Companies providing input to this email discussion are requested to leave contact information below.

|  |  |  |
| --- | --- | --- |
| **Company** | **Delegate name** | **Email address** |
| CATT | Hao Xu | xuhao@catt.cn |
| ASUSTeK | Lider Pan | lider\_pan@asus.com |
| Apple | Zhibin Wu | Zhibin\_wu@apple.com |
| Nokia | Gyorgy Wolfner | Gyorgy.wolfner@nokia.com |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

# 1 Comments on CR

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Company** | **Clause number** | **Original text in CR** | **Suggested modification or comments** | **Rapporteur response** |
| CATT | 6.2.2 | ***n3c-Suport***  This field indicates the support of N3C MP. If the field is present, the UE can perform early detection of candidate N3C relay UEs. If absent, a UE is not required to perform early detection of candidate N3C relay UEs. | ***n3c-Support***  This field indicates the support of N3C MP. If the field is present, the UE can perform early detection of candidate N3C relay UEs. If absent, a UE is not required to perform early detection of candidate N3C relay UEs. |  |
| CATT | 6.3.1 | t400-U2U-r18 ENUMERATED {ms200, ms400, ms600, ms800, ms1200, ms2000, ms3000, ms4000} OPTIONAL, -- Need M | t400-U2U-r18 ENUMERATED {ms200, ms400, ms600, ms800, ms1200, ms2000, ms3000, ms4000} OPTIONAL, -- Need R |  |
| CATT | 6.3.1  6.3.5 |  | For the new introdeced t400-U2U-r18, just wonder any procedure text’s addition is also needed? |  |
| ASUSTeK | 5.8.9.1.2 | 5.8.9.1.2 Actions related to transmission of *RRCReconfigurationSidelink* message  The UE shall set the contents of *RRCReconfigurationSidelink* message as follows:  1> for each sidelink DRB that is to be released, according to clause 5.8.9.1a.1.1, due to configuration by *sl-ConfigDedicatedNR,* *SIB12*, *SidelinkPreconfigNR*, by upper layers, or due to end-to-end sidelink release:  2> set the entryincluded in the *slrb-ConfigToReleaseList* corresponding to the sidelink DRB;  … | It seems to us that the term “end-to-end sidelink release” is not used at any other places in the RRC Spec. In our understanding, this should be “end-to-end sidelink DRB release”. |  |
| ASUSTeK | 5.8.9.1a.1.2 and  5.8.9.7.1 | 5.8.9.1a.1.2 Sidelink DRB release operations  …  1> if the sidelink radio link failure is detected for a specific destination; or  1> if the sidelink DRB release is triggered by end-to-end PC5 connection failure due to per-hop PC5 link failure, in accordance with clause 5.8.9.3a:  2> release the PDCP entity, RLC entity and the logical channel of the sidelink DRB for the specific destination.  …  5.8.9.7.1 PC5 Relay RLC channel release  …  1> if the PC5 Relay RLC channel release was triggered by end-to-end DRB release as specified in 5.8.9.1a.1.2; or  1> if the PC5 Relay RLC channel release was triggered by end-to-end DRB modification as specified in 5.8.9.1a.2.2:  2> if the PC5 Relay RLC channel release was triggered due to per-hop PC5 link failure; or  2> if the PC5 Relay RLC channel release was triggered after the reception of the *RRCReconfigurationSidelink* message; or  2> after receiving the *RRCReconfigurationCompleteSidelink* message, if the PC5 Relay RLC channel release was triggered due to the configuration received within the *sl-ConfigDedicatedNR*;  3> release the RLC entity and the corresponding logical channel associated with the end-to-end DRB;  … | It seems the RLC channel release due to **per-hop PC5 link failure** is performed twice in clauses 5.8.9.1a.1.2 and 5.8.9.7.1.  In our understanding, the cause of the PC5 Relay RLC channel release in clause 5.8.9.7.1 could be due to **end-to-end PC5 link failure** (including T400 expiry, integrity check failure, and end-to-end PC5 connection failure due to reception of *NotificationMessageSidelink*, as specified in clause 5.8.9.3a) instead of **per-hop PC5 link failure**.  Besides, as specified in clause 5.8.9.1.2, the sidelink RRC reconfiguration procedure is initiated due to end-to-end sidelink DRB release. Thus, we think the action of RLC channel release should be performed after receiving the *RRCReconfigurationCompleteSidelink* message.  