|  |  |  |  |
| --- | --- | --- | --- |
| Company | Clause | Comment | Rapp Response |
| Lenovo | 6.3.1 | For the field description for frequency information, “In this release” has ambiguity after introducing new IE ***sl-FreqInfoListSizeExt*** and suggest to remove the wording  ***sl-FreqInfoList, sl-FreqInfoListSizeExt***  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 *sl-FreqInfoList*. | But I thought it is also true that even in Rel-18, the legacy IE (*sl-FreqInfoList*), would still have one entry?  By removing the “in this release”, it seems to say it is applicable to all releases (even in the future), which seems not rigorous either?  Lenovo: True. agree with Rapp not removing “in this release” |
| Lenovo | 5.2.2.4.13 | New added IE *sl-FreqInfoListSizeExt* and *sl-RLC-BearerConfigListSizeExt* are defined in SIB12 but not in *sl-ConfigCommonNR*. Needs to be aligned with 6.3.1  2> if *sl-FreqInfoList*/*sl-FreqInfoListSizeExt* is included in *sl-ConfigCommonNR*:  …  2> if *sl-RadioBearerConfigList* or *sl-RLC-BearerConfigList*/*sl-RLC-BearerConfigListSizeExt* is included in *sl-ConfigCommonNR*: | SL-ConfigCommonNR-r16 Is not extendable, so cannot be used.  But true there is mis-match with procedural text, will correct the procedural text in the next iteration. |
| Lenovo | 6.3.5 and 5.8.9.1a.5.1 | Additional RLC configuration for SRB/SCCH is directly specified, so we understand there not need RLC configuration index for SRB RLC configuration. I guess the purpose to include this index for SRB is for unified release condition/operation of additional RLC bearer for both DRB and SRB?  **6.3.5**  SL-RLC-BearerConfig-r18 ::= CHOICE {  srb SEQUENCE {  sl-SRB-IdentityWithDuplication INTEGER (1..3),  sL-RLC-BearerConfigIndex-r16 SL-RLC-BearerConfigIndex-r18,  ...  },  drb SEQUENCE {  slrb-PC5-ConfigIndex-r18 SLRB-PC5-ConfigIndex-r16,  sL-RLC-BearerConfigIndex-r16 SL-RLC-BearerConfigIndex-r18,  sl-RLC-ConfigPC5-r18 SL-RLC-ConfigPC5-r16 OPTIONAL, -- Need M  sl-MAC-LogicalChannelConfigPC5-r18 SL-LogicalChannelConfigPC5-r16 OPTIONAL, -- Need M  ...  }  }    **5.8.9.1a.5.1**  1> for unicast, if *SL-RLC-BearerConfigIndex* (if any) of the sidelink DRB or SRB isincluded in *sl-RLC-BearerToReleaseList*/*sl-RLC-BearerToAddModListSizeExt* in *RRCReconfigurationSidelink*; | Exactly, the RLC bearer index for SRB is only used for a unified release operation.  Lenovo: Thanks and no further comments. |
| Lenovo | 5.8.9.1.1 | Since following two sentences are basically same, seems they can be combined for concise text. No strong view though  - the addition of sidelink carrier associated with the peer UE, as specified in clause 5.8.9.1b.2;  - the modification of sidelink carrier associated with the peer UE, as specified in clause 5.8.9.1b.2;  =>  - the addition or modification of sidelink carrier associated with the peer UE, as specified in clause 5.8.9.1b.2; | True, but also I notice that in the legacy text, they always split the addition case and modification case, so I also split the two. No strong view, let’s see if any other view from companies |
| Lenovo | 5.8.9.1a.6 | A typo  3> configure the MAC entity with a logical channel associated with the sidelink RLC entity, as specified in clause 9.1.1.4. | Thx for catching it, will correct it in the next iteration |
| Lenovo | 5.8.9.1b.2 | Typo and rewording  1> for unicast, after receiving the *RRCReconfigurationCompleteSidelink* message,  2> for each *sl-Carrier-Id* value included in the *~~sl-CarrierToReleaseList~~ sl-CarrierToAddModList* that is not part of the current UE configuration (sidelink carrier addition):  …  1> for unicast, if the ~~sidelink carrier addition~~ added sidelink carrier was modified due to the reception of the *RRCReconfigurationSidelink* message; or  1> for unicast, after receiving the *RRCReconfigurationCompleteSidelink* message,  2> for each *sl-Carrier-Id* value included in the *~~sl-CarrierToReleaseList~~ sl-CarrierToAddModList* that is part of the current UE configuration (sidelink carrier modification):  3> modify the sidelink carrier configuration in accordance with *sl-AbsoluteFrequencyPointA* and *sl-AbsoluteFrequencySSB*; | Thanks for catching it, will update it in the next release |
| Lenovo | 6.3.5 | The new added timer is for C-LBT cancellation, so suggest following update for the description of IE and also the name of timer:  ***sl-LBT-FailureRecoveryConfig***  Configures parameters used for detection and cancellation of consistent sidelink LBT failures for operation with shared spectrum channel access, as specified in TS 38.321 [3]. – *SL-LBT-FailureRecoveryConfig* The IE *SL-LBT-FailureRecoveryConfig-r18* is used to configure the parameters used for detection and cancellation of sidelink consistent LBT failures for operation with shared spectrum channel access, as specified in TS 38.321 [3].  ***SL-LBT-FailureRecoveryConfig* information element**  -- ASN1START  -- TAG-SL-LBT-FAILURERECOVERYCONFIG-START  SL-LBT-FailureRecoveryConfig-r18 ::= SEQUENCE {  sl-lbt-FailureInstanceMaxCount-r18 ENUMERATED {n4, n8, n16, n32, n64, n128} OPTIONAL, -- Need M  sl-lbt-FailureDetectionTimer-r18 ENUMERATED {ms10, ms20, ms40, ms80, ms160, ms320} OPTIONAL, -- Need M  sl-LBT-~~Recovery~~CancellationTimer-r18 ENUMERATED {ms10, ms20, ms40, ms80, ms160, ms320} OPTIONAL, -- Need M...  }  -- TAG-SL-LBT-FAILURERECOVERYCONFIG-STOP  -- ASN1STOP | For the naming of the timer, it is to align with 321 running-CR. For the other changes, they are fine for me, thanks!  Lenovo: Thanks for the explanation. Still think the name is not so precise but understand the alignment. |
