sender has no measurement results available, the sender may include one empty entry (i.e. without any optional fields present) in measResultPerMOList. This field is used in (NG)EN-DC and NR-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
scg-RB-Config  
Contains all of the fields in the IE RadioBearerConfig used in SN, used to allow the target SN to use delta configuration to the UE, e.g. during SN change. The field is signalled upon change of SN unless MN uses full configuration option. Otherwise, the field is absent.  
<endl>  
  
  
<start>  
cg-configinfo  
selectedBandEntriesMNList  
A list of indices referring to the position of a band entry selected by the MN, in each band combination entry in allowedBC-ListMRDC IE. BandEntryIndex 0 identifies the first band in the bandList of the BandCombination, BandEntryIndex 1 identifies the second band in the bandList of the BandCombination, and so on. This selectedBandEntriesMNList includes the same number of entries, and listed in the same order as in allowedBC-ListMRDC. The SN uses this information to determine which bands out of the NR band combinations in allowedBC-ListMRDC it can configure in SCG in NR-DC. The SN can use this information to determine for which band pair(s) it should check SimultaneousRxTxPerBandPair.  
<endl>  
  
  
<start>  
cg-configinfo  
servCellIndexRangeSCG  
Range of serving cell indices that SN is allowed to configure for SCG serving cells.  
<endl>  
  
  
<start>  
cg-configinfo  
servCellInfoListMCG-EUTRA  
Indicates the carrier frequency and the transmission bandwidth of the serving cell(s) in the MCG in intra-band (NG)EN-DC. The field is needed when MN and SN operate serving cells in the same band for either contiguous or non-contiguous intra-band band combination or LTE NR inter-band band combinations where the frequency range of the E-UTRA band is a subset of the frequency range of the NR band (as specified in Table 5.5B.4.1-1 of TS 38.101-3 [34]) in (NG)EN-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
servCellInfoListMCG-NR  
Indicates the frequency band indicator, carrier center frequency, UE specific channel bandwidth and SCS of the serving cell(s) in the MCG in intra-band NE-DC. The field is needed when MN and SN operate serving cells in the same band for either contiguous or non-contiguous intra-band band combination or LTE NR inter-band band combinations where the frequency range of the E-UTRA band is a subset of the frequency range of the NR band (as specified in Table 5.5B.4.1-1 of TS 38.101-3 [34]) in NE-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
servFrequenciesMN-NR  
Indicates the frequency of all serving cells that include PCell and SCell(s) with SSB configured in MCG. This field is only used in NR-DC. servFrequenciesMN-NR indicates absoluteFrequencySSB.  
<endl>  
  
  
<start>  
cg-configinfo  
sftdFrequencyList-NR  
Includes a list of SSB frequencies. Each entry identifies the SSB frequency of a PSCell, which corresponds to one MeasResultCellSFTD-NR entry in the MeasResultCellListSFTD-NR.  
<endl>  
  
  
<start>  
cg-configinfo  
sftdFrequencyList-EUTRA  
Includes a list of E-UTRA frequencies. Each entry identifies the carrier frequency of a PSCell, which corresponds to one MeasResultSFTD-EUTRA entry in the MeasResultCellListSFTD-EUTRA.  
<endl>  
  
  
<start>  
cg-configinfo  
sidelinkUEInformationEUTRA  
This field contains the E-UTRA SidelinkUEInformation message as specified in TS 36.331 [10].  
<endl>  
  
  
<start>  
cg-configinfo  
sidelinkUEInformationNR  
This field contains the NR SidelinkUEInformationNR message.  
<endl>  
  
  
<start>  
cg-configinfo  
sourceConfigSCG  
Includes all of the current SCG configurations used by the target SN to build delta configuration to be sent to UE, e.g. during SN change. The field contains the RRCReconfiguration message, i.e. including secondaryCellGroup and measConfig. The field is signalled upon change of SN, unless MN uses full configuration option. Otherwise, the field is absent.  
<endl>  
  
  
<start>  
cg-configinfo  
sourceConfigSCG-EUTRA  
Includes the E-UTRA RRCConnectionReconfiguration message as specified in TS 36.331 [10]. In this version of the specification, the E-UTRA RRC message can only include the field scg-Configuration. In this version of the specification, this field is absent when master gNB uses full configuration option. This field is only used in NE-DC.  
<endl>  
  