If the above understandings are correct, the following modification is suggested:  5.8.9.7.1 PC5 Relay RLC channel release  …  1> if the PC5 Relay RLC channel release was triggered by end-to-end DRB release as specified in 5.8.9.1a.1.2; or  1> if the PC5 Relay RLC channel release was triggered by end-to-end DRB modification as specified in 5.8.9.1a.2.2:  2> after receiving the *RRCReconfigurationCompleteSidelink* message, if the PC5 Relay RLC channel release was triggered due to ~~per-hop~~end-to-end PC5 link failure; or  2> if the PC5 Relay RLC channel release was triggered after the reception of the *RRCReconfigurationSidelink* message; or  2> after receiving the *RRCReconfigurationCompleteSidelink* message, if the PC5 Relay RLC channel release was triggered due to the configuration received within the *sl-ConfigDedicatedNR*;  3> release the RLC entity and the corresponding logical channel associated with the end-to-end DRB;  … |  |
| OPPO | 5.3.7.2 | 1> release *sl-L2RelayUE-Config*, if configured;  1> release *sl-L2RemoteUE-Config*, if configured;  1> release the SRAP entity, if configured; | The U2U Relay configuration should not be released, suggested change as follows:  1> release *sl-L2RelayUE-Config* for U2N Relay case, if configured;  1> release *sl-L2RemoteUE-Config* for U2N Relay case, if configured;  1> release the SRAP entity for U2N Relay case, if configured; |  |
| OPPO | 5.8.3.3/6.2.2 *SidelinkUEInformationNR* | 5.8.3.3  <omit>  5> set *sl-RLC-ModeIndicationistL2-U2U* to include the RLC mode(s), if the associated bi-directional PC5 RLC channel(s) has been established due to the configurationby *RRCReconfigurationSidelink*;  6.2.2-*SidelinkUEInformationNR*  SL-TxResourceReqL2-U2U-r18 ::= SEQUENCE {  sl-DestinationIdentityL2-U2U-r18 SL-DestinationIdentity-r16 OPTIONAL,  sl-TxInterestedFreqListL2-U2U-r18 SL-TxInterestedFreqList-r16,  sl-TypeTxSyncListL2-U2U-r18 SEQUENCE (SIZE (1..maxNrofFreqSL-r16)) OF SL-TypeTxSync-r16,  sl-CapabilityInformationSidelink-r18 OCTET STRING OPTIONAL,  sl-U2U-InfoList-r18 SEQUENCE (SIZE (1.. maxNrofRemoteUE-r17)) OF SL-U2U-Info-r18 OPTIONAL,  sl-RLC-ModeIndicationListL2-U2U-r18 SEQUENCE (SIZE (1.. maxNrofSLRB-r16)) OF SL-RLC-Mode-r18 OPTIONAL,  ...  } | Another alt is to reuse the legacy IE (sl-RLC-ModeIndicationList) and set the QFI by relay UE implementation, suggested change is as follows:  ***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. L2 U2U Relay UE set the associated sl-QoS-FlowIdentity by implementation. |  |
| OPPO | 5.8.9.1.2 | 1> for each sidelink DRB that is to be released, according to clause 5.8.9.1a.1.1, due to configuration by *sl-ConfigDedicatedNR,* *SIB12*, *SidelinkPreconfigNR*, by upper layers, or due to end-to-end sidelink release: | Can “by upper layers” already cover the end-to-end link release case? So we don’t need to add the “or due to end-to-end sidelink release” |  |
| OPPO | 5.8.9.1.2 | 1> for each sidelink DRB that is to be established or modified, according to clause 5.8.9.1a.2.1, due to receiving *sl-ConfigDedicatedNR,* *SIB12* or *SidelinkPreconfigNR*:  2> if the sidelink DRB is a per-hop sidelink DRB (i.e. the UE is performing non-L2 U2U relay NR sidelink communication with a peer UE):  3> if a sidelink DRB is to be established:  4> assign a new logical channel identity for the logical channel to be associated with the sidelink DRB and set *sl-MAC-LogicalChannelConfigPC5* in the *SLRB-Config* to include the new logical channel identity;  3> set the *SLRB-Config* included in the *slrb-ConfigToAddModList*, according to the received *sl-RadioBearerConfig* and *sl-RLC-BearerConfig* corresponding to the sidelink DRB;  2> else if the sidelink DRB is an end-to-end sidelink DRB (i.e. the UE is acting as a L2 U2U Remote UE, and configure peer L2 U2U Remote UE with end-to-end SDAP and PDCP):  3> if the UE is in RRC\_CONNECTED:  4> set the *SLRB-Config* included in the *slrb-ConfigToAddModList*, according to the received *sl-RadioBearerConfig* in *sl-ConfigDedicatedNR*;  3> else if the UE is in RRC\_IDLE/RRC\_INACTIVE:  4> set the *SLRB-Config* included in the *slrb-ConfigToAddModList*, which is derived by end-to-end QoS profile, according to the *sl-RadioBearerConfig* in *SIB12*;  3> if the UE is out of coverage:  4> set the *SLRB-Config* included in the *slrb-ConfigToAddModList*, which is derived by end-to-end QoS profile, according to the *sl-RadioBearerConfig* in *SidelinkPreconfigNR*; | Since “or provide the L2 U2U Relay UE with the QoS flow to end-to-end DRB mapping” is removed, there is no need to separate E2E DRB and per-hop DRB, the only difference is for U2U Relay case, the assign logical channel identity operation is not needed, suggested change is as follows:  1> for each sidelink DRB that is to be established or modified, according to clause 5.8.9.1a.2.1, due to receiving *sl-ConfigDedicatedNR,* *SIB12* or *SidelinkPreconfigNR*:  ~~2> if the sidelink DRB is a per-hop sidelink DRB (i.e. the UE is performing non-L2 U2U relay NR sidelink communication with a peer UE):~~  ~~3~~2> if a sidelink DRB is to be established and if the sidelink DRB is a per-hop sidelink DRB (i.e. the UE is performing non-L2 U2U relay NR sidelink communication with a peer UE):  3~~4~~> assign a new logical channel identity for the logical channel to be associated with the sidelink DRB and set *sl-MAC-LogicalChannelConfigPC5* in the *SLRB-Config* to include the new logical channel identity;  2~~3~~> set the *SLRB-Config* included in the *slrb-ConfigToAddModList*, according to the received *sl-RadioBearerConfig* and *sl-RLC-BearerConfig* corresponding to the sidelink DRB;  ~~2> else if the sidelink DRB is an end-to-end sidelink DRB (i.e. the UE is acting as a L2 U2U Remote UE, and configure peer L2 U2U Remote UE with end-to-end SDAP and PDCP):~~  ~~3> if the UE is in RRC\_CONNECTED:~~  ~~4> set the~~ *~~SLRB-Config~~* ~~included in the~~ *~~slrb-ConfigToAddModList~~*~~, according to the received~~ *~~sl-RadioBearerConfig~~* ~~in~~ *~~sl-ConfigDedicatedNR~~*~~;~~  ~~3> else if the UE is in RRC\_IDLE/RRC\_INACTIVE:~~  ~~4> set the~~ *~~SLRB-Config~~* ~~included in the~~ *~~slrb-ConfigToAddModList~~*~~, which is derived by end-to-end QoS profile, according to the~~ *~~sl-RadioBearerConfig~~* ~~in~~ *~~SIB12~~*~~;~~  ~~3> if the UE is out of coverage:~~  ~~4> set the~~ *~~SLRB-Config~~* ~~included in the~~ *~~slrb-ConfigToAddModList~~*~~, which is derived by end-to-end QoS profile, according to the~~ *~~sl-RadioBearerConfig~~* ~~in~~ *~~SidelinkPreconfigNR~~*~~;~~ |  |
| OPPO | 5.8.9.1a.1.2 | 1> if the sidelink DRB release is triggered by end-to-end PC5 connection failure due to per-hop PC5 link failure, in accordance with clause 5.8.9.3a: | Why only mention the per-hop PC5 link failure case? |  |
| OPPO | 5.8.9.1a.2.2 | 2> for an end-to-end sidelink DRB (i.e. the UE is acting as L2 U2U Remote UE or L2 U2U Relay UE):  3> if the UE is in RRC\_CONNECTED:  4> reconfigure the SRAP entity for the sidelink DRB, in accordance with the *sl-SRAP-ConfigU2U* received in *sl-ConfigDedicatedNR*, if included;  3> else if the UE is in RRC\_IDLE or RRC\_INACTIVE:  4> derive the PC5 RLC channel configuration based on per-SLRB QoS profile of this end-to-end sidelink DRB according to the configuration in *SIB12*;  3> else if the UE is out of coverage:  4> derive the PC5 RLC channel configuration based on per-SLRB QoS profile of this end-to-end sidelink DRB according to the configuration in *SidelinkPreconfigNR*;  3> if the PC5 RLC channel configuration derived by per-SLRB QoS profile of this end-to-end sidelink DRB is changed:  4> perform the PC5 Relay RLC channel release or addition/modification according to the derived PC5 RLC channel configuration as specified in 5.8.9.7.1 or 5.8.9.7.2;  4> consider the PC5 RLC channel applying the configuration derived by per-SLRB QoS profile of this end-to-end sidelink DRB as the egress PC5 relay RLC channel;  4> associate this end-to-end sidelink DRB with the PC5 RLC channel;  4> reconfigure the SRAP entity with the mapping between the end-to-end sidelink DRB and the egress PC5 relay RLC channel for the sidelink DRB. | The wording of IDLE/INACTIVE/OOC case can be simplified/aligned with CONNECTED case as follows  2> for an end-to-end sidelink DRB (i.e. the UE is acting as L2 U2U Remote UE or L2 U2U Relay UE):  3> if the UE is in RRC\_CONNECTED:  4> reconfigure the SRAP entity for the sidelink DRB, in accordance with the *sl-SRAP-ConfigU2U* received in *sl-ConfigDedicatedNR*, if included;  3> else if the UE is in RRC\_IDLE or RRC\_INACTIVE:  4> reconfigure the SRAP entity for the sidelink DRB, if the derived PC5 RLC channel configuration derived by per-SLRB QoS profile of this end-to-end sidelink DRB is changed according to he configuration in SIB12;~~derive the PC5 RLC channel configuration based on per-SLRB QoS profile of this end-to-end sidelink DRB according to the configuration in~~ *~~SIB12~~*~~;~~  3> else if the UE is out of coverage:  4> reconfigure the SRAP entity for the sidelink DRB, if the derived PC5 RLC channel configuration derived by per-SLRB QoS profile of this end-to-end sidelink DRB is changed according to he configuration in SidelinkPreconfigNR;~~derive the PC5 RLC channel configuration based on per-SLRB QoS profile of this end-to-end sidelink DRB according to the configuration in~~ *~~SidelinkPreconfigNR~~*~~;~~  ~~3> if the PC5 RLC channel configuration derived by per-SLRB QoS profile of this end-to-end sidelink DRB is changed:~~  ~~4> perform the PC5 Relay RLC channel release or addition/modification according to the derived PC5 RLC channel configuration as specified in 5.8.9.7.1 or 5.8.9.7.2;~~  ~~4> consider the PC5 RLC channel applying the configuration derived by per-SLRB QoS profile of this end-to-end sidelink DRB as the egress PC5 relay RLC channel;~~  ~~4> associate this end-to-end sidelink DRB with the PC5 RLC channel;~~  ~~4> reconfigure the SRAP entity with the mapping between the end-to-end sidelink DRB and the egress PC5 relay RLC channel for the sidelink DRB.~~  [ASUSTeK] In our understanding, the PC5 Relay RLC channel release/addition/modification by the UE in RRC\_CONNECTED is specified in clause 5.3.5.14, while the PC5 Relay RLC channel release/addition/modification by the UE in RRC\_IDLE/RRC\_INACTIVE is not specified elsewhere. If OPPO’s proposal is followed, the PC5 Relay RLC channel release/addition/modification by the UE in RRC\_IDLE/RRC\_INACTIVE would be missing. Thus, we are fine to keep the current structure wording in the running CR. |  |
| OPPO | 5.8.9.3a | 2> discard the rest of the end-to-end NR sidelink communication related radio resources and configuration for this end-to-end PC5 connection, including local ID pair in SRAP configuration; | It is not clear what “rest of” and “radio resources” mean, prefer the original wording |  |
| OPPO | 5.8.9.3b | 2> discard rest of the the end-to-end NR sidelink communication related radio resources and configuration for this end-to-end PC5 connection, including end-to-end SRB/DRB related configuration, QoS related configuration, SRAP configuration; | It is not clear what “rest of” and “radio resources” mean, prefer the original wording |  |
| OPPO | 5.8.9.5 | 3> if MCG transmission is not suspended;  4> initiate the indirect path failure information procedure as specified in 5. 7. 3c to report indirect path failure; | 3> if neither MCG transmission nor indirect path transmission is suspended;  4> initiate the indirect path failure information procedure as specified in 5. 7. 3c to report indirect path failure; |  |
| OPPO | 5.8.9.5a | 2> discard all the left radio resources and the NR sidelink communication related configuration for this end-to-end PC5-RRC connection, including local ID pair in SRAP configuration; | It is not clear what “all the left radio resources” mean, prefer the original wording |  |
| OPPO | 5.8.9.7.1 | 5.8.9.7.1 PC5 Relay RLC channel release  The UE shall:  1> if the PC5 Relay RLC channel release was triggered after the reception of the *RRCReconfigurationSidelink* message; or  1> after receiving the *RRCReconfigurationCompleteSidelink* message, if the PC5 Relay RLC channel release was triggered due to the configuration received within the *sl-ConfigDedicatedNR*:  2> for each *SL-RLC-ChannelID* in *sl-RLC-ChannelToReleaseList* received in *sl-ConfigDedicatedNR* within *RRCReconfiguration,* or for each *SL-RLC-ChannelID* included in the received *sl-RLC-ChannelToReleaseListPC5* that is part of the current UE sidelink configuration:  3> release the RLC entity and the corresponding logical channel associated with the *SL-RLC-ChannelID*;  1> if the PC5 Relay RLC channel release was triggered by end-to-end DRB release as specified in 5.8.9.1a.1.2; or  1> if the PC5 Relay RLC channel release was triggered by end-to-end DRB modification as specified in 5.8.9.1a.2.2:  2> if the PC5 Relay RLC channel release was triggered due to per-hop PC5 link failure; or  2> if the PC5 Relay RLC channel release was triggered after the reception of the *RRCReconfigurationSidelink* message; or  2> after receiving the *RRCReconfigurationCompleteSidelink* message, if the PC5 Relay RLC channel release was triggered due to the configuration received within the *sl-ConfigDedicatedNR*;  3> release the RLC entity and the corresponding logical channel associated with the end-to-end DRB;  1> if the PC5 Relay RLC channel release was triggered for a specific destination by upper layers as specified in 5.8.9.5, or due to sidelink RLF as specified in 5.8.9.3:  2> release the RLC entity and the corresponding logical channel associated with the *SL-RLC-ChannelID* of the specific destination; | The new added 3 bullets can be covered by existing condition so no need for this change:  2> if the PC5 Relay RLC channel release was triggered due to per-hop PC5 link failure; or=> can be covered by the existing third 1> condition  2> if the PC5 Relay RLC channel release was triggered after the reception of the *RRCReconfigurationSidelink* message; or => can be covered by the existing first 1> condition  2> after receiving the *RRCReconfigurationCompleteSidelink* message, if the PC5 Relay RLC channel release was triggered due to the configuration received within the *sl-ConfigDedicatedNR*; => can be covered by the second 1> condition |  |
| Apple | 6.6.1 | -- ASN1START  -- TAG-UEINFORMATIONREQUESTSIDELINK-START  UEInformationRequestSidelink-r18 ::= SEQUENCE {  rrc-TransactionIdentifier-r18 RRC-TransactionIdentifier,  criticalExtensions CHOICE {  ueInformationRequestSidelink-r18 UEInformationRequestSidelink-r18-IEs,  criticalExtensionsFuture SEQUENCE {}  }  }  UEInformationRequestSidelink-r18-IEs ::= SEQUENCE {  sl-E2E-QoS-InfoListPC5-r18 SEQUENCE (SIZE (1.. maxNrofSL-Dest-r16)) OF SL-E2E-QoS-InfoPC5-r18 OPTIONAL, -- Need N  lateNonCriticalExtension OCTET STRING OPTIONAL,  nonCriticalExtension SEQUENCE {} OPTIONAL  }  SL-E2E-QoS-InfoPC5-r18 ::= SEQUENCE {  sl-DestinationIdentityRemoteUE-r18 SL-DestinationIdentity-r16,  sl-E2E-SLRB-Index-r18 SLRB-PC5-ConfigIndex-r16,  sl-QoS-InfoList-r18 SEQUENCE (SIZE (1..maxNrofSL-QFIsPerDest-r16)) OF SL-QoS-Info-r16  }  -- TAG-UEINFORMATIONREQUESTSIDELINK-STOP  -- ASN1STOP | Several comments on the changes made here:  First, the “maxNrofSL-Dest-r16” variable is only 32. It does not be able to support all end-to-end SLRB, we need to change as below:  sl-E2E-QoS-InfoListPC5-r18 SEQUENCE (SIZE (1.. ~~maxNrofSL-Dest-r16~~ maxNrofSLRB-r16)) OF SL-E2E-QoS-InfoPC5-r18 OPTIONAL, -- Need N  Second, in the field description below, the name “***sl-E2E-QoS-ConnectionListPC5***  “ needs to be updated to its new changed name. Also, the description needs to explain this is a for QoS info of an end-to-end SLRB.  Finally, “sl-E2E-SLRB-Index-r18“ is a new field, so the field description needs to insert a new row to explain this new field. |  |
| Apple | 5.8.3.3 | NOTE X: If UE is in RRC\_CONNECTED, how to merge the split per-flow QoS on the second hop into a per-SLRB level QoS for SUI reporting is up to relay UE implementation. | For this new NOTE, we need to add “If UE is L2 U2U relay UE” part, because the NOTE is not applicable to any other UEs involved in SUI procedure.  Also, better to change SUI to the full name of the message SIdleinkUEInformationNR |  |
| Apple | 5.8.9.1.2 | NOTE 3: If UE is in RRC\_IDLE or in RRC\_INACTIVE or out of coverage, how to merge the split per-flow QoS on the first/second hop into a per-SLRB level QoS for RLC channel configuration derivation is up to UE implementation. | For this NOTE, some changes as below to limit its applicability to L2 U2U case.  NOTE 3: If a L2 U2U remote UE or L2 U2U relay UE is in RRC\_IDLE or in RRC\_INACTIVE or out of coverage, how to merge the split per-flow QoS on the first/second hop into a per-SLRB level QoS for RLC channel configuration derivation is up to UE implementation. |  |
| Apple | 5.8.9.11.3 | 3> perform QoS split based on the *sl-QoS-InfoList* for each QoS flow to decide the split PDB value for each PC5 hop;  3> set the contents of *UEInformationResponseSidelink* message as follows:  4> set *sl-SplitQoS-InfoListPC5* to include the split PDB value for each QoS flow on the first PC5 hop between L2 U2U Relay UE and L2 U2U Remote UE;  3> submit the *UEInformationResponseSidelink* message to lower layers for transmission;  NOTE: It is left to Relay UE implementation on how to split the PDB. | For the steps acted upon the QoS split, it is important to connect this to the procedure defined for IDLE/INACTVE and CONNECTED relay UE behaviour in other clauses correspondingly:  I suggest to add more level-3 bullets as below.  3> merge the split per-flow QoS on the second hop into a per-SLRB level QoS  3> If relay UE is in IDLE/INACIVE  4> Trigger the procedure in 5.8.9.1.2 to configure the PC5 relay RLC channel(s) for the 2nd hop between the relay UE and peer remote UE , if needed;  3> If relay UE is in CONNECTED  4> Trigger the SIdelinkUEInfromationNR procedure as specified in 5.8.3.2 to report per-SLRB level QoS to the sevring gNB of the relay UE; |  |
| Apple | 5.8.9.1a.2.2 | 2> for an end-to-end sidelink DRB (i.e. the UE is acting as L2 U2U Remote UE or L2 U2U Relay UE):  3> if the UE is in RRC\_CONNECTED:  4> associate this end-to-end sidelink DRB with the PC5 RLC channel indicated by *sl-EgressRLC-ChannelPC5* included in *sl-ConfigDedicatedNR,* received from *RRCReconfiguration*;  3> else if the UE is in RRC\_IDLE or RRC\_INACTIVE:  4> derive the PC5 RLC channel configuration based on per-SLRB QoS profile of this end-to-end sidelink DRB according to the configuration in *SIB12*;  3> else if the UE is out of coverage:  4> derive the PC5 RLC channel configuration based on per-SLRB QoS profile of this end-to-end sidelink DRB according to the configuration in *SidelinkPreconfigNR*;  3> perform the PC5 Relay RLC channel addition/modification according to the derived PC5 RLC channel configuration as specified in 5.8.9.7.2, if needed;  3> consider the PC5 RLC channel applying the configuration derived by per-SLRB QoS profile of this end-to-end sidelink DRB as the egress PC5 relay RLC channel;  3> associate this end-to-end sidelink DRB with the PC5 RLC channel and configure the mapping between the end-to-end sidelink DRB and the egress PC5 relay RLC channel to SRAP; | First, better to align the name PC5 Relay RLC channel  Second, “based on per-SLRB QoS profile of this end-to-end sidelink DRB” is very confusing, the derivation is not based on end-to-end QoS of the end-to-end DRB, but the after-split per-SLRB level QoS in each corresponding hop. So, the suggestion to modify text as below:  Change all “per-SLRB QoS profile of this end-to-end sidelink DRB “ to “ per-SLRB level QoS of either 1st hop (for L2 U2U remote UE) or 2nd hop (for L2 U2U relay UE) for this end-to-end Sidelink DRB” |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Apple | 6.6.1 | -- ASN1START  -- TAG-UEINFORMATIONREQUESTSIDELINK-START  UEInformationRequestSidelink-r18 ::= SEQUENCE {  rrc-TransactionIdentifier-r18 RRC-TransactionIdentifier,  criticalExtensions CHOICE {  ueInformationRequestSidelink-r18 UEInformationRequestSidelink-r18-IEs,  criticalExtensionsFuture SEQUENCE {}  }  }  UEInformationRequestSidelink-r18-IEs ::= SEQUENCE {  sl-E2E-QoS-InfoListPC5-r18 SEQUENCE (SIZE (1.. maxNrofSL-Dest-r16)) OF SL-E2E-QoS-InfoPC5-r18 OPTIONAL, -- Need N  lateNonCriticalExtension OCTET STRING OPTIONAL,  nonCriticalExtension SEQUENCE {} OPTIONAL  }  SL-E2E-QoS-InfoPC5-r18 ::= SEQUENCE {  sl-DestinationIdentityRemoteUE-r18 SL-DestinationIdentity-r16,  sl-E2E-SLRB-Index-r18 SLRB-PC5-ConfigIndex-r16,  sl-QoS-InfoList-r18 SEQUENCE (SIZE (1..maxNrofSL-QFIsPerDest-r16)) OF SL-QoS-Info-r16  }  -- TAG-UEINFORMATIONREQUESTSIDELINK-STOP  -- ASN1STOP | Several comments on the changes made here:  First, the “maxNrofSL-Dest-r16” variable is only 32. It does not be able to support all end-to-end SLRB, we need to change as below:  sl-E2E-QoS-InfoListPC5-r18 SEQUENCE (SIZE (1.. ~~maxNrofSL-Dest-r16~~ maxNrofSLRB-r16)) OF SL-E2E-QoS-InfoPC5-r18 OPTIONAL, -- Need N  Second, in the field description below, the name “***sl-E2E-QoS-ConnectionListPC5***  “ needs to be updated to its new changed name. Also, the description needs to explain this is a for QoS info of an end-to-end SLRB.  Finally, “sl-E2E-SLRB-Index-r18“ is a new field, so the field description needs to insert a new row to explain this new field. |  |
|  |  |  |  |  |
| Nokia | 3.1 | **NR sidelink communication**: AS functionality enabling at least V2X Communication as defined in TS 23.287 [55] and/or A2X Communication as defined in TS 23.256 [76] and/or ProSe Communication (including ProSe UE-to-Network Relay, non-Relay communication, and ProSe UE-to-UE Relay Communication including UE-to-UE Relay communication with integrated discovery) as defined in TS 23.304 [65] between two or more nearby UEs, using NR technology but not traversing any network node. | Currently the “including” implies that it is only ProSe U2U including integrated discovery is used. We believe that it would be reasonable to add both cases.  (including ProSe UE-to-Network Relay, non-Relay communication, ProSe UE-to-UE Relay Communication, and UE-to-UE Relay communication with integrated discovery) |  |
| Nokia | 5.2.2.4.13 | NOTE: the L2 U2U UE is allowed to use previous configuration based on SIB12 before receiving dedicated configuration during and immediately after state transition from idle/inactive to connected. | Editorial, but capital letter, and needs an “a/the” before “previous configuration” |  |
| Nokia | 5.3.5.5.2 | 3> indicate to upper layer to trigger PC5 unicast link release with the source L2 U2N Relay UE, if the UE is L2 U2N remote UE at source side; | We think it would be more spec compliant to have separate condition  3> if the UE is L2 U2N remote UE at source side;  4> indicate to upper layer to trigger PC5 unicast link release with the source L2 U2N Relay UE |  |
| Nokia | 5.3.5.9 | 1> if the received *otherConfig* includes *n3c-RelayUE-InfoReportConfig*:  2> consider itself to be configured to report relay UE information with non-3GPP connection(s). | Has spaces after 1> and 2>, should be tabs |  |
| Nokia | 5.3.5.17.3.2a | The N3C remote UE shall:  1> if N3C Indirect path addition/change failure is detected:  2> if MCG transmission is not suspended: | In first 1> is space, should be tab |  |
| Nokia | 5.8.3.3 | 6> include *sl-PerSLRB-QoS-InfoList*, with each entry including the per-SLRB second-hop QoS profile and the corresponding *sl-RemoteUE-SLRB-Identity* which is set to the same value as the *SLRB-PC5-ConfigIndex* received in *RRCReconfigurationSidelink* message from the L2 U2U Remote UE for the same end-to-end SLRB | According to the agreement it is “QoS flow list in SUI for L2 U2U should not be mandatory”:  6> may include *sl-PerSLRB-QoS-InfoList*, with each entry including the per-SLRB second-hop QoS profile and the corresponding *sl-RemoteUE-SLRB-Identity* which is set to the same value as the *SLRB-PC5-ConfigIndex* received in *RRCReconfigurationSidelink* message from the L2 U2U Remote UE for the same end-to-end SLRB |  |
| Nokia | 5.8.3.3 | 5> set sl-RLC-ModeIndicationistL2-U2U to include the RLC mode(s), | Editorial, missing “L”  5> set sl-RLC-ModeIndicationListL2-U2U to include the RLC mode(s), |  |
| Nokia | 5.8.3.3 | NOTE X: If UE is in RRC\_CONNECTED, how to merge the split per-flow QoS on the second hop into a per-SLRB level QoS for SUI reporting is up to relay UE implementation. | Wording comments  NOTE X: If the L2 U2U Relay UE UE is in RRC\_CONNECTED, how to merge the split per-flow QoS on the second hop into a per-SLRB second-hop QoS profile for SUI reporting is up to L2 U2U relay UE implementation. |  |
| Nokia | 5.8.9.7.1 | 1> if the PC5 Relay RLC channel release was triggered by end-to-end DRB modification as specified in 5.8.9.1a.2.2:  2> if the PC5 Relay RLC channel release was triggered due to per-hop PC5 link failure; or | Something is not good here: DRB modification is triggered due to PC5 link failure. |  |
| Nokia | 5.8.9.7.2 | The source L2 U2U Remote UE derives the configuration for the PC5 Relay RLC channel(s) between the source L2 U2U Source UE and L2 U2U relay UE | Editorial  The source L2 U2U Remote UE derives the configuration for the PC5 Relay RLC channel(s) between the source L2 U2U Remote UE and L2 U2U relay UE |  |
| Nokia | 5.8.9.11.2 | 3> set sl-DestinationIdentityRemoteUE to include the associated identity for peer L2 U2U Remote; | 3> set sl-DestinationIdentityRemoteUE to include the associated identity for peer L2 U2U Remote UE; |  |
| Nokia | 6.x | ASN.1 naming convention: before an abbreviation a “-“ is needed | “L2U2U” should be “L2-U2U”  “L3U2U” should be “L3-U2U”  “xxL2” should be “xx-L2” (xx can be anything) |  |
| Nokia | 6.3.5 | [[  sl-DiscConfig-v1800 SL-DiscConfig-v1800 OPTIONAL, -- Need M  t400-U2U-r18 ENUMERATED {ms200, ms400, ms600, ms800, ms1200, ms2000, ms3000, ms4000} OPTIONAL, -- Need M  ]] | ASn.1 syntax: No “,” is needed at the end of the new line before the “]]”  [[  sl-DiscConfig-v1800 SL-DiscConfig-v1800 OPTIONAL, -- Need M  t400-U2U-r18 ENUMERATED {ms200, ms400, ms600, ms800, ms1200, ms2000, ms3000, ms4000} OPTIONAL -- Need M  ]] |  |
| Samsung | 5.7.3c.3 | 1> else if the UE initiates transmission of the *IndirectPathFailureInformation* message due to reception of the *NotificationMessageSidelink* including *indicationType*, in accordance with clause 5.8.9.10.4:  2> set the *failureTypeIndirectPath* as the value in *indicationType* received from *NotificationMessageSidelink*; | According to 5.8.9.10.4 (Actions related to reception of NotificationMessageSidelink message), the indicationType = RelayUE-CellReslection will trigger the indirect path failure information procedure, i.e.,  4> if MP is configured and MCG transmission (i.e. direct path) is not suspended;  5> if the *indicationType* is *relayUE-HO*;  6> suspend indirect path transmission;  5> else:  6> initiate the indirect path failure information procedure as specified in 5. 7. 3c to report indirect path failure;  Meanwhile, the text in 5.7.3c.3 indicates that the failureTypeIndirectPath should be the one of indicationType. Since we remove relayUE-Cellreselection, it is better to mention that relayUE-Cellreselection is an exception, i.e.,  2> set the *failureTypeIndirectPath* as the value in *indicationType* received from *NotificationMessageSidelink* (except *relayUE-CellReselection*); |  |
| Samsung | 5.7.3c.3 | 1> else if the UE initiates transmission of the *IndirectPathFailureInformation* message due to PC5-RRC connection release requested by upper layers in accordance with clause 5.8.9.5:  2> set the *failureTypeIndirectPath* as *sl-PC5-Release*;  1> if the target L2 U2N Relay UE (i.e., the UE indicated by *sl-IndirectPathRelayUE-Identity* in the received *sl-IndirectPathAddChange*) changes its serving PCell to a different cell from the target cell (i.e. the cell indicated by *sl-IndirectPathCellIdentity* in the received *sl-IndirectPathAddChange*) during path addition or change; or  1> if the UE initiates transmission of the *IndirectPathFailureInformation* message due to N3C Indirect path addition/change failure in accordance with clause 5.3.5.17.3.2a: | In this section, the text is described from the remote UE perspective, i.e., “if the UE initiates …”. For cell change case, it is better to align this style. Meanwhile, as we discussed during the meeting, the serving PCell is misleading since the cell change case is mainly for cell reselection when receiving NotificationMessageSidelink with indicationType of relayUE-CellReselection. Thus, suggest the following changes:  1> if the UE initiates transmission of the *IndirectPathFailureInformation* message due to that the target L2 U2N Relay UE (i.e., the UE indicated by *sl-IndirectPathRelayUE-Identity* in the received *sl-IndirectPathAddChange*) changes its serving cell to a different cell (e.g., receiving *NotificationMessageSidelink* with *indicationType* of *relayUE-CellReselection*) from the target cell (i.e. the cell indicated by *sl-IndirectPathCellIdentity* in the received *sl-IndirectPathAddChange*) during path addition or change; or |  |
| Samsung | 5.3.5.17.2.3 | 1> if the (target) L2 U2N Relay UE (i.e., the UE indicated by *sl-IndirectPathRelayUE-Identity* in the received *sl-IndirectPathAddChange*) changes its serving PCell to a different cell from the target cell (i.e. the cell indicated by *sl-IndirectPathCellIdentity* in the received *sl-IndirectPathAddChange*) before path addition or change: | Similar logic as above, suggest to change it as:  1> if the (target) L2 U2N Relay UE (i.e., the UE indicated by *sl-IndirectPathRelayUE-Identity* in the received *sl-IndirectPathAddChange*) changes its serving Cell to a different cell (e.g., receiving *NotificationMessageSidelink* with *indicationType* of *relayUE-CellReselection*) from the target cell (i.e. the cell indicated by *sl-IndirectPathCellIdentity* in the received *sl-IndirectPathAddChange*) during path addition or change: |  |

# 2 Comments on RIL list

|  |  |  |
| --- | --- | --- |
| **Company** | **Suggested modification or comments** | **Rapporteur response** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |