|  |  |  |  |
| --- | --- | --- | --- |
| Company | Clause | Comment | Rapp Response |
| Xiaomi | 5.8.9.1.2 | 1> set the entryincluded in the *sl-CarrierToAddModList*, :2> set the *SLRB-Config* included in the *slrb-ConfigToAddModList*, according to the received *sl-RadioBearerConfig* and *sl-RLC-BearerConfig* corresponding to the sidelink DRB;Bullet 2 is RB modification not carrier modification  | Thanks for catching it, will be corrected in the next iteration |
| Xiaomi | 5.8.9.1a.6.1 | 1> for groupcast and broadcast, for sidelink DRB, if *SL-RLC-BearerConfig* is received in *sl-RLC-BearerToAddModListSizeExt* in *sl-ConfigDedicatedNR* for a *sl-ServedRadioBearer*, and if the *SL-TxProfile* of at least one associated QoS flow for the *sl-ServedRadioBearer* indicates *backwardsCompatible* and UE decides to use PDCP duplication; orAccording to the agreement, this case only applies to RRC\_IDLE/INACTIVE. *If at least one QoS flow having Tx profile with value set to backwards compatible is mapped to the radio bearer, legacy carrier is used for transmission for this radio bearer, for RRC\_IDLE/RRC\_INACTIVE/OOC case.*For RRC\_CONNECTED, NW should ensure all the Qos flows for the same RB indicates the same Tx profile.Also “use the legacy carrier” is not reflected.  | For the 1st issue, although I got your point that there might be no case of mixed Tx profile for CONNECTED case, but still UE has to diff between backwards-(in)compatible cases, and then the only delta part is about “at least”? that seems a bit difficult to further differentiate. Let’s hear more view before change.For the 2nd issue, it will be corrected in the next iteration |
| Xiaomi | 5.8.9.1b.1 | Suggest to have separate section for release condition and release operation. Regarding release condition;1> for unicast, if the sidelink carrier release was triggered due to the reception of the *RRCReconfigurationSidelink* message; or1. for unicast, after receiving the *RRCReconfigurationCompleteSidelink* message if the sidelink carrier release was triggered due to the configuration received within the *sl-ConfigDedicatedNR,* *SIB12*, *SidelinkPreconfigNR ,upper layer or due to change of UE capabilities of either UE*; or

1> for unicast, after receiving the *RRCReconfigurationCompleteSidelink* message if the sidelink carrier release was triggered due to the maximum number of consecutive HARQ DTX for peer UE has been reachedFor operation：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 for reception or transmission | The reason I use the current style (instead of separate condition/action as u pointed out) is that I feel it is a bit hard to outline each condition for add/mod/release (e.g., I am not super sure about the yellow part) separately. But we are open, let’s see if any similar comment, before change. |
| Xiaomi | 5.8.9.1b.2 | Similar as above. Condition for add/modify 1. for unicast, if the sidelink carrier release was triggered due to the reception of the *RRCReconfigurationSidelink* message; or
2. for unicast, after receiving the *RRCReconfigurationCompleteSidelink* message if the sidelink carrier release was triggered due to the configuration received within the *sl-ConfigDedicatedNR,* *SIB12*, *SidelinkPreconfigNR ,upper layer or due to change of UE capabilities of either UE*;

Regarding add/modify operation:1> for unicast, if the sidelink carrier addition was triggered due to the reception of the *RRCReconfigurationSidelink* message; 2> for each *sl-Carrier-Id* value included in the *sl-CarrierToAddModList* 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* for reception;1. for unicast, after receiving the RRCReconfigurationCompleteSidelink message if the sidelink carrier release was triggered due to the configuration received within the sl-ConfigDedicatedNR, SIB12, SidelinkPreconfigNR ,upper layer or due to change of UE capabilities of either UE;
2. add the sidelink carrier taking into account at least carrier(s) mapped to the sidelink QoS flow(s) configured by the upper layer, carriers configured in *sl-ConfigDedicatedNR,* *SIB12* or *SidelinkPreconfigNR*, and carrier(s) supported by both UEs
 | The reason I use the current style (instead of separate condition/action as u pointed out) is that I feel it is a bit hard to outline each condition for add/mod/release (e.g., I am not super sure about the yellow part) separately. But we are open, let’s see if any similar comment, before change. |