| Xiaomi | 5.8.6.2 | The UE shall for frequency(ies) which have been selected for NR sidelink communication as specified in TS 38.321 [3]:  1> if [*syncFreqList*] is included in *RRCReconfiguration* or in *SIB12*, and includes at least one of the concerned frequency(ies)  2> if the concerned frequency(ies) are included in *sl-FreqInfoToAddModList/sl-FreqInfoToAddModListExt* in *sl-ConfigDedicatedNR* within *RRCReconfiguration* message or includedin *sl-ConfigCommonNR* within *SIB12*, and *sl-SyncPriority* is configured for the concerned frequency and set to *gnbEnb*:  The condition is not needed since the selected frequency must belongs to the NW configured frequency? |  |
| Xiaomi | 5.8.9.1 | The purpose of PC5-RRC also includes to indicate the PDCP duplication configuration of the SRB and DRB. |  |
| Xiaomi | 5.8.9.1.2 | The corresponding behavior to add/release the carrier frequency is missing |  |
| Xiaomi | 5.8.9.1.3 | 1> if the *RRCReconfigurationSidelink* includes the *sl-CarrierToReleaseList*:  2> for each entryvalue included in the *sl-CarrierToReleaseList* that is part of the current UE sidelink configuration;  3> perform the additional sidelink RLC bearer release procedure, according to clause 5.8.9.1a.5;  1> if the *RRCReconfigurationSidelink* includes the *sl-CarrierToAddModList*  2> for each *sl-Carrier-Id* value included in the *sl-CarrierToAddModList* that is not part of the current UE sidelink configuration:  3> perform the additional sidelink RLC bearer addition procedure, according to clause 5.8.9.1a.6;  2> for each *sl-Carrier-Id* value included in the *sl-CarrierToAddModList* that is part of the current UE sidelink configuration:  3> perform the additional sidelink RLC bearer modification procedure, according to clause 5.8.9.1a.6;  Not correct should be carrier release/add/modification procedure. |  |
| Xiaomi | 5.8.9.1a.1 | Since there is separate section to release the additinoal bearer, “the associated RLC entity(ies) (i.e., including the additional sidelink RLC bearer if applicable) for” is not needed in this section? |  |
| Xiaomi | 5.8.9.1a.5.2 | 1> for unicast, after receiving the *RRCReconfigurationCompleteSidelink* message, if the additional sidelink RLC bearer release was triggered due to the configuration received within the *SIB12*, *SidelinkPreconfigNR* or indicated by upper layers:  2> for each *SL-RLC-BearerConfigIndex* included in transmitted *sl-RLC-BearerToReleaseList*/*sl-RLC-BearerToAddModListSizeExt* that is part of the current UE sidelink configuration:  3> release the additional sidelink RLC bearer for NR sidelink communication associated with the *SL-RLC-BearerConfigIndex*;  To align with section 5.9.1a.1,  1> for unicast, after receiving the *RRCReconfigurationCompleteSidelink* message, if the additional sidelink RLC bearer release was triggered due to the configuration received within the *SIB12*, *SidelinkPreconfigNR* or indicated by upper layers:  2> release the RLC entity and the corresponding logical channel for NR sidelink communication associated with the additional sidelink RLC bearer; |  |
| Xiaomi | 5.8.9.1a.6.1 | There is no agreement that TX profile is associated per QoS flow, suggest to have editors’ note on this point |  |
| Xiaomi | 5.8.9.1a.6.2 | 1> for unicast, after receiving the *RRCReconfigurationCompleteSidelink* message, if the additional Sidelink RLC bearer addition was triggered due to the configuration received within the *sl-ConfigDedicatedNR,* *SIB12*, *SidelinkPreconfigNR* or indicated by upper layers:  It should be up to TX UE implementation to enable PDCP duplication for SRB1/2/3, why this is related to the configuration received from NW? |  |
| Xiaomi | 5.8.9.1a.6.2 | 2> else (i.e., if this procedure was for Sidelink SRB):  3> configure the MAC entity with a logical channel associated with the sidelink RLC entity, s specified in clause 9.1.1.4.  Typo as specified in … |  |
| Xiaomi | 5.8.9.1b.2 | 2> for each *sl-Carrier-Id* value included in the *sl-CarrierToReleaseList* that is not part of the current UE configuration (sidelink carrier addition):  3> add the sidelink carrier, corresponding to the *sl-Carrier-Id*, in accordance with the *sl-AbsoluteFrequencyPointA* and *sl-AbsoluteFrequencySSB*;  1> for unicast, after receiving the *RRCReconfigurationCompleteSidelink* message,  2> for each *sl-Carrier-Id* value included in the *sl-CarrierToReleaseList* that is not part of the current UE configuration (sidelink carrier addition):  3> add the sidelink carrier, corresponding to the *sl-Carrier-Id*, in accordance with the *sl-AbsoluteFrequencyPointA* and *sl-AbsoluteFrequencySSB*;  Typo should be add/modify list |  |
| Xiaomi | 6.2.2 | ***sl-TxInterestedFreqList***  Each entry of this field indicates the index of frequency on which the UE is interested to transmit NR sidelink communication, for each destination (within *SL-TxResourceReq-r16*) and for each QoS flow (within *SL-TxResourceReq-v1700*). The value 1 corresponds to the frequency of first entry in *sl-FreqInfoList* broadcast in *SIB12*, the value 2 corresponds to the frequency of first entry in *sl-FreqInfoList broadcast* in *SIB12*, the value 3 corresponds to the frequency of second entry in *sl-FreqInfoListSizeExt* broadcast in *SIB12* and so on.  Should be ***sl-FreqInfoListSizeExt*** |  |
| Xiaomi | 6.3.5 | FD of sl-LBT-RecoveryTimer missing |  |
| Xiaomi | 6.3.5 | srb SEQUENCE {  sl-SRB-IdentityWithDuplication INTEGER (1..3),  sL-RLC-BearerConfigIndex-r16 SL-RLC-BearerConfigIndex-r18,  ...  *Is this necessary for SRB?* |  |
| Xiaomi | 6.3.5 | Not correct to place here? |  |
| Xiaomi | 6.3.5 | C:\Users\xm\AppData\Local\Temp\WeChat Files\dc643e586455a032b0698f350a94105.png  Is it a correct handling to include a r16 parameter in the r18 IE? Also the SL-RLC-BearerConfigIndex-r18 should be v18xy?  RRCReconfigurationSidelink-v18xy-IEs ::= SEQUENCE {  sl-CarrierToAddModList-r18 SEQUENCE (SIZE (1..maxNrofFreqSL-1-r18)) OF SL-CarrierConfig-r18 OPTIONAL, -- Need N  sl-CarrierToReleaseList-r18 SEQUENCE (SIZE (1..maxNrofFreqSL-1-r18)) OF SL-CarrierId-r18 OPTIONAL, -- Need N  sl-RLC-BearerToAddModList-r18 SEQUENCE (SIZE(1..maxNrofSLRB-r16)) OF SL-RLC-BearerConfig-r18 OPTIONAL, -- Need N  sl-RLC-BearerToReleaseList-r18 SEQUENCE (SIZE(1..maxNrofSLRB-r16)) OF SL-RLC-BearerConfigIndex-r18 OPTIONAL -- Need N  }  Similar comment as above should be v18xy |  |
| Xiaomi | 6.3.5 | *RRCReconfigurationSidelink*  SL-RLC-BearerConfigIndex-r18 ::= INTEGER (1..maxSL-LCID-r16)  With the above change is this parameter applied to any other place? If not, can be deleted? |  |
| NEC | 5.3.13.1a | For relay case, does the UE needs to check the following highlighted:  1> if configured by upper layers to transmit NR sidelink discovery and related data is available for transmission:  2> if the UE is configured by upper layers to transmit NR sidelink L2 U2N relay discovery messages and *sl-L2U2N-Relay* is included in *SIB12*; or  2> if the UE is configured by upper layers to transmit NR sidelink L3 U2N relay discovery messages and *sl-L3U2N-RelayDiscovery* is included in *SIB12*; or  2> if the UE is configured by upper layers to transmit NR sidelink non-relay discovery messages and *sl-NonRelayDiscovery* is included in *SIB12*:  3> if the frequency on which the UE is configured to transmit NR sidelink discovery is included in *sl-FreqInfoList*/*sl-FreqInfoListSizeExt* within *SIB12* provided by the cell on which the UE camps; and if the valid version of *SIB12* does not include *sl-DiscTxPoolSelected* or *sl-TxPoolSelectedNormal* for the concerned frequency; |  |
| NEC | 5.8.3.2 | Is it possible that sl-FreqInfoListSizeExt and sl-ScheduledConfig configured towards UE at the same time? Since CA is only supported for mode 2 UE:  2> if configured by upper layers to perform NR sidelink transmission on the frequency included in *sl-FreqInfoList*/*sl-FreqInfoListSizeExt* in *SIB12* of the PCell and *if sl-DRX-ConfigCommonGC-BC* is included in *SIB12-IEs* andif the UE is configured with *sl-ScheduledConfig*: |  |
| NEC | 5.8.5.2 | Can rapp clarify what the exact condition does the “else” branch mean? Also, for the blue highlighted, can rapp confirm there would be no case that [syncFreqList] is configured while [slss-TxMultiFreq] is not configured  1> if out of coverage on the frequency used for NR sidelink communication/discovery, and the frequency used to transmit NR sidelink communication/discovery is included in *sl-FreqInfoToAddModList/sl-FreqInfoToAddModListExt* in *sl-ConfigDedicatedNR* within *RRCReconfiguration* message or includedin *sl-FreqInfoList*/*sl-FreqInfoListSizeExt* within *SIB12*; and has selected GNSS or the cell as synchronization reference as defined in 5.8.6.3:  2> if [*syncFreqList*] is not included in *RRCReconfiguration* nor in *SIB12*; or  2> if [*syncFreqList*] is included in *RRCReconfiguration* or in *SIB12*; and if none of the frequency(ies) selected as specified in TS 38.321 [3] is included in the [*syncFreqList*] or the concerned frequency is selected as the synchronisation carrier frequency in accordance with 5.8.6.2; or  2> if [*syncFreqList*] and [*slss-TxMultiFreq*] are included in *RRCReconfiguration* or in *SIB12*; and if the concerned frequency has been selected for NR sidelink communication transmission as specified in TS 38.321 [3] and is included in [*syncFreqList*]; and if the UE has selected a frequency other than the concerned frequency as the synchronisation carrier frequency in accordance with 5.8.6.2; and if [*slss-TxDisabled*] corresponding to the concerned frequency is not configured in *RRCReconfiguration* or in *SIB12*:  3> if in RRC\_CONNECTED; and if *networkControlledSyncTx* is configured and set to *on*; or  3> if *networkControlledSyncTx* is not configured; and for the concerned frequency *syncTxThreshIC* is configured; and the RSRP measurement of the reference cell, selected as defined in 5.8.6.3, for NR sidelink communication/discovery transmission is below the value of *syncTxThreshIC*:  4> transmit sidelink SSB on the frequency used for NR sidelink communication/discovery in accordance with 5.8.5.3 and TS 38.211 [16], including the transmission of SLSS as specified in 5.8.5.3 and transmission of *MasterInformationBlockSidelink* as specified in 5.8.9.4.3;  1> else: |  |
| NEC | 5.8.9.1.3 | Related comment as Xiaomi mentioned, it should be carrier addition/modification/release procedure. Moreover, the correct referred section should be 5.8.9.1b.1 and 5.8.9.1b.2  1> if the *RRCReconfigurationSidelink* includes the *sl-CarrierToReleaseList*:  2> for each entryvalue included in the *sl-CarrierToReleaseList* that is part of the current UE sidelink configuration;  3> perform the additional sidelink RLC bearer release procedure, according to clause 5.8.9.1a.5;  1> if the *RRCReconfigurationSidelink* includes the *sl-CarrierToAddModList*  2> for each *sl-Carrier-Id* value included in the *sl-CarrierToAddModList* that is not part of the current UE sidelink configuration:  3> perform the additional sidelink RLC bearer addition procedure, according to clause 5.8.9.1a.6;  2> for each *sl-Carrier-Id* value included in the *sl-CarrierToAddModList* that is part of the current UE sidelink configuration:  3> perform the additional sidelink RLC bearer modification procedure, according to clause 5.8.9.1a.6; |  |
| NEC | 5.8.9.1.10 | We understand this is for duplication, but duplication is not always activated, so prefer to have the following addition:  1> release the additional sidelink RLC bearer of this destination, if configured, in according to clause 5.8.9.1a.5; |  |
| NEC | 5.8.9.1a.6 | Can rapp further clarify what does the highlighted trigger operation mean?  1> for unicast, after receiving the *RRCReconfigurationCompleteSidelink* message, if the additional Sidelink RLC bearer addition was triggered due to the configuration received within the *sl-ConfigDedicatedNR,* *SIB12*, *SidelinkPreconfigNR* or indicated by upper layers: |  |
| ZTE | 6.3.5 | Why we introduce a new IE to indicate the additional RLC leg, i.e. sl-RLC-BearerConfigListSizeExt-v18xy ?  Current SL-RLC-BearerConfig can be re-used again, and add an indication(i.e. additionalRLCchannel) to indicate which RLC bearer is the additional leg. |  |
| ZTE | 5.2.2.4.13/5.3.5.14 | It is possible that UE is configured with only one leg, i.e. no duplication. However, current procedure mandate UE to perform additional RLC channel addition/release. Suggest to  2> if *sl-RadioBearerConfigList* or *sl-RLC-BearerConfigLis* is included in *SIB12-IEs*:  3> perform sidelink DRB addition/modification/release as specified in 5.8.9.1a.1/5.8.9.1a.2;  3>If *t*/*sl-RLC-BearerConfigListSizeExt is included in SIB12-IEs:*  4> perform additional sidelink RLC bearer addition/modification/release as specified in 5.8.9.1a.5/5.8.9.1a.6; |  |
| ZTE | 6.4 | Why we need a new maxLCID value?  In MAC layer, legacy reserved LCID is allocated to duplicated RLC channel. So, do not see the necessary to introduce new maxLCID value.  Additionally, maxLCID influence UE capability, we do not we should increase Maximum number of RLC bearer due to duplication. |  |
| ZTE | 5.8.5.2 | agree following procedure, but this should be restricted to UE configured with multiple carriers, i.e. differentiate single carrier and multiple carriers:  2> if [*syncFreqList*] is not included in *RRCReconfiguration* nor in *SIB12*; or  2> if [*syncFreqList*] is included in *RRCReconfiguration* or in *SIB12*; and if none of the frequency(ies) selected as specified in TS 38.321 [3] is included in the [*syncFreqList*] or the concerned frequency is selected as the synchronisation carrier frequency in accordance with 5.8.6.2; or  2> if [*syncFreqList*] and [*slss-TxMultiFreq*] are included in *RRCReconfiguration* or in *SIB12*; and if the concerned frequency has been selected for NR sidelink communication transmission as specified in TS 38.321 [3] and is included in [*syncFreqList*]; and if the UE has selected a frequency other than the concerned frequency as the synchronisation carrier frequency in accordance with 5.8.6.2; and if [*slss-TxDisabled*] corresponding to the concerned frequency is not configured in *RRCReconfiguration* or in *SIB12*: |  |
| ZTE | 6.6.2 | For following IE， “towards to peer UE” is not clearer from RX UE’s perspective.  Suggest to use “***sl-CarrierToAddModList***  Indicate added/modified carrier used by UE transmitting RRCReconfigurationSidelink”  sl-CarrierToAddModList  Indicate the carriers to be added / modified for the transmission towards the peer UE.  sl-CarrierToReleaseList  Indicate the carriers to be released for the transmission towards the peer UE. |  |
| ZTE | 6.6.2 | Carrier ID and frequencySSB is useless for identifying the frequency, RX UE can identify the carrier only via AbsoluteFrequencyPointA.  SL-CarrierConfig-r18 ::= SEQUENCE {  sl-Carrier-Id-r18 SL-CarrierId-r18,  sl-AbsoluteFrequencyPointA-r18 ARFCN-ValueNR-r18 OPTIONAL, -- Need M  sl-AbsoluteFrequencySSB-r18 ARFCN-ValueNR-r18 OPTIONAL -- Need R  }  [vivo] agree with ZTE.  1 Some carrier may not have frequencySSB  2 different carrier may have same point A  So point A+ frequency SSB cannot identify the carrier.  If the intention is to identify carriers from RX carrier list configuration, we may need to further define some mapping, e.g. carrier ID to RX carrier list configuration mapping. |  |
| ZTE | 5.8.9.1b.1, 5.8.9.1b.2 | We think the carrier list in PC5 RRCconfigurationSidelink is to indicate the carrier to be used by **TX UE**. Therefore, the description of “release/add” the carrier is inappropriate to be used from RX UE’s perspective, as shown in following. Current wording may cause RX UE release it’s own transmission carrier.  1> for unicast, after receiving the *RRCReconfigurationCompleteSidelink* message,  2> for each *sl-Carrier-Id* value included in the *sl-CarrierToReleaseList*:  3> if the current UE configuration includes a sidelink carrier with value *sl-Carrier-Id*:  4> release the sidelink carrier.  Suggested to mimic measurement behaviour(i.e. A UE in RRC\_CONNECTED maintains a measurement object list, a reporting configuration list, and a measurement identities list according to signalling and procedures in this specification. ):  “UE maintain a carrier list used by peer UE.”  1> for unicast, after receiving the *RRCReconfigurationCompleteSidelink* message,  2> for each *sl-Carrier-Id* value included in the *sl-CarrierToReleaseList*:  3> if the current UE configuration includes a sidelink carrier with value *sl-Carrier-Id*:  4> remove the carrier from maintained carrier list. |  |
| vivo | 5.8.6.2 | When capturing RAN1 #114 agreements, one is missing:  Agreement  To reuse LTE SL CA synchronization procedure for NR SL CA synchronization procedure,   * Rel-16/17 SL synchronization procedure is used for each SL carrier. * The same synchronization reference is used for all the aggregated SL carriers.   + Note: Set A and Set B based LTE SL CA synchronization procedure is supported.   UE assumes that the configuration for SL synchronization reference priority including sl-NbAsSync is the same across all the aggregated SL carriers, which is the same as in LTE SL CA synchronization procedure.  We understand this is also needed in 5.8.6.2, as in LTE we also have this kind of agreement which was capture in LTE spec:  6.3.8 Sidelink information elements  ***syncOffsetIndicator***  E-UTRAN should ensure *syncOffsetIndicator* is set to the same value as *syncOffsetIndicator1* or *syncOffsetIndicator2* in *preconfigSync* within *SL-Preconfiguration*, if configured. If *syncOffsetIndicator-v1430* is configured, the UE shall ignore the field *syncOffsetIndicator-r12*. E-UTRAN should ensure *syncOffsetIndicator* is set to the same value as *syncOffsetIndicator1* in *v2x-CommPreconfigSync* within *SL-V2X-Preconfiguration*, if configured. E-UTRAN should ensure *syncOffsetIndicator2* is set to the same value as *syncOffsetIndicator2* in *v2x-CommPreconfigSync* within *SL-V2X-Preconfiguration*, if configured. E-UTRAN should ensure *syncOffsetIndicator3* is set to the same value as *syncOffsetIndicator3* in *v2x-CommPreconfigSync* within *SL-V2X-Preconfiguration*, if configured. E-UTRAN should ensure all values in *syncOffsetIndicator* are same across all carrier frequencies configured for UEs performing V2X sidelink communication on multiple carrier frequencies. For *SL-V2X-Preconfiguration*, all values in *syncOffsetIndicator* should be same across all carrier frequencies configured for UEs performing V2X sidelink communication on multiple carrier frequencies.  So a NOTE is needed in 5.8.6.2, may be just under NOTE 2, and the text can be like e.g.  NOTE 3: all concerned carrier frequency(ies) have the same *sl-SyncPriority* and *sl-NbAsSync* configuration. |  |
| vivo | ***6.3.5***  ***SL-SyncConfig*** | SL-SyncConfigList-r16 ::= SEQUENCE (SIZE (1..maxSL-SyncConfig-r16)) OF SL-SyncConfig-r16  SL-SyncConfig-r16 ::= SEQUENCE {  sl-SyncRefMinHyst-r16 ENUMERATED {dB0, dB3, dB6, dB9, dB12} OPTIONAL, -- Need R  sl-SyncRefDiffHyst-r16 ENUMERATED {dB0, dB3, dB6, dB9, dB12, dBinf} OPTIONAL, -- Need R  sl-filterCoefficient-r16 FilterCoefficient OPTIONAL, -- Need R  sl-SSB-TimeAllocation1-r16 SL-SSB-TimeAllocation-r16 OPTIONAL, -- Need R  sl-SSB-TimeAllocation2-r16 SL-SSB-TimeAllocation-r16 OPTIONAL, -- Need R  sl-SSB-TimeAllocation3-r16 SL-SSB-TimeAllocation-r16 OPTIONAL, -- Need R  sl-SSID-r16 INTEGER (0..671) OPTIONAL, -- Need R  txParameters-r16 SEQUENCE {  syncTxThreshIC-r16 SL-RSRP-Range-r16 OPTIONAL, -- Need R  syncTxThreshOoC-r16 SL-RSRP-Range-r16 OPTIONAL, -- Need R  syncInfoReserved-r16 BIT STRING (SIZE (2)) OPTIONAL -- Need R  },  gnss-Sync-r16 ENUMERATED {true} OPTIONAL, -- Need R  ...  }  RAN1 has the agreement:  **Agreement:**   * A UE may assume that the configuration for sync reference priority is the same across all the aggregated carriers in CA.   UE may assume number and location of SLSS resources is the same in all the aggregated carriers.  This is not reflected in the CR, so the following text (example) should be captured in field description or NOTE:  *sl-SSB-TimeAllocation1 is set to be same across all carrier frequencies configured for UEs performing NR sidelink communication on multiple carrier frequencies, if configured.*  *sl-SSB-TimeAllocation2 is set to be same across all carrier frequencies configured for UEs performing NR sidelink communication on multiple carrier frequencies, if configured.*  *sl-SSB-TimeAllocation3 is set to be same across all carrier frequencies configured for UEs performing NR sidelink communication on multiple carrier frequencies, if configured.* |  |
