3GPP TSG-RAN WG2#124 R2-23XXXXX

Chicago, USA, 13 – 17 November, 2023

Agenda Item: 7.9.1

Source: Huawei, HiSilicon

Title: [Post124][403][Relay] Rel-18 relay RRC CR (Huawei)

Document for: Discussion and decision

# 1 Introduction

This document is the report of the following discussion:

* [Post124][403][Relay] Rel-18 relay RRC CR (Huawei)

Scope: Review and finalise the Rel-18 relay RRC CR.

Intended outcome: Agreed CR

Deadline: Short (for RP)

Please provide your comments by Thursday November 30th 10:00 UTC to allow 24h for the rapporteur to update the CR before the deadline.

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

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| **Company** | **Delegate name** | **Email address** |
| Xiaomi | Yang Xing | Yangxing1@xiaomi.com |
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# 2 Comments collection

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| **Company** | **Clause number** | **Original text in CR** | **Suggested modification or comments** | **Rapporteur response** |
| Xiaomi | 4.1 | **Split DRB**: In MR-DC or MP, a DRB that supports transmission via MCG (i.e. direct path in MP) and SCG/indirect path in MP, as well as duplication of PDCP PDUs as defined in TS 37.340 [41]. | Since split DRB is also applied to MR-DC, MCG is enough. Bracket part, i.e. (i.e. direct path in MP), shall be removed, since it’s only applied to MP. |  |
| Xiaomi | 4.1 | **Split SRB**: In MR-DC or MP, an SRB that supports transmission via MCG (i.e. direct path in MP) and SCG/indirect path in MP, as well as duplication of RRC PDUs as defined in TS 37.340 [41]. | Similar comment as above |  |
| Xiaomi | 5.3.5.xx.1 | 5.3.5.xx.1 Configuration of SL indirect path  5.3.5.xx.1.1 General  For SL indirect path:  - the L2 U2N Remote UE is provided with sidelink dedicated configuration as specified in 5.3.5.14, L2 U2N Remote UE configuration as specified in 5.3.5.16, and SL indirect path specific configuration as specified in 5.3.5.xx.1.2;  - the L2 U2N Relay UE is provided with sidelink dedicated configuration as specified in 5.3.5.14, L2 U2N Relay UE configuration as specified in 5.3.5.15, as well as Uu Relay RLC channel as specified in 5.3.5.5.12 and 5.3.5.5.13. | According to the definition in 3.1, SL indirect path only includes the PC5 unicast link.  **SL indirect path:** In Multi-path, the indirect path using PC5 unicast link.  So, the Uu Relay RLC channel is not part of SL indirect path. ‘, as well as Uu Relay RLC channel as specified in 5.3.5.5.12 and 5.3.5.5.13’ can be removed. |  |
| Xiaomi | 5.3.5.xx.2 | 5.3.5.xx.2 Configuration of N3C indirect path  5.3.5.xx.2.1 General  For N3C indirect path,  - the N3C remote UE is provided with non-3GPP indirect path configuration including relay UE identification as specified in 5.3.5.xx.2.2;  - the N3C relay UE is provided with non-3GPP indirect path configuration including bearer mapping configurations as specified in 5.3. 5.xx.2.3, as well as Uu Relay RLC channel as specified in 5.3.5.5.12 and 5.3.5.5.13. | Similar comment as above. |  |
| Xiaomi | 5.3.5.15.3 | The L2 U2U Relay UE shall:  1> if no SRAP entity has been established:  2> establish a SRAP entity as specified in TS 38.351 [66];  1> for each *sl-L2IdentityRemote* value included in the *sl-RemoteUE-ToAddModList* that is not part of the current UE configuration (L2 U2U Remote UE Addition):  2> configure the parameters to SRAP entity in accordance with the *sl-SRAP-ConfigRelayU2U*;  1> for each *sl-L2IdentityRemote* value included in the *sl-RemoteUE-ToAddModList* that is part of the current UE configuration (L2 U2U Remote UE modification):  2> modify the configuration in accordance with the *sl-SRAP-ConfigRelayU2U*; | *sl-SRAP-ConfigRelayU2U* is not defined in the spec. |  |
| Xiaomi | 5.3.5.15.6 | The L2 U2U Remote UE shall:  1> if *sl-L2RemoteUE-Config* is set to *setup*:  2> if the *sl-L2RemoteUE-Config* contains the *sl-SRAP-ConfigRemoteU2U*:  3> if no SRAP entity has been established:  4> establish a SRAP entity as specified in TS 38.351 [66];  3> configure the parameters to SRAP entity in accordance with the *sl-SRAP-ConfigRemoteU2U*;  1> else if *sl-L2RemoteUE-Config* is set to *release*:  2> release the relay operation related configurations. | *sl-SRAP-ConfigRemoteU2U* is not defined in the spec. |  |