| Xiaomi | 6.3.5 | sl-FreqInfoToAddModListExt-v18xy SEQUENCE (SIZE (1..maxNrofFreqSL-r16)) OF SL-FreqConfigExt-v18xyshould be maxNrofFreqSL-1-r18? | The intention was not to define a new constant, but reuse the old one which equals to 8 |
| Xiaomi | 6.3.5 | SL-SCCH-CarrierSetConfig-r18 ::= SEQUENCE { sl-destinationList-r18 SEQUENCE (SIZE (1..maxNrofSL-Dest-r16)) OF SL-DestinationIdentity-r16, allowedCarrierFreqSet1-r18 SEQUENCE (SIZE (1..maxNrofFreqSL-r16)) OF INTEGER (1..maxNrofFreqSL-r16), allowedCarrierFreqSet2-r18 SEQUENCE (SIZE (1..maxNrofFreqSL-r16)) OF INTEGER (1..maxNrofFreqSL-r16)}Why the CC set is configured per DST? Should be per LCH configuration | It is to follow the legacy LTE design, and the set1/2 are used for the two LCH respectively, so it is per-LCH as agreed. |
| Xiaomi | 6.3.5 | ue-toUE-COT-SharingED-Threshold-r18 INTEGER (-85..-52)should be To | True, will be corrected |
| Xiaomi | 6.3.5 | sl-threshCBR-FreqKeeping-r15 should be r18 | True, will be corrected |
| Xiaomi | 6.6.2 | 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}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-r18 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 ... Should be v18xy? | In PC5-RRC module, there was no r16 IE defined, so I start from r18 |
| Xiaomi | 6.6.2 |  drb SEQUENCE { slrb-PC5-ConfigIndex-r18 SLRB-PC5-ConfigIndex-r16, sL-RLC-BearerConfigIndex-r18 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 ... }According to 331, the value ragne of additional LCID is 1-32 while according to running MAC spec, the LCID for addditoinal bearer is 21-36, which is not aligned.  | True, will be corrected |
|  | 6.6.2 | SL-CarrierId-r18 ::= INTEGER (0..maxNrofFreqSL-1-r18)Should be 1.. maxNrofFreqSL-1-r18? | I thought about this, and not quite sure if we should exclude 0, i.e., the legacy carrier, so having this included for now. but open to hear more view.  |
| ZTE |  | WID should be “NR\_SL\_enh2-Core” | True, to be corrected |
| ZTE | 6.2.2 | What is “aligned with sl-QoS-flowID in SL QoS info”?***sl-QoS-FlowIdentity***This identity uniquely identifies one sidelink QoS flow between the UE and the network in the scope of UE, aligned with the *sl-QoS-FlowIdentity* in *SL-QoS-Info*. | Thanks for reminding, seems no need to include the flow-ID, as long as it aligns with the old flow-list. |
| ZTE | 6.2.2 | FD of following IE is missingSL-CarrierFailure-r18 ::= SEQUENCE { sl-DestinationIdentity-r18 SL-DestinationIdentity-r16, sl-CarrierFailure-r18 SEQUENCE (SIZE (1..maxNrofFreqSL-r16)) OF INTEGER (1..maxNrofFreqSL-r16)} | True, will be corrected in the next iteration |
| ZTE | 6.3.1 | Why does not SIB12 include “SL-SCCH-CarrierSetConfig”? | Based on 123bis conclusion4. For SCCH, at least for RRC\_IDLE/RRC\_INACTIVE/OOC cases, leave the decision of per-LCH carrier set for PDCP duplication to Tx UE implementationSo no need for such configuration in SIB? Sorry if any missing point |
| ZTE | 6.3.2 | The FD of “sl-frequency” is missing. The value of this IE is integer, so is it ID of frequency within SL frequency list configured to UE?MeasObjectNR-SL-v18xy ::= SEQUENCE { sl-Frequency INTEGER (1..maxNrofFreqSL-r16), tx-PoolMeasToRemoveList-r16 Tx-PoolMeasList-r16 OPTIONAL, -- Need N tx-PoolMeasToAddModList-r16 Tx-PoolMeasList-r16 OPTIONAL -- Need N} | True, will correct it in the next iteration (yes to your second question) |
| ZTE | 6.3.5 | 1. we think the intention of network configure SCCH allowed carrier is to mimic DRB case, i.e. per logical channel, seems current signaling design is per logical channel type. Suggest to add “SRB ID” within SCCH allowed carrier list2. following description is not enough for two allowed SRB carrier list. Current description does not clarify why are two allowed carrier lists configured. Seems current wording mimic LTE V2X’s signaling design. In LTE V2X, we also have following description in LTE MAC spec. We think following description is also necessary for NR V2X.If duplication is activated as specified in TS 36.323 [4], the MAC entity shall map different sidelink logical channels which correspond to the same PDCP entity onto different carriers in accordance with clause 5.14.1.5, or onto different carriers of different carrier sets (if configured in *allowedCarrierFreqList* for the corresponding destination). For a given sidelink logical channel, it is up to UE implementation which carrier set to select among the carrier sets configured in *allowedCarrierFreqList* (if configured) for the corresponding destination.Suggest to adopt following description***allowedCarrierFreqSet1, allowedCarrierFreqSet2***Indicates the set of carrier frequencies applicable for the transmission