| vivo | ***5.8.6.2*** | The UE shall for frequency(ies) which have been selected for NR sidelink communication as specified in TS 38.321 [3]:  1> if [*syncFreqList*] is included in *RRCReconfiguration* or in *SIB12*, and includes at least one of the concerned frequency(ies)  2> if the concerned frequency(ies) are included in *sl-FreqInfoToAddModList/sl-FreqInfoToAddModListExt* in *sl-ConfigDedicatedNR* within *RRCReconfiguration* message or includedin *sl-ConfigCommonNR* within *SIB12*, and *sl-SyncPriority* is configured for the concerned frequency(ies) and set to *gnbEnb*:  3> select one frequency from the concerned frequency(ies) which are included in [*syncFreqList*] as the synchronisation carrier frequency;  Typo: Missed ‘(ies)’ |  |
| vivo | ***5.8.6.2*** | 3> if the UE has selected a SyncRef UE:  4> if the PSBCH-RSRP of the strongest candidate SyncRef UE exceeds the minimum requirement TS 38.133 [14] by *sl-SyncRefMinHyst* and the strongest candidate SyncRef UE belongs to the same priority group as the current SyncRef UE and the PSBCH-RSRP of the strongest candidate SyncRef UE exceeds the PSBCH-RSRP of the current SyncRef UE by *syncRefDiffHyst*; or  4> if the PSBCH-RSRP of the candidate SyncRef UE exceeds the minimum requirement TS 38.133 [14] by *sl-SyncRefMinHyst* and the candidate SyncRef UE belongs to a higher priority group than the current SyncRef UE; or  4> if GNSS becomes reliable in accordance with TS 38.101-1 [15] and TS 38.133 [14], and GNSS belongs to a higher priority group than the current SyncRef UE; or  4> if a cell is detected and gNB/eNB (if *sl-NbAsSync* is set to *true*) belongs to a higher priority group than the current SyncRef UE; or  4> if the PSBCH-RSRP of the current SyncRef UE is less than the minimum requirement defined in TS 38.133 [14]:  5> consider no SyncRef UE to be selected;  3> if the UE has selected GNSS as the synchronization reference for NR sidelink communication/discovery:  4> if the PSBCH-RSRP of the candidate SyncRef UE exceeds the minimum requirement defined in TS 38.133 [14] by *sl-SyncRefMinHyst* and the candidate SyncRef UE belongs to a higher priority group than GNSS; or  4> if GNSS becomes not reliable in accordance with TS 38.101-1 [15] and TS 38.133 [14]:  5> consider GNSS not to be selected;  3> if the UE has selected cell as the synchronization reference for NR sidelink communication/discovery:  4> if the PSBCH-RSRP of the candidate SyncRef UE exceeds the minimum requirement defined in TS 38.133 [14] by *sl-SyncRefMinHyst* and the candidate SyncRef UE belongs to a higher priority group than gNB/eNB; or  4> if the selected cell is not detected:  5> consider the cell not to be selected;  **Issue 1:**  We understand based on RAN1 agreement there are 3 steps:  *1. find the sync reference on each carrier in CA (e.g. 4 carriers)*  *2. compare the priority of different sync reference, and select one carrier (e.g. carrier-2, which is using GNSS)*  *3. use GNSS as the reference for all 4 carriers*  So for the above parts, it is not clear whether it is about the step 1 or step 3. If it is step 3, then it should be clarified that e.g .  3> if the UE has selected a sync carrier and if the UE has selected a SyncRef UE:  On the other hand, there is no condition for ‘when UE should consider no synchronisation carrier frequency is selected’ (for now there is only condition for when no synchronization reference is selected )  **Issue 2:**  The above part is under the last 2>, which is 2>else. Why for the first two 2>, as highlighted in yellow, there is no such condition for the UE to consider no sync reference is selected?  2> if the concerned frequency(ies) are included in *sl-FreqInfoToAddModList/sl-FreqInfoToAddModListExt* in *sl-ConfigDedicatedNR* within *RRCReconfiguration* message or includedin *sl-ConfigCommonNR* within *SIB12*, and *sl-SyncPriority* is configured for the concerned frequency and set to *gnbEnb*:  3> select one frequency from the concerned frequency(ies) which are included in [*syncFreqList*] as the synchronisation carrier frequency;  3> select a cell in accordance with the synchronisation carrier frequency as the synchronization reference source as defined in 5.8.6.3:  2> else if the concerned frequency(ies) are included in *sl-FreqInfoToAddModList/sl-FreqInfoToAddModListExt* in *sl-ConfigDedicatedNR* within *RRCReconfiguration* message or includedin *sl-ConfigCommonNR* within *SIB12*, and *sl-SyncPriority* for concerned frequency(ies) are not configured or are set to *gnss*, and GNSS is reliable in accordance with TS 38.101-1 [15] and TS 38.133 [14]; or if the concerned frequency(ies) are included in *SL-PreconfigurationNR*, and *sl-SyncPriority* in *SidelinkPreconfigNR* is set to *gnss* and GNSS is reliable in accordance with TS 38.101-1 [15] and TS 38.133 [14]:  3> select one frequency from the concerned frequency(ies) which are included in [*syncFreqList*] as the synchronisation carrier frequency;  3> select GNSS in accordance with the synchronisation carrier frequency as the synchronization reference source;  2> else: |  |
| vivo | ***5.8.6.2*** | 3> if the UE has not selected any synchronization reference:  4> if the UE detects one or more SLSSIDs for which the PSBCH-RSRP exceeds the minimum requirement defined in TS 38.133 [14] by *sl-SyncRefMinHyst* and for which the UE received the corresponding *MasterInformationBlockSidelink* message (candidate SyncRef UEs), or if the UE detects GNSS that is reliable in accordance with TS 38.101-1 [15] and TS 38.133 [14], or if the UE detects a cell,  5> select the synchronisation reference source(s) on each concerned frequency which is included in [*SyncFreqList*] according to the following priority group order;  5> select the frequency with the highest synchronisation reference source priority as the synchronisation carrier frequency, according to the following priority gourp order, and consider the synchornization reference source (i.e. eNB/gNB, GNSS or SyncRef UE) that selected on the synchronisation carrier frequency as the synchronization reference:  Missed ‘gNB’ |  |
| Nokia | 5.8.5.2  5.8.6.2 | Although minor comment, we believe that “nor” should be used with “neither” and not “not” e.g. in below and continuously through the spec  2> if [*syncFreqList*] is ~~not~~neither included in *RRCReconfiguration* nor in *SIB12*; or |  |
| Nokia | 5.8.3.3 | We understand for the below addition this were only intended, and useful for SL-CA. Maybe we should not send it in all SUIs but only when related to CA communication.  5.8.3.3 Actions related to transmission of *SidelinkUEInformationNR* message  <text omitted>  5> set *sl-CapabilityInformationSidelink* to include *UECapabilityInformationSidelink* message, if any, received from the associated peer UE;  5> set *sl-Freq-InfoList* to include the frequency(ies) of the sidelink QoS flow(s) of the associated destination configured by the upper layer for the NR sidelink communication transmission;  4> if a sidelink radio link failure or a sidelink RRC reconfiguration failure has been declared, according to clauses 5.8.9.3 and 5.8.9.1.8, respectively; |  |
| Nokia | 5.8.6.2 | Although we agree with the intention of differentiating frequencies and frequency, we think it may be simpler to have the first sentence just stating “frequency(ies)” and then handling the differentiation in a else conditional cause. Currently, since the second part also covers “frequency”, it may lead to significant confusion.  Also, referring to 38.321 in the last intro may imply that the transmission of NR sidelink communication/discovery of the first is not “as specified in 38.321”  5.8.6.2 Selection and reselection of synchronisation reference  The UE shall for a frequency used for transmitting NR sidelink communication/discovery:  1> if [*syncFreqList*] is not included in *RRCReconfiguration* nor in *SIB12*; or  1> if [*syncFreqList*] is included in *RRCReconfiguration* or in *SIB12*, and none of the frequency(ies) selected as specified in TS 38.321 [3] is included in the *syncFreqList*:  <text omitted>  The UE shall for frequency(ies) which have been selected for NR sidelink communication as specified in TS 38.321 [3]:  1> if [*syncFreqList*] is included in *RRCReconfiguration* or in *SIB12*, and includes at least one of the concerned frequency(ies) |  |
| Nokia | 5.8.9.1a.2.2 | Rogue indent for a second level bullet  2> establish a RLC entity for NR sidelink communication and configure it in accordance with the *sl-RLC-ConfigPC5* received in the *RRCReconfigurationSidelink* or *sl-RLC-Config* received in *sl-ConfigDedicatedNR,* *SIB12*, *SidelinkPreconfigNR*, associated with sidelink DRB; |  |
| Nokia | 5.8.9.3 | Would propose in the last condition to add “which has not been cancelled”  5.8.9.3 Sidelink radio link failure related actions  The UE shall:  1> upon indication from sidelink RLC entity that the maximum number of retransmissions for a specific destination has been reached; or  1> upon T400 expiry for a specific destination; or  1> upon indication from MAC entity that the maximum number of consecutive HARQ DTX for a specific destination has been reached; or  1> upon integrity check failure indication from sidelink PDCP entity concerning SL-SRB2 or SL-SRB3 for a specific destination; or  1> upon indication of consistent sidelink LBT failures which has not been cancelled for all RB sets for a specific destination from MAC entity: |  |
| Qualcomm | 5.2.2.4.13 | 1. Is *sl-FreqInfoList* for Rel 16 & 17and Rel 18 others (Relay, no V2X cases) and *sl-FreqInfoListSizeExt* for Rel 18 V2X? If so, suggest using *sl-FreqInfoList* or *sl-FreqInfoListSizeExt* to make it clearer.  2. Sidelink discovery is ProSe/Relay, not support SL CA  3> if configured to transmit NR sidelink discovery:  4> if the UE is configured by upper layers to transmit NR sidelink L2 U2N relay discovery messages and *sl-L2U2N-Relay* is included in SIB12; or  4>if the UE is configured by upper layers to transmit NR sidelink L3 U2N relay discovery messages and *sl-L3U2N-RelayDiscovery* is included in SIB12; or  4>if the UE is configured by upper layers to transmit NR sidelink non-relay discovery messages and *sl-NonRelayDiscovery* is included in SIB12:  5> use the resource pool(s) indicated by *sl-DiscTxPoolSelected*, *sl-TxPoolExceptional* or *sl-TxPoolSelectedNormal* for NR sidelink discovery transmission, as specified in 5.8.13.3;  5> perform CBR measurement on the transmission resource pool(s) indicated by *sl-TxPoolSelectedNormal*, *sl-DiscTxPoolSelected* or *sl-TxPoolExceptional* for NR sidelink discovery transmission, as specified in 5.5.3.1;  5> use the synchronization configuration parameters for NR sidelink discovery on frequencies included in *sl-FreqInfoList*/*sl-FreqInfoListSizeExt*, as specified in 5.8.5;  3. The following have both Rel 16/17 and Rel 18 SL-CA for V2X mixed.  2> if *sl-RadioBearerConfigList* or *sl-RLC-BearerConfigList*/*sl-RLC-BearerConfigListSizeExt* is included in *SIB12-IEs*:  3> perform sidelink DRB addition/modification/release as specified in 5.8.9.1a.1/5.8.9.1a.2;  3> perform additional sidelink RLC bearer addition/modification/release as specified in 5.8.9.1a.5/5.8.9.1a.6; |  |
| Qualcomm | 5.3.3.1a | If *sl-FreqInfoListSizeExt* is used for Rel 18 V2X only, then need some “if” or “note” to clarify it. Currently it’s under all cases.  1> if configured by upper layers to transmit **NR sidelink communication** and related data is available for transmission:  2> if the frequency on which the UE is configured to transmit NR sidelink communication is included in *sl-FreqInfoList*/*sl-FreqInfoListSizeExt* within *SIB12* provided by the cell on which the UE camps; and if the valid version of *SIB12* does not include *sl-TxPoolSelectedNormal* for the concerned frequency; |  |
| Qualcomm | 5.3.5.14,  5.3.13.1a,  5.5.3.1,  5.8.3.2 | Same comments as the above, which ever applicable to these sections (5.3.5.14, 5.3.13.1a, 5.5.3.1, 5.8.3.2, ):  For Rel 18 V2X case only with *sl-FreqInfoListSizeExt*, and/or  Additional RLC for Rel 18 V2X only |  |
| Qualcomm | 5.8.3.3 | 5> set *sl-Freq-InfoList* to include the frequency(ies) of the sidelink QoS flow(s) of the associated destination configured by the upper layer for the NR sidelink communication transmission; |  |
| Qualcomm | 5.8.5.2 | Do we need to add a “if” for Rel 18 V2X case only (not apply to PreSe, Relay case)? (Same comment in other sub-clause related to SL-SSB).  2> if [*syncFreqList*] is not included in *RRCReconfiguration* nor in *SIB12*; or  2> if [*syncFreqList*] is included in *RRCReconfiguration* or in *SIB12*; and if none of the frequency(ies) selected as specified in TS 38.321 [3] is included in the [*syncFreqList*] or the concerned frequency is selected as the synchronisation carrier frequency in accordance with 5.8.6.2; or  2> if [*syncFreqList*] and [*slss-TxMultiFreq*] are included in *RRCReconfiguration* or in *SIB12*; and if the concerned frequency has been selected for NR sidelink communication transmission as specified in TS 38.321 [3] and is included in [*syncFreqList*]; and if the UE has selected a frequency other than the concerned frequency as the synchronisation carrier frequency in accordance with 5.8.6.2; and if [*slss-TxDisabled*] corresponding to the concerned frequency is not configured in *RRCReconfiguration* or in *SIB12*: |  |
| Qualcomm | 5.8.6.2 | Seems the following content is for Rel 18 V2X using SL CA. If so, suggest adding “if” or something to make it clearer.  “The UE shall for frequency(ies) which have been selected for NR sidelink communication as specified in TS 38.321 [3]:  1> if [*syncFreqList*] is included in *RRCReconfiguration* or in *SIB12*, and includes at least one of the concerned frequency(ies)  2> if the concerned frequency(ies) are included in *sl-FreqInfoToAddModList/sl-FreqInfoToAddModListExt* in *sl-ConfigDedicatedNR* within *RRCReconfiguration* message or includedin *sl-ConfigCommonNR* within *SIB12*, and *sl-SyncPriority* is configured for the concerned frequency and set to *gnbEnb*:  3> select one frequency from the concerned frequency(ies) which are included in [*syncFreqList*] as the synchronisation carrier frequency;  3> select a cell in accordance with the synchronisation carrier frequency as the synchronization reference source as defined in 5.8.6.3:  …  7> UEs of which SLSSID is 337 and *inCoverage*, included in the *MasterInformationBlockSidelink* message received from this UE, is set to *false*, starting with the UE with the highest PSBCH-RSRP result (priority group 2);  7> Other UEs, starting with the UE with the highest PSBCH-RSRP result (priority group 3);” |  |
| Qualcomm | 5.8.9.1a.5.1  5.8.9.1a.5.2  5.8.9.1a.6.1  5.8.9.1a.6.1  5.8.9.1b.1  5.8.9.1b.2 | Suggest adding “if” or some wording that these features are for Rel 18 V2X only |  |
|  |  |  |  |