| Xiaomi | 5.3.7.2 | 5.3.7.2 Initiation  …  1> else (e.g. acting as L2 U2N Remote UE configured with MP):  2> if the UE is capable of L2 U2N Remote UE:  3> perform either cell selection as specified in TS 38.304 [20], or relay selection as specified in clause 5.8.15.3, or both;  2> else:  3> perform cell selection in accordance with the cell selection process as specified in TS 38.304 [20].  NOTE 2: For L2 U2N Remote UE, if both a suitable cell and a suitable relay are available, the UE can select either one based on its implementation. | We understand the else part covers both remote UE with MP and non-remote UE. The bracket only covers the first case. It’s clearer to remove the bracket. Current description without bracket is already clear enough. |  |
| 5.7.3c.4 | Xiaomi | 5.7.3c.4 Actions related to transmission of *IndirectPathFailureInformation* message  The UE shall set the contents of the *IndiretPathFailureInformation* message as follows:  …  1> for each *MeasObjectNR* configured by a *MeasConfig* associated with the MCG, and for which measurement results are available:  2> include an entry in *measResultFreqList*;  2> if there is a *measId* configured with the *MeasObjectNR* and a *reportConfig* which has *rsType* set to *ssb*:  3> set *ssbFrequency* in *measResultFreqList* to the value indicated by *ssbFrequency* as included in the *MeasObjectNR*;  2> if there is a *measId* configured with the *MeasObjectNR* and a *reportConfig* which has *rsType* set to *csi-rs*:  3> set *refFreqCSI-RS* in *measResultFreqList* to the value indicated by *refFreqCSI-RS* as included in the associated measurement object;  2> if a serving cell is associated with the *MeasObjectNR*:  3> set *measResultServingCell* in *measResultFreqList* to include the available quantities of the concerned cell and in accordance with the performance requirements in TS 38.133 [14];  2> set the *measResultNeighCellList* in *measResultFreqList* to include the best measured cells, ordered such that the best cell is listed first, and based on measurements collected up to the moment the UE detected the failure, and set its fields as follows;  3> ordering the cells with sorting as follows:  4> based on SS/PBCH block if SS/PBCH block measurement results are available and otherwise based on CSI-RS;  4> using RSRP if RSRP measurement results are available, otherwise using RSRQ if RSRQ measurement results are available, otherwise using SINR;  3> for each neighbour cell included:  4> include the optional fields that are available.  NOTE 1: The measured quantities are filtered by the L3 filter as configured in the mobility measurement configuration. The measurements are based on the time domain measurement resource restriction, if configured. Exclude-listed cells are not required to be reported. | RAN2 didn’t agree to report cell measurement result in indirect path failure information report. We don’t think it’s necessary to include cell measurement result, since direct path is still available. |  |
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| Xiaomi | 6.2.2 | N3C-RelayUE-InfoList-r18 ::= SEQUENCE (SIZE (1..ffs8)) OF N3C-RelayUE-Info-r18 | Since remote UE shall report if reported N3C relay UE becomes unavailable as following spec, remote UE shall be allowed to report an empty list if all reported N3C relay UE become unavailable. So we suggest to change the minimum size to (0…ffs).  1> if configured to report relay UE information with non-3GPP connection(s);  2> if the UE did not transmit a *UEAssistanceInformation* message with *n3c-relayUE-InfoList* since it was configured to report available relay UE information with non-3GPP connection(s); or  2> if the UE has new available non-3GPP conection(s); or  2> if the non-3GPP connection(s) with the reported relay UE(s) is not available:  3> initiate transmission of the *UEAssistanceInformation* message in accordance with 5.7.4.3 to report relay UE information with non-3GPP connection(s) included in the *n3c-relayUE-InfoList*; |  |