of the MAC SDUs from the sidelink SRB logical channels whose associated destination is included in *sl-destinationList*. If present, network ensures *allowedCarrierFreqSet1* and *allowedCarrierFreqSet2* do not include the same carrier frequency. For a given sidelink SRB logical channel, it is up to UE implementation which carrier set to select among the carrier sets. If duplication is activated as specified in TS 38.323 [\*], the MAC entity shall map different sidelink logical channels of SL RLC bearer which correspond to the same PDCP entity onto different carrier sets.3. the meaning of ***allowedCarrierFreqSet1*** is not clear. The value of entry in this list is an integer, is it ID of frequency within SL frequency list configured to UE. | True, will correct that in the next iteration.Indeed it was copied from LTE, but if the suggested addition was captured in MAC, why not now for NR also capture in MAC?Sure, definition of the integer are added into FD. |
| ZTE | 6.3.5 | Is it appropriate to use such long IE name in ASN.1? harq-ACKFeedbackRatioforContentionWindowAdjustmentGC-Option2-r18 INTEGER (10..100) OPTIONAL, -- Need M | It is copied from rrc parameter list from R1, but also I got the same feeling.. I will use abbr of CW to shorten it. |
| ZTE | 6.3.5 | Following agreement is missing.2: For SL-DRB the CAPC value is (pre)configurable per-DRB as in NR-U. | Oh, sorry for missing that, thanks for catching it. |
| ZTE | 6.3.5 | Following FD should be removed, since corresponding IE is not present.***sl-AbsoluteFrequencySSB***Indicates the frequency location of sidelink SSB. The transmission bandwidth for sidelink SSB is within the bandwidth of this sidelink BWP. | True, will remove. |
| ZTE | 9.2 | The new added “MAC configuration” for duplication shares same name with legacy MAC configuration for SRB. Suggested to use “MAC configuration associated to additional RLC configuration” | OK, will add |
| ZTE | 9.x | Do we need to move R17 tx profile to the new added clause 9.X? | Tend to avoid change to the legacy part |
| Huawei, HiSilicon | 6.3.2 | Within IE MeasObjectNR-SL, the FD for field sl-Frequency is needed, as this field is new and appears for the first time. The FD can reuse the change on similar SUI fields, " 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-FreqInfoListSizeExt broadcast in SIB12, the value 3 corresponds to the frequency of second entry in sl-FreqInfoListSizeExt broadcast in SIB12 and so on." | True, as replied to ZTE. |
| Huawei, HiSilicon | 6.3.2 | Within IE MeasResultsSL: though RAN2 has no explicit agreement on the frequency dimension (i.e. carrier index), it is straightforward such frequency dimension (i.e. carrier index) is needed for measurement results. Response to Rapp's response: It is possible/allowed that multiple measurement objects (e.g. RP#1 in carrier#1, RP2#in carrier#1, RP#1 in carrier#2, and etc.) are configured. In such case, for MeasResultsSL, meas-ID would be mapping to multiple RPs in different carriers. In other words, if carrier index is not included in the IE MeasResultsSL, there may be two CBR measurement results associated to a same resource pool ID ( e.g. one CBR measurement result for RP#1 and another CBR measurement result also for RP#1 yet on another carrier). This would lead to the misunderstanding on the CBR measurement result for multiple RPs in different carriers. | Yet I thought the meas-ID which is included in MR, and associated to a MO, will already play the role for that?Response to further comments by Huawei:Yet my understanding was that for the pools in a same MO, there is only one frequency indicated, and for a same Meas-ID, there is only one MO associated, so that one single Meas-ID would have only one frequency behind. Please correct me if any missing point.  |
| Ericsson | 5.8.3.1, 5.8.3.2 | The texts refer to “sidelink carrier failure” | Better to add “SL CA”, since sidelink carrier failure is only valid for SL CA.[Rapp] I am open to that, yet I thought it would be good to align with the wording used in MAC spec, where the indication was provided?4> indicate HARQ-based Sidelink carrier failure to RRC.  |
| Ericsson | 5.8.9.1.2 | 1> set the entryincluded in the *sl-CarrierToReleaseList* corresponding to the sidelink carrier(s) for which MAC entity indicates that the maximum number of consecutive HARQ DTX for a specific destination has been reached; | The bullet 1> needs to be improved to state that the “the maximum number of consecutive HARQ DTX for a specific destination and a carrier”[Rapp] I am open that, yet seems that intention has already been reflected by1> set the entryincluded in the *sl-CarrierToReleaseList* corresponding to the sidelink carrier(s) for which MAC entity indicates that the maximum number of consecutive HARQ DTX for a specific destination has been reached; |
| Ericsson | 6.3.5 | 1. SL-SCCH-CarrierSetConfig-r18 ::= SEQUENCE { sl-DestinationList-r18 SEQUENCE (SIZE (1..maxNrofSL-Dest-r16)) OF SL-DestinationIdentity-r16, sl-SRB-Identity SEQUENCE (SIZE (1..3)) OF SRB-Identity, allowedCarrierFreqSet1-r18 SEQUENCE (SIZE (1..maxNrofFreqSL-r16)) OF INTEGER (1..maxNrofFreqSL-r16), allowedCarrierFreqSet2-r18 SEQUENCE (SIZE (1..maxNrofFreqSL-r16)) OF INTEGER (1..maxNrofFreqSL-r16)}2. ***Sl-SRB-Identity***This field indicates the list of sidelink SRB identities that the *allowedCarrierFreqSet1* and *allowedCarrierFreqSet2* apply.3.***ue-ToUE-COT-SharingED-Threshold***Indicates the energy detection threshold that is to be used by a UE to initiate a channel occupancy to be shared to other UE(s), and another UE that shares the initiated channel occupancy shall use this configured parameter for accessing the channel(s) as specified in TS 37.213 [48], clause 4.5.5 for sidelink channel access. Unit in dBm. Value -85 corresponds to -85 dBm, value -84 corresponds to -84 dBm, and so on (i.e. in steps of 1dBm). | * + - 1. the two fields allowedCarrierFreqSet1 and allowedCarrierFreqSet2 need to be renamed as “sl-”
			2. the field name ***Sl-SRB-Identity*** *need to be lower case.*
			3. *For the highlighted text,* can it be reformulated that “the COT initiating UE shall use this configured parameter for accessing the channel” to simplify the text. No need to repeat the same text for the UE and the other UE.

[Rapp] for 1, OK will change.For 2, thanks, will correct itFor 3, allow me some time to check with our R1, since I thought a-UE here means COT initiating UE, while another-UE here means COT sharing UE, and this text was mainly copied from R1 para list. |
| Qualcomm | 5.2.2.4.13And other sections | “2> if *sl-FreqInfoList*/*sl-FreqInfoListSizeExt* is included in *SIB12-IEs*:3> if configured to receive NR sidelink communication:4> use the resource pool(s) indicated by *sl-RxPool* for NR sidelink communication reception, as specified in 5.8.7;3> if configured to transmit NR sidelink communication:4> use the resource pool(s) indicated by *sl-TxPoolSelectedNormal*, or *sl-TxPoolExceptional* for NR sidelink communication transmission, as specified in 5.8.8;4> perform CBR measurement on the transmission resource pool(s) indicated by *sl-TxPoolSelectedNormal* or *sl-TxPoolExceptional* for NR sidelink communication transmission, as specified in 5.5.3.1;1. use the synchronization configuration parameters for NR sidelink communication on frequencies included in *sl-FreqInfoList*/*sl-FreqInfoListSizeExt*, as specified in 5.8.5;

…” | Based on the text with *sl-FreqInfoListSizeExt* in this CR, seems it contains extra frequencies. If so, would *sl-FreqInfoList~~Size~~Ext* be more clear?[Rapp] the naming was used to follow ASN.1 guidance of list extension, i.e., sizeExt is used when the added new list is mainly to extend the size, while Ex is used only if the list of the old list is not extended, but just more fields are added into the list.  |
| Qualcomm | 5.8.3.3 | 5> if *sl-FreqInfoListSizeExt* is included in *SIB12-IEs*:6> set *sl-QoS-InfoList* to include the frequency(ies), and Tx Profile mapped to the sidelink QoS flow(s) of the associated destination configured by the upper layer for the NR sidelink communication transmission; | Not sure if frequencies should be included in *sl-QoS-InfoList* for backward compatible reason (sl-QoS-InfoList-r16 ). Both frequencies and Tx Profiles can be handled the same way, i.e., the frequency(ies) and Tx Profile(s) mapped to the sidelink QoS flow(s) which is included in *sl-QoS-InfoList, i.e.,* QoS profile(s) of the sidelink QoS flow(s) of the associated destination. [Rapp] not sure I get the key point, now both frequency and Tx profiles are included in the newly added IE, since the old IE is not extendable.  |
| Qualcomm | 6.2.2 | – *SidelinkUEInformationNR*The *SidelinkUEinformationNR* message is used for the indication of NR sidelink UE information to the network. | Not sure if we need to have r18 for sl-QoS-Infolist here.[Rapp] Same reply as above, since the old list is not extendable. |
|  | 6.2.2 | ***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 list. | Suggest having some description of the ***sl-FreqInfoListSizeExt******[Rapp] Sure.*** |