  
<start>  
cg-configinfo  
twoPHRModeMCG  
Indicates if the power headroom for MCG shall be reported as two PHRs (each PHR associated with a SRS resource set) is enabled or not.  
<endl>  
  
  
<start>  
cg-configinfo  
twoSRS-PUSCH-Repetition  
Indicates whether the indicated serving cell is configured for PUSCH repetition corresponding to two SRS resource sets configured in either srs-ResourceSetToAddModList or srs-ResourceSetToAddModListDCI-0-2 with usage 'codebook' or 'noncodebook'.  
<endl>  
  
  
<start>  
cg-configinfo  
ueAssistanceInformationSourceSCG  
Includes for each UE assistance feature associated with the SCG, the information last reported by the UE in the NR UEAssistanceInformation message for the source SCG, if any.  
<endl>  
  
  
<start>  
cg-configinfo  
ue-CapabilityInfo  
Contains the IE UE-CapabilityRAT-ContainerList supported by the UE (see NOTE 3). A gNB that retrieves MRDC related capability containers ensures that the set of included MRDC containers is consistent w.r.t. the feature set related information.  
<endl>

<start>  
bandcombinationinfo  
allowedFeatureSetsList  
Defines a subset of the entries in a FeatureSetCombination. Each index identifies a position in the FeatureSetCombination, which corresponds to one FeatureSetUplink/Downlink for each band entry in the associated band combination.  
<endl>  
  
  
<start>  
bandcombinationinfo  
bandCombinationIndex  
In case of NR-DC, this field indicates the position of a band combination in the supportedBandCombinationList. In case of NE-DC, this field indicates the position of a band combination in the supportedBandCombinationList and/or supportedBandCombinationListNEDC-Only. In case of (NG)EN-DC, this field indicates the position of a band combination in the supportedBandCombinationList and/or supportedBandCombinationList-UplinkTxSwitch. Band combination entries in supportedBandCombinationList are referred by an index which corresponds to the position of a band combination in the supportedBandCombinationList. Band combination entries in supportedBandCombinationListNEDC-Only are referred by an index which corresponds to the position of a band combination in the supportedBandCombinationListNEDC-Only increased by the number of entries in supportedBandCombinationList. Band combination entries in supportedBandCombinationList-UplinkTxSwitch are referred by an index which corresponds to the position of a band combination in the supportedBandCombinationList-UplinkTxSwitch increased by the number of entries in supportedBandCombinationList.  
<endl>

<start>  
meastiming  
carrierFreq, ssbSubcarrierSpacing  
Indicates the frequency and subcarrier spacing of the SS block of the cell for which this message is included, or of other SS blocks within the same carrier.  
<endl>  
  
  
<start>  
meastiming  
ssb-MeasurementTimingConfiguration  
Indicates the SMTC which can be used to search for SSB of the cell for which the message is included. When the message is included in "Served NR Cell Information" (see TS 36.423 [37]), "Served Cell Information NR" (see TS 38.423 [35]), or "Served Cell Information" (see TS 38.473 [36]), the timing is based on the cell for which the message is included. When the message is included in "NR Neighbour Information" (see TS 36.423 [37]), or "Served Cell Information" (see TS 38.423 [35]), the timing is based on the cell indicated in the "Served NR Cell Information" or "Served Cell Information NR" with which the "NR Neighbour Information" or "Neighbour Information NR" is provided. When the message is included in "CU to DU RRC Information", the timing is based on the cell indicated by SpCell ID with which the message is included.  
<endl>  
  
  
<start>  
meastiming  
ss-RSSI-Measurement  
Provides the configuration which can be used for RSSI measurements of the cell for which the message is included.  
<endl>

<start>  
measurementtimingconfiguration  
campOnFirstSSB  
Value true indicates that the SSB indicated in the first instance of MeasTiming in the measTiming list can be used for camping and for a PCell configuration (i.e. in spCellConfigCommon of the masterCellGroup).  
<endl>  
  
  
<start>  
measurementtimingconfiguration  
csi-RS-CellMobility  
Indicates the CSI-RS configuration of the cell for which this message is included. The timing of the CSI-RS resources is based on the SSB indicated by refSSBFreq.  
<endl>  
  
  
<start>  
measurementtimingconfiguration  
csi-RS-SubcarrierSpacing  
Indicates the subcarrier spacing of the CSI-RS resources included in csi-rs-CellMobility.  
<endl>  
  
  
<start>  
measurementtimingconfiguration  
measTiming  
A list of SMTC information, SSB RSSI measurement information and associated NR frequency exchanged via EN-DC X2 Setup, EN-DC Configuration Update, Xn Setup and NG-RAN Node Configuration Update procedures, or F1 messages between gNB DU and gNB CU.  
<endl>  
  
  
<start>  
measurementtimingconfiguration  
physCellId  
Physical Cell Identity of the SSB on the ARFCN indicated by carrierFreq.  
<endl>  
  
  
<start>  
measurementtimingconfiguration  
psCellOnlyOnFirstSSB  
Value true indicates that only the SSB indicated in the first instance of MeasTiming in the measTiming list can be used for a PSCell configuration (i.e. in spCellConfigCommon of the secondaryCellGroup).  
<endl>  
  
  
<start>  
measurementtimingconfiguration  
ssb-ToMeasure  
The set of SS blocks to be measured within the SMTC measurement duration (see TS 38.215 [9]).  
<endl>

<start>  
ueradiopaginginformation  
supportedBandListNRForPaging  
Indicates the UE supported NR frequency bands which are derived by the gNB from UE-NR-Capability.  
<endl>  
  
  
<start>  
ueradiopaginginformation  
dl-SchedulingOffset-PDSCH-TypeA-FDD-FR1  
Indicates whether the UE supports DL scheduling slot offset (K0) greater than 0 for PDSCH mapping type A in FDD FR1.  
<endl>  
  
  
<start>  
ueradiopaginginformation  
dl-SchedulingOffset-PDSCH-TypeA-TDD-FR1  
Indicates whether the UE supports DL scheduling slot offset (K0) greater than 0 for PDSCH mapping type A in TDD FR1.  
<endl>  
  
  
<start>  
ueradiopaginginformation  
dl-SchedulingOffset-PDSCH-TypeA-TDD-FR2  
Indicates whether the UE supports DL scheduling slot offset (K0) greater than 0 for PDSCH mapping type A in TDD FR2.  
<endl>  
  
  
<start>  
ueradiopaginginformation  
dl-SchedulingOffset-PDSCH-TypeB-FDD-FR1  
Indicates whether the UE supports DL scheduling slot offset (K0) greater than 0 for PDSCH mapping type B in FDD FR1.  
<endl>  
  
  
<start>  
ueradiopaginginformation  
dl-SchedulingOffset-PDSCH-TypeB-TDD-FR1  
Indicates whether the UE supports DL scheduling slot offset (K0) greater than 0 for PDSCH mapping type B in TDD FR1.  
<endl>  
  
  
<start>  
ueradiopaginginformation  
dl-SchedulingOffset-PDSCH-TypeB-TDD-FR2  
Indicates whether the UE supports DL scheduling slot offset (K0) greater than 0 for PDSCH mapping type B in TDD FR2.  
<endl>  
  
  
<start>  
ueradiopaginginformation  
halfDuplexFDD-TypeA-RedCap  
Indicates whether the RedCap UE only supports half-duplex operation for FDD in the indicated band(s).  
<endl>  
  
  
<start>  
ueradiopaginginformation  
inactiveStatePO-Determination  
Indicates whether the UE supports to use the same i\_s to determine PO in RRC\_INACTIVE state as in RRC\_IDLE state.  
<endl>  
  
  
<start>  
ueradiopaginginformation  
numberOfRxRedCap  
Indicates the number of Rx branches supported by a RedCap UE.  
<endl>  
  
  
<start>  
ueradiopaginginformation  
ue-RadioPagingInfo  
The field is used to transfer UE capability information used for paging. The gNB generates the ue-RadioPagingInfo and the contained UE capability information is absent when not supported by the UE.  
<endl>

<start>  
ueradioaccesscapabilityinformation-ies  
ue-RadioAccessCapabilityInfo  
Including NR, MR-DC, E-UTRA radio access capabilities. A gNB that retrieves MRDC related capability containers ensures that the set of included MRDC containers is consistent w.r.t. the feature set related information.  
<endl>

<start>  
%pdu-typeidentifier%  
%field identifier%  
Field description.  
<endl>  
  
  
<start>  
%pdu-typeidentifier%  
%field identifier%  
Field description.  
